Minnesota Board of Water and Soil Resources. Minutes.

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Version 3
August 20, 2018

Minnesota Board of Water & Soil Resources

DATE: August 19, 2008

TO: Board of Water and Soil Resources' Members, Advisors, and Staff

FROM: John Jaschke, Executive Director

SUBJECT: August 27-28 BWSR Tour and Meeting Notice

The Board of Water and Soil Resources (BWSR) will tour western Renville County and a portion of Kandiyohi County on Wednesday, August 27, 2008. See the attached tour map.

Please let Mary Jo Anderson know your plans and RSVP to her as soon as possible at 651-297-4290 or mary.jo.anderson@state.mn.us

Tuesday, August 26, 2008 *(Options if you're arriving early to Olivia):*

1. Tom Kalahar, Renville SWCD Technician, is extending an invitation to take anyone who arrives early on Tuesday to a canoe trip on the Minnesota River. This is an opportunity to view the Granite Rock Outcrops and all the natural beauty of the Minnesota River. Contact Mary Jo Anderson if you're interested in this optional recreational activity.

2. If you are interested in golfing, see the attached listing of golf courses in the area. Call ahead to make your tee time. Please note that the Olivia Golf Course is closed at noon on Tuesday for "Men's Day".

3. If you are looking for other optional/recreational activities in the area, see the enclosed brochures or contact Karen Flom at the Renville County SWCD at 320-523-1559.

Sleeping rooms have been reserved at the Sheep Shedde Inn, 2425 West Lincoln Ave., in Olivia (phone: 320-523-5000) http://www.sheepsheddeinn.com for Tuesday and Wednesday evenings, August 26 and 27. See the attached room reservation list. The rooms have been direct billed (you do not pay for the room), unless noted on the rooming list. Please let Mary Jo Anderson know asap if you do not need a sleeping room.

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fax (218) 755-4201

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Chair Randy Kramer is hosting an *optional* Open House at his home on ***Wednesday*** evening after dinner, from 7:00 – 9:00 p.m. Again, this is optional; it's an opportunity for an informal casual gathering with Board Members, Advisors, Staff and others attending the tour or meeting. Randy's home is about fifteen miles from Olivia; carpooling is encouraged; see attached directions. RSVP is necessary, please let Mary Jo Anderson know if you plan to attend.

Wednesday, August 27, 2008 – Board Tour

Registration, coffee/rolls, welcome, introductions, and an overview of the day will be held at Max's Grill (down the hallway from the Sheep Shedde Inn), in the Banquet Room, in Olivia, at 7:30 a.m.

A coach bus will promptly depart from Max's Grill/Sheep Shedde Inn in Olivia at 8:00 a.m. The narrated tour will begin in Olivia and head to Willmar in Kandiyohi County via Highway 71 to view the Grass Lake Project. There are various partnership projects along Hwy. 71 including easements, ag waste, tree plantings, and other conservation measures completed with BWSR, local SWCDs, the Hawk Creek Watershed Project and NRCS participation.

Heading back into Renville County, we will spend the morning in the western part of the County. Sites will include an out-of-compliance feedlot (currently working to achieve compliance) the Long Lake WMA, and several "value added" industries including Southern Minnesota Beet Sugar Coop, MinnAqua, and Golden Oval. Additionally, we'll see a variety of practices including easements, wetland restorations, buffers, riparian, farmstead shelterbelts, a WPA, CRP including new S.A.F.E. contracts, and several Hawk Creek Projects including alternative intakes and ISTS. We will be going past the ethanol plant on the county line near Minnesota Falls.

We will have lunch at Skalbekken County Park in Renville County, on the Minnesota River, south of Sacred Heart. The Pork Producers will be grilling pork tenderloin for lunch.

Immediately following lunch at the park, we'll have a short presentation on USGS Research Findings: "Effects of Agricultural Land Retirement in the Minnesota River Basin", presented by Eric Mohring, BWSR staff, and Vicki Christensen, USGS staff.

After lunch, the tour will stay along the Minnesota River Valley and we will see several floodplain easements, a variety of mining projects, RC&D roadside erosion projects, Granite Rock Outcrops and associated wetlands, as well as feedlots.

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We will see two MN DOT Living Snow Fence projects, one on Hwy. 71 and also one on Hwy. 212 outside the City of Bird Island. We will see two MN DOT wetland mitigation easements before the tour ends. Of course there are more shelterbelts, field windbreaks, CRP and CREP sites. We will be going past the Revier feedlot site which will be the largest cattle feedlot in the state (10,000 head). Along this part of the tour we will see an example of an out-of-compliance feedlot that was fixed with FWQM grant funds in partnership with EQIP and Ag BMP loan dollars.

The tour will continue in the afternoon. We plan to arrive back at Max's Grill/Sheep Shedde Inn in Olivia about 4:30 p.m.

Dinner reservations have been made at Max's Grill in Olivia. Dinner will be served from 5:30 p.m. – 6:30 p.m. Dinner will also be direct billed, however, you need to let Mary Jo Anderson know if you plan to join us for dinner as we need to know the number of attendees.

If you have special food needs, or require a vegetarian meal, please contact Mary Jo Anderson as soon as possible.

If you will not be present for the Wednesday coach bus tour, dinner in the evening, the Open House at Randy Kramer's; or if you do not need a room reservation on Tuesday or Wednesday evening at the Sheep Shedde Inn, please contact Mary Jo Anderson immediately, as we need to know the number of people attending.

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Thursday, August 28, 2008 – Board Meeting
The Board of Water and Soil Resources will meet on Thursday, August 28, at 8:30 a.m., in the Banquet Room at Max's Grill in Olivia.

The following information pertains to agenda items:

Committee Recommendations
Metro Water Planning Committee

1. **Carnelian-Marine-St. Croix Watershed District Watershed Management Plan Amendment** -The Carnelian-Marine Watershed District was enlarged by Board Order dated March 28th, 2007 to include the area of the Marine on St. Croix Watershed Management Organization (MWMO). At that time the name changed to the Carnelian-Marine-St. Croix Watershed District (District) and the number of managers increased from five to seven. The Amendment incorporates the MWMO Plan as an appendix to the District's Watershed Management Plan. The District's Plan is scheduled for revision in 2010. The Metro Water Planning Committee met on August 4, 2008 and reviewed the contents of the Amendment along with comments that were made. The Committee recommends approval of the revised plan by the full Board. See attachments. *DECISION ITEM*

2. **Comfort Lake-Forest Lake Watershed District Revised Watershed Management Plan -** The District transects both a metropolitan and a non-metropolitan county, thus it comes under the authorities of Minnesota Statutes Chapter 103D. Watershed districts in the seven county metropolitan area come under the authorities of Minnesota Statutes Chapter 103B and 103D. The District sought and gained statutory designation under Minnesota Statues Chapter 103B in the 2008 legislative session. This change in designation allows the District to access a wider variety of funding sources in the implementation of the Watershed Management Plan; however, it also necessitated a revision to the Plan to meet the additional requirements of 103B. The Metro Water Planning Committee met on August 4, 2008 and reviewed the contents of the revised plan along with comments that were made. The Committee recommends approval of the revised plan by the full Board. See attachments. *DECISION ITEM*

3. **Richfield-Bloomington Watershed Management Organization, Watershed Management Plan –** The revised Watershed Management Plan dated July 2008 was filed with the Board. The draft Order contains a summary of the planning process, the reviewing agencies' comments, and highlights of the Plan. Numerous comments were received from the state agencies, particularly BWSR staff during the review process and meetings were held with WMO consultants to

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provide additional clarification and discuss WMO responses. One unique approach established by the RBWMO in the Plan is to require the two member cities to fund the entire cost of implementing the Plan and WMO operations, which is in full agreement by both cities. The Metro Water Planning Committee met on August 4, 2008 and reviewed the contents of the revised plan along with comments that were made. The Committee recommends approval of the revised plan by the full Board. See attachments. *DECISION ITEM*

4. **Shingle Creek and West Mississippi Watershed Management Organizations' Plan Amendment** – An Amendment dated January 2008 to the Watershed Management Plan was filed with the Board. The main goal of the plan amendment is to add one capital project for 2008 and revise the completion date of other planned capital projects within the Watershed Management Plan. The Metro Water Planning Committee met on August 4, 2008 and reviewed the contents of the Amendment along with comments that were made. The Committee recommends approval of the revised plan by the full Board. See attachments. *DECISION ITEM*

Northern Water Planning Committee

1. **Benton County Local Water Management Plan** - The Northern Water Planning Committee met on August 13. The Benton SWCD Manager presented the local water management plan. The priority concerns for the Benton County local water management plan are: 1) Feedlot and Nutrient Management; 2) Development, and; 3) Ground Water Quality and Quantity. The Plan will run for ten years from 2008 through 2017 with a work plan update to take place in 2013. The Northern Water Planning Committee recommended approval of the Benton County Local Water Management Plan. See attachments. *DECISION ITEM*

2. **Final Review – Crow Wing County Local Water Management Plan** - Crow Wing County submitted their Revised Local Water Management Plan for final state review and comment. The Northern Water Planning Committee met August 13th after the state agencies comment period ended. The Committee's recommendations or requirements will be presented at the Board meeting for action. See attachments. *DECISION ITEM*

3. **Mahnomen County Local Water Management Plan** - The Northern Water Planning Committee met on August 13, 2008 in Wadena to discuss the state review agency comments and recommendations for the approval of the Mahnomen County Local Water Management Plan. The priority concerns for Mahnomen County are Groundwater Quality, Surface Water Quality and

Impaired Waters/TMDL's and Erosion and Sedimentation. A Board decision on the approval of this document is sought. The Northern Water Planning Committee recommends approval. See attachments. *DECISION ITEM*

4. **Aitkin County Priority Concerns Scoping Document (PCSD)** – Aitkin County Priority Concerns Scoping Document – Aitkin County submitted the Priority Concerns Scoping Document for state review and comment as part of updating their Comprehensive Local Water Management Plan. The Northern Water Planning Committee of the Board met August 13th after the state agencies comment period ended. The Committee's recommendations or requirements for the content of the final plan are drafted for the full Board to review and take action on. The state's expectations of the final plan must be sent to Aitkin County. See attachments. *DECISION ITEM*

5. **Ottertail County Priority Concerns Scoping Document** - Ottertail County submitted the Priority Concerns Scoping Document for state review and comment as part of updating their Comprehensive Local Water Management Plan. The Northern Water Planning Committee of the Board met in Wadena on August 13th after the state agencies comment period ended. The Committee's recommendation of the PCSD are drafted for the full Board to review and take action on, pursuant to M.S. section 103B.313, subdivision 3. The state's expectations for the final plan must be sent to Ottertail County. See attachment. *DECISION ITEM*

6. **Red Lake County Priority Concerns Scoping Document (PCSD)** - The Northern Water Planning Committee met on August 13, 2008 in Wadena to discuss with representatives of Red Lake County the PCSD, state review agency comments and to prepare recommendations for the approval of the Priority Concerns Scoping Document for the Red Lake County LWMP. (In preparation for updating of the Red Lake County Local Water Management Plan). The priority concerns for Red Lake County are: surface water quality and impaired waters/TMDL's, water quantity, ground water quality, and erosion and sedimentation. A full Board decision on the acceptance of this document is sought. See attachments. *DECISION ITEM*

Southern Water Planning Committee

1. **Blue Earth County Local Water Management Plan Update** – Blue Earth County submitted their Local Water Management Plan Update, a record of the public hearing, and copies of all written comments pertaining to the Update to the

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Board for final State review on June 5, 2008. On August 7, 2008, the Board's Southern Water Planning Committee (Committee) reviewed the recommendation of the state review agencies regarding final approval of the Blue Earth County Local Water Management Plan Update. The Committee recommends approval. The Findings of Fact, Conclusions and Order are drafted for the full Board to review and take action on. See attachments. *DECISION ITEM*

2. **Brown County Local Water Management Plan Update** – Brown County submitted their Local Water Management Plan Update, a record of the public hearing, and copies of all written comments pertaining to the Update to the Board for final State review on April 22, 2008. On August 7, 2008, the Board's Southern Water Planning Committee (Committee) reviewed the recommendation of the state review agencies regarding final approval of the Brown County Local Water Management Plan Update. The Committee recommends approval. The Findings of Fact, Conclusions and Order are drafted for the full Board to review and take action on. See attachments. *DECISION ITEM*

3. **Nicollet County Local Water Management Plan Update** – Nicollet County submitted their Local Water Management Plan Update, a record of the public hearing, and copies of all written comments pertaining to the Update to the Board for final State review on May 13, 2008. On August 7, 2008, the Board's Southern Water Planning Committee (Committee) reviewed the recommendation of the state review agencies regarding final approval of the Nicollet County Local Water Management Plan Update. The Committee recommends approval. The Findings of Fact, Conclusions and Order are drafted for the full Board to review and take action on. See attachments. *DECISION ITEM*

RIM Reserve Planning Committee

1. **RIM/WRP Partnership Grant Payment Schedule for SWCD Services -** The following draft *RIM/WRP Partnership Grant Payment Schedule for SWCD Services* and Board Resolution was unanimously recommended for approval at the August 19, 2008 teleconference of the RIM Reserve Management Planning Committee for full BWSR Board approval at the August 28, 2008 meeting.

   This payment schedule will adequately compensate SWCDs for their services and participation in the RIM/WRP partnership. The grant recognizes the critical role SWCDs play in delivering RIM Reserve conservation easements to Minnesota's private landowners. See attachments. *DECISION ITEM*

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New Business

1. **Overview of Whole Farm Planning Bill (HF 2867)** – Representative Al Juhnke – *INFORMATION ITEM*

2. **Presentation on New Assessment and Planning Tools** – Tim Gieseke, Ag Resource Strategies, LLC – *INFORMATION ITEM*

3. **Demonstration of an On-line Tool-in-Progress Conservation Funding Advisor** – Peter Scheffert, Minnesota Department of Agriculture – *INFORMATION ITEM*

4. **2008 Federal Farm Bill Update** – Tim Koehler and Paul Flynn, NRCS – *INFORMATION ITEM*

5. **'09 Non-Point Engineering Assistance Challenge Grants** – The Non-Point Engineering Assistance (NPEA) Challenge Grant, provides funding assistance to NPEA Joint Powers Boards for providing accelerated technical assistance to landowners to apply conservation practices. The Grants Program and Policy Committee is requesting the Board to approve its allocation recommendation. See attachments. *DECISION ITEM*

6. **SWCD Technical Services Areas (TSAs) Reorganization** – Several 2007 SWCD resolutions recommended changes in the funding and/or delivery structure for the Nonpoint Engineering Assistance (NPEA) Program. SWCDs passed a resolution at the 2007 MASWCD Convention recommending that the Conservation Technical Assistance Committee (CTAC), which involves representation from the 11 existing SWCD TSAs, MASWCD, MACDE and BWSR, develop a recommendation to the BWSR Board regarding changes to the NPEA program delivery. The CTAC, together with NPEA Host SWCD Managers, developed a consensus recommendation to reorganize the existing 11 SWCD TSAs to 8 TSAs statewide, and co-alignment of MASWCD Areas. BWSR and MASWCD have signed a Memorandum of Agreement to support the co-alignment of SWCD TSAs and MASWCD Areas, as recommended by the CTAC. The Grants Program and Policy Committee is recommending approval of the CTAC consensus recommendations. See attachments. *DECISION ITEM*

7. **FY 09 Drainage Records Modernization Challenge Grants** – The 2007 Legislature appropriated funding to the BWSR to develop guidelines for drainage records preservation and modernization and $500,000 for cost-share grants to local governments for public drainage records modernization. The Water

Resources Center, Minnesota State University, Mankato was contracted to assist development of Drainage Records Modernization Guidelines, based on the collective experience of Chapter 103E drainage authorities that have modernized their records to date. The subject guidelines are scheduled to be complete in August 2008. The Grants Program and Policy Committee recommends approval of the associated FY 09 Drainage Records Modernization Challenge Grants Program. See attachments. *DECISION ITEM*

8. **FY 2009 Clean Water Legacy Grant Funding Package** - The Clean Water Legacy interagency work team has identified components of the FY '09 Clean Water Legacy (CWL) competitive funding application process. The Grants Program and Policy Committee met on July 23 to review and discuss the FY '09 CWL competitive funding budget for restoration projects. The Committee recommended approval of the FY '09 application process in accordance with the accompanying documents. See attachments. *DECISION ITEM*

9. **Area II Minnesota River Basins Project Inc. FY 2009 Annual Work Plan** - This plan is for BWSR oversight of project and administrative funding related to the flood control efforts of the Area II nine county joint powers. Administrative funding for Area II, via state general fund, is $140,000 for FY 2009. Project funding for FY 2009 consists of Bonding appropriations that was awarded in 2006. The administrative budget and project listing are included in the plan. A minimum 25% local match is required of all state dollars. Staff recommends approval of this plan. See attachments. *DECISION ITEM*

10. **Minnesota River Basin Joint Powers Board, FY09 Annual Work Plan –** This plan is for BWSR oversight of administrative funding related to the efforts of the Minnesota River Basin Joint Powers Board (MRB). Administrative funding for MRB, via state general funds, has been restored to $100,000 each of the next two years from the 2007 legislative session. The overall budget objectives are included in the plan. Staff recommends approval of this plan and execution of the administrative grant agreement for FY2009. See attachments. *DECISION ITEM*

I appreciate your prompt response to these requests. If you have any questions regarding the agenda, please feel free to give me a call at 651-296-0878. The meeting will adjourn about 12:30 p.m. I look forward to seeing you next week!

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Sheep Shedde Inn
2425 West Lincoln Avenue
Olivia, MN 56277
Phone: 320-523-5000

Tuesday, August 26

1. Dana Allen
2. Mary Jo Anderson
3. Paul Brutlag
4. LeAnn Buck ****
5. Paul Eger ****
6. Quentin Fairbanks
7. Tom Fischer
8. Travis Germundson
9. Jim Haertel
10. Jeff Hrubes
11. John Jaschke
12. Kari Keating
13. Brian Kletscher
14. Paul Langseth
15. Melissa Lewis
16. Joe Martin ****
17. Brian Napstad
18. Jeff Nielsen
19. Faye Sleeper ****
20. Louise Smallidge
21. Gene Tiedemann
22. LuAnn Tolliver
23. Steve Woods
24. Vicki Christensen
25. Kevin Lines
26. Eric Mohring
27.
28.
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30.
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32.

Wednesday, August 27

1. Dana Allen
2. Mary Jo Anderson
3. Paul Brutlag
4. LeAnn Buck ****
5. Paul Eger ****
6. Quentin Fairbanks
7. Tom Fischer
8. Travis Germundson
9. Jim Haertel
10. Jeff Hrubes
11. John Jaschke
12. Kari Keating
13. Brian Kletscher
14. Paul Langseth
15. Melissa Lewis
16. Joe Martin ****
17. Brian Napstad
18. Jeff Nielsen
19. Faye Sleeper ****
20. Louise Smallidge
21. Gene Tiedemann
22. LuAnn Tolliver
23. Steve Woods
24. Bob Burandt
25. John Linc Stine ****
26. Peter Scheffert ****
27. Jason Weinerman
28. Tom Wenzel
29.
30.
31.
32.

****** will pay for own room upon arrival**

8/18/08

Minnesota Board of Water & Soil Resources

BOARD OF WATER AND SOIL RESOURCES

"OPEN HOUSE"

Wednesday, August 27, 2008

7:00 p.m. - 9:00 p.m.

at the home of
Randy Kramer, Chair
42808 County Road 11
Bird Island, MN 55310
Phone: 320.979.4208

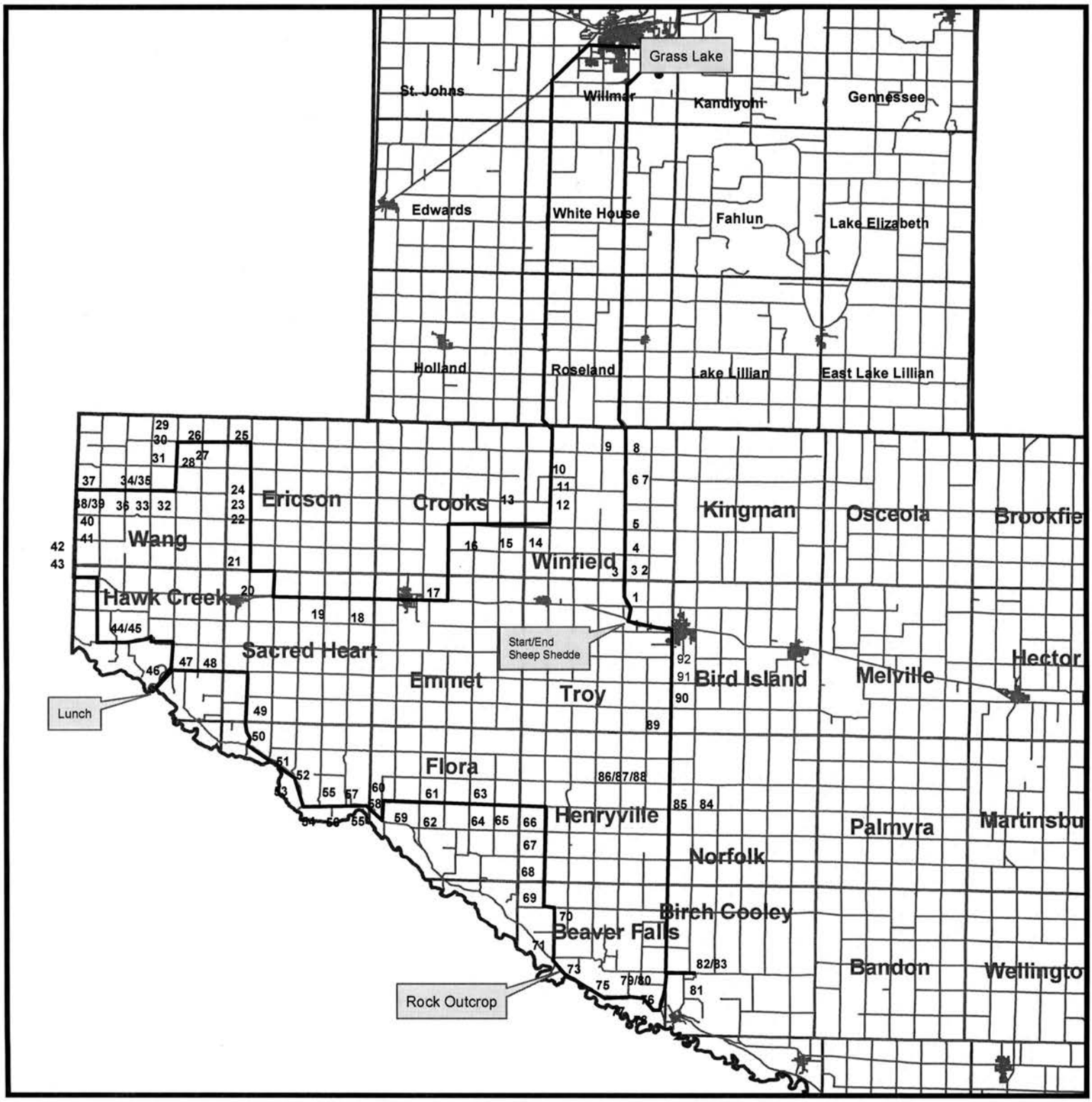
Directions from the Sheep Shedde Inn
2425 W. Lincoln Avenue, Olivia

1.	*Start out going East on US-212E toward Bird Island, continue to follow US-212E.*	*6.4 miles*
2.	*Turn Left at stoplight onto CR-5/N Main St., continue to follow CR-5.*	*4.0miles*
3.	*Turn Right onto CR-11 follow "S" curve*	*4.3 miles*
4.	*End at 42808 County Road 11, north side of road*	
Estimated time: 23 minutes, estimated distance		*14.75 miles*

Light refreshments and dessert will be served. This is an optional informal, casual gathering for BWSR Members, Advisors, Staff, and others attending the tour or meeting.

RSVP to Mary Jo Anderson, 651.297.4290 or mary.jo.anderson@state.mn.us

BWSR TOUR 2008
Renville and Kandiyohi Counties



Plans have been finalized for a tour that will begin and end at the Sheep Shedde in Olivia and include sites in the Western half of Renville County and a portion of Kandiyohi County. Included on the tour will be a variety of practices funded through a wide range of partnerships and programs. Also included are several business & industry sites, some historic sites and some unique natural resource sites.

Olivia Golf Club

512 South 6th Street
Olivia, MN 56277
(320) 523-2313
www.oliviagolfclub.com

Course Description:
9-hole Semi-Private Course
Par 36
Year Founded: 1920
Tee Times: Please call in advance

Established in 1928, the Olivia Golf Club is one of the oldest and "best kept secrets" in the state of MN. Our course features bent grass greens & tee boxes, driving range, putting green, and rental carts. The clubhouse has a relaxing atmosphere. Tee times start at 8:00 a.m. daily (please call in advance), with the course closing on Tuesdays at noon for Men's Day and Thursdays until 4:00 p.m. for Ladies Day. For a day of relaxation and fun, come golf at the Olivia Golf Club!

Green Fees:
9 Hole Weekday: $13.00
9 Hole Weekend: $15.00
18 Hole Weekday: $17.00
18 Hole Weekend: $20.00

Cart Fees:
9 Holes: $15.00
18 Holes: $20.00

Located 5 blocks south of the Courthouse off Hwy 212

Stoney Creek Golf Course

21278 820th Avenue
Renville, MN 56284
(320) 329-8400
http://www.ci.renville.mn.us

Course Description:
9-hole Public Course
Par 36
Year Founded: 1999
Tee Times: Please call in advance

Our 9 hole course with putting green and driving range provides an unparalleled challenge, even to the most experienced golfer, with rates that every one can afford! We also offer food and beverages in the club house, along with a beverage cart on the course. The course is open to the public seven days a week with Ladies Night on Tuesdays at 6:00 pm, League Night on Wednesdays at 6:00 pm and Men's Night on Thursdays at 6:00 pm. Come and enjoy yourself with a relaxing day of golf at Stoney Creek!

Green Fees:
9 Hole Weekday: $13.00
9 Hole Weekend: $13.00
18 Hole Weekday: $20.00
18 Hole Weekend: $20.00

Cart Fees:
9 Holes: $13.00
18 Holes: $20.00

Located 2 miles west & 1 mile south of Renville off of US Highway 212

Renville County Golf Courses

Fort Ridgely Golf Course
72158 County Road 30
Fairfax, MN 55332
(507) 426-7840

Mayflower Country Club
Highway 4 South
Fairfax, MN 55332
(507) 426-9964

Oakdale Golf Club
55106 County Road 38
Buffalo Lake, MN 55314
(320) 833-5518

Olivia Golf Club
512 South 6th Street
Olivia, MN 56277
(320) 523-2313

Stoney Creek Golf Course
21278 820th Avenue
Renville, MN 56284
(320) 329-8400

Produced by the Renville County HRA/EDA
www.renville.com
320-523-3656

Fort Ridgely Golf Course

72158 County Road 30
Fairfax, MN 55332
(507) 426-7840
www.dnr.state.mn.us

Course Description:

9-hole Public Course
Par: 35
Year Founded: 1927
No Tee Times Taken - First Come, First Served
Walking Only - No Riding Carts Allowed

Our 9 hole course will be open to the public seven days a week after renovations are complete in the 2008 season. The clubhouse will have soft drinks and candy available via vending maching. There will also be a driving net available for use. Feel free to come and enjoy a day at Fort Ridgely until our golf course reopens. Come ride your horse; play volleyball or softball; fish and camp (drive-in and walk-in sites available), or to learn the history of this once thriving outpost.

Green Fees:

Green fees to be determined....

Located seven miles south of Fairfax on Minnesota Highway #4. Watch for the large brown signs.

Mayflower Country Club

Highway 4 South
Fairfax, MN 55332
(507) 426-9964
mayflocc@centurytel.net

Course Description:

9-hole Public Course
Par: 36
Year Founded: 1967
Tee Times: Please call in advance

Green Fees:

9 Hole Weekday: $12.00
9 Hole Weekend: $17.00
18 Hole Weekday: $18.00
18 Hole Weekend: $23.00

Cart Fees:

South of Fairfax 2 1/2 miles on MN Hwy 4. Turn Right (west) on Co Rd 39 - west 1 1/2 miles on south side of Road

Oakdale Golf Club

55106 County Road 38
Buffalo Lake, MN 55314
(320) 833-5518
www.oakdalegolfclub.com

Course Description:

18-hole Semi-Private Course
Par: 36
Year Founded: 1965
Tee Times: Please call in advance

Rolling hills, mature trees, and expertly maintained grees are only part of the golfing experience offered at the Oakdale Golf Club, an 18 hole championship course located on beautiful Lake Allie, featuring a driving range, practice green, and full service bar & grill. Our course is open to the public seven days a week and is well known as one of the friendliest courses around! Escape to the peacefulness of a rural setting where you can enjoy a day of golf and relaxation at a price everyone can afford!

Green Fees:

9 Hole Weekday: $12.00
9 Hole Weekend: $16.00
18 Hole Weekday: $21.00
18 Hole Weekend: $27.00

Cart Fees:

9 Holes (anytime): $8.00
18 Holes (anytime): $12.00

Agriculture/Renewable Energy Committee Established

The HRA/EDA established the Agriculture/ Renewable Energy Committee in December of 2006. This committee was established to expand and enhance agriculture & renewable energy projects in Renville County.

Agriculture/Renewable Energy Committee Members
· Blair Anderson, Fairfax
· Barbara Frank, Danube
· Pete Kronlokken, Sacred Heart
· Joe Sullivan, Franklin

With the establishment of this committee, the HRA/EDA and the Agriculture/Renewable Energy Committee have helped sponsor multiple events in Renville County:

- Renewable Energy Conference 2007
- Agricultural/renewable energy bus tour
- A 'Look at Value Added Area Co-ops' seminar
- Large dairy farm informational meeting
- Small Wind Turbine meeting

This committee has completed or are in the process of completing numerous projects:

- Sent survey out to Renville County communities and residents regarding livestock development, ag business, and renewable energy to poll residents on what types of agriculture projects they would like to see happen in Renville County.
- Generated a list of Ag/Renewable Energy ideas for area students to create pod casts with for the "Get Broadband" project.
- Obtained a list of Renville County farmers under the age of 35 to be contacted to see if they need help getting their own operations started.
- Plans to host an Alternative Crop Development Seminar this coming Fall in Renville County.
- Working to compile a report on livestock zoning and variance laws in Renville County compared to other adjoining counties.

Agriculture Facts

According to the 2006 USDA MN Agriculture Statistics, Renville County is ranked #1 in the state of Minnesota for Sweet Corn, Corn for Grain, and Green Peas. Other County rankings include #4 in Dry Edible Beans & Soybeans, and #6 in Sugarbeet production. Along with the crops of which Renville County is a top producer, we cannot forget about the livestock. Renville County is host to 371 registered feedlots. In 2006, Renville County had 14,100 Cattle & Calves on Feed, 2300 breeding Sheep and Lambs, 3000 Dairy Cows, 1500 Beef Cows, and 191,000 Hogs & Pigs.

Major Agriculture Businesses of Renville County

Agraliance
Bird Island Farmers Co-op
Christensen Family LLC
Co-op Country Farmers Elevator & United Mills
Farmers Co-op Elevator
Golden Oval Eggs
Harvest Land Cooperative
Minaqua Fisheries
Minnesota Energy (Ethanol Plant)
Mor-Pork Inc.
Mycogen Seeds
Precision Soya of Minnesota
Remington Hybrid Seed Co.
Renk Seed
Revier Cattle Co.
South Central Grain & Energy
Southern MN Sugar Beet Co-op

Renville County Agriculture

COME HOME TO Renville COUNTY

Ag & Neighbor Friendly County Suited for All Types of Agriculture!

Renville County HRA/EDA
500 E. DePue Ave.
Olivia, MN 56277
(320) 523-3656
www.renville.com

About Renville County

Renville County is an agricultural county located in west central Minnesota. The county is well known for its agricultural innovations, including crop and animal cooperatives, seed crop breeding and production, and farmers who are willing to experiment with newly developed agricultural technology.

Renville County's present boundaries are within 982.92 square miles. The county is comprised of 27 townships and ten cities; Bird Island, Buffalo Lake, Danube, Fairfax, Franklin, Hector, Morton, Olivia, Renville, and Sacred Heart.

Renville County offers excellent shopping and dining facilities in its ten rural communities within the county, meeting the needs of all its residents. Also, there are four colleges located within 45 minutes of Renville County, providing ample educational opportunities for all.

The 2006 estimated census data indicated that there are 16,531 people living in Renville County. Of these, 29.7% are 17 and under, 51.7% are between the ages of 18 and 64, and 18.6% are 65 years of age or older. Overall, Renville County offers a variety of activities to satisfy everybody.

Renville County - A great place for agriculture, outdoor activities, and a great quality of life.

Alternative Energy

Throughout the past year, the Renville County HRA/EDA has continued to explore alternative energy development here in Renville County. Some of these alternatives include wind energy and biomass production. In February 2007, the Renville County HRA/EDA held a two day Renewable Energy Conference focusing on wind energy production and cellulosic ethanol. Over 200 people from all over the state of Minnesota attended the conference. Two University of MN graduate students prepared feasibility studies of wind energy in Renville County, which have shown that Renville County may be ideal for wind energy production. These reports were shared at the conference and are also posted on the HRA/EDA website, www.renville.com, for the general public to view.

Minnesota has become a national leader in developing wind energy; the fastest growing energy source in the world. Wind power is cleaner and safer than burning fossil fuels and has vast potential in Minnesota. According to the American Wind Energy Association (AWEA), Minnesota ranks fourth in the nation in installed capacity of wind power. Wind energy has proven to be a vital tool for economic development in Minnesota. Landowner revenue, tax revenue, and personal income have all increased because of wind development, which creates quality jobs in rural communities and keeps energy dollars in the state. As wind projects are developed in our county, it is the desire of the Renville County HRA/EDA to see that these investments remain local with the land that the towers sit on, and that the return on investment goes back to the local owners and into our local communities.

August 2007

Buffalo Lake Farm & Flea Market
Saturdays 8:00 -11:00 a.m. starting July 28th
Located in the Buffalo Lake City Park - Hwy 212

Fairfax Farmers Market
Tuesdays 4:00 - 6:00 p.m.; July - September
Located on 1st Street S.E. off Hwy 19 in Fairfax

Feldman's Market
August - October on the Corner of 212 & Main Street in Renville; Call 320-522-0465

Garden Market
Vern & Anita Kardell; Variety of Vegetables
66918 Cty. Rd. 27 Fairfax; Call 507-426-8298

Ron Hanson
Chemical free onions available through Autumn and Winter; Call 320-765-2379 to order

K & C Gardens
Ken & Cathy Balderston; Located 8 miles N. of Olivia
Open M-F 3:00 -8:00 p.m. & Sat. 1:00 - 8:00 p.m.
Call 320-523-2162 to order canning cucumbers and tomatos by 1/2 bushel or bushel

Lundstrum Vegetables
Rural Bird Island; Wide variety of vegetables, jams, and jellies; Free range chickens. Call 320-365-4174

Morton Sidewalk Market
Saturdays 9am-Noon; Downtown Morton by City Hall

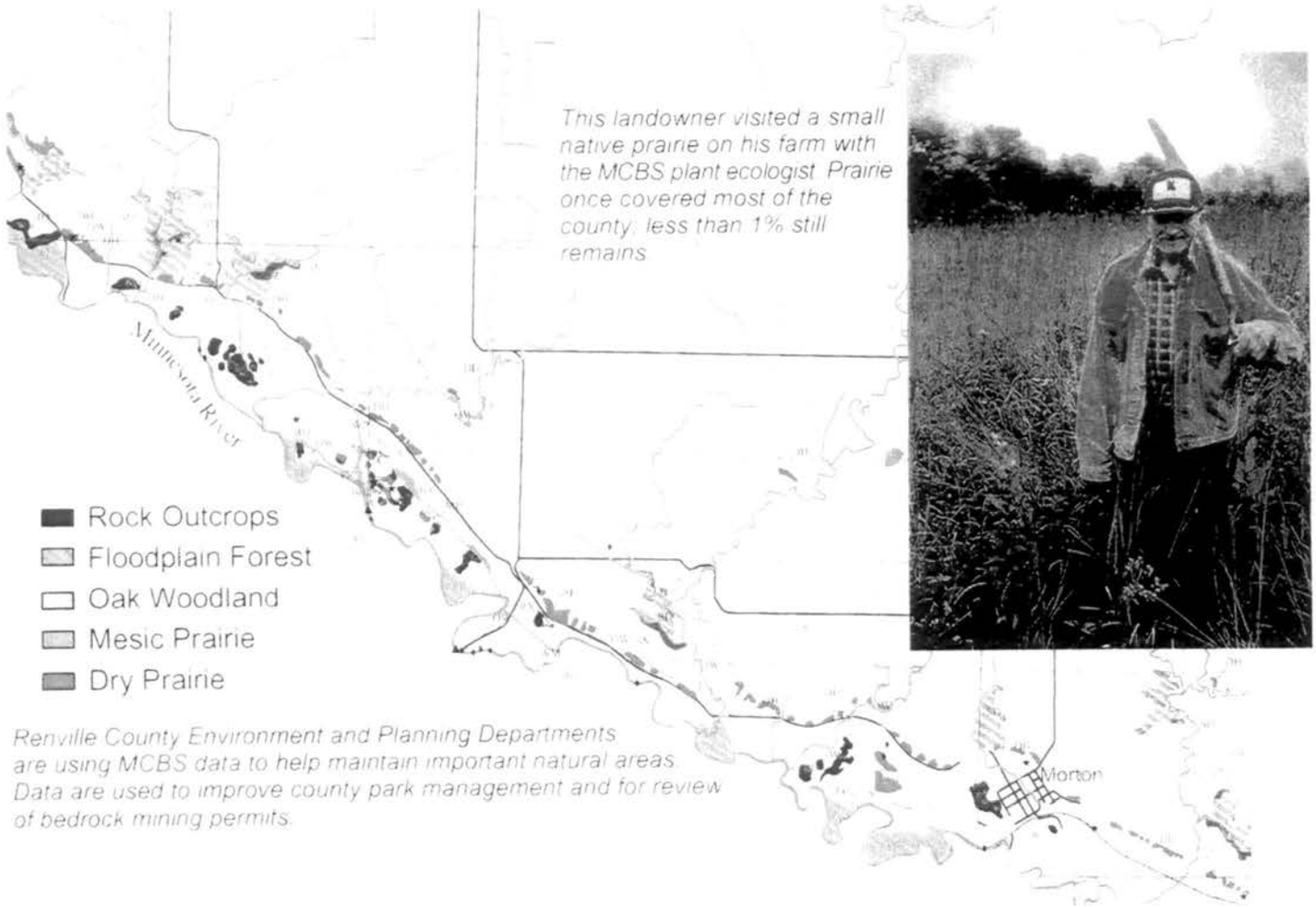
Olivia Farmers Market
Thursdays 2:00 - 5:30pm; July - October; City parking lot of 9th Street & Fairview; Call Nancy for more information at 320-523-1350

Renville Farmers Market
Fridays 3-6pm at Water Tower Park in Renville

Norb & Cindy Serbus
Pumpkins, squash, & gourds; Call 320-826-2165 (produce not available until late August)

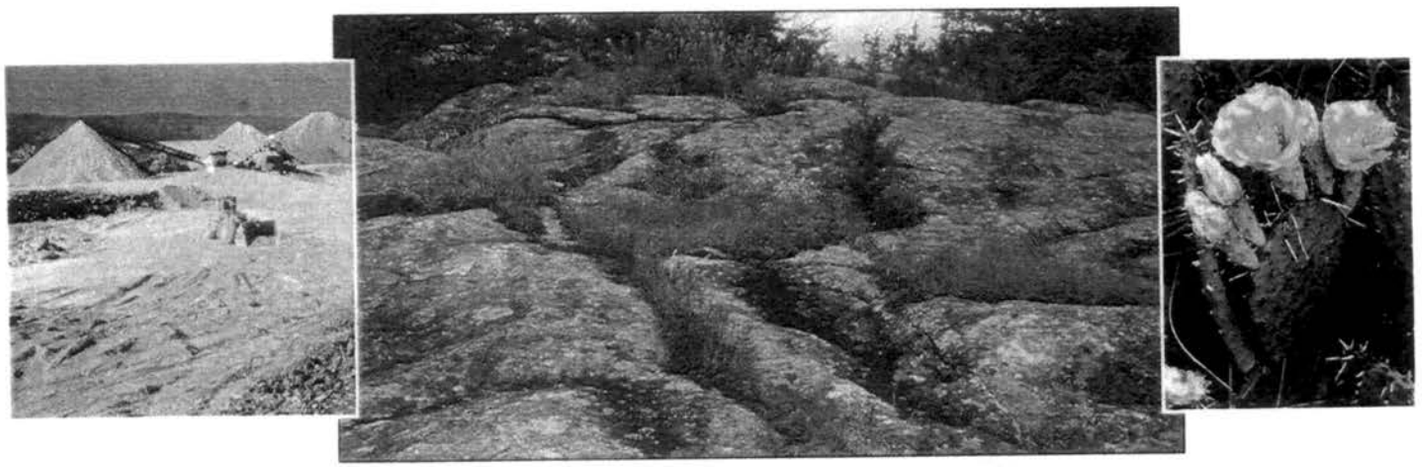
Wertish Farm
Drug & hormone free chickens and turkeys
Call 320-826-2451 to order

RENVILLE COUNTY



This landowner visited a small native prairie on his farm with the MCBS plant ecologist. Prairie once covered most of the county; less than 1% still remains.

Renville County Environment and Planning Departments are using MCBS data to help maintain important natural areas. Data are used to improve county park management and for review of bedrock mining permits.



The Minnesota River Valley contains most of the remaining native habitats identified by MCBS in the River counties. The rock outcrops of the River corridor are exposures of 3.6 billion year-old bedrock, some of the oldest bedrock found on the surface of the Earth. This distinctive feature provides habitat for the Great Plains prickly pear cactus *(Opuntia macrorhiza)*.

Authentic Travel

Green Routes offers an alternative to conventional tourism.

Green Routes will direct you to places where you can get locally grown food, experience unique cultural attractions, and participate in outdoor activities that minimally affect the environment, like biking, canoeing, and birding.

Green Routes offers tools to plan and select travel destinations that reflect your values of sustainability. Since every dollar you spend on travel is effectively a vote in favor of a specific way of doing business, through Green Routes, you'll encourage new travel destinations to develop sustainable practices.

Take time to explore the back roads and learn about a region from the people who live and work there. You'll find no more gracious tour guides on your journeys than the owners of these green businesses. And, since the places highlighted are not necessarily your typical tourist destination, please respect the hours of operation as well as the spaces themselves, and call ahead if you have special needs.

GREEN ROUTES

Renewing the Countryside
2105 First Avenue South · Minneapolis, Minnesota 55404 USA
1.866.378.0587 · rtc@rtcinfo.org

www.GreenRoutes.org

Tatanka Bluffs

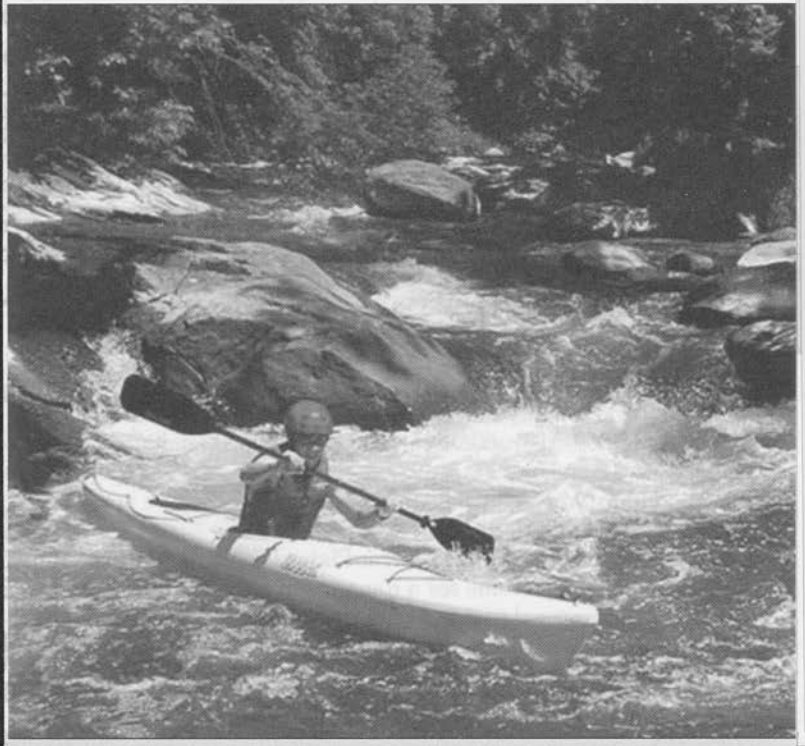
Upper Sioux Agency to
Fort Ridgely, Minnesota

GREEN ROUTES

Where cuisine, culture, and conservation come together

Tatanka Bluffs

Nestled in the beautiful Central Minnesota River Valley, Tatanka Bluffs is part of the nationally recognized Minnesota River Valley Scenic Byway. Explore the beautiful rolling prairie, spectacular bluffs, and quaint heritage-rich towns in this scenic river valley.



View the spectacular water falls at Alexander Ramsey Park, tour historic Fort Ridgely, or marvel at the 2000 American Indian images carved in quartzite outcrops at the Jeffers Petroglyphs. Find respite among the many parks and trails, or amble along in a canoe down scenic rivers and creeks in this picturesque region.

In this history-rich area, learn about the early fur trade, pioneer settlements, the Sioux uprising or the role that the steamboat had on developing parts of the region.

Experience the local flavor while tasting the bounty of the rich, fertile soil of the Minnesota River Valley at cafés, farmers markets and bed and breakfasts across the area. Sample wines made from Minnesota grapes at a local vineyard, tour beautifully restored historic buildings, or learn about the art of blacksmithing. Locally-made pottery, crafts and quilts make wonderful gifts or a fond reminder of your trip.

Tatanka Bluffs is a haven for renewable energy, with the production of bio-mass, ethanol, biodiesel and wind energy. We look forward to your visit!

This guide was developed in collaboration with business and community leaders from Redwood and Renville counties, the Redwood Area Development Corporation, Renville County HRA/EDA, and with support from the Southwest Initiative Foundation.

GREEN ROUTES

WWW.GREENROUTES.ORG

Renewable Energy in Tatanka Bluffs

E85

E85 is a fuel made of 85% cleaner burning, renewable ethanol and just 15% gasoline. E85 is designed for use in flex fuel vehicles, which are regular vehicles equipped to run on any blend of ethanol from zero to 85%. If you drive a FFV, it will be stated in your owner's manual or can be found on CleanAirChoice.org.

E85 is a locally grown commodity from corn grown in the #1 (Renville) and #2 (Redwood) counties in corn production in the state of Minnesota, meaning it reduces our dangerous dependence on foreign oil.

Green Routes destinations contribute to the local economy by employing local residents, using local products and growers, and supporting other local businesses.

Redwood County

Cenex C-Store
1400 E Bridge St, Redwood Falls, MN 56283
507-644-3383

Cenex - Belview
110 N Main St, Belview, MN 56214
507-938-3069

Cenex - Harvest Land Coop
710 Front Street Morgan, MN 56266
507-249-3196

Hoyt Oil & Convenience Sinclair
241 6th St, Walnut Grove, MN 56180
507-859-2552

Lamberton Amoco
26169 US Hwy 14, Lamberton, MN 56152
507-752-7558

Meadowland C-Store Wabasso
Hwy 68 East, Wabasso, MN 56293
507-342-5145

Meadowland Farmers Coop
101 1st Ave West, Lamberton, MN 56152
507-752-7352

Renville County

212 1-Stop
101 East Hwy 212, Danube, MN 56230
320-826-2660

Minnesota Energy
514 West Yellowstone Trail, Buffalo Lake, MN 55314
320-833-5321

Cenex - Farmers Coop Oil
118 NE Dupont, Renville, MN 56284
320-329-8351

Cenex - Farmers Coop Oil
537 E Hwy 12, Sacred Heart, MN 56285
320-765-2752

Cenex - Honzay's
1208 W Lincoln Ave, Olivia, MN 56277
320-523-1241

Fairfax Mobil Mart
Hwy 4 & 19, Fairfax, MN 55332
507-426-8396

South Central Grain & Energy - Cenex
100 Hwy Ave, Hector, MN 55342
320-848-2286

Green Routes involves local residents and business owners in creating a collaborative tourism plan that benefits both visitors and the community.

Renville-Sibley Cooperative Power Association

320-826-2593
www.renville-sibley.coop

Your source for renewable energy in Renville and Redwood Counties offering Prairie Wind credits for purchase to all customers.

Where to Buy Food Direct from Farmers While Traveling Tatanka Bluffs

Farmers Markets and Farm Stands

Be sure to call ahead to confim hours, directions and to find out what is in season.

Babe's Blossoms
7 Miles N on Hwy 4 Hector - Call 320-848-6566
Fridays through September 1pm - 5pm
Saturdays through September 9am - Noon

Buffalo Lake Farm and Flea Market
Buffalo Lake City Park Hwy 212
8am - 11am - Saturdays Starting July

Deutschland Meats
Downtown Sanborn - Call 507-648-3388
Open Monday - Friday 8am – 5:30pm Saturday 9am – 1pm
Authentic German Recipes for Beef and Pork Processing

Green Routes encourages individuals to eat and vacation in ways that support healthy rural communities as well as encourage businesses to contribute to environmental stewardship, economic vitality, and social and community well-being.

Fairfax Farmers Market
1st Street SE off Hwy 19 Fairfax
Tuesdays 4pm - 6pm; July - September

Feldman's Market
Corner of 212 and Main Street in Renville
Call 320-522-0465
August - October

Geis Farms
Lamberton - Call 507-752-7722
Please Call First
Bison Meat – USDA Inspected

Ron Hanson
Sacred Heart - Call 320-765-2379
Chemical Free Late Season Onions

Hilltop Harvest LLC
Call 507-641-8118 or 1-888-785-6655
Redwood Falls near Highway 19
Open 7am - 7pm Starting in Mid-June; Otherwise, Call First
Fresh Strawberries, Raspberries, and Pumpkins

Vern and Anita Kardell
66918 Cty Rd 27 Fairfax
Call 507-426-8298
Vegetables

Green Routes offers people the opportunity to learn how to incorporate economically, environmentally, and socially sustainable practices into their tourism, travel, and other business plans.

K&C Gardens
Ken & Cathy Balderston
36257 890th Ave.
(8 miles North of Olivia)
Call 320-523-2162
Monday - Friday 3pm - 8pm, Saturday 1pm - 8pm

Lundstrom Vegetables
Rural Bird Island
Call 320-365-4174
Open Daily - Buy From Farm

Morton Sidewalk Market
Downtown Morton - By City Hall
Saturdays 9am - Noon

Olivia Farmers Market
Lot Behind American Bank
9th Street and Fairview - Olivia
Thursdays 2pm - 5:30pm
July - October

The Prairie Gardener
Wabasso – 507-342-2626
Open Monday - Saturday 8am- 6pm; April – October
Green House Specializing in Daylilies

Renville Farmers Market
Water Tower Park - Renville
Fridays 3pm - 6pm

Norb and Cindy Serbus
Danube - Call 320-826-2165
Pumpkins, Squash, and Gourds

Trebesch Premium Pork
Call 507-249-3293 or 507-920-7980
Sales in Redwood Falls
trebpork@redred.com – Please Call First

Walter Organic Farms
Clements - 507-692-2223 – Please Call First
Organic Flax and Organic Fed Omega Broilers
Will UPS anywhere

Wertish Farm
Danube - Call 320-826-2451
Drug and Hormone Free Chickens

1 Fieldstone Vineyards
38577 State Highway 68, Morgan, MN 56266
507-249-9463 • info@fieldstonevineyards.com
www.fieldstonevineyards.com
Hours: Weekends May - Dec., Sat 11-6, Sun 12-5.
Other times by appointment.

Redwood County's first winery located on the 4th generation Reding Family Century Farm. Come and tour the vineyards and the 1930's dairy barn that was renovated into a winery. Fieldstone Vineyards pride themselves on providing 100% Minnesota grown products and making wine on site from berry to bottle.

2 Fort Ridgely State Park
72158 County Road 30, Fairfax, MN 55332
507-426-7840
www.dnr.state.mn.us/state_parks/fort_ridgely/index.html
Hours: Vary, call ahead or check website.

Immerse yourself in Minnesota history, spanning from 7000 years ago when this site was first occupied. Learn how the site has changed with each occupation from Native Americans, U.S. military, 1930's CCC camp to now. Located within two valleys, this park offers plenty of recreation: play a nine hole course, hike or ride the trails on horseback, fish and camp. In winter, cross country ski and sledding.

3 Gathering Friends Quilt Shop
101 South Main Street, Bird Island, MN 55310
320-365-4670 • info@gatheringfriendsquiltshop.com
www.gatheringfriendsquiltshop.com
Hours: Mon - Fri 9-5; Sat 9-3

As soon as you walk in you feel welcome in this full service quilt shop. This is not your run of the mill quilt shop, as the owners design and write their own patterns and books. Gathering Friends renovated a 1902 brick building, restoring the original flooring, windows, woodwork and tin ceiling. The shop carries over 3,000 bolts of quality fabric, yarn, unique gifts and garden accessories.

4 Gilfillan Estate Historic Site
28269 State Highway 67, Morgon, MN 56266
507-249-2210
www.redwoodcountyhistoricalsociety.org
Hours: June - Labor Day, Saturday & Sunday 1 - 4:30
Weekday tours by appointment. Admission fee.

The historic Gilfillan Estate and Manor House has been beautifully restored. It tells the story of early successful cattle breeding, farming and the continuing story of philanthropy by the Gilfillan family. Gilfillan Estate is the home of Farm Fest, held during the first week in August.

Green Routes destinations engage customers and visitors through active, personal, and meaningful participation in nature, people, places, history, and/or cultures.

5 Great Plain Designs
18233 County Highway 4, Walnut Grove, MN 56180
507-859-3101, 605-695-9033 • pete@petelandherr.com
www.petelandherr.com
Hours: Vary, call ahead

Combining art and landscapes, Great Plains Designs is blazing a trail in sustainable living. Come see a roman arch style kiln firing up, enjoy walks in restored prairie, buy dishes and stoneware, hand harvested prairie seed, or join in the seed harvesting yourself. Using as many environmentally sound practices as possible, this is a good place to visit for first hand understanding of sustainable living with style.

6 Hollatz Guest House
393 Laser Trail, Redwood Falls, MN 56283
507-641-2999 • tomshar@redred.com
Hours: Call for reservations

Set on seven acres of woods, this scenic family owned guesthouse is the perfect place to rest after a day of hiking at the nearby Alexander Ramsey Park Trail. Guests will learn about the area's best places to visit from the owners who were born in Redwood Falls. Come and relax in the backyard gazebo, take a walk in the woods down to the creek or take a bike ride to downtown Redwood Falls.

Green Routes destinations conserve natural resources by reducing the use of non-renewable resources or using energy efficient appliances.

7 Holmberg Orchard
12697 325th Street, Vesta, MN 56292
507-762-3131 • sindie@redred.com
www.holmbergorchard.com
Hours: September & October, daily 10 AM - 6 PM

Your family is bound to have a memorable time at this amazing orchard, set on 20 acres with 7,000 trees. In the fall you can enjoy hayrides, pumpkin patches, homemade apple pie and a tribute to the old days with a traditional apple butter stir over the fire. Visit an old school house that was saved and restored as the orchard's bargain center. With conservation in mind, the orchard was planted with wind/snowbreaks and green strips to hold moisture and eliminate the need for irrigation.

8 Jeffers Petroglyphs
27160 County Road 2, Comfrey, MN56019
507-628-5591 • jefferspetroglyphs@mnhs.org
www.jefferspetroglyphs.com
Hours: May & Sept: Fri & Sat 10-5, Sun 12-5;
Memorial Day - Labor Day: M-F 10-5, Sat 10-8, Sun 12-5.
Oct - April, by appointment. Admission fee.

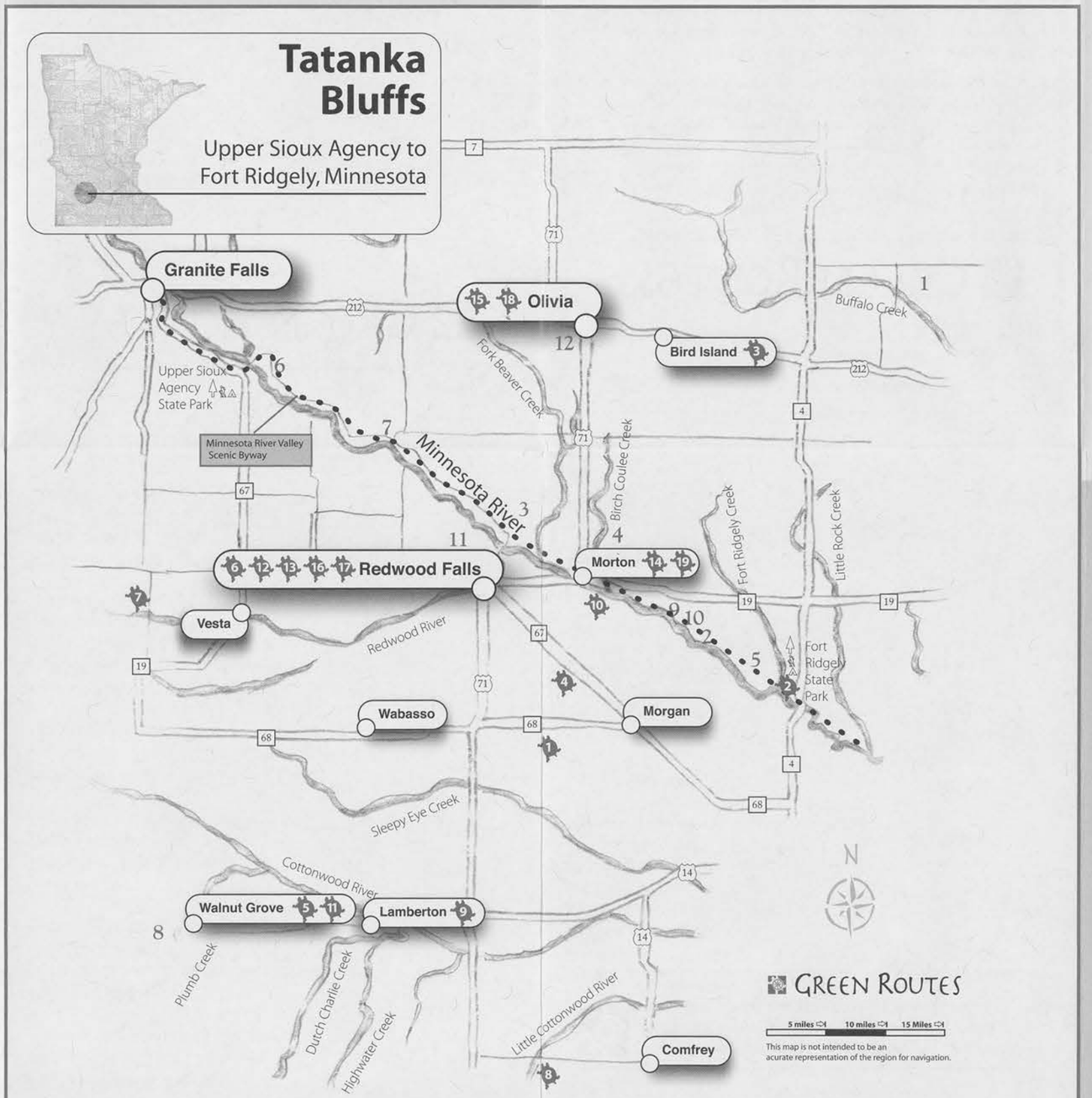
Visit Jeffers Petroglyphs to experience one of the oldest continually used sacred sites in the world. You will find ancient carvings in outcroppings of red quartzite dating back 9,000 years ago. The Visitors Center does an excellent job of educating about the site and professional guides give tours of the area. Take walks in the 33 acres of virgin prairie, and 127 acres of restored prairie. There is even a fake bison for practicing the ancient hunting style of atlatl throwing.

9 Lamberton Historical Society
206 2nd Avenue E., Lamberton, MN 56152
507-752-7601
www.rrcnet.org/~lambrton/iron.htm
www.rrcnet.org/~lambrton/blacksmith.htm
Hours: Check website for dates.
Open during September Hot Iron Days.
Other times by appointment.

Visitors to the Lamberton Blacksmith Shop will find a wealth of history and artifacts from days gone by. The artisan craft of blacksmithing was once the cultural center of many farming communities. Each year in September, Hot Iron Day features blacksmithing demonstrations and a live iron pour.

10 Lower Sioux Historic Site
32469 County Road 2, Morton, MN 56270
507-697-6321 • lowersioux@mnhs.org
www.mnhs.org/places/sites/lsa/
www.mnhs.org/places/sites/lsa/images/lsa4.gif
Hours: Memorial Day through Sept 30
Saturday 10-5 Sunday 12-5 Admission fee.

The Lower Sioux Historic Site Museum tells the story of the Dakota people, their struggle to retain their culture and the 1862 US-Dakota War. The museum goes above and beyond with sustainable practices such as using low flow toilets, passive solar heating, maintaining native species, environmental and cultural education. Visit the exhibits, walk the trails, and check out a stone warehouse restored to its original 1861 appearance.



11 Merryweather Gardens
1488 Bunker Avenue, Walnut Grove, MN 56180
507-629-8276 • sruthchild@redred.com
www.merryweathergardens.com
Hours: Seasonal. Call ahead or check website.

A few miles from Walnut Grove, Merryweather Gardens offers an array of organic herbs, vegetables and specialty garlic. The gardens are dedicated to growing nutrition dense food, guaranteed to taste old-fashioned! At this charming farm, you will be greeted by colorful heritage turkeys and chickens. All the buildings on the grounds have been restored, including an old manure pit that now is a lovely water lily garden.

Green Routes destinations use sustainably produced or organically grown products.

12 Minnesota Inventors Hall of Fame
Redwood Area Community Center
901 Cook Street, Redwood Falls, MN56283
halloffame@minnesotainventors.org
www.minnesotainventors.org
www.ci.redwood-falls.mn.us/services_RACC.htm
Hours: Summer: M-F 6AM - 8PM
Winter: M-F 6AM -10 PM, Sat 8AM -8PM, Sun 12- 8PM

What do Post-it Notes, an aircraft autopilot system and biodegradable plastic made from corn all have in common? They were all invented by Minnesotans. Come visit this unique display highlighting a rotational display of MN inventors. Located in the Redwood Falls Community Center, the display is a proud tribute to Minnesotan ingenuity.

13 Redwood County Historical Society
913 W. Bridge, Redwood Falls 56283
507-641-3329
www.redwoodcountyhistoricalsociety.org
Hours: May - October, weekends & holidays.
Weekday tours by appointment. Admission fee

The Redwood County Historical Society is housed in a building converted from its original use as the county poor farm. With 30 rooms dedicated to various aspects of turn of the century life, visitors get a complete glimpse of what it was like to live in Redwood County in the early 20th century.

14 Renville County Historical Society
441 North Park Drive, Morton, MN 56270
507-697-6147 • rchs@redred.com
www.renvillecountyhistory.com
Hours: Summer: Tue - Sat 10-4; Sun 1-4.
Winter: Tue - Fri 1-4 Admission fee.

Renville County Historical Society and Museum is dedicated to preserving the history of Renville County. Among their large collection are freestanding structures such as a pioneer log cabin and two 19th century schoolhouses.

15 St. Aloysius Catholic Church
301 South 10th Street, Olivia, MN 56277
320-523-2030
Hours: Tours available by appointment.

Stop by this historic church to take in the remarkable Italian Romanesque Revival architecture. Often referred to as the "Cathedral on the Prairie", it was built in 1925 by Fr. Henry Pomije who served this parish for 42 years. The walls are decorated in oil canvas paintings by Gonippo Raggi, a well-known artist of the 1940s.

16 Tatanka Bluffs B&B
103 East 2nd Street, Redwood Falls, MN 56283
507-627-1875 • zuidema@newulmtel.net
www.tatankabluffsbandb.com
Hours: Call for reservations

This newly renovated bed & breakfast in the heart of Redwood Falls offers three guest rooms reflecting the history of the region. The works of local artists and authors are displayed throughout. Guests can tour the beautiful back roads and historic sites along this part of the Minnesota River Valley.

Green Routes directs people to places where they can get locally grown food and locally made products as well as participate in a community's natural attractions and amenities.

17 The Calf Fiend Café
220 East 2nd Street, Redwood Falls, MN 56283
507-637-3728
Hours: M-W 6 AM - 2 PM; Thurs 6AM - 11 PM;
Fri & Sat 6 AM - midnight.

As a community gathering spot, this café serves as the "unofficial" tourist center and provides an inviting space to meet in the center of town. Stop by for a cup of fair trade coffee, a bowl of soup or a sandwich made from local products. Be sure to ask about local area attractions!

18 The Master's Coffee Shop & Bakery
809 East Lincoln Avenue (Hwy 212), Olivia, 56277
masters@mchsi.com
Hours: Mon - Fri 7AM - 4 PM; Sat 8:00AM - 11:00 AM

This charming locally-owned and operated café and bakery features homemade soups & sandwiches, desserts, cheesecakes, lunch specials, soft-serve ice cream, coffee and specialty drinks. Local 4-H youth raise the eggs served at the café and fresh produce comes from the owners' own garden and the local farmers market.

19 The Red Sled
121 West 2nd Street, Morton, MN 56270
507-697-6411
Hours: Mon - Sat 10 AM - 5 PM; Sun 12 - 4PM

This enchanting shop is packed with locally crafted items including pottery, quilts, home decorative items and seasonal gifts. Check out their selection of Birch Coulee Pottery made by a local potter who makes his glazes from local materials.

County Parks

1. Lake Allie Park
   6 Miles Northeast of Buffalo Lake on County Road 24
2. Anderson Lake Park
   Southeast of Franklin just West of the junction of County Road 3 or 5 Miles South of Highway 19
3. Beaver Falls Park
   South of Olivia - Renville County Road 2 or 3 Miles West of Highway 71
4. Birch Coulee Park
   North of Morton along County road 18
5. Mack Lake Park
   Southwest of Fairfax on County Road 5
6. Skalbekken Park
   6 Miles Southwest of Sacred Heart on County Road 10
7. Vicksburg Park
   10 Miles South of Renville on County Road 6
8. Plum Creek County Park
   Walnut Grove

City Parks with Overnight Camping

9. Ballpark
   Franklin - 3 night maximum for camping
10. Boat Landing
    Franklin - 7 night maximum for camping
11. Ramsey Park
    North of Highway 19 on Grove Street - Redwood Falls
12. Memorial Park
    Olivia on US Hwy 212 - 71

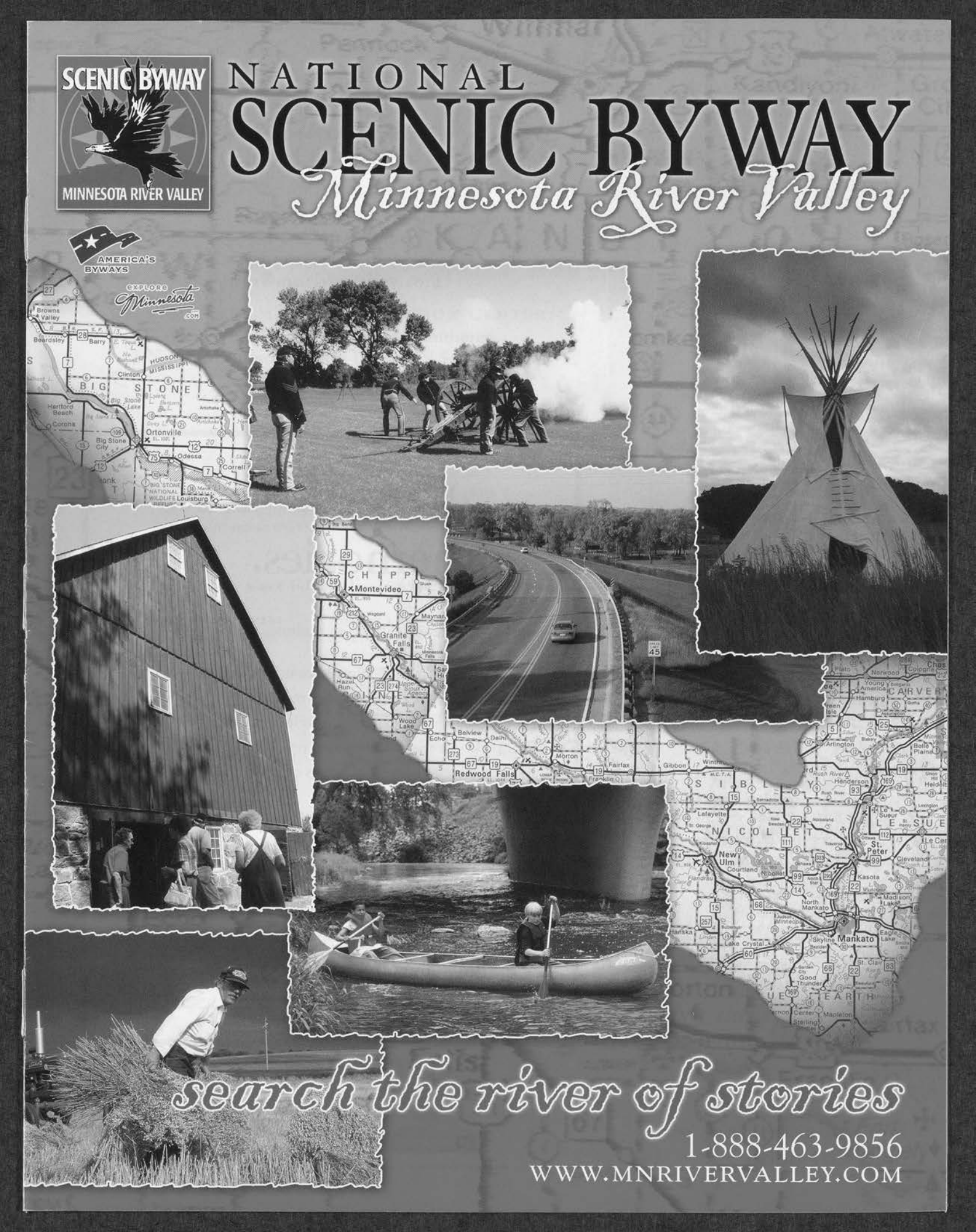
State Parks

Fort Ridgely State Park
South of Fairfax

Upper Sioux Agency State Park
8 Miles Southeast of Granite Falls and next to Skalbekken Park

Scenic Byway

Minnesota River Valley Scenic Byway:
www.mnrivervalley.com


SCENIC BYWAY
MINNESOTA RIVER VALLEY
NATIONAL
SCENIC BYWAY
Minnesota River Valley
AMERICA'S BYWAYS
EXPLORE Minnesota .COM
search the river of stories
1-888-463-9856
WWW.MNRIVERVALLEY.COM

Search the river of stories...

on your road to memories.

Along the Byway you will find a wide variety of history, agriculture, and culture.

Located along the Minnesota River, the **Minnesota River Valley National Scenic Byway** is a destination in itself. Although time has brought changes, the river valley remains as beautiful as ever. Hardwood forests, 3.8 billion year old granite outcrops, and lush prairie grasses remain for you to enjoy. State and local parks dot the valley, inviting you to get out-of-doors all year long, while museums and historic sites offer vivid stories of prairie life.

Close your eyes and imagine becoming an explorer for a day. Relax in the tranquility of Big Bluestem prairie grasses. Watch for Dakota skipper butterflies among purple cornflowers. Scan the expansive blue sky for bald eagles or wait quietly at the river's edge to catch a glimpse of a deer at sunset. Too much quiet for you? How about a threshing show with chugging and puffing turn-of-the-century steam engines. A 19th century musket demonstration? Cross-country skiing? Power shopping in unique specialty stores? Take home one of our stories. We've got plenty to share!

FOR MORE BYWAY INFORMATION, VISIT
www.mnrivervalley.com OR CALL **1-888-463-9856**.

Minnesota River Valley
SCENIC BYWAY

CONTACT US:
1-888-463-9856
www.mnrivervalley.com
info@mnrivervalley.com

OR VISIT OUR MAIN INFORMATION CENTER:
New Ulm Area Chamber of Commerce
1 North Minnesota – New Ulm, MN 56073-0384
Fax 507-354-1504

Use this page to request additional information about specific byway destination areas or topics by marking an ✘ in the space. Fill in your mailing information then fax, mail, call or email us your request and we will send you the customized information.

I would like more information on the following:

Destination Areas
___ Henderson Area
___ Le Sueur Area
___ St. Peter Area
___ Mankato & North Mankato Area
___ New Ulm Area
___ Redwood Falls Area
___ Renville County Area
___ Granite Falls Area
___ Montevideo Area
___ Ortonville Area

Topics
___ Agriculture
___ Art & Culture Events
___ Biking
___ Camping
___ Casino
___ Festivals & Events
___ Golfing
___ Museums
___ Native American Heritage
___ Prairies
___ State Parks & Refuges
___ Wildlife Watching & Birding

NAME _____

MAILING ADDRESS _____

CITY _____

STATE _____ ZIP CODE _____

PHONE _____

EMAIL _____

See America's Byways

– FUNDED IN PART BY THE FEDERAL HIGHWAY ADMINISTRATION –

explore Minnesota .com

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FOR MORE BYWAY INFORMATION, VISIT US ONLINE OR CALL.
www.mnrivervalley.com
1-888-463-9856

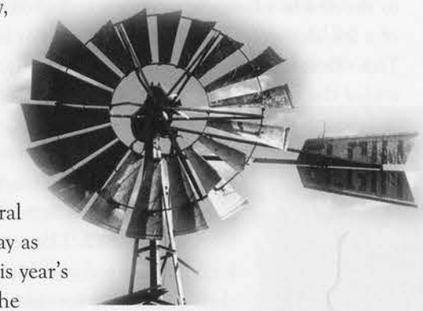
Food for a Nation

The pair of off-white, sweating oxen strained against the heavy wooden yokes as they listened to the sound of their master's voice pushing them to keep them moving forward. C'mup! C'mup! The deep prairie roots fought bravely for their existence, but they were no match for the oxen and plowshare. The average acre of prairie took two full days to reduce to small clumps ready for grain to be planted.

When the immigrant settlers came to this land to make themselves a new life, they brought with them the hopes and dreams of a lifetime. Some purchased land; others claimed land and settled under government programs agreeing to stay for at least ten years and build a home. Many spent years of hard work struggling to make a profit, with weather, insects, or injury finally ending in claim abandonment. Perseverance for a very few actually paid off. Friendships of neighbors made the isolation of homesteads bearable. Sitting around visiting was one of few entertainments, but everyone relished it. Neighbors helping neighbors allowed larger structures to be built. Many quaint home sites can still be seen along the byway.

Eventually, the sod was smoothed and the town sites were established, making store catalog purchases common. The stores and mail order businesses gave these families amenities like store-bought furniture, windows for their homes, and sewing machines and fabric for making clothing.

Fieldwork was eventually eased somewhat by cast iron plowshares and harrowing machines. The first horse drawn combine was used in 1884 for wheat. Joseph Renshaw Brown, founder of Henderson, was one of the first inventors to experiment with the steam engine tractor. The first tractors came into the American market by 1868, but were not generally affordable to the average farmers until well into the 1930's and 1940's. By 1954, the number of tractors out-numbered horses on farms for the first time in history. The Minnesota Machinery Museum in Hanley Falls has buildings packed full of these now outdated pieces of history. The production of products the average farm supplied increased immensely, and by 1960 a single farmer provided 26 people with food. The ease and automation of planting, fertilizing, weed control, and harvest have come with a price tag. The ability to work many more acres than in the past has increased the average farm size from 80-acre homesteads in the 1850's to farms that encompass a square mile today. This increase means less families farming and a change in how the farm site buildings are designed and built. Large round bales, machine sheds, and outside storage serve the purpose and reduce the need to maintain the traditional barns. The red barns along the Byway are becoming obsolete. See one of the remaining red barns at the Swensson Farm Museum near Montevideo. The need to preserve the valuable black topsoil encourages less tillage and can help to keep the waterways cleaner. Wise testing of the soil tells the farmers of today where and how much of specific types of fertilizer to apply, saving dollars and time. Travel the Byway in the fall and develop an appreciation for the agricultural managers of today as they combine this year's harvest, and at the same time enjoy the fall colors. Also stop and appreciate the traditional style buildings, learn more about what crops are grown most commonly along the Byway, and think back to the times when all of the land was first broken to feed a nation of people. This nation was built on the backs of pioneers like those who settled this land. If you take the time, you can still see the traces of their lives in many places along this beautiful valley ◆



BYWAY BITS

Prairies and Wetlands, Hardwoods and...Cactus?!

Landscape preserves along the Byway Corridor provide opportunities to study or observe rare and important plant and animal species, as well as historic landscapes.

Natural sites include native cactus at **Big Stone National Wildlife Refuge**, the country's largest pothole lake at **Swan Lake** and original tall-grasses prairie at the western end of the Byway. The **Minnesota River Valley** is home to some of the richest farmland in the world, mainly due to the decomposition of the tall-grasses. Slow down and reflect on how your food came to your table by watching the simple beauty of farmers working their fields in spring and fall. It's sublimely awesome!

The modern landscape benefits from enlightened programs to restore the river banks and marginal farmland by planting native vegetation, which will benefit not only the river quality, but wildlife, too. ◆

Farms & Red Barns

What does the Jolly Green Giant, a millionaire's estate and a 100 year-old "Century Farms" have in common? They're all here along the Byway!

Near **Redwood Falls** is the **Gilfillan Estate**, containing a tourable mansion, large farm museum, and the home to **Farmfest** - a huge agriculture festival every August.

Minnesota's Machinery Museum in **Hanley Falls** hosts Minnesota's largest collection of farm equipment and exhibits. Check out the old time **threshing show** every August!

East of **Montevideo** is the **Olof Swensson Farm Museum** built in 1901. You can see the large barn, 22-room home, and welcoming grounds.

Le Sueur is home to the **Green Giant Company**, the local museum and town markers tell the whole story! Ho, Ho, Ho!

The Byway is home to a variety of agricultural businesses. Corn-based ethanol gasoline, agricultural seed production, food processing and food production with both large scale and small local growers of all sorts exist here. Watch for local farmers markets or local stores showcasing "Minnesota Grown" local foods for the best selection! Or preview local sources at **www.minnesotagrown.com**. ◆

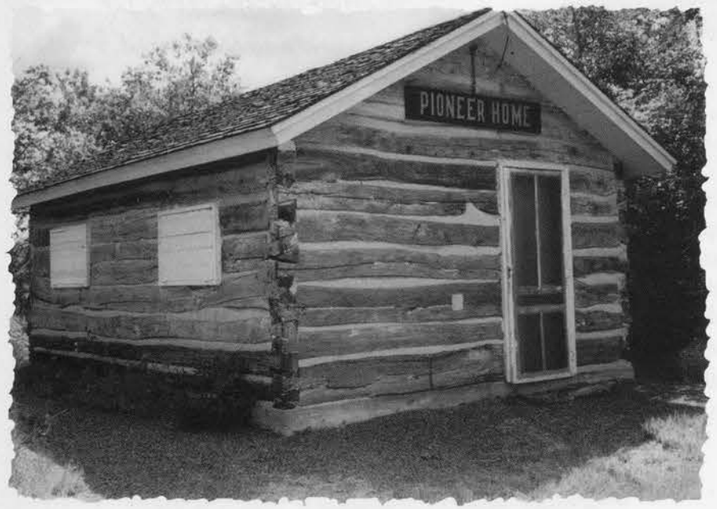
"The average acre of prairie took two full days to reduce to small clumps ready for grain to be planted."

Struggles for a Home

A young boy sat piling stones building a low wall, while his mom worked nearby tediously cutting up large chunks of freshly killed bison occidentalis. One of the men had been hurt deeply as his hunting group bravely approached the huge beasts with just spears in hand and rock outcroppings to hide behind. Life was hard for the Paleo-Indians.

A small, stone wall was found by archaeologists 9,000 years later, nearby fragile remains of bison skeletons. Chop marks on the masses of bones, a discarded stone scraper, and fire-cracked rocks told the story of what happened at this site. For thousands of years before today, people lived along this generous river valley. They hunted, fished, and gathered what they needed to exist. There is documented evidence of habitation over 8,000 years old at Browns Valley with the Browns Valley Man, and near Granite Falls at the Peterson Bison Kill Site. The original inhabitants progressively changed with new materials they found and traded. New ways of hunting were established with the addition of horses, tools, and knowledge. Seeds traded with other bands brought with them new tastes and ways to ease the workload. Eventually came the European traders and a complete change in some of the peoples' lives.

Soon the bison were gone and a once proud People had to change their lifestyles even more in order to feed their children. No more did the government leaders of the United States want the People to live off the ever moving, ever dwindling bison herds. Treaties promised amenities; promises that were never fully kept. Frustration consumed the People and in the late summer of 1862 while the Civil War was still being fought, a terrible conflict broke out along the valley. Both peaceful Dakota People and innocent immigrant settlers were caught in the middle of the strife, leading to the deaths of over 500 settlers and Dakotas. The actions of a few changed the future of a nation of Dakota People. This effort to take back what was originally their homeland ended the treaty's broken promises. The vast majority of the Dakotas, peaceful or not, were exiled from this land, ending the struggle to keep their homeland. The tragic event is now named the United States/Dakota Conflict of 1862. The remainder of the land, known today as Minnesota, was then opened up for sale and settlement. Sites honoring and remembering those six weeks of time in Minnesota's history are scattered all along the valley including the Lower Sioux Agency Historic Site and the Schwandt Memorial.



Eventually, small log cabins like the Rudi Memorial or sod homes dotted the landscape. Usually the only store bought item in the homes was the stove on which they cooked and heated the tiny dwellings. The floors were hard packed dirt. Men toiled in the fields for long, drawn-out days to break the thick prairie sod, plant grain seed and tend their meager livestock. Many didn't make it when their crops failed. They took work where they could. Even during the times of strife, their faith was strong; worship was held in each other's homes until churches and schools could be built. The people of the prairie were like the land they loved, strong and resilient.

We can only hope that the boy who built the stone wall lived a long life, for parts of the story are gone with the winds that blow steadily across the land. Gone are many of the stories of the immigrant settlers who worked so hard to make a better life for themselves and their families.

Remember the stories of the Dakota families who were torn apart by war, separation, and exile, and lost their way of life, their burial grounds, and their homeland. Respect all of their memories as you travel the Byway and learn the stories of those who came before you ◆

"The people of the prairie were like the land they loved, strong and resilient."

Byway Bits

Festivals

With 287 miles worth of towns, there's bound to be a festival for your taste or season. Here is just a sampling of some events: **Sauerkraut Days** (Henderson), **Rock Bend Folk Festival** (St. Peter), **Rib Fest** (Mankato), **Bavarian Blast** (New Ulm), **Farmfest** (Redwood Falls), **Fiesta Days** (Montevideo), **Applefest** (Appleton), **Corn Fest** (Ortonville) and the **Meander Upper Minnesota River Valley Art Crawl.**

As you can see, a wide range of interests and activities await you in the **Minnesota River Valley!** ◆

Golfing

There are more than 25 golf courses along the Byway with a wide variety of playing surfaces & layouts, many with beautiful bluff & valley views!

From the sandy greens at **Ft. Ridgely**, to the championship courses near **Redwood Falls** and many municipal courses on the prairie and in the valley, there is a course nearby for all skill and interest levels. ◆

Hunting & Fishing

Hunting in the valley begins in the fall with over 150,000 geese at the **Lac qui Parle Wildlife Management Area**. Deer, duck, pheasant, and turkey are numerous, and trapping muskrat, mink, fox, raccoon, and beaver is also viable. Bow and black powder hunting have grown recently with outfitters able to supply your needs along the Minnesota River Valley Byway.

Ortonville's Big Stone Lake is famous for national fishing contests, but all along the river and its tributaries walleye, largemouth bass, crappies, northern pike, perch, blue gill, and fighting catfish abound. Don't forget about ice fishing in the winter! ◆

Birding

Eagles--everyone seems to be interested in these majestic creatures and the river valley abounds with them! Hot spots include the **Lac qui Parle WMA**, and areas around **Granite Falls**, **Montevideo**, and **Nicollet**. Watch the skies or trees along the river or on ice near open water in spring, and you're sure to see some!

The **Minnesota River Valley Birding Trail** is almost entirely within the Scenic Byway and there have been sightings of nearly 350 species within the river's watershed! With many refuges, wildlife management areas, scientific and natural areas, parks and other specified lands, the habitat is healthy and widespread. Check **www.birdingtrail.org** for great details! ◆

A River's Legacy

Thirteen thousand years ago, glacial melt water from Lake Agassiz burst through a natural earthen berm and over the continental divide. This phenomenon created a huge torrent of water that carved the Minnesota River Valley as we see it today. There are places along the valley that the scouring force of this tremendous ancient river clawed the earth so deeply that 3.8 billion year old granite bedrock was exposed. These outcrops are scattered along the valley and now protect some very unique plant and animal communities. The Glacial River Warren was not the first

to flow this path, but the sheer volume of this ancient river carved a footprint upon this land that is recognizable from satellite images. With this landmark on the face of the earth, some still debate the true headwaters to the Minnesota River. The outlet of Big Stone Lake or a small stream known as the Little Minnesota that flows steadily from a place named Sici Hollow, both silently claiming the right to be the beginning of the proud Minnesota River. Now a slow and peaceful river remains. The river valley reaches a mile wide in places and stretches from Browns Valley to the river's confluence with the Mississippi River at Fort Snelling. Search the river of stories for your own experiences and memories.

Along its winding path you will find remnants of prairie, the pre-settlement vegetation. While most speak of any open grassland area as prairie, once you learn what exists in a true prairie, you will never mistake it again. Those traveling the Byway can expect unique opportunities and experiences. Take the time to listen for the call of the red tailed hawk deftly hunting for its sustenance, or to retreat to a quiet grassy place and lie down on your back facing the brightness of the emerald blue sky while wisps of clouds float overhead. Relax and allow the chipping sounds of the resident bobolink to settle into your memory. Breathe deeply and inhale the fragrance of the carpet of lavender, shaggy blooms of the native blazing stars, or the intense scent of the common milkweed, much like the lilac. Some of the native grasses grow so tall you could get lost in an expanse of it. Become mesmerized by the waves of grass rippling in the breeze. Study the scattered, gnarly, burr oaks and their individual characteristics, as most of these majestic oaks have lived here for well over a hundred years. Respect the voices that come to you as time waifs away; they may be voices from the past.

People have lived here for thousands of years. Everything the original people had was a part of the land, and they respected it. The original inhabitants used various plants for medicine, nourishment, tools, and shelter. They also deftly hunted the bison. The thundering of the thousands of heavy hooves with the billowing dust clouds from the herds are now just records in history books. The great bison herds, along with our native prairie ecosystem, are almost gone. The prairie was plowed under to grow crops for a growing nation with less than one percent of the prairie yet to be enjoyed.

Whether at an early cemetery, along a railroad grade, or in the six state parks along the Byway, there are still places to rest and immerse yourself in what was here less than 200 years ago. Only occasional sounds of highway noise or a plane flying overhead may disrupt your solitude. These are the sounds of the development threats that challenge the remaining prairie today. So respect the nodding, tiny birds-foot violet and the tough, pale pasque flower, as they have existed here for many years and are a fragment of what once was. Become familiar with this proud river, its land, and especially its people, as they are as resilient as the prairie ◆

"History is a watercourse.
A river in the mind.
A precarious pattern we make
from the flow of time,
as we try to write our names
on the water."

--Lyall Watson

Minnesota River Valley BYWAY BITS

Canoeing, Kayaking and Hiking

The rivers along the byway provide a wide range of experiences for the water enthusiast. The **Minnesota River**, generally slow and winding, provides excellent game fishing including **walleye**, **northern**, **channel** and **flathead catfish**. There are smaller tributaries of the Minnesota that give something to come back for to the action-minded folks. Rock rapids, white water and fine fishing all rolled into the **Yellow Medicine River** and **Hawk Creek**, which some claim are two of the best white water rivers in the state. If that sounds too ambitious for you, try your luck on the **Chippewa** or the **Pomme de Terre Rivers**, as they are known for their wildlife viewing and gentle waters.

Prime spots for hiking are located in the **six state parks** and many other parks along the byway. A wide variety of hiking awaits you with forested, prairie and riparian ecosystems. Given the depth of the valley in many places, trail opportunities can challenge the serious hiker, or just be a walk in the park! Bring along a good bird book or if hiking the prairie, choose a good tall-grass prairie plant book. Bring along friends or family to make this trip a memorable one. Don't forget the camera! ◆

Geology, Mining and The Continental Divide

The oldest exposed rock in the world! That's what you'll find near **Granite Falls**, but there are several other places along the Byway that will excite the geologist in you.

The draining of **Glacial Lake Aggasiz** from west central Minnesota after the last ice age shaped the river valley. There is still evidence of those forces for the sharp eye.

The old town of **Ottawa** is ripe with limestone buildings from a local quarry, including a church, town hall, house, and barn.

There are still opportunities to watch **mining for aggregate gravel** taking place at various sites along the Byway, especially near **St. Peter**, **New Ulm**, **Renville**, **Granite Falls**, and **Ortonville**.

Near the **Minnesota/South Dakota** border is the **Continental Divide**, which separates water flowing south to the **Gulf of Mexico** and water flowing north to **Hudson Bay**. A sign at **Browns Valley** explains this phenomenon. ◆

Byway Guide Directory

ACCOMMODATIONS

Holiday Inn New Ulm. **507-359-2941**

Microtel Inns & Suites **507-354-9800**
424 20th S St - New Ulm, MN 56073. **800-771-7171**
www.microtelinn.com
63 rooms, 25 suites, indoor pool & spa. Home of the FREE wireless high speed Internet, long distance & local calls. 40-person capacity meeting room.

The Morton Inn Morton **507-697-6205**

Prairie's Edge Casino Resort . . . **320-564-2121**
5616 Prairie's Edge Lane **866-293-2121**
Granite Falls, MN 56241 / deb@prairiesedgecasino.com
www.prairiesedgecasino.com
MN's newest casino offers slot machines, blackjack, a luxurious hotel, dining, entertainment, and a convention center. Coming this summer, a new 55-unit RV park.

Redwood Valley Lodge **507-644-5700**
Redwood Falls

Sunrise Motel Ortonville **800-337-6106**

ATTRACTIONS

Fieldstone Vineyards Morgan . **507-249-WINE**

Historic Gilfillan Farm Estate . . **507-249-3451**
Redwood Falls

Le Sueur Museum **507-665-2050**
709 North 2nd Street - Le Sueur, MN 56058
Green Giant Genealogy Interpretive Center, one and only veterinary clinic, drug store, and much more.

Redwood County Historical Museum Redwood Falls **507-644-3329**

BED & BREAKFAST

Deutsche Strasse Bed & Breakfast **866-226-9856**
404 S Germain St - New Ulm, MN 56073
www.deutschestrasse.com
5 rooms/5 private baths. Four course breakfast. In Historic district, 4 blocks from downtown. Wireless Internet.

CASINOS

Jackpot Junction Casino Hotel **800-WIN-CASH**
PO Box 420 - Morton, MN 56270
www.jackpotjunction.com
Slots, table games, bingo, entertainment, restaurants, bars, 2 hotels, RV Park, convention center, golf course, childcare.

Prairie's Edge Casino Resort . . . **320-564-2121**
5616 Prairie's Edge Lane **866-293-2121**
Granite Falls, MN 56241 / deb@prairiesedgecasino.com
www.prairiesedgecasino.com
MN's newest casino offers slot machines, blackjack, a luxurious hotel, dining, entertainment, and a convention center. Coming this summer, a new 55-unit RV park.

CHAMBERS / CVB'S

Appleton Area Chamber **320-289-1527**
PO Box 98 - Appleton, MN 56208
appletonmn@fedtel.net / www.appletonmn.com
Close to Lac qui Parle State Park/Refuge/ MN River, ATV Park, Chippewa Prairie Preserve!

Big Stone Lake Area Chamber of Commerce **320-839-3284**
987 US Hwy 12 - Ortonville, MN 56278 **800-568-5722**
chamber@bigstonelake.com / www.bigstonelake.com
"Wild" about fishing, hunting, golf, birding? Visit unique Big Stone Lake. Call for FREE map.

Granite Falls Convention & Visitors Bureau . . **320-564-4039**
646 Prontice Street - Granite Falls, MN 56241
gfchamber@mvtvwireless.com / www.granitefallseda.org
Come visit Granite Falls, a beautiful River Valley Town.

Henderson Chamber of Commerce **507-248-3234**
PO Box 216 - Henderson, MN 56044
www.hendersonmn.com
One of Minnesota's oldest communities. Nestled in the "big woods" along the Minnesota River Valley. Historic Main Street features museums, antique shopping and unique shops, and old fashioned soda fountain and one of the state's finest B & B's.

Montevideo Area Chamber of Commerce & CVB . **320-269-3527**
110 N First St - Montevideo, MN 56265 **800-269-5527**
generalinfo@montechamber.com
www.montechamber.com
Parks, rivers, unique shops, antiques, and historic depot & village. 2004 All America City.

New Ulm CVB **507-233-4300**
PO Box 862 - New Ulm, MN 56073. . **888-463-9856**
nuchamber@newulmtel.net / www.newulm.com
Discover Germany in Minnesota in this charming town with festivals, super shopping & ethnic food.

Redwood Area Chamber & Tourism **507-637-2828**
200 South Mill Street - PO Box 21 . . . **800-657-7070**
Redwood Falls, MN 56283
betha@redwoodfalls.org / www.redwoodfalls.org
Escape to Redwood Falls...'The Scenic City'. Home of Alexander Ramsey Park - Minnesota's "Little Yellowstone"

Renville County Housing & Economic Development **320-523-3656**
500 E Depue Ave - Olivia, MN 56277
chris_h@co.renville.mn.us / www.renville.com
Restaurants, lodging, wild life, antique stores, parks, and museums, only 100 miles west of Minneapolis.

Sleepy Eye Convention & Visitors Bureau Sleepy Eye **800-290-0588**

St. Peter Tourism & Visitors Bureau **507-934-3400**
101 S Front St - St. Peter, MN 56082 . **800-473-3404**
spchamb@hickorytech.net / www.tourism.st-peter.mn.us
Welcome to historic Saint Peter - Home of unique attractions including Saint Peter's Pearly Gates.

Western Minnesota Prairie Waters CVB **888-888-5432**
323 West Schlieman Ave - Appleton, MN 56208
info@prairiewaters.com / www.prairiewaters.com
Come to where the Prairie meets the River... Surrounding the northern portion of the Minnesota River Valley, enjoy outdoor adventures, wildlife, state parks, national wildlife refuge, historic sites, festivals and much more! Experience Life in the Relaxed Lane..

GOLF COURSE

Dacotah Ridge Golf Club **800-WIN-CASH**
PO Box 420 - Morton, MN 56270
www.dacotahridge.com
Designed by architect Rees Jones, 18-hole championship golf course. Nationally recognized by Golf magazine.

HERITAGE SITE

Historic Chippewa City and Chippewa County Historical Society **320-269-7636**
151 Pioneer Dr PO Box 363 - Montevideo, MN 56265
cchs@maxminn.com
Late 1800's village, 24 buildings including log cabins and business district surrounded by wooden boardwalks.

RV PARK

Lakeshore Park RV Park **320-839-3701**
39445 Lake Shore RV Park Road **800-936-7386**
Ortonville, MN 56278
lakeshorerv@watco.midco.net
Newly expanded outdoor pool, cabins, 6 campsites, boatlift renting, and 18-hole mini-golf on Big Stone Lake.

SHOPPING / ANTIQUING

Ron's Hallmark Redwood Falls. . . . **507-637-8535**

FOR MORE BYWAY INFORMATION,
VISIT **www.mnrivervalley.com** OR CALL **1-888-463-9856.**

Byway Information Centers

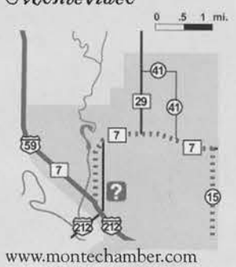
Big Stone Lake Area
Chamber of Commerce
987 US Hwy 12
Ortonville, MN 56278-1406
(800) 568-5722

Ortonville

www.bigstonelake.com

Montevideo Area
Chamber of Commerce & CVB
110 N. 1st St.
Montevideo, MN 56265-1402
(800) 269-5527

Montevideo



www.montechamber.com

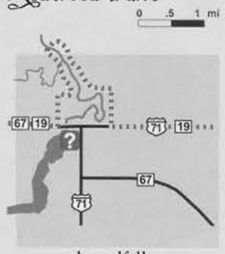
Granite Falls
Chamber of Commerce & CVB
646 Prentice St.
Granite Falls, MN 56241-1505
(320) 564-4039

Granite Falls

www.granitefallsmn.org

Redwood Area
Chamber & Tourism
200 S. Mill St.
Redwood Falls, MN 56283
(800) 657-7070

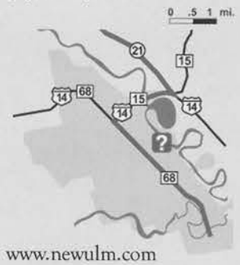
Redwood Falls



www.redwoodfalls.org

New Ulm
Chamber of Commerce
1 N. Minnesota St.
New Ulm, MN 56073-1727
(888) 463-9856

New Ulm



www.newulm.com

Greater Mankato CVB
122 S. River Front Drive
PO Box 999
Mankato, MN 56002
(800) 657-4733

Mankato and North Mankato

www.greatermankato.org

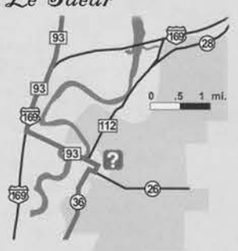
St. Peter Tourism
and Visitors Bureau
101 S. Front St.
St. Peter, MN 56082-2500
(800) 473-3404

St. Peter

www.tourism.st-peter.mn.us

Le Sueur Area
Chamber of Commerce
500 N. Main St.
Le Sueur, MN 56058-5500
(507) 665-2501

Le Sueur



home.lesueurchamber.org

1-800-269-5527 | www.montechamber.com
generalinfo@montechamber.com

Your road to memories...

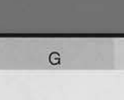
The Minnesota River Valley National Scenic Byway

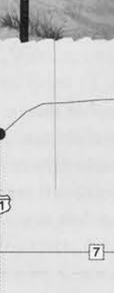
www.mnrivervalley.com

FOR MORE BYWAY INFORMATION, VISIT **www.mnrivervalley.com** OR CALL **1-888-463-9856.**

AMERICA'S BYWAYS

SCENIC BYWAY
MINNESOTA RIVER VALLEY





Visit www.mnriveryvalley.com for more information.

Venture into the Valley!

Here are more places to see and things to do.

- Golf Courses
- River Access Points
- Recreational Trails
- Casinos
- Farmers' Markets
- Antique Stores & Specialty Shops
- Festivals and Events
- Fishing
- Hunting
- Wildlife Viewing
- Whitewater Canoeing
- Local museums
- Historic Sites

David Larson, MN/DOT

Minnesota River Valley Scenic Byway Paved Surface

Minnesota River Valley Scenic Byway Gravel Surface

Alternate Route Paved Surface

Alternate Route Gravel Surface

Minnesota River

Interstates

U.S. Highways

State Highways

County Roads

Byway Information

Scale 0 5 10 20 mi.

Browns Valley, Beardsley, Ortonville, Big Stone City, Odessa, Correll, Appleton, Louisburg, Milan, Madison, Watson, Montevideo, Dawson, Wegdahl, Granite Falls, Sacred Heart, Upper Sioux Community, Canby, Hanley Falls, Wood Lake, Echo, Belview, Delhi, Morton, Redwood Falls, Lower Sioux Community, Marshall, Benson, Willmar, Olivia, Glencoe, Franklin, Fairfax, Gaylord, Morgan, Sleepy Eye, New Ulm, Courtland, Nicollet, Cambria, North Mankato, Judson, Mankato, Kasota, St.Peter, Norseland, Ottawa, LeSueur, Henderson, Belle Plaine, Blakeley, Minneapolis, St. Paul, Faribault, Owatonna, Albert Lea, Blue Earth, Fairmont, Jackson, Worthington, 56 miles from Worthington to Sioux Falls, SD

SOUTH DAKOTA MINNESOTA

Discovery Sites

The list of discovery sites along the Byway are listed in order from west to east along the Minnesota River Valley. Many of the sites are seasonal and variable and may charge an admission fee.
More discovery sites can be found at www.mnrivervalley.com.

Samuel Jerome Brown Memorial Park

West Broadway Avenue in Browns Valley.
Samuel Jerome Brown was known as the "Paul Revere" of the northwestern frontier, for his noble and kindhearted character. This memorial has a restored log cabin built by Samuel's father, Major Joseph R. Brown, which exhibits many artifacts of this early pioneer's life. The cabin served as a trading post, stage line stop, tavern and inn.
(320-695-2608 or 2110)

Big Stone National Wildlife Refuge

One mile southeast of Ortonville, off Highway 7/75.
The Big Stone National Wildlife Refuge consists of 10,795 acres of marsh and open water created by the three-mile dam across the Minnesota River. The refuge offers a four mile self-guided auto tour along which you will experience western prairie, mixed hardwoods, and wetlands with over 230 different species of birds living there. A foot trail provides a close-up view of prairie plants, meandering rivers and wildlife. The 100 acres of granite rock outcrops support unusual species of cactus and other plants and provide an excellent view of the refuge.
(320-273-2191)

Chippewa Prairie Preserve

From the junction of Hwy 40 and Lac qui Parle County Rd 33, cross Lac qui Parle Lake on Hwy 40 and turn left onto Chippewa Cty Rd 30. Go 3 miles, turn left onto County Line Rd and go 1/2 mile. Chippewa Prairie's 1,102 acres represent a small remnant of the once vast northern tall grass prairie ecosystem. For hundreds of years, the area was home to the Dakota Indians who camped along the river, harvesting wild plants and following the vast herds of buffalo, elk, white-tailed deer, and migrating waterfowl. Settlers began arriving but found the boulder-strewn terraces and steep ravines too difficult to plow. Here the prairie continued to bloom, interrupted mainly by grazing livestock and seasonal mowing.

Lac qui Parle Wildlife Management Area and Refuge

Located on the lower end of Lac qui Parle Lake between Watson and Milan. Canada geese use Lac qui Parle Wildlife Management Area as a stopover during fall migration. Fall is the best time to see the largest concentration of Canada geese. Flocks of up to 100,000 can be seen during peak migration in late October. Bald eagles can also be seen nesting on an island sanctuary. Located adjacent to the newly renovated Lac qui Parle State Park.

Lac qui Parle Mission State Historic Site

From Watson, one mile northwest on Highway 7, turn left on County Road 13, go 2.2 miles, turn right on County Road 32 and go one mile, on left side of road. Interpretive sign marks the location of Joseph Renville's fur trading post established in 1826 at a Wahpeton Dakota village on the Lac qui Parle Lake shore. Renville invited missionaries to establish the Lac qui Parle Mission near his post in 1835, and a trail with interpretive signs connects the two sites. The Chippewa County Historical Society administers this Minnesota Historical Society site.

Historic Chippewa City

Located at 151 Pioneer Drive, Junction of Highway 59/7, Montevideo.
A unique 23 building, turn of the century village. Stroll the boardwalks as you reminisce of times gone by. Visit the Millinery Shop, Law Office, School House, and our authentic log cabins.
A 1915 Seagraves Pumper and a 1914 Dodge hearse are also on display.
(320-269-7636)

Olof Swensson Farm Museum

From Montevideo go six miles east on Highway 7, turn right and go five miles south on County Road 6, turn left and go 1/4 mile on County Road 15.
The Olof Swensson Farm Museum contains a 22-room house, timber-framed barn, family burial cemetery, and remains of a grist mill. Constructed in 1901, the house contains original furnishings from this unique Norwegian/Swedish family. Listed in the National Register of Historic Places.
(320-269-7636)

Minnesota's Machinery Museum

Located 1 and 1/2 blocks west of Highway 23, Hanley Falls. Five large buildings contain a marvelous collection of antique tractors, gas engines, implements, and tools in mint condition. Many fond memories will surface as you stroll through the farm home rooms and general store. New in 1996 is a building to display vintage automobiles. Plan an hour and a half to experience rural Minnesota's finest look at yesterday and today's agriculture and transportation.
(507-768-3522)

Upper Sioux Agency State Park

Eight miles southeast of Granite Falls on Highway 67.
This 1,280 acre park was named for the historic site within its boundaries. The Upper Sioux Agency (or Yellow Medicine Agency) was established by the federal government in 1854 to be a center for instructing the Dakota people in farming methods. The park offers three campgrounds, 18 miles of trails, two picnic areas, river fishing, and two rental tipis. It is listed in the National Register of Historic Places.
(320-564-4777, 800-766-6000, www.dnr.state.mn.us)

Joseph R. Brown State Wayside

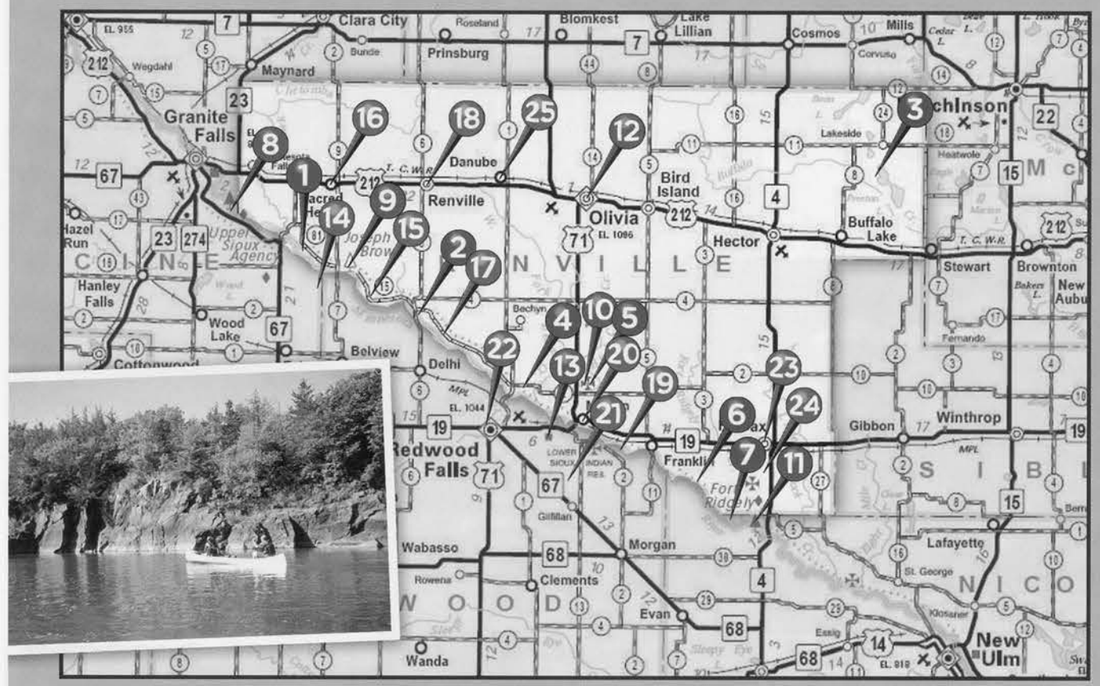
Located on Renville County Road 81, south of Sacred Heart.
The Joseph R. Brown State Wayside Rest displays the granite ruins of Brown's home from 1862. Destroyed during the U.S./Dakota Conflict of 1862, the three-story home was a mansion compared to normal pioneer homes. Brown's family was spared because of his wife Susan's Native American heritage. Brown was a politician, inventor, publisher, and Indian Agent.
(320-564-4777)

Lower Sioux Agency State Historic Site

Located on Redwood Co. Hwy #2, south of Morton. In 1853 the U.S. Government established the Agency to administer treaty obligations with the Dakota people living on reservations along the Minnesota River. Explore the history and culture of the Dakota, learn how government employees and missionaries sought to change their traditional way of life at the agency, and discover the roots of the U.S./Dakota Conflict of 1862 in the visitor center exhibit. Outdoors, investigate the original 1861 agency warehouse and three miles of trails with interpretive signs telling more of the agency's story. Administered by the Minnesota Historical Society.
(507-697-6321, www.mnhs.org)

RENVILLE COUNTY AREA...

You may want to bring your binoculars, canoe, camera, tent, horse, car, and a good pair of hiking shoes!



RENVILLE COUNTY PARKS
-- GREEN PUSH PINS --

1 – Skalbekken
2 – Vicksburg
3 – Lake Allie
4 – Beaver Falls
5 – Birch Coulee
6 – Anderson Lake
7 – Mack Lake

Experience the natural beauty of Renville County by visiting our more than 1,300 acres of county parks featuring primitive stands of trees, wildflowers, native prairies, and wildlife. See unique bedrock outcroppings that were formed 3.6 billion years ago along the banks of the Minnesota River.

For more information, call 320.523.3768.

MINNESOTA HISTORIC SITES/BUILDINGS
-- BROWN PUSH PINS --

8 – **Upper Sioux State Park** 320.564.4777
5908 Highway 67 Granite Falls, MN 56241

9 – **Joseph R. Brown Historic site** 651.296.6126

10 – **Birch Coulee Historic Site** www.mnhs.org/places/sites/bc

11 – **Fort Ridgely State Park** 507.426.7840
72158 County Road 30, Fairfax, MN 55332

12 – **Renville County Courthouse**
Olivia

13 – **Lower Sioux Agency** 507.697.6321
Lower Sioux Agency Historic Site,
32469 Redwood County Hwy 2,
Morton, MN 56270

MUSEUMS, PARKS, AND OTHER POINTS OF INTEREST
-- RED PUSH PINS --

14 – **Swedes Forest Scientific and Natural Area** (SNA)

15 – **Rudi Memorial**

16 – **Sacred Heart Area Museum** 320.765.8868

17 – **Schwandt Monument**

18 – **Renville Museum** 320.329.3541

19 – **Redwood Ferry Site**

20 – **Renville County Museum** 507.697.6147
www.renvillecountyhistory.com

21 – **Jackpot Junction Casino Hotel** 800.946.2274

22 – **Ramsey Park**
Redwood Area Chamber/Tourism
507.637.2828 or 800.657.7070

23 – **Fairfax Depot Museum** 507.426.7385

24 – **FairRidge Bike Trail** 800.535.3160
www.cityoffairfax-mn.gov

25 – **Danube Town Depot Museum** 320.826.2274

Come Home to Renville County...where business, agriculture, and opportunity go hand in hand!

Call for information about these sites and other outstanding sites such as our golf courses, restaurants, antique stores, unique gift stores and motels and to receive a free county map or visit us online.

320.523.3656
www.renville.com

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Renville County HRA/EDA 500 E. DePue Avenue, Olivia, MN 56277
Ph **320.523.3656** Fax **320.523.3833** Web **www.renville.com** Email **chris_h@co.renville.mn.us**
Visit our beautiful Minnesota River Valley **www.mnrivervalley.com** or the Minnesota River Valley Birding Trail **www.birdingtrail.org**.

Redwood County Historical Museum

West edge of Redwood Falls on Highway 19/67. The Old Redwood County Poor Farm, which was constructed in 1908, houses two stories of relics. (507-637-3329)

Alexander Ramsey Park

North of Highway 19 on Grove Street in Redwood Falls. Minnesota's largest municipal park featuring Ramsey Falls, 217 acres of wooded Redwood River Valley, a zoo with bison, playgrounds, campgrounds, shelters, golf club, hiking and skiing trail system, and fishing. (507-637-5755)

Gilfillan Farm Estate (Farmfest Site)

Eight miles southwest of Redwood Falls on Highway 67. This historic estate was built by the Gilfillan family which was known for exporting prime beef for European consumption during the early 1900s. The site is also the location of Farmfest, an agricultural extravaganza held each summer. (507-644-2490)

Fort Ridgely State Park and Historic Site

Located off Highway 4, south of Fairfax. This state park offers opportunities for camping, golfing, hiking, horse trails, and picnicking. Within the boundaries of the state park is the Fort Ridgely State Historic Site. Built in 1853 without a protective outer wall, Fort Ridgely was intended to serve as a "police station" between the line of settlement and the Dakota reservations along the upper Minnesota River. A staging ground for Civil War volunteers, Fort Ridgely was attached twice during the U.S./Dakota Conflict of 1862. The restored commissary building houses an audio-visual program, exhibits and gift shop. The Friends of Fort Ridgely administers this Minnesota Historical Site. **(507-426-7888, 507-697-6321, www.mnhs.org)** The state park is administered by the Department of Natural Resources. **(507-426-7840, www.dnr.state.mn.us)**

REDWOOD FALLS AREA
Home of Alexander Ramsey Park - "Minnesota's Little Yellowstone"

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- Beautiful State and Municipal Parks
- Great Specialty Shopping
- Historic Farm Estate
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- Orchard
- Casino Gaming
- Museums
- Sod Houses
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- Battlefields
- Petroglyphs
- Zoo

Chamber Redwood Area Tourism

PO Box 21, Redwood Falls, MN 56283
or further information contact us at:
1-800-657-7070
Email: chamber@redwoodfalls.org
Website: www.redwoodfalls.org

507-644-5700 • 1382 Bridge Street • Redwood Falls

Redwood County Historical Society

Historic Gilfillan Farm Estate
OPEN JUNE - LABOR DAY WEEKEND
Lorraine Tauer
507-249-3451
Redwood County Historical Museum
OPEN JUNE - OCTOBER 1 or BY APPOINTMENT
507-641-3329

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The Morton Inn
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400 Kokesch Drive P.O. Box 189 Morton, MN 56270

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7,000 square feet of gifts, cards, and collectables.
Hallmark Gold Crown
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240 S. WASHINGTON - REDWOOD FALLS, MN 56283

Harkin Store

Eight miles northwest of New Ulm on County Road 21. Sit a spell and play checkers, enjoy the old-fashioned smells of camphor and cinnamon, chat with the costumed staff, and investigate the line of wares - many of them original inventory - at this 1870s general store. The Harkin Store was important to early settlers arriving by steamboat to the town of West Newton, which flourished until the railroad bypassed the community by in 1873. The Nicollet County Historical Society administers this Minnesota Historical Society site.
(507-354-8666, 888-463-9856, harkin@nchsmn.org, www.mnhs.org)

Monuments in New Ulm & Glockenspiel

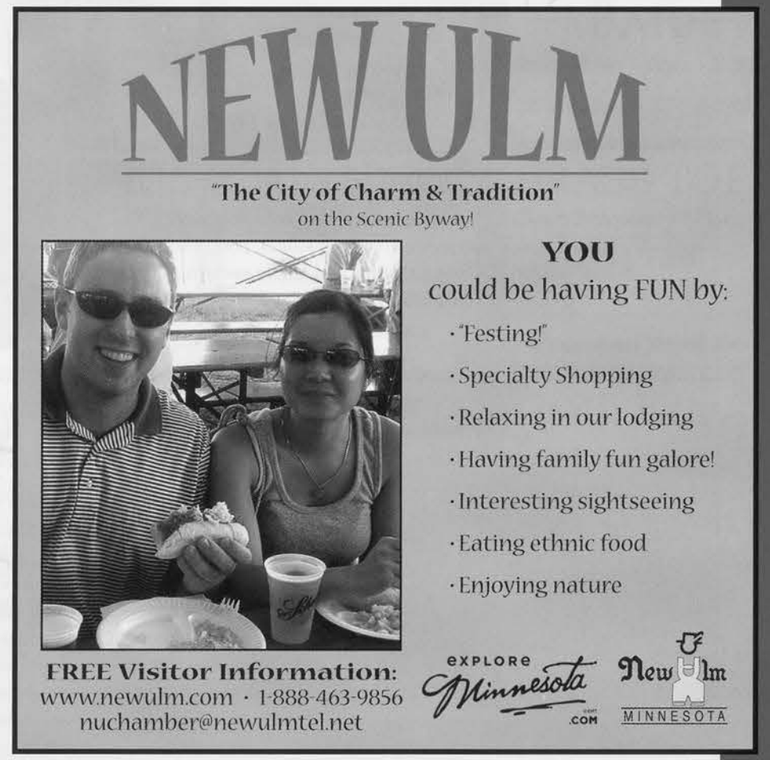
Some of the monuments which grace New Ulm are The Defender Monument (Center & State Streets), Waraju Distillery Chimney (Center & Linden Streets), Melges Bakery Building (213 South Minnesota Street), the Hermann Monument (Center & Monument Streets), and the Glockenspiel (4th & Minnesota Street), a unique 45-foot, free-standing clock tower with animated figures that depict the city's history.
(507-233-4300, 888-463-9856, www.newulm.com)

August Schell Brewery Museum and Gardens

South on Broadway, then west on 18th Street, New Ulm. New Ulm's oldest industry, the August Schell Brewing Company, was founded in 1860 and is still a family business. Schell's brews have won several honors in national brewing competitions. The brewery also offers a walking garden, Museum of Brewing, gift shop and brewery tours.
(507-354-5528, www.schellsbrewery.com)

R. D. Hubbard House

606 South Broad Street, Mankato.
Built in 1871, the Hubbard House was declared by the newspaper to be one of the finest homes of its day. The high level restoration has returned the home to its former splendor. Its oak and birch woodwork, three marble fireplaces, silk wall coverings, and Tiffany and Quetzal lamp shades enhance the French Second Empire style architecture. The fine Carriage House contains a collection of horse-drawn vehicles and antique autos. Victorian gardens landscape the two buildings. The house is listed on the National Register of Historic Places.
(507-345-5566, www.rootsweb.com/~mnbechs)



Traverse des Sioux Treaty Site History Center

1851 North Minnesota Avenue, St. Peter.
The home of the Nicollet County Historical Society, the History Center museum was built next to the site where the Treaty of 1851 between the Dakota people and the federal government was signed. The museum contains three exhibit halls, audio-visual room, and archives. A variety of changing and traveling exhibits are featured throughout the year.
(507-934-2160, museum@nchsmn.org)

Ottawa Village

Le Sueur County Road 23 (Ottawa Road).
This State Registered Historic District dates back to 1853. The platted village is a long narrow tract of land along the Minnesota River. Ottawa progressed in the 1860s to 1890s but by 1900 was falling into decline. Ottawa's seven locally quarried stone buildings on the National Register of Historic Places stand like markers of the birth, life and passing on of this once busy townsite. Self-guided map and tour available at Town Hall Kiosk. One of the sites, the Ottawa Methodist Church, was built in the 1860s of native limestone and is one of the oldest Methodist Church buildings in Minnesota.
(507-665-2501, www.lesueurchamber.org)

Le Sueur Museum and Green Giant Room

709 North 2nd Street, Le Sueur.
Exhibits, videos, and archives tell the story of the Green Giant Company along with an old time drug store with veterinary display, agriculture room, one room school, post office, art, radios, military, Le Sueur History, and family research center.
(507-665-2050, www.lesueurchamber.org)

Joseph R. Brown Minnesota River Center and Research Library

600 Main Street, Henderson, MN.
An interpretive center telling the life story of this exceptional man who shaped early Minnesota history. A place to study the geographical and cultural history of the Minnesota River Valley with an exhibit called the "Minnesota River Table". The valley carved by the Ancient River Warren has been home to successive waves of natives, from prehistoric people to the Dakota in the valley when white explorers, fur traders, and then settlers arrived. Joseph R. Brown founded Henderson in 1852 when settlement of southern Minnesota was about to begin. His influence on early Minnesota government, relations with Indians, and his business endeavors are explained in the center.
(507-248-3234, 507-248-3687, jrbsoc@mchsi.com, www.mnriverjrb.org)

HENDERSON

EST. 1852

Experience the History · Enjoy the Beauty

Whether it's the historic intrigue, antique shopping and unique shops, or the beautiful river valley activities, Henderson offers something for everyone.

- Historic Main Street
- Unique Shops
- Beautiful City Parks
- Historic Museums
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- Bluffs and Valleys to Explore
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507-248-3818

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FESTIVALS

Sauerkraut Days - Last Weekend in June • Heritage Days - 2nd Weekend in Sept. • Eskimo Days - 1st Saturday in Feb.

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- New RV Park Opening August 2005

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Please Gamble Responsibly

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- Camp by the river at Memorial Park.
- Swim & exercise at our Kilowatt Community Center.
- Shop our Retail & Gift Shop.
- Dine at our Great Restaurants.
- Try your luck at Prairies Edge Casino Resort.
- Golf at our Beautiful Golf Course.

See all that Nature has to offer
The River, The Oldest Rock
& our Wonderful State Park.

A Beautiful River Valley Town!

Granite Falls
Convention & Visitor's Bureau

646 Prentice Street, Granite Falls, Minnesota 56241
Local: 320.564.4039 ❖ Fax: 320.564.3843
Email: gfchamber@mvtvwireless.com ❖ granitefallsmn.org

BOARD OF WATER AND SOIL RESOURCES
MAX'S GRILL, BANQUET ROOM
2425 WEST LINCOLN AVENUE
OLIVIA, MINNESOTA 56277
(Phone: 320-523-5000)
THURSDAY, AUGUST 28, 2008

PRELIMINARY AGENDA

8:30 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF JUNE 25, 2008

OPEN MIKE (10-minute agenda time, two-minute limit/person)

REPORTS

- Chair – Randy Kramer
- Executive Director – John Jaschke
- Dispute Resolution Committee – Randy Kramer
- Wetlands Committee – LuAnn Tolliver
- Grants Program & Policy Committee – Louise Smallidge
- Public Relations, Outreach & Strategic Planning Committee – Brian Napstad
- Administrative Advisory Committee – Randy Kramer

COMMITTEE RECOMMENDATIONS

Metro Water Planning Committee

1. Carnelian-Marine-St. Croix Watershed District Watershed Management Plan Amendment – Bob Burandt – *DECISION ITEM*

2. Comfort Lake-Forest Lake Watershed District Revised Watershed Management Plan – Bob Burandt – *DECISION ITEM*

3. Richfield-Bloomington Watershed Management Organization, Watershed Management Plan – Bob Burandt – *DECISION ITEM*

4. Shingle Creek and West Mississippi Watershed Management Organizations' Plan Amendment – Bob Burandt – *DECISION ITEM*

Northern Water Planning Committee

1. Benton County Local Water Management Plan – Quentin Fairbanks - *DECISION ITEM*

2. Final Review – Crow Wing County Local Water Management Plan – Quentin Fairbanks - *DECISION ITEM*

3. Mahnomen County Local Water Management Plan – Quentin Fairbanks – *DECISION ITEM*

4. Aitkin County Priority Concerns Scoping Document (PCSD) – Quentin Fairbanks – *DECISION ITEM*

5. Ottertail County Priority Concerns Scoping Document (PSCD) – Quentin Fairbanks – *DECISION ITEM*

6. Red Lake County Priority Concerns Scoping Document (PCSD) – Quentin Fairbanks – *DECISION ITEM*

Southern Water Planning Committee

1. Blue Earth County Local Water Management Plan – Paul Langseth - *DECISION ITEM*

2. Brown County Local Water Management Plan – Paul Langseth - *DECISION ITEM*

3. Nicollet County Local Water Management Plan – Paul Langseth - *DECISION ITEM*

RIM Reserve Planning Committee

1. RIM/WRP Partnership Grant Payment Schedule for SWCD Services – Tabor Hoek – *DECISION ITEM*

NEW BUSINESS

1. Overview of Whole Farm Planning Bill (HF 2867) – Representative Al Juhnke - *INFORMATION ITEM*

2. Presentation on New Assessment and Planning Tools – Tim Gieseke, Ag Resource Strategies, LLC – *INFORMATION ITEM*

3. Demonstration of an On-line Tool-in-Progress Conservation Funding Advisor – Peter Scheffert, Minnesota Department of Agriculture – *INFORMATION ITEM*

4. 2008 Federal Farm Bill Update – Tim Koehler and Paul Flynn, NRCS – *INFORMATION ITEM*

5. '09 Non-Point Engineering Assistance Challenge Grants – Al Kean – *DECISION ITEM*

6. SWCD Technical Services Areas (TSAs) Reorganization – Al Kean - *DECISION ITEM*

7. FY 09 Drainage Records Modernization Challenge Grants – Al Kean – *DECISION ITEM*

8. FY 2009 Clean Water Legacy Grant Funding Package – Matt Drewitz and Jeff Hrubes – *DECISION ITEM*

9. Area II Minnesota River Basins Project Inc. FY 2009 Annual Work Plan – Tabor Hoek, BWSR, and Kerry Netzke, Area II Coordinator – *DECISION ITEM*

10. Minnesota River Basin Joint Powers Board, FY09 Annual Work Plan – Jeff Nielsen – *DECISION ITEM*

AGENCY REPORTS

- Minnesota Department of Agriculture – Joe Martin
- Minnesota Department of Health – John Linc Stine
- Minnesota Department of Natural Resources – Larry Kramka
- Minnesota Extension Service – Faye Sleeper
- Minnesota Pollution Control Agency – Paul Eger

ADVISORY COMMENTS

- Association of Minnesota Counties (AMC) – Annalee Garletz
- Minnesota Association of Conservation District Employees (MACDE) – Rick Reimer
- Minnesota Association of Soil and Water Conservation Districts (MASWCD) – LeAnn Buck
- Minnesota Association of Townships (MAT) – Sandy Hooker
- Minnesota Association of Watershed Districts (MAWD) – Ray Bohn
- Natural Resources Conservation Service (NRCS) – Tim Koehler

UPCOMING MEETINGS

- Next Board Meeting, September 24, 2008, St. Paul

12:30 PM ADJOURN

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD NORTH
ST. PAUL, MINNESOTA 55155
WEDNESDAY, JUNE 25, 2008

BOARD MEMBERS PRESENT:
Wayne Anderson, MPCA; Paul Brutlag, Quentin Fairbanks, Brian Kletscher, Randy Kramer, Larry Kramka, DNR; Paul Langseth, Joe Martin, MDA; Brian Napstad, Ken Robinson, Faye Sleeper, MES; Louise Smallidge, John Linc Stine, MDH; Gene Tiedemann, LuAnn Tolliver

BOARD MEMBERS ABSENT:
Dana Allen
Bob Burandt

STAFF PRESENT:
Mary Jo Anderson, Tim Fredbo, Travis Germundson, Jim Haertel, John Jaschke, Al Kean, Kari Keating, Kevin Lines, Dave Weirens, Tom Wenzel, Wayne Zellmer

OTHERS PRESENT:
Sandy Hooker, MAT
Tim Koehler, NRCS
Dr. Ed Nater, U of M

Chair Kramer called the meeting to order at 9:00 a.m.

PLEDGE OF ALLEGIANCE

** 08-56 **ADOPTION OF AGENDA** – Moved by Louise Smallidge, seconded by Paul Langseth, to adopt the agenda as presented. Motion passed on a voice vote.

** 08-57 **MINUTES OF MAY 28, 2008** – Moved by Brian Napstad, seconded by Quentin Fairbanks, to approve the minutes of May 28, 2008 as circulated. Motion passed on a voice vote.

REPORTS

Chair's Report – Randy Kramer reported that Bob Burandt and Dana Allen were unable to attend the meeting today. Chair Kramer reported that the IRS mileage rate will increase to 58.5 cents a miles for all business miles driven from July 1, 2008, through December 31, 2008. Chair Kramer attended the EQB meeting. The EQB passed a resolution to enter into an agreement with the U.S. Army Corps of Engineers for watershed planning in the Minnesota River Basin and authorized EQB Chair Gene Hugoson to negotiate the final contract.

Executive Director's Report – John Jaschke reported that Board Members Paul Brutlag, Louise Smallidge and LuAnn Tolliver have been reappointed by Governor Tim Pawlenty.

A comprehensive overview of the new Farm Bill will be part of the August Board meeting. John stated that he, Julie Klocker, and Al Kean will be meeting with Senator Dille this afternoon regarding the 2010 deadline for feedlot compliance. State regulations are tied to BWSR's cost-share program funding.

John attended the MASWCD Legislative Committee meeting last week. The MACDE summer meeting is being held June 23-25 at Breezy Point.

John reported that four additional counties (Houston, Fillmore, Freeborn, Winona) have been designated as "declared federal disaster counties" from the recent flooding event. BWSR is in the process of receiving $1.85M from DEED to assist in flood recovery for the August 2007 event.

John reported that he attended the MAWD summer tour last week, hosted by Bois de Sioux Watershed District. Tour sites included the North Ottawa project, a large scale flood protection project under construction to protect farmland with multiple benefits. John reported that Traverse County has a drainage

moratorium on tiling into county ditch systems until August 1 in order to protect the public road subgrades.

John reported that a Memorandum of Agreement between BWSR and the MASWCD is being developed regarding the realignment of SWCD Technical Services Area (TSA) boundaries, and MASWCD area boundaries to reorganize the current eleven SWCD TSAs into eight TSAs. John stated that the Grants Program & Policy Committee will discuss this issue at their July meeting.

Dispute Resolution Committee – Travis Germundson reported that dates on appeals have now been added to the DRC report. Travis reported that two additional appeals have been received, one in Washington County and one in Carver County. Travis reported that decisions have been made on two appeals, File #08-12 and File #08-13 have both been denied. John stated that he and Travis and Jim Haertel met with the Attorney General's office this week. BWSR will now have another attorney working on agency matters. Jim Haertel stated that all appeals received by BWSR have first gone through the LGU local review and appeals process, although appealed restoration orders do not go through the LGU.

Wetlands Committee – LuAnn Tolliver reported that the Wetlands Committee did not meet this month, the Wetlands Committee will meet on July 23, at 12:30 p.m. LuAnn will meet with Dave Weirens today to establish the agenda, which will include review of permanent rules.

Grants Program & Policy Committee – Louise Smallidge reported that the Grants Program & Policy Committee has several recommendations on the agenda today. The Grants Program & Policy Committee will meet on July 23 at 9:00 am.

Public Relations, Outreach & Strategic Planning Committee – Brian Napstad stated he anticipates the Public Relations, Outreach & Strategic Planning Committee will meet in the fall.

Administrative Advisory Committee (AAC) – Randy Kramer reported that the AAC met this morning to discuss the RIM Reserve bonding implementation phases; southeast flood update; the federal farm bill summary; dedicated funding update; NPEA MOA with MASWCD; Traverse County drainage resolution; feedlots; and the draft itinerary of the Board tour.

NEW BUSINESS

FY09 SWCD Grants – Wayne Zellmer reported that the Grants Program & Policy Committee recommends the following:

1. **Regular Statewide Cost-Share Base Grants** – These base grants are for the installation of conservation practices. Allocation of FY 09 SWCD Base Grants as itemized on the composite spreadsheet totaling $2,144,308.
2. **Clean Water Legacy Feedlot Water Quality Management Grants (FWQMG)** – Grant funds may not be used for new or expansion feedlot projects. Allocation of FY 09 FWQMGs as itemized on the composite spreadsheet totaling $1,399,904 leaving a remaining balance of $198,219 to be part of the '09 Clean Water Legacy Program.
3. **General Services Grant** – This base grant is for expenditures necessary to the operations of the SWCD and is non-competitive. Allocation of FY 09 General Services Grants as itemized on the composite spreadsheet totaling $2,155,122.
4. **Easement Services Grant** – This grant is allocated to SWCDs as compensation for local delivery of the RIM Reserve Program and the conveyance of easements. Allocation of FY 09 Easement Services Grants as itemized on the composite spreadsheet totaling $345,008.

** 08-58 Grand total of $6,044,342 in grant allocations. Moved by Louise Smallidge, seconded by Paul Langseth, to approve the Grants Program & Policy Committee's recommendations as presented, and authorizes staff to allocate these individual grants as listed on the attached composite spreadsheet. Discussion followed. Motion passed on a voice vote.

FY09 Natural Resources Block Grants (NRBG) – Wayne Zellmer explained that the Natural Resources Block Grants (NRBG) provides assistance to local governments to implement state natural resource programs. Wayne reported that the Grants Program & Policy Committee recommends approval of the following grants:

1. **Comprehensive Local Water Management** – Allocation of $1,499,824. This component is for implementing comprehensive local water plans. A statutory local levy match is required that will generate $1.5 M on a statewide basis. This individual county amount is determined from a county's equalized taxable net tax capacity, as determined by the Department of Revenue. Counties must have a BWSR approved locally adopted comprehensive local water plan.
2. **Wetland Conservation Act (WCA)** – Allocation of $2,171,973. This component is for the local administration of the WCA. A local 1:1 match is

required. The grant amount is formula derived from a base amount of county WCA activity.

3. **DNR Shoreland** – Allocation of $429,926. This component is for the administration of state approved Shoreland Management Programs. It's administered at the state level by the DNR. A local 1:1 match is required. The grant amount is derived from a base estimated amount of county shoreland activity.
4. **MPCA County Feedlot Program** – Allocation of $1,973,875. This component is for county administration of the MPCA Feedlot Program. All counties that have received delegation from MPCA to administer this Program are eligible to apply. A local .7:1 match is required. Grant amounts are based on the grant formula.
5. **MPCA County Subsurface Sewage Treatment Systems Program** – Allocation of $870,000. All counties are required to pass ordinances regulating SSTS countywide. All counties that have enacted countywide ordinances and have a BWSR approved locally adopted comprehensive local water plan are eligible to receive this grant. No local match is required. Grant amount of $10,000 is determined by equal county allocations. (If dedicated funding is achieved, this amount will become the base amount for FY 10 grants.) These funds are appropriated under the CWL Program. Koochiching County will be paid when they meet their SSTS requirements.

** 08-59 Moved by Louise Smallidge, seconded by Brian Kletscher, to approve the '09 Natural Resources Block Grant Program and authorize staff to enter into grant agreements with counties that meet Program requirements according to the proposed itemized amounts on the attached spreadsheet *2009 BWSR Natural Resources Block Grant, Base Grant Breakdown by Program*. Discussion followed. Wayne explained that the Legislative Auditor recommends a verification approach that all counties have expended the required local match. BWSR staff will be spot-checking a number of counties to see if the local match is expended. The Koochiching County NRBG grant will be held until they are in compliance. Motion passed on a voice vote.

FY09 Non Point Engineering Assistance (NPEA) Base Grant – Wayne Zellmer explained that the NPEA base grants are allocated annually to the eleven NPEA (TSA) Joint Powers Boards for the purpose of providing technical assistance to landowners to apply conservation practices. For FY 09, the legislature has appropriated $1.06 M for this Program. Wayne reported that the Grants Program & Policy Committee recommends approval of the NPEA base

** grants. Moved by Louise Smallidge, seconded by Paul Langseth to adopt the

08-60 Grants Program & Policy Committee's recommendation to approve the FY09 NPEA base grant and authorize staff to allocate these grants according to the policies presented, to JPBs meeting the Program requirements. Discussion followed.

Wayne Zellmer stated that the Grants Program & Policy Committee will inventory the JPBs and establish a plan for grant agreements to be restructured with unspent funds returned to the state or transferred to remaining JPBs. Brian Napstad alerted the Board that the resolution is a two-year grant agreement that could be dispensed in one year. Al Kean clarified that the Grants Program & Policy Committee meets in July and will make a recommendation to the Board in August, that will address the issue of transferring funds from 11 JPBs to 8 JPBs. Motion passed on a voice vote.

Mower SWCD Special Project Re-Allocation – Wayne Zellmer reported that the 2005 Legislature allocated funding for a demonstrational flood retention project in the Mower SWCD. A suitable site was not obtained before the grant agreement with Mower SWCD expired and these funds were returned to BWSR. A favorable site for this project has been secured along with funding other local, state, and federal funding. The Mower SWCD is requesting a re-allocation of the $15,000 for the proposed flood retention project. The Grants Program & Policy Committee recommends approval of the funding reallocation and requests
** approval. Moved by Louise Smallidge, seconded by Paul Langseth, to approve
08-61 the allocation of the appropriated $15,000 to the Mower SWCD for the Arlo Scheevel flood retention project. Discussion followed. Motion passed on a voice vote.

John Jaschke reported that Dave Peterson, Board Conservationist in Rochester, is retiring July 1, 2008.

Farm Bill Assistance Program – Kevin Lines reported that the Farm Bill Assistance Grant Program began in 2002 to provide financial assistance to selected SWCD's to accelerate the implementation of grassland and wetland projects. The primary focus has been with the conservation programs found in the Federal Farm Bill. This grant cycle is for Phase VIII that will run from July 1, 2008 through June 30, 2009. To date, nearly $6 million dollars has been spent on this project with a result of 240,000 acres of projects. The Farm Bill Committee, comprised of DNR, Pheasants Forever and BWSR staff, have
** developed the process for this program. Moved by Louise Smallidge, seconded
08-62 by Brian Napstad, to approve the FY09 Farm Bill Assistance Grant, BWSR's share is $180,000, total funding $767,500. Discussion followed. Motion passed on a voice vote.

Recognition Of Ken Robinson - Chair Kramer congratulated Ken Robinson for his one-year of service on the Board. Chair Kramer appreciated Ken's willingness to assist on BWSR Committees. Chair Kramer presented Ken with a Certificate of Recognition from Governor Tim Pawlenty. Chair Kramer, on behalf of BWSR, presented a commemorative print to Ken. Ken thanked the Board, and stated that he appreciated his time with BWSR.

Chair Kramer called for a break in the meeting at 10:05 a.m. The meeting reconvened at 10:25 a.m.

Agricultural Watershed Restoration Projects – Al Kean reported that Governor Pawlenty signed the Clean Water Legacy Act (CWLA) into law on June 2, 2006. The 2007 Legislature directed BWSR to use $1.5 million of Clean Water Legacy Act cost-share and incentives payment appropriations for agricultural watershed restoration projects located in watershed(s) impaired by nonpoint agricultural sources. These projects are to provide for long-term restoration of surface water quality. A three-phase project work plan was approved by the Board on January 23, 2008. Phase 1 involves selection of project subwatersheds that are representative of drained agricultural landscapes in Minnesota, and associated local project sponsors. A stakeholder Technical Advisory Committee (TAC) was established to help rank and select project subwatersheds and local sponsors. The Grants Program and Policy Committee reviewed the Phase 1 project subwatershed and local sponsor selection recommendations of staff and the project TAC and recommends approval. Moved by Louise Smallidge, seconded by John Linc Stine, to adopt the Grants Program & Policy Committee's recommendation to approve the six selected subwatersheds and local sponsors as presented. Discussion followed. Motion passed on a voice vote.

** 08-63

Establish Rates and Sign-Up Procedures for Reinvest in Minnesota (RIM) Reserve/Wetlands Reserve Program (WRP) Partnership: Phase 1 – Kevin Lines introduced Tim Koehler, NRCS Assistant State Conservationist. Kevin explained that BWSR and the Minnesota UDSA Natural Resources Conservation Service (NRCS) are announcing Phase I of a RIM Reserve/Wetlands Reserve Program (WRP) partnership. This partnership between the premier national and state wetland restoration programs will combine agency processes to offer competition payment rates to landowners for the purpose of restoring wetlands and adjacent lands in high priority areas. Kevin presented background information, reported that sign-up begins tomorrow, June 26, 2008 through July 18, 2008. Kevin explained the easement duration, payment rate for Phase 1, enrollment, scoring, selection process, and training. Tim Koehler reported that Washington has $75M to obligate in the next two months, on a first-come, first-serve basis. Kevin thanked the RIM Reserve Planning Committee (Paul Brutlag,

chair; Paul Langseth, Dana Allen, Randy Kramer, Larry Kramka, Joe Martin, Bob Burandt, and BWSR staff Tim Fredbo, Tabor Hoek, Pete Waller, Tom Wenzel) have all been very instrumental in this process. Kevin thanked Tim Koehler for all his efforts in acquiring funds, developing the sign-up procedures, and establishment of payment rates.

** Kevin reported that the RIM Reserve Planning Committee recommends approval of the partnership project and to launch Phase I of the RIM/WRP. Moved by Paul Brutlag, seconded by Ken Robinson, to approve RIM/WRP Partnership Phase 1. Discussion followed.

** Moved by Joe Martin, seconded by Larry Kramka, to amend the resolution to add, *"WHEREAS, a subcommittee shall be appointed by the Chair of the Board of Water and Soil Resources to approve a scoring worksheet and make project selections in coordination with NRCS."* Discussion followed. Joe stated that this subcommittee may be a separate committee of the RIM Reserve Planning Committee that could include board members and outside staff. Tim Koehler explained the WRP scoring process. An eligibility worksheet has been included in the scoring process. Tim stated that the amendment as proposed would delay the sign-up process. Joe stated that he doesn't think the process will be delayed, the subcommittee would allow the selection process to be authorized by BWSR. John Jaschke explained that the current approach is accomplished by staff using the scoring sheet. John stated that the proposed amendment approach would utilize the same information but would add to the group reviewing scores and selecting projects. Paul Langseth explained that the timeframe is critical on this matter. Larry Kramka suggested that this would be at the discretion of the chair to designate the subcommittee as the existing committee. Joe said his intent is to have another set of eyes as oversight of the subcommittee. Randy Kramer asked if the selection process is at the end, or does use of the score sheet begin tomorrow. Tim Koehler stated that if the amendment is approved as proposed, there is no way Minnesota will meet the timelines to leverage current federal funds. Larry Kramka stated that the selection process is in place, that doesn't have to change with this amendment. Brian Napstad asked for clarification, there's a conflict in the resolution. Joe Martin stated that this is an added "Whereas". John Jaschke stated that Phase I is on a tight timeline. LuAnn Tolliver stated that she could see the amendment a part of Phase II.

** Moved by Paul Langseth, seconded by Joe Martin, to amend the amendment, strike "*approve a*", and replace with "*review the existing*". *"WHEREAS a subcommittee shall be appointed by the Chair of the Board of Water and Soil Resources to ~~approve a~~ review the existing scoring worksheet and make project selections in coordination with NRCS".*

Discussion followed on the amended amendment. John Jaschke clarified that if the amended amendment is approved, Chair Kramer could name others to be added to the current committee in making project selection decisions, and at some point review the existing score sheet but not before the Phase I signup begins. Brian Napstad stated that we are under a tight timeframe and he doesn't see the benefit with an amendment, a change at this point in time is a risk to securing federal funding. Paul Langseth stated that the resolution adds streamlined oversight to the selection process; he supports the amendment. Joe Martin stated that this is a large state and federal project, and a balanced group for selection is necessary. Tim Koehler stated that NRCS and BWSR have worked well together on similar endeavors.

Chair Kramer called for a roll call vote on the amended amendment. Affirmative: Quentin Fairbanks, Larry Kramka, Paul Langseth, Joe Martin, Wayne Anderson, Ken Robinson, John Linc Stine, Randy Kramer. Opposed: Faye Sleeper, Paul Brutlag, Brian Kletscher, Brian Napstad, Louise Smallidge, Gene Tiedemann,
08-64 LuAnn Tolliver. The amended amendment is approved, 8 to 7. Motion passed.

Chair Kramer called for a roll call vote on the Resolution: "BWSR authorizes Phase I of the RIM/WRP partnership to begin on June 26, 2008 and run through September 30, 2008. The total partnership payment rate for cropland acres is 140% of EMV and for non-cropland acres is 93% EMV. Rates are to be calculated using the township mean for tillable property value established by county assessors for the 2009 tax year. Affirmative: Faye Sleeper, Paul Brutlag, Quentin Fairbanks, Larry Kramka, Brian Kletscher, Paul Langseth, Joe Martin, Wayne Anderson, Brian Napstad, Ken Robinson, Louise Smallidge, Gene Tiedemann, LuAnn Tolliver, John Linc Stine, Randy Kramer. Opposed: None.
08-65 Motion passed. Chair Kramer appointed Paul Brutlag, Paul Langseth, Larry Kramka, and Joe Martin to the subcommittee.

Lake Titlow Restoration Project – John Jaschke reported that the City of Gaylord was appropriated $475,000 for improving water quality in the Lake Titlow watershed. Funds may be used for pre-design and design of holding ponds and for construction and reconstruction of storm water sewer drains and related facilities. The City's Plan of Work splits the $475,000 into $175,000 for pre-design and design work within the watershed and $300,000 for construction work in the City. Extra funds needed for the project will come from the City of Gaylord.
** Moved by Brian Kletscher, seconded by Quentin Fairbanks, to authorize staff to
08-66 enter into a grant agreement with the City of Gaylord for the Lake Titlow Restoration Project. John stated that Jeff Nielsen is the lead staff on this project. Motion passed on a voice vote.

Winona County Nominating Districts Resolution – John Jaschke reported Winona County SWCD has requested a record of BWSR approval on their nominating districts. The Winona SWCD board of supervisors passed a Nominating Districts Resolution at their May 14, 2008 meeting. There has been no change to the existing way of holding elections, but rather this is an affirmation of what they are currently doing. After this is approved by the BWSR, ** it will be filed with the Winona County Auditor. Moved by Brian Napstad, 08-67 seconded by Larry Kramka, to approve the Winona County SWCD's Nominating Districts Resolution. Motion passed on a voice vote.

Carbon Capture and Terrestrial Sequestration Study – John Jaschke introduced Dr. Ed Nater, University of Minnesota. Dr. Ed Nater, provided background information and a status report of work on the *Carbon Capture and Terrestrial Sequestration Study* requested by the Legislature in 2007. The Legislature's request was to develop an inventory of Minnesota lands having high Carbon stocks that should be protected. This is a five-year study project. Discussion followed. Chair Kramer thanked Dr. Nater for his presentation.

AGENCY REPORTS

Minnesota Department of Agriculture (MDA) – Joe Martin briefly commented on the flooding in southeast Minnesota. Joe reported that the pesticide application is in full swing. MDA is working on drainage tile issues, BMP effectiveness, and phosphorus issues with Clean Water Legacy dollars. MDA continues to work on other concerns such as Gypsy moth, tracking salmonella and TB.

Minnesota Department of Health (MDH) – John Linc Stine reported that the well code revisions have been approved by Governor Tim Pawlenty, effective August 4. John stated that the MDH website has posted the report of well samplings in the southeast flooding area. MDH is working on the new law to regulate swimming pools in the State.

Minnesota Extension Service (MES) – Faye Sleeper reported that Jim Anderson officially retires on July 1, 2008. Faye distributed the annual report on "The Great Lakes Regional Water Program: Cultivating Learning in a Changing World". John Jaschke stated that Jim Anderson plans to attend the October Board meeting and be recognized for his service on the BWSR Board since 1996.

Minnesota Pollution Control Agency (MPCA) – Wayne Anderson reported that MPCA continues to work on hypoxia issues. Governor Tim Pawlenty reappointed Dennis Jensen to the MPCA Board, and appointed a new board member, Kathy Lohmer from Lake Elmo.

ADVISORY COMMENTS

Minnesota Association of Watershed Districts (MAWD) – LuAnn Tolliver, on behalf of Ray Bohn and MAWD, thanked BWSR members and staff for attending the MAWD summer tour and appreciates the partnership with BWSR.

Natural Resources Conservation Service (NRCS) – Tim Koehler reported that there is a new Farm Bill! Tim distributed the "Food, Conservation and Energy Act of 2008" for board members' information. Tim will provide information as new rules come into play. Chair Kramer thanked Tim for his presentation.

Upcoming Meetings

- Grants Program & Policy Committee Meeting, July 23, 2008, at 9:00 a.m.
- Wetlands Committee Meeting, July 23, 2008, at 12:30 p.m.
- BWSR Board Tour/Meeting, August 27-28, 2008, Renville County. John stated that there is no meeting in July. Information will be mailed regarding the tour/meeting logistics.

Chair Kramer thanked Ken Robinson again for his service on the Board.

** 08-68 Moved by LuAnn Tolliver, seconded by Louise Smallidge, to adjourn the meeting at 12:47 p.m. Motion passed on a voice vote.

Respectfully submitted,

Mary Jo Anderson
Recorder

Dispute Resolution Report
August 15, 2008
by: Travis Germundson

There are presently **22** appeals pending. All of the appeals involve WCA except File 05-24. There have been **5** new appeals filed since the last report dated June 25th.

Note: File 08-13 appeal of a wetland type/boundary decision in Hennepin County was denied and now is being appealed to the Court of Appeals.

Format note: New appeals that have been filed since last report to the Board.
~~Appeals that have been decided since last report to the Board.~~

File 08-24 (08/11/08) This is an appeal of a restoration order in Grant County. The appeal regards drainage impacts to a 32 acre Type 3 wetland resulting from agricultural drain tile improvements. No decision has been made on the appeal.

File 08-23 (08/06/08) This is an appeal of a after-the-fact replacement plan decision in Itasca County. The LGU denied an after-the-fact wetland replacement plan application for a fill strip because wetland impacts can be avoided by the construction of an elevated boardwalk. No decision has been made on the appeal.

File 08-22 (07/31/08) This is an appeal of a restoration order in Cass County. The appeal regards the filling of approximately 16,800 square feet in a Type 7 wetland to provide storage and parking areas for several recreation vehicles. No decision has been made on the appeal.

~~File 08-21 (07/18/08) This is an appeal of a restoration order in Mille Lacs County. The appeal regards the filling of approximately 9,570 square feet of a Type 2/3 wetland for the construction of an access road.~~ *The appeal has been withdrawn.*

~~File 08-20 (07/09/08) This is an appeal of a restoration order in Mille Lacs County. The appeal regards the filling of approximately 4,335 square feet of wetland associated with the construction of a residential dwelling.~~ *The appeal has been withdrawn.*

~~File 08-19 (06/20/08) This is an appeal of an exemption decision in Washington County. At issue are denials of agricultural exemption, drainage exemption, incidental wetland exemption, and forestry exemption for unpermitted wetland fill.~~ *The appeal has been denied.*

~~File 08-18 (06/18/08) This is an appeal of a restoration order in Carver County. The appeal regards the draining of 24,124 square feet of wetlands associated with a residential development site.~~ *The appeal has been denied.*

~~File 08-17 (06/02/08) This is an appeal of a replacement order in Rice County. The appeal regards the filling of 3,875 square feet of a Type 7 wetland for the construction of a stormwater pond.~~ *The replacement order has been denied in part and modified in part.*

~~File 08-16 (05/29/08) This is an appeal of a restoration order in Mahnomen County. The appeal regards the filling of 6,970 square feet of a Type 3 wetland with excavated lakebed material.~~ *The replacement order has been denied in part and modified in part.*

~~File 08-15 (05/29/08) This is an appeal of a replacement order in Mahnomen County. The appeal regards the filling of 3,072 square feet of a Type 3 wetland with excavated lakebed material.~~ *The appeal has been denied.*

~~File 08-14 (05/29/08) This is an appeal of a restoration order in Mahnomen County. The appeal regards the filling of 6,742 square feet of a Type 3 wetland with excavated lakebed material.~~ *The appeal has been denied.*

File 08-11. (04/29/08) This is an appeal of a restoration order in Hennepin County. The appeal regards the filling of 1.75 acres of a type 2/3 wetland for the construction of a pole barn and pasture area. The restoration order has been stayed until and the appeal has been placed in abeyance for submittal of a wetland replacement plan, exemption, or no-loss application.

File 08-9. (03/06/08) This is an appeal of a replacement order in Pine County. The appeal regards impacts to approximately 11.26 acres of wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-8. (04/03/08) This is an appeal of a replacement order in Pine County. The appeal regards the filling of over 18,000 square feet of Type 2 wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-4. (01/24/08) This is an appeal of no-loss and exemption decisions in Waseca County. In addition to the no-loss decision, at issue are denials of the agricultural exemption, approved development exemption, incidental wetland exemption, and claims of numerous procedural issues that were prejudicial to the applicants. Further, a Minn. Stat. § 15.99 (60-day rule) claim is pending in District Court. The appeal has been remanded for further technical work at the local level.

File 08-1. (02/04/08) This is an appeal of a restoration order in Aitkin County. The appeal involves the filling of wetland for a road in shoreland area. The restoration order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 07-37. (12/16/07) This is an appeal of a restoration and replacement order in the City of Sturgeon Lake, Pine County. The appeal involves the excavation and filling of wetland. The restoration and replacement order has been placed in abeyance to allow for the submittal of a complete replacement plan.

~~File 07-36. (11/26/07) This is an appeal of a restoration order in the City of Hugo, Washington County. The appeal involves the filling of approximately 5,447 square feet of Type 7 wetland for a driveway. The restoration order has been stayed and the appeal has been placed in abeyance pending a decision by the LGU on applications for an exemption and a replacement plan.~~ *The appeal has been denied and the Restoration Order Affirmed.*

File 07-33. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-32. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-31. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a restoration order for unauthorized filling of wetland for a building. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-29. (10/25/07) This is an appeal of a restoration order in Crow Wing County. The appeal involves the filling of wetland along a driveway. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work.

File 07-28. (10/22/07) This is an appeal of a restoration order in Mille Lacs County. The appeal regards the filling of wetland. The restoration order has been stayed and the appeal has been placed in abeyance pending the submission of an after-the-fact wetland replacement plan application this month.

File 07-27. (10/19/07) This is an appeal of a restoration and replacement order in Benton County. The appeal involves the excavation of an island that was in wetland and the filling of wetland along the wetland edge. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work this spring.

File 06-23. (05/19/06) This is an appeal of a replacement plan decision in Kanabec County. The LGU denied the wetland replacement plan application. A previous denial of the same replacement plan application had been appealed, the appeal was remanded for a hearing, and now the current denial has been appealed. The appeal has been placed in abeyance pending the outcome of a lawsuit between the landowner and the county. The lawsuit concerns the county's possible noncompliance with the 60-day rule. The county prevailed in district court, however the decision was appealed to the Court of Appeals where the county again prevailed. An appeal to the Minnesota Supreme Court was denied review. It is likely the appeal will soon be placed on the calendar for DRC proceedings.

File 06-17. (05/27/06) This is an appeal of a replacement plan decision in the City of Montgomery in LeSueur County. The LGU denied an after-the-fact wetland replacement plan application based on a lack of sufficient reasons why the restoration could not be completed. The appeal has been remanded for further processing at the local level.

File 06-12. (04/13/06) This is an appeal of a no-loss decision in Stearns County. It involves the same project and issues as File 06-6. After a restoration order was issued, a no-loss application was submitted by the developer and denied by the LGU. The appeal has been remanded for further technical evaluation.

File 06-6. (02/16/06) This is an appeal of a restoration order in Stearns County. At issue are numerous wetlands impacted by filling, sedimentation, reduction of hydrology and lack of Best Management Practices associated with a residential development. The appeal has been denied in part. The Restoration Order has been affirmed in part and has been stayed in part.

File 05-24. (03/04/05) This is an appeal, actually three appeals, of the Bois de Sioux Watershed District compensation to landowners related to a project. The appeal has been held in abeyance pending settlement discussions. It appears at least two of the appeals have been settled.

File 05-1. (01/13/05) This is an appeal of a replacement plan decision by the Rice Creek Watershed District. The District previously made a decision that was appealed which resulted in a remand for an expanded TEP. Now there is an appeal of the decision made under remand since the decision differed from the TEP report. At issue is a wetland delineation and the Comprehensive Wetland Protection and Management Plan that BWSR approved. After a hearing before the DRC, the board remanded the matter for a new wetland delineation and for submission on an updated, complete replacement plan application.

File 04-23. (08/25/04) This is an appeal of a forestry exemption decision in Kittson County. Unpermitted fill was placed in a Type 7 wetland for a road. A Cease and Desist Order was issued. Additional filling has recently occurred in violation of the CDO. Corps and DNR violations also exist. The appeal has been accepted and is in abeyance pending completion of a wetland delineation and submittal of a replacement plan application.

COMMITTEE RECOMMENDATIONS

Metro Water Planning Committee

1. Carnelian-Marine-St. Croix Watershed District Watershed Management Plan Amendment – Bob Burandt – *DECISION ITEM*

2. Comfort Lake-Forest Lake Watershed District Revised Watershed Management Plan – Bob Burandt – *DECISION ITEM*

3. Richfield-Bloomington Watershed Management Organization, Watershed Management Plan – Bob Burandt – *DECISION ITEM*

4. Shingle Creek and West Mississippi Watershed Management Organizations' Plan Amendment – Bob Burandt – *DECISION ITEM*

Minnesota Board of Water & Soil Resources

MEMORANDUM

DATE: July 24, 2008
TO: Metro Water Planning Committee
FROM: Melissa Lewis, Board Conservationist
RE: Carnelian-Marine-St. Croix Watershed District Marine WMO Plan Amendment

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Background

The Carnelian-Marine Watershed District was established in 1981 and enlarged to include the area of the Marine on St. Croix Watershed Management Organization (MWMO) on March 28th, 2007. At this time, the name changed to the Carnelian-Marine-St. Croix Watershed District (District) and the number of managers increased from five to seven. The District is located exclusively in Washington County in the northeast portion of the Minneapolis – St. Paul seven county Metropolitan Area and consists of a total of 81.48 square miles. The District is bound by the St. Croix River to the east, the Comfort Lake Forest Lake and Rice Creek Watershed Districts to the west, and the Browns Creek Watershed District to the south. The mission of the District is to protect and improve the water resources, natural habitat, and personal property within its boundaries; to educate property owners and the community on the value of water resources; and to promote progressive public relationships and interagency consistency.

The Amendment submitted is to incorporate the MWMO Plan as an appendix to the District Watershed Management Plan. The 60-day review draft of the Amendment was submitted to BWSR, other state agencies, Metropolitan Council, and local governments on September 28th, 2007. A public hearing was held on June 4th, 2008; no comments were received. The 45-day review draft was submitted on January 17th, 2008. The final draft of the Amendment was received by BWSR on April 25th, 2008. No comments were received.

Amendment Summary

The Amendment to the District Watershed Management Plan incorporates a modified version of the draft MWMO Plan as an appendix, incorporates by reference a number of studies completed by the MWMO, and provides an implementation schedule of projects and programs the District will pursue in the next two years when a revised plan is due. The modifications to the MWMO Plan eliminate language that was either redundant or contradictory to statements made in the District Plan. The amendment also states in the User's Guide and Executive Summary that the policies and actions in the existing Carnelian-Marine Watershed District Overall Plan apply across the entire District area, and that in the event of conflicts between the policies and actions in the District plan and the MWMO plan/appendix, the District Plan shall apply.

Amendment Highlights

The critical elements included in the Amendment are:

- Description of the recent enlargement of the District and discussion of the prioritization of the policies and actions of the Plans.
- Implementation schedule for projects and programs of the District that will culminate in the completion of the Watershed Management Plan revision in 2010.
- Incorporation of the MWMO Watershed Management Plan into the District Plan. The critical elements of this plan include:
    - Identification of focus areas within the enlarged area including stormwater standards for unique and rare resources, coordination of stormwater improvements, a land protection initiative, and community outreach and education.
    - Identification of capital improvement projects for Arcola Creek, Fall's Creek, and a Best Management Practices Program.
    - Identification of watershed planning activities including; a wetland management plan, mapping of priority resources, Long and Sand Lakes management plans, and a Fall's Creek Corridor Management Plan.

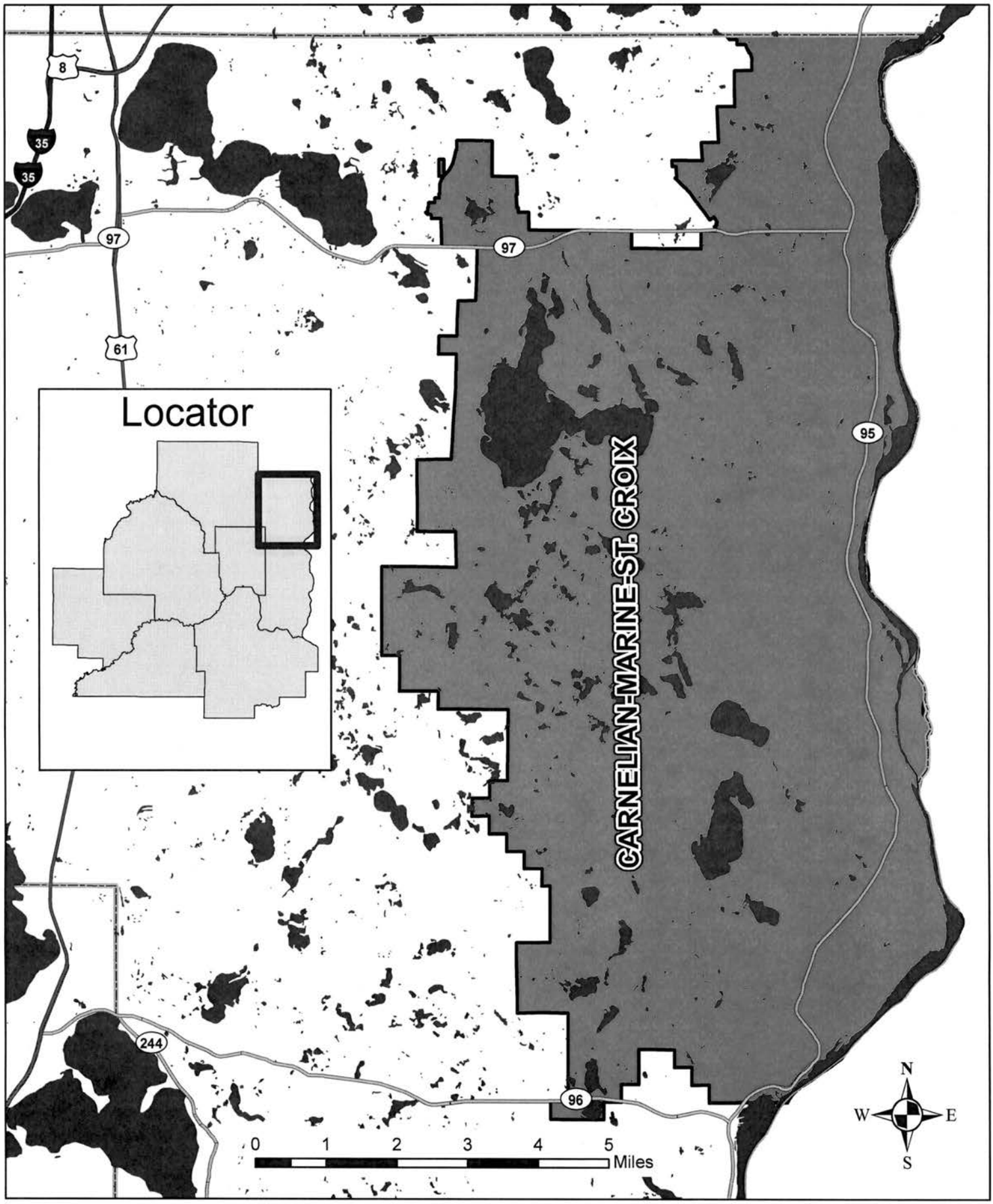
Attachments

- Draft Board Order for the Carnelian-Marine-St. Croix Watershed District Marine WMO Plan Amendment
- Revision pages from the District Watershed Management Plan
- Map of District

Recommendation

Staff recommends approval of the Carnelian-Marine-St. Croix Watershed District Marine WMO Plan Amendment.

Carnelian-Marine-St. Croix Watershed District



Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota 55155

In the Matter of the review of the Amendment to the Watershed Management Plan for the Carnelian-Marine-St. Croix Watershed District, pursuant to Minnesota Statutes Section 103B.231, Subdivision 11.

ORDER APPROVING AMENDMENT TO WATERSHED MANAGEMENT PLAN

Whereas, the Board of Managers of the Carnelian-Marine-St. Croix Watershed District (District) submitted a Watershed Management Plan Amendment (Amendment) dated April 25, 2008, to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes Section 103B.231, Subd. 11, and;

Whereas, the Board has completed its review of the Amendment;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **Watershed District Establishment.** The Carnelian-Marine Watershed District was established by the Minnesota Water Resources Board in 1981. Washington County filed a Petition with the Board of Water and Soil Resources on December 22, 2006, to enlarge the District to include the area of the Marine on St. Croix Watershed Management Organization (MWMO). On March 28, 2007, the Board ordered the Carnelian Marine Watershed District be enlarged according to the Petition, that the name be changed to the Carnelian-Marine-St. Croix Watershed District, and that the number of managers be increased from five to seven, contingent upon the dissolution of the Marine on St. Croix Watershed Management Organization occurring within three months from the date of the Order. The Board further ordered that the Carnelian-Marine Watershed District Watershed Management Plan be amended within one year of the date of the Order to include the petitioned area. The mission of the District is to protect and improve the water resources, natural habitat, and personal property within its boundaries; to educate property owners and the community on the value of water resources; and to promote progressive public relationships and interagency consistency.

2. **Authority to Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251. The current District watershed management plan was approved by Board Order on October 25, 2000.

The watershed management plan may be amended according to Minnesota Statutes Section 103B.231, Subd. 11.

3. **Nature of the Watershed.** The District is located exclusively in Washington County in the northeast portion of the Minneapolis – St. Paul seven county Metropolitan Area and consists of a total of 81.48 square miles. Included in the District are 27.33 square miles within the City of Scandia, 4.18 square miles within the City of Marine on St. Croix, 0.74 square miles within the City of Hugo, 34.58 square miles within the Town of May, 0.25 square miles within the City of Grant, and 14.40 square miles within the Town of Stillwater. The District is bound by the St. Croix River to the east, the Comfort Lake-Forest Lake and Rice Creek Watershed Districts to the west, and the Browns Creek Watershed District to the south.

4. **Amendment Development and Review.** The Amendment consists of the incorporation of the MWMO Watershed Management Plan (MWMOWP) as an appendix and the adoption by reference of the following studies: Square Lake Clean Water Partnership, Twin Lake Landlocked Basin Study, Millstream and Marine Natural Resources Inventories, and the Spring Creek Inventory to the District Watershed Management Plan. The District circulated a copy of the draft Amendment to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7.

   In the development of the MWMOWP, the MWMO formed a steering committee to provide input and guidance. The steering committee consisted of watershed residents, municipal staff, and technical representatives and met six times during the development of the MWMOWP in 2004. The MWMOWP was reviewed by the State Review agencies and the Metropolitan Council in 2004, but did not proceed to Board approval due to the pending enlargement of the Carnelian-Marine Watershed District.

   The 60-day review draft of the Amendment was submitted to the Board, other state agencies, Metropolitan Council, and local governments on September 28th, 2007. A public hearing was held on June 4th, 2008, where no comments were received. The 45-day review draft was submitted on January 17th, 2008. The final draft of the Amendment was received by the Board on April 25th, 2008. No local comments were received.

5. **Metropolitan Council Review.** The Council found that the 60-day review draft of the Amendment was unclear in the priorities and timing of planning efforts between the District Plan and the Amendments. This concern was addressed and the Council found the 45-day draft to be consistent with the Council's *Water Resources Management Plan* and should help to protect the water resources in the District.

6. **Department of Agriculture Review.** The MDA did not comment on the Amendment.

7. **Department of Health Review.** The MDH did not comment on the Amendment.

8. **Department of Natural Resources Review.** The DNR did not comment on the Amendment.

9. **Pollution Control Agency Review.** The MPCA was pleased the District submitted a TMDL project work plan, encouraged the submittal of District water quality data into the statewide Storage and Retrieval water quality database, and encouraged the District to visit the water quality section of the MPCA's Environmental Data Access System.

10. **Local Review.** Washington County re-submitted comments made during the MWMOWP development. The comments they made at that time were incorporated into the Amendment.

11. **Board Review.** Board staff commented on the 45-day review draft that the intentions of Amendment to bridge policies and activities in the newly enlarged watershed district until the revision of the watershed management plan, due in 2010, were unclear. Staff also commented that a prioritization of the combined goals and policies of the MWMO and the Carnelian-Marine Watershed District, as well as a process for incorporating proposed plans and studies of the MWMO into the overall planning and timing process of the District, was needed in the Amendment. Lastly, staff commented that the Amendment needed a discussion of which proposed plans and studies would be completed as a part of the upcoming plan revision and which will be considered for inclusion in the implementation section of the revision. These comments were addressed in the final submission of the Amendment.

12. **Highlights of the Plan Amendment.** The critical elements included in the Amendment are:
    - Description of the recent enlargement of the District and discussion of the prioritization of the policies and actions of the Watershed Management Plans.
    - Implementation schedule for projects and programs of the District that will culminate in the completion of the Watershed Management Plan revision in 2010.
    - Modifications to the MWMO Watershed Management Plan to eliminate language that was either redundant or contradictory to statements made in the District Plan.
    - Incorporation of the MWMO Watershed Management Plan into the District Plan. The critical elements of this Amendment include:
        - Identification of focus areas including stormwater standards for unique and rare resources, coordination of stormwater improvements, a land protection initiative, and community outreach and education.
        - Identification of capital improvement projects for Arcola Creek, Fall's Creek, and a Best Management Practices Program.
        - Identification of watershed planning activities including a wetland management plan, mapping of priority resources, Long and Sand Lakes management plans, and a Fall's Creek Corridor Management Plan.

13. **Metro Water Planning Committee Meeting.** The Board's Metro Water Planning Committee met on August 4, 2008 to review and discuss the Amendment. Those in attendance from the Board's Committee were Louise Smallidge, Faye Sleeper, LuAnn Tolliver and Robert Burandt as chair. Board staff in attendance were Metro Region Supervisor Jim Haertel and Board Conservationist Melissa Lewis. Board staff

recommended approval of the Amendment. After discussion, the Committee unanimously voted to recommend approval of the Amendment to the full Board.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving an Amendment to the Watershed Management Plan for the Carnelian-Marine-St. Croix Watershed District pursuant to Minnesota Statutes Section 103B.231, Subd. 11.

3. The Carnelian-Marine-St. Croix Watershed District Amendment attached to this Order incorporates the Marine on St. Croix Watershed Management Organization Watershed Management Plan into the appendix of the District's Watershed Management Plan.

4. The attached Amendment is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

5. The Carnelian-Marine-St. Croix Watershed District Watershed Management Plan, including the Amendment, is due for revision in 2010.

ORDER

The Board hereby approves the attached Amendment, dated April 25, 2008, to the Carnelian-Marine-St. Croix Watershed District Watershed Management Plan.

Dated at Olivia, Minnesota this 28th day of August, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

BY: Randy Kramer, Chair

Minnesota Board of Water & Soil Resources

MEMORANDUM

DATE: July 25, 2008
TO: Metro Water Planning Committee
FROM: Jim Haertel, Metro Region Supervisor
RE: Comfort Lake-Forest Lake Watershed Management Plan Revision

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Background

The Comfort Lake-Forest Lake Watershed District (District) was established in 1999 under Minnesota Statutes Chapter 103D. It replaced, and expanded the area of coverage, of the Forest Lake Watershed Management Organization that was established in 1983.The District is located in the northeast portion of the Metropolitan Area, approximately forty percent in Chisago County and sixty percent in Washington County. The District consists of a total of 47 square miles bound by the Sunrise River Watershed Management Organization to the west, the Rice Creek Watershed District to the south and west, the Carnelian-Marine-St. Croix Watershed District to the south and east, and no watershed management organizations to the north in Chisago County. Portions of the Cities of Forest Lake, Scandia, and Wyoming, and the Towns of Chisago Lakes and Wyoming, are included in the District. The Mission of the District is to protect and conserve its water resources using sound scientific water management approaches, technologies, and methods to develop a uniform, integrated approach to water management within a rapidly changing and urbanizing area.

Due to the unique status of the District transecting both a metropolitan and a non-metropolitan county, the District sought and gained statutory designation under Minnesota Statues Chapter 103B in the 2008 legislative session. This change in designation allows the District to access a wider variety of funding sources in the implementation of the Watershed Management Plan; however, it also necessitated a revision to the Plan to meet the additional requirements of 103B.

The District's current Plan was approved by BWSR in 2001 and scheduled to be revised in 2011. If the proposed revised Plan is approved by BWSR, it would remain on the schedule to be revised in 2011. The reason for this is that the proposed revised Plan is on a fast track to be approved so 103B funding authorities can be used in 2009, thus a lengthy public input process was not used in the Plan revision. BWSR staff worked closely with District staff throughout the development of the Plan revision while the proposed legislation was pending. Although the emphasis of the Plan revision was to add information for the required elements under 103B, other significant revisions have been made.

Revised Plan Summary

The revised Plan submitted includes an updated Executive Summary, the addition of a section on impaired waterbodies within the District, slight revisions to Chapter 10: Local Governing Units, revised Chapter 11: Implementation Plans, revised Chapter 12: Capitol Improvement Plan (CIP), the addition of Appendix G: CIP Project Screening, the addition of Appendix H: CIP Preliminary Design Drawings, the addition of Appendix I: CIP Cost Estimates and Schedule for Proposed Projects, and the addition of Appendix J: Lake Response Curves Post CIP Implementation.

Fiscal Context

The table below shows financial information for adjacent or similar size WMO's and WD's.

TYPE	AREA (sq mi)	NAME	2004	2005	2006
WD	28	Brown's Creek	$320,385	$503,935	$653,307
WD	41	Capitol Region	$1,327,715	$924,848	$2,032,091
WD	43	Carnelian-Marine	$420,888		$324,942
WD	55	Comfort Lake Forest Lake	$287,058	$243,511	$199,512
WD	96	Coon Creek	$640,591	$498,240	$672,326
WMO	56	Lower Rum River	$50,353	$48,222	$50,747
WD	50	Nine Mile Creek	$1,484,029	$2,413,557	$2,494,951
WD	42	Prior Lake-Spring Lake	$655,410	$756,044	$1,006,087
WD	53	Ramsey-Washington Metro	$2,350,399	$5,667,027	$3,828,209
WD	201	Rice Creek	$3,041,834	$2,810,074	$3,526,442
WD	47	Riley-Purgatory-Bluff Creek	$2,245,286	$1,819,722	$1,535,258
WMO	71	Sunrise River	$9,960	$10,863	$22,039
WMO	127	Upper Rum River	$4,270	$20,482	$17,762
WD	64	Valley Branch	$772,065	$211,104	$646,262

Fiscal activities are an approximate barometer of influence within a watershed only. As shown above, expenditures in the Comfort Lake-Forest Lake WD have been decreasing from 2004 to 2006. That trend will likely turn around in 2009 with approval of the revised Plan and additional funding authorities.

Revised Plan Highlights

The highlights of the revised plan include:

- Inclusion of funding authorities under Minnesota Statutes Chapter 103B.
- Extensive Capitol Improvement Program containing specific details for each project including preliminary design drawings for projects.
- Strengthened Implementation section that sets forth goals that clearly indicate the steps for improving water quality within the District by implementing a variety of stormwater projects.
- Development process for Rules, Standards and a Permit program.
- Addresses in detail the impaired lakes in the District.
- Exemplary approach in developing a workplan to address impaired waters problems.

Local and state comments received in regards to the revised Plan have been sufficiently addressed. There were very few comments forwarded as a result of the final 45-day review.

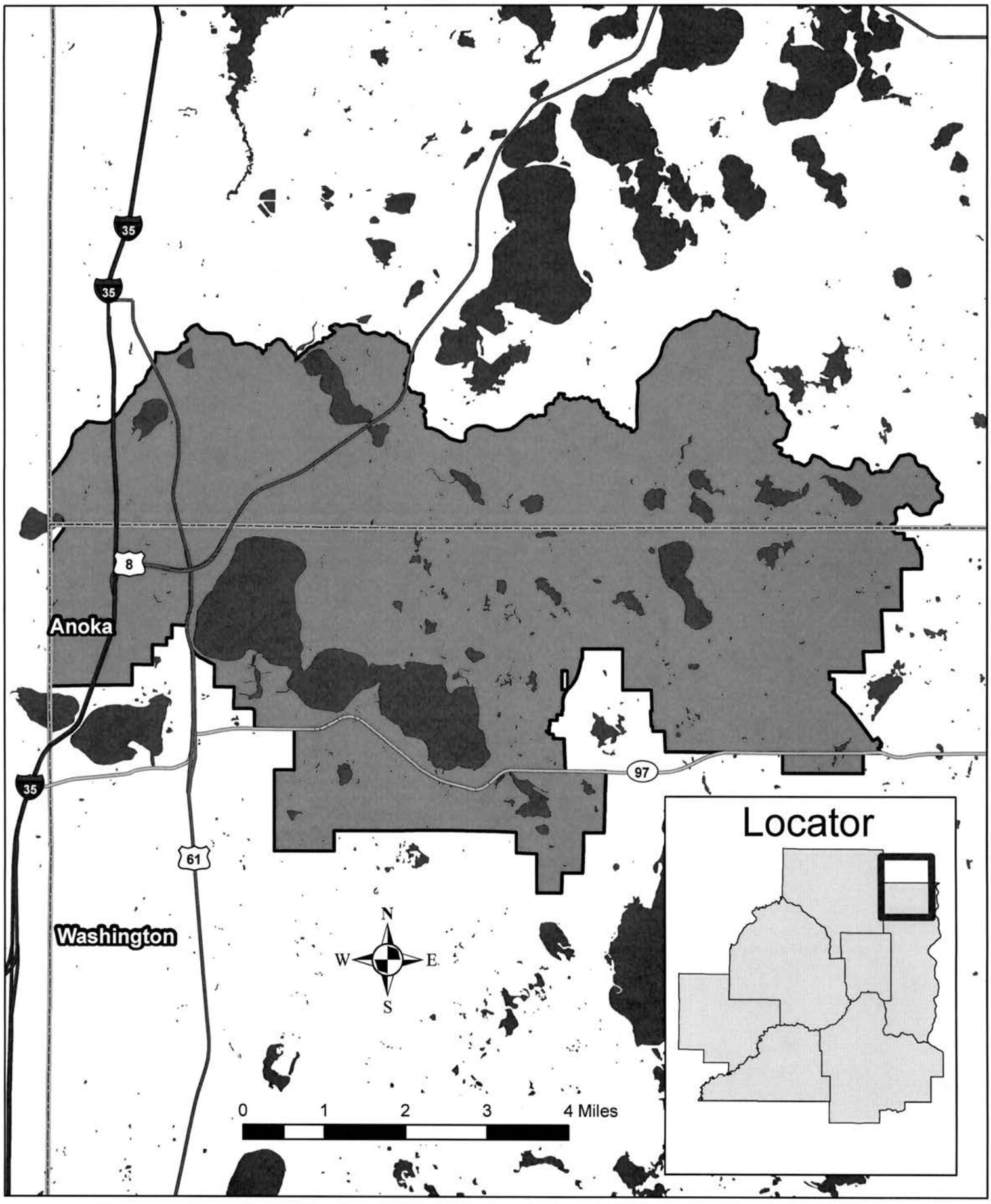
Attachments

- Draft Board Order for the Comfort Lake-Forest Lake Revised Watershed Management Plan
- Pages from the revised Plan
- Map of District

Recommendation

Staff recommends approval of the Comfort Lake-Forest Lake Revised Watershed Management Plan.

Comfort Lake-Forest Lake Watershed District



Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota 55155

In the Matter of the review of the Watershed Management Plan for the **Comfort Lake – Forest Lake Watershed District**, pursuant to Minnesota Statutes Section 103B.231, Subdivision 9.

ORDER APPROVING WATERSHED MANAGEMENT PLAN

Whereas, the Board of Managers of the Comfort Lake – Forest Lake Watershed District (District) submitted a Watershed Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes Section 103B.231, Subd. 9, and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **Watershed District Establishment.** The Comfort Lake-Forest Lake Watershed District (District) was established in 1999 under Minnesota Statutes Chapter 103D. The District achieved statutory designation under Minnesota Statutes Chapter 103B during the 2008 legislative session. The District is located in the northeast portion of the Metropolitan Area, approximately forty percent in Chisago County and sixty percent in Washington County. Portions of the Cities of Forest Lake, Scandia, and Wyoming, and the Towns of Chisago Lakes and Wyoming, are included in the District. The mission of the District is to protect and conserve its water resources using sound scientific water management approaches, technologies, and methods to develop a uniform, integrated approach to water management within a rapidly changing and urbanizing area.

2. **Authority to Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251. The current District watershed management plan was approved by Board order dated October 25, 2001. The watershed management plan may be revised according to Minnesota Statutes Section 103B.231, Subd. 9.

3. **Nature of the Watershed.** The District encompasses approximately 47 square miles in northern Washington County and southern Chisago County, bound by the Sunrise River Watershed Management Organization to the west, the Rice Creek Watershed District to the south and west, the Carnelian-Marine-St. Croix Watershed District to the south and east, and no watershed management organizations to the north in Chisago County. The

watershed outlets to the northwest to the Sunrise River, which flows northeast through Chisago County before discharging to the St. Croix River.

4. **Plan Development and Review.** Due to the unique status of the District transecting both a metropolitan and a non-metropolitan county, the District sought and gained statutory designation under Minnesota Statues Chapter 103B in the 2008 legislative session. This change in designation allowed the District to access a wider variety of funding sources in the implementation of their watershed management plan; however, it also necessitated a revision to the current plan to meet the additional requirements of 103B. The District's current plan, approved by the Board in 2001, was scheduled to be revised in 2011. The proposed revised Plan would remain on the same schedule to be revised in 2011. The reason for this is that the proposed revised Plan did not have a lengthy public input process in its development. Board staff worked closely with District staff throughout the Plan development process.

   Although the emphasis of the Plan revision was to add information for the required elements under Minnesota Statues Chapter 103B, other significant revisions have been made including an updated Executive Summary, the addition of a section on impaired waterbodies within the District, slight revisions to Chapter 10: Local Governing Units, revised Chapter 11: Implementation Plans, revised Chapter 12: Capitol Improvement Plan (CIP), the addition of Appendix G: CIP Project Screening, the addition of Appendix H: CIP Preliminary Design Drawings, the addition of Appendix I: CIP Cost Estimates and Schedule for Proposed Projects, and the addition of Appendix J: Lake Response Curves Post CIP Implementation.

   The draft revised Plan was submitted to the Board, other state agencies, and local governments for the 60-day review on February 15, 2008. A public hearing was held on May 22, 2008. On June 2, 2008, the draft revised Plan was sent to the review agencies for the 45-day review period. The final draft of the revised Plan was received by the Board on July 22, 2008.

5. **Local Review.** The District distributed copies of the draft Plan to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7.

   Washington County. The County suggested Section 12 be amended to provide more specific details regarding the Washington County policy on financing watershed management organization capital projects and the District responded by amending Section 12.6 with more details. The County recommended amending Section 10.4 to specify that local plans for communities within Washington County must also be sent to Washington County for review because the County has an approved groundwater plan and the District responded by including the requirement. The County commented that the Plan should incorporate goals, objectives and information from the Washington County 2003-2013 Groundwater Plan and the District responded that the suggested changes will be incorporated in the 2011 revised plan. The County recommended Section 10 be amended to add language to encourage local government units to include groundwater protection efforts in their local plans and the District responded by expanding Section 10.2 accordingly. The County commented that the Plan needs to provide additional detail on the funding for each individual capital improvement project and the District responded

by including specific funding sources for each project. The County commented that the Bixby Park project be modified in a certain manner and the District responded by including language that the feasibility and benefit of the proposed modification will be researched.

Wyoming Township. The Township commented that the wrong acreage was given for School Lake and the District responded by correcting the acreage. The Township commented about the incorrect spelling of Heims Lake and the District responded by correcting the spelling. The Township could not locate Section 11.2.2.1 that was referenced in Section 12.3.12.3 and the District responded by clarifying the reference. The Township commented that Table 3 was out of date and the District responded by updating the table.

6. **Metropolitan Council Review.** The Council cautioned about the District most likely enforcing its rules and standards through existing permit programs of member communities and the District responded by revising the language to specify that the District will establish a permit program to enforce its rules and standards. The Council provided details on what should be included in local water plans and the District incorporated the information into the Plan. The Council commented about certain wetland inventory procedures that must be included and the District responded by adding language to define the procedures. The Council recommended that certain maps be included and the District responded by including the requested maps. The Council commented on certain references that should be amended in the 2011 revised plan the District acknowledged it will incorporate the suggested changes in its 2011 plan revision.

During the 45-day review, the Council made some comments about the 2011 plan revision and the District responded favorably. The Council commented that the list of local water plan contents is contained in a certain Council document and the District responded by referencing the document. The Council commented that most of the local water plan contents listed are required by Minnesota Rules Chapter 8410, however the District merely encourages the inclusion of the items and the District responded by modifying the language accordingly.

7. **Department of Agriculture Review.** The MDA did not comment on the Plan.

8. **Department of Health Review.** The MDH did not comment on the Plan.

9. **Department of Natural Resources Review.** The DNR commented that several initiation dates associated with the core goals in the Executive Summary are old and the District responded by eliminating the old initiation dates. The DNR had extensive comments on Section 3.6, Biological and Ecological Resources, and the District made revisions to address many of the items and responded that the other items would be incorporated in the 2011 plan revision. The DNR recommended the inclusion of waterbodies infested with invasive species in Section 3.8 and the District made revisions accordingly. The DNR recommended the use of updated data and guidelines in Sections 3.8 and 3.9 and the District made the recommended changes. The DNR recommended various information sources be used to update Figure 5 and the District responded that the figure would be updated in the 2011 plan revision. The DNR recommended Section 5.3.2

be updated and the District responded by making the recommended changes. The DNR recommended Goal WM-4 in Section 7.3.2 be revised to include protection of an aquifer and to work with the City of Forest Lake to find alternative water supply wells and the District responded that the 2011 plan revision process will consider the recommendations. The DNR recommended the Recreational Lake Goals in Section 7.3.2 be revised to address rough fish control on Bone Lake and access on Sylvan Lake and the District responded that the 2011 plan revision process will consider the recommendations. The DNR suggested Section 7.3.3 include reference to draft floodplain maps that are currently out for public review and the District responded that the 2011 plan revision process will consider the recommendation. The DNR recommended various changes to Section 7.3.5 and the District responded that the 2011 plan revision process will consider the recommendations. The DNR commented that the maps tend to be a little busy and that Figure 10 will need to be updated once the new floodplain maps are approved and the District responded that the 2011 plan revision process will consider the recommendations. The DNR recommended numerous revisions to the Capital Improvement Plan in Section 12 and the District responded by making revisions corresponding with most of the recommendations and that the 2011 plan revision process will consider the remaining recommendations.

10. **Pollution Control Agency Review.** The PCA was pleased that the Plan addresses in detail impaired waters and that the Plan is responsive to the basin-wide priority objective for phosphorus reduction in Lake St. Croix. The PCA encouraged the District to submit water quality data for inclusion in STORET and the District responded that it currently submits the data as requested.

11. **Department of Transportation Review.** The DOT clarified that the improvements planned for TH 8 are based on safety reasons and to handle the expected daily traffic volumes and the District responded by clarifying the language. The DOT requested they be listed as the Wetland Conservation Act Local Government Unit for its projects and the District responded by making the requested revision. The DOT questioned how phosphorous load is related to transportation improvements and requested the language be deleted and the District responded that studies show increases in impervious surfaces increase the rate and volume of runoff which results in increased erosion and sediments and associated nutrients thus the requested change was not made. The DOT commented that more discussion is needed in the Plan if the District intends to include volume control in its Rules and the District responded that the 2011 plan revision process will incorporate the recommendation. The DOT requested the word "permitting" be added in Section 5.3.7 and the District responded by adding the requested word.

12. **Board Review.** Board staff commented that certain wetland inventory procedures should be included and the District responded by adding language to define the procedures. Board staff commented that maps of stormwater systems should be included or it should be required in local water plans and the District responded by making revisions to include the maps in the local water plans. Board staff recommended maps of existing and future land uses and the Municipal Urban Service Area be included and the District responded by including the recommended maps. Board staff commented that local governments that have not adopted shoreland and floodplain ordinances should be identified and the

District responded by including the information. Board staff commented that the Plan should specify that it may be adopted by reference for local water plans and the District responded by adding the recommended language. Board staff recommended the procedures to enforce violations and controls of the District and of local governments should be specified and the District responded by making the recommended revisions.

13. **Plan Summary and Highlights.** The critical elements included in the Plan are:

- Inclusion of funding authorities under Minnesota Statutes Chapter 103B.
- Extensive Capitol Improvement Program containing specific details for each project including preliminary design drawings for projects.
- Strengthened Implementation section that sets forth goals that clearly indicate the steps for improving water quality within the District by implementing a variety of stormwater projects.
- Development process for Rules, Standards and a Permit program.
- Addresses in detail the impaired lakes in the District.
- Exemplary approach in developing a workplan to address impaired waters problems.

14. **Metro Water Planning Committee Meeting.** On August 4, 2008, the Board's Metro Water Planning Committee and staff met with a representative from the District in St. Paul to review and discuss the Plan. Those in attendance from the Board's Committee were Louise Smallidge, Faye Sleeper, LuAnn Tolliver and Robert Burandt as chair. Board staff in attendance were Metro Region Supervisor Jim Haertel and Board Conservationist Melissa Lewis. The representative from the District was District Administrator Randy Anhorn. Board staff recommended approval of the Plan. After discussion, the Committee unanimously voted to recommend approval of the Plan to the full Board.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving a Watershed Management Plan for the Comfort Lake - Forest Lake Watershed District pursuant to Minnesota Statutes Section 103B.231, Subd. 9.

3. The Comfort Lake - Forest Lake Watershed District Watershed Management Plan attached to this Order defines water and water-related problems within the District's boundaries, possible solutions thereto, and an implementation program.

4. The attached Watershed Management Plan is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

ORDER

The Board hereby approves the attached Watershed Management Plan dated July 2008 as the Watershed Management Plan for the Comfort Lake - Forest Lake Watershed District.

Dated at Olivia, Minnesota this 28th day of August, 2008.

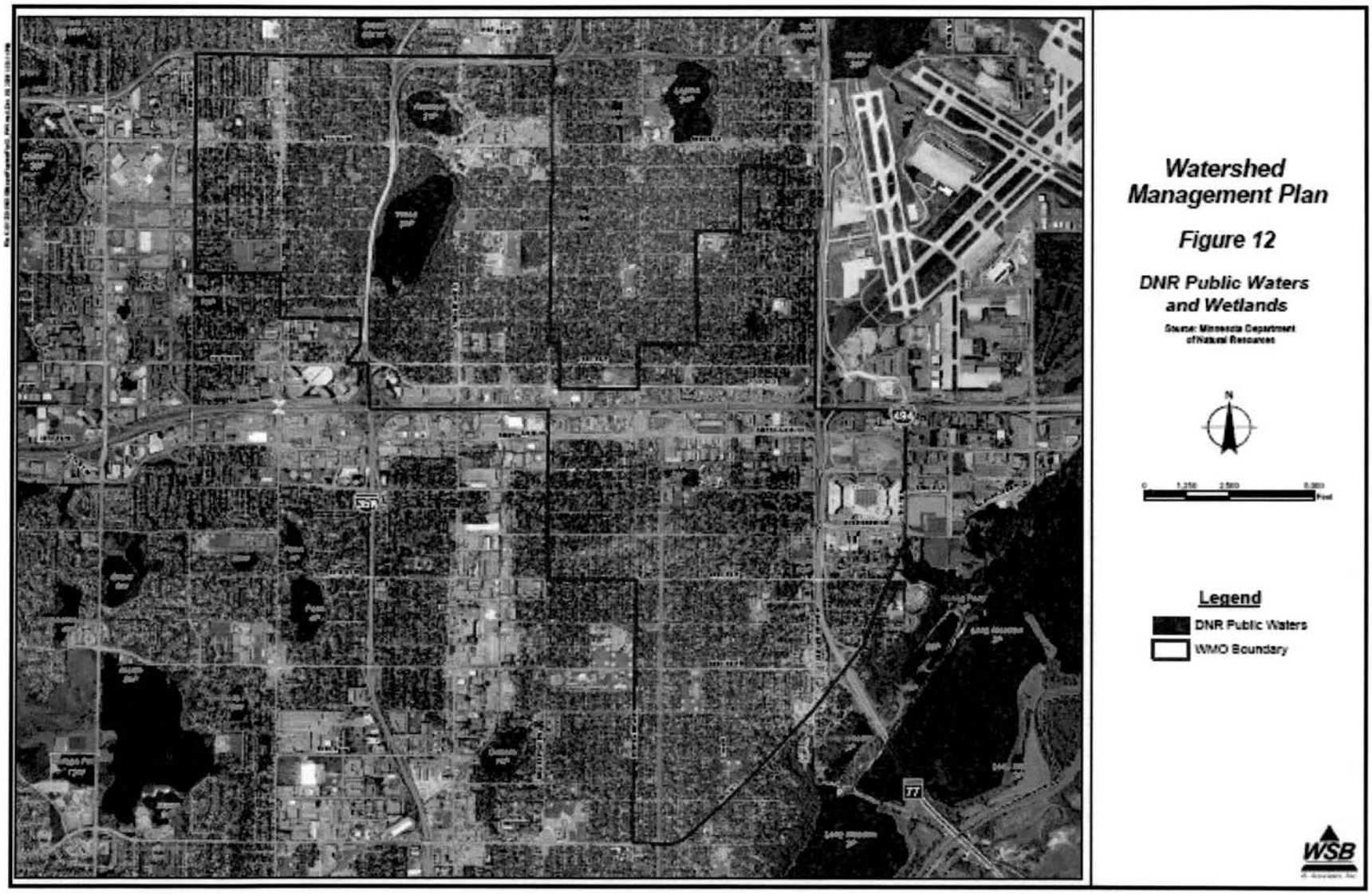
MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Minnesota Board of Water and Soil Resources
August 2008 Metro Water Planning Committee Meeting

OVERVIEW
Richfield Bloomington Watershed Management Organization (RBWMO)
Comprehensive Watershed Management Plan Update 2008-2018 (Plan)



1. **RBWMO Establishment.** On December 19, 1983, the Richfield Bloomington Watershed Management Organization (RBWMO) was established via Joint Powers Agreement (JPA). BWSR approved their second generation plan in January 2001 under the Metropolitan Surface Water Management Act.

2. **Requirement to Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

3. **Nature of the Watershed.** The RBWMO spans 7.55 square miles in southeastern Hennepin County. There are two local government units within RBWMO as the name implies: the Cities of Richfield and Bloomington. The WMO is fully developed. There are no major creeks or rivers in the watershed and the stormwater runoff flows primarily through storm sewer southeasterly into a series of large storm ponds and then into the Minnesota River. Unique features within RBWMO include Wood Lake Park and Nature Center, Smith Park, and the Mall of America. The waterbodies within the WMO include: Smith Pond, Wright's Lake, Running Pond, Sheridan Pond, Richfield Lake, Wood Lake, Augsburg Pond, and Wilson Pond.

   RBWMO is bound by the Minnehaha Creek WD to the north, Lower Minnesota River WD to the south and east, and on the west by Nine Mile Creek WD.

4. **Plan Development and Review.** BWSR and other state agency staff participated in a plan update kickoff meeting early in the process. The previous plan stated it would be in effect until December 31, 2006. The primary reason for the delayed Plan submittal is due to the numerous state agencies' comments resulting in some changes to the draft Plan. The draft 3rd generation Comprehensive Watershed Management Plan (Plan) was submitted to BWSR, other state agencies, and local governments for the required 60-day review on June 15, 2007. RBWMO received a considerable number of 60-day review comments from BWSR, DNR, Met Council, MNDOT, and MPCA. RBWMO held the required public hearing on September 17, 2007, and no comments were received. On October 12, 2007, all review agencies had received the revised draft Plan for the required 45-day review period. The Commissioners received comment letters from the BWSR, DNR, Met Council, and MPCA. In response to the comprehensive nature and number of comments, a meeting was held on January 9, 2008, between BWSR staff and RBWMO consultants to provide additional clarification and Plan review. On April 9, 2008, BWSR staff again met with RBWMO consultants to clarify several components of the Plan and refine the response to comments. The final draft Plan was submitted to BWSR on July 17, 2008.

5. **Local Review.** The RBWMO circulated a copy of the draft Plan to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7. No formal comments were submitted by the member cities or the county.

6. **Metropolitan Council Review.** Met Council stated that with the WMO's outlined reporting and assessment mechanisms for the member cities, the Plan appears to be consistent with Council's *Water Resources Management Policy Plan.*

7. **Department of Agriculture Review.** MDA did not provide comments on the RBWMO draft Plan.

8. **Department of Health Review.** MDH did not provide comments on the RBWMO draft Plan.

9. **Department of Natural Resources Review.** The DNR provided the following comments for the 60- and 45-day review periods: Within the Resource Inventory section of the Plan, DNR requested several missing strategies such as addressing the shortage of recreational fishing opportunities, rare and natural communities management, runoff volume control, groundwater conservation. RBWMO either revised the Plan accordingly or required the member communities to address these items in their local water plans.

10. **Pollution Control Agency Review.** MPCA offered comments related to RBWMO's position on TMDLs, individual sewage treatment systems, the WMO's definition of "water quality problems", and several other clarifications. RBWMO will not be involved with the direct administration of TMDLs, but rather will defer responsibility to member cities and MPCA. In addition member cities will be required to develop improved water quality monitoring programs, pursue grant funds for retrofit BMP implementation, RBWMO satisfactorily addressed the remaining items.

11. **Department of Transportation Review.** DOT requested clarification on proposed storm pond designs and WCA LGU for MNDOT projects.

12. **Board Review.** For the 60-day review, Board staff provided a substantial number of comments. Board comment recommended completion and inclusion of a self assessment, which RBWMO elected not to add to the Plan – this is not a requirement of 8410. Board staff noted during both review periods that the Plan should outline the public input acquired during the plan revision process. RBWMO explained the input process in the agency response to comments but elected not to add a narrative summary to the Plan. Additional input can be sought utilizing their new website and the formalized Citizen Advisory Committee. The Board emphasized the need to establish a systematic approach to ensuring local water plan compliance. RBWMO stated it will utilize the proposed annual evaluation and reporting process. In order to make the policies more outcome-based, a number of them were revised or eliminated. The Board requested that the Plan document that there was a meaningful assessment of the adequacy of municipal stormwater and maintenance standards. RBWMO believed there was adequate assessment during each member cities' SWPPP process. A summary of the SWPPPs has been added to the Plan and member cities are required to develop a maintenance program. In both comment periods BWSR asked to reconsider the need for runoff volume control and redevelopment standards. RBWMO created policies that require redevelopment to reduce runoff volume, nutrient loading, and runoff rates to 1988 levels. The Board requested that RBWMO outline their role in the development of TMDLs. RBWMO stated they will not be involved with the direct administration of TMDLs, but rather defers responsibility to member cities and MPCA. Member cities will also be required to develop improved water quality monitoring programs. RBWMO will pursue grant funds for retrofit BMP installation as well. In order to show the financial impact of the implementation plan for member communities, the Board in both comment periods advised that a supplemental table be provided identifying each member's annual contribution. RBWMO incorporated this information into the Plan. BWSR reminded RBWMO that local water plans must be approved by RBWMO and adopted by member cities within two years of BWSR approval of the Plan and that they should allow sufficient time for the entire process.

    For the 45-day review, the Board remained concerned about local water plan accountability and the importance of strict oversight of local water plan compliance. Based on the Board's 60- and

45-day recommendations, RBWMO established a Technical Advisory Committee that will: 1) complete a peer review and spot check of each city's local water plan activities, permits, and RBWMO Plan compliance every other year, 2) annually review NPDES annual reports for compliance with RBWMO education and maintenance requirements, and 3) summarize local activities and compliance concerns and prepare the draft RBWMO annual financial and activity report for the RBWMO Commissioners. A Board comment requested clarification on what human resources will be used implement the Plan. RBWMO noted they will strictly utilize existing city staff from both cities and no new staff is needed. The Board emphasized the need for the Commissioners to assess their budget and funding mechanisms, other than grants and stormwater utility fees, to assist cities with non-degradation, cost-share BMP programs, and other Plan implementation elements needed to achieve water quality goals. RBWMO chose to require the cities to fund all project/implementation strategies and not to provide funding for the University of Minnesota's NEMO efforts.

13. **Plan Summary.** Notable elements of the Plan include:
    - Utilization of a TAC with specified annual tasks related to member city accountability and reporting to the RBWMO Commissioners.
    - For redevelopment projects, policies require reduction of runoff volume, nutrient loading, and runoff rates to 1988 levels.
    - Continued cooperation between local governments by implementing storm water management programs, storm water management studies, and storm water improvement projects.

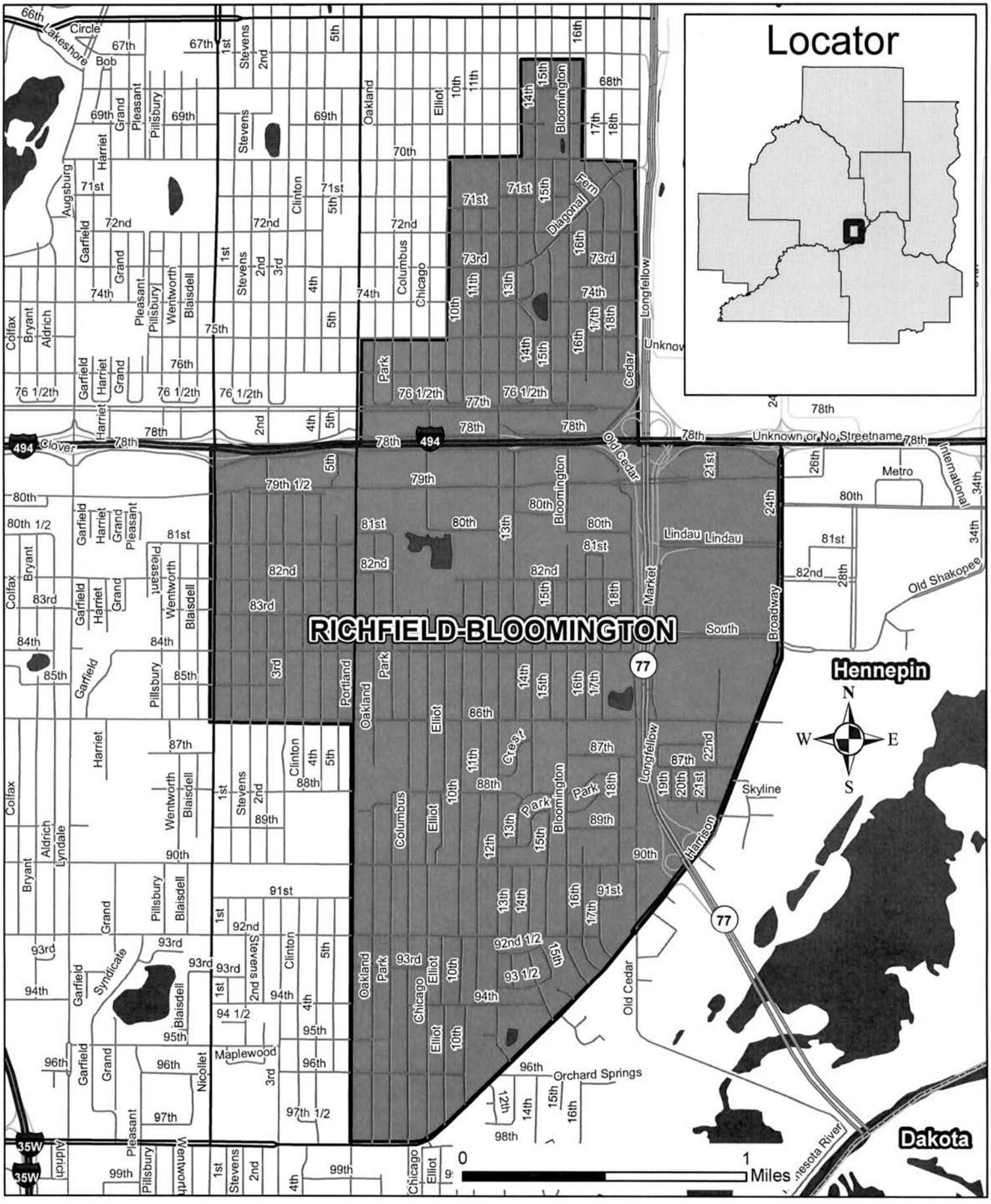
14. **Metro Water Planning Committee Meeting.** On August 4, 2008, the Board's Metro Water Planning Committee and staff met with representatives from the RBWMO in St. Paul to review and discuss the Plan update. Those in attendance from the Board's Committee were Robert Burandt, Louise Smallidge, and LuAnn Tolliver. Board staff in attendance were Metro Supervisor Jim Haertel and Board Conservationists Brad Wozney and Melissa Lewis. Attendees from RBWMO were Scott Anderson representing Bloomington, Kristin Asher representing Richfield, and Engineer Todd Hubmer. Board staff recommended approval of the Plan. [After discussion, the subcommittee (unanimously?) voted to recommend _____ of the Richfield Bloomington Watershed Management Organization's Comprehensive Watershed Management Plan to the full Board.]

15. **Fiscal Context and Implementation.** The entire cost of implementing the Plan and WMO operation falls to the individual cities and any acquired grant funds. The combined budgets for the member communities exceeds $10 million through 2017. Future TMDLs and other modeling efforts should result in an increase in the CIP budget. RBWMO will review and update biennially the overall CIP starting 2010.

STAFF RECOMMENDATION:

BWSR Board Conservationist Brad Wozney recommends approval of the Richfield Bloomington Watershed Management Organization 2008-2018 Watershed Management Plan.

Richfield-Bloomington Watershed Management Organization



Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota 55155

In the Matter of the review of the Watershed Management Plan for the **Richfield-Bloomington Watershed Management Organization** pursuant to Minnesota Statues Section 103B.231, Subdivision 9

ORDER APPROVING WATERSHED MANAGEMENT PLAN

Whereas, the Board of Commissioners of the Richfield-Bloomington Watershed Management Organization (RBWMO) submitted a Watershed Management Plan (Plan) dated July 2008 to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes Section 103B.231, Subd. 9, and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **Watershed Management Organization Establishment.** On December 19, 1983, the Richfield-Bloomington Watershed Management Organization (RBWMO) was established via Joint Powers Agreement (JPA). BWSR approved their second generation plan in January 2001 under the Metropolitan Surface Water Management Act. The Board of Commissioners consist of all city council members from both member cities, five from Richfield and seven from Bloomington.

2. **Requirement to Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

3. **Nature of the Watershed.** The RBWMO spans 7.55 square miles in southeastern Hennepin County. There are portions of two local government units within RBWMO as the name implies, the Cities of Richfield and Bloomington. The WMO is fully developed. There are no major creeks or rivers in the watershed and the stormwater runoff flows primarily through storm sewer southeasterly into a series of large storm ponds and then into the Minnesota River. Unique features within RBWMO include

Wood Lake Park and Nature Center, Smith Park, and the Mall of America. The waterbodies within the WMO include: Smith Pond, Wright's Lake, Running Pond, Sheridan Pond, Richfield Lake, Wood Lake, Augsburg Pond, and Wilson Pond.

RBWMO is bound by the Minnehaha Creek Watershed District to the north, Lower Minnesota River Watershed District to the south and east, and on the west by Nine Mile Creek Watershed District.

4. **Plan Development and Review.** Board staff and other state agency staff participated in a plan update kickoff meeting early in the process. The previous plan stated it would be in effect until December 31, 2006. The primary reason for the delayed Plan submittal is due to the numerous state agencies' comments resulting in some changes to the draft Plan. The draft 3rd generation Plan was submitted to Board staff, other state agencies, and local governments for the required 60-day review on June 15, 2007. RBWMO received a considerable number of 60-day review comments from Board staff, DNR, Met Council, MNDOT, and MPCA. RBWMO held the required public hearing on September 17, 2007, and no comments were received. On October 12, 2007, all review agencies had received the revised draft Plan for the required 45-day review period. The Commissioners received comment letters from the Board staff, DNR, Met Council, and MPCA. In response to the comprehensive nature and number of comments, a meeting was held on January 9, 2008, between Board staff and RBWMO consultants to provide additional clarification and Plan review. On April 9, 2008, Board staff again met with RBWMO consultants to clarify several components of the Plan and refine the response to comments. The final draft Plan was submitted to the Board on July 17, 2008.

5. **Local Review.** The RBWMO circulated a copy of the draft Plan to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7. No formal comments were submitted by the member cities or the county.

6. **Metropolitan Council Review.** The Council stated that with the RBWMO's outlined reporting and assessment mechanisms for the member cities, the Plan appears to be consistent with Council's *Water Resources Management Policy Plan.*

7. **Department of Agriculture Review.** MDA did not provide comments on the RBWMO Plan.

8. **Department of Health Review.** MDH did not provide comments on the RBWMO Plan.

9. **Department of Natural Resources Review.** The DNR provided the following comments for the 60- and 45-day review periods. Within the Resource Inventory section of the Plan, DNR requested including several missing strategies such as addressing the shortage of recreational fishing opportunities, rare and natural communities management, runoff volume control, groundwater conservation. RBWMO either revised the Plan accordingly or required the member communities to address these items in their local water plans.

10. **Pollution Control Agency Review.** MPCA offered comments related to RBWMO's position on TMDL's, individual sewage treatment systems, the WMO's definition of "water quality problems", and several other clarifications. RBWMO will not be involved with the direct administration of TMDL's, rather it will defer responsibility to member cities and MPCA. In addition, member cities will be required to develop improved water quality monitoring programs and pursue grant funds for retrofit BMP implementation. RBWMO satisfactorily addressed the remaining items.

11. **Department of Transportation Review.** MnDOT requested clarification on proposed storm pond designs and WCA LGU for MNDOT projects.

12. **Board Review.** For the 60-day review, Board staff provided a substantial number of comments. Board comments recommended completion and inclusion of a self assessment, which RBWMO elected not to add to the Plan. This is not a requirement of 8410. Board staff noted during both review periods that the Plan should outline the public input acquired during the plan revision process. RBWMO explained the input process in the agency response to comments but elected not to add a narrative summary to the Plan. Additional input can be sought utilizing their new website and the formalized Citizen Advisory Committee. The Board emphasized the need to establish a systematic approach to ensuring local water plan compliance. RBWMO stated it will utilize the proposed annual evaluation and reporting process. In order to make the policies more outcome-based, a number of them were revised or eliminated. The Board requested the Plan document that there was a meaningful assessment of the adequacy of municipal stormwater and maintenance standards. RBWMO believed there was adequate assessment during each member cities' SWPPP process. A summary of the SWPPP's has been added to the Plan and member cities are required to develop a maintenance program. In both comment periods Board staff asked to reconsider the need for runoff volume control and redevelopment standards. RBWMO created policies that require redevelopment to reduce runoff volume, nutrient loading, and runoff rates to 1988 levels. The Board requested that RBWMO outline their role in the development of TMDL's. RBWMO stated they will not be involved with the direct administration of TMDL's, rather it defers responsibility to member cities and MPCA. Member cities will also be required to develop improved water quality monitoring programs. RBWMO will pursue grant funds for retrofit BMP installation as well. In order to show the financial impact of the implementation plan for member communities, Board staff in both comment periods advised that a supplemental table be provided identifying each member's annual contribution. RBWMO incorporated this information into the Plan. Board staff reminded RBWMO that local water plans must be approved by RBWMO and adopted by member cities within two years of the Board's approval of the Plan and that they should allow sufficient time for the entire process.

For the 45-day review, Board staff remained concerned about local water plan accountability and the importance of strict oversight of local water plan compliance. Based on Board staff's 60- and 45-day recommendations, RBWMO established a Technical Advisory Committee that will: 1) complete a peer review and spot check of

each city's local water plan activities, permits, and RBWMO Plan compliance every other year, 2) annually review NPDES annual reports for compliance with RBWMO education and maintenance requirements, and 3) summarize local activities and compliance concerns and prepare the draft RBWMO annual financial and activity report for the RBWMO Commissioners. A Board comment requested clarification on what human resources will be used to implement the Plan. RBWMO noted they will strictly utilize existing city staff from both cities and no new staff is needed. Board staff emphasized the need for the Commissioners to assess their budget and funding mechanisms, other than grants and stormwater utility fees, to assist cities with non-degradation, cost-share BMP programs, and other Plan implementation elements needed to achieve water quality goals. RBWMO chose to require the cities to fund all project/implementation strategies and not to provide funding for the University of Minnesota's NEMO efforts.

13. **Plan Summary and Highlights.** Notable elements of the Plan include:
    - Utilization of a TAC with specified annual tasks related to member city accountability and reporting to the RBWMO Commissioners.
    - For redevelopment projects, policies require reduction of runoff volume, nutrient loading, and runoff rates to 1988 levels.
    - Continued cooperation between local governments by implementing storm water management programs, storm water management studies, and storm water improvement projects.

14. **Metro Water Planning Committee Meeting.** The Board's Metro Water Planning Committee met on August 4, 2008, in St. Paul to review and discuss the Plan revision. Those in attendance from the Board's Committee were Louise Smallidge, Faye Sleeper, LuAnn Tolliver and Robert Burandt as chair. Board staff in attendance were Metro Region Supervisor Jim Haertel and Board Conservationists Brad Wozney and Melissa Lewis. Attendees from RBWMO were Scott Anderson representing Bloomington and Consulting Engineer Todd Hubmer. Board staff recommended approval of the Plan. After discussion, the Committee unanimously voted to recommend approval of the RBWMO 2008-2018 Watershed Management Plan to the full Board.

CONCLUSIONS

1. All relevant, substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving a Watershed Management Plan for the Richfield-Bloomington Watershed Management Organization pursuant to Minnesota Statutes Section 103B.231, Subd. 9.

3. The Richfield Bloomington Watershed Management Organization Watershed Management Plan attached to this Order defines water and water-related problems within the organization's boundaries, possible solutions thereto, and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

ORDER

The Board hereby approves the attached Watershed Management Plan dated July 2008 as the Watershed Management Plan for the Richfield-Bloomington Watershed Management Organization.

Dated at Olivia, Minnesota this 28th day of August, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

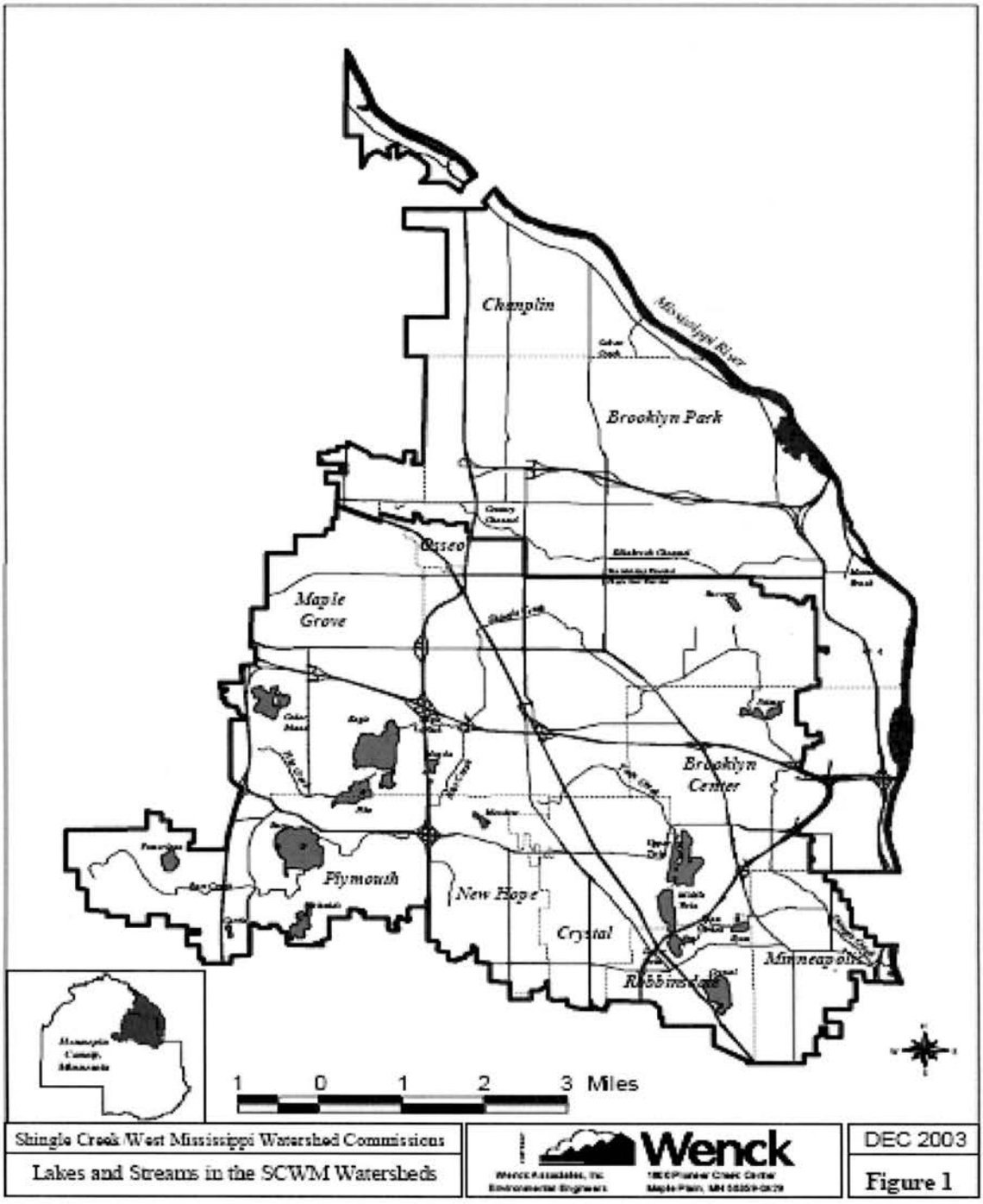
BY: Randy Kramer, Chair

DRAFT

Minnesota Board of Water and Soil Resources
August 2008 Metro Water Planning Committee Meeting

OVERVIEW

Shingle Creek / West Mississippi Watershed Management Organizations (SC-WMWMC) Major Plan Amendment 2008-2012



1. **SC-WMWMC Establishment.** Joint Powers Agreements established the Shingle Creek and West Mississippi Watershed Management Commissions (SC-WMWMC) in 1984. Each Commission is comprised of one member appointed from each community by their respective city council. The first Watershed Management Plan was published in April 1990. The second generation watershed management plan was approved by BWSR in April 2004. A major amendment was approved by BWSR in April 2007.

2. **Requirement to Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

3. **Nature of the Watershed.** The Shingle Creek and West Mississippi Watershed Management Commissions are located exclusively in Hennepin County in the northwest portion of the Minneapolis – St. Paul seven county metropolitan area. They are bound by the Mississippi River to the north and east, on the southeast by the Mississippi WMO, on the south by Bassett Creek WMO, and on the west by the Elm Creek WMO. Both watersheds encompass all or part of the following ten municipalities: Brooklyn Center, Brooklyn Park, Champlin, Crystal, Maple Grove, Minneapolis, New Hope, Osseo, Plymouth, and Robbinsdale. The Shingle Creek and West Mississippi watersheds cover 44.5 square miles and 23 square miles respectively. There are fourteen lakes in the Shingle Creek watershed, and none in West Mississippi. Combined the watersheds have approximately 20.5 miles of stream. Predominantly both watersheds are fully developed, with the remaining land being currently developed.

4. **Plan Development and Review.** The draft Amendment was submitted to BWSR, other state agencies, and local governments for the required 60-day review on January 29, 2008. **The main components of the Amendment include: 1) Add the Crystal Twin Oak Pond project to the 2008 Capital Improvement Program (CIP). 2) Split the Wetland 639W project into two phases over two years - 2008 and 2009. 3) Move the Shingle Creek Restoration CR 10 to I-694 and the Maple Grove Pond P55 projects from 2009 to 2010.** The SC-WMWMC received 60-day review comment letters from BWSR and Met Council. SC-WMWMC held a public hearing on May 8, 2008. No new suggested changes were offered during the meeting. On May 22, 2008, all review agencies had received the revised draft Amendment for the required 45-day review period. The Commissioners received comment letters from BWSR and PCA. The final draft Amendment was submitted to BWSR on July 16, 2008.

5. **Local Review.** The SC-WMWMC circulated a copy of the draft Amendment to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7. There were no comments received from member cities during the formal comment period. However, at the May 8, 2008 public hearing, the representative from Brooklyn Center stated that their city will oppose the amendment primarily due to the Commission not funding a project in their city under said Amendment.

6. **Metropolitan Council Review.** Met Council was supportive of the amendment stating it is consistent with the Council's *Water Resources Management Policy Plan*.

7. **Department of Agriculture Review.** MDA did not provide comments on the Amendment.

8. **Department of Health Review.** MDH did not provide comments on the Amendment.

9. **Department of Natural Resources Review.** The DNR did not provide comments on the Amendment.

10. **Pollution Control Agency Review.** MPCA, in their 45-day comment letter, offered their support of the Amendment.

11. **Department of Transportation Review.** DOT did not provide comments on the Amendment.

12. **Board Review.** Board staff had no concerns regarding the Amendment. Board staff commended the Commissions for their systematic approach to reviewing the CIP.

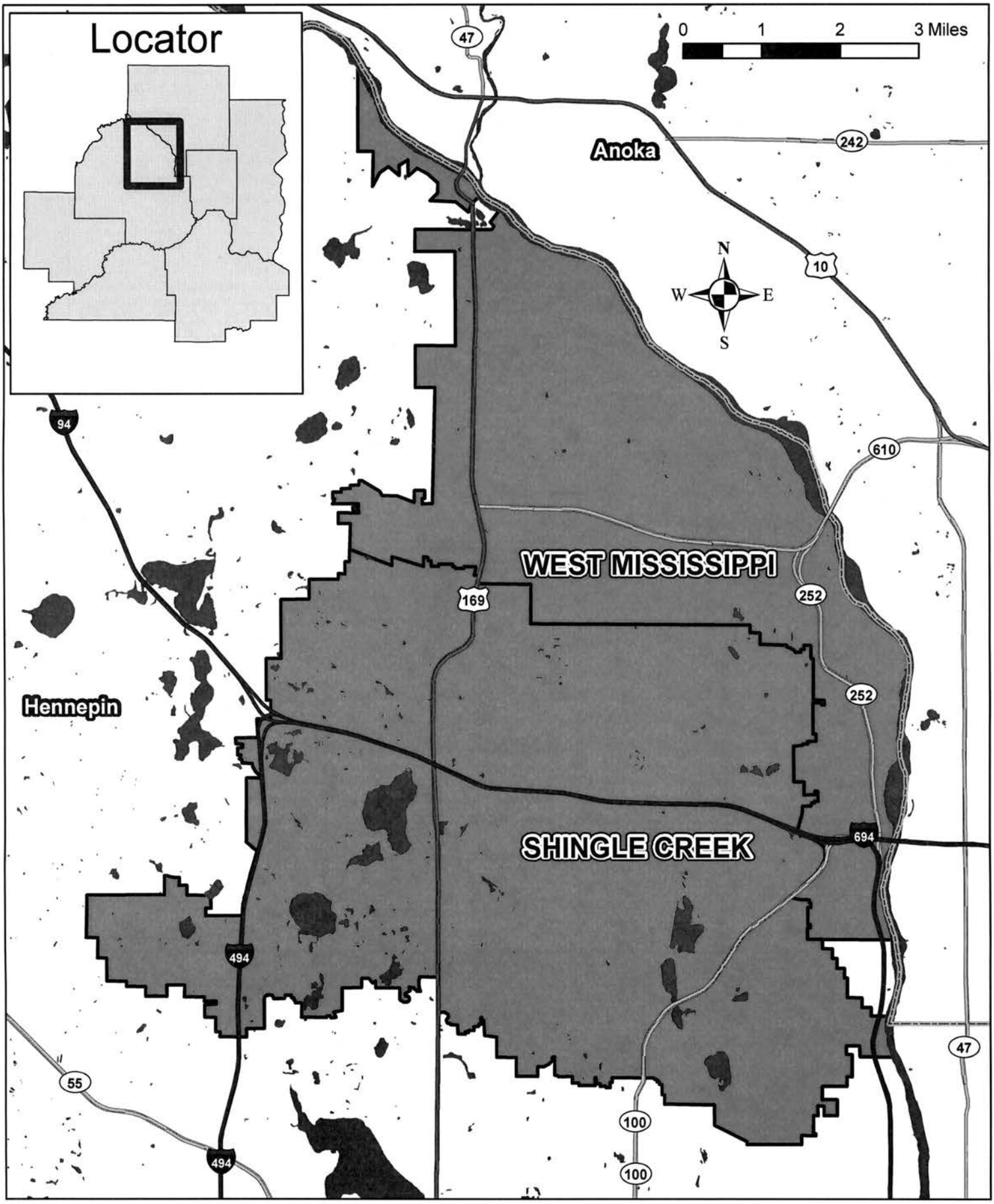
14. **Plan Amendment Summary and Highlights.** The main goal of the major plan amendment is to add one capital project for 2008 and revise the completion date of other planned capital projects within the Watershed Management Plan.

15. **Metro Water Planning Committee Meeting**. On August 4, 2008, the Board's Metro Water Planning Committee and staff met with representatives from the SC-WMWMC in St. Paul to review and discuss the Amendment. Those in attendance from the Board's Committee were [Louise Smallidge, LuAnn Tolliver, Faye Sleeper, and Robert Burandt as chair]. Board staff in attendance were Metro Region Supervisor Jim Haertel and Board Conservationists Brad Wozney and Melissa Lewis. There were no representatives from SC-WMWMC present at the meeting. Board staff recommended approval of the Amendment. [After review and discussion, the committee (unanimously?) voted to recommend _____ of the Shingle Creek – West Mississippi Watershed Management Commissions' Watershed Management Plan Amendment to the full Board.]

STAFF RECOMMENDATION:

With no substantial comments related to the amendment, BWSR Board Conservationist Brad Wozney recommends approval of the Shingle Creek – West Mississippi Watershed Management Commissions' Major Plan Amendment 2008-2012.

Shingle Creek & West Mississippi Watershed Management Organizations



Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota 55155

In the Matter of the review of the Amendment to the Watershed Management Plan for the **Shingle Creek and West Mississippi Watershed Management Organizations**, pursuant to Minnesota Statutes Section 103B.231, Subdivision 11.

ORDER APPROVING AMENDMENT TO WATERSHED MANAGEMENT PLAN

Whereas, the Boards of Commissioners of the Shingle Creek and West Mississippi Watershed Management Organizations (Commissions) submitted a Watershed Management Plan Amendment (Amendment) dated January 2008, to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes Section 103B.231, Subd. 11, and;

Whereas, the Board has completed its review of the Amendment;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **Watershed Management Organization Establishment.** Joint Powers Agreements established the Shingle Creek and West Mississippi Watershed Management Commissions (Commissions) in 1984. Each Commission is comprised of one member appointed from each community by their respective city council. The first Watershed Management Plan was published in April 1990. During the development process of the Second Generation Plan, both Commissions agreed upon merging the plan preparation, operating policies, and administration for efficiency purposes, but they remain separate, politically distinct Watershed Management Organizations. Four out of the five member cities of the West Mississippi Watershed Management Commission are also members of the Shingle Creek Watershed Management Commission. Champlin is a member of West Mississippi only. The second generation watershed management plan was approved by BWSR in April 2004. The attached Amendment will be incorporated into the joint Watershed Management Plan upon approval and adoption.

2. **Authority to Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251. The current Commissions' watershed management plan was approved by Board Order on April 28, 2004. The watershed management plan may be amended according to Minnesota Statutes Section 103B.231, Subd. 11.

3. **Nature of the Watershed.** The Commissions are located exclusively in Hennepin County in the northwest portion of the Minneapolis – St. Paul seven county metropolitan area. They are bound by the Mississippi River to the north and east, on the southeast by the Mississippi WMO, on the south by the Bassett Creek WMO, and on the west by the Elm Creek WMO. The Commissions encompass all or part of the following ten municipalities: Brooklyn Center, Brooklyn Park, Champlin, Crystal, Maple Grove, Minneapolis, New Hope, Osseo, Plymouth, and Robbinsdale. The Shingle Creek and West Mississippi watersheds cover 44.5 square miles and 23 square miles respectively. There are fourteen lakes in the Shingle Creek watershed, and none in West Mississippi. Combined the watersheds have approximately 20.5 miles of stream. Predominantly, both watersheds are fully developed, with the remaining land being currently developed.

4. **Amendment Development and Review.** The draft Amendment was submitted to Board staff, other state agencies, and local governments for the required 60-day review on January 29, 2008. The main components of the Amendment include: 1) Add the Crystal Twin Oak Pond project to the 2008 Capital Improvement Program (CIP). 2) Split the Wetland 639W project into two phases over two years - 2008 and 2009. 3) Move the Shingle Creek Restoration CR 10 to I-694 and the Maple Grove Pond P55 projects from 2009 to 2010. The Commissions received 60-day review comment letters from BWSR and the Metropolitan Council. The Commissions held a public hearing on May 8, 2008. No new suggested changes were offered during the hearing. On May 22, 2008, all review agencies had received the revised draft Amendment for the required 45-day review period. The Commissioners received comment letters from Board staff and the PCA. The final draft Amendment was submitted to the Board on July 16, 2008.

5. **Metropolitan Council Review.** The Council was supportive of the amendment stating it is consistent with the Council's *Water Resources Management Policy Plan.*

6. **Department of Agriculture Review.** The MDA did not comment on the Amendment.

7. **Department of Health Review.** The MDH did not comment on the Amendment.

8. **Department of Natural Resources Review.** The DNR did not comment on the Amendment.

9. **Pollution Control Agency Review.** The MPCA, in their 45-day comment letter, offered their support of the Amendment.

10. **Local Review.** The Commissions circulated a copy of the draft Amendment to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7. There were no comments received from member cities during the formal comment period. However, at the May 8, 2008 public hearing, the representative from Brooklyn Center stated that their city will oppose the amendment primarily due to the Commission not funding a project in their city under said Amendment. It was noted that one of the projects does extend into Brooklyn Center.

11. **Board Review.** Board staff had no concerns regarding the Amendment. Board staff commended the Commissions for their systematic approach to reviewing the CIP.

12. **Highlights of the Plan Amendment.** The main goal of the plan amendment is to add one capital project for 2008 and revise the completion date of other planned capital projects within the Watershed Management Plan. This amendment reflects the Commissions' willingness to regularly review their implementation program and to quickly react to project opportunities that arise.

13. **Metro Water Planning Committee Meeting.** The Board's Metro Water Planning Committee met on August 4, 2008 to review and discuss the Amendment. Those in attendance from the Board's Committee were Louise Smallidge, Faye Sleeper, LuAnn Tolliver and Robert Burandt as chair. Board staff in attendance were Metro Region Supervisor Jim Haertel and Board Conservationists Brad Wozney and Melissa Lewis. Board staff recommended approval of the Amendment. After discussion, the Committee unanimously voted to recommend approval of the Amendment to the full Board.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving an Amendment to the Watershed Management Plan for the Shingle Creek and West Mississippi Watershed Management Organizations pursuant to Minnesota Statutes Section 103B.231, Subd. 11.

3. The Shingle Creek and West Mississippi Watershed Management Organizations' Amendment attached to this Order defines the need and purpose of the Watershed Management Plan changes and the methods of financing.

4. The attached Amendment is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

ORDER

The Board hereby approves the attached Amendment, dated January 2008, to the Shingle Creek and West Mississippi Watershed Management Organizations' (Commissions') Watershed Management Plan.

Dated at Olivia, Minnesota this 28th day of August, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Northern Water Planning Committee

1. Benton County Local Water Management Plan – Quentin Fairbanks - *DECISION ITEM*

2. Final Review – Crow Wing County Local Water Management Plan – Quentin Fairbanks - *DECISION ITEM*

3. Mahnomen County Local Water Management Plan – Quentin Fairbanks – *DECISION ITEM*

4. Aitkin County Priority Concerns Scoping Document (PCSD) – Quentin Fairbanks – *DECISION ITEM*

5. Ottertail County Priority Concerns Scoping Document (PSCD) – Quentin Fairbanks – *DECISION ITEM*

6. Red Lake County Priority Concerns Scoping Document (PCSD) – Quentin Fairbanks – *DECISION ITEM*

Benton County

COMPREHENSIVE LOCAL WATER MANAGEMENT PLAN 2008-2018

Prepared by Annie Felix and the Benton County Water Resources Advisory Committee
With assistance from the Benton Soil and Water Conservation District

BENTON SOIL and WATER CONSERVATION DISTRICT

14 WEST 2ND AVENUE
FOLEY, MN 56329
www.soilandwater.org

Revised April 10, 2008

Benton County Local Water Management Plan Contributors

Water Resources Advisory Committee Lead and Water Plan Technician

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Water Resources Advisory Committee

Voting members:

John Bemboom	Benton County Township Officers Association representative
Butch Bukowski	Benton County Board of Commissioner
Duane Cekalla	Little Rock Lake Association representative
Craig Gondeck	Citizen at-large
Dan Hennek	Citizen at-large
Joe Jordan	Benton County Soil and Water Conservation District Supervisor
Brian Kaschmitter	Elk River Watershed Association representative
Larry Nadeau	Benton County municipalities representative
Ken Nodo	Citizen at-large
Guy Spence	Citizen at-large

Ex-officio members:

Pat Gehling	Natural Resources Conservation Service
Mike Howe	Minnesota Department of Health
Dan Lais	Minnesota Department of Natural Resources - Waters Division
Maggie Leach	Minnesota Pollution Control Agency
Steve Marod	Minnesota Department of Natural Resources - Fisheries Division
Dan Martens	Minnesota Extension Service
Dave Neiman	Minnesota Rural Water Association
Nick Tomczik	Benton County Department of Development
Jason Weinerman	Board of Water and Soil Resources

Other Agency Advisors:

Chelle Benson	Benton County Department of Development
Gail Haglund	Minnesota Department of Health
John Henz	City of Sauk Rapids
Gerry Maciej	Benton Soil and Water Conservation District
Bruce Montgomery	Minnesota Department of Agriculture
Jim Mosier	City of Foley
John Pokorney	Minnesota Pollution Control Agency
Mark Sauer	City of Rice
Todd Schultz	City of Sauk Rapids
Phil Votruba	Minnesota Pollution Control Agency

Benton County Commissioners:

Earl "Butch" Bukowski
Jim McMahon
Dick Soyka
Duane Walter
Joe Wollak

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EXECUTIVE SUMMARY

This is a summary of the fourth revision of the Benton County Comprehensive Local Water Management Plan. The plan is effective 2008-2018 and covers the entire county.

1. Purpose
The purpose of the Benton County Comprehensive Local Water Management Plan is to:

- Identify and address existing and potential issues for the protection, management, and development of water resources and related resources in the County
- Identify priority concerns to be addressed during the effective time frame of the plan
- Develop goals and implement actions that improve water quality and quantity and related resource management and planning in the County

2. Description of Priority Concerns
The Benton County Water Resources Advisory Committee has selected three priority concerns that will be addressed in the implementation plan. Education and outreach will be a component of each priority concern, and therefore it was not selected as a separate priority concern.

The three priority concerns selected were:

1. Feedlot and Nutrient Management
2. Development
3. Groundwater Quantity and Quality

The following is a general description of the three selected priority concerns. A more detailed discussion is found in the Priority Concerns Scoping Document (see Appendix).

Feedlot and nutrient management
Even though Benton County is experiencing development pressures, agriculture still dominates the landscape. There is concern that livestock operations and the by-products they produce are degrading surface water quality. There is a need for a focused effort to pro-actively approach livestock producers and offer cost share and technical assistance to design and install low cost best management practices that improve water quality.

Development
Benton County population is expected to increase 23% by 2015. The western part of the county is already developing rapidly around the cities of St. Cloud, Sauk Rapids, and Sartell. We need to strategically plan for how growth should be managed and where it should occur in order to preserve and protect our water quality and quantity while promoting economic progress.

Groundwater quantity and quality
There are concerns regarding groundwater over-pumping in the last few years. There is a need to locate and map groundwater resources within the county in order to plan for and promote

sustainable use of the resource. Because of the increasing population, there is also a need to protect drinking water from contamination.

NOTE
It is important to recognize previously identified water quality problems in Benton County. As of 2007, four water bodies within Benton County have been designated as impaired by the MPCA including (mercury impairment listings not included):

Little Rock Creek – Biological impairment, Fish & invertebrates
Mayhew Creek - Biological impairment, Fish & invertebrates
Little Rock Lake – Nutrient impairment
Mayhew Lake – Nutrient impairment

The causes(s) of these impairments are unknown at this time. A Total Maximum Daily Load (TMDL) study for Little Rock Creek began in 2006. The Little Rock Lake and Mayhew Lake TMDL studies are scheduled to start in 2008. The Mayhew Creek TMDL study start date has not been scheduled. A TMDL study is a process for determining the source(s) and the cause(s) of the impairments. It defines the maximum amount of a pollutant the water body can receive and still meet water quality standards. Agricultural and development related pollutant sources will be reviewed as part of the TMDL process. After the impairment sources have been identified and loads have been calculated, a pollution reduction plan is developed. The pollution reduction plan identifies all the sources of the pollutant in the watershed and allocates needed reductions among them. Addressing these impaired water bodies is a high priority ongoing activity in this plan.

3. Summary of goals and actions
The following is a summary of the goals, actions and estimated costs for each of the priority concerns. A full description of the goals, objectives, and action items including responsible entity, schedule, cost and watershed can be found in the Implementation Plan (see page 25).

Feedlot and nutrient management

Goal 1: Reduce or minimize the negative impact of animal manure and fertilizer on surface and groundwater.

Actions:

1. Host field days, meetings, publish written material, etc.
2. Recruit participants through non-traditional methods, i.e., on farm visits
3. Support compliance with MN Rule 7020 and other regulations related to water quality
4. Promote low cost feedlot solutions
5. Demonstrate economic, environmental, and other benefits of Best Management Practices adoption
6. Promote and advertise pasture/grazing management planning
7. Identify and work with non-compliant farms to install Best Management Practices
8. Provide basic manure management tools and services, i.e. spreader calibration, manure and soil testing, spreading equipment, etc.
9. Conduct demonstration trial plots and other on farm educational work with producers in cooperation with private/public entities

10. Partner with other entities who provide programs and services to this audience to adopt Best Management Practices
11. Investigate and promote improved manure handling and application systems, i.e.: community composting, small rental equipment
12. Promote adoption of manure management BMPs, targeting efforts on dairy and poultry manure and/or land areas of highest concern
13. Consider need for Local Government Unit review of new projects on feedlots under 300 Animal Units
14. Host exploratory meeting(s) regarding the county feedlot delegation topic, invite other counties/interested parties to speak on the topic

Estimated cost: $1,484,000

Development

Goal 1: Balance open space and development in Benton County in such a way as to maintain and/or improve the region's water quality.

Actions:

1. Assist in the development of the County Geologic Atlas
2. Contact agencies (DNR, County parks, Extension Service, others) to identify & compile list of existing inventories of rare/critical/vulnerable water resources
3. Develop a list of components that should go into an inventory of rare/critical/vulnerable water resource areas
4. Survey Local Government Units and public to identify water resource concern areas and priorities
5. Create sensitive areas management plan using the resource concern areas and priorities developed in 4) & list compiled in 2)
6. Develop tools such as conservation subdivision for use in designated areas as defined in 5).
    a. Host Alternative Shoreline Ordinance standard discussion between Local Government Units
7. Develop a single source of contact for developers to receive information about rules/regulations for all county and township development projects
8. Create a quick reference guide on development regulations
9. Bring together Local Government Units to discuss development issues and the needs associated with those issues.
10. Educate townships about municipal separate storm sewer systems (MS4) plans if they do not have them
11. Develop/utilize and distribute materials about best management practices to new landowners at time of purchase

Goal 2: Encourage Benton County local government units to adopt development related ordinances and policies to maintain and enhance the region's water resources.

Actions:

1. Assist MS4s with Total Maximum Daily Load (TMDL) implementation
2. Create & promote incentives to establish and maintain low impact development
    a. Explore method to make low impact development techniques standard
    b. Identify and define low impact development techniques

c. Educate developers, citizens, landowners about Low Impact Developments (LIDs) using newsletter, i.e. Solid Waste Newsletter
d. Promote distribution of educational materials for lawn/yard best management practices

3. Explore updating standards for high rainfall events
    a. Research to find an appropriate standard for rainfall on runoff requirements for developments
4. Identify standard and optional Best Management Practices for development
5. SWCD staff serve on plat review committee as BMP technical representative
6. Include the installation of perennial vegetation filters as part of any ditch cleaning/maintenance project, i.e. grass filters
    a. Educate/offer cost sharing and technical assistance to landowners to install grass buffers on private ditches
7. Review public ditch inventory, create electronic map and update it on a regular basis

Goal 3: Provide information and education opportunities to the appropriate audience concerning development impacts on water resources through a coordinated local government effort.

Actions:

1. Develop a crisis delivery system to address emergency or hot topic issues as they arise
    a. Develop procedures to address various levels of water related crisis for protection of the public and the appropriate level of response and notification.
    b. Inform the public during crisis using County City Watch (automatic dialer)
    c. Complete and maintain digital parcel layer with names, addresses, and phone numbers
2. Incorporate water resource education into a county wide environmental newsletter
3. Explore options for creating or partnering to create water resource website for the county
4. Develop a marketing plan to promote water quality within the county (work with local university business/marketing programs for assistance)
5. Establish a county wide educational water resource program that incorporates all audiences and ages
    d. Seek to establish a county wide "Water Week" through a county proclamation or other method to highlight the importance of water issues within Benton County
6. Encourage townships to have annual water resource meetings to address water issues within the township, possibly in conjunction with the County Water Week

Goal 4: Pro-actively plan for future growth in order to protect water resources and minimize land use conflicts

Actions:

1. Identify full build out areas around rapidly growing communities using Local Government Unit Comprehensive Plans
2. Model the impact of full build out in the high growth zones to plan for future developments to determine potential water quality/quantity issues

Estimated cost: $1,205,000

Groundwater quantity and quality

Goal 1: Protect and maintain groundwater quality resources in Benton County.

Actions:

1. Support Department of Agriculture Central Sands Monitoring Network (initiate a discussion of needs)
2. Promote information sharing regarding monitoring projects (trends), i.e.: Anoka Sandplain, municipalities
3. Work with Dept of Agriculture & Health to identify additional groundwater monitoring needs in County
4. Establish a groundwater quality database
5. Work with Wellhead Protection Area (WHPA) managers to share information and centralize monitoring data
6. Work with partners to educate landowners within the Wellhead Protection Area about Best Management Practices
7. Work with LGUs to address zoning issues in WHPAs
8. Promote cost share programs to encourage BMPs in WHPA
9. Recognize drinking water protection areas in existing and future water resource plans by establishing priority protection area overlays on land use and zoning maps, specifically Mississippi River
10. Develop and implement a plan to identify subsurface sewage treatment system (SSTS) priority areas in County
11. Develop and implement a plan and process to inspect and/or upgrade SSTS in priority areas of the County
12. Promote grants and low interest loan programs to upgrade SSTS
13. Develop process to inventory unused wells in County
14. Promote cost share program to seal unused wells
15. Develop process to require unused wells to be sealed (currently wells must be sealed to complete a title transfer).
16. Inventory Class V injection wells (motor vehicle waste disposal wells, large capacity septic systems and cesspools, storm water drainage wells, aquifer remediation wells) in sensitive areas and work with EPA to meet Class V Wells Rule Revisions
17. Create a process to identify performance standards for sensitive areas, recharge areas, wellhead protection areas that are impacted by developments such as storage tanks, stormwater seepage ponds, mining areas, etc.

Goal 2: Protect and maintain groundwater quantity resources in Benton County.

Actions:

1. Identify & protect possible regional water supplies
2. Identify and protect possible recharge areas
3. Identify intercommunity measures to augment community water supply in the event of water contamination or shortage
4. Continue to monitor groundwater levels in the County. Work with MN DNR Waters to investigate groundwater pumping (irrigation) effects on surface water base flow
5. Work with municipalities and agricultural community to conserve water use & implement BMPs

6. Work with appropriate entities to identify aquifer thresholds to maintain adequate water supply for consumptive use
7. Maintain surface water resources (i.e. lakes, rivers, wetlands)

Estimated cost: $1,088,900

Total estimated cost to implement priority concern action items: $3,777,900.00

4. Consistency of the plan with other local, state, and regional plans

Local plans:

- Local Water Management Plans – Mille Lacs, Sherburne, Morrison, Stearns counties
- Comprehensive Plans – Benton County, Cities of St. Cloud, Sauk Rapids, Sartell, Foley, and Rice
- Storm Water Pollution Plans – Cities of St. Cloud Sauk Rapids, Sartell, Foley, Rice
- Ordinances - Benton County; Benton County Townships; Cities of St. Cloud, Sauk Rapids, Sartell, Rice, Foley
- Wellhead Protection Plans – Cities of Rice, Sauk Rapids, Sartell
- Source Water Protections Plans – Cities of St. Cloud, St. Paul, and Minneapolis

State

- Minnesota Pollution Control Agency - Upper Mississippi River Basin Plan
- Environmental Quality Board - Minnesota Watermarks Gauging the Flow of Progress 2000 – 2010

Regional

None

The Benton County Local Water Management Plan is consistent with existing local and state plans reviewed.

5. Summary of recommended amendments to other plans and controls

All LGUs within Benton County should amend their management plans, controls and ordinances as needed for consistency with the goals and objectives listed under:

- Development Priority Concern
    - Goal 1 Objectives 1 & 2
    - Goal 2 Objective 1,2,3
    - Goal 3 Objective 1
    - Goal 4 Objective 1
- Groundwater Priority Concern
    - Goal 1 Objectives 1,2, 3
    - Goal 2 Objective 1, 2

PRIORITY CONCERNS

1. Priority Concern Assessments

The following is a general assessment of each priority concern. The assessment will examine what the concern is, why it was selected, the risks of not addressing it, who is most affected, and the geographic location of the concern (if applicable).

Feedlot and Nutrient Management Assessment

Animal agriculture is a vital industry in Benton County, contributing approximately $90 million annually to the county economy (2006 Comprehensive Plan). In the 1990s Benton County experienced a decrease of farms, but an increase was reported in the 2002 Census of Agriculture. Over the years, despite changing demographics and economics, the farming community has remained strong; see Table 1 (USDA National Agricultural Statistics Service).

Table 1.

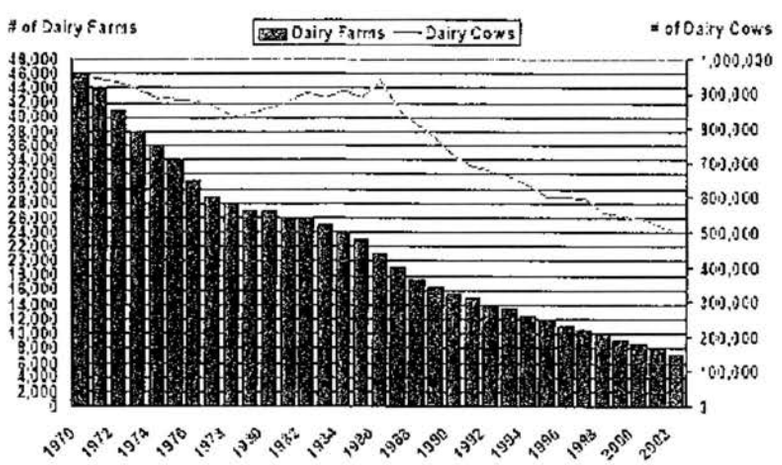
Farms by Size (Acres)	1949	1987	1992	1997	2002
1-9	42	46	25	25	35
10-49	308	129	129	158	229
50-179	1004	391	333	307	352
180-499	83	339	311	279	269
500-999	na	38	49	48	58
>1,000	na	11	18	13	22
Total Farms	**1437**	**954**	**865**	**834**	**965**

A variety of livestock are raised in Benton County. The primary types of animals produced are beef and dairy cattle, swine, layer and broiler chickens. The following is a discussion of each type of animal production and associated statistics.

CATTLE – Dairy

According the National Agricultural Statistics Service (NASS), dairy farms in Minnesota are diminishing -- from 46,000 farms in 1970 to 6,474 farms in 2002, see chart at right. Conversely, the number of cows per farm is on the rise. Between 1987 and 2002 the number of cows per farm increased 650 percent. Benton County statistics are shown in the charts below (2006 farm data not available).

Minnesota Dairy Farms & Cows 1970-2002



DATE: 7/30/2008

TO: BWSR NORTHERN REGION WATER PLANNING COMMITTEE

FROM: JASON WEINERMAN

RE: REVIEW OF BENTON COUNTY FINAL LOCAL WATER MANAGEMENT PLAN (LWMP)

Benton County submitted their Local Water Management Plan to the Brainerd office of the BWSR on May 9, 2008. From my observation of the plan development and review of the final plan, I arrived at the conclusion that the local water management plan meets the guidelines established by BWSR, as well as the requirements of 103B.313-103B.314. I recommend that BWSR approve the updated LWMP for Benton County.

During the Priority Concerns Scoping phase, the County did an excellent job of contacting state and local agencies, partners, and the public at large to solicit input and developed the following three priority concerns, which were approved by the BWSR Northern Water Planning Committee on May 9, 2007. The Priority Concerns identified were:

1. Feedlot and Nutrient Management
2. Development
3. Groundwater Quality and Quantity

During the PCSD review, the Committee commended the county for their process and provided the following recommendations:

- Include a communication and education Goal and/or Objective into each priority concern contained within the Local Water Management Plan
- Identify a goal that seeks to insure the implementation of regulations such as shoreland ordinances and subsurface sewage treatment systems (SSTS) through zoning and other efforts
- Include provisions that identify methods to protect the resource identified in Table 6 of the PCSD including Wetlands, Streams/Rivers and Lakes

The final draft of the Comprehensive Local Water Management Plan has sections that explicitly deal with each of the recommendations provided by the Northern Water Planning Committee.

On May 9, 2008 the plan was routed to the reviewing state agencies who returned the following comments.

MDA: The plan does not violate any statutory or rule requirements administered by our agency and approves the entire plan as submitted with no additional comments.

MDH: The plan does not violate any statutory or rule requirements administered by our agency and approves the entire plan as submitted. MDH offers the following comments:

- Benton County has done an excellent job in addressing water management issues for the period over which this plan is intended.

MPCA: The plan does not violate any statutory or rule requirements administered by our agency and approves the entire plan as submitted. MPCA offers the following comments:

- MPCA staff was pleased to serve in an "Other Agency Advisor" role with the Water Resources Advisory Committee (WRAC) in this process. The WRAC put much thought and effort into this LWM Plan update and is committed to putting forth the necessary effort and resources to see the Plan through.
- Currently, within Benton County, four water bodies have been designated as being impaired. As a result of these impairments, Total Maximum Daily Load (TMDL) projects have begun (Little Rock Creek-Phase II) or are currently scheduled to begin in the near future (Little Rock Lack and Mayhew Lake-spring summer/2008, and Mayhew Creek-2009). Identifying the sources of the impairments and developing a pollution reduction plan through the TMDL process is a key element in restoring the health of these resources. However, it will be the successful implementation of such actions/Best Management Practices (BMPs) as stated in the County LWM Plan that will have the greatest overall impact towards achieving the long-term water quality goals for these and other vital water resources within the County.
- The road ahead in protecting and improving the quality of the water resources within the County and throughout Minnesota will be one with numerous challenges.

DNR: The plan does not violate any statutory or rule requirements administered by our agency and approves the entire plan as submitted. The DNR offers the comments:

- We commend Benton County for inviting Dan Lais, Area Hyrdologist, and Steve Marod, Fisheries Specialist, to actively participate during this planning process. We are pleased that their input was an integral component in identifying the county's priority concerns and developing the goals, objectives and actions for future water management. Dan Lais' assessment of his participation was that the County put a lot of effort into this planning process; they involved a good mixture of partners and developed a solid implementation plan that includes an initial evaluation of associated costs.

On May 6, 2008, the Water Plan was presented to the County Commissioners and held before a public hearing during the Commissioners regularly scheduled meeting. Two individuals spoke in favor of the local water management plan. One comment requested clarification on a citation in the local water management plan regarding the date of a study regarding the contribution of sediment from construction sites.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Reviewing the Local Water Management Plan Update for **Benton County** (Minnesota Statutes , Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the **Benton** County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Board on **May 9, 2008** pursuant to M.S. Section 103B.315, Subd. 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1) On **March 23, 2007,** the Minnesota Board of Water and Soil Resources received a Priority Concerns Scoping Document from **Benton** County, pursuant to M.S. Section 103B.312.

2) On **May 23, 2007,** the Board of Water and Soil Resources approved official comments on the **Benton** County Priority Concerns Scoping Document, which were mailed to the county on **May 23, 2007.**

3) The priority concerns the local water management plan addresses include:

   A) Feedlot and Nutrient Management
   B) Development
   C) Groundwater Quality and Quantity

4) On **May 9, 2008,** the BWSR received the **Benton** County Plan Update, a record of the public hearing, and copies of all written comments pertaining to the plan update to the Board for final State review pursuant to M.S. Section 103B.315, Subd. 5.

5) On **August 13, 2008,** the Northern Water Planning Committee of the board reviewed the recommendation of the state review agencies regarding final approval of the **Benton** County Plan Update . Recommendations of the state review agencies were:
   A) Minnesota Department of Agriculture recommends Approval
   B) Minnesota Department of Health recommends Approval
   C) Minnesota Department of Natural Resources recommends approval
   D) Minnesota Pollution Control Agency recommends approval
   E) Minnesota Environmental Quality Board: no recommendation received
   F) Minnesota Board of Water and Soil Resources regional staff recommends Approval
   G) Board Water Plan Review Committee Meeting recommends Approval

6) This update will be in effect until **August, 2018.**

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of **Benton** County pursuant to Minnesota Statutes , 103B.315, Subd. 5.

2. The **Benton** County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the county; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the **Benton** Local Water Management Plan **August 1, 2008 to July 31, 2018 with** the Goals, Objectives and Action Items being amended prior to July 31, 2013.

Dated at **Olivia,** Minnesota, this **twenty eighth day of August, 2008.**

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Minnesota Board of Water & Soil Resources

DATE: August 5, 2008

TO: BWSR Northern Plan Review Committee

FROM: Dan Steward, Board Conservationist

SUBJECT: Review of the Aitkin County Priority Concerns Scoping Document (PCSD)

The original Aitkin County Local Water Management Plan (LWMP) was approved in 1990. The first update to the original plan was completed in 1997. The current or third generation water plan would have expired October 23, 2007. Aitkin County is developing their updated Plan under a BWSR extension that extends the Plan to July 1, 2009. Aitkin is one of three counties that are developing its update through a Clean Water Legacy Grant that will help the county improve the analysis of water protection strategies and actions.

Since the county began development of their original water plan in 1989, the county has delegated implementation of the LWMP to the Aitkin Soil and Water Conservation District

On June 26, 2007, the Aitkin County Board of Commissioners passed a resolution to update the LWMP.

On July 3, 2008, Aitkin County submitted their Priority Concerns Scoping Document (PCSD) to the Board of Water and Soil Resources for review. The attached Aitkin County PCSD identifies the following priority concerns, and proposes the update be focused on these five water management issues.

1. Surface Water Management
2. Land Use and Development
3. Groundwater Quality
4. Fish and Wildlife Habitat
5. Education

The County used the following process to develop the PCSD:

- On April 18, 2007, the county held a public informational meeting to obtain comments and input for the list of priority concerns. Notice for the meeting was published in the local newspaper.

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701 Minnesota Avenue
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Bemidji, MN 56601
phone (218) 755-4235
fax (218) 755-4201

Brainerd
1601 Minnesota Drive
Brainerd, MN 56401
phone (218) 828-2383
fax (218) 828-6036

Duluth
394 S. Lake Avenue
Room 403
Duluth, MN 55802
phone (218) 723-4752
fax (218) 723-4794

Fergus Falls
1004 Frontier Trail
Fergus Falls, MN 56537
phone (218) 736-5445
fax (218) 736-7215

Marshall
1400 E. Lyon Street
Box 267
Marshall, MN 56258
phone (507) 537-6060
fax (507) 537-6368

New Ulm
261 Highway 15 S.
New Ulm, MN 56073
phone (507) 359-6074
fax (507) 359-6018

Rochester
2300 Silver Creek
Road N.E.
Rochester, MN 55906
phone (507) 281-7797
fax (507) 285-7144

Saint Paul
520 Lafayette Road N.
Saint Paul, MN 55155
phone (651) 296-3767
fax (651) 297-5615

- Aitkin County has a very open water planning task force meeting procedure. Everyone is welcome to attend task force meetings. As a result most of the input on the priority concerns was received through regular task force meetings. The task force met on the following dates: June 26, 2007, August 15, 2007, September 19, 2007, October 17, 2007, November 21, 2007, January 16, 2008, February 20, 2008, March 19, 2008, April 16, 2008 and May 21, 2008. The newspaper editor is a task force member and reports on task force meetings and issues followed most meetings. The date and location of future task force meetings were included in the articles.

- June 14, 2008, Rivers and Lake Fair. The public was invited to provide input on the update.

- April 4, 2008 , July 30, 2008 and miscellaneous other dates, met with Dan Steward (BWSR) to discuss the update.

The following priority concerns were submitted by the state review agencies:

- BWSR: Protection of water quality during and after land development in riparian areas, erosion and sediment control in developing areas, the trend toward the development of marginal lands, and county lake water quality action plans.

- MPCA: Impaired waters/Total Maximum Daily Loads (TMDL), Access to MPCA water quality data, and the Exotics problems associated with Mille Lacs Lake.

On July 3, 2008 the PCSD was sent to the required state agencies for review. Agencies were asked to send comments to Ron Shelito by August 6, 2008, the following agency comments were received:

MDH: The MDH in its comments on the PCSD concurred with the priority concerns selected by the county. The MDH noted that the process used by the county to identify priority concerns was adequate, and commended the county for recognizing the value of protecting and preserving groundwater quality/quantity.

MDA: As of the date of this letter no comments had been received from the MDA, MDH, MPCA or DNR. Comments from the agencies may be received by the committee meeting, and if so, will be discussed at the meeting. The DNR and MPCA have had staff involvement at task force meetings, and no negative comments are anticipated.

After reviewing the PCSD submitted by Aitkin County along with the comments provided by the review agencies, I conclude that the guidance requirements have been met. The county is to be commended for working with BWSR to build Clean Water Legacy protection elements into the update. I recommend the committee approve the PCSD for Aitkin County.

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- Aitkin County has a very open water planning task force meeting procedure. Everyone is welcome to attend task force meetings. As a result most of the input on the priority concerns was received through regular task force meetings. The task force met on the following dates: June 26, 2007, August 15, 2007, September 19, 2007, October 17, 2007, November 21, 2007, January 16, 2008, February 20, 2008, March 19, 2008, April 16, 2008 and May 21, 2008. The newspaper editor is a task force member and reports on task force meetings and issues followed most meetings. The date and location of future task force meetings were included in the articles.

- June 14, 2008, Rivers and Lake Fair. The public was invited to provide input on the update.

- April 4, 2008 , July 30, 2008 and miscellaneous other dates, met with Dan Steward (BWSR) to discuss the update.

The following priority concerns were submitted by the state review agencies:

- BWSR: Protection of water quality during and after land development in riparian areas, erosion and sediment control in developing areas, the trend toward the development of marginal lands, and county lake water quality action plans.

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Minnesota Board of Water & Soil Resources

1601 Minnesota Drive, Brainerd, MN 56401

DATE: August 1, 2008

TO: BWSR North Region Water Plan Review Subcommittee

FROM: Dan Steward, BWSR Board Conservationist

SUBJECT: Review of Crow Wing County Final Local Water Management Plan (LWMP)

On May 22, 2007, BWSR and other state review agencies received the Priority Concerns Scoping Document (PCSD) from Crow Wing County. The North Region Review Subcommittee (Committee) met August 8, 2007, to discuss state review comments, the content of the PCSD, and recommendations for the final plan.

BWSR's August 23, 2007, letter pursuant to M.S.section 103B.313, subdivision 5, communicated the State's official comments pertaining to the priority concerns chosen by Crow Wing County. BWSR commended Crow Wing County for the process used to select the concerns and did not require any changes to the PCSD.

Crow Wing County's six priority concerns are:

1. Protect Surface Water Quality
2. Address and Minimize Stormwater Runoff
3. Protect Ground Water Quality/Quantity
4. Address Wastewater Needs Throughout the County
5. Protect Marginal Land and Address Shoreland Ordinance Violations
6. Promote Environmental Education

Crow Wing County held the required public hearing on June 24, 2008, as part of a regular County Board meeting. The final draft of the updated Crow Wing County Water Plan was submitted on July 2, 2008, for review by state agencies. Agency comments were due to Ron Shelito by August 1, 2008.

The duration of the updated LWP will be from August 2008 to August 2013.

The following agencies provided these comments:

- On July 22, 2008, the Minnesota Department of Health, in its comments, stated that the Plan does not violate any statutory or rule requirements administered by the MDH and recommended BWSR approve the Plan as submitted. The MDH commended the county for working to protect important local water resources.

- On July 10, 2008, the Minnesota Department of Agriculture, it its comments, stated that the Plan does not violate any statutory or rule requirements administered by the MDA, and recommended BWSR approve the Plan as submitted.

- On July 29, 2008 the SWCD contacted the Environmental Quality Board who informed them that they would not be submitting comments on the update.

- The Minnesota Department of Natural Resources and Pollution Control Agency were both contacted in regard to their comments. Both informed the SWCD that their comments would be forthcoming. The comments had not been received at the time of this letter. DNR and MPCA comments will be discussed at the review committee meeting.

Keith Pohl, the Crow Wing County Water Planner, and other county representatives will attend the August 13th North Region Water Plan Review Committee meeting in Wadena, and make a presentation on the final plan.

After reviewing the final plan, I find it meets the requirements of M.S. 103B.314 for content, and is consistent with the previously reviewed PCSD. The MDH and the MDA have recommended approval. I recommend the subcommittee approve the Crow Wing County Local Water Management Plan at their meeting prior to Board approval on March 28, 2007. Crow Wing County would then adopt the plan in September, 2008.

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Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Reviewing the Local Water Management Plan Update for Crow Wing County (Minnesota Statutes , Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Crow Wing County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Board July 1, 2008, pursuant to M.S. Section 103B.315, Subd. 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1) On May 22, 2007, the Minnesota Board of Water and Soil Resources received a Priority Concerns Scoping Document from Crow Wing County, pursuant to M.S. Section 103B.312.

2) On August 8, 2007, the BWSR North Region Water Plan Review Committee met with representatives of Crow Wing County to review the Priority Concerns Scoping Document.

3) On August 23, 2007, the Board of Water and Soil Resources approved official comments on the Crow Wing County Priority Concerns Scoping Document, which were mailed to the county on August 23, 2007.

4) The priority concerns, in no particular order of importance, the local water management plan addresses include:

- Protect Surface Water Quality
- Address and Minimize Stormwater Runoff
- Protect Ground Water Quality/Quantity
- Address Wastewater Needs Throughout the County
- Protect Marginal Land and Address Shoreland Ordinance Violations
- Promote Environmental Education

5) On July 1, 2007, the BWSR received the **Crow Wing** County Plan Update, a record of the public hearing, and copies of all written comments pertaining to the plan update to the Board for final State review pursuant to M.S. Section 103B.315, Subd. 5.

6) On August 13, 2008, the North Region Water Plan Review Committee of the board reviewed the recommendation of the state review agencies regarding final approval of the Crow Wing County Plan Update. Recommendations of the state review agencies were:

7)

A) Minnesota Department of Agriculture: recommended approval;
B) Minnesota Department of Health: recommended approval;
C) Minnesota Board of Water and Soil Resources staff: recommended approval;
D) Board North Region Water Plan Review Committee Meeting recommended approval.

8) This update will be in effect for a five year period until August 27, 2113.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Local Water Management Plan Update of Crow Wing County pursuant to Minnesota Statutes, 103B.315, Subd. 5.

2. The Crow Wing County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the county; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the Crow Wing County Local Water Management Plan – August 28, 2008 to August 27, 2013.

Dated at Olivia, Minnesota, this twenty-eighth day of August 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Minnesota Board of Water and Soil Resources
520 Lafayette Road N.
Saint Paul, MN 55155

In the Matter of Reviewing the Local Water Management Plan Update For Mahnomen County (Minnesota Statutes , Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Mahnomen County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Board on August 28, 2008, pursuant to M.S. Section 103B.315, Subd. 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1) On July 24, 2007 the Minnesota Board of Water and Soil Resources received a Priority Concerns Scoping Document from Mahnomen County, pursuant to M.S. Section 103B.312.

2) On November 29, 2007 the Board of Water and Soil Resources approved official comments on the Mahnomen County Priority Concerns Scoping Document, which were mailed to the county on November 29, 2007.

3) The priority concerns, in no particular order of importance, the local water management plan addresses include:

- Mahnomen County will focus on groundwater quality protection within Mahnomen County.
- Mahnomen County will focus on surface water quality and impaired waters/TMDLs.
- Mahnomen County will focus on erosion and sediment controls within Mahnomen County.

4) On July 24, 2008 the BWSR received the Mahnomen County Plan Update, a record of the public hearing, and copies of all written comments pertaining to the plan update to the Board for final State review pursuant to M.S. Section 103B.315, Subd. 5.

5) On August 13, 2008, the regional Water Planning Committee of the board reviewed the recommendation of the state review agencies regarding final approval of the Mahnomen County Plan Update. Recommendations of the state review agencies were:
   A) Minnesota Department of Agriculture: recommends approval;
   B) Minnesota Department of Health: recommends approval;
   C) Minnesota Department of Natural Resources: recommends approval;
   D) Minnesota Pollution Control Agency: recommends approval;
   E) Minnesota Environmental Quality Board: no recommendation received;

F) Minnesota Board of Water and Soil Resources: regional staff recommends approval;
G) Board Water Plan Review Committee: recommends approval.

6) This update will be in effect for a ten-year period until October 1, 2018.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of Mahnomen County pursuant to Minnesota Statutes, 103B.315, Subd. 5.

2. The Mahnomen County Plan Update attached to this Order states water and water-related problems within the county; general goals, objectives, and actions of the county; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the Mahnomen County Local Water Management Plan – October 1, 2008 to October 1, 2018.

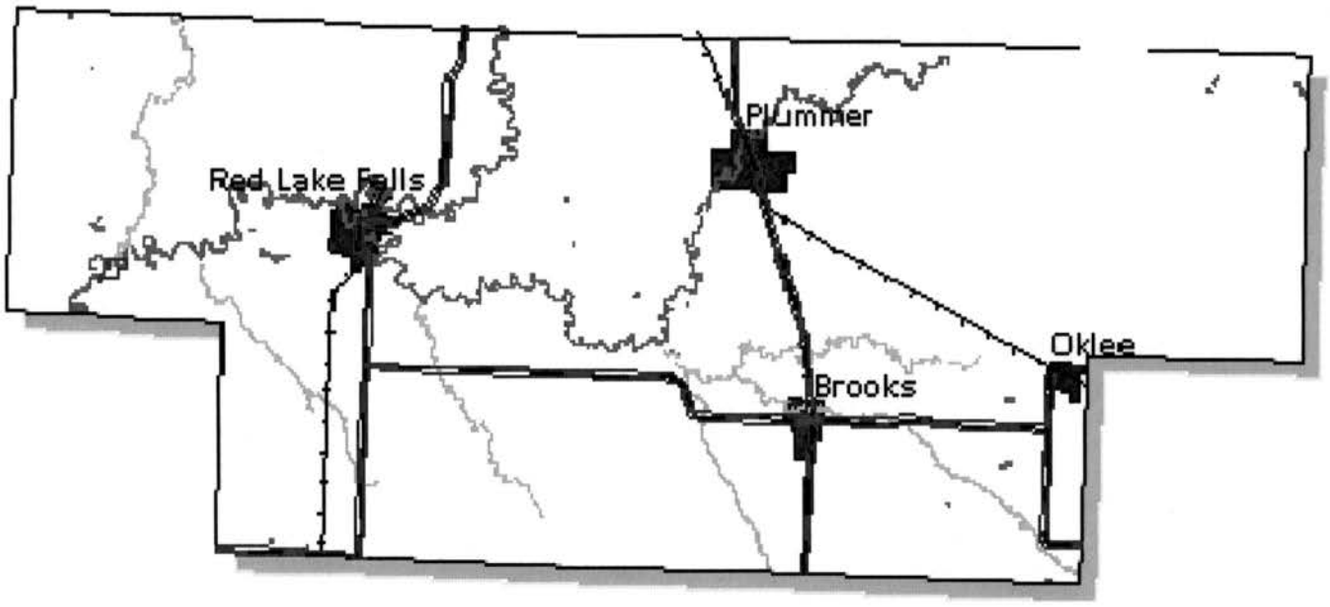
Dated at Olivia, Minnesota, this twenty-eighth day of August 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Red Lake County's
Priority Concerns Scoping Document



A precursor to the Red Lake County Comprehensive Local Water Management Plan.

The priority concerns scoping document of the Red Lake County Comprehensive Local Water Management Plan was developed in accordance with the changes to the Comprehensive Local Water Management Act; Statutes 103B.304 – 103B.355. The scoping document lists the priority concerns the Red Lake County Water Management Advisory Committee has chosen, along with a detailed account of how the concerns were identified and selected.

Tanya Hanson, Local Water Management Coordinator
Red Lake County Soil & Water Conservation District

LIST OF PRIORITY CONCERNS

The Red Lake County CLWMP will address the following priority concerns:

Surface Water Quality & Impaired Waters - TMDLs

Water Quality is important to Red Lake County because of our recreational opportunities, along with the downstream domestic use of the water supply.

High priority areas and activities:

- a. Rivers and streams – identifying impaired waters
- b. Non-impaired waters – water quality protection
- c. Feedlots – agricultural waste management
- d. Source water supply – Cities of Crookston & EGF
- e. Recreational uses / Tourism Opportunities
  - i. Tubing
  - ii. Red River Corridor Enhancement Group
    - a. additional river accesses
    - b. canoe routes
    - c. portages
    - d. signage
    - e. city park improvements
  - iii. Fishing and Hunting
    - a. Beach Ridge – prairie chickens, sharp tail grouse, Hungarian partridge
    - b. Woodland – deer, moose, ruffed grouse, coyotes, and smaller wildlife
  - iv. Promotion of Tourism

Surface Water Quantity

Flooding causes loss of income to farmers which greatly impacts local economy, washes out roads and bridges, and contributes to sediment deposits in the rivers and streams.

High priority areas and activities:

- a. Flooding
  - i. Agricultural – ditch and outlet maintenance
  - ii. Overland – ditch improvements
- b. Drainage
  - i. Inadequate ditches – ditch and outlet maintenance
  - ii. Aging public ditch systems – abandonment or maintenance
  - iii. Subsurface drainage – impacts to water quality
    - a. TSS, TP, and high N
    - b. Less Tillage, Reduce Runoff, Increase Infiltration
- c. Drought
  - i. Bank Sloughing
  - ii. Water Management and Supply
- d. Beaver Control
  - i. Plugging ditches, culverts, and waterways

Groundwater Quality

Groundwater quality is important to Red Lake County because of all the public and private wells that are located throughout the county.

High priority areas and activities:

a. Observation Wells – Three DNR Wells
b. Wellhead Protection Plan
    i. Red Lake Falls and Oklee – completed
    ii. Plummer and MN Wheat Growers - needed

Erosion and Sedimentation

Erosion and Sedimentation are two issues that the County is always trying to and will always be trying to address, work on, and prevent.

High priority areas and activities:

a. Map eroded areas – prioritize erosion control projects
b. Tributary bank instability at outlets into river
c. Shoreland degradation
    i. Shoreland Ordinance
d. Ditches that outlet into rivers and streams
    i. filling streams and rivers with sediments
        a. establishment of buffers
e. Channelized portion of Clearwater River
f. Ditch Bank Sloughing and Stabilization
g. Sediment from Wild Rice Production
    i. install drain tile
    ii. install outlet structures
    iii. install sedimentation ponds
h. Wind Erosion
    i. highly erodible fields
        a. residue management
        b. conservation tillage
        c. field windbreaks

Unique Water / Land Related Resources

Red Lake County has several unique areas of interest.

High priority areas and activities:

a. Prairie Remnants
b. Old Treaty Crossing at Huot Park

Southern Water Planning Committee

1. Blue Earth County Local Water Management Plan – Paul Langseth - *DECISION ITEM*

2. Brown County Local Water Management Plan – Paul Langseth - *DECISION ITEM*

3. Nicollet County Local Water Management Plan – Paul Langseth - *DECISION ITEM*

Minnesota Board of Water & Soil Resources

DATE: July 25, 2008

TO: Jeff Nielsen, BWSR Southern Regional Supervisor

FROM: Chris Hughes, Board Conservationist

SUBJECT: **Blue Earth County Local Water Management Plan Final Review**

I have completed my final review of the Blue Earth County Local Water Management Plan and recommend approval of this update.

The Blue Earth County Local Water Management Plan meets all requirements including:

- focuses on the priority concerns identified in the Priority Concerns Scoping Document;
- adequately assesses the priority concerns and sets forth appropriate goals and objectives;
- lays out a detailed implementation program with measurable actions, timeline and budget; and
- includes all required sections.

State agency comments were received from the Minnesota Department of Natural Resources (DNR), the Minnesota Department of Health (MDH), the Minnesota Department of Agriculture (MDA) and the Minnesota Pollution Control Agency (MPCA). These agencies recommend approval of the Plan.

I look forward to assisting Blue Earth County in the implementation of their plan. County Water Plan Coordinator Julie Conrad spent considerable time and effort writing the Blue Earth County Water Plan. The update process provided ample opportunity for stakeholder involvement. The plan was developed using information gained through Greenprint and numerous work sessions with stakeholders and partners including the Blue Earth SWCD. Julie should be commended for her leadership and dedication throughout the planning process.

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Blue Earth County Water Management Plan 2008-2013

BLUE EARTH COUNTY

Blue Earth County
Soil and Water Conservation District

WATER MANAGEMENT PLAN 2008-2013

Practical, Measurable and Achievable

EXECUTIVE SUMMARY

Purpose of the Plan

The purpose of the Blue Earth County *Water Management Plan 2008-2013* is to identify and assess priority water resource concerns, develop goals and objectives to address priority concerns, and provide direction for Blue Earth County and Blue Earth County Soil and Water Conservation District (SWCD) programs and decision making. Actions to achieve plan objectives are specified along with the necessary financial and staff resources and lead agency for a five-year period, July 1, 2008 through June 30, 2013.

Priority Concerns

Written surveys, a public meeting and many workshops were used to identify the priority concerns for Blue Earth County. A *Priority Concerns Scoping Document* (PCSD) summarizing the process used to identify priority concerns was prepared and is included in the Appendix. The five priority concerns identified in the PCSD are: Ground water, Surface Water, Drainage Ditches, Wetlands and Wildlife. These priority concerns are broad and most are interrelated from a hydrological standpoint. In addition, there are a many sources of surface water pollution, and many pollutants are a concern to both ground and surface water. Land use and pollutant sources directly related to surface water and ground water priority concerns were identified and addressed separately as sub-priority concerns in the *Water Management Plan 2008-2013.* A complete list of priority concerns and sub-priority concerns includes the following:

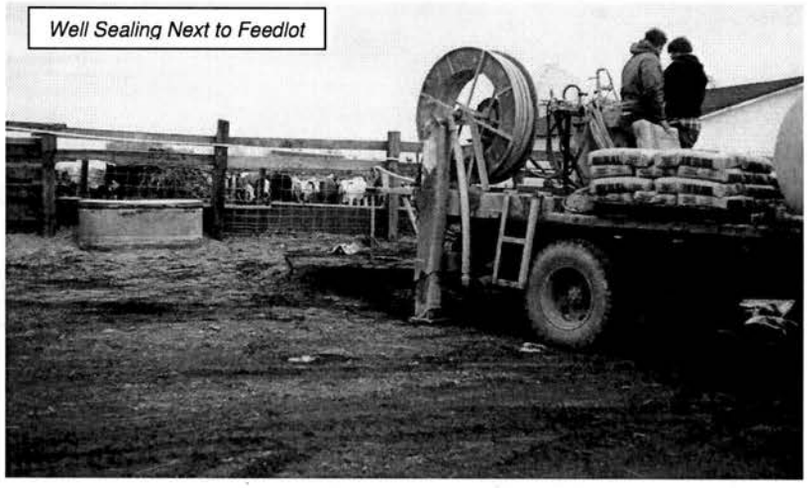
- Ground water
- Surface water
    - Impaired Waters and Total Maximum Daily Loads (TMDLs)
    - Agricultural Runoff, Erosion and Pesticides
    - Feedlots, Manure Management
    - Urban Development and Stormwater Runoff
- Drainage ditches
- Wetlands
- Wildlife
- Ground water *and* Surface water
    - Wastewater Treatment - Subsurface Sewage Treatment Systems
    - Mercury, Pesticides and Household Hazardous Waste

The permanent conversion of agricultural land and open space to urban land use is an overriding concern and is considered one of the greatest threats to natural resources in Blue Earth County. Protecting water resources and all natural resources is a local priority. The County is leading a planning effort in partnership with municipalities and many other stakeholders to develop a local plan for prioritizing, protecting, restoring and enhancing natural resources throughout Blue Earth County.

Priority Concern: Ground Water

Protecting ground water quality and quantity is the highest priority for Blue Earth County's residents. Geologic sensitivity, well construction, and land use influence the quality of ground and drinking water supplies. There are public and private wells with a higher susceptibility to contamination due to shallow depth to bedrock, coarse soils or shallow aquifers.

Groundwater supply and groundwater quality data are lacking. Better data is needed to develop more meaningful local policy to protect ground water. As described in the 2005 DNR Report to the Legislature on the *Sustainability of Minnesota's Ground Water: A Statement of Issues and Needs,* there is a State-wide need for groundwater information. The County supports State efforts to complete a geologic atlas for Blue Earth County and expanded monitoring programs such as ground water level monitoring wells and physical and chemical testing in Blue Earth County.

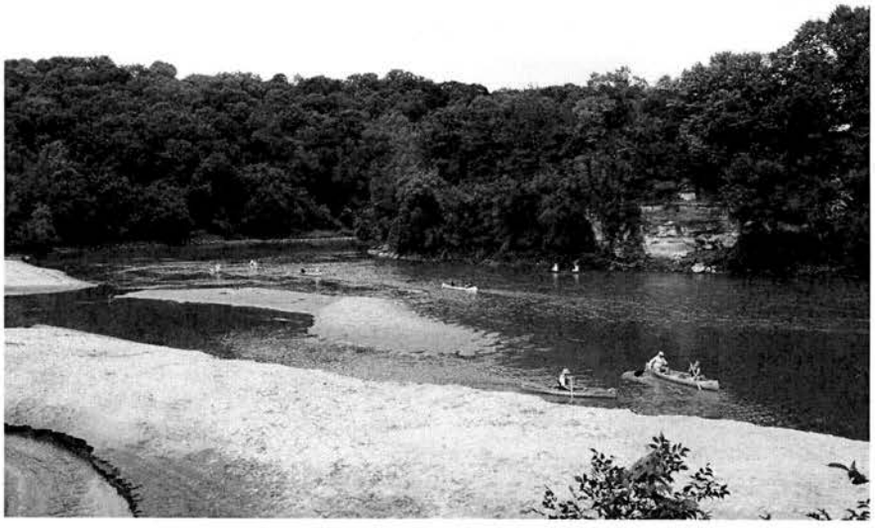


Well Sealing Next to Feedlot

Priority Concern: Surface Waters

Surface water is a broad priority concern. It includes rivers, streams, lakes and wetlands. The sources of pollution to surface waters are numerous, generally related to land use and are considered either point or nonpoint sources. Point sources are mainly municipal wastewater and industrial discharges. The MPCA regulates point sources with permitting, inspections, monitoring and reporting requirements. Nonpoint sources are less easily identified, widespread and include both agricultural and urban land use. Nonpoint source pollution is recognized as a major source of pollution.

As the dominant land use in Blue Earth County, it is generally understood that runoff from agricultural land is a major source of nonpoint source pollution related to land use. Runoff from urban areas, wastewater discharges in



unincorporated areas and natural processes such as channel and bank erosion are also nonpoint sources contributing significantly to local water quality impairments.

Priority Concern: Impaired Waters and Total Maximum Daily Loads (TMDLs)
The MPCA is in the process of assessing surface waters in Minnesota and has identified water quality impairments in virtually every watershed in Blue Earth County. The pollutants causing these impairments affect aquatic life and include mainly turbidity, nutrients, fecal bacteria, pesticides and mercury. TMDL reports and implementation plans will be required for these impairments. TMDLs are relatively new to local water management, but addressing pollutants causing water quality impairments has been the focus of local water planning for twenty years and much longer for many local programs at the County and SWCD. Depending on available resources, the County's role with impaired waters and TMDLs will develop along with State TMDL programs.

Priority Concern: Agricultural Runoff, Erosion and Pesticides
Soil erosion and runoff containing nutrients and pesticides are known sources of pollutants to surface water. These pollutants are transported through gully, sheet and rill erosion, tile intakes, tile lines, ditches and directly to surface water. Highly erodible soils are associated with slope and are found along every river, stream and intermittent stream in Blue Earth County. Of the total existing cropland, just over one percent of the cropland in the County is considered "highly erodible" and 3.53 percent "potentially highly erodible" according to the *USDA Soil Survey for Blue Earth County*.

Priority Concern: Feedlots, Manure Management
Livestock feedlot manure can be a source of bacteria, TSS, phosphorus, nitrogen and other pollutants. Most livestock in Blue Earth County is produced in confinement barns with below-barn, concrete manure storage pits. Runoff containing manure used as fertilizer for agricultural crop production is likely the greatest source of pollution from livestock feedlots as most feedlots with direct runoff were improved or eliminated early in the County's feedlot program history.

Priority Concern: Urban Development and Stormwater Runoff
Urban stormwater runoff refers to rain water and snow melt runoff from impervious surfaces and urban type of development such as residential subdivisions, shoreland areas, commercial, business, industrial, institutional, government, and roadways located in incorporated and unincorporated areas. Pollutants contained in stormwater runoff include pesticides, nutrients, petroleum, refuse, leaves and grass, chemicals and other contaminants. Stormwater runoff can also increase the rate erosion of stream banks, ditches, gullies, and outfalls. Increasing infiltration in urban areas reduces the volume and erosion potential of stormwater discharge.

Priority Concern: Drainage Ditches

Drainage ditches can be a source of sediment from eroding ditch banks and can also transport sediment and pollutants from agricultural and urban runoff to surface waters. Buffer strips along drainage ditches help reduce erosion and sedimentation by slowing overland flow, trapping sediment and other pollutants, and holding soil in place along the ditch banks. Reducing erosion and sedimentation also reduces maintenance costs for ditch owners.

Drainage systems alter natural hydrology by efficiently removing water from poorly drained areas. Peak flows in the drainage system have the potential to cause erosion both in the drainage system and in downstream surface waters. Retaining water within drainage systems can reduce peak flows and the rate of erosion in the drainage system and downstream.

Priority Concerns: Wetlands and Wildlife

Most of the County's pre-settlement wetlands were lost due to drainage for agriculture, community development and transportation. Due to the high percentage of lost wetlands, the County is considered a "high priority region" for preservation, enhancement, restoration, and establishment of wetlands, according to the Wetland Conservation Act (WCA). Wetlands are important for water quality, flood control, wildlife and recreation. Restoring fragmented habitat and impacts to remaining wetlands that may harm wildlife are important considerations for wetland management in the County. While all land uses can harm the ecological value of wetlands, urban development is likely the greatest threat to permanent loss of wetland quantity and quality in Blue Earth County at this time.

Priority Concern: Wastewater Treatment - Subsurface Sewage Treatment Systems

Wastewater contains bacteria, pathogens, chemicals, nutrients, and solids. Untreated wastewater is a potential threat to public health and can pollute surface and ground water. The bulk of the County population (77-percent in 2005) lives in one of the eleven municipalities utilizing State-permitted wastewater treatment systems. Most of the remaining

population utilizes onsite, subsurface soil treatment systems (SSTS) regulated by State rules and County ordinance.

Priority Concern: Mercury, Pesticides and Household Hazardous Waste

Waste from residential, business, industry and agriculture sources can pollute ground and surface water. Ground water quality, pesticide pollution and run-off from urban and rural land uses were identified as high priorities in citizen surveys administered during development of the PCSD. MDA monitoring of surface waters in Blue Earth County shows the presence of pesticides in surface waters. The pesticide, acetochlor, has been identified by the MPCA as an impairment of surface waters in Blue Earth County. The County's Household Hazardous Waste Facility is currently the only location in the area where farmers and residents can legally dispose of waste pesticides.

Mercury is identified by the MPCA as impairment of many surface waters in Blue Earth County. Although the main source of mercury impairments is atmospheric deposition, reducing use and managing the disposal of products containing mercury is part of the State's mercury TMDL plan. Mercury-containing products such as fluorescent bulbs, thermostats and thermometers are accepted for recycling at the County's Household Hazardous Waste Facility.

Implementation Summary

The bulk of the Water Management Plan 2008-2013 involves continuation of successful, existing local programs. These programs will be enhanced with use of GIS and LiDAR technology to provide more targeted education, outreach, planning and implementation activities. Public access to natural resources data and information will also be expanded.

Both urban and rural nonpoint source pollution are priority concerns addressed in the plan. However, agricultural nonpoint pollution sources are the focus of much of the implementation plan because:

1) Agricultural land use accounts for most of the land area in the County.
2) The County and SWCD are responsible for plan implementation and work directly mostly with agricultural land owners and operators.
3) Point sources are regulated by the MPCA and are located mostly in municipalities.

The following is a summary list and description of plan objectives addressing priority concerns.

Objective: Protect ground water quality.
Continuing the Minnesota Department of Health-delegated, County Well Code program, well sealing cost share program and administration of local land use regulations are high priorities. Assisting with source water protection plans, targeting education and providing information to local government officials in areas with a high susceptibility to ground water contamination are high priorities of the *Water Management Plan 2008-2013.*

Objective: Improve livestock manure management.
Continuing the County feedlot program and working with feedlot operators to improve nutrient management planning and application methods in sensitive areas are high priority actions related to livestock production and feedlots in the *Water Management Plan 2008-2013.*

Objective: Address pollutants causing impaired waters and TMDLS.
There is a high density of impaired waters with multiple pollutant stressors in Blue Earth County. Continuing existing programs to reduce nonpoint source pollution and working cooperatively on a watershed basis to prioritize local implementation efforts consistent with local, watershed and TMDL implementation plans are priorities of the *Water Management Plan 2008-2012.*

Objective: Reduce erosion and runoff from agricultural land.
Identifying and targeting high priority erosion areas and continuing local SWCD programs to reduce runoff and erosion and establishing and promoting proven soil and water conservation practices including buffer strips, filter strips, grassed waterways, terraces, crop residue, tillage practices, nutrient management, water retention, and other USDA-approved best management practices are priority actions in the *Water Management Plan 2008-2013.*

Objective: Reduce runoff from urban areas.
Promoting the reduction of pollutants in stormwater runoff, encouraging land use and urban stormwater management policy changes to minimize erosion, and constructing and other water quality projects in conjunction with local parks, transportation and other projects in all incorporated and unincorporated urban areas are priority actions in the *Water Management Plan 2008-2013.*

Urban runoff will be addressed with the collaborative efforts of the County Environmental Services Department, individual and locally organized municipalities and townships in the County, private consultants, local engineers, and State agencies.

Objective: Reduce erosion and increase water retention in County ditches.
Establishing vegetated ditch buffers and increasing water retention in County drainage systems are high priority actions of the *Water Management Plan 2008-2013.*

The 2007 Drainage Code amendments require the County to complete a ditch buffer inventory and inspect ditches every five years and every year on ditches with reported problems. The County has already developed an inspection program and buffer inventory, but the new reporting and inspection requirements are expected to increase program management needs and costs.

Objective: Increase on site waste water treatment system compliance.
Reducing public health threats and increasing compliance with State rules with installation of onsite wastewater treatment are priorities of the *Water Management Plan 2008-2013*. The County program is administered in the Environmental Services Department. The program includes a local ordinance, permits, inspections, education and enforcement.

Objective: Increase wetland area and wildlife habitat.
The County will continue administration of the Wetland Conservation Act. Identifying, assessing and prioritizing wetland areas for protection and enhancement and restoring wetlands for water quality as well as wildlife are a continuation of the County's *Greenprint* plan and are priorities of the *Water Management Plan 2008-2013*.

Objective: Provide collection sites for mercury product recycling and waste pesticide disposal.
The County will continue operating the Household Hazardous Waste Facility that currently accepts mercury products with funding from Xcel Energy, household pesticides with funding assistance from the MPCA, and ag waste pesticides with funding from the MDA. Ensuring continued convenient local collection of mercury products for recycling and ag pesticides for disposal are priorities of the *Water Management Plan 2008-2013*.

Total Projected Cost of the Implementation Program

The projected cost to implement the actions contained in the *Water Management Plan 2008-2013* is $3,035,380. This cost includes and assumes continued State grants such as the Natural Resources Block Grant (NRBG), BWSR grants for SWCD for operations, and the Erosion, Sediment Control and Water Quality Cost-Share Program. It is difficult to estimate the costs associated with highly variable USDA Farm Program funding and State and Federal water quality grants, so these costs were not projected in the budget. Historical levels of funding will not be adequate to meet State, TMDLs, watershed and County water quality goals. Additional funding will be needed for this work, mainly for SWCD staff and projects.

Plan Consistency with Local, State and Regional Plans and Controls

Ground water
The Water Management Plan supports State plans to expand ground water data, information and monitoring. The DNR and EQB have prepared reports describing these needs throughout the State.

Soil and Water Conservation Practices
The objectives and actions contained in the plan are consistent with other water related plans. The actions address the sources of pollutants common to agricultural and urban land use and soil types in the Minnesota River Basin. The plan is consistent with the State's Soil and Water Conservation Policy, Minnesota Statute 103C.005, encouraging implementation of practices that:

1) control or prevent erosion, sedimentation, siltation, and related pollution in order to preserve natural resources;
2) ensure continued soil productivity;
3) protect water quality;
4) prevent impairment of dams and reservoirs;
5) reduce damages caused by floods
6) preserve wildlife;
7) protect the tax base; and
8) protect public lands and waters.

Minnesota Statutes, Delegation Agreements and Local Programs

Much of the plan involves continuation of ongoing County and SWCD programs. Many of these programs are administered under official delegation agreements and/or the authority of State Statutes and Rules. County programs and ordinances affected by specific State controls include SSTS, Feedlots, WCA, Well Code and County Ditches (Drainage Code). The SWCD is not a regulatory agency, but administration of the SWCD and SWCD programs are defined by State Statutes. State agencies review these SWCD and County programs and reports to the State are required.

Clean Water Legacy Act

Although it was a one time appropriation, the Clean Water Legacy Act defined prioritization methods for assessing, restoring and preventing impaired waters and recognized the benefits of working with existing local authorities. The plan is consistent with and supports the following priorities and considerations contained in the Clean Water Legacy Act:

1) Coordinate with and utilize existing local authorities and infrastructure for implementation.
2) Can be implemented in whole or in part by providing support for existing and ongoing restoration efforts.
3) Use existing regulatory authorities to achieve restoration for point and nonpoint sources of pollution where applicable.
4) Promote the development and use of effective non-regulatory measures to address pollution sources for which regulations are not applicable.
5) Use restoration methods that have a demonstrated effectiveness in reducing impairments and provide the greatest long-term positive impact on water quality protection and improvement and related conservation benefits.
6) Effectively leverage other sources of funds, including federal, state, local and private sources.
7) Identify, encourage and fund implementation actions to prevent waters from becoming impaired and to improve the quality of waters that are listed as impaired but have no approved TMDL addressing the impairment using the best available data and technology.

Recommendations to Achieve Consistency

No specific amendments to plans or official controls have been identified to achieve consistency with other plans or official controls. Local programs will evolve during the planning period and changes expanding water resources protection are expected within

five years. Changes in plans and official controls at the State and watershed level are expected but the impact on local government and plan implementation is unknown.

Local Government

The plan includes objectives and County actions to encourage changes in official plans and controls at the local government level to address stormwater runoff and to protect groundwater.

State, Watershed and Other Plans

As water related plans are developed by other entities, consideration of and consistency with the *Water Management Plan 2008-2013*'s local priorities and established programs is recommended. Continuation of existing, locally developed, County- and municipal-based programs and local regulations is the foundation of the Water Management Plan. The County's existing programs integrate land use, water quality, health, waste management, and other issues protecting the health, safety and welfare of the residents of Blue Earth County. Local programs were shaped over time in a public process involving meetings and hearings which led to County standards more restrictive than standards prescribed by the State of Minnesota. Implementation of the plan and local authority for programs related to objectives and actions in the plan should not be delegated, transferred or assumed by other entities or joint powers boards that are not accountable to County residents and lack an understanding of the collective social, environmental and economic needs and priorities in Blue Earth County.

Implementation Plan

The *Water Management Plan 2008-2013* includes objectives and actions that are practical, measurable and achievable in a five-year period. It will likely take much longer to observe measurable improvements in water quality and achieve local, watershed and State TMDL water quality goals. The implementation program is displayed in a table that includes a list of objectives and actions and identifies the lead and supporting agencies, estimated schedule, and the estimated financial resources available or needed for each action.

Lead , Supporting Agency and Others Involved
Implementation of the Water Management Plan 2008-2013 is the responsibility of the County and the SWCD. Many other agencies will be involved with implementation directly and indirectly, providing technical assistance, oversight and funding. The main implementation partner will be the NRCS. Local townships and municipalities will also be involved and will have expenses related to plan implementation.

Lead Agency
The lead agency is either the SWCD or County. They are responsible for the action and are more likely to expend greater staff or other resources on the action. The supporting agency will likely expend less time but will be involved with the action. The lead and supporting agencies are designated with a "1" or "2' in the County or SWCD column of the table.

Other agencies expected to have a significant role or time involvement with an action are listed in a separate column.

Schedule and Financial Resources
The foundation of the plan is ongoing programs. Some programs will be expanded or enhanced in the first few years of plan implementation. This will require additional work and staff for program development, such as support from planning, GIS and other County staff not generally involved with an ongoing program. These amounts have been estimated and are included in the budget.

Financial constraints limit the ability of the SWCD and County to greatly expand existing programs or begin new programs. This is particularly true at the SWCD where stable funding to establish soil and water conservation practices is limited and grant funding is unpredictable. The budget reflects this uncertainty.

Timeline
Each of the five years of the implementation program is shown in columns (2008-2013). An "X" in a column indicates when implementation of an action item is expected. A bold "**X**" indicates more staff time and expenses will be needed during one year of an action spanning more than one year.

Budget

To provide a meaningful implementation budget useful to the County and SWCD, the plan budget for each action distinguishes financial and staff resources available for ongoing programs and new actions. This is shown in three separate columns labeled "ongoing", "special", and "implementation." The "ongoing" column shows the *annual* budget for program staff and related costs to operate the program associated with an action or group of actions. The "special" column is the *total* estimated cost for additional staff needed for an action item. The "implementation" column is the estimated total amount needed for implementation of an action. This includes land management practices. The "implementation" budget for an action might also include expenses such as publication and printing costs not typically part of an ongoing program. The implementation budget does not reflect land owner/operator costs or costs to other agencies or local units of government. The budget also does not include the County Ditch Authority or management of County ditches but does include an estimated budget for actions to improve water quality that will involve the County Ditch Authority.

It was not possible to reasonably estimate the resources needed for all actions. Notes in the table explain that there is either not enough information or the financial resources available are widely variable and cannot be estimated. For example, while there is insufficient data at this time, data collection might be the first action followed by an assessment, but only after the assessment will it be possible to determine financial needs. Budgets tied to unpredictable sources or levels of funding were also not estimated for some actions. For some actions, an estimated range of funding or unit costs is shown based on current costs. Beyond a relatively small amount of State cost-share, there is a great deal of uncertainty with funding to establish soil and water conservation practices, as the bulk of the funding for these practices has been from competitive water quality grants from the MPCA and BWSR. Funding for SWCD staff is also tied to short term water quality grants. There is a need for stable funding to increase local capacity, mainly at the SWCD, to work with partners and land owners/operators to promote and establish land management practices that improve water quality and ensure continued soil productivity.

The need for more local staff is a specific action repeated several times in the plan to address multiple priorities: increasing water retention, increasing ditch buffer strips, and addressing TMDLs. The total projected cost of the budget is conservative and includes the addition of just one staff person. Without additional staff, implementing some of the actions in the plan will not be possible. Notes indicate which actions will require additional financial resources.

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
GROUND WATER											
Objective 1: Continue the Well Program.											
Action 1: Blue Earth County will permit and inspect construction of new domestic wells and sealing of unused and abandoned wells.		1		x	x	x	x	x	$59,360		
Action 2. The County will continue to fund the well sealing cost share program with at least $9,000 annually.		1		x	x	x	x	x			$45,000
Objective 2: Increase local government's awareness of the potential for ground water contamination susceptibility in Blue Earth County.											
Action 1: The County will work with Township officials providing data and information related to ground water contamination susceptibility and groundwater protection methods, including zoning, with a special focus on Lime Township and Mankato Township because of their unique position having local zoning authority and their location in areas with high susceptibility to ground water contamination.		1	Mankato Township Lime Township and City of Mankato		x	x				$17,000	
Action 2: The County will provide data and information related to ground water contamination susceptibility and groundwater protection strategies to local government officials, including municipalities.		1	All municipalities		x	x					$200
Objective 3: The County will incorporate ground water protection measures in land use planning and regulations.											
Action 1: The County will address ground water protection and land use in the update of the County Comprehensive Land Use Plan.		1	County Planning Commission and County Board		x	x				$17,000	
Action 2: The County will address ground water protection measures in land use policy at the local level with special attention to business use and storage of potentially hazardous chemicals and materials and subsurface wastewater treatment and disposal.		1	County Planning Commission and County Board		x	x	x				
Objective 4: The County will assist local government units with preparation of source water protection plans.											
Action: The County will assist all local government units and the MDH with preparing source water protection plans as requested by participating in planning teams and providing available data and information including maps and aerial photos and County well index data.		1	Municipalities, MDH	?	?	?	?	?		unknown	unknown

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
AG RUNOFF, PESTICIDES											
Objective 1: Reduce the amount of farmed, highly erodible land adjacent to public waters and ditches by establishing a buffer strip or a cover of perennial vegetation adjacent to all public waters in the County.											
Objective 2: Increase best management practices on farmed, highly erodible and potentially highly erodible land.											
Action 1: The County, SWCD and other local implementation partners will identify marginal, highly erodible farmland adjacent to public waters and drainage systems and highly erodible and potentially erodible farm land.	1	2	NRCS, FSA, appropriate State agencies	x	x					$1,680	
Action 2: Identify and prioritize areas to work based on appropriate financial incentives, easements, and regulations, special projects, studies, TMDLs, and local plans related to objective.	1	2	NRCS	x	x	x	x	x	$18,480 [B]	$16,800	
Action 3: Work with relevant implementation partners to promote conservation practices in priority areas.	1		NRCS	x	x	x	x	x		unknown	unknown
Action 4: Contact and work with land owners and land occupiers to establish conservation practices achieve objective.	1		NRCS	x	x	x	x	x		unknown	unknown
Action 5. Establish soil and water conservation practices to reduce runoff, soil erosion and sedimentation.	1		NRCS, BWSR	x	x	x	x	x			$30,000- $35,000 annual State cost share [F]
Action 6: Establish soil and water conservation practices to reduce runoff, soil erosion and sedimentation.	1	2	NRCS, State and Federal Agencies	x	x	x	x	x		unknown	unknown
Objective 3. Increase public awareness of soil and water conservation issues, problems with education and information.											
Action 1: Develop posters and other informational pieces related to soil erosion and other factors used to prioritize local project implementation and funding for display at the County SWCD, NRCS and other related offices.	1	2	NRCS		x	x	x	x	$23,520 [B]	$4,200 [A]	$1,500
Action 2: Provide access to aerial photos, maps, topography, soils and other information on the County and SWCD web sites.	2	1			**X**	x	x	x		$3,400 [A]	
Action 3: Promote best management practices in newsletters, web sites, press releases and brochures distributed by the County and SWCD annually.	1	2	NRCS	x	x	**X**	x	x		$3,400 [C]	$20,000
Objective 4. Bi-annually review and evaluate data and information available for targeting BMP's and other implementation efforts.											

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Action: Regularly hold *Water Management Plan* meetings with local implementation partners to identify, assess, evaluate and prioritize current project needs, information and future implementation strategies.	1	1	NRCS, FSA, DNR, State agencies	x	x	x	x	x		$5,000	
Objective 5. Seek stable funding for at least one SWCD staff position to work in all priority areas coordinating and promoting best management practices as described in the *Water Management Plan 2008-2013,* watershed and other relevant plans.											
Action 1: Develop description of project and staff needs based on annual SWCD plans and other plans.	1	1		x	x					$3,360	
Action 2: **County Drainage Section:** Add a full-time SWCD Technician/BMP Coordinator to work at the SWCD working with conservation partners promoting and coordinating the establishment of buffer and filter strips on County ditches, tile intakes and other waterways with an emphasis on County ditches. **TMDL Section:** Seek funding for a County-based staff person at the SWCD to work with land owners/operators in all impaired waters and TMDL Implementation Plan priority areas to establish soil and water conservation practices known to address multiple pollutants causing impairments. **Wetlands and Wildlife Section:** Add a full-time SWCD Technician/BMP Coordinator from 2009-2013 at the SWCD working with conservation partners promoting and coordinating the establishment of water retention an	1				x	x	x	x		$339,200 [E]	
LIVESTOCK and MANURE MANAGEMENT											
OBJECTIVE 1. Work with all feedlot operators to improve manure management planning.											
Action 1: The County will meet with 100 percent of feedlot operators and crop consultants to improve manure management planning.		1		x	x	x	x	x	$64,608		
Action 2: The County Feedlot Officer will enhance review of manure management fields and field/site specific discussion of sensitive areas and requirements (ground water contamination maps, bedrock, slope, soils, floodplains, ditches, surface water features, two foot contour maps, property boundaries, aerial photos and other information).		1		x	x	x	x	x			

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Action 3: The County will develop a program to provide County/SWCD web site access to local information about sensitive areas and requirements (ground water contamination maps, bedrock, slope, soils, floodplains, ditches, surface water feature, two foot contour maps, property boundaries, aerial photos and other information).	2	1			x	x				$3,360 [A]	
Action 4: The County and SWCD will enhance its general, feedlot education program by providing information about applying manure in sensitive areas such as surface water and shallow soil over bedrock for distribution and display at the SWCD/NRCS office.	1	1			x	x	x	x		$300	
Action 5: The SWCD, County and other organizations will participate in local demonstrations, field days and workshops as appropriate and report the results in newsletters and other communications.	1	1	MES, MDA		x	x	x	x	included in other budgets	$2,400	
Objective 2: Improve manure management in areas with high susceptibility to ground water contamination due to shallow depth of soil to bedrock.											
Action 1: Identify feedlots in areas with high susceptibility for ground water contamination and shallow depth to bedrock.		1			x					$1,175	
Action 2: Work with the Lime Township Board, feedlot operators and horse owners in Lime Township by providing information related to improving site management and manure management and identifying small sites with potential problems.		1	Lime Township			x	x			$4,200	
Action 3: Provide site specific information and other resources to feedlot operators in areas with shallow depth to bedrock.	2	1	NRCS			x	x			$1,680	
Action 4: Provide technical assistance to horse and livestock owners to reduce the potential for ground water contamination from manure.	1	1	NRCS			x	x	x		unknown	unknown
Action 5: Assess the need for and availability of financial assistance to horse owners to improve manure management.	1	1	NRCS			x	x	x		unknown	unknown
OBJECTIVE 3. Reduce runoff from agricultural fields.											
Action: Establish buffer strips, terraces and grass waterways to protect surface waters from runoff from agricultural fields.	1		NRCS, FSA	x	x	x	x	x	part of ongoing program	unknown	unknown
OBJECTIVE 4. Reduce manure runoff problems from livestock feedlots and smaller sites.											
Action 1: Provide technical assistance to operators of feedlots with open lot agreements to correct pollution problems by 2011, the State feedlot program compliance deadline.	1	2	NRCS	x	x	x			$8,400 [B]	unknown	unknown
Action 2: Provide technical assistance to feedlot operators and owners of small sites to address pollution problems.	1	1	NRCS	x	x	x	x	x			

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
URBAN RUNOFF, PESTICIDES											
Objective 1: Encourage municipalities and Townships to review and revise stormwater, zoning and subdivision ordinances to protect water resources.											
Action 1: Work with City staff, engineers and consultants to provide each City with general information about urban stormwater runoff impacts.		1	Municipalities, City Engineers		x	x	x			$7,050	Each City's meeting and consulting engineer expenses
Action 2: Work with the City staff, engineers, consultants, NEMO, DNR and others as appropriate to provide each City with model ordinances to address development and stormwater impacts.		1	Municipalities, City Engineers		x	x	x	x			
Action 3: Assess the need and seek funding for consultant services to review and rewrite local ordinances, if needed.		1	Municipalities, City Engineers, DNR		x	x	x	x			unknown
Action 4: Work with Mankato Township and Lime Township to provide each with general information about urban stormwater runoff impacts and model ordinances to address stormwater impacts.		1	Mankato Township Lime Township		x	x	x				Township meeting expenses
Objective 2: Reduce erosion at existing urban stormwater outlet structures.											
Action 1: Work with City staff, engineers, SWCD and the County Ditch Manager to inventory and evaluate stormwater outlets to determine where erosion problems exist.		1	Municalities and engineers	x	x					included in Objective 1	Each City's meeting and consulting engineer expenses
Action 2: Identify short-term and long-range solutions to stormwater runoff problems and construct structures, retention areas and other conservation practices where needed.		1	Municalities and engineers		x	x					
Action 3: Work with City staff and SWCD to seek funding for Action 2 if needed.	2	1	Municalities and engineers		x	x					
Objective 3: Reduce erosion from construction sites.											
Action 1: Provide general information about MPCA NPDES permit rules to municipalities (not Mankato) and Mankato Township staff.		1	Municipalities, Mankato Township		x	x				included in Objective 1	
Action 2: Provide general information about MPCA NPDES permit rules along with construction permits issued by the County.		1			x	x	x	x		$3,360	
Action 3: Work with staff of municipalities, MPCA stormwater staff and others to assess compliance and educational needs related to State NPDES permit requirements.		1	MPCA, Municipalities			x				included in Objective 1	Each City's staff and other expenses

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Action 4: The City of Mankato will continue implementation of its Stormwater Pollution Prevention Plan, partnering with the County and local municipalities for education and other activities when appropriate.		2	Mankato, Municipalities	x	x	x	x	x		$1,680	City of Mankato budget
Objective 4: Promote homeowner best management practices to reduce pesticides, fertilizer and other pollutants generated by lawn, garage and home care.											
Action 1: Work with city staff to provide data and information and sample educational materials, flyers, posters, etc.		1	Municipalities		x	x	x	x	included in other budgets and Objective 1		City expenses for printed materials, mailings
Action 2: Include BMP's in County and SWCD newsletters, web sites and other outreach activities.	2	1			x	x	x	x	included in other budgets		
Objective 5: Protect sensitive lake shoreland areas from development.											
Action 1: Assess the shoreland and riparian areas of all lakes, especially those with greatest likelihood of development such as Madison, Duck, Ballantyne, George, Eagle, Lura, Crystal, Loon, and Mills Lakes, to provide a baseline and general information for the County Planning Commission and the affected municipalities.		1	DNR, County Planning Commission, Madison Lake, Eagle Lake, Lake Crystal	x	x					part of Wetlands and Widlife Objective 2	
Action 2: Address shoreline protection in the County's Comprehensive Land Use Plan and amend County land use regulations to protect shoreland areas from development impacts.		1	County Planning Commission and County Board		x	x				part of Wetlands and Widlife Objective 2	
Objective 6: City and County park systems will continue to develop and redevelop shoreland areas providing public access, reducing runoff, and protecting stream banks and shoreland.											
Action 1: The County Parks Department will continue to utilize and promote best management practices, such as rain gardens and use of native vegetation, in all County parks, as appropriate.		1	DNR	x	x	x	x	x		unknown	unknown
Action 2: The County will continue to work with lake associations, local conservation organizations, the DNR and other State agencies to stabilize shoreland areas in County Parks where needed and as funding is available.		1	DNR, MPCA, Other agencies	x	x	x	x	x		unknown	unknown
Action 3: The City of Mankato will continue to redevelop waterfront areas, trails and parkways along the Minnesota River, Blue Earth River, Indian Creek, and Thompson Creek to improve water quality and provide education and access to the river for residents and visitors where appropriate and as funding is available.		2	City of Mankato	x	x	x	x	x		unknown	unknown

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
IMPAIRED WATERS AND TMDLs											
Objective 1: Support development of TMDL Implementation Plans.											
Action 1: Work cooperatively on a watershed basis to identify and prioritize implementation activities.	1	1	GBERBA, neighboring counties, MPCA, State Agencies	x	x	x	x	x	$59,010 [D]	unknown	
Action 2: At the request of the MPCA or other TMDL sponsor and within the constraints of local staff time and resources, participate in preparation of TMDL studies and implementation plans .	1	1	MPCA	x	x	x	x	x		unknown	unknown
Objective 2: Implement soil and water conservation and other practices identified in TMDL implementation plans.											
Action 1: Work with agricultural land owners/operators to establish best management practices to achieve TMDL implementation goals as practicable considering availability of local staff and project resources.	1	2		x	x	x	x	x	part of existing programs		unknown
Action 2: Seek funding for a County-based staff person at the SWCD to work with land owners/operators in all impaired waters and TMDL Implementation Plan priority areas to establish soil and water conservation practices known to address multiple pollutants causing impairments.	1	1			x	x	x	x		$339,200 [E]	
Action 3: Work with nonpoint sources identified in TMDLs to increase awareness of water quality problems, change behavior and establish best management practices where appropriate and practicable considering availability of local staff and project resources.	1	1		x	x	x	x	x	part of existing programs		
Objective 3: Increase participation in the MPCA Citizen Stream Monitoring Program.											
Action 1: Promote Citizen Stream Monitoring in SWCD and County newsletters, web site and other information sources.	1	1		x	x	x	x	x	included in existing and future education efforts		
COUNTY DITCHES											
Objective 1: Encourage voluntary establishment of ditch buffer strips on County ditches with education and information activities promoting the benefits of ditch buffers and the availability of financial incentives.											

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Action 1: The SWCD will provide a list of conservation funding opportunities to the Ditch Authority annually in order for the Ditch Authority to be fully aware of locally available incentives.	1			x	x	x	x	x		$3,360	
Action 2: The County and SWCD will increase communications providing information about water quality related benefits of ditch buffers and financial incentives available for establishing new ditch buffers.	1	2	NRCS		x	x	x	x		$3,360	
Action 3: The County Ditch Authority and other County Departments will work together to provide information in general newsletters and the County web-site. The County Ditch Authority will develop written communications, such as letters and newsletters to ditch system owners when appropriate to special projects.	1	1	NRCS		x	x	x	x	Existing newsletters and web site	unknown	unknown
OBJECTIVE 2: Increase the total miles of drainage ditch buffer strips on County ditches in Blue Earth County by 50 percent by December 31, 2012. *In order to achieve County goals for this objective, financial resources will be needed for additional staff, landowner incentives and acquisition costs.*											
Action 1: Establish baseline data for this objective to consistently measure success over time, by using County data reported to BWSR to determine the total miles of ditch buffers in the County.		1		x	x					unknown	
Action 2: Add a full-time SWCD Technician/BMP Coordinator from 2009-2012 to work at the SWCD working with conservation partners promoting and coordinating the establishment of buffer and filter strips on County ditches, tile intakes and other waterways with an emphasis on County ditches.	1	2			x	x	x	x		$339,200[E]	
Action 3: Work with implementation partners to develop a reasonable, implementation goal and work plan annually for this objective assuming the addition of full time staff and financial incentives to coordinate bmp programs with a special emphasis on ditch buffers.	2	1	NRCS, FSA, Local Implementation Partners		x	x	x	x		$5,000	
Action 4: Seek funding to provide financial incentives to establish ditch buffer strips on pre-identified County ditches.	2	1			x	x	x	x		unknown	$12,000-$14,000 per mile[G]
OBJECTIVE 3: Identify, assess and prioritize County ditch systems and areas within County ditch systems for retention, wider ditch buffers and other strategies to improve surface and ground water quality and wildlife habitat.											

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Action 1: Work with local committees and workgroups with broad representatives of multiple interests similar to those formed for the Water Management Plan and Greenprint to develop criteria and methods for prioritizing program implementation. Representatives of ditch owners, wildlife conservation, rural residents, water quality and others will be involved. County GIS tools will be used to support the process.	2	1		x	x					part of Wetlands and Wildlife section	
Action 2: Priority areas will be assessed based on methods and criteria developed by committees and workgroups for program implementation as well as available resources, regulations and other requirements. The County and SWCD will work together to identify representatives and frequency of program planning and evaluation as needed.	2	1		x	x	x	x	x		part of Wetlands and Wildlife section	
Action 3: Identify and assess opportunities to reduce impacts from municipal storm water discharges with best management practices, including water retention, wetland restoration, buffer strips, grassed waterways, and other erosion control practices.	2	1	Municipalities, Engineers,	x	x					$30,000	
Action 4: Identify native plants best suited for ditch buffer plantings, assess and prioritize locations for native plants in conjunction with wildlife and other priority areas.	1	1	BWSR, DNR		x	x				$5,000	
OBJECTIVE 4: Increase water retention and wetland restoration in County ditch drainage systems by 30 percent.											
Action 1: Seek funding to expand the engineering and environmental review assessment for ditch improvement and repair projects to study flooding characteristics and downstream impacts during small, frequent storm events as well as 5,10, 25, 50 year flood events; water storage and retention practices; and water quality effects.		1		x	x	x	x	x		unknown	unknown
Action 2: Establish baseline data for this objective to consistently measure success over time.		1		x	x					$3,360	
Action 3: Seek funding to provide financial incentives to establish water retention areas.	1	1			x	x	x	x		$8,400	unknown
Action 4: Work with local conservation groups and State and Federal agencies to seek funding and restore and enhance wildlife habitat in priority areas.	1	1		x	x	x	x	x			unknown
Action 5: Add a full-time SWCD Technician/BMP Coordinator from 2009-2013 at the SWCD working with conservation partners promoting and coordinating the establishment of water retention and wetlands.	1	2			x	x	x	x		$339,200 [E]	

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Action 6: Work with implementation partners to develop a reasonable, implementation goal and work plan annually for this objective assuming the addition of full time staff and financial incentives to coordinate bmp programs with a special emphasis on ditch buffers and water retention.	2	1			?	?	?	?		unknown	
WETLANDS AND WILDLIFE											
Objective 1: Continue to administer WCA.											
Action 1: Continue to administer the WCA, including TEP and with the DNR on WCA enforcement.	2	1	BWSR, DNR	x	x	x	x	x	$85,152 [C]		
Objective 2: Continue to identify, assess and prioritize high priority areas for protection, enhancement and restoration of wetlands and wildlife habitat.											
Action 1: Continue to work with DNR Fisheries, DNR Wildlife staff and US Fish and Wildlife Service to identify, assess and prioritize specific areas important for wetland habitat, lake shore habitat, and other conservation practices.		1	DNR, BWSR, USFWS	x	x					$67,840 [A]	
Action 2: Work with local wildlife conservation organizations to identify, assess and prioritize specific areas important for wetland habitat, lake shore habitat, and other conservation practices.		1		x	x						
Action 3: Continue to work with representatives of broad interests and stakeholders to identify, assess and prioritize wetland, lake shore habitat and other conservation areas.		1	Planning Commission	x	x						
Action 4: Evaluate the need for a Comprehensive Wetland Management Plan and ordinance in all or parts of Blue Earth County.	2	1	Mankato, Municipalities, BWSR		x	x					
Objective 3: Identify and incorporate ground water recharge areas in wetland and other conservation plans.											
Action: As described in the Groundwater Section of the Water Management Plan, the County views protection of ground water a very high priority. Additional data is needed to identify, assess and prioritize ground water recharge areas to target wetland protection and restorations.		1	State Agencies	?	?	?	?	?	unknown	unknown	unknown
WASTEWATER AND SSTS											
Objective 1: Continue to manage decentralized wastewater treatment with the County SSTS program.											

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Action 1: Maintain and update the County Ordinance consistent with State State Statutes.		1		x	x	x	x	x	$127,200		
Action 2: Issue permits, conduct inspections and maintain records for SSTS in Blue Earth County.		1		x	x	x	x				
Objective 2: Reduce the number of dwellings defined as imminent public health threats by 50 percent.											
Action 1: Update and analyze all available data to reasonably estimate the number of imminent public health threats and determine a baseline to evaluate future results related to this goal.		1		x	x					$5,020	
Action 2: Assess the need for financial incentives, including low interest loans, to accelerate the percentage of compliant SSTS.	2	1			x	x				$1,175	
Action 3: Evaluate overall compliance levels every one to three years and adjust education and other program components accordingly to meet objective.		1			x	x		x		$3,500	
Objective 2: Increase compliance with SSTS maintenance requirements.											
Action 1: Determine the level of compliance with State regulated maintenance requirements.		1	MPCA		x	x				$2,520	
Action 2: Work with haulers, property owner representatives and others to identify and address education, disposal and other needs related to septic system maintenance issues.		1	Municipalities, Townships		x	x					
Objective 3: Evaluate septage management systems, including disposal, storage and land application.											
Action 1: Identify the septage management systems of each contractor in the County.		1				x	x			$1,260	
Action 2: Work with pumpers, contractors, municipalities and other representatives to assess needs related to septage management in Blue Earth County.		1				x	x			$2,520	
CHEMICALS AND PROBLEM MATERIALS											
Objective 1: Increase public awareness of responsible use of hazardous substances and disposal of wastes and problem materials.											
Action 1: Identify opportunities to expand and enhance education efforts to target audiences, including the SWCD, NRCS, County and other local partners.	2	1	NRCS	x	x	x	x	x		$1,680	unknown
Action 2: Incorporate general information related to responsible use of hazardous substances and disposal of wastes and problem materials in County and SWCD newsletters and other public places.	2	1	NRCS	x	x	x	x	x	included in other budgets		

Objective / Action	Lead Agency		Other Agency	Timeline					Budget		
	SWCD	County		2008	2009	2010	2011	2012	Ongoing	Special	Implemention
Objective 2: Ensure continued agricultural waste pesticide disposal opportunities in Blue Earth County.											
Action: Work with MDA to continue operating agricultural waste pesticide disposal sites in Blue Earth County.		1	MDA	x	x	x	x	x	included in other budgets		
Objective 3: Ensure continued mercury product recycling opportunities in Blue Earth County.											
Action: Work with MPCA, Xcel Energy to continue mercury product recycling opportunities.		1	MPCA, Xcel	x	x	x	x	x	included in other budgets		

Key for Budget Items

[A] = County staff from departments related to action

[B] = SWCD staff

[C] = Both County and SWCD

[D] = Costs to participate in existing watershed organizations at current levels. Includes annual dues, County Commissioner and SWCD Supervisor per diem, and County and SWCD staff time. Does not include mileage or other expenses.

[E] = Additional SWCD staff is needed to address multiple objectives. This is the estimated cost of one staff person for four years.

[F] = Historic range of cost share

[G] = Current range of cost

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, MN 55155

In the Matter of Reviewing the Local Water Management Plan Update for Blue Earth County (Minnesota Statutes, 2003, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Blue Earth County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Minnesota Board of Water and Soil Resources (Board) on June 5, 2008, pursuant to Minnesota Statute (M.S.) Section 103B.315, Subdivision (Subd.) 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1. On June 19, 2007, the Board received a Priority Concerns Scoping Document from Blue Earth County, pursuant to M.S. Section 103B.312.

2. On October 24, 2007, the Board of Water and Soil Resources approved official comments on the Blue Earth County Priority Concerns Scoping Document, which were mailed to the County on October 24, 2007.

3. The Board received a resolution from Blue Earth County, dated November 27, 2007, requesting a six-month extension of their current Local Water Management Plan.

4. On December 19, 2007, the Board officially approved the Blue Earth County extension request, thereby extending the end date to July 1, 2008.

5. On June 5, 2008, the Board received the Blue Earth County Plan Update, a record of the public hearing, and copies of all written comments pertaining to the Plan Update for final State review pursuant to M.S. Section 103B.315, Subd. 5.

6. The priority concerns the Plan Update addresses include:
   a. **Groundwater**
   b. **Surface Water Quality**
   c. **Drainage**
   d. **Wetlands**
   e. **Wildlife and Natural Resources**

7. On August 7, 2008, the Regional Water Planning Committee of the Board reviewed the recommendation of the state review agencies regarding final approval of the Blue Earth County Plan Update. Recommendations of the state review agencies were:
   a. Minnesota Department of Agriculture: recommends approval;
   b. Minnesota Department of Health: recommends approval;
   c. Minnesota Department of Natural Resources: recommends approval;
   d. Minnesota Pollution Control Agency: recommends approval;
   e. Minnesota Environmental Quality Board: no recommendation received;
   f. Minnesota Board of Water and Soil Resources regional staff: recommends approval;
   g. Board Regional Water Planning Review Committee: recommends approval.

8. This update will be in effect until June 30, 2013.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of Blue Earth County pursuant to M.S. Section 103B.315, Subd. 5.

2. The Blue Earth County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the County; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the Blue Earth County Local Water Management Plan.

Dated at Olivia, Minnesota, this 28th day of August, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Minnesota Board of Water & Soil Resources

DATE: June 10, 2008

TO: Jeff Nielsen, BWSR Southern Regional Supervisor

FROM: Chris Hughes, Board Conservationist

SUBJECT: **Brown County Local Water Management Plan Final Review**

I have completed my final review of the Brown County Local Water Management Plan and recommend approval of this update.

The Brown County Local Water Management Plan meets all requirements including:

- focuses on the priority concerns identified in the Priority Concerns Scoping Document;
- adequately assesses the priority concerns and sets forth appropriate goals and objectives;
- lays out a detailed implementation program with measurable actions, timeline and budget; and
- includes all required sections.

State agency comments were received from the Minnesota Department of Natural Resources (DNR), the Minnesota Department of Health (MDH), the Minnesota Department of Agriculture (MDA), and the Minnesota Pollution Control Agency (MPCA). These agencies recommend approval of the Plan.

I look forward to assisting Brown County in the implementation of their plan. Former County Water Plan Coordinator Paul Davis and current Water Plan Coordinator Desiree Hohenstein should be commended for their leadership and dedication throughout the planning process.

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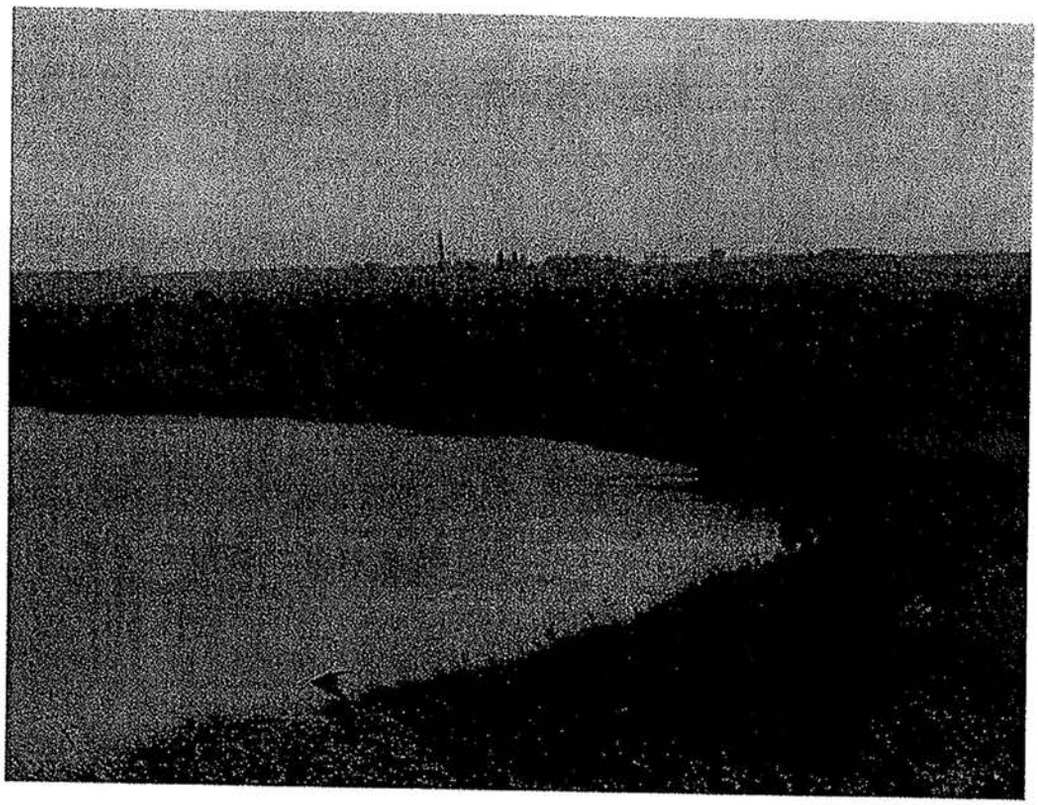
4/22/03

Brown County
Comprehensive Water Plan



January 1st, 2008 to December 31st, 2018

Executive Summary

VERSION AND PURPOSE:

The Brown County Comprehensive Water Plan is used as a planning tool to protect and enhance water resources including surface and groundwater and their related land uses. The Plan provides on opportunity for the local government to combine efforts of various State programs to work on the local level to improve water quality. This version allows the County to focus limited resources on defined concerns and sites that can help to show the greatest benefit. The plan includes project development and implementation strategies which will help to identify existing and potential problems and formulate implementation goals to improve hydrologic objectives.

The plan focuses on Priority Concerns as identified in coordination with local governments and State agencies and an Implementation Plan that addresses the Priority Concerns. Implementation of the plan, through annual workplans, will make certain that objectives and goals will be reached. It is in the best interest of the county to ensure that implementation occurs.

Brown County is located in South Central Minnesota and is bordered by Nicollet, Blue Earth, Renville, Cottonwood, Watonwan and Redwood Counties. County population based on the 2000 census estimates is 26,911 with the County Seat, New Ulm, estimated at a population of 13,594. Countywide the population has declined by 0.3 percent while New Ulm has seen a +3.5 percent increase in the period since the 1990 census data.

Land use in Brown County is a contrasting mixture of urban/rural and industrial/agricultural. Approximately 72% of the residents live in cities with a population greater than 500. Industrial activities are present in each of the three highest populated cities; New Ulm, Sleepy Eye and Springfield. Brown County is agriculturally oriented with 335,000 acres or 85% of land use in crop production with corn and soybeans being the primary crops. Hogs are the primary livestock in the County.

There are three Major Watershed Basins associated with Brown County. The northern portion of the County lies primarily within the Middle Minnesota River watershed with the Little Cottonwood River Basin included. In this area the local drainage is north and east toward the Minnesota River which forms the northern border of Brown County. The central and western portions of the County lie primarily within the Cottonwood River Major Watershed. The Cottonwood River joins the Minnesota River south of the City of New Ulm. The south central portion of the County is drained by the Watonwan River Major Watershed with the Lake Hanska watershed being the main source for drainage to the south of the County.

The first Brown County Water Management Plan was adopted by the Brown County Board of Commissioners in 1990. Subsequently a 1996 Water Plan Update was submitted for the 10 year plan update. An extension was requested in 2007 for the update with the current plan set to expire December 31, 2008.

DESCRIPTION OF PRIORITY CONCERNS

The Priority Concerns to be addressed by the County are as follows. Concerns are not listed in order of importance and concerns were selected to be broad enough to address most concerns submitted. The Priority Concerns were selected by the Task Force after examining citizen and State comments for review.

1. **Soil Erosion Concerns** – including addressing of TMDL issues by watershed. Prevention of soil erosion and sedimentation from runoff and streambank erosion. Promotion of programs to improve residue management and conservation tillage. Incorporate urban aspects of stormwater management and runoff of impervious surfaces.

2. **Groundwater** – including addressing concerns with pesticide and fertilizer use in agricultural and urban areas. Wellhead protection and well sealing opportunities. Address potential water quantity issues involved with industrial and rural development and city water use needs.

3. **Drainage** – including possible inventory of existing system and need for improvements with the possibility for water storage. Buffer initiatives with emphasis on problem areas and erodible soils. Management focusing on public drainage system that provides agricultural production with benefits to water quality and quantity concerns.

4. **Wetlands/Water Retention** – including protection and enhancement of existing wetland resources. Inventory of existing wetlands and potential areas for restoration and water retention projects. Wetland education to contractors involved with development projects.

5. **Human Wastewater** – including the inventory of septic and municipal systems for compliance and needs. Cooperate with municipal systems to find improvements for systems and possible funding options. Upgrade of failing and non compliant individual septic systems. TMDL concerns addressed for fecal limits.

SUMMARY OF GOALS AND ACTIONS

PRIORITY CONCERN 1: SOIL EROSION

GOAL 1: Address impaired surface waters and their TMDL's

Objective A: Develop understanding of water quality issues. $64,000.00
Objective B: Reduce the impairments in surface waters. $34,000.00
Objective C: Delisting of existing impaired waters. $60,000.00

GOAL 2: Reduce soil erosion and sedimentation on agricultural lands.

Objective A: Identify areas that show potential for high erosion$13,000.00
Objective B: Cooperate and promote and market conservation programs and practices. $251,000.00

GOAL 3: Reduce stream bank and ditch bank erosion.

Objective A: Identify problems areas within the County. $10,000.00
Objective B: Provide education and options to control stream and ditch bank erosion. $55,000.00

GOAL 4: Reduce urban runoff and storm water impacts to surface waters.

Objective A: Assess urban non point source pollution in Brown County. $39,000.00
Objective B: Education to cities and citizens on runoff and storm water management. $82,000.00
Objective C: Implement Storm water and Runoff practices with cooperating Cities. $31,000.00

PRIORITY CONCERN 2: GROUNDWATER

GOAL 1: Protect ground water sources from pesticide and fertilizer contamination from agricultural and urban contamination.

Objective A: Obtain Groundwater information relating to potential impacts. $8,200.00
Objective B: Provide education on proper agricultural and residential application rates. $39,000.00

GOAL 2: Protect drinking water sources

Objective A: Recognize and support needs of public water supply wellhead protection $11,000.00
Objective B: Encourage private well protection from contamination sources. $5,000.00
Objective C: Encourage proper sealing of unused or abandoned wells. $96,000.00

GOAL 3: Minimize impacts to groundwater sources from industrial and rural development.

Objective A: Reduce impacts of rural and industrial development on groundwater resources. $8,000.00

PRIORITY CONCERN 3: DRAINAGE

GOAL 1: Improve drainage management system based on water quality goals.

Objective A: Cooperate with Drainage Authorities to inventory current drainage system. $167,000.00
Objective B: Determine and map problem areas$6,000.00
Objective C: Reduce water inputs and provide water storage to the system. $1,045,000.00
Objective D: Develop education and incentive programs to increase conservation practices. $467,000.00

PRIORITY CONCERN 4: WETANDS/WATER RETENTION

GOAL 1: Protect existing wetlands and increase wetland resources

Objective A: Identify current wetlands and potential wetland restoration sites.$75,000.00
Objective B: Educate citizens and officials on wetland functions and importance.$16,000.00
Objective C: Encourage wetland restoration and management.$157,000.00
Objective D: Develop a Local Comprehensive Wetland Protection and Management Plan. $12,000.00

PRIORITY CONCERN 5: HUMAN WASTEWATER

GOAL 1: Eliminate Subsurface Sewage Treatment System (SSTS) contamination to surface and groundwater.

Objective A: Maintain onsite sewage treatment inspection program.$22,000.00
Objective B: Provide education and seek funding for septic program. $1,570,000.00

GOAL 2: Assist with improvements and upgrades to municipal and industrial wastewater treatment systems.

Objective A: Inventory of existing processes in waste water treatment facilities $9,000.00
Objective B: Inventory of needs and funding opportunities for improved technologies. $2,044,000.00

10 YEAR PLAN TOTAL $6,384,200.00

CONSISTENCY WITH OTHER PLANS

Brown County Water Planning is based out of the Planning and Zoning Office. The Water Plan, County Zoning Ordinance, Feedlot Ordinance, Wetland Conservation Act and all other aspects of the Natural Resources Block Grant are administered out of this office. In addition there is communication and cooperation with all other Courthouse offices and the Brown County SWCD office for planning processes. This helps to provide some consistency between plans and ordinances. In addition the County has access to several local, regional and State plans for use in plan development.

SUMMARY OF RECOMMENDATIONS TO OTHER PLANS

The priority concerns and action items established in the Water Plan should allow for cooperation between the County and local governments in the development and amendments of local controls and ordinances. Reference to water quality and quantity issues developed in the plan should be considered on a voluntary basis by each organization in its planning process. The Water Plan office should act as a resource for those considering planning updates.

GOALS AND OBJECTIVES FOR PRIORITY CONCERNS

The five priority concern areas as developed from the Priority Concerns Scoping Document established by the Local Water Management Plan Task Force and adopted by Brown County are presented below. An assessment of each element is included for each priority concern area. Specific goals, objectives and actions have been identified, and will be implemented throughout the life of the Plan.

PRIORITY CONCERN 1:

SOIL EROSION CONCERNS – including addressing of TMDL issues by watershed. Prevention of soil erosion, sedimentation from runoff and streambank erosion. Promotion of programs to improve residue management and conservation tillage. Incorporate urban aspects of storm water management and runoff of impervious surfaces.

I. DESCRIPTION OF EROSION CONCERNS

Cultivated land makes up approximately 85% of the land use in Brown County, which leaves a majority of the land throughout the county susceptible to erosion.

Erosion is a process that is always occurring but can be greatly increased by our land use practices. The rate and extent of erosion is increased in the agricultural community through poor cultivation practices which leaves the land unprotected and vulnerable to wind and water actions. Artificial drainage has also created erosion concerns in the agricultural areas. The extensive tiling and ditch system which allows drainage for crop production has increased the amount flow to the surface water system. By not allowing the water to infiltrate to the groundwater system we create ditches and streams that are "flashy" which move great quantities of water with its' erosive force downstream. This creates the opportunity for bank erosion throughout the system. Reducing this flow and preventing soil loss is necessary to reduce sediment and attached pollutants from reaching surface waters.

Agriculture is by no means the only culprit in erosion concerns. With development come homes, roads and parking lots built over the soil, reducing the amount of water that can enter the ground. Without infiltration this water flows overland with increasing energy causing erosion. Removal of trees and vegetation, especially along stream banks and shorelines, adds to the potential for erosive affects. The ability of the soil to absorb and buffer the effects of water is reduced and potential for the soil particles to be released is increased. The construction phase can become a major source of sediment in many projects. Controlling erosion will reduce the amount of sediment that can degrade waterways. Storm water runoff can change both water quality and quantity affecting our water resources physically, chemically and biologically. Polluted runoff containing oil, grease, chemicals, nutrients, metals, litter and pathogens for example, can severely reduce water quality.

Traditional water management practices have relied on moving water off the landscape as quickly as possible without much concern for downstream affects. These systems will need to be assessed to see what potential they will have with our future land use opportunities and issues. Upland management practices that aim for water retention will need to be addressed to alleviate the erosion potential. A change in mindset and behavior will be needed that balances economic gains and the benefits of conservation practices. Outreach efforts will need to take place educating local officials and landowners as to the benefits these practices can provide.

GOAL 1: Address impaired surface waters and their TMDL's

Objective A: ***Develop understanding of water quality issues.***

Actions:

1. Continue and expand water testing through Clean Water Partnerships (CWP's) and submit data to the MPCA.
2. Recruit volunteers for the MPCA's Citizen Stream Monitoring Program (CSMP) for impaired reaches.
3. Recruit CSMP volunteers in the rural community for water bodies that have no previous sampling record.
4. Develop baseline data information through coordination with MPCA, MDA, MDH staff that will meet listing and delisting requirements.
5. Follow approved sampling techniques and submit water quality data for analysis and review.

Objective B: ***Reduce the impairments in surface waters***

Actions:

1. Cooperate with SWCD and NRCS to market available conservation programs to landowners.
2. Develop strategies with the county drainage authority to address water quantity issues that explore alternatives to existing drainage management.
3. Utilize Counties Geographic Information Systems (GIS) data to inventory and target areas for best management practices.
4. Provide educational opportunities on the TMDL process to the public through articles, meetings and personal contacts.
5. Partner with Cities and Industries to define their role in the TMDL process and the practices they can utilize to reduce impacts.

Objective C: ***Delisting of existing impaired waters.***

Actions:

1. Work with CWP's and MPCA in the development and implementation of Total Maximum Daily Load (TMDL) plans for impaired waters.
2. Provide County level assistance throughout study and implementation phases to coordinating agencies and organizations.
3. Work with individuals and businesses to help develop plans that will reduce their impacts to the developed implementation plan on impaired reaches.

4. Use developed priority areas as guide on progress and update implementation strategy based on successes and continued sampling.

GOAL 2: Reduce soil erosion and sedimentation on agricultural lands.

Objective A: ***Identify areas that show potential for high erosion***

Actions:

1. Use available GIS resources and soil survey information to identify areas of concern where soil and slope conditions exist that may cause highly erodible conditions.
2. Identify and map areas to be targeted for implementation projects.
3. Prioritize implementation projects based on impaired waters.

Objective B: ***Cooperate with SWCD*** **to** ***promote and market conservation programs and practices.***

Actions:

1. Provide education to landowners in targeted areas on BMP's and conservation programs available through County, State and Federal programs
2. Work with the Brown County SWCD to pursue additional cost-share and incentive funding for BMP's.
3. Work with County Board as the Ditch Authority to establish a long term or permanent buffer program.
4. Demonstrate conservation tillage, alternative drainage practices and BMP's through field days sponsored by the County, U of M, State Agencies and farm groups and businesses.

GOAL 3: Reduce stream bank and ditch bank erosion.

Objective A: ***Identify problems areas within the County.***

Actions:

1. Utilize GIS data and ditch records to identify high priority areas prone to stream and ditch bank erosion.
2. Conduct air photo reviews of priority areas.
3. Conduct site visits and document erosion impacts.
4. Inventory and prioritize sites based on implementation potential.

Objective B: ***Provide education and options to control stream and ditch bank erosion.***

Actions:

1. Target sites on the inventory list to educate and provide assistance to landowners on erosion control measures.
2. Pursue funding for the implementation of buffer strips and stream bank stabilization practices.
3. Develop and provide information on upland management practices including wetland restorations, water storage, and infiltration practices that help to store and meter water.

4. Provide education and information on grazing management practices that reduce bank erosion.
5. Seek and provide funding for demonstration projects for fencing or buffers that show benefits of bank stabilization.
6. Work with County Drainage Authority to develop a plan that considers water retention and storage as part of ditch repair and improvements.
7. Work with Ditch Authority on possible funding of buffer incentives through the County.
8. Research and provide information on cost effective conservation practices that provide ditch and stream bank stabilization and report to County Board.
9. Work with SWCD and NRCS to encourage the re-enrollment of expiring CRP contracts that promote stream and ditch buffers.

GOAL 4: Reduce urban runoff and storm water impacts to surface waters.

Objective A: ***Assess urban non point source pollution in Brown County.***

Actions:

1. Consult with cities to review storm water system designs and current outlet systems.
2. Consult with cities to determine flows at different storm event levels.
3. Consult with industries to determine discharges to storm sewer systems and permitted discharges.
4. Sample to determine types and quantities of pollutants seen in the storm water system.
5. Work with State agencies to determine acceptable levels for storm water management.
6. Assess the nature, cause, and effect of urban runoff and storm water pollution on surface waters.

Objective B: ***Provide education to cities and citizens on runoff and storm water management.***

Actions:

1. Provide information and education opportunities to local officials on non point source pollution, runoff and storm waster issues.
2. Provide information to communities on the use of BMP's that reduce the effects of storm water runoff.
3. Provide education and training opportunities for implementation of storm water best management practices to city utility employees.
4. Assist in providing Phase II Storm water Program workshops for local officials and contractors.
5. Provide education opportunities to developers, and contractors on low impact development.
6. Provide education opportunities that highlight the role citizens play in non-point source pollution through press releases and community events.
7. Educate homeowners on the proper handling and disposal of household hazardous waste.

8. Offer incentives to residents to encourage redirecting runoff to pervious surfaces for on-lot infiltration.

Objective C: ***Implement Storm water and Runoff practices with cooperating Cities.***

Actions:

1. Assist communities to utilize existing and pursue additional funding for the implementation of urban best management practices.
2. Provide technical and financial assistance to communities to assist officials, developers, and contractors in fulfilling Phase II Storm water Program requirements.
3. Encourage and provide information on the utilization of storm water management practices including retention, infiltration and storm water wetlands.
4. Provide assistance on projects to follow erosion and sediment control regulations and techniques available from the MPCA and Minnesota Erosion Control Association (MECA).
5. Encourage the development of Storm water Management Plans that consider practices that improve water quality including street sweeping, catch basin cleaning, leaf litter management, salt application, snow removal storage, ponds, filter strips, infiltration and plans for future improvements.

PRIORITY CONCERN 2

Groundwater – including addressing concerns with pesticide and fertilizer use in agricultural and urban areas. Wellhead protection and well sealing opportunities. Address potential water quantity issues involved with industrial and rural development and city water use needs.

II. DESCRIPTION OF GROUNDWATER CONCERNS

Groundwater is the main source for drinking water in Brown County. High quality drinking water is necessary for both community health and economic well being. Protecting the sources of drinking water is a goal for the water plan by working with municipalities and individuals to prevent groundwater contamination.

Brown County is an area of intensive agriculture with areas of geology that make it susceptible to groundwater contamination. Well monitoring suggests that drinking well contamination can be experienced within the County. Human activities including urban and industrial development and waste water treatment have the potential to affect both private and public water sources. Working toward eliminating groundwater contamination sources including well sealing and reducing rural and urban chemical application are priorities.

Most areas of the County have shown the possibility of developing adequate ground water supplies for farm and domestic use. Planning for future development and gaining an understanding of the groundwater resources will help ensure that the resource is protected.

GOAL 1: Protect ground water sources from pesticide and fertilizer contamination from agricultural and urban contamination.

Objective A: ***Obtain Groundwater information relating to potential impacts.***

Actions:

1. Compile and review monitoring data from MDA on pesticide application and groundwater contamination.
2. Review Brown County Groundwater Vulnerability Project information.
3. Work with MDNR and MGS on well log survey.
4. Work with Brown Nicollet Community Health for well information from nitrate testing studies.

Objective B: ***Provide education and information on proper agricultural and residential application rates.***

Actions:

1. Use MDA guidelines to promote pesticide water quality BMP's
2. Concentrate education activities on priority areas that show greatest potential for groundwater impacts.
3. Work with and provide information to applicators and producers on following the University of Minnesota recommended application rates.
4. Provide field day education opportunities for ag suppliers, applicators and property owners on proper application practices.
5. Encourage soil sampling to gain a better understanding of soil needs before application.
6. Provide technical and financial assistance to assist producers in adopting BMP's to reduce the impacts of manure runoff.
7. Develop residential educational resources on chemical and fertilizer application.
8. Provide educational resources and technical assistance to community groups, schools and at community events on utilizing BMP's.

GOAL 2: Protect drinking water sources

Objective A: ***Recognize and support needs of public water supply wellhead protection.***

Actions:

1. Encourage community and non-community public water suppliers to develop and implement wellhead protection plans.
2. Work with public water suppliers to reduce potential impacts to drinking water sources.
3. Assist public water suppliers with the development of maps outlining the location of wells and radius of concern.
4. Consider wellhead protection areas when making land use decisions.
5. Utilize information provided by Minnesota Department of Health in source water assessments.

Objective B: ***Encourage private well protection from contamination sources.***

Actions:

1. Educate homeowners, realtors, and contractors on the importance of maintaining proper setbacks from private wells to potential contamination sources.
2. Educate homeowners and realtors on the importance of well disclosure.
3. Encourage homeowners to get private wells tested on a regular basis.

Objective C: ***Encourage proper sealing of unused or abandoned wells.***

Actions:

1. Inventory locations of abandoned or unused wells.
2. Prioritize the sealing of unused or abandoned wells based on potential for contamination.
3. Use existing and develop new cost-share programs to assist with well sealing costs.
4. Develop and distribute educational materials for homeowners, realtors, bankers and attorneys on the importance of disclosing and sealing wells.

GOAL 3: Minimize impacts to groundwater sources from industrial and rural development.

Objective A: ***Reduce impacts of rural and industrial development on groundwater resources.***

Actions:

1. Define and map areas that may have low availability of groundwater resources and high potential for contamination.
2. Obtain up to date information on water use practices involving rural development including feedlot needs and ethanol production.
3. Inform Planning and Zoning office on industrial uses that have high water use potential and develop plans that consider high water use impacts.
4. Work with DNR to consider planning for significant water use developments.

PRIORITY CONCERN 3:

Drainage – including possible inventory of existing system and need for improvements with the possibility for water storage. Buffer initiatives with emphasis on problem areas and erodible soils. Management focusing on public drainage system that provides agricultural production with benefits to water quality and quantity concerns.

III. DESCRIPTION OF DRAINAGE CONCERNS

Brown County's predominant land use is agricultural. Drainage has been and will remain an important issue affecting people's lives and livelihoods. The Brown County drainage system consists of approximately 90 ditch systems covering 340 miles of open drainage ditches and uncounted miles of private tile. The Brown County Commissioners act as the County Drainage Authority considering drainage repair and improvement issues.

The agricultural drainage system provides artificial drainage of water from the soil profile in order to allow crop production. The systems are designed to quickly and efficiently remove excess water creating the opportunity for large quantities of water to exit the system. This increased flow can have detrimental affects to the receiving waters that include ditches, streams, rivers and lakes. The excess flow causes erosion and carries with it various pollutants that can impact water quality.

Much of the drainage system is outdated and under designed to accept the ever increasing amount of tile that is installed. Understanding the existing system and its' potential will help to improve water quality. Considering options to reduce the load to the system including controlled drainage and wetland and water storage opportunities should be considered by the Board.

GOAL 1: Improve drainage management system based on water quality goals.

Objective A: ***Cooperate with Drainage Authorities to inventory current drainage system.***

Actions:

1. Utilize mapping and data management process from current GIS ditch layer for public drainage systems.
2. Field verify ditch systems to determine as built conditions.
3. Compile ditch information relating to previous repair and improvements.
4. Inventory conservation projects currently active on ditch network.
5. Consider new GIS based information system with archived ditch maps and compiled information.

Objective B: ***Determine and map problem areas***

Actions:

1. Identify areas with high potential for failure due to the amount of inputs to the system
2. Identify areas with high maintenance costs and develop solutions that provide water storage, reduced erosion and reduced maintenance.
3. Prioritize drainage systems that currently impact an impaired water body.

Objective C: ***Reduce water inputs and provide water storage to the system.***

Actions:

1. Utilize GIS data to create potential water retention sites.
2. Identify upstream practices that slow or reduce flow to receiving waters in problem areas.
3. Pursue funding opportunities for water storage or wetland restorations in high priority areas.
4. Explore funding mechanisms through the Ditch Authority that rewards landowners for their water retention efforts through incentives or reduced taxing.
5. Develop controlled drainage demonstration site.

Objective D: ***Develop education and incentive programs to increase conservation practices.***

1. Promote and seek funding for the installation of buffers on the drainage systems.
2. Pursue funding for alternatives to surface tile inlets.
3. Provide information and educational resources on water retention and wetland restoration efforts to officials and landowners.
4. Provide information and educational resources on controlled drainage to officials and landowners.
5. Develop economic worksheet considering water storage benefits to the system in reduced maintenance costs.
6. Encourage the County Drainage Authority to partner with other agencies for project support and funding.

PRIORITY CONCERN 4:

Wetlands/Water Retention – including protection and enhancement of existing wetland resources. Inventory of existing wetlands and potential areas for restoration and water retention projects. Wetland education to contractors involved with development projects.

IV. DESCRIPTION OF WETLAND/WATER RETENTION CONCERNS

Since Brown County has lost more than 90 percent of it's wetlands to drainage and development, the County as a whole is identified as a high priority area with regard to wetland preservation. The loss of wetlands leads to increased runoff creating the potential for water impairments. Ground water recharge and water storage are also impacted through the loss of wetlands. For this reason, water storage needs to be considered a resource rather that a liability.

Wetland restoration and water retention projects need to be developed that help to restore the natural hydrology. Restoration of wetlands, identification of wetland preservation areas and landuse changes along with consideration of drainage policy geared toward keeping water in its place and reducing peak flows is critical.

Goal 1: Protect existing wetlands and increase wetland resources.

Objective A: ***Identify current wetlands and potential wetland restoration sites.***

Actions:

1. Create wetland inventory for existing wetlands covered under local, State and Federal jurisdictions.
2. Create drained wetlands inventory for water storage potential.
3. Create GIS map of wetlands currently managed through an easement or conservation program.
4. Identify wetland preservation areas according to the Wetland Conservation Act.

Objective B: ***Educate citizens and officials on wetland functions and importance.***

Actions:

1. Collaborate with agency and conservation group partners to share information gathered through the inventory process.
2. Develop information to distribute to contractors, developers and realtors on wetland identification.
3. Provide wetland training opportunities to local officials who make planning, development and permitting decisions.
4. Work with DNR and Planning and Zoning on lakeshore development wetland impact issues.
5. Provide lakeshore owners information on needed permits for vegetation removal and beach development by the DNR.

Objective C: Encourage wetland restoration and management.

Actions:

1. Identify through the building permit process potential wetland impacts that may need consideration.
2. Protect existing wetland areas for their value to flood reduction, infiltration, sediment reduction, erosion control and nutrient reduction.
3. Administer the Wetland Conservation Act.
4. Work with DNR and USFWS to maintain existing wildlife and wetland areas.
5. Educate landowners to the benefits of converting drained wetlands in the WRP and CRP programs.
6. Work with SWCD and other agencies to enroll individuals in wetland restoration programs.

Objective D: Develop a Local Comprehensive Wetland Projection and Management Plan.

Actions:

1. Form a stakeholder/advisor group of County Board members, BWSR, DNR, Brown County SWCD, Brown County NRCS and local citizens of the County.
2. Develop the plan according to Wetland Conservation Act 8420.0650.

PRIORITY CONCERN 5:

Human Wastewater – including the inventory of septic and municipal systems for compliance and needs. Cooperate with municipal systems to find improvements for systems and possible funding options. Upgrade of failing and non compliant individual septic systems. TMDL concerns addressed for fecal limits.

V. DESCRIPTION OF HUMAN WASTEWATER CONCERNS

The cities of Brown County rely on central collection sewer systems. With changing regulatory and technological advancements there is a need for the County to provide assistance for the upgrade of these systems to improve water quality by improving waste water discharges. An inventory of existing systems and cooperation with the municipalities will help to determine needs to seek funding and assistance on potential improvements.

The rural community relies on Subsurface Sewage Treatment Systems (SSTS) for the treatment of human waste. A high percentage of the systems do not meet current State standards. Properly installed systems provide for sewage treatment that does not affect surface and ground water resources.

GOAL 1: Eliminate Subsurface Sewage Treatment System (SSTS) contamination to surface and groundwater.

Objective A: ***Maintain onsite sewage treatment inspection program.***

Actions:
1. Provide site and soils investigations with contractors to verify design criteria.
2. Provide assistance, review and approval of system designs.
3. Complete site inspections at time of installation.
4. Maintain file system of compliant systems and design and installation records.

Objective B: ***Provide education and seek funding for septic program.***

Actions:
1. Provide educational materials on system design and maintenance to new septic system owners.
2. Provide pumping notice to homeowners for maintenance to systems.
3. Develop information to be used at meetings, events and shows on the importance of SSTS upgrade and maintenance.
4. Provide financial and technical status reports to County Officials.
5. Inventory of systems considered Imminent Threat to Public Health or Safety.
6. Continue seeking funds for low interest loan programs sponsored by Clean Water Partnerships and County Septic fund.

GOAL 2: Assist with improvements and upgrades to municipal and industrial wastewater treatment systems.

Objective A: Inventory of existing processes in waste water treatment facilities

Actions:
1. Work with waste water operators and municipal officials to gain understanding of current systems.
2. Develop inventory of current treatment plant operations.

3. Obtain permit information pertaining to facility discharges and their potential impacts to impaired waters.

Objective B: Inventory of needs and funding opportunities for improved technologies.

1. Provide technical assistance and support to communities with inadequate sewage collection and treatment.
2. Work with operators to determine needs to upgrade and improve treatment facilities.
3. Research technologies to update and improve water treatment facilities.
4. Seek funding to upgrade processes and facilities as requested.

ON GOING ACTIVITIES

Brown County Local Water Management is involved in several diverse activities and programs through it's involvement with the Planning and Zoning office and relationship with the Brown Soil and Water Conservation District. The following is a partial list of ongoing activities and programs associated with the Brown County Water Plan:

-Wetland Conservation Act
-Planning and Zoning
-Brown County Feedlot Program
-Brown County Septic Inspection
-Geographic Information Systems
-Cottonwood Clean Water Partnership
-Little Cottonwood Clean Water Partnership
-Children's Water Festival
-Brown/Nicollet/Cottonwood Water Quality Board
-Brown Nicollet Community Health
-MDA AgBMP Loan Program
-Brown County Low Interest Septic Loan Program
-Household Hazardous Waste Program
-Brown County Recycling Program

BROWN COUNTY LOCAL WATER MANAGEMENT PLAN
10 YEAR IMPLEMENTATION SCHEDULE FOR PRIORITY CONCERNS

PRIORITY CONCERN 1: SOIL EROSION	Timeline	Cooperators	Costs
GOAL 1: Address impaired surface waters and their TMDL's			
Objective A: ***Develop understanding of water quality issues.***			
1. Continue and expand water testing through Clean Water Partnerships (CWP's) and submit data to the MPCA.	Continuous	CWP's, WP, Co	$20,000.00
2. Recruit volunteers for the MPCA's Citizen Stream Monitoring Program (CSMP) for impaired reaches.	Continuous	WP, SWCD, CWP's	$2,000.00
3. Recruit CSMP volunteers in the rural community for water bodies that have no previous sampling record.	Continuous	WP, SWCD	$2,000.00
4. Develop baseline data information through coordination with MPCA, MDA, MDH staff that will meet listing and delisting requirements.	Continuous	CWP's, WP, MPCA, MDA, MDH	$30,000.00
5. Follow approved sampling techniques and submit water quality data for analysis and review.	Continuous	CWP's, WP	$10,000.00
		TOTAL	$64,000.00
Objective B: ***Reduce the impairments in surface waters***			
1. Cooperate with SWCD and NRCS to market available conservation programs to landowners.	Continuous	WP, SWCD, NRCS, CWP's	$10,000.00
2. Develop strategies with the county drainage authority to address water quantity issues that explore alternatives to existing drainage management.	2008-2010	WP, Co, DA	$15,000.00
3. Utilize Counties Geographic Information Systems (GIS) data to inventory and target areas for best management practices.	2008-2010	WP, Co, SWCD	$5,000.00
4. Provide educational opportunities on the TMDL process to the public through articles, meetings and personal contacts.	Continuous	WP, SWCD, MPCA	$2,000.00
5. Partner with Cities and Industries to define their role in the TMDL process and the practices they can utilize to reduce impacts.	Continuous	WP, Cities, MPCA	$2,000.00
		TOTAL	$34,000.00

Objective C: ***Delisting of existing impaired waters.***

1. Work with CWP's and MPCA in the development and implementation of Total Maximum Daily Load (TMDL) plans for impaired waters.	Continuous	WP, MPCA, CWP's	$40,000.00
2. Provide County level assistance throughout study and implementation phases to coordinating agencies and organizations.	Continuous	WP	$10,000.00
3. Work with individuals and businesses to help develop plans that will reduce their impacts to the developed implementation plan on impaired reaches.	Continuous	WP	$5,000.00
4. Use developed priority areas as guide on progress and update implementation strategy based on successes and continued sampling.	Continuous	WP	$5,000.00
		TOTAL	$60,000.00

GOAL 2: Reduce soil erosion and sedimentation on agricultural lands.

Objective A: ***Identify areas that show potential for high erosion***

1. Use available GIS resources and soil survey information to identify areas of concern where soil and slope conditions exist that may cause highly erodible conditions.	2008-2010	WP, SWCD, Co	$2,000.00
2. Identify and map areas to be targeted for implementation projects.	Continuous	WP, SWCD, Co	$10,000.00
3. Prioritize implementation projects based on impaired waters.	Continuous	WP, SWCD, CWP's	$1,000.00
		TOTAL	$13,000.00

Objective B: ***Cooperate with SWCD to promote and market conservation programs and practices.***

1. Provide education to landowners in targeted areas on BMP's and conservation programs available through County, State and Federal programs.	Continuous	WP, SWCD, NRCS	$10,000.00
2. Work with the Brown County SWCD to pursue additional cost-share and incentive funding for BMP's.	Continuous	WP, SWCD, NRCS	$1,000.00
3. Work with County Board as the Ditch Authority to establish a long term or permanent buffer program.	2010-2012	WP, DA, Co	$200,000.00
5. Demonstrate conservation tillage, alternative drainage practices and BMP's through field days sponsored by the County, U of M, State Agencies and farm groups and businesses.	2010-2014	WP, SWCD, UofM, MDA	$40,000.00
		TOTAL	$251,000.00

GOAL 3: Reduce stream bank and ditch bank erosion.

Objective A: *Identify problems areas within the County.*

1. Utilize GIS data and ditch records to identify high priority areas prone to stream and ditch bank erosion.	2008-2010	WP, Co	$2,000.00
2. Conduct air photo reviews of priority areas.	2008-2010	WP, SWCD	$2,000.00
3. Conduct site visits and document erosion impacts.	2008-2014	WP, SWCD, CWP's	$5,000.00
4. Inventory and prioritize sites based on implementation potential.	2008-2014	WP, SWCD's, CWP's	$1,000.00
		TOTAL	$10,000.00

Objective B: *Provide education and options to control stream and ditch bank erosion.*

1. Target sites on the inventory list to educate and provide assistance to landowners on erosion control measures.	2008-2014	WP, SWCD,CWP's	$10,000.00
2. Pursue funding for the implementation of buffer strips and stream bank stabilization practices.	Continuous	WP, SWCD,CWP's	$2,000.00
3. Develop and provide information on upland management practices including wetland restorations, water storage, and infiltration practices that help to store and meter water.	Continuous	WP, SWCD,CWP's	$2,000.00
4. Provide education and information on grazing management practices that reduce bank erosion.	Continuous	WP, SWCD,CWP's	$2,000.00
5. Seek and provide funding for demonstration projects for fencing or buffers that show benefits of bank stabilization.	2008-2014	WP, SWCD,CWP's	$4,000.00
6. Work with County Drainage Authority to develop a plan that considers water retention and storage as part of ditch repair and improvements.		WP, DA, Co	$10,000.00
7. Work with Ditch Authority on possible funding of buffer incentives through the County.	2008-2014	WP, DA, Co	$20,000.00
8. Research and provide information on cost effective conservation practices that provide ditch and stream bank stabilization and report to County Board.	2008-2014	WP, DA, Co	$1,000.00
9. Work with SWCD and NRCS to encourage the re-enrollment of expiring CRP contracts that promote stream and ditch buffers.	Continuous	WP, SWCD, CWP's, NRCS	$4,000.00
		TOTAL	$55,000.00

GOAL 4: Reduce urban runoff and storm water impacts to surface waters.

Objective A: *Assess urban non point source pollution in Brown County.*

1. Consult with cities to review storm water system designs and current outlet systems.	2008-2010	WP, Cities	$2,000.00
2. Consult with cities to determine flows at different storm event levels.	Continuous	WP, Cities, MPCA	$5,000.00
3. Consult with industries to determine discharges to storm sewer systems and permitted discharges.	2008-2010	WP, Cities, Industry	$6,000.00
4. Sample to determine types and quantities of pollutants seen in the storm water system.	2008-2014	WP, Cities, MPCA	$5,000.00
5. Work with State agencies to determine acceptable levels for storm water management.	2008-2010	WP, Cities, MPCA	$1,000.00
6. Assess the nature, cause, and effect of urban runoff and storm water pollution on surface waters.	2008-2014	WP, Cities, MPCA	$20,000.00
		TOTAL	$39,000.00

Objective B: *Provide education to cities and citizens on runoff and storm water management.*

1. Provide information and education opportunities to local officials on non point source pollution, runoff and storm waster issues.	Continuous	WP	$5,000.00
2. Provide information to communities on the use of BMP's that reduce the effects of storm water runoff.	Continuous	WP	$5,000.00
3. Provide education and training opportunities for implementation of storm water best management practices to city utility employees.	Continuous	WP	$20,000.00
4. Assist in providing Phase II Storm water Program workshops for local officials and contractors.	Continuous	WP	$3,000.00
5. Provide education opportunities to developers, and contractors on low impact development.	Continuous	WP	$5,000.00
6. Provide education opportunities that highlight the role citizens play in non point source pollution through press releases and community events.	Continuous	WP	$2,000.00

7. Educate homeowners on the proper handling and disposal of household hazardous waste.	Continuous	WP, Recycling	$2,000.00
8. Offer incentives to residents to encourage redirecting runoff to pervious surfaces for on lot infiltration.	2010-2014	WP, Cities	$40,000.00
		TOTAL	$82,000.00

Objective C: ***Implement Storm water and Runoff practices with cooperating Cities.***

1. Assist communities to utilize existing and pursue additional funding for the implementation of urban best management pracitces.	Continuous	WP, Cities	$10,000.00
2. Provide technical and financial assistance to communities to assist officials, developers, and contractors in fulfilling Phase II Storm water Program requirements.	Continuous	WP, Cities	$10,000.00
3. Encourage and provide information on the utilization of storm water management practices including retention, infiltration and storm water wetlands.	Continuous	WP, Cities	$4,000.00
4. Provide assistance on projects to follow erosion and sediment control regulations and techniques available from the MPCA and Minnesota Erosion Control Association (MECA).	Continuous	WP, Cities	$2,000.00
5. Encourage the development of Storm water Management Plans that consider practices that improve water quality including street sweeping, catch basin cleaning, leaf litter management, salt application, snow removal storage, ponds, filter strips, infiltration and plans for future improvements.	2008-2010	WP, Cities	$5,000.00
		TOTAL	$31,000.00

PRIORITY CONCERN 2: GROUNDWATER

GOAL 1: Protect ground water sources from pesticide and fertilizer contamination from agricultural and urban contamination.

Objective A: ***Obtain Groundwater information relating to potential impacts.***

1. Compile and review monitoring data from MDA on pesticide application and groundwater contamination.	2008-2010	WP, MDA	$1,000.00

2. Review Brown County Groundwater Vulnerability Project information.	2008-2010	WP	$200.00
3. Work with MDNR and MGS on well log survey.	2008-2010	WP, DNR, MGS	$2,000.00
4. Work with Brown Nicollet Community Health for well information from nitrate testing studies.	Continuous	WP, MDH, BNC	$5,000.00
		TOTAL	$8,200.00

Objective B: ***Provide education and information on proper agricultural and residential application rates.***

1. Use MDA guidelines to promote pesticide water quality Bump's.	Continuous	WP, MDA	$1,000.00
2. Concentrate education activities on priority areas that show greatest potential for groundwater impacts.	Continuous	WP, SWCD	$2,000.00
3. Work with and provide information to applicators and producers on following the University of Minnesota recommended application rates.	Continuous	WP, SWCD, CWP's, Co	$5,000.00
4. Provide field day education opportunities for ag suppliers, applicators and property owners on proper application practices.	Continuous	WP, SWCD	$5,000.00
5. Encourage soil sampling to gain a better understanding of soil needs before application.	Continuous	WP, SWCD, Co	$2,000.00
6. Provide technical and financial assistance to assist producers in adopting BMP's to reduce the impacts of manure runoff.	Continuous	WP, SWCD, Co	$20,000.00
7. Develop residential educational resources on chemical and fertilizer application.	Continuous	WP, SWCD, MDA	$2,000.00
8. Provide educational resources and technical assistance to community groups, schools and at community events on utilizing BMP's.	Continuous	WP, SWCD	$2,000.00
		TOTAL	$39,000.00

GOAL 2: Protect drinking water sources

Objective A: ***Recognize and support needs of public water supply wellhead protection.***

1. Encourage community and non-community public water suppliers to develop and implement wellhead protection plans.	Continuous	WP, Cities, MDH	$2,000.00
2. Work with public water suppliers to reduce potential impacts to drinking water sources.	Continuous	WP, Cities, MDH	$5,000.00

3. Assist public water suppliers with the development of maps outlining the location of wells and radius of concern.	2008-2012	WP, Cities, MDH	$1,000.00
4. Consider wellhead protection areas when making land use decisions.	Continuous	WP, Cities, MDH	$2,000.00
5. Utilize information provided by Minnesota Department of Health in source water assessments.	Continuous	WP, Cities, MDH	$1,000.00
		TOTAL	$11,000.00

Objective B: ***Encourage private well protection from contamination sources.***

1. Educate homeowners, realtors, and contractors on the importance of maintaining proper setbacks from private wells to potential contamination sources.	Continuous	WP, Cities, MDH	$2,000.00
2. Educate homeowners and realtors on the importance of well disclosure.	Continuous	WP, Cities, MDH	$2,000.00
3. Encourage homeowners to get private wells tested on a regular basis.	Continuous	WP, Cities, MDH	$1,000.00
		TOTAL	$5,000.00

Objective C: ***Encourage proper sealing of unused or abandoned wells.***

1. Inventory locations of abandoned or unused wells.	2008-2012	WP, MDH	$50,000.00
2. Prioritize the sealing of unused or abandoned wells based on potential for contamination.	2008-2012	WP, MDH	$2,000.00
3. Use existing and develop new cost-share programs to assist with well sealing costs.	Continuous	WP, MDH, Co	$40,000.00
4. Develop and distribute educational materials for homeowners, realtors, bankers and attorneys on the importance of disclosing and sealing wells.	Continuous	WP, MDH	$4,000.00
		TOTAL	$96,000.00

GOAL 3: Minimize impacts to groundwater sources from industrial and rural development.

Objective A: ***Reduce impacts of rural and industrial development on groundwater resources.***

1. Define and map areas that may have low availability of groundwater resources and high potential for contamination.	2008-2009	WP, MDH, DNR, MGS	$2,000.00

2. Obtain up to date information on water use practices involving rural development including feedlot needs and ethanol production.	2008-2009	WP, MDH, Industry	$1,000.00
3. Inform Planning and Zoning office on industrial uses that have high water use potential and develop plans that consider high water use impacts.	Continuous	WP, P&Z	$1,000.00
4. Work with DNR to consider planning for significant water use developments.	Continuous	WP, DNR	$4,000.00
		TOTAL	$8,000.00

PRIORITY CONCERN 3: DRAINAGE

GOAL 1: Improve drainage management system based on water quality goals.

Objective A: ***Cooperate with Drainage Authorities to inventory current drainage system.***

1. Utilize mapping and data management process from current GIS ditch layer for public drainage systems.	Continuous	WP, DA	$5,000.00
2. Field verify ditch systems to determine as built conditions.	2010-2016	WP, DA	$50,000.00
3. Compile ditch information relating to previous repair and improvements.	2008-2010	WP, DA	$10,000.00
4. Inventory conservation projects currently active on ditch network.	2008-2010	WP, SWCD	$2,000.00
5. Consider new GIS based information system with archived ditch maps and compiled information.	2010-2016	WP, DA, Co	$100,000.00
		TOTAL	$167,000.00

Objective B: ***Determine and map problem areas***

1. Identify areas with high potential for failure due to the amount of inputs to the system.	2008-2010	WP, SWCD	$2,000.00
2. Identify areas with high maintenance costs and develop solutions that provide water storage, reduced erosion and reduced maintenance.	2008-2010	WP, DA, SWCD	$2,000.00
3. Prioritize drainage systems that currently impact an impaired water body.	2008-2010	WP	$2,000.00
		TOTAL	$6,000.00

Objective C: ***Reduce water inputs and provide water storage to the system.***

1. Utilize GIS data to create potential water retention sites.	2008-2010	WP	$4,000.00

2. Identify upstream practices that slow or reduce flow to receiving waters in problem areas.	Continuous	WP, SWCD	$1,000.00
3. Pursue funding opportunities for water storage or wetland restorations in high priority areas.	Continuous	WP, SWCD, Co	$500,000.00
4. Explore funding mechanisms through the Ditch Authority that rewards landowners for their water retention efforts through incentives or reduced taxing.	2010-2016	WP, DA, Co	$500,000.00
5. Develop controlled drainage demonstration site.	2010-2012	WP, DA, Co	$40,000.00
		TOTAL	$1,045,000.00

Objective D: ***Develop education and incentive programs to increase conservation practices.***

1. Promote and seek funding for the installation of buffers on the drainage systems.	Continuous	WP, DA, SWCD, Co	$300,000.00
2. Pursue funding for alternatives to surface tile inlets.	Continuous	WP, DA, SWCD, Co	$50,000.00
3. Provide information and educational resources on water retention and wetland restoration efforts to officials and landowners.	Continuous	WP, SWCD	$10,000.00
4. Provide information and educational resources on controlled drainage to officials and landowners.	Continuous	WP, SWCD	$2,000.00
5. Develop economic worksheet considering water storage benefits to the system in reduced maintenance costs.	2010-2012	WP, SWCD	$5,000.00
6. Encourage the County Drainage Authority to partner with other agencies for project support and funding.	2010-2012	WP	$100,000.00
		TOTAL	$467,000.00

PRIORITY CONCERN 4: WETANDS/WATER RETENTION

GOAL 1: Protect existing wetlands and increase wetland resources

Objective A: ***Identify current wetlands and potential wetland restoration sites.***

1. Create wetland inventory for existing wetlands covered under local, State and Federal jurisdictions.	2008-2012	WP, BWSR	$20,000.00
2. Create drained wetlands inventory for water storage potential.	2008-2012	WP, BWSR	$50,000.00
3. Create GIS map of wetlands currently managed through an easement or conservation program.	2008-2012	WP, SWCD, BWSR	$5,000.00
		TOTAL	$75,000.00

Objective B: ***Educate citizens and officials on wetland functions and importance.***

1. Collaborate with agency and conservation group partners to share information gathered through the inventory process.	2008-2012	WP	$2,000.00
2. Develop information to distribute to contractors, developers and realtors on wetland identification.	Continuous	WP, BWSR	$5,000.00
3. Provide wetland training opportunities to local officials who make planning, development and permitting decisions.	Continuous	WP, BWSR, COE	$5,000.00
4. Work with DNR and Planning and Zoning on lakeshore development wetland impact issues.	Continuous	WP, DNR, P&Z	$2,000.00
5. Provide lakeshore owners information on needed permits for vegetation removal and beach development by the DNR.	Continuous	WP, DNR, P&Z	$2,000.00
		TOTAL	$16,000.00

Objective C: ***Encourage wetland restoration and management.***

1. Identify through the building permit process potential wetland impacts that may need consideration.	Continuous	WP, P&Z	$10,000.00
2. Protect existing wetland areas for their value to flood reduction, infiltration, sediment reduction, erosion control and nutrient reduction.	Continuous	WP, DNR, BWSR	$5,000.00
3. Administer the Wetland Conservation Act.	Continuous	WP, Co	$100,000.00
4. Work with DNR and USFWS to maintain existing wildlife and wetland areas.	Continuous	WP, DNR, USFWS	$2,000.00
5. Educate landowners to the benefits of converting drained wetlands in the WRP and CRP programs.	Continuous	WP, SWCD	$10,000.00
6. Work with SWCD and other agencies to enroll individuals in wetland restoration programs.	Continuous	WP, SWCD, NRCS	$30,000.00
		TOTAL	$157,000.00

Objective D: ***Develop a Local Comprehensive Wetland Protection and Management Plan.***

1. Form a stakeholder/advisor group of County Board members, BWSR, DNR, Brown County SWCD, Brown County NRCS and local citizens of the County.	2008-2010	WP, Co, BWSR, DNR, SWCD, NRCS	$2,000.00
2. Develop the plan according to Wetland Conservation Act 8420.0650.	2010-2012	WP, Co, BWSR, DNR, SWCD, NRCS	$10,000.00
3. Administer the Wetland Protection and Management Plan.	Continuous	WP	
		TOTAL	$12,000.00

PRIORITY CONCERN 5: HUMAN WASTEWATER

GOAL 1: Eliminate Subsurface Sewage Treatment System (SSTS) contamination to surface and groundwater.

Objective A: ***Maintain onsite sewage treatment inspection program.***

1. Provide site and soils investigations with contractors to verify design criteria.	Continuous	WP, Co	$5,000.00
2. Provide assistance, review and approval of system designs.	Continuous	WP, Co	$5,000.00
3. Complete site inspections at time of installation.	Continuous	WP, Co	$10,000.00
4. Maintain file system of compliant systems and design and installation records.	Continuous	WP, Co	$2,000.00
		TOTAL	$22,000.00

Objective B: ***Provide education and seek funding for septic program.***

1. Provide educational materials on system design and maintenance to new septic system owners.	Continuous	WP, Co	$2,000.00
2. Provide pumping notice to homeowners for maintenance to systems.	Continuous	WP, Co	$5,000.00
3. Develop information to be used at meetings, events and shows on the importance of ISTS upgrade and maintenance.	Continuous	WP, Co	$2,000.00
4. Provide financial and technical status reports to County Officials.	Continuous	WP, Co	$1,000.00
5. Inventory of systems considered Imminent Threat to Public Health or Safety.	2010-2014	WP, Co	$60,000.00
6. Continue seeking funds for low interest loan programs sponsored by Clean Water Partnerships and County Septic fund.	Continuous	WP, Co	$1,500,000.00

		TOTAL	$1,570,000.00

GOAL 2: Assist with improvements and upgrades to municipal and industrial wastewater treatment systems.

Objective A: *Inventory of existing processes in waste water treatment facilities*

1. Work with waste water operators and municipal officials to gain understanding of current systems.	2008-2010	WP, Cities	$5,000.00
2. Develop inventory of current treatment plant operations.	2008-2010	WP, Cities	$2,000.00
3. Obtain permit information pertaining to facility discharges and their potential impacts to impaired waters.	2008-2010	WP, Cities, MPCA	$2,000.00
		TOTAL	$9,000.00

Objective B: *Inventory of needs and funding opportunities for improved technologies.*

1. Provide technical assistance and support to communities with inadequate sewage collection and treatment.	Continuous	WP, Cities	$10,000.00
2. Work with operators to determine needs to upgrade and improve treatment facilities.	Continuous	WP, Cities	$30,000.00
3. Research technologies to update and improve water treatment facilities.	Continuous	WP, Cities	$4,000.00
4. Seek funding to upgrade processes and facilities as requested.	Continuous	WP, Cities	$2,000,000.00
		TOTAL	$2,044,000.00
		10 YEAR PLAN TOTAL	$6,396,200.00

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, MN 55155

In the Matter of Reviewing the Local Water Management Plan Update for Brown County (Minnesota Statutes, 2003, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Brown County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Minnesota Board of Water and Soil Resources (Board) on April 22, 2008, pursuant to Minnesota Statute (M.S.) Section 103B.315, Subdivision (Subd.) 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1. The Board received a resolution from Brown County, dated June 27, 2006, requesting a two-year extension of their current Local Water Management Plan.

2. On August 24, 2006, the Board officially approved the Brown County extension request, thereby extending the end-date to December 31, 2008.

3. On August 9, 2007, the Board received a Priority Concerns Scoping Document from Brown County, pursuant to M.S. Section 103B.312.

4. On September 27, 2007, the Board's Southern Region Water Planning Committee met with representatives of Brown County to discuss state agencies review comments, the contents of the Priority Concerns Scoping Document, and recommendations for the content of the final Plan Update.

5. On October 24, 2007, the Board of Water and Soil Resources approved official comments on the Brown County Priority Concerns Scoping Document, which were mailed to the County on October 24, 2007.

6. On April 22, 2008, the Board received the Brown County Plan Update, a record of the public hearing, and copies of all written comments pertaining to the Plan Update for final State review pursuant to M.S. Section 103B.315, Subd. 5.

7. The priority concerns the Plan Update addresses include:
    a. **Soil Erosion**
    b. **Groundwater**
    c. **Drainage**
    d. **Wetlands and Water Retention**
    e. **Human Wastewater**

8. On August 7, 2008, the Southern Region Water Planning Committee of the Board reviewed the recommendation of the state review agencies regarding final approval of the Brown County Plan Update. Recommendations of the state review agencies were:
    a. Minnesota Department of Agriculture: recommends approval;
    b. Minnesota Department of Health: recommends approval;
    c. Minnesota Department of Natural Resources: recommends approval;
    d. Minnesota Pollution Control Agency: recommends approval;
    e. Minnesota Environmental Quality Board: no recommendation received;
    f. Minnesota Board of Water and Soil Resources regional staff: recommends approval;
    g. Board Regional Water Planning Review Committee: recommends approval.

9. On August 7, 2008, the Board's Southern Region Water Planning Committee decision was to provide the following recommendation to the full Board at its next scheduled meeting:
    a. The Brown County Plan Update shall be in effect from January 1, 2008 through August 28, 2018, as pursuant to M.S. 103B.311 Subd. 4 (5) (a local water management plan must not extend more than ten years from the date of Board approval); and
    b. Recommend approval of the Plan Update; and
    c. Recommend that Brown County be required to update the Goals, Objectives, and Implementation section of the Plan Update and obtain Board approval by August 28, 2013.

10. This update will be in effect until August 28, 2018.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of Brown County pursuant to M.S. Section 103B.315, Subd. 5.

2. The Brown County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the County; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the Brown County Local Water Management Plan with a required update to the Implementation section (Goals, Objectives, and Action) by August 28, 2013.

Dated at Olivia, Minnesota, this 28th day of August, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Minnesota Board of Water & Soil Resources

DATE: July 21, 2008

TO: Jeff Nielsen, BWSR Southern Regional Supervisor
Southern Region Water Planning Committee

FROM: Thomas Fischer, Board Conservationist

SUBJECT: **Nicollet County Local Water Management Plan - Final Review**

Nicollet County submitted its Priority Concerns Scoping Document (PCSD) in September 2006 for state agency reviews and comments. The Board of Water and Soil Resources (BWSR) Southern Region Water Planning Committee (Committee) met with representatives of Nicollet County on November 8, 2006, to discuss state agencies review comments, the contents of the PCSD and recommendations for the content of the final Local Water Management Plan (Plan). In a letter to Nicollet County dated December 20, 2006, the BWSR communicated the State's official comments: the priority concerns to be addressed in the final Plan were deemed to be appropriate; the Committee did not recommend or require any changes to the PCSD.

On November 16, 2006, the BWSR received a resolution from Nicollet County requesting a two-year extension of their current Plan. On December 20, 2006, the BWSR officially approved the extension request. The extended end-date of the current Plan was set at December 31, 2008.

Nicollet County completed the final draft Plan, held the required public hearing on April 22, 2008, and submitted the final draft Plan to the BWSR on May 9, 2008, as required for final review by state agencies. State agency comments and recommendations were to be submitted to Jeff Nielsen by June 30, 2008.

The following state agencies provided comments/recommendations:

- Minnesota Department of Agriculture (MDA) approved the entire Plan as submitted, no other comments/recommendations.
- Minnesota Department of Health (MDH) approved the entire Plan as submitted, no other comments/recommendations.
- Minnesota Pollution Control Agency (MPCA) recommends that BWSR approve the entire Plan as submitted and provided the following for consideration:
    - work closely with the drainage authority to fully assess all impacts of proposed drainage projects;

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fax (218) 755-4201

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Web: www.bwsr.state.mn.us TTY: (800) 627-3529 An equal opportunity employer Printed on recycled paper

- recommended revisions to a table listing waters on the Impaired Waters List within the Plan to provide accurate and up-to-date information;
- encourages Nicollet County to utilize the MPCA's Environmental Data Access System to find and download surface water monitoring sites data.

The following state agencies did not provide comments/recommendations:

- Minnesota Department of Natural Resources
- Minnesota Environmental Quality Board

I have completed my final review of the Nicollet County Plan and find that it does meet the minimum requirements of Minnesota Statute 103B.314. The Plan:

- focuses on the priority concerns identified in the PCSD;
- assesses the priority concerns and sets forth appropriate goals and objectives;
- provides an implementation program with measurable actions, timeline and budget; and
- includes all required sections.

If approved as submitted to BWSR, there is one requirement of Minnesota Statute that the Nicollet County Plan would not comply with. Minnesota Statute 103B.311 Subdivision 4 (5) states that a local water management plan must not extend more than ten years from the date of Board approval. The BWSR Board is scheduled to take action on this plan at their August 28, 2008 meeting. To comply with Minnesota Statute, the Nicollet County Plan should expire on August 28, 2018. The Nicollet County Plan covers the period of September 1, 2008 through December 31, 2018—three months beyond the ten year maximum. A very easy problem to correct, but does need to be corrected to comply with Minnesota Statute.

I hereby recommend approval of the Nicollet County Local Water Management Plan. I look forward to assisting Nicollet County in the implementation of their Plan.

NICOLLET COUNTY

FOURTH GENERATION

LOCAL WATER MANAGEMENT PLAN

September 1, 2008
Through
August 31, 2018

NICOLLET COUNTY LOCAL WATER MANAGEMENT PLAN

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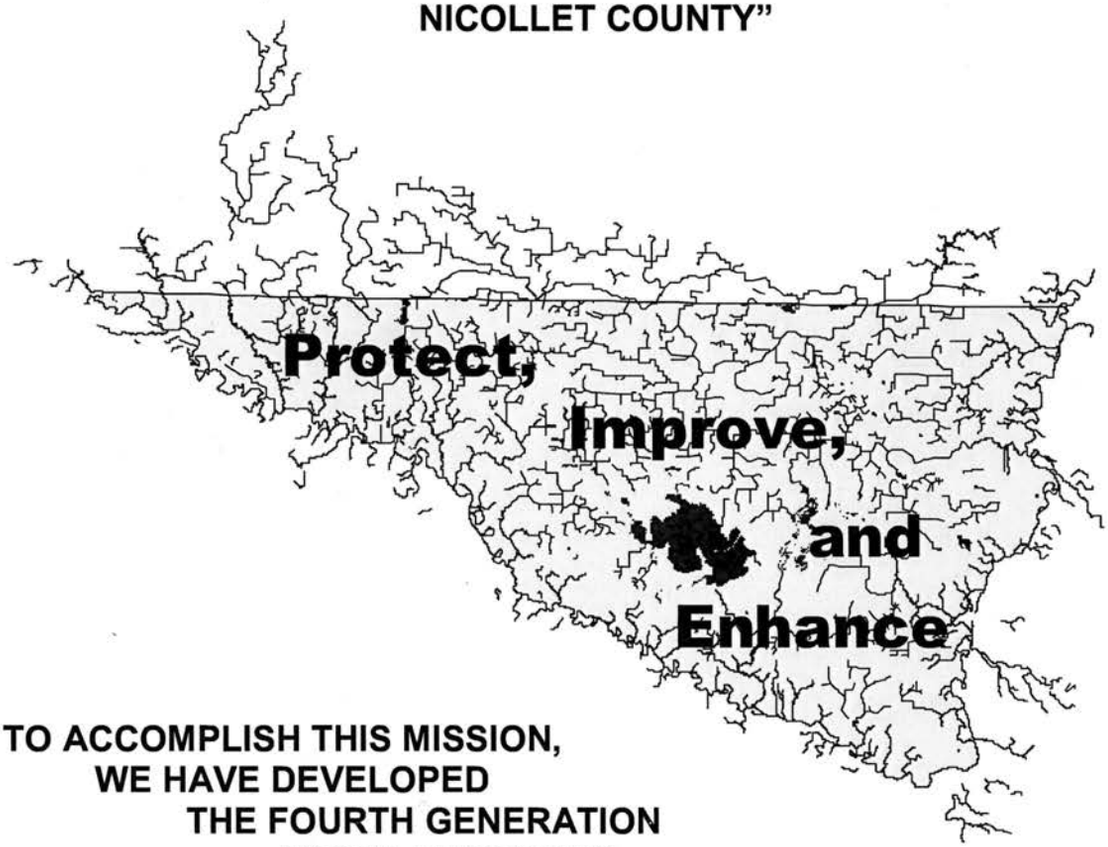
ACRONYMS

13 County	South Central Minnesota County Comprehensive Water Planning Project Joint Powers Board consisting of Blue Earth, Brown, Cottonwood, Faribault, Freeborn, Jackson, LeSueur, Martin, Nicollet, Sibley, Steele, Waseca and Watonwan counties
Adj. Cnty	Adjacent Counties
BdCom	Nicollet County Board of Commissioners
BMP	Best Management Practices
BNC WQB	Brown-Nicollet-Cottonwood Water Quality Board
BN CHS	Brown-Nicollet Community Health Service
BWSR	Board of Water and Soil Resources
CCMR	Coalition for a Clean Minnesota River
Cities	Nicollet County Cities
Con-Gr	Conservation Groups
County	Nicollet County
CWP	MPCA Clean Water Partnership Grant
DNR	Minnesota Division of Natural Resources
ESD	Nicollet County Environmental Services Department
FSA	Farm Services Agency
GAC	Gustavus Adolphus College, St. Peter
GIS	Geographic Information System
IATP	Institute for Agriculture and Trade Policy
LGU	Local Governmental Units, Nicollet County or City Offices or Nicollet SWCD
MDA	Minnesota Department of Agriculture
MDH	Minnesota Department of Health
MES	University of Minnesota Extension Service at Nicollet County
MidMN	Middle Minnesota River Watershed
MGS	Minnesota Geological Survey
MPCA	Minnesota Pollution Control Agency
MSU-M	Minnesota State University at Mankato
NCEM	Nicollet County Emergency Management
NCLWP	Nicollet County Local Water Management Plan
NCPB	Nicollet County Park Board
NPDES/SDS	National Pollutant Discharge Elimination System/State Disposal System
NCSO	Nicollet County Sheriff's Office
NRCS	Natural Resources Conservation Service
PW	Nicollet County Public Works Department
RR WS	Rush River Watershed Clean Water Partnership
SMC	Seven Mile Creek Watershed Clean Water Partnership
SSTS	Subsurface Sewage Treatment System
SWCD	Nicollet Soil and Water Conservation District
TMDL	Total Maximum Daily Load
TRRCD	Three Rivers Resource Conservation and Development Council Association
U of M	University of Minnesota
TSW	Tri-County Solid Waste Office (LeSueur, Nicollet and Sibley Counties)
USGS	United States Geological Survey
WCA	Wetland Conservation Act
WHP	Wellhead Protection Area
WRC	Minnesota State University at Mankato – Water Resource Center
WS	Watershed

THE MISSION STATEMENT

"TO PROTECT, IMPROVE & ENHANCE THE WATER RESOURCES OF NICOLLET COUNTY"



**TO ACCOMPLISH THIS MISSION,
WE HAVE DEVELOPED
THE FOURTH GENERATION
NICOLLET COUNTY
LOCAL WATER
MANAGEMENT PLAN**

**SEPTEMBER 1, 2008
THROUGH
AUGUST 31, 2018**

A copy of this Plan and other pertinent information can be found at the Environmental Services Department at the Nicollet County Government Center, 501 South Minnesota Avenue, St. Peter, MN 56082 or by going to the Nicollet County Website at http://www.co.nicollet.mn.us/; then going to the Environmental Services Department link under the heading of Departments.

NICOLLET COUNTY CONTRIBUTORS

The following is a list of those who have contributed talent, time, money and support to the development of the Fourth Generation Nicollet County Local Water Management Plan. Without their assistance and knowledge this Plan would not have been developed. With their continued assistance it will be a successful mechanism to "Protect, Improve and Enhance Our Water Resources" in Nicollet County and beyond.

PREPARED BY:
Pamela Rivers, Nicollet County Local Water Management Plan Administrator
The Local Water Management Task Force Members

WITH ASSISTANCE FROM:
The Citizens of Nicollet County
The County Water Resources Management Citizen Task Force
The Nicollet County Board of Commissioners
The City Officials of Nicollet County
The Township Officials of Nicollet County
The Offices and Departments of Nicollet County
Nicollet Soil and Water Conservation District
Brown-Nicollet Environmental Health Office
Brown-Nicollet-Cottonwood Water Quality Joint Powers Board
Rush River Watershed Clean Water Partnership

STATE AND FEDERAL AGENCY CONTRIBUTORS:
Board of Water and Soil Resources
Minnesota Department of Agriculture
Minnesota Department of Health
Minnesota Department of Natural Resources
Minnesota Environmental Quality Board
Minnesota Geologic Survey
Minnesota Pollution Control Agency
University of Minnesota Extension Service – Nicollet County
U.S.D.A. Natural Resources Conservation Service

THE REVISION OF THE 2008-2018 LWM PLAN WAS FUNDED BY:
Nicollet County
Natural Resources Block Grant from the Minnesota Board of Water and Soil Resources

LOCAL WATER MANAGEMENT TASK FORCE MEMBERS

The following people dedicated time and expertise to the development of the LWM Plan. It is through their efforts that staff was able to develop a document that reflects the needs and desires of the citizens of the county. Thank you for your commitment.

CITIZEN MEMBERS:
Eric Peters - Area Business
John Kral - Nicollet SWCD Board Supervisor and Area Crop Farmer
Kathy Meyer – College Student and Urban Resident - Resigned 2008
Ken Albrecht – Rural Resident
Kevin Finstad – Rural Resident and Small Business Owner - Resigned 2007
Marty Schott – Area Farmer and Crop Consultant
Roger Schoeb - Rural Resident
Tim Gieseke – Area Farmer and Agricultural Business Owner
Tom Zellmer - Nicollet County Township Officer Association and Belgrade Township Supervisor
Walter Krohn – Area Farmer and represented the Nicollet Conservation Club, Deceased

TECHNICAL MEMBERS:
Kevin Ostermann - Nicollet SWCD District Manager
Blake Honetschlager – Nicollet SWCD District Technician
Mike Wagner - Nicollet County Public Works Director
Kevin Kuehner - Water Quality Specialist, B-N-C CWP (position vacant as of September 2007)
Ed Hohenstein; replacing Scott MacLean in April 2007 - Watershed Specialist, B-N-C CWP
Jack Bovee – Water Quality Technician, B-N-C CWP
Ronald Otto, Coordinator, Rush River Watershed Clean Water Partnership
Wayne Schoper – Minnesota Extension Service, Nicollet County
Pamela Rivers - Nicollet County Water Management Plan Coordinator
Joel Anderson - DNR Area Wildlife Manager
Stephanie McLain; replacing Yamika Stokes in May 2006, NRCS, District Conservationist

EX-OFFICIO MEMBERS:
Judy Hanson - County Commissioner
Dr. Bruce Beatty – County Commissioner; replacing Commissioner David Haack
Mandy Landkamer - Director, County Environmental Services, Tina Rosenstein, Retired
Thomas Fischer – Board Conservationist – Board of Water and Soil Resources

SPECIAL RECOGNITION:

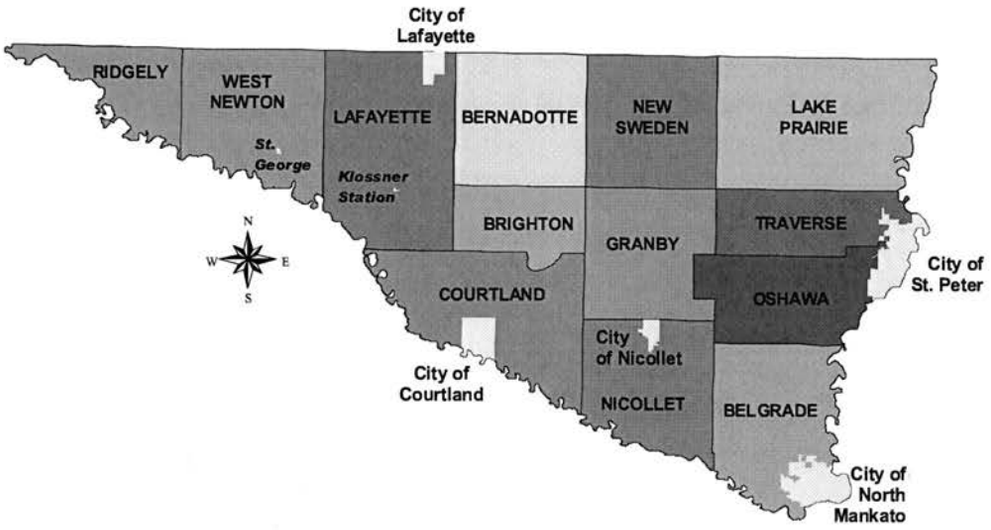
- To Ms. Tina Rosenstein, retired Director of the Environmental Services Department, who, as an intern at MSU-M Urban Studies Department, wrote some of the original county water plans within the 13 County Joint Powers and had remained active in local water management throughout her professional career.
- To Mr. Walter Krohn, who passed away in 2007, whose faithful attendance and active interest was a source of many ideas used in development of the water plans.
- To Ms. Kathy Meyer and Mr. Kevin Finstad who contributed to the development of the Priority Concerns with their knowledge of the County and regard for the importance of protecting and enhancing our natural resources.
- To Mr. Thomas Fischer, Board Conservationist with the BWSR, whose dedication and assistance has guided this process and helped the Task Force members to achieve an environmentally sound, fiscally responsible and achievable Water Plan.

EXECUTIVE SUMMARY

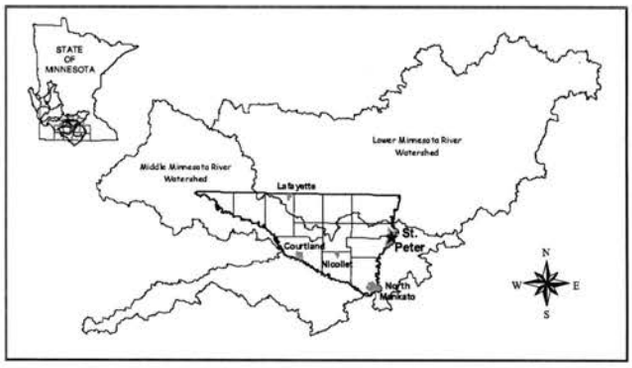
Background:

Nicollet County is located in south central Minnesota lying entirely within the Minnesota River Basin and lies adjacent to the counties of Blue Earth, Brown, Le Sueur, Renville and Sibley. The thirteen townships form a triangular shape with 104.6 miles of the Minnesota River forming the southeast and southwest boundaries. A line of forested bluffs separate the river valley from land that is relatively flat and historically used for agricultural purposes. Approximately 245,000 acres are actively farmed.

There are five cities: the largest being North Mankato with the County seat, St. Peter following closely in population and rapidity of growth. The cities of Courtland, Lafayette and Nicollet, with a small portion of the City of Mankato, complete the list of cities in the County. There are two unincorporated rural townsites; Klossner is located in Lafayette Township and Saint George is located in West Newton Township.



The County lies entirely within the Minnesota River Basin and the County Commissioners are active in the Minnesota River Board and other organizations promoting enhancement, while preserving the natural resources. The majority of the County lies within the Middle Minnesota River Watershed. Along with Nicollet County, the counties of Blue Earth, Brown, Cottonwood, LeSueur, Redwood, Renville and Sibley and a very small portion of Watonwan make up the Middle Minnesota River Watershed technical committee which meets to discuss natural resource issues. The upper 1/3 of the county lies within the Lower Minnesota River Watershed with the counties of Carver, Dakota, Hennepin, LeSueur, McLeod, Renville, Rice, Scott, Sibley and a small portion of Ramsey at the mouth of the Minnesota River. Growth of the urban population and concerns of the rural area makes this a complex watershed.

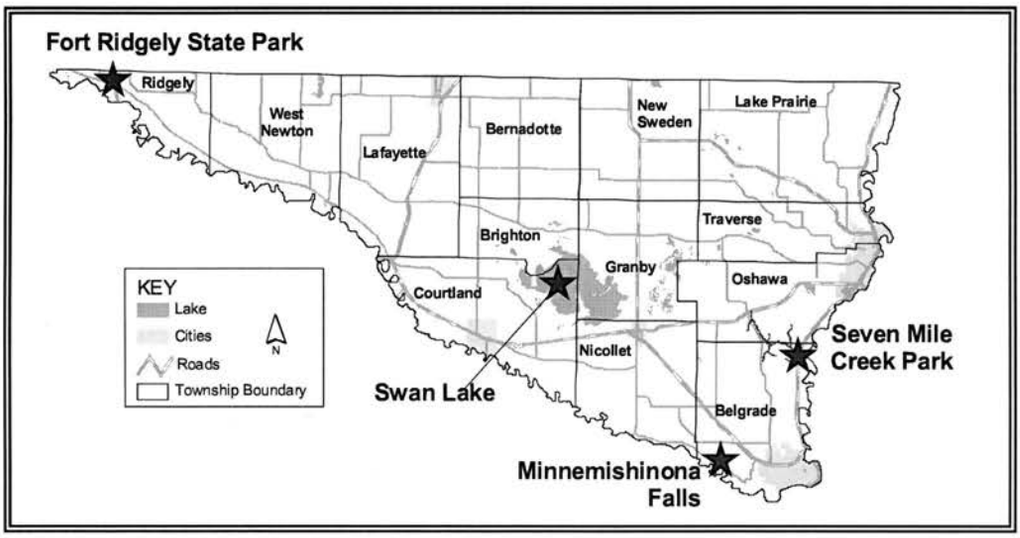


The latest population Census is listed below with the projected population increase over the next 20 years of 7% from 2000 to 2010 and 14% from 2000 to 2030.

STATE DEMOGRAPHIC CENTER COUNTY PROJECTIONS								
MCD	Adjust. Census 2000	Total Pop 2002	Extrapolated					
			2005	2010	2015	2020	2025	2030
NICOLLET COUNTY	**27,219**	**30,471**	**30,840**	**31,860**	**32,630**	**33,190**	**33,590**	**34,000**
CITIES								
Courtland	538	553	578	635	682	721	755	791
Lafayette	529	531	542	570	592	610	624	642
Mankato (pt)	0	0	0	0	0	0	0	0
Nicollet	889	922	943	994	1,034	1,067	1,094	1,126
North Mankato (pt)	11,800	12,208	12,459	13,077	13,570	13,956	14,221	14,391
St. Peter	9,765	9,979	10,037	10,239	10,377	10,463	10,525	10,639
Total for Cities	**23,521**	**24,193**	**24,559**	**25,515**	**26,255**	**26,817**	**27,219**	**27,589**
TOWNSHIPS								
Belgrade	1,031	1,049	1,065	1,106	1,137	1,161	1,183	1,209
Bernadotte	346	358	361	371	378	383	387	394
Brighton	169	165	162	158	154	150	146	144
Courtland	715	720	719	724	725	723	721	722
Granby	259	258	252	245	237	229	222	218
Lafayette	724	719	713	707	699	689	679	672
Lake Prairie	638	631	621	609	595	579	565	558
New Sweden	326	331	327	322	315	308	301	298
Nicollet	511	508	499	488	476	462	451	445
Oshawa	525	526	535	557	574	587	598	612
Ridgely	126	121	118	115	111	107	104	102
Traverse	363	372	390	429	462	489	512	538
West Newton	517	520	517	515	512	507	501	499
Total for Townships	**6,250**	**6,278**	**6,279**	**6,346**	**6,375**	**6,374**	**6,370**	**6,411**
Per Cent of Change 2000-2010 is 7%								
Per Cent of Change 2000-2030 is 14%								
Incorporates CQR corrections for 2000							28-Jun-04	
Projected population to 2030 for cities and townships outside the Twin Cities area Extrapolated population figures going out to 2030 for cities (Office of the State Demographer: Dataset, published July 1, 2004) | resource details								

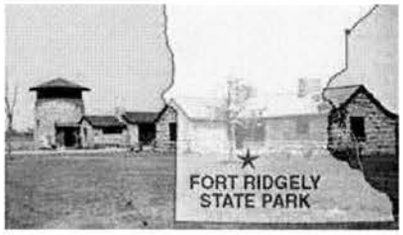
* http://www.demography.state.mn.us/DownloadFiles/00Proj/PopulationProjections02.pdf

The parks and scenic areas in the County are a source of pride to the citizens and show the desire to not only preserve and enhance the County's natural resources, but to show-case them for all to see. Among these natural amenities are wildlife management areas, numerous parks and boat landings on the Minnesota River. Below is a map of four areas described below.



- **Swan Lake** as one of the largest prairie pothole marshes in the United States, offers birding, hunting and research opportunities with public landings along its shore. Nicollet Creek/Swan Lake Outlet has one of the best water quality designations of the tributaries to the Minnesota River. Swan Lake is managed through the cooperation between DNR Wildlife and Fisheries, landowners, conservation clubs and the many visitors who enjoy this unique and beautiful area in central Nicollet County.

- **Fort Ridgely State Park** is the only state park in the County and is located at the far westerly edge of the County. The fort was built in 1853 and became a State park in 1911. There are camp sites, a 9 hold golf course, and many other recreational opportunities. In 2011, the Park will be featured on the Minnesota State Park Permit which is required for entrance to any state park. The design of the sticker is pictured at the right. This will provide the public with the reminder of this beautiful area and the opportunity to visit the ruins of this once thriving outpost. You can find out more about Fort Ridgely State Park and all that it offers by going to the DNR website at http://www.dnr.state.mn.us/state_parks/fort_ridgely/index.html.



- **Seven Mile Creek County Park** was established in 1967 and now encompasses 628 acres in Belgrade and Oshawa townships. The Park is located between North Mankato and St Peter on both sides of US 169. Some of the attractions that draw over 150,000 people to the Park annually include: picnic grounds with a shelter and playground equipment, a boat landing, ball diamonds, over eight miles of multi-use

trails (including many groomed for horse riding), the Creek which is stocked with brown trout annually and the beautiful forested areas throughout the surrounding vicinity. Since 1996 three surface water monitoring sites have been operated within the 36.8 square miles of the watershed. Those with internet access can go to the on a virtual tour of Seven Mile Creek County Park at
http://mrbdc.mnsu.edu/major/midminn/subshed/sevenmi/vtour/smvt_1.html

- **Minnemishinona Falls Scenic Outlook** which was opened to the public in 2008, is west of North Mankato along the Judson Bottom Road (County Road 41); a quarter of a mile from the junction of County Road 71 and the Judson Bottom Road. This road is designated as a Minnesota River Valley Scenic Byway and the Minnemishinona Falls Scenic Area is one of the high lights along the Byway. The parking area and fenced overlook is located along the west rim of the gorge below Minnemishinona Falls providing a view of the Minnesota River Valley and access to the 42 foot falls. One of the few waterfalls in the State, it is now preserved through the efforts of Nicollet County, private citizens and several organizations. This beautiful area is a wonderful example of the grandeur of the areas along Scenic Byways across the State.

Links to information about Seven Mile Creek Park and Minnemishinona Falls Scenic Outlook can be found on the Nicollet County website at http://www.co.nicollet.mn.us

The Purpose of the Local Water Management Plan

The purpose of the Nicollet County Local Water Management Plan (LWM Plan) is twofold and is intended for use in the ten year period of September 1, 2008 through August 31, 2018. This fourth generation Plan will:

- Identify existing and potential problems;
- Identify opportunities for the protection, management, and development of water and related land resources; and
- Develop objectives with a plan of action to promote efficient hydrologic management and effective environmental protection of water and related land resources.

Project History

The Nicollet County Board of Commissioners authorized the development of the first Nicollet County Comprehensive Water Resources Management Plan in the spring of 1987. It addressed surface water, groundwater, and related land uses and resources on a watershed basis.

Beginning that fall with an informational meeting, development and implementation of the original 1990 Local Water Plan achieved extensive citizen and intergovernmental involvement. Numerous Nicollet County residents, county organizations, local units of government, adjacent counties, state agencies, federal agencies, private companies, and institutions of higher learning assisted county staff and officials. Regular communication and cooperation with neighboring counties was essential and remained a key ingredient in the process in developing the first Water Plan.

Currently referred to as the Nicollet County Water Management Task Force, the original Water Planning and Implementation Task Force, has continued to be a part of the process. In 1994, 1999 and November 2005, the Task Force reviewed the review of the Goals, Objectives and Actions for the second, third and now fourth revisions respectively.

PAST ACCOMPLISHMENTS

Funding of project activities to assist the County in its implementation of the Plan has been provided by the Nicollet County Board of Commissioners and the Natural Resources Block Grant, which includes water planning, shoreland, wetland, SSTS and feedlot monies. Additional funding has been made available through MPCA Clean Water Partnership grants, 319 Grants, Challenge Grants and Conservation Innovation Grants, as well as private foundations. Equally important are the time and knowledge of Task Force Members, county employees, citizens, and others involved in developing this Plan.

Through cooperation with many partners, from local citizens to federal agencies, staff has been able to accomplish many activities toward the goal of educating the County's citizens in good stewardship and maintaining and improving the natural resources.

Partnerships

The following is a list of some of the partners that provided assistance and/or funding through joint activities, grants and staff participation.

- **LOCAL**
  - Nicollet County
  - City of Courtland
  - City of Lafayette
  - City of Nicollet
  - City of North Mankato
  - City of St. Peter
  - Brown-Nicollet Environmental Health Department
  - Brown-Nicollet-Cottonwood Water Quality Board
  - Nicollet Soil and Water Conservation District
  - Three Rivers Resource Conservation and Development Council Association
  - The University of Minnesota Extension Service – Nicollet County
  - Lake Hallett Association
  - The adjacent counties of Blue Earth, Brown, LeSueur, Renville and Sibley
- **STATE**
  - Board of Water and Soil Resources
  - Minnesota Department of Health
  - Minnesota Department of Agriculture
  - Minnesota Pollution Control Agency
  - Office of Environmental Assistance (now part of MPCA)
  - Minnesota Division of Natural Resources
- **FEDERAL**
  - Natural Resource Conservation Service
  - Farm Service Agency
  - US Fish and Wildlife Service
  - US Environmental Protection Agency
  - Nation Oceanic and Atmospheric Administration
- **SPECIAL INTEREST GROUPS**
  - Pheasants Forever
  - Nicollet Conservation Club
  - Minnesota Pork Producers
  - Minnesota Soybean Growers Assoc
  - Minnesota Corn Growers Assoc
  - Izaac Walton League
  - Ducks Unlimited

- Friends of the Minnesota Valley
- The Minnesota Project
- Institute for Agriculture and Trade Policy

➢ **FOUNDATIONS**
- McKnight Foundation
- The Schmidt Foundation
- BMP Challenge
- Conservation Technology Information Center

➢ **SCHOOLS AND INSTITUTIONS OF HIGHER LEARNING**
- Elementary, Junior and High Schools of the County
- Minnesota State University-Mankato
- Gustavus Adolphus College, St. Peter
- South Central College, North Mankato
- New Country School, Henderson

Projects

It would be difficult to list everyone engaged in activities and every project, so the following describes some highlights of accomplishments since 2002.

❖ **TMDL PROJECTS**

➢ **Minnesota River Basin TMDL Project for Turbidity** This TMDL project addresses 18 impairments on the Minnesota River and its tributaries. The TMDL study is currently underway and the MPCA is partnering with Tetra Tech, an environmental consulting firm, to develop the TMDL study. A stakeholder committee representing urban, agriculture, watershed projects, government and citizens is currently meeting. See the website for more information: http://www.pca.state.mn.us/water/tmdl/project-mnriver-turbidity.html

➢ **Lower Minnesota River TMDL: Low Dissolved Oxygen** The project addresses a single impairment in the lower portion of the Minnesota River during low flow conditions. The main sources of excess phosphorus during low flow conditions include wastewater treatment facilities, direct discharges of sewage, stormwater and agriculture. Results from the TMDL study indicate that, with phosphorus reductions, it is possible to meet the dissolved oxygen standard in the Lower Minnesota River during low flow conditions. The U.S. Environmental Protection Agency (EPA) approved the Total Maximum Daily Load (TMDL) Report in September 2004, and an Implementation Plan has been developed. For more information on this Project see the MPCA website at http://www.pca.state.mn.us/water/tmdl/project-lowerminnesota-oxygen.html

➢ **High Island/Rush River TMDL Project for Fecal Coliform** A TMDL Plan has been written and submitted to the MPCA for review. Once the Plan is adopted the work plan will be written and implementation will begin to take place.

➢ **Seven Mile Creek Turbidity and Fecal Coliform TMDL** Seven Mile Creek and two of its tributaries are listed as impaired for turbidity and fecal Coliform bacteria. This TMDL project addresses a total of 6 impairments. The Brown Nicollet Cottonwood Water Quality Board is currently developing a work plan for this TMDL project. For more information see http://www.pca.state.mn.us/water/tmdl/project-sevenmilecreek.html

❖ **CLEAN WATER PARTNERSHIPS**

➢ **Rush River Watershed:** Project Partners: The County Board of Commissioners of McLeod, Nicollet and Sibley, SWCD, ESD, MES, MDA, DNR, MPCA, landowners, Friends of the Minnesota Valley, foundations, and conservation groups. The project assists the landowners in the watershed that lies in Nicollet, Sibley and McLeod

counties. A newsletter is sent to all residents to inform and educate on various topics such as the results of water quality testing, low interest loan availability and cost sharing opportunities for land practices and BMPs. As part of the project, 21 landowners have received low interest loans to bring their septic systems into compliance. This project is on-going.

- **Seven Mile Creek Watershed:** Project Partners: BNC WQB, SWCD, MES, ESD, MDA, MDH, DNR, MPCA, landowners, foundations and conservation groups. A long term project, concluding in 2008, has been involved in researching water quality and quantity. Information can be obtained at http://mrbdc.wrc.mnsu.edu/org/bnc/sevenmile.html. Three wetlands have been restored in the watershed with other restorations in the planning stages. The Project also assists landowners to implement BMPs. A newsletter is sent to all residents to inform and educate on various topics such as the results of water quality testing, low interest loan availability and cost sharing opportunities for land practices and BMPs. Financed as part of the project 47 landowners have received low interest loans to bring their septic systems into compliance.
  - As part of this clean water partnership the staff, with grants and assistance from Gustavus Adolphus College students, has identified and mapped the historic wetland areas using GIS techniques. This demonstrates the loss of wetlands through the years providing a valuable tool determining the locations where suitable areas for restorations. There are plans to do this for the entire county.
  - Information on the wetlands that have been restored during this Project can be found at http://mrbdc.wrc.mnsu.edu/org/bnc/pdf/groundwater_final.pdf
- **Middle Minnesota SSTS Low Interest Loans.** Through this program, homeowners can avail themselves of up to $10,000 of low interest loans to bring their septic systems into compliance in the Middle Minnesota Watershed. The ten year loan with 4% interest is assessed and payable with their taxes twice a year. To date 8 landowners have been able to use this grant money. This project is on-going.

❖ **AGRICULTURAL PROJECTS**

- **Red Top Farms Field-Scale BMP and Water Quality Demonstration Project:** Project Partners: MDA, Red Top Farms, U of M, ESD and BNC WQB. Implementation of existing Nitrogen BMPs and U of M Fertilizer Recommendations resulted in a significant reduction in fertilizer inputs, maintained yields, and appears to have decreased nitrogen losses by 40 to 50 percent. Additionally, the results have been extremely positive for the majority of pesticide products that have been studied since 1996. The overall concept of Red Top has proven to be a highly effective educational approach for farmers, agricultural professionals, and the non-agricultural community. The site has hosted many educational field days and has been featured in numerous agricultural magazines and newspaper articles. This project is on-going. For more information go to the MDA website at: http://www.mda.state.mn.us/protecting/waterprotection/waterprortf.htm.
- **Paired Watershed Research for Effects of Best Management Practices on Water Quality:** Project Partners: University of Minnesota Soil, Water and Climate Department, MSU-M, BNC EQB, MDS, United Farmers Co-op Lafayette, Nicollet SWCD, USDA NRCS. Two small watersheds with similar size and farming practices were chosen in Lafayette Township to research water quality. Farmers in Watershed #28074 were asked to changes practices such as tillage, and the farmers in the adjoining watershed, #28075, were asked to not change their current practices. Cash incentives were offered and the project had almost 100% participation. The results of the project continue to influence the area farmers in a positive way as they use the information from this study to modify their farming practices toward a sustainable farming practice. Information can be found at http://mrbdc.wrc.mnsu.edu/org/bnc/pdf/groundwater_final.pdf

- **Integrating Solar/Wind Powered Pumps with Restored Wetlands to Treat Agricultural Drainage Tile Water** (a BWSR Challenge Grant): Project Partners: BNC WQB, ESD, USDA-NRCS, U of M Bio-Systems and Ag Engineering, SWCD, ESD, MPCA, MDA, GAC, BN EH, Landowner and Keeley Farm Drainage. A demonstration of the use of a solar/wind hybrid generator system for pumping agricultural drainage tile water into restored wetlands. This project is on-going.
- **MN Conservation Drainage Demonstration Project:** Project Partners: BNC WQB, MDA, Nicollet County, SWCD, ESD, City of St. Peter, NRCS and private landowners. Three different drainage tile practices were installed in a 125 acre field managed for a corn/soybean rotation within the St. Peter WHP. Controlled drainage uses an in-line control structure to manipulate the water table by effectively opening and closing the drain tile. Some of the tile systems have also been designed to flow into a linear woodchip bio-reactor to provide additional treatment prior to accessing the main drain tile. The practices were installed in 2006 and will sunset in the fall of 2008. Results from the Project will provide information on the potential and/or usefulness for using conservation drainage practices on a larger scale across Nicollet County and south-central Minnesota. This project is on-going. For information on this Project go to the following website at http://mrbdc.wrc.mnsu.edu/org/bnc/pdf/groundwater_final.pdf.

❖ **OTHER PARTNERSHIPS**

- **Rural Land Opportunity Show:** Project Partners: LeSueur and Nicollet counties, BWSR, Three Rivers RC&D, Friends of the MN Valley, Coalition for a Clean Minnesota River, DNR, Rural Advantage, the MN Project, IATP, NRCS and CCMR. An annual event that offers education and information about alternative agricultural practices to farmers and small land owners. This project is on-going.
- **Tri-County Solid Waste Office (TSO)** A joint powers agreement between Nicollet, LeSueur and Sibley counties. Partners: Commissioners and staffs of Blue Earth, LeSueur, Sibley and Nicollet counties, MPCA, MDA. This office was created to promote solid waste and recycling opportunities to the three counties, administers the Tri-County Solid Waste Plan and promotes education. Nicollet County ESD staff and Sentence to Serve crews assist TSO staff at two Tire-Appliance-Electronic Collections each year. Once a year, the TSO staff is assisted at the Household Hazardous Waste Collection by the following agencies: MPCA, Blue Earth County ESD, Nicollet County ESD and Sentence to Serve crews. TSO staff is also involved in the operation of the Blue Earth Household Hazardous Waste Facility and Product Reuse Center, coordinates recycling events, promotions, recycling education and advertising. A MPCA staff person is shared with Tri-County Solid Waste Office and assists with the collections, administrative duties and education. For more information go to the Tri-County Solid Waste Office website at http://geocities.com/tricountyswo

❖ **EDUCATION**

- **Annual Children's Water Festival** Project Partners: SCC, Brown, Cottonwood and Nicollet counties,; BN CHS, BNC WQB, SWCD, MPCA, MDA, MDH, BWSR, DNR, TCSW, New Country School, citizen volunteers, 4th graders and teachers from Brown, Cottonwood and Nicollet counties. Since 1999 Nicollet County has helped sponsor, plan and participate in the tri-county Children's Water Festival hosting 800-1,000 fourth graders annually. This fun one day event provides students with hands-on and interactive activities stressing the importance of water quality and quantity. Many private businesses and organizations, citizens, local units of government and state agencies provide planning and/or support for the Festival. This is an on-going project and more information can be found at http://mrbdc.wrc.mnsu.edu/org/bnc/childrenwaterfest.html

- **Fort Ridgely Days:** Project Partners: DNR, Friends of the Fort, schools from Brown, Nicollet, Renville and Sibley counties. A semi-annual event for area 5th and 6th graders where they learn about life when Fort Ridgely was active during the mid-1800s. The LWM Plan Administrator teaches about water concerns then and now. This is an on-going project.
- **Hoover 1st Grade Annual Environmental Trip to Seven Mile Creek Park:** Project Partners from Nicollet County: ESD, BNC WQB, Nicollet SWCD. Children are offered an opportunity to visit the County Park and learn what kind of life exists in the area and in the Creek and the geology of the area, as well as other educational opportunities.

❖ **NICOLLET SOIL AND WATER CONSERVATION DISTRICT** http://www.nicolletswcd.org/

- **Highway US 169 Project** Sedimentation problems along State Highway 169 between Mankato and Le Sueur led the Minnesota Department of Transportation (MNDOT) office in Mankato to seek assistance from the SWCD and USDA Natural Resources Conservation Service. It was determined that to be successful in reducing the sedimentation along State Highway 169, projects needed to be implemented in upland areas of the watersheds, with cost-share incentives for the participating landowners. The NRCS and SWCD spent many hours in engineering and construction inspection. If that work had been done by a private firm, those engineering costs would have exceeded $40,000. The SWCD and NRCS worked with seven local landowners to complete 25 sedimentation reduction projects. Total construction costs were $153,607. The estimated tons of soil saved per year are 657, and total reduction of peak flow is 150 percent.
- **Tree Planting Days at the City of Nicollet Public Schools:** Partners: USDA NRCS, Nicollet SWCD, Nicollet Public Schools. Staff works with the Nicollet School staff to line up a day to do a tree planting or other activity with their kids. In 2008, staff is planting a native grass area near a stormwater pond at the Nicollet High School. Though this doesn't involve the students directly "as a hands" on project in the spring of 2008, the students will benefit from having a natural area that teachers can use to educate them on certain topics. Staff also hands out about 125-150 trees to grade school kids each year.
- **Cost Share Programs** These programs are administered by the Nicollet SWCD, NRCS and FSA and promoted through such programs as County administered Clean Water Partnerships:
  - **The Conservation Reserve Program (CRP)** A federal program that provides technical and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. The program is administered by the Farm Service Agency, with NRCS providing technical land eligibility determinations, conservation planning and practice implementation. Approximately 80 CRP contracts have been signed into 10-15 conservation easements.
  - **The Minnesota Conservation Reserve Enhancement Program (CREP)** From 1998 through September 2002, Minnesota undertook an initiative to improve water quality, reduce soil erosion, and create wildlife habitat in the Minnesota River basin. Minnesota's first Conservation Reserve Enhancement Program, which built off the successful Reinvest in Minnesota Reserve Program, brought together local, state, and federal officials, conservation groups, and interested landowners to work collectively on restoring the Minnesota River watershed. This was a tremendous opportunity to leverage federal money with this program. The federal government would leverage dollars at a ratio of 2.3:1 with an $81 million state investment to $164 million federal investment. More information can be obtained by going to the BWSR website under Easements at http://www.bwsr.state.mn.us/easements/crep/index.html

- Minnesota River CREP was the second in the nation
- 100,000 acres (more than half were wetland restorations) were protected
- 2,456 easements, totaling 100,465 acres, were enrolled State wide
- Pollution Reduction Benefits state wide via reports received from 1997 to present:
  - Soil Loss Reduction: 476,000 tons/yr
  - Sediment Reduction: 231,000 tons/yr
  - Phosphorus Reduction: 308,000 lbs/yr
- In Nicollet County a total of 30 Easements were enrolled totaling 1,107 acres using $833,631.84 match from the State
- In 2002 the Hiniker Family enrolled 57 acres in the Program which was the last to be enrolled in the 10,000 Acre Minnesota River Basin sign-up. Governor Ventura held a news conference at the site of the Hiniker Saw Mill on US 169 just north of Mankato, to dedicate the last acre and praise this project that has gone so well for the area and the State of Minnesota.

▪ **The Reinvest in Minnesota (RIM) Reserve Program** This SWCD administered program is one of the first such programs of its kind in the country, began in 1986 and is managed at the state level by the Minnesota Board of Water and Soil Resources. It protects and improves water quality, reduces soil erosion, and enhances fish and wildlife habitat by retiring private marginal cropland from agricultural production, planting permanent native vegetation, and restoring previously drained wetlands. Other benefits include flood control and groundwater recharge. In Nicollet County 47 acres have been enrolled in this Program between 2006 and 2008.

▪ **Environmental Quality Incentive Program (EQIP)** A federal program that provides technical assistance, cost share payments, and incentive payments to assist crop, livestock, and other agricultural producers with environmental and conservation improvements to their operations. EQIP is a voluntary conservation program from the USDA Natural Resources Conservation Service. A total of 39 producers or farm operations signed between 2006 and spring of 2008 obligating approximately $835,500. In that same time period, approximately 75 practices have been installed for a total of $250,000. The actual implementation of the practices does not usually occur within the same year of obligation.

➢ **District Tree Program:** The Nicollet SWCD has a tree program in which trees and shrubs are ordered to sell to landowners for conservation. The trees are ordered ahead of time and then a tree list is written up and available in December. Orders are taken on a first come first serve basis until the trees arrive in April. Over 30,000 trees have been distributed since 2006 to Nicollet County residents.

➢ **The South Central Envirothon** Project Partners: South Central Minnesota Association of Conservation District Employees (SCMACDE), SWCDs, DNR, BWSR, US Geological Society, the Raptor Center, and University of Minnesota. An Envirothon is an outdoor, hands-on learning experience for high school students. It centers around six different learning stations on topics such as forestry, soils, water quality, wildlife habitat, a current events issue and an oral presentation. Staff from the Nicollet SWCD assists each year. For more information on the 2008 Envirothon go to the following website: http://faribaultcountyswcd.com/FileLib/All%20Envirothon%20Information.pdf

❖ **LAKE ASSOCIATIONS**

➢ **Lake Hallett Association:** The Lake Hallett Association is a grass roots group formed in 1998 in response to the City of Saint Peter's decision in 1996 to declare Lake Hallett a

basin for urban storm water discharge and their plans to greatly increase the amount of storm water going into the lake. The Association is dedicated to the protection and promotion of Lake Hallett as a recreational and aesthetic resource for the citizens of Saint Peter and the surrounding area. Lake Hallett abounds with many varieties of birds, a healthy fish population of sunfish, crappies, perch and bass, frogs, snapping turtles, painted turtles and even a rare Blandings turtle was discovered and marked by the DNR. Volunteers have monitored the water quality for a decade through the MPCA Citizen's Lake Monitoring Program and through other programs in cooperation with the MPCA, DNR, Minnesota Waters, MSU-Mankato and the U of M. An approved Monitoring Plan that was implemented in 2007 and will continue into 2008 with funds from the Clean Water Legacy Act. More can be learned at http://www.lakehallett.com/.

❖ **NICOLLET COUNTY DEPARTMENTS**

The accomplishments of the County Departments would be too numerous to list. Driving through the countryside would provide examples of what has been accomplished with cooperation between staff and the Nicollet County citizens. Below are a few high lights:

- **Environmental Services Department (ESD)** The following are examples of the knowledgeable staff that administers County programs and the commitment of the County to its natural resources while supporting an economic base.
  - **Zoning** Staff administers the Nicollet County Zoning Ordinance and constantly keeps up with the current developments in land use and natural resource protection, amending the Ordinance as needed. Staff prepares reports for Conditional Use Permits which are presented to the Planning and Zoning Advisory Commission at a public hearing for recommendation to the County Board of Commissioners. Staff also prepares reports for Variance requests or appeals, which are presented to the Board of Adjustment and Appeals at a public hearing.
  - **Subsurface Sewage Treatment Systems (SSTS) Program** A proactive program to bring sewage treatment systems into compliance and provide technical assistance to homeowners and SSTS professionals. Currently, the Environmental Specialist administers the program and serves as the SSTS Inspector. With MPCA, this staff person co-educates installers and other inspectors, as well as serving as a member of the MPCA Advisory Committee for the SSTS Program.
  - **SSTS Revolving Loan Program** This program is funded with county funds, as well as programs through the Seven Mile Creek Watershed, Rush River Watershed Clean Water Partnerships and a Middle Minnesota River Watershed Clean Water Legacy grant.
  - **GIS** A knowledgeable staff person continues to work closely with other department staff to update tax parcel maps with information such as location of houses, commissioner districts, and county ditch locations. The tax maps have delineated tax parcels with shorelines of bodies of water and are used as a tool for assessing property, zoning, feedlot and wetland identifications. Through the years the parcels have been drafted by County staff and sent to Chicago, Illinois for updating. ESD staff has worked with other county departments to maintain the tax parcel maps and made themselves available to assist in any other GIS requests. The staff has also worked with several water quality projects in their efforts for mapping accuracy. Recently the Sidwell Company has converted the hard copy cadastral maps to a digital format. County staff is working toward making the tax maps available to the public through the County website.
  - **Feedlots** A full time county feedlot officer assists the animal producers with permits, BMPs and advises them of available loan programs, assisted by SWCD and MES.

Of the 473 feedlots with 50 animal units (10-49 animal units in shoreland) or more, 414 feedlots have completed a Level II Inventory. A Level II Inventory is where staff has visited a feedlot site, identified any areas of concern and recorded their findings. Staff continues to assist the producers to maintain compliance with the state and federal regulations. It has also afforded them a better understanding of the advisability of using BMPs to gain better economic growth, while using environmentally safe practices. As new or expanded operations are permitted a Level II Inventory is done. Feedlots with 10 animal units or more require a County feedlot permit and 300 or more animal units require a Conditional Use Permit; 1,000 or more animal units require NPDES and a Conditional Use Permit.

- **Solid Waste** ESD staff carries out the enforcement of the County Solid Waste Ordinance and all necessary amendments. Along with the Tri-County Solid Waste Office staff (a joint powers agreement between Nicollet, LeSueur and Sibley counties), ESD staff assists with county-wide education and annual household hazardous waste collection and two tire- appliance-electronic collections. The Tri-County Waste Office maintains the Solid Waste Management Plan with assistance from ESD staff.
- **Wetland Conservation Act (WCA)** The Nicollet SWCD and ESD staffs administer the State program. The purpose of WCA is to provide a no net loss of wetlands, the wetland value, or the function. Staff continues to educate the county citizens on the benefit of wetlands in their many capacities, such as flood and water retention and nutrient uptake.
- **Local Water Resource Management** In the intervening years since the original survey in 1989, the County citizens have gained a greater knowledge of the natural resources in Nicollet County and in the State of Minnesota. They have put that education to use by becoming aware of their own practices and modifying their actions. In 1989 the Nicollet County Emergency Services Office began to collect precipitation information in response to a request from the National Weather Service. Since 1991, the Environmental Services Department had administered this project; the network has expanded as of 2008 to 21 readers during the growing season and 9 readers during the winter months. This information is forwarded to the MN State Climatology Office and the National Weather Service monthly. The reports are shared with each reader as well as the SWCD, MN Extension-Nicollet County, NRCS and area farmer's cooperatives. The Local Water Management Plan Administrator serves on the technical committee for all water quality projects in the County. Education is part of the job and staff participates in the annual Children's Water Festival, the Fort Ridgely School Days, Hoover 1st Grade Class at Seven Mile Creek Park and other opportunities as they arise.

- **Brown-Nicollet-Cottonwood Water Quality Board (BNC WQB)** This joint powers board was formed to facilitate clean water partnership grants for the Seven Mile Creek Watershed (Nicollet County) and the Little Cottonwood River (Brown and Cottonwood counties). Formed because of the Community Health joint powers between Nicollet and Brown County and through the Middle Minnesota diagnostic study, this joint powers group has worked together on many projects and producing some remarkable results. See information on the projects accomplished by Brown-Nicollet-Cottonwood Water Quality Board at the Brown-Nicollet CHS Office on the website at http://mrbdc.mnsu.edu/org/bnc/index2.html.
- **Brown-Nicollet Community Health Services (BN CHS)** Beside covering their community health duties, the staff has accomplished several projects that remain true to the LWM Mission Statement such as: clean water partnership grants, township well testing, Public Health Nuisance and clandestine drug lab site investigations and

educating the public. Such sites constitute a real danger for contamination of the water and soil.

- **Ground Water Vulnerability Project** Partners: BNC WQB. MDH, MPCA, MES, staffs from Brown, Nicollet and Cottonwood SWCDs, ESDs, Water Planners and Planning and Zoning. A collaborative effort among several state and county agencies to map the probability of nitrate contamination of groundwater in the Minnesota counties of Brown, Nicollet, and Cottonwood. The nitrate probability maps are used by planning and zoning staff to identify areas that have a high likelihood for nitrate groundwater contamination. Sites for permit applications—such as subdivisions or dairy or hog operations—are identified on the probability maps to determine the risk of groundwater contamination. The maps are NOT used to deny permits, but rather to identify vulnerable areas so that appropriate measures can be added to the permit to protect water quality. This process also educates applicants about the conditions that contribute to nitrate contamination. The final report on the project can be found at the following: http://mrbdc.wrc.mnsu.edu/org/bnc/pdf/groundwater_final.pdf
- **Public Works Department** Besides maintaining the county roads summer and winter, the Public Works Department maintains the ditches and serves as weed inspector. The Flea Beetle Pilot Project, with MDA, was an outgrowth of the weed inspector program. It was such a success that a "nursery" of beetles has been established on Barbers Island and other county land. These flea beetles have been used by the county landowners as a non-invasive method of eradicating leafy spurge and are being used to supply surrounding counties and agencies for the same purpose. The Black-margined Loosestrife Beetle has been used to control purple loosestrife in the County. A pilot project to eradicate Canadian Thistle utilizing the Tortoise Beetle has been investigated and may be a project for the county in the future.

Description of the Priority Concerns to be Addressed by the Plan

All Priority Concerns are felt to address the issue of Safe Drinking Water. Each item was chosen to maintain and improve the quality of current resources and the improvement of those waters that have been found not to comply with current established safe drinking water levels.

- **Stormwater Management**

When the word "stormwater" is mentioned some may think only of curbs and gutters (stormwater sewer systems) in a city that drains the water off city streets. Rather than thinking of stormwater as a city issue we must starting thinking of it as any water that flows across and over the land to any surface water. This means water flowing from such areas as rooftops, across roads, lawns, fields, etc. to a body of water. Stormwater can be a source of pollution and may contain common pollutants such as oil, sediment, pesticide, and litter. The citizens are becoming aware of this real and prevalent problem and are taking the steps to change the way they view surface runoff. There is still a great deal of education that needs to take place. The entire county is part of the Middle Minnesota River Watershed and the Lower Minnesota River Watershed which flow into the Minnesota River and then into the Mississippi River. Therefore, stormwater management has local, regional, and national implications and must be addressed with a comprehensive plan.

In reviewing the concerns of urban and rural surface water runoff, the Task Force Members felt the need to continue and/or develop action items that promote the prevention of nutrient and sediment runoff impacts to the water resources. This will be done through continuation and/or development of strong regulations, and actions such as promotion of wetland restorations, attention to stream bank and overland erosion, as

well as construction of various BMPs. It is important for rural and urban citizens to continue to receive education about stormwater pollution and the LGU staffs continue to develop and enhance good regulations for the protection of their citizens and the natural resources.

The LWM Plan will promote the use of native plantings and rain gardens, bluff and shoreland protection within development as well as innovative ways to conform to stormwater regulations for cities and subdivisions.

Through the Rush River CWP and Middle Minnesota River CWP, and Seven Mile Creek CWP which will be sun setting in 2009, there is an additional focus on drainage, wetland restoration and other practices promoted by these projects.

- **Urban and Rural Resource Management**

Nicollet County is predominately agricultural with two rapidly growing cities of North Mankato and St. Peter and continued growth in the three smaller cities.

There are people who are moving out of the cities into the rural area as well as people moving from the rural area into the cities. Each individual can continue to learn about and practice BMPs to limit wind and water erosion, protect and enhance the lakes and streams, as well as restore wetlands and their functions, whether they live in a cities or rural area. Effort will continue to be made to educate the public on the fact that we live upstream and downstream from other people. What we do, even through we may not have lakes or streams next to our homes, will still affect others.

The Task Force Members are aware of the need for education that will encourage the citizens to be aware of the reasons for proper use of fertilizers and pesticides, drainage, erosion and sediment control in landscaping and site development for homes and businesses.

Data collected through various projects has been shared with the area residents and agricultural producers and will continue to be part of the information that is disseminated to area residents, producers and farm cooperatives.

Along with a strong ongoing SSTS inspection program, the County has dedicated county funds toward a SSTS low interest loan program to assist area residents in upgrading their sewage treatment system. There is also low interest loan money available through the Seven Mile Creek CWP, Rush River Watershed CWP, and Middle Minnesota River Watershed CWP grants.

The LWM Plan will focus on actions that will maintain a healthy economy while promoting environmentally sound agricultural BMPs in the rural areas. BMP implementation will be facilitated through the County Feedlot Officer, SWCD, NRCS, the Rush River Watershed CWP and the Seven Mile Creek Watershed CWP and the Middle Minnesota River CWP.

- **Total Maximum Daily Loads (TMDL)**

Water bodies that fail to meet one or more water quality standards are considered impaired and are subject for inclusion on Minnesota's Impaired Waters list. The Federal Clean Water Act requires that each identified impairment a Total Maximum Daily Load (TMDL) be developed. In its strictest sense a TMDL is defined as the *"the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards."* (MPCA Glossary: www.pca.state.mn.us/water/tmdl/tmdl-glossary.html.) The term TMDL also describes the process of gathering data, stakeholder input and technical expertise to identify the sources of pollution and make source allocations that will allow a waterbody to meet its numerical TMDL. The TMDL process results in a pollution reduction and implementation plan to address a waterbody's impairment.

Since the first survey was sent out in 1989 the citizens of Nicollet and surrounding counties have felt that pure drinking water was and continues to be their top priority.

The County has three Clean Water Partnership projects at this time: The Rush River Watershed with Sibley and McLeod counties, the Seven Mile Creek Watershed and the monitoring in the Middle Minnesota River CWP. Each has an on-going focus on the impaired waters that have been identified by the State. The Rush River has completed a preliminary TMDL that addresses fecal coliform impairments. A Rush River turbidity TMDL and Seven Mile Creek fecal and turbidity TMDL are slated to begin within the lifespan of this Water Plan.

Also the Water Plan will focus on action items that specifically target those waters that have not been identified by the State for improvement, but could potentially be listed as impaired.

Water quality testing, analysis of flows and potential pollutants from county staff research and research done by others, has begun to establish educational communications and practices that will improve the water quality and quantity of the watersheds. If this is not done the economic and social effect will be overwhelming to the citizens of the County and even the country.

The following Table is a summary of the 2008 Impaired Waters List for Nicollet County. A portion of the Southern Branch of Rush River Watershed drainage area lies within the County. Detailed information can be found in Appendix A.

Reach	Pollutant, Stressor or Indicator	Affected Use
Minnesota River as it flows along the southern and eastern boundary of the County	Fecal Coliform, Mercury in Fish Tissue, PCB in Fish Tissue, PCB in Water Column and Turbidity	Aquatic Consumption, Aquatic Life and Aquatic Recreation
Rogers Creek a.k.a. Robard's Creek	Fish Bioassessments	Aquatic Life
Rush River and South Branch, Rush River (drainage area)	Fecal Coliform and Turbidity	Aquatic Life and Aquatic Recreation
Seven Mile Creek, CD 13A & CD	Fecal Coliform, Turbidity	Aquatic Life & Aquatic Recreation

The Swan Lake Outlet a.k.a. Nicollet Creek was removed from the List in 2008 as a correction. The TMDL Plan for Mercury has been approved for the Minnesota River.

General information on the Minnesota's Impaired Waters and Total Maximum Daily Loads (TMDLs) can be found on the Minnesota Pollution Control Agency website at http://www.pca.state.mn.us/water/tmdl/index.html. A map of the Lower Minnesota River Basin: Conventional Parameters 2008 Impaired Waters Requiring TMDL (per Section 303 (d) Clean Water Act) can be found at http://www.pca.state.mn.us/publications/maps/tmdl-lmn-conv-08.pdf:. The Table of containing information on the 2008 Impaired Waters 303(d) List can be found at http://www.pca.state.mn.us/publications/wq-iw3-15.xls and to find data from surface water monitoring sites you can go to http://www.pca.state.mn.us/data/edaWater/index.cfm.

- **Groundwater**

Groundwater is the water that flows beneath the ground. Research has shown that certain practices may affect groundwater. Practices, such as maintaining a sufficient distance from a well to a subsurface sewage treatment system or minimizing the impact of a chemical spill can reduce the impact to groundwater. The potential impact may be substantial, the responsibility lies on everyone to protect groundwater.

Without recognizing this responsibility, the groundwater may become contaminated. The

cost of providing potable drinking water could become extremely expensive. Urban as well as rural citizens and businesses must accept the responsibility of protecting the groundwater.

Nicollet County has had a unique on-going program of township water well testing since 1988. This program instructs citizens on how to maintain their wells and educates homeowners on how to remove bacteria from the well and to prevent bacteria from returning to the well. The potential source of nitrates and the ramifications to the household are also discussed. This program has shown areas of special concern for groundwater protection and educational opportunities for the residents that utilize private wells and small community wells.

The BN CH also assists the County Public Health Department through drinking water testing for women who are pregnant, breastfeeding mothers and infants for nitrates and bacteria.

Along with the cities that have completed their MDH Wellhead Protection Plans and those that are in the process, the County will continue to offer assistance and promote action items to protect those areas that have been identified.

Summary of Goals and Actions with the Projected Total Cost

Below is a table of the projected costs for implementation per year for each Goal. The detailed list of Goals, Objectives and Actions begins on page 25.

GOAL: Stormwater Control	**Projected Cost per Year: $39,000**
Objective 1. Innovative Techniques for City Stormwater Control	
Objective 2. Erosion Control and Best Management Practices	
Objective 3. Sensitive Land Along Ravines and Streams	
Objective 4. Establish Filter Strips along Riparian Corridors, Bluff Land Interfaces, Ditches and Natural Streams	
Objective 5. Stormwater Education	
GOAL: Urban and Rural Resource Management	**Projected Cost per Year: $346,500**
Objective 1. Establish Buffers and Native Plantings	
Objective 2. Subsurface Sewage Treatment Systems	
Objective 3. Wetlands	
Objective 4. Parks and Scenic Areas	
Objective 5. Manure Management Plans	
Objective 6. Solid Waste	
Objective 7. Education	
GOAL: TMDLs	**Projected Cost per Year: $40,500**
Objective 1. Seven Mile Creek Watershed (SMC WS)	
Objective 2. Rush River Watershed (RR WS)	
Objective 3. Middle Minnesota Best Management Practices Clean Water Partnership	
Objective 4. Roger's a.k.a. Robard's Creek	
Objective 5. Minnesota River TMDLs	
Objective 6. Education	
GOAL: Groundwater	**Projected Cost per Year: $8,000**
Objective 1. Township Well Water Testing	
Objective 2. Wellhead Protection	
Objective 3. Well Sealing	
Objective 4. Education	
PROJECTED COST OF IMPLEMENTATION PER YEAR: $434,000	

Consistency of the Plan with Other Pertinent Local, State, and Regional Plans

The Nicollet County LWM Plan has been found to be consistent with other plans within the County and adjacent watersheds and counties. Upon careful review it has also been found to be consistent with state plans.

Summary of Recommended Amendments to other Plans and Official Controls

The LWM Plan has been found to be consistent with other pertinent local, state and regional plans. There are no recommended amendments or potential conflicts with official controls at this time.

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LWM Plan Administrator
For Nicollet County

PRIORITY CONCERNS

Please note that there will be an education component incorporated into all of the Priority Concerns in the LWM Plan. A thorough description of the process for the development of these concerns can be found in the *Priority Concerns Scoping Document* contained in the appendix.

- **Stormwater Management** (including urban and rural action items that deal specifically with surface water runoff)
- **Urban and Rural Resource Management** (including drainage, erosion and sediment control action items)
- **Total Maximum Daily Loads** (the two Clean Water Partnership Projects have action items for the Rush River and Seven Mile Creek; also the County will pursue additional funding for practices specifically targeting impaired waters)
- **Groundwater** (including wellhead protection assistance and action items)

Assessment of the Priority Concerns

On November 11, 2005, the Local Water Management (LWM) Task Force and began the process to discern the priorities of Nicollet County citizens and county staff.

The LWM Task Force citizen members were chosen for their knowledge of the needs of Nicollet County and the citizens who reside in both the cities and the rural areas.

Through discussions, emails and presentations by MDA and MDH staff, the Citizen Survey and small technical committee meetings, a list of priorities were developed. Priority was given to those activities that had broad based support from citizens, staff and the County Board of Commissioners. Projects that are currently being funded were given a high priority for continuation. It was felt that these projects have a large contingency of support from the citizens and the historical data gathered supports continued efforts and funding.

Activities in the Nicollet County Environmental Services Department (ESD) that relate to the management of the natural resources and protection of the drinking water sources are dealt with by the full time staff every day. The Zoning Ordinance supports strict shoreland and floodplain regulations. The feedlot and ISTS/SSTS programs, solid waste issues and violations are also addressed by the ESD staff; as well as the administration of the Wetland Conservation Act. While dealing with these regulations staff is aware of the needs for education, regulation and investigation across the county. Current issues were given close scrutiny by the staff that made suggestions for inclusion in the Goals and Objections and Actions of the LWM Plan.

There are several Grants currently being administered in the County. These projects are the Seven Mile Creek Watershed, the Rush River Watershed Project, the Middle Minnesota River SSTS Clean Water Legacy Grant and the Monitoring the Middle Minnesota River Watershed Project (CWP). Close analysis of issues were given to these areas which are listed on the Impaired Water's list for TMDLs.

GOALS, OBJECTIVES AND IMPLEMENTATION SCHEDULE

Action items are planned to be conducted on an annual basis unless stated differently. The amount listed under "Cost per Year" is for staff time, not actual cost of implementation unless stated.

This Schedule is set up for a ten-year plan; however in the 5th year the County will revisit this Schedule and revise and update as needed.

GOAL: STORMWATER CONTROL					
Action Item	**Description**	**Focus Areas**	**Responsible Agencies**	**Time**	**Cost per Year**
Objective 1: Innovative Techniques for City Stormwater Control					
#1	Assist the City of Lafayette with their stormwater improvement project	City of Lafayette	ESD, MPCA	2008-2010	**$1,000**
#2	Assist the City of Lafayette with installation of 4 rain gardens	City of Lafayette	ESD, MPCA	2009-2010	**$4,000**
#3	Assist cities in researching grants and loans for stormwater projects, including control of erosion during construction	Cities	Cities, ESD, MPCA	2008-2018	**$500**
#4	Work with cities to continue and increase stormwater education	Cities	Cities, ESD, MPCA	2008-2018	**$500**
#5	Encourage the cities to continue to inform their citizens of the outlet source of the storm water drains	Cities	Cities, ESD, MES, SWCD, MPCA	2008-2018	**$500**
Objective 2: Erosion Control and Best Management Practices					
#1	Continue research into various practices	County Wide	SMC, RR, ESD, SWCD, NRCS, MES, MDA, MPCA, Cities	2008-2018	**$1,000**
#2	Implement new practices at 5 locations	County Wide	SMC, RR, ESD, SWCD, NRCS, MES, MDA, MPCA, Cities	2008-2018	**$6,000**
#3	Hold one demonstration of new practices each year	County Wide	SMC, RR, SWCD, ESD, NRCS, MES, MDA, MPCA	2008-2018	**$2,000**
#4	Hold one demonstration on current BMPs each year	County Wide	SMC, RR, SWCD, ESD, NRCS, MES, MDA, MPCA	2008-2018	**$5,000**
#5	Research methods to address ravine erosion	County Wide	PW, cities	2008-2018	**$1,000**

Objective 3: Sensitive Land Along Ravines and Streams					
#1	Implement BMPs at 20 locations throughout the 10 year plan	County Wide	SMC, RR, ESD, SWCD, NRCS, MES, MDA, MPCA, Cities	2008-2018	**$5,500**
#2	Hold one educational event per year on ways to keep surface water from eroding ravines	County Wide	SMC, RR, ESD, SWCD, NRCS, MES, MDA, MPCA, Cities	2008-2018	**$5,000**
#3	Promote structural practices in ravine buffer strips	County Wide	SMC, RR, ESD, SWCD, NRCS, MES, MDA, MPCA, Cities	2008-2018	**$500**
Objective 4: Establish Filter Strips along Riparian Corridors, Bluff Land Interfaces, Ditches and Natural Streams					
#1	Establish 5 Buffer Strips per year	County Wide	SMC, RR, ESD, SWCD, NRCS, MES, MDA, MPCA	2008-2018	**$3,000**
#2	Send out 20 proposals to landowners per year	County Wide	SMC, RR, SWCD, ESD, NRCS, MES, MDA, MPCA	2008-2018	**$2,500**
Objective 5: Stormwater Education					
#1	Develop and distribute information on the BMPs of stormwater management yearly	County Wide	SMC, RR, ESD, SWCD, NRCS, MES, MDA, MPCA	2008-2018	**$1,000**
Projected Total for this Priority Concern					**$39,000**

GOAL: URBAN AND RURAL RESOURCE MANAGEMENT					
Action Item	**Description**	**Focus Areas**	**Responsible Agencies**	**Time**	**Cost per year**
Objective 1: Establish Buffers and Native Plantings					
#1	Establish buffer strips around 2 existing wetlands during the duration of the Plan	Rural Area	SWCD, ESD, NRCS, MSE, SMC, RR, Con-Gr, DNR	2008-2018	**$1,000**
#2	Hold 2 demonstrations on all aspects of native grass plantings in rural and urban areas where applicable	County Wide	SMC, RR, SWCD, ESD, NRCS, MSE, MDA, Con-Gr, DNR, cities	2008-2018	**$1,500**
Objective 2: Subsurface Sewage Treatment Systems					
#1	Upgrade 65 non-compliant systems per year	County Wide	ESD, MPCA, BNC WQB, RR	2008-2018	**$51,000**

#2	When applicable continue with County funding for upgrades	County Wide	BdCom, ESD, MPCA	2008-2018	**$100,000**
#3	Continue funding full time SSTS inspector program	County Wide	BdCom, ESD, MPCA	2008-2018	**$75,000**
Objective 3: Wetlands					
#1	Utilize college interns to complete mapping of historic wetlands started under Seven Mile Creek CWP Project	County Wide	ESD, SMC, RR, colleges, DNR	2008-2018	**$2,000**
#2	Work with other agencies to re-establish 25 acres of wetlands	County Wide	SWCD, ESD, MSE, SMC, RR, Con-Gr, DNR	2008-2018	**$1,000**
Objective 4: Parks and Scenic Areas					
#1	Continue efforts to purchase additional land for established parks and scenic areas	County Parks	BdCom, PW, NCPB	2008-2018	**$1,000**
#2	Search out grants and other avenues to continue to furnish state-of-the-art playground equipment	County Parks	BdCom, PW, NCPB, ESD, SWCD	2008-2018	**$1,000**
#3	Continue to enhance the county park and scenic areas with landscaping (including costs)	County Parks	BdCom, PW, NCPB, SWCD,ESD	2008-2018	**$7,000**
#4	Assist the Parks Dept and Probation Office in the building of a structure at SMC Park to store equipment for the Park and Sentence-to-Serve crew	SMC County Park	BdCom, PW, ESD, NCPB, TRRCD	2008-2018	**$1,000**
#5	Assist landowners, cities, townships and agencies in preserving and enhancing scenic areas such as lakes and the scenic roadways as requested	County Wide	Cities, SWCD, ESD, MSE, SMC, RR, Con-Gr, DNR	2008-2018	**$1,000**
#6	Work with DNR and landowners in the Swan Lake Watershed to plant 1 area in native plants and restore 1 wetland area within the 10 year lifespan of the plan	Swan Lake WS	SWCD, ESD, DNR, Ldown	2008-2018	**$1,000**
#7	Assist with grants and other contributions for purchase of the 2.8 acre lot adjoining and to the west of Minnemishinona Falls Scenic Outlook	Belgrade Township	BdCom, Park Board, ESD, Con-Gr	2008-2011	**$1,000**
Objective 5: Manure Management Plans					
#1	Advocate manure and soils testing with 10 area producers	Rural Areas	SWCD, MES, SMC, RR, ESD, MPCA, NRCS	2008-2018	**$1,000**

#2	Develop 5 manure plans utilizing U of M guidelines and match up application rates with needs of crops and discuss with area producers	Rural Areas	SWCD, MES, SMC, RR, ESD, MPCA, NRCS	2008-2018	**$7,500**
#3	Discuss with 5 area producers the issues of over application of commercial fertilizer and manure	Rural Areas	SWCD, MSE, SMC, RR, MPCA, NRCS	2008-2018	**$1,000**
#4	Seek 2 landowners who will erect educational signs that show benefits of using manure as fertilizer, e.g. 10 hogs fertilize 1 acre	Rural Areas	SWCD, MSE, SMC, RR, ESD, MPCA, NRCS	2008-2018	**$1,000**
Objective 6: Solid Waste					
#1	Continue to enforce the Solid Waste Ordinance	Rural Area	ESD, TSW, NCSO, DNR	2008-2018	**$45,000**
#2	Continue ways of promoting proper solid waste disposal throughout the county	County Wide	TSW, ESD, SWCD, NCSD, DNR, MPCA	2008-2018	**$1,500**
#3	Continue Open Burning/Burn Barrel education campaign at the County Fair demonstrations and presentations	County Wide	TSW, ESD, SWCD, DNR, MPCA	2008-2018	**$1,500**
#4	Hold Household Hazardous Waste Collections and Tire-Appliance-Electronic Collections yearly (cost includes disposal and staffing)	County Wide	TSW, ESD	2008-2018	**$36,000**
#5	Develop and distribute educational information packets on the dangers of using backyard burn barrels to 50 citizen per year	County Wide	TSW, ESD, MPCA	2008-2018	**$2,500**
#6	Give annual presentations to 2 schools on recycling, dangers of backyard burning and/or solid waste	County Wide	TSW, ESD	2008-2018	**$1,500**
#7	Seek Funding for solid waste education and help clean up problem areas	County Wide	TSW, ESD, MPCA	2008-2018	**$500**
Objective 7: Education					
#1	Continue to hold the Annual Children's Water Festival for Fourth Graders	Nicollet, Brown, Cottonwood counties	B-N CH, ESD, MSE, SWCD, Tri-Co, various State & Federal agencies	2008-2018	**$1,000**
#2	Continue to attend Career Day and present occupational information	County Wide	SWCD, NRCS, DNR	2008-2018	**$500**
#3	Annually donate tree seedlings to elementary students	St Peter Elementary School	SWCD	2008-2018	**$500**

#4	Continue to participate in the Fort Ridgely Education Days every year	County Wide	ESD	2008-2018	**$1,000**
Projected Total for this Priority Concern					**$346,500**

GOAL: TMDLS					
Action Item	**Description**	**Focus Areas**	**Responsible Agencies**	**Time**	**Cost per Year**
Objective 1: Seven Mile Creek Watershed (SMC WS)					
#1	Assist with the implementation of the Fecal Coliform TMDL Study	SMC WS	BNC WQB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$5,500**
#2	Seek innovative ways of accomplishing the objectives of the Fecal Coliform TMDL Implementation	SMC WS	BNC WQB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$1,500**
#3	Contact 5 landowners along ditch systems to implement CRP	SMC WS	BNC WQB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$1,000**
#4	Contact 5 landowners for wetland restorations under CRP	SMC WS	BNC WQB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$1,000**
#5	Install 2 structural practices through EQIP & State Cost-Share Program	SMC WS	BNC WQB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$3,000**
Objective 2: Rush River Watershed (RR WS)					
#1	Complete the Implementation Plan for Fecal coliform Bacteria Impairment	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2009	**$2,500**
#2	Assist with the Implementation of the Fecal Coliform TMDL Study	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$5,000**

#3	Assist with the Turbidity TMDL Study	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$5,000**
#4	Seek innovative ways of accomplishing the objectives of the Fecal Coliform Implementation Plan	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$2,500**
#5	Contact 5 landowners along ditch systems to implement CRP	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$1,000**
#6	Contact 5 landowners for wetland restorations under CRP	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$1,000**
#7	Install structural practices through EQIP & State Cost-Share Program	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$3,000**
#8	Install 5 rock tile inlets per year	RR WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$2,500**
Objective 3: Middle Minnesota BMP CWP					
#1	Continue the initiatives as set forth in the CWP work plan	MidMN WS	RR JPB, ESD, SWCD, MDA, NRCS, MPCA, DNR, MES, BdCom	2008-2018	**$1,000**
Objective 4: Roger's a.k.a. Robard's Creek					
#1	Investigate the Fish Biota (IBI) Impairment Listing on Roger's Creek	Roger's Creek	ESD, SWCD, Public Works, colleges, DNR, MPCA	2008-2010	**$500**
#2	Pursue removal from the TMDL List if appropriate	Roger's Creek	ESD, SWCD, Public Works, colleges, DNR, MPCA	2008-2010	**$500**

#3	Pursue writing a TMDL Study if applicable	Roger's Creek	ESD, SWCD, Public Works, colleges, DNR, MPCA	2008-2011	**$2,000**
Objective 5: Minnesota River TMDLs					
#1	Work with adjacent counties along the Minnesota River to form partnerships to complete the Turbidity TMDL Study for implementation	Along the MN River	ESD, SWCD, RR, SMC, MPCA, adj. cnty	2008-2011	**$1,000**
Objective 6: Education					
#1	Promote education on the improvement of the Minnesota River and the importance of its tributaries	County Wide	ESD, SWCD, MES, NRCS, DNR, MPCA	2008-2018	**$1,000**
Projected Total for this Priority Concern					**$40,500**

GOAL: GROUNDWATER					
Action Item	**Description**	**Focus Areas**	**Responsible Agencies**	**Time**	**Cost per Year**
Objective 1: Township Well Water Testing					
#1	Continue Township Well Water testing program if applicable, every three years	Rural Areas	B-NCHS, ESD, MDH	2008-2018	**$1,500**
#2	Continue to support GIS water quality data base input from township testing	Rural Areas	B-NCHS, ESD, MDH	2008-2018	**$500**
Objective 2: Wellhead Protection					
#1	Assist the cities of North Mankato and Courtland in wellhead protection plans and implementation as applicable	North Mankato and Courtland	B-NCHS, ESD, MDH	2008-2018	**$500**
#2	Assist property owners that have transient and non-transient wells, as designated by MDH, in wellhead protection plans and implementation as applicable	Rural Areas	B-NCHS, ESD, MDH	2008-2018	**$500**
#3	Assist property owners in education about wellhead areas around private wells as applicable	Rural Areas	B-NCHS, ESD, MDH	2008-2018	**$500**
#4	Assist in seeking wellhead protection implementation funding	County Wide	B-NCHS, ESD, MDH	2008-2018	**$500**

Objective 3: Well Sealing					
#1	Use state cost share and other funds to assist with 2 well decommissioning per year	County Wide	SWCD, NRCS, ESD	2008-2018	**$1,000**
#2	Assist cities in obtaining funding for relocation and sealing of municipal wells	Cities	Cities, ESD	2008-2018	**$500**
Objective 4: Education					
#1	Assist Extension in one educational event on protection of rural wells	Townships	MES, BNCHS	2008-2018	**$1,000**
#2	Assist in education on noncommunity public water supply systems and inter-well management zone at County Fairs	County Wide	MDH, ESD, B-NCH, MES	2008-2018	**$1,500**
Projected Total for this Priority Concern					**$8,000**

THE PROJECTED COST OF IMPLEMENTATION PER YEAR IS $434,000

IMPLEMENTATION SCHEDULE - ONGOING ACTIVITIES

Nicollet County is dedicated to preserving our resources while providing a sound economy and educational opportunities for its citizens. The Nicollet County strives to maintain and enhance the beauty of the Minnesota River Valley. The Nicollet County staffs in all departments are known for their willingness to work with all citizens of the County.

While the County staff can not regulate the cities, there is a congenial working relationship and will continue to work with the city staffs as opportunities arise. Cities continue to educate and enforce best management practices in stormwater control, erosion control during construction and offer incentives to their citizens to practice enhancement and preservation of their natural resources.

Staff will continue to work with the County's cities and businesses to support innovative techniques, water quality conservation and improvement options and to assist them in BMPs education and implementation. For example the Statewide Reinvigorate Recycling Campaign will receive support and a pilot of the Environmental Preferable Purchasing Program is being investigated for Nicollet County's cities and county government buildings.

Staff will continue to work with all the public water suppliers in the county to further efforts to protect water quality and reduce potential impacts to drinking water sources that may be attributable to land uses.

The youth in Nicollet County is important. County staff will continue to join the staffs of the surrounding counties, cities, agencies, and organizations to present and participate in educational opportunities throughout the county on a yearly basis.

SWCD and ESD staffs continue to administer the Minnesota Wetland Conservation Act Rules and Regulations. Staff and other partners may also assist landowners to preserve and restore wetlands through education and/or grants, such as Clean Water Partnership and Clean Water Legacy grants.

The Environmental Service Department (ESD) staff will continue to provide administration of zoning, SSTS, feedlot, and solid waste ordinances. Staff answers questions and enforces the regulations in zoning and shoreland areas, stormwater and erosion control methods, and solid waste.

Rural landowners are provided with education and grant funding, as available, for replacement of non-compliant septic systems. The County Board of Commissioners has authorized county money, in the form of low interest loans, to be used to assist people in upgrading their non-compliant septic systems.

Staffs provide opportunities for the citizens to access county, state and federal funds to assist in farming practices through such programs as RIM, CREP and grants from CWP, CWL funds, foundations and other groups. These programs help achieve the goals within set rules and regulations while at the same time provide vital information that preserves and improves the natural resources.

The staff in the County is aware and acknowledges the importance of threatened, endangered and special concern species, fish barriers and other detriments to fish and habitat health. Once these areas have been identified staff may work with the DNR or other agencies to remedy these concerns. Such projects are part of the focus in the Seven Mile Creek Watershed, Rush River Watershed and Middle Minnesota Watershed Clean Water Partnership grants. The SWCD and NRCS staffs are also available to offer education and assistance to the landowner.

The following projects are summarized beginning on page 11 of the Executive Summary and will continue to be a part of the work plans:

- **TMDL PROJECTS**
  - Minnesota River Basin TMDL Project for Turbidity
  - High Island/Rush River TMDL Project for Fecal Coliform
  - Seven Mile Creek Turbidity and Fecal Coliform TMDL

- **CLEAN WATER PARTNERSHIPS**
  - Rush River Watershed
  - Seven Mile Creek Watershed
  - Middle Minnesota ISTS Low Interest Loans
  - Middle Minnesota Diagnostic Study

- **AGRICULTURAL PROJECTS**
  - Red Top Farms Field-Scale BMP and Water Quality Demonstration Project
  - Integrating Solar/Wind Powered Pumps with Restored Wetlands to Treat Agricultural Drainage Tile Water
  - MN Conservation Drainage Demonstration Project

- **OTHER PARTNERSHIPS**
  - Rural Land Opportunity Show
  - Tri-County Solid Waste Office

- **EDUCATION**
  - Annual Children's Water Festival
  - Fort Ridgely Days
  - Hoover 1st Grade Annual Environmental Trip to Seven Mile Creek Park:

- **SWCD**
  - Tree Planting Days Nicollet Public Schools
  - The following Cost Share Programs:
    - The Conservation Reserve Program (CRP) A federal program that provides technical and financial assistance to eligible farmers and ranchers to address soil,
    - The Minnesota Conservation Reserve Enhancement Program (CREP)

- The Reinvest in Minnesota (RIM) Reserve Program
- Environmental Quality Incentive Program (EQIP)
- Wildlife Habitat Incentive Program (WHIP)

➢ District Tree Program
➢ The South Central Envirothon
➢ WCA Administration

❖ **LAKE ASSOCIATIONS**
➢ Lake Hallett Association

❖ **NICOLLET COUNTY DEPARTMENTS**
➢ **Environmental Services Department (ESD)**
- Zoning
- Subsurface Sewage Treatment Systems (SSTS) Program
- GIS Programs
- Feedlots
- Solid Waste
- Wetland Conservation Act (WCA)
- Local Water Management
- Backyarder's Precipitation Network

➢ **Brown-Nicollet-Cottonwood Water Quality Board (BNC WQB)**
- Facilitate Clean Water Partnership Grants

➢ **Brown-Nicollet Community Health Services (BN CHS)**
- Community health duties
- Several projects that remain true to the LWM Mission Statement such as:
  - Assisting with clean water partnership grants
  - Township well testing,
  - Public Health Nuisance and Clandestine Drug Lab site investigations

➢ **Nicollet County Public Works Dept.**
- County Park, Roads and Scenic Areas
- Black-margined Loosestrife Beetle
- Flea Beetle Project
- The Black-margined Loosestrife Beetle Project
- The Tortoise Beetle may be a project for the county in the future

APPENDIX

NICOLLET COUNTY
FOURTH GENERATION

LOCAL WATER
MANAGEMENT PLAN

APPENDIX A. 2008 Impaired Waters Information

List of the River Reaches and the South Branch of the Rush River Watershed Drainage Area within Nicollet County:

Reach	Description	Yr	River ID#	Prev. ID#	Affected Use	Pollutant or Stressor	TMDL Target Start	TMDL Target Completion	Cate-gory	Yr TMDL Plan Approved
MINNESOTA RIVER TMDLs										
Minnesota River	Shahaska Cr to Rogers Cr	98	07020007-501		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Shahaska Cr to Rogers Cr	94	07020007-501		Aquatic recreation	Fecal Coliform	2008	2011	5B	
Minnesota River	Shahaska Cr to Rogers Cr	02	07020007-501		Aquatic consumption	PCB in Water Column	2002	2015	5B	
Minnesota River	Shahaska Cr to Rogers Cr	02	07020007-501		Aquatic life	Turbidity	2004	2009	5B	
Minnesota River	Shahaska Cr to Rogers Cr		07020007-501		Aquatic consumption	Mercury Water Column			5B[15]	2008
Minnesota River	Shahaska Cr to Rogers Cr		07020007-501		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Blue Earth R to Shahaska Cr	98	07020007-502		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Blue Earth R to Shahaska Cr	02	07020007-502		Aquatic life	Turbidity	2004	2009	5B	
Minnesota River	Blue Earth R to Shahaska Cr		07020007-502		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Cottonwood R to Little Cottonwood R	98	07020007-503		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Cottonwood R to Little Cottonwood R	02	07020007-503		Aquatic life	Turbidity	2004	2009	5B	
Minnesota River	Cottonwood R to Little Cottonwood R		07020007-503		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Minneopa Cr to Blue Earth R	98	07020007-504		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	

Reach	Description	Yr	River ID#	Prev. ID#	Affected Use	Pollutant or Stressor	TMDL Target Start	TMDL Target Completion	Cate-gory	Yr TMDL Plan Approved
Minnesota River	Minneopa Cr to Blue Earth R		07020007-504		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Swan Lk Outlet to Minneopa Cr	98	07020007-505		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Swan Lk Outlet to Minneopa Cr	02	07020007-505		Aquatic consumption	PCB in Water Column	2002	2015	5B	
Minnesota River	Swan Lk Outlet to Minneopa Cr	02	07020007-505		Aquatic life	Turbidity	2004	2009	5B	
Minnesota River	Swan Lk Outlet to Minneopa Cr		07020007-505		Aquatic consumption	Mercury Water Column			5B[15]	2008
Minnesota River	Swan Lk Outlet to Minneopa Cr		07020007-505		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Morgan Cr to Swan Lk Outlet	98	07020007-506		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Morgan Cr to Swan Lk Outlet		07020007-506		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Little Cottonwood R to Morgan Cr	98	07020007-507		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Little Cottonwood R to Morgan Cr		07020007-507		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Eight Mile Cr to Cottonwood R	98	07020007-508		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Eight Mile Cr to Cottonwood R		07020007-508		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Little Rock Cr to Eight Mile Cr	98	07020007-509		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Little Rock Cr to Eight Mile Cr		07020007-509		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Spring Cr to Little Rock Cr	98	07020007-510		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	

Reach	Description	Yr	River ID#	Prev. ID#	Affected Use	Pollutant or Stressor	TMDL Target Start	TMDL Target Completion	Cate-gory	Yr TMDL Plan Approved
Minnesota River	Spring Cr to Little Rock Cr		07020007-510		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Fort Ridgely Cr to Spring Cr	98	07020007-511		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Fort Ridgely Cr to Spring Cr		07020007-511		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Wabasha Cr to Fort Ridgely Cr	98	07020007-512		Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Wabasha Cr to Fort Ridgely Cr		07020007-512		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Rogers Cr to Cherry Cr	98	07020007-599	12-524	Aquatic consumption	PCB in Fish Tissue	1998	2011	5B	
Minnesota River	Rogers Cr to Cherry Cr		07020007-599	12-524	Aquatic consumption	Mercury in fish tissue			5B[15]	2008
Minnesota River	Cherry Cr to Le Sueur Cr	02	07020012-507		Aquatic recreation	Fecal Coliform	2010	2014	5B	
Minnesota River	Cherry Cr to Le Sueur Cr	98	07020012-507		Aquatic consumption	PCB in Fish Tissue	1998	2010	5B	
Minnesota River	Cherry Cr to Le Sueur Cr		07020012-507		Aquatic consumption	Mercury in fish tissue			5B[15]	2008
RUSH RIVER, SOUTH BRANCH TMDLs (Rush River Watershed Drainage Area in Nicollet County)										
Rush River	S Branch Rush R to Minnesota R	02	07020012-521		Aquatic recreation	Fecal Coliform	2003	2008	5A	
Rush River	S Branch Rush R to Minnesota R	08	07020012-521		Aquatic Life	Turbidity	2011	2015	5A	
Rush River, South Branch	Unnamed ditch to Rush R	08	07020012-553		Aquatic Recreation	Fecal Coliform	2008	2010	5C	

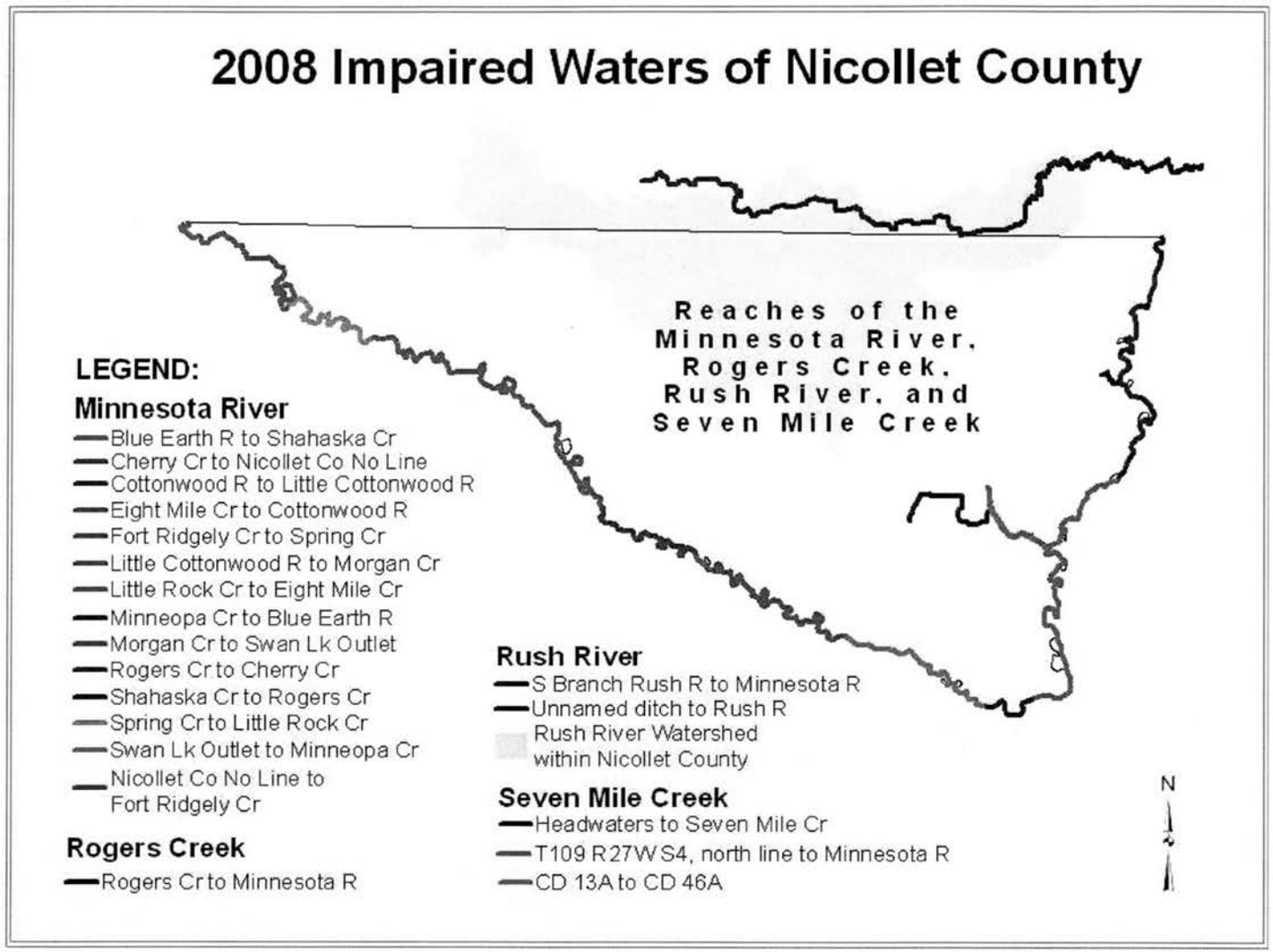
Reach	Description	Yr	River ID#	Prev. ID#	Affected Use	Pollutant or Stressor	TMDL Target Start	TMDL Target Completion	Cate-gory	Yr TMDL Plan Approved
SEVEN MILE CREEK TMDLs										
County Ditch 46A	Headwaters to Seven Mile Cr	06	07020007-516		Aquatic recreation	Fecal Coliform	2010	2015	5A	
County Ditch 46A	Headwaters to Seven Mile Cr	06	07020007-516		Aquatic life	Turbidity	2010	2015	5A	
Seven Mile Creek	CD 13A to CD 46A	06	07020007-564		Aquatic recreation	Fecal Coliform	2010	2015	5A	
Seven Mile Creek	CD 13A to CD 46A	06	07020007-564		Aquatic life	Turbidity	2010	2015	5A	
Seven Mile Creek	T109 R27W S4, north line to Minnesota R	06	07020007-562		Aquatic recreation	Fecal Coliform	2010	2015	5A	
Seven Mile Creek	T109 R27W S4, north line to Minnesota R	06	07020007-562		Aquatic life	Turbidity	2010	2015	5A	
ROGERS CREEK TMDLs (a.k.a. Robard's Creek)										
Rogers Creek (a.k.a. Robard's Creek)	Unknown Cr (a.k.a. Rogers Cr) to Minnesota R	04	07020007-547		Aquatic life	Fish Bioassessments	2012	2017	5C	

Minnesota Pollution Control Agency Link:
Minnesota's Impaired Waters and Total Maximum Daily Loads: http://www.pca.state.mn.us/water/tmdl/index.html

TABLE KEY:

a.k.a.	Also Known As	TMDL	Total Maximum Daily Load
Cr	Creek	R	River
Lk	Lake	Yr	Year

A Map of the River Reaches and the South Branch of the Rush River Watershed Drainage Area within Nicollet County:



Appendix B. Priority Concerns Scoping Document

NICOLLET COUNTY

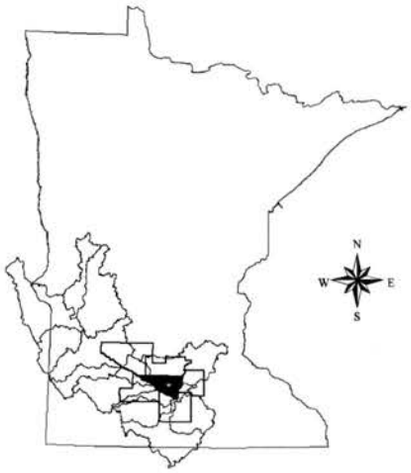
FOURTH GENERATION

2008 - 2018
LOCAL WATER
MANAGEMENT PLAN

PRIORITY CONCERNS SCOPING DOCUMENT

This priority concerns scoping document for the Nicollet County Local Water Management Plan was developed in accordance with the changes to the Comprehensive Local Water Management Act, MN Statutes 103B.304-103B.355. The document identifies the priority concerns as developed by the Nicollet County Water Management Task Force, along with a detailed account of how those concerns were identified and selected.

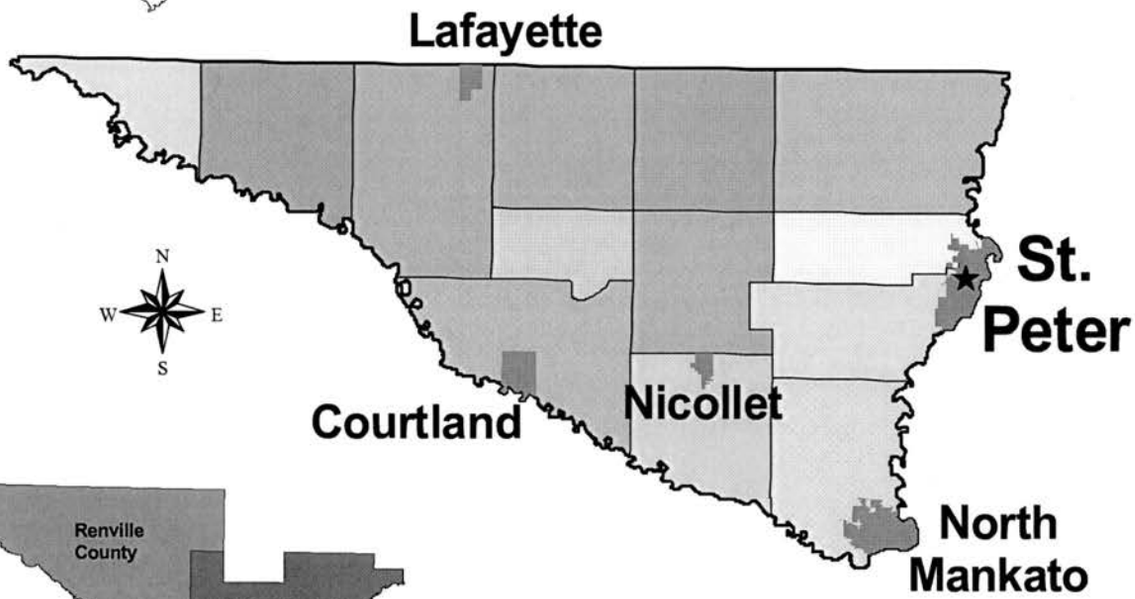
INTRODUCTION:

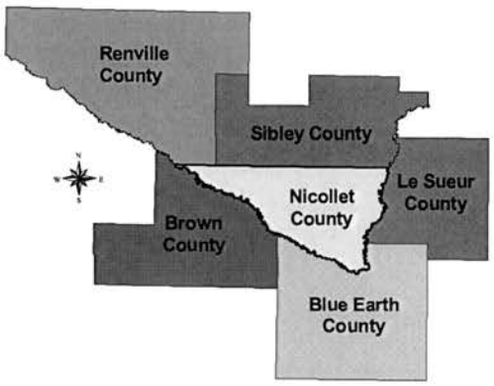


Nicollet County is located in south central Minnesota lying entirely within the Minnesota River Basin.

Triangular in shape, the County's thirteen townships are bordered on the southeast and southwest by 104 miles of the 335 total miles of the Minnesota River.

One of the two largest cities, Saint Peter, is the County Seat and lies between the bluffs to the west and the Minnesota River to the East along U.S. Highway 169. To the south approximately 12 miles along U.S. Highway 169 is the largest city of North Mankato. There are three small cities with a small unpopulated portion of the city of Mankato within the county boundaries.





The counties of Blue Earth, Brown, LeSueur, Renville and Sibley lie adjacent to Nicollet County and share the Minnesota River along our borders.

According to the Minnesota State Demographer's Office[1] the estimate percent of change to the population of the county as a whole from 2000-2010 is 7% and from 2000-2030 is 14%. The 2030 estimated population of the county is 34,000. The estimated growth of the cities within our county will increase from 23,521 in 2000 to an estimated 27,589 by 2030. Likewise the townships will grow from a 2000 census of 6,250 to an estimated 6,411 in 2030.

The majority of the land use is agricultural or cultivated land. Urban land use has grown

[1] *Projected population to 2030 for cities and townships outside the Twin City area* (Office of the State Demographer: Dataset, published July 1, 2004)

significantly in recent years, especially in the North Mankato and St. Peter areas. Most of the industrial development exists in these cities, with the exception of mining activities which occurs mostly within the Minnesota River Valley.

Table of Land Use*

Land Use	Acreage	Percent
Urban & Rural Development	9,272	3
Cultivated Land	234,169	78
Transitional Agricultural Land	148	>1
Woodland	25,745	8
Brush Land	320	>1
Grassland	13,645	5
Water	7,793	3
Wetland	6,947	2
Gravel Pits, Rock & Sand	499	>1

* International Coalition Land Use/Land Cover, 1990

PLAN INFORMATION:

The Local Water Management Plan Administrator is in the Environmental Services Department and is responsible for the local water management plan/program with the assistance of the Nicollet Soil and Water Conservation District staff and the Brown-Nicollet-Cottonwood Water Quality Board staff. The Board of Water and Soil Resources Board approved the first Nicollet County Water Plan on November 13, 1990 and it was adopted by the County Board of Commissioners at their meeting of January 8, 1991 and. This will be the fourth update of the Nicollet County Local Water Management Plan. The current plan will expire on December 31, 2006.

LIST OF THE PRIORITY CONCERNS:

Please note that there will be an education component incorporated into all Priority Concerns in the LWM Plan.

- **Stormwater Management** (including urban and rural action items that deal specifically with surface water runoff)
- **Urban and Rural Resource Management** (including drainage, erosion and sediment control action items)
- **Total Maximum Daily Loads** (the two Clean Water Partnership Projects have action items for the Rush River and Seven Mile Creek; also the County will pursue additional funding for practices specifically targeting impaired waters)
- **Groundwater** (including wellhead protection assistance and action items)

PRIORITY CONCERNS IDENTIFICATION:

The Nicollet County Local Water Management planning process of addressing priority concerns has included the following steps and/or actions:

02-22-05	Nicollet County Board of Commissioners passes a Resolution to update the Plan
08-29-05	County Comprehensive Water Plan Update Training with BWSR staff and State Agencies
11-01-05	Nicollet County Board of Commissioners passes a Resolution appointing the Task Force Members

11-09-05 Water Management Advisory Task Force convened
11-09-05 Develop a process to get Public Input
02-22-06 Review plan update process (including public input) with board conservationist
03-09-06 Notification of intent to update the plan sent, along with Priority Concerns Input form and a request for relevant plans.

Received from:

Local Units of Government

☒ Soil and Water Conservation District	03-22-06 received input/plan
☒ Municipalities, Towns and Townships	03-07-06 received input/plan
☒ Planning and Zoning Office	03-10-06 received input/plan
☒ Contiguous Counties	04-12-06 received input/plan
☒ Joint Powers Organizations	none

STATE REVIEW AGENCIES

☒ BWSR	03-08-06 received input
☒ DNR	03-06-06 received input
☒ MPCA	03-01-06 received input
☒ MDA	03-09-06 received input
☒ MDH	03-16-06 received input
☒ EQB	03-21-06 received input

06-01-06 Legally Noticed Public Information Meeting
06-13-06 Conduct public information meeting at County Board of Commissioners Meeting
06-12 thru 06-16-06 Public Information Opportunity Display at County Government Center
04-03-06 Review relevant local, state and federal plans and controls.
08-14-06 Select priority concerns the plan will address.

LWM Citizen Task Force

Meeting of the Members

11-09-05 County Government Center
01-18-06 County Government Center
03-21-06 County Government Center
07-19-06 County Government Center – small committee meeting for PCSD discussion

E-Mail and US Postal Service Correspondence with Members

11-22-05 Review of Citizen Survey content
01-06-06 Notice of news release and request for comments from County Commissioners serving on Task Force
01-11-06 Request for Citizen Survey responses from Members
03-24-06 Priority Concerns Recap from Meeting
08-15-06 Request for decision on Draft Priority Concerns

Citizen Survey

11-28-05	KRBI Radio Café 1310 Show to discuss the Revision of the Plan and the Citizen's Survey
01-11-06	Mailings and E-Mails went out to Task Force Members and Citizens
01-20-06	Survey placed on Environmental Services Department Website

Local Units of Government Meeting

02-10-06	Notice sent to the Cities of Courtland, Lafayette, Mankato, Nicollet, North Mankato and St. Peter
03-01-06	Meeting was held

Following is a list of priority concerns that were received:

STATE AGENCIES' PRIORITY CONCERNS:

I. MINNESOTA BOARD OF WATER AND SOIL RESOURCES:

From Tom Fischer, Board Conservationist

1. **Erosion and Sediment Control, and Nutrient Management On Agricultural Land**

Why is it important the plan focus on this concern? Approximately 80% of Nicollet County is cultivated land located on 730 farms. To provide for the long-term productive capacity of the county's soil resource base, these agricultural soils need to be protected from erosion.

Agricultural runoff is also a significant source of nutrient loading to surface and ground waters. Proper application of commercial fertilizer and animal waste is critical in reducing loss to receiving waters. Preventing soil loss due to erosion reduces sediment and attached phosphorous from entering receiving waters, which helps improve water quality.

The waters listed on the MPCA Impaired Waters list in Nicollet County are impaired due to various pollutants, including turbidity and fecal coliform. Implementation of agricultural Best Management Practices (BMPs) is needed to protect and keep the productive soils in place by reducing soil erosion, provide for proper utilization of chemical ferttilizers and animal waste, and to retain precipitation on the land that aids in the control of floodwaters. These will lead to improved quality of the water resources.

2. **Drainage System Maintenance and Repair**

Why is it important the plan focus on this concern? Properly maintained drainage systems support the productive capability and erosion protection of soils that require drainage for agricultural use. Drainage systems that require repair can make use of technologies that can aid in flood water control and water quality improvement as well as address the drainage needs of agriculture. The public drainage system is a major component of Nicollet County's water resources and deserves significant attention in this local water management plan update.

3. **Maintain, Enhance and Increase Wetlands Within The County**

Why is it important the plan focus on this concern? Retaining water on the landscape in the watershed by wetland creation and restoration will help address the concerns of erosion control and water quality and quantity.

Incorporating enhancement and preservation of wetlands is identified as important in the Minnesota River Basin Plan, Lower Minnesota River Dissolved Oxygen Implementation Plan. Wetlands that receive significant quantities of contaminants such as excess nitrate-N have been identified as good candidates for the significant removal of those contaminants. This priority concern has been addressed in other counties through the development of a comprehensive wetland protection and management plan and adopted county wetland ordinance that strives to replace within the county any wetland functions and values lost as a result of wetland impacts and the Wetland Conservation Act.

4. **Storm Water Runoff and Sediment Delivery From Impervious Surfaces and Construction Sites**

Why is it important the plan focus on this concern? Storm water from impervious surfaces and sediment from construction sites and other areas without vegetative cover can greatly increase floodwater potential and deliver large amount of sediment to receiving waters.

II. MINNESOTA DEPARTMENT OF AGRICULTURE:

From Becky Balk, Agricultural Land Use Planner

1. **Pesticide and Nutrient Impacts To Surface Water**

Why is it important the plan focus on this concern? It is known that rivers, streams and lakes in Nicollet County are impacted by pesticides and nutrients. It is also known that agricultural chemicals may move through tile lines to surface outlets.

2. **Nutrient impacts to St. Peter and Nicollet Wellhead Protection Areas**

Why is it important the plan focus on this concern? Areas of concern that should be addressed include St. Peter and Nicollet wellhead protection areas which are considered vulnerable.

3. **Conservation Tillage and Drainage**

Why is it important the plan focus on this concern? Soil erosion by wind and water are both of concern in Nicollet County. Nicollet County is in the Minnesota River Watershed, which ultimately contributes nutrients and sediment to the Mississippi River. The Lake Pepin TMDL (turbidity and phosphorus) and the Minnesota River Turbidity and Dissolved Oxygen (DO) TMDLs will all impact Nicollet County's agricultural industries to some degree.

With the heavy rains and high potential for soils erosion by water in the last few years, it is clear that soil conservation practices are important for producers to implement. Proper drainage of agricultural lands is important for crop development, but also has been proven to reduce soil erosion (Agricultural Drainage: Issues and Answers, 2004).

4. **Manure Management and ISTS**

Why is it important the plan focus on this concern? 1) Because of this large task, it is important that the County to continue to develop strategies to address this issue. 2) The development of manure management and nutrient management plans will help ensure that producers have the tools to apply manure at agronomic rates and reduce the potential for impacts to surface and ground waters. 3) Fecal coliform/E. coli impairments are prevalent in the Minnesota River Watershed and a great deal of work will be undertaken in this area as more waters become impaired for bacteria. Manure and ISTS are two sources for this impairment and it is important that livestock producers and rural landowners are involved with any fecal coliform TMDLs developed in Nicollet County.

III. MINNESOTA DEPARTMENT OF HEALTH:

From Terry Bovee, Source Water Protection Planner

1. **Recognizing and supporting needs of public water suppliers in their wellhead protection planning programs: plan development, and plan implementation.**
2. **Recognizing noncommunity public water supply systems and the inner well management zone (a 200 foot radius around the public water supply well also known as IWMZ) protection needs.**
3. **Continue to support the Brown-Nicollet-Cottonwood water quality data bases for private wells that are compatible with the County Well Index and can be used in a geographic information system (GIS) format.**
4. **Support the sealing of unused wells, with a priority for those located in wellhead protection areas.**

Why is it important the plan focus on this concern? Drinking water is important to every one and is a vital necessity for community health and economic well-being. The city of St. Peter represents about 1/3 of the county population and has issues with high nitrates in portions of their public drinking source water. Working with all the public water suppliers in the county furthers efforts to protect and reduce potential impacts to drinking water sources that may be attributable to land uses.

IV. MINNESOTA DEPARTMENT OF NATURAL RESOURCES:

From Cheryl Heide, Region 4 Regional Director

1. Holding Water on the Landscape-Hydrograph Restoration

Restoration of wetlands and changes in land use practices and drainage policies can work in concert to provide a way of keeping the water in place, reducing peak run off events, recharging groundwater aquifers, slowing the movement of surface water, trapping nutrients and sediment and providing habitat.

2. Creation of Buffers on Ditches, Streams and Rivers

Natural vegetation planted along ditches at sufficient widths contribute to effective reduction of non-point source pollution. Un-mowed vegetation in erodible and sloped areas and drainage-ways help filter sheet-flow runoff of water-borne fertilizers and pesticides before they enter surface or groundwater.

3. Fish Passage

Elimination of unintentional fish barriers within the Minnesota River Watershed can increase species diversity and habitat by restoring fish access to larger portions of their natural range.

4. River and Stream Channel Restoration

Flow restoration of rivers and streams done in an environmentally friendly manner is important to relieve flooding pressure on upstream lands. This should be done as a part of a comprehensive approach to flood damage reduction.

5. Agricultural Best Management Practices

Best Management Practices can help reduce pollution problems and preserve water quality.

6. Threatened and Endangered Species

The foundation of strong economies and vibrant human communities is healthy, resilient ecosystems. To help insure a healthy ecosystem for future generations, management activities and resources within the county should consider occurrences and needs of Threatened, Endangered and Special Concern Species and sites identified by the DNR as having Biodiversity Significance.

V. MINNESOTA ENVIRONMENTAL QUALITY BOARD:

From: John Wells, Strategic Planning Director, MN EQB

No comments were generated because the position is vacant at this time.

VI. MINNESOTA POLLUTION CONTROL AGENCY:

From Dave L. Johnson, Regional Division – Watershed Section

1. Impaired Waters/Total Maximum Daily Loads (TMDL):

Identify the priority on addressing impaired waters and participate in TMDL projects. Address commitment of county to submit data, provide plans for monitoring unmonitored waters and describe actions and timing County intends to take to reduce impairments.

2. Feedlots and Land Application of Manure:

The County should continue to provide adequate staffing to continue prioritizing Open Lot Agreement sign-ups and implement "fixes" beneficial to protection of water resources.

3. Drainage System Management and Open Tile Inlets:

Recommend the drainage authority incorporate a comprehensive assessment of the environmental aspects of any proposed project. We strongly recommend that the following

portions of the drainage code be fully assessed and utilized for your PDSs: 103E.015; 103E.227; 103E.701 Subd. 6; 103E.805 and 103B.245. Also consider going beyond the one-rod minimal buffer to enhance protections to reach water quality goals in specific watersheds. Consider greater setback & buffer protection to open ditch/intake efforts to help reduce pollutants; focusing on open systems.

4. Erosion and Runoff Control:

MPCA strongly supports objectives and goals that address erosion, sedimentation and turbidity issues, and recommends these efforts be a priority for implementation. Urban and lakeshore development pose similar problems in construction site erosion concerns. Educational actions related to erosion and runoff, enforcement of soil erosion ordinance(s) would help address this issue.

5. Wellhead Protection and Ground Water Issues:

In St. Peter wellhead area stormwater management and agricultural drainage water management comments must be addressed. Map ground water recharge areas & any important geologic features that may create direct links between surface water and ground water.

6. Citizen Monitoring of Surface Waters:

Continue to promote citizen stream monitoring in the County. While most of the County's lakes are shallow and small, the Citizen Lake Monitoring Program data would still be valuable.

CLEAN WATER PARTNERSHIP STAFF PRIORITY CONCERNS:

I. Rush River Clean Water Partnership:

From Scott Kudelka, Watershed Coordinator

1. **Reduce Sediment levels in the Rush River Watershed**
2. **Reduce Nutrient levels in the Rush River Watershed**
3. **Reduce fecal coliform bacteria / E. coli levels in the Rush River Watershed**

II. Seven Mile Creek Clean Water Partnership:

Kevin Kuehner, Watershed Coordinator

1. **Drainage Management**
2. **Filter Strips Along Riparian Corridors, Bluff Land Interface and Drainage ditches**
3. **Non-Complying Septic Systems**

LOCAL UNITS OF GOVERNMENT PRIORITY CONCERNS:

CITIES

I. CITY OF COURTLAND:

From Dan Wietecha, City Administrator

1. The Courtland Planning Commission is nearing completion of an update to the City's Comprehensive Plan. The draft has **identified "maintain the beauty of the river valley"** as the City's highest priority. Although this does not specifically address water quality; it would be reasonable to include the cleanliness of the Minnesota River within the reach of this priority.
2. "**Have an overall stormwater plan**" has ranked in 30th place out of 53 identified City priorities for the updated Comp Plan. However there have been a couple of specific locations that warrant the City's examination for potential erosion control, retention pond, and similar stormwater improvements.
3. A 2001 survey by your office* found "**safe drinking water**" identified as the number one water management concern of Lafayette residents.

*referring to the 2001 LWM Citizen Survey done by the County Environmental Services Dept.

II. CITY OF LAFAYETTE:

From Dan Wietecha, City Administrator

1. The City of Lafayette has been working with local businesses in **controlling phosphorus content in their waste streams**. The City prefers to stay ahead of the MPCA's 2011 deadline for our Phosphorus Management Plan.

2. The City of Lafayette has participated in the **Rush River Assessment Project** the last several years.

3. A 2001 survey by your office* found "**safe drinking water**" identified as the number one water management concern of Lafayette residents.

*referring to the 2001 LWM Citizen Survey done by the County Environmental Services Dept.

III. CITY OF MANKATO LYING WITHIN NICOLLET COUNTY:

No Comments Were Received

IV. CITY OF NICOLLET:

From Dan Wietecha, City Administrator

1. The City of Nicollet has three municipal wells abandoned in the 1920's & 1940's. The Department of Health is requiring their location and appropriate sealing. **The City of Nicollet believes it unfair that this and similar water quality requirements come unfunded from state and federal agencies.**
2. The City of Nicollet acknowledges **the importance and value of Swan Lake as habitat.**
3. A 2001 survey by your office* found "**safe drinking water**" identified as the number one water management concern of Nicollet residents.

*referring to the 2001 LWM Citizen Survey done by the County Environmental Services Dept.

V. CITY OF NORTH MANKATO:

From Mike Fischer, City Planner and Marian Heyer, Building & Construction Inspector, via phone conversation

1. **Feedlot Confinement and Proximity to City**
2. **MS4: the over-all concept is good, but it needs to be guided by common sense**
3. **Soil Erosion Through Construction**
4. **Burden of Paper Work for the City for Permits for Stormwater**

VI. CITY OF ST PETER:

From Peter Moulton, verbal comments, during LGU Meeting

1. **MS4 Stormwater and resultant arduous paperwork for the city**
2. **Erosion Control Issues**

V. TOWNSHIPS

I. Townships Priority Concerns:

Lafayette Township from Chuck Schmidt, Supervisor

1. Valley Hills Edition – Township Road 611 Ave: **washing hillside down in public road**
2. 581st Ave – Lafayette South Township: **washing hillside and public road erosion**

VI. CONTIGUOUS COUNTIES PRIORITY CONCERNS:

I. BLUE EARTH COUNTY:

None submitted; their County LWM Plan expires 2007

II. BROWN COUNTY:

None submitted; their County LWM Plan expires 2006

III. LE SUEUR COUNTY:

None submitted. Their County LWM Plan is currently in the process of being revised. The following is taken from their recent Priority Concern Scoping Document

1. **Impaired Waters/TMDLs**
2. **Wastewater Treatment**
3. **Stormwater Management**
4: **Protection of Undeveloped Shorelines**
5: **Drinking Water Protection**
6: **Drainage Management**
7: **Reduce Contamination from Agricultural Sources**

IV. RENVILLE COUNTY:

None submitted. Their County LWM Plan expires beyond 2008

V. SIBLEY COUNTY:

None submitted. Their County LWM Plan expires beyond 2008. However, comments were made by the Watershed Coordinator for land in the Rush River Watershed lying within Nicollet County; please see Clean Water Partnership Staff Priority Concerns: Rush River.

CITIZEN SURVEY RESULTS:

At the top of the Survey was this statement: *"The following Survey will be used to determine the priorities in planning for water resource management and improvements. You will not find Safe Drinking Water as a choice on the Issues below. It has always been Nicollet County's goal to achieve & maintain safe drinking water for its citizens. Choosing an additional Five (5) Issues will assist us in drafting a plan in reaching our goal to "Protect, Improve & Enhance the Water Resources of Nicollet County."* In reviewing the surveys of the past it was felt that by eliminating this one issue we could focus on receiving five issues that would better represent the feelings of the citizens who, like us, agree that Safe Drinking Water is a main priority of water planning.

When developing the 23 questions for the survey it was felt that not everyone would understand certain terms. For instance when Terry Bovee, MN Department of Health and Bill Thompson, MN Pollution Control Agency visited with the Task Force they explained that Surface Water Runoff Associated with Storm Events and Stormwater Management were the same thing and included both urban and rural runoff. We also wanted to understand the amount of concern for Herbicide and Pesticide Use whether it was a general concern or specifically urban or rural. Since these herbicide, pesticides and runoff issues were priorities for the Task Force they agreed that listing them in multiple question form would result in a clearer understanding of the priorities for the citizens.

The following is a table of the top ranked survey results by percentages. Ninety five surveys were sent out to citizens, cities and townships of the county. It was also posted on the County website and media announcement were circulated. A total of 56 were received and results were tabulated and reviewed with the LWM Task Force.

TOP RANKING RESPONSES	%
Soil Erosion & Runoff	41
Urban Pesticide & Fertilizer Use	41
Development Adjacent to Lakes, Streams & Rivers	32
Wetland Protection & Restoration	32
Herbicide & Pesticide Use	30
Livestock/ Feedlot Management	29
Industrial Practices Affecting Water Resources	27
Farmland Drainage	27
Surface Water Runoff Associated with Storm Events	25
ADDING LIKE RESPONSES TOGETHER	
Herbicide & Pesticide Use, Urban Pesticide & Fertilizer Use & Rural Pesticide & Fertilizer Use	89
Surface Water Runoff Associated with Storm Events & Stormwater Management	41
PER CENT OF RESPONSES FROM CITIZENS BY LOCATION *	
Rural Agricultural or Farm	38
Rural Non-Agricultural or Subdivision	24
City	36
Unincorporated Town	2

* One survey did not list a location

PRIORITY CONCERNS SELECTION:

Nicollet County water planning and implementation activities have been on going since the first plan was adopted in 1990 and is the umbrella under which everyone is working toward our Mission Statement: "Protect, Improve and Enhance The Water Resources of Nicollet County. The Nicollet County staffs are adding to what the state and federal agencies can not fulfill because of funding cuts.

The Priority Concerns were chosen based upon information received through the Citizen's Survey, the comments received from the state agencies and local governmental units, and the public comments received separately from the survey and from the Public Information Input Opportunity Display that was in the atrium of the Government Center. After the information was gathered it was presented to the Task Force and a choice was made based on this information and acquaintance of the Task Force members with the citizens of the county and the environmental needs.

The participation of the public in different activities such as The Citizen Survey and Public Input Opportunity, as well as comments received from articles featured in the media, were also used as an indication of commitment to the priority concerns that were chosen.

All Priority Concerns are felt to address the issue of safe drinking water. Each item was chosen to promote the safety of current resources and the improvement of those waters that have been found to not comply with current established safe drinking water levels.

- **Stormwater Management**

In reviewing the concerns of urban and rural surface water runoff the Task Force Members felt that the need to continue working on action items that will promote the prevention of nutrient and sediment runoff impacts to our water resources. This will be done through continued strong zoning and solid waste regulations; continued restoration of wetlands and

attention to stream and overland erosion, and working with cities to promote lawn and construction best management practices for development.

Through the Seven Mile Creek and Rush River Clean Water Partnership there is a focus on drainage that will continue to be pursued.

- **Urban and Rural Resource Management**

The Nicollet County is predominately agricultural with two rapidly growing cities. The Task Force Members are aware of the need for education that will encourage our citizens to be aware of the reasons and to including drainage, erosion and sediment control action items in their landscaping and site development for homes and businesses.

Along with a strong ongoing ISTS/SSTS inspection program; the County has dedicated county funds toward an ISTS/SSTS loan program to assist area residents in upgrading their sewage treatment system.

The Water Plan will focus on actions that will maintain a healthy economy while promoting environmentally sound agricultural best management practices in our rural areas; working through the County Feedlot Officer, SWCD, The Rush River Watershed and Seven Mile Creek Watershed Clean Water Partnerships.

- **Total Maximum Daily Loads (TMDL)**

The County has two clean water partnership projects: The Rush River Watershed with Sibley County and The Seven Mile Creek Watershed. Both have an on-going focus on the TMDLs that have been identified by the State.

There is also another on-going project, "Paired Watersheds", that has focused on two small watersheds in western Nicollet County comparing farming and tilling practices. One side has refrained from changing any practices and the other side has made specific changes such as tillage and cropping rotations for comparison of water quality data.

Also the Water Plan will focus on action items that specifically target those waters that have not been identified by the state for improvement, but could potentially become part of this growing list.

- **Groundwater**

Nicollet County has a unique on-going program of township water well testing, since 1988, that has shown areas of special concern for groundwater protection and educational opportunities for the residents that are on private wells and small community wells. Along with our cities that have completed their MDH Wellhead Protection Plans and those that are in the process, the county will continue to offer assistance and promote action items to protect those areas that have been identified.

PRIORITY CONCERNS NOT ADDRESSED BY THE PLAN:

Staff limitations and budget cuts make it necessary to focus on a limited number of issues for implementation over the next five years. Additional concerns that were submitted, but not included in the Priority Concern Scoping Document, were felt to be either part of an ongoing program through other sources or to have been relegated to a lower priority because of funding considerations and availability of staff. These and other issues that will not be addressed in this LWM Plan will be carefully watched for escalation of importance throughout the duration of the next five years.

Various Nicollet County staff are addressing many issues that are of importance to those commenting on their concerns. On-going programs within the county are addressing natural resources on a pro-active basis. The following lists are some of the on-going programs.

- The Environmental Services Department is responsible for the following as well as education about these issues:
  - **Personnel:**
    - A Local Water Management Plan Administrator
    - A County Feedlot Officer that focuses on Best Management Practices (BMPs) that addresses such issues as soil erosion and runoff concerns from open lots, proper management of manure and location of facilities in relation to surface and groundwater.
    - An ISTS Designer I (Inspector), a licensed soil scientist who works closely with citizens and installers to maintain and improve the installation and upkeep of all individual sewage treatment systems
    - A Solid Waste Enforcement Coordinator that administers the solid waste ordinance regulations
    - The Wetland Conservation Act Administrator coordinates the WCA Rules
  - **Permitting:**
    - The granting of a Conditional Use Permit will always maintain the goals of health, safety and general welfare of the public and can contain conditions that require compliance with federal, state and local rules and regulations.
    - Issuance of Zoning Permits can address compliance with water quality issues as well.
  - **Solid Waste:**
    - The County Board of Commissioners approved the establishment of the following solid waste activities done in conjunction with the Tri-County Solid Waste Office:
      - Continuation of an annual household hazardous waste collection
      - Continuation of two annual tire, appliance and electronic collections
      - Establishment of four rural recycling areas across the County
- The Children's Water Festival is a one-day educational event that presents awareness and the importance of water to the fourth grade children (including public, parochial and home schooled) of Brown, Cottonwood and Nicollet County
  1999-present; the website: http://mrbdc.mnsu.edu/org/bnc/childrenwaterfest.html
- The County has the following ongoing projects:
  - Seven Mile Creek Clean Water Partnership Project
    - 1999-present; the website: http://mrbdc.mnsu.edu/org/bnc/sevenmile.html
  - Rush River Clean Water Partnership Project
    - 2003-present; the website: http://mrbdc.mnsu.edu/major/lowminn/subshed/rush/rr_index.html
  - Paired Watershed Study with the University of Minnesota
    - 2002-present; the website: http://mrbdc.mnsu.edu/org/bnc/paired_watershed.html,
- The Soil and Water Conservation District works closely with the people in the rural areas to furnish them with information on available programs, making application for these programs and assisting in such areas as wind and water erosion solutions. This office coordinates efforts with the clean water partnership projects, state and federal programs and county activities.

In summation:

THE CITIZENS AND STAFF OF NICOLLET COUNTY ARE DEDICATED TO FULFILLING OUR MISSION STATEMENT TO

PROTECT, IMPROVE & ENHANCE THE WATER RESOURCES OF NICOLLET COUNTY

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, MN 55155

In the Matter of Reviewing the Local Water Management Plan Update for Nicollet County (Minnesota Statutes Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Nicollet County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Minnesota Board of Water and Soil Resources (Board) on May 9, 2008, pursuant to Minnesota Statute (M.S.) Section 103B.315, Subdivision (Subd.) 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1. On September 7, 2006, the Board received a Priority Concerns Scoping Document from Nicollet County, pursuant to M.S. Section 103B.312.

2. On September 15, 2006, the Board distributed copies of the Priority Concerns Scoping Document to state agencies for review and comment.

3. On November 8, 2006, the Board's Southern Region Water Planning Committee met with representatives of Nicollet County to discuss state agencies review comments, the contents of the Priority Concerns Scoping Document and recommendations for the content of the final Plan Update.

4. On November 16, 2006, the Board received a resolution from Nicollet County requesting a two-year extension of their current Local Water Management Plan.

5. On December 20, 2006, the Board officially approved the Nicollet County extension request, thereby extending the end-date to December 31, 2008.

6. On December 20, 2006, the Board approved official comments on the Nicollet County Priority Concerns Scoping Document, which were communicated to the County in a letter dated December 20, 2006.

7. The priority concerns the Plan Update addresses include:
    a. **Stormwater Management** (dealing with urban and rural surface water runoff)
    b. **Urban and Resource Management** (drainage, erosion and sediment control)
    c. **Total Maximum Daily Loads** (two existing Clean Water Partnership Projects and pursuing additional funding to target impaired waters)
    d. **Groundwater** (wellhead protection assistance—community and private)

8. On May 13, 2008, the Board received the Nicollet County Plan Update for final State review pursuant to M.S. Section 103B.315, Subd. 5. The Plan Update covers the period of September 1, 2008 through August 31, 2018.

9. On May 19, 2008, the Board received a record of the public hearing, and copies of all written comments pertaining to the plan update to the Board for final State review pursuant to M.S. Section 103B.315, Subd. 5.

10. On August 7, 2008, the Board's Southern Region Water Planning Committee reviewed the recommendation of the state review agencies regarding final approval of the Nicollet County Plan Update pursuant to M.S. Section 103B.315, Subd. 5. Recommendations of the state review agencies were:
    a. Minnesota Department of Agriculture: recommends approval;
    b. Minnesota Department of Health: recommends approval;
    c. Minnesota Pollution Control Agency: recommends approval;
    d. Minnesota Department of Natural Resources: recommends approval;
    e. Minnesota Environmental Quality Board: no recommendation received;
    f. Minnesota Board of Water and Soil Resources regional staff: recommends approval.

11. On August 7, 2008, the Board's Southern Region Water Planning Committee decision was to provide the following recommendation to the full Board at its next scheduled meeting:
    a. The Nicollet County Plan Update shall be in effect from September 1, 2008 through August 28, 2018, as pursuant to M.S. 103B.311 Subd. 4 (5) (a local water management plan must not extend more than ten years from the date of Board approval); and
    b. Recommend approval of the Plan Update; and
    c. Recommend that Nicollet County be required to update the Goals, Objectives and Implementation section of the Plan Update and obtain Board approval by August 28, 2013.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of Nicollet County pursuant to M.S., 103B.315, Subd. 5.

2. The Nicollet County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the County; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the Nicollet County Local Water Management Plan for the period of September 1, 2008 through August 28, 2018, with the requirement that the Goals, Objectives and Implementation Schedule section be updated and receive Board approval by August 28, 2013.

Dated at Olivia, Minnesota, this 28th day of August, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

RIM Reserve Planning Committee

1. RIM/WRP Partnership Grant Payment Schedule for SWCD Services – Tabor Hoek – *DECISION ITEM*

Board Resolution #_____

RIM/WRP Partnership Program
Grant Payment Schedule for SWCD Services
August 28, 2008

Easement No. _____

DRAFT

	SWCD Compensation Per Easement	**✓ for Applicable Tasks**
A. Easement Development and Acquisition		
Landowner signed and accepted for funding.	**$ 1,500**	☐
B. Conservation Plan Development and Vegetation Plan Implementation		
Level 1: No involvement by SWCD.	**$ 0**	☐
Level 2: SWCD develops conservation plan and vegetation plan implementation.	**500**	☐
C. Construction Plan Development and Implementation		
1. Plan Development		
• No involvement by SWCD.	**$ 0**	☐
• SWCD performs topo survey/site assessment, simple project designs or assists in topo survey/site assessment in complex projects.	**500**	☐
2. Construction Implementation – *Staking/Layout, Oversight, Inspection, Final Check, As-Built Plan*	*Check Only One Box*	
Level 1: SWCD provides extensive role in simple project. SWCD assists project manager in complex project.	**$ 1,500**	☐
Level 2: SWCD plays extensive role in complex project.	**$ 3,000**	☐

Note: Levels to be determined by SWCD and BWSR wetland engineering staff

_____ _____ ***BWSR Approval*** _____

SWCD Representative ***Date***

Board Resolution #_____

RIM/WRP Partnership Grant Payment Schedule for SWCD Services

WHEREAS the MN State Legislature appropriate $25 million to RIM Reserve in the 2008 bonding bill (Chapter 179, 2008 Session Law) which Governor Pawlenty signed in to law on April 7, 2008, and said funding is now available for expenditures as the MN Department of Finance has established the necessary accounts;

WHEREAS the MN State Legislature determined that the BWSR may use up to ten percent of this appropriation to implement the RIM Reserve Program;

WHEREAS the new RIM Reserve funding was intended to, and will, leverage federal WRP (Wetlands Reserve Program) funding;

WHEREAS the Board of Water and Soil Resources (BWSR) adopted a resolution on June 25, 2008 authorizing Phase I of the RIM/WRP Partnership and authorized staff to develop the necessary sign-up procedures and supporting materials with the Natural Resources Conservation Service (NRCS);

WHEREAS, the RIM Reserve Program is administered by the BWSR in cooperation with local SWCDs.

WHEREAS the BWSR RIM Reserve Management Planning Committee met on August 19, 2008 to review and recommend the attached Grant Payment Schedule for Soil and Water Conservation District (SWCD) Services related to the RIM/WRP Wetland Restoration Partnership;

NOW, THEREFORE BE IT RESOLVED THAT, the Minnesota Board of Water and Soil Resources approves and authorizes staff to allocate the attached grant formula for SWCD Services in support of the RIM/WRP partnership.

_____ _____

Randy Kramer, Chair
Minnesota Board of Water and Soil Resources

Date

NEW BUSINESS

1. Overview of Whole Farm Planning Bill (HF 2867) – Representative Al Juhnke - *INFORMATION ITEM*

2. Presentation on New Assessment and Planning Tools – Tim Gieseke, Ag Resource Strategies, LLC – *INFORMATION ITEM*

3. Demonstration of an On-line Tool-in-Progress Conservation Funding Advisor – Peter Scheffert, Minnesota Department of Agriculture – *INFORMATION ITEM*

4. 2008 Federal Farm Bill Update – Tim Koehler and Paul Flynn, NRCS – *INFORMATION ITEM*

5. '09 Non-Point Engineering Assistance Challenge Grants – Al Kean – *DECISION ITEM*

6. SWCD Technical Services Areas (TSAs) Reorganization – Al Kean - *DECISION ITEM*

7. FY 09 Drainage Records Modernization Challenge Grants – Al Kean – *DECISION ITEM*

8. FY 2009 Clean Water Legacy Grant Funding Package – Matt Drewitz and Jeff Hrubes – *DECISION ITEM*

9. Area II Minnesota River Basins Project Inc. FY 2009 Annual Work Plan – Tabor Hoek, BWSR, and Kerry Netzke, Area II Coordinator – *DECISION ITEM*

10. Minnesota River Basin Joint Powers Board, FY09 Annual Work Plan – Jeff Nielsen – *DECISION ITEM*

Viewpoint

A conservation plan for every farm

Farm Talk
By PAULA MOHR
pmohr@farmprogress.com

OUR state lawmakers have a full plate when they convene their next session the second week of February. Transportation, understandably, will dominate early discussions and decisions. Finger-pointing over the 35W bridge fiasco should end. All legislators and the governor need to look to the future. That includes the passage of a gas tax increase dedicated to pay for sorely needed transportation projects.

Conservation also may be at the forefront, if Rep. Al Junke, DFL-Willmar, follows through with his idea. At the Minnesota Corn Growers meeting in January, Junke said he wants agriculture to be proactive with conservation practices and prove to the nonfarming public that farmers truly care about the environment.

To show agriculture's commitment, Junke says every farm in the state should have a conservation plan in five to 10 years. Such a plan would be developed for each farm, with data coming from already established sources, and it would be voluntary for each farmer to adopt it. With existing documentation of soil types, topography, crop yields, soil fertility and so forth, conservation plans would spell out recommended crops, tillage practices, soil and water erosion controls, wildlife enhancements, and other environmental safeguards.

'What? No way!'

This idea probably will throw some of you off guard. "What? No way! The government isn't going to tell me how to farm," you say. On top of that, you might wonder about data privacy laws. What would happen if your farm information ends up in the hands of groups with less than honorable intentions? The latter is a real concern that should be addressed from the get-go. Otherwise, additional work on such a law would be in vain.

There is merit in the idea of having a conservation plan tailored for every farm. Every farm should have one implemented now, period. With all the state and federal programs, cost-share funds, agronomy advisers, with all the technology such as GPS, computerized equipment and monitors, there is no practical reason not to have one. Farmers relish the belief that they are the true stewards of soil and water. We hear it preached all the time at farm meetings. You are environmental stewards. Yet in today's agricultural-ignorant society, that's not good enough. You will have to prove you deserve that precious title by practicing conservation on all your lands.

It's true that agriculture must be more proactive these days. At least once a week, it seems, we're getting beat up in the general media. Corn ethanol has been a recent target, with opponents blaming it for higher food prices. A recent *National Geographic* magazine article portrays North Dakota's rural landscape as artfully desolate yet ignores its rural economic strengths. And in Twin Cities metro area news coverage, farmers and the ag industry continue to take the heat for water pollution — i.e., acetochlor found in southeastern Minnesota streams. A new attack on corn ethanol also surfaced in one daily metro newspaper: More acres planted to corn would be a disaster to wildlife. According to that news article, Minnesota reportedly has lost 80,000 Conservation Reserve Program acres and CRP contracts for an additional 800,000 acres will expire by 2013.

What is the flip side of this story? As of September and October 2007, according to FSA data, Minnesota ranked third in the nation for the number of contracts (62,827) and third for the number of farms (33,600) participating in CRP. The state ranked seventh for acres enrolled (1,830,917) and seventh for rental payments ($110,416,081).

This is just one of several federal conservation programs in which Minnesota farmers are voluntarily enrolled, and less than half of the state's farms have done so. Different programs work better for different farms. However, could something other than rental payments and paperwork be discouraging farmers from participating?

According to the 2006 ag census, there are about 79,000 farms in the state with 27.4 million acres. To design conservation plans for each farm sounds like an insurmountable task. Yet, is it? We'd like to hear from you. If you follow a conservation plan, why do you? If you don't have a plan, why not? What would encourage your participation? We look forward to hearing from you.

KEY: ~~stricken~~ = removed, old language. underscored = added, new language.

Authors and Status List versions

H.F. No. 2867, as introduced - 85th Legislative Session (2007-2008) Posted on Feb 13, 2008

relating to soil and water conservation; creating farm unit conservation plan program; requiring conservation plan for participation in a state cost-share program; creating farmland conservation task force; appropriating money; amending Minnesota Statutes 2006, sections 103C.101, by adding subdivisions; 103C.501, subdivision 5; proposing coding for new law in Minnesota Statutes, chapter 103C.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. Minnesota Statutes 2006, section 103C.101, is amended by adding a subdivision to read:

Subd. 1a. **Conservation plan.** "Conservation plan" means a set of documents tailored to the natural and economic characteristics of an individual farm unit that includes projects and practices recommended to both increase the economic viability of the farm operation and preserve or enhance water, soil, wildlife, and other natural resources. Specific items contained in a conservation plan must include but are not limited to: estimated erosion and nutrient loss rates for the farm unit given current farming practices; short-term and long-term economic and environmental effects of erosion and nutrient loss; an explanation of relevant federal, state, and local erosion control and water quality laws and suggested best practices; a summary of the local district's current comprehensive plan if such a plan exists; a listing and description of suggested farming and resource management practices including potential effects on yield, income, and farm operations for each practice; and information on educational, technical, and financial assistance available from relevant agencies and nongovernment organizations.

Sec. 2. Minnesota Statutes 2006, section 103C.101, is amended by adding a subdivision to read:

Subd. 5a. **Farm unit.** "Farm unit" means a single contiguous tract of agricultural land, or two or more adjacent tracts of agricultural land with substantially similar geographic, soil, and drainage characteristics, upon which crop or livestock production or both are conducted by a person who owns or is purchasing or renting all of the land, or by that person's tenant or tenants. If a landowner has multiple farm tenants, the land on which farming operations are being conducted by each tenant is a separate farm unit.

Sec. 3. Minnesota Statutes 2006, section 103C.501, subdivision 5, is amended to read:

Subd. 5. **Contracts by districts.** (a) A district board may contract on a cost-share basis to furnish financial aid to a land occupier or to a state agency for permanent systems for erosion or sedimentation control or water quality improvement that are consistent with the district's comprehensive and annual work plans.

(b) The duration of the contract must, at a minimum, be the time required to complete the planned systems. A contract must specify that the land occupier is liable for monetary damages and penalties in an amount up to 150 percent of the financial assistance received from the district, for failure to complete the systems or practices in a timely

manner or maintain the systems or practices as specified in the contract.

(c) A contract may provide for cooperation or funding with federal agencies. A land occupier or state agency may provide the cost-sharing portion of the contract through services in kind.

(d) The state board or the district board may not furnish any financial aid for practices designed only to increase land productivity.

(e) When a district board determines that long-term maintenance of a system or practice is desirable, the board may require that maintenance be made a covenant upon the land for the effective life of the practice. A covenant under this subdivision shall be construed in the same manner as a conservation restriction under section 84.65.

(f) After January 1, 2012, a district board may not enter into a new contract with an occupier of agricultural land unless the occupier has a conservation plan for the impacted land under section 103C.55, which may consist of a comparable plan as provided by section 103C.55, subdivision 3.

Sec. 4. **[103C.55] FARM UNIT CONSERVATION PLAN.**

Subdivision 1. **Conservation plan.** Except as provided in subdivision 3, district boards, in consultation with the state board and the commissioner of agriculture, shall develop a conservation plan for each farm unit in this state. A district board shall distribute the completed conservation plan to the owner or operator of a farm unit.

Subd. 2. **Priority.** A district board must assign a higher priority to producing a conservation plan for any farm unit located wholly or partially within the watershed of a body of water included in the Pollution Control Agency's latest 303(d) total maximum daily load list of impaired waters as impaired by a source or sources other than mercury or polychlorinated biphenyls or other nonagricultural chemicals.

Subd. 3. **Existing plan.** A district board need not create a conservation plan for a farm unit already covered by a comparable conservation plan prepared in consultation with or by the Natural Resources Conservation Service or a state agency within ten years prior to the effective date of this section.

Sec. 5. **FARMLAND CONSERVATION TASK FORCE.**

(a) The Board of Water and Soil Resources and the commissioner of agriculture must convene a farmland conservation task force. The objective of the task force is to advise the legislature on how the state can achieve the expedient implementation of cost-effective soil and water conservation and nutrient management practices on the state's working farmlands, with an emphasis on farms with a completed conservation plan including recommended projects or practices both for the economic benefit of the farm operation and the preservation or enhancement of this state's water, soil, wildlife, and other natural resources. In particular, the task force must:

(1) estimate the amount of farmer demand statewide for assistance implementing soil and water conservation and nutrient management projects or practices, including an estimate of the financial and technical resources required and an implementation plan to satisfy this demand as quickly as possible;

(2) summarize the latest understanding of cost-effective soil and water conservation and nutrient management practices on agricultural lands along with the soil type, geography, cropping, or livestock rearing methods and other conditions under which each practice is most effective;

(3) describe and evaluate methods for quantitatively measuring any economic and environmental improvements at both the farm and watershed levels for each practice identified in clause (2); and

(4) describe and evaluate ways in which the state can encourage farmers to implement cost-effective soil and water conservation and nutrient management practices, including but not limited to: modifying or expanding existing state programs,

complementing existing federal working lands conservation programs, incorporating a conservation compliance component in existing state property tax benefits for the agriculture sector, and creating additional incentives.

(b) The task force must include a representative of each of the following organizations: the committee or committees of the house of representatives with jurisdiction over agriculture policy and finance, the committee or committees of the senate with jurisdiction over agriculture policy and finance, the committee or committees of the house of representatives with jurisdiction over environment and natural resources policy and finance, the committee or committees of the senate with jurisdiction over environment and natural resources policy and finance, the Department of Agriculture, the Department of Natural Resources, the Pollution Control Agency, the Board of Water and Soil Resources, the Minnesota Natural Resources Conservation Service of the United States Department of Agriculture, the University of Minnesota agricultural experiment stations, the University of Minnesota Extension Service, the Minnesota Farm Bureau, and the Minnesota Farmers Union.

(c) No later than January 15, 2009, the Board of Water and Soil Resources must report the findings and recommendations of the task force to the house and senate committees with jurisdiction over agriculture policy and finance and environment and natural resources policy and finance.

Sec. 6. **APPROPRIATION.**

(a) $..... in fiscal year 2009 is appropriated from the general fund to the Board of Water and Soil Resources for the activities required by sections 3 and 4.

(b) $..... in fiscal year 2009 is appropriated from the general fund to the commissioner of agriculture for the activities required by sections 3 and 4.

Please direct all comments concerning issues or legislation
to your House Member or State Senator.

For Legislative Staff or for directions to the Capitol, visit the Contact Us page.

General questions or comments.

last updated: 01/04/2008

PROPOSED 09 NPEA CHALLENGE GRANT

BACKGROUND

The NPEA Challenge Grant has traditionally been made available to all NPEA JPBs once a biennium to provide accelerated engineering/technical assistance funding to assist landowners implementing high priority conservation practices.

The **First Funding Priority** has been to, JPBs whose member SWCDs recently receiving Feedlot Water Quality Management Grants, and propose to maintain or hire accelerated staffing to provide shared feedlot technical assistance.

In addition to technical staffing, about one-third of allocations have funded transportation, field equipment, office equipment, and training costs.

The Board has annually set-aside ten percent of the Feedlot Water Quality Management Grants (FWQMG) or $300,000 a biennium to fund this Program.

ISSUE

The Board and staff have struggled to effectively allocate these competitive funds due to the difficulties in evaluating the needs and "wants" of one JPB compared to another JPB, in this historically underfunded NPEA Program.

Until this biennium, the legislature has funded the FWQMGs through the State Cost Share Program. The FWQMG Program is now funded under the Clean Water Legacy Program.

At their January 2007 Meeting, the Board moved that the Grants Program and Policy Committee re-evaluate allocation options for the 09 Program.

Allocation Options considered by the Grants Program and Policy Committee Included:

1. Allocate competitively as in prior years
   Concern - Difficult to evaluate applications and ascertain JPB "wants" vs. needs

2. Allocate proportionately according to JPBs whose SWCDs received 09 FWQMGs
   Concern - Results in extreme disproportions of allocations (See map.)

JPB	Allocation	%
5	$87,000	29
7	11,100	4
10	21,300	7
11	180,600	60
	$300,000	100%

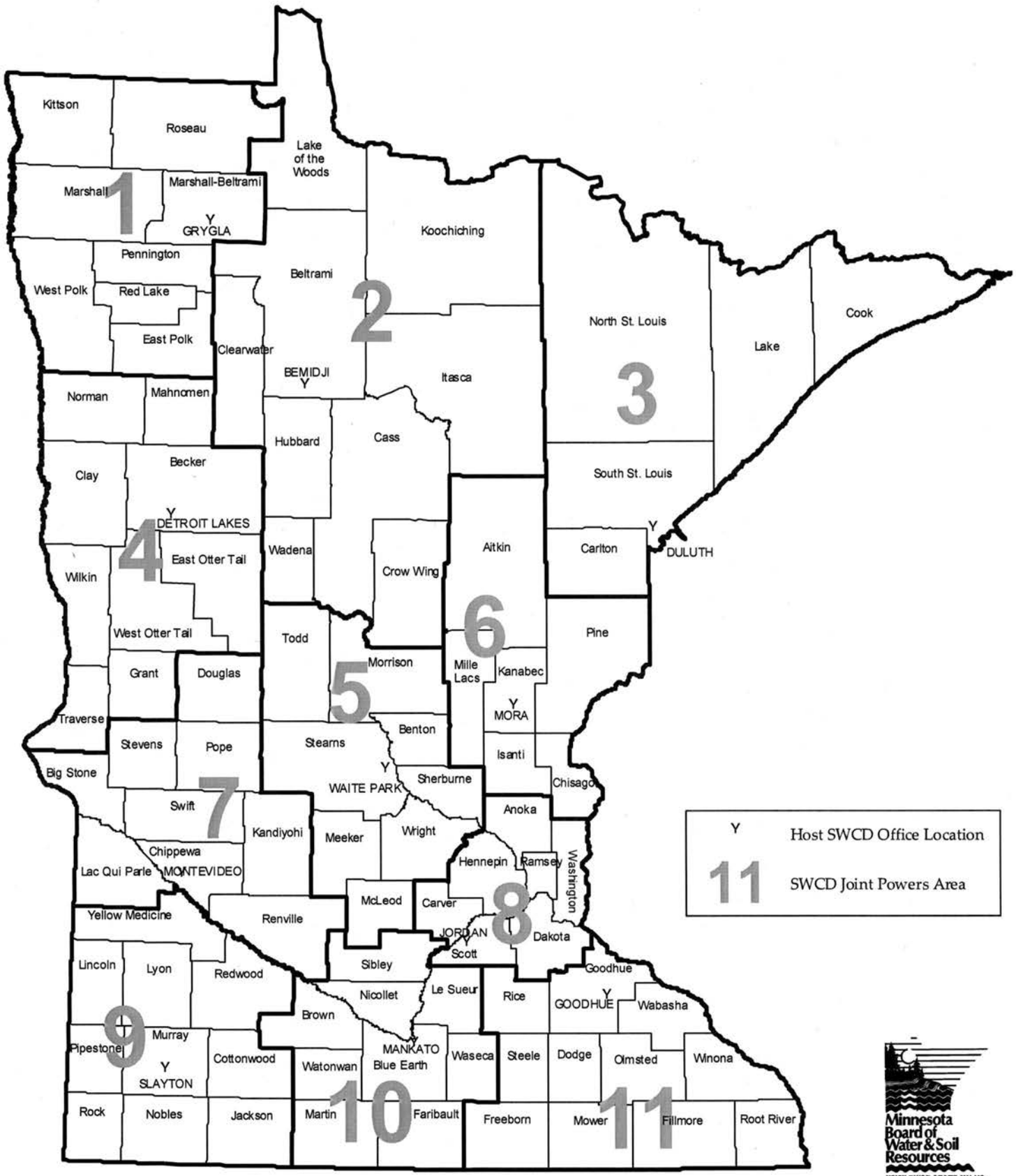
3. Add Program funds to 09 CWL Program to be applied for competitively
   Concern - JPB applications historically not competitive in CWL Program

4. Allocate $100,000 to JPBs 5, 9, and 11 to continue support for previously funded staff positions
   – Allocations would provide funding to continue positions providing Open Lot Agreement assistance and feedlot design
   - Accomplishes program objectives and Board's First Funding Priority

RECOMMENDATIONS

The Grants Program and Policy Committee recommends 1) the Board adoption of allocation option number **four**; and, 2) the NPEA Program needs its own stable funding and future CWL appropriations be allocated via the CWL Program; via Board adoption of the attached resolution.

Nonpoint Engineering Assistance Program



Minnesota Board of Water & Soil Resources
WWW.BWSR.STATE.MN.US

January 2003

Board Resolution #_____

FY 09 Non-Point Engineering Assistance Challenge Grant Allocations

WHEREAS, the Non Point Engineering Assistance (NPEA) Challenge Grant, administered by the Board of Water and Soil Resources (BWSR), provides funding assistance to NPEA Joint Powers Boards for providing accelerated technical assistance to landowners to apply conservation practices; and,

WHEREAS, the Board has annually set-aside ten percent of the Feedlot Water Quality Management Grants (FWQMG) or $300,000 a biennium to fund this Program; and,

WHEREAS, the Board's funding objective is for JPBs to maintain or hire accelerated staffing to provide shared feedlot technical assistance.

NOW THEREFORE, the BWSR hereby authorizes staff to allocate the FY 09 NPEA Challenge Grants of $100,000 each to JPBs 5, 9, and 11.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

SWCD Technical Services Areas Reorganization for Nonpoint Engineering Assistance Program Delivery

BACKGROUND

The BWSR has received state grant funding for nonpoint engineering assistance through SWCDs (i.e. the NPEA Program), since FY 1995. Eleven joint powers areas of SWCDs were established in 1995 to use this funding to hire and share engineers and technicians. The level of annual state funding has changed from $1.04M in FY 1996, to $1.13M in FY 1997-2003, to $1.064M in FY 2004-2007, to $1.06M in FY 2008-2009. Inflation has caused financial challenges for this program. In 2002-2003, an ad hoc committee of SWCD supervisors, SWCD managers, MASWCD and BWSR staff investigated ways to address the structure and financial challenges of the NPEA Program, as well as opportunities for other shared technical expertise. However, the ad hoc committee did not achieve a strong consensus for its recommendations and the state financial situation was very constrained at that time. In 2004, the Conservation Technical Assistance Committee (CTAC), including representation from the 11 SWCD Technical Services Areas (TSAs), MASWCD, MACDE and BWSR, was formed and developed a consensus agreement to retain the 11 SWCD TSAs by requiring a minimum 25% local share.

ISSUE

In 2007, several SWCD resolutions recommended increased state funding and/or changes to the structure for delivery of the Nonpoint Engineering Assistance Program and associated SWCD Technical Services Areas. These resolutions included recommendations to consolidate the current 11 SWCD TSAs to 8 MASWCD Areas, or making SWCD TSA staff BWSR staff. These resolutions identified the inflationary costs of TSA staff, approximately flat state funding, difficulty in raising the required minimum 25% local share, and staff retention concerns, as the primary reasons for these resolutions.

The CTAC met on 9-5-07 and 11-1-07 to coordinate a response to these resolutions. A subsequent MASWCD emergency resolution was passed by SWCD Supervisors at the 2007 MASWCD Convention, recommending that the CTAC develop a recommendation to the BWSR Board regarding the structure and financial resources of the NPEA Program and its delivery. The BWSR conducted focus group meetings with TSA Host SWCD Managers and with TSA staff to provide input to the CTAC. At a meeting on 1-29-08, the CTAC requested Host SWCD Managers and BWSR staff (Recommendations Work Group) to further develop alternatives and draft recommendation(s). The Recommendations Work Group developed majority and minority recommendations to the CTAC.

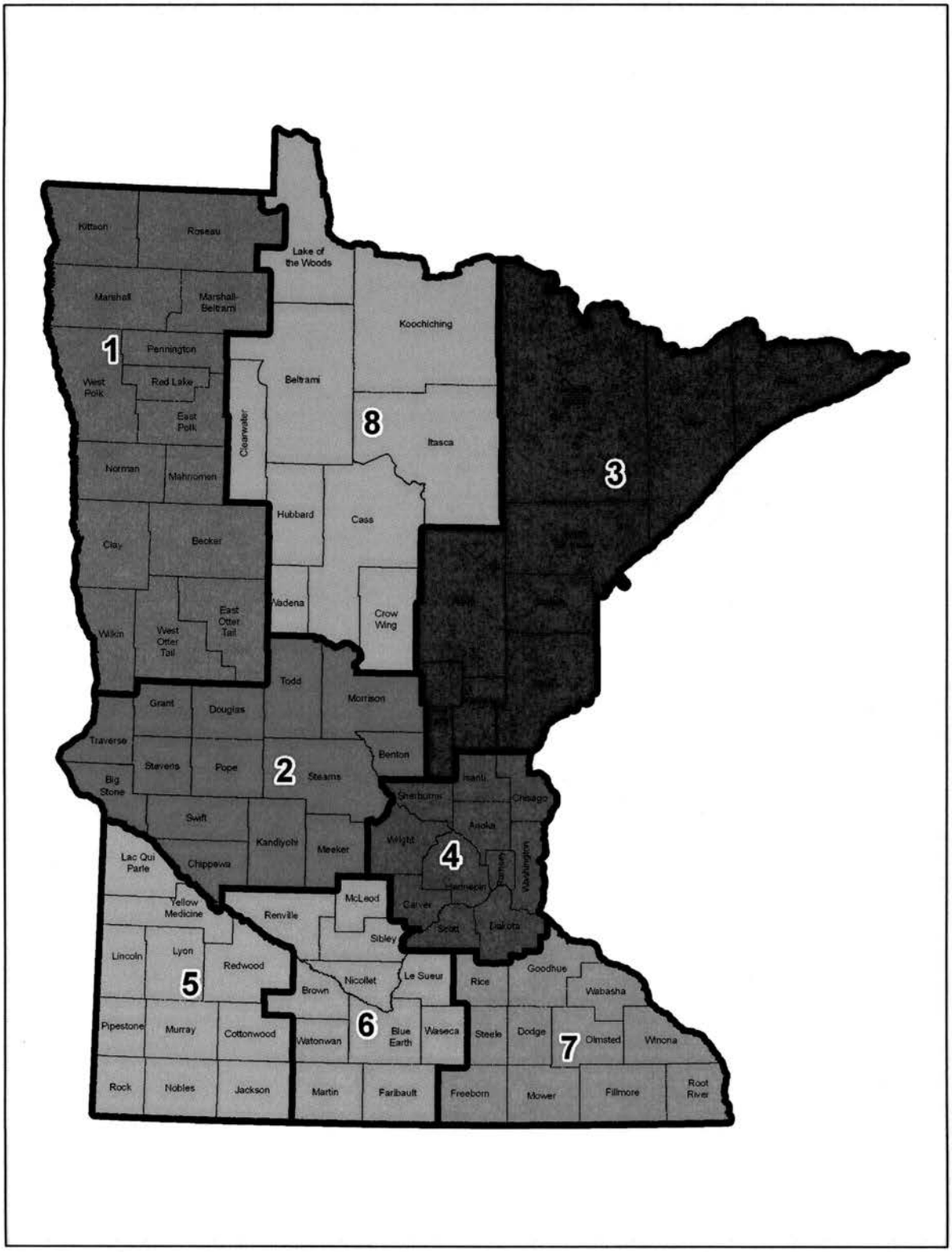
The CTAC reached a consensus short-term recommendation on March 12, 2008 and requested the Recommendations Work Group to further clarify several characteristics and considerations. The Recommendations Work Group developed recommended clarifications that were adopted by consensus of the CTAC on 7-22-08. These recommendations include consolidation of 11 SWCD TSAs to 8 TSAs co-aligned with MASWCD Areas.

BWSR and MASWCD signed a Memorandum of Agreement in July 2008 to support co-alignment of SWCD TSA and MASWCD Area boundaries, as recommended by the CTAC.

Three 2008 SWCD resolutions recommend this co-alignment. The decision to realign MASWCD Areas is dependent on a positive vote for this by SWCD Supervisors at the 2008 MASWCD Convention.

RECOMMENDATION

The Grants Program & Policy Committee is requesting the Board to approve the attached resolution and associated consensus recommendations of the CTAC to reorganize the current 11 SWCD TSAs into 8 TSAs.


Kittson
Roseau
Lake of the Woods
Marshall
Marshall-Beltrami
Koochiching
1
Pennington
Red Lake
West Polk
East Polk
Beltrami
Clearwater
8
Itasca
3
Norman
Mahnomen
Hubbard
Cass
Clay
Becker
Wadena
Crow Wing
East Otter Tail
Wilkin
West Otter Tail
Todd
Morrison
Grant
Douglas
Traverse
Benton
Stevens
Pope
2
Stearns
Big Stone
Isanti
Chisago
Sherburne
Swift
Anoka
Kandiyohi
Meeker
Wright
4
Lac Qui Parle
Chippewa
Hennepin
Ramsey
Washington
McLeod
Yellow Medicine
Renville
Carver
Scott
Dakota
Sibley
Lincoln
Lyon
Redwood
5
Nicollet
Le Sueur
Rice
Goodhue
Brown
Wabasha
Pipestone
Murray
Cottonwood
Watonwan
6
Blue Earth
Waseca
Steele
Dodge
7
Olmsted
Winona
Rock
Nobles
Jackson
Martin
Faribault
Freeborn
Mower
Fillmore
Root River

BWSR Resolution # _____, Attachment A

Hybrid NPEA Program Alternative to Address Structure and Financial Challenges Short-Term Consensus Recommendation of CTAC 3-12-08

<u>Alternative F)</u> – Create 8 SWCD TSAs / JPBs along modified MASWCD Area boundaries, with an 11-county Metro Area 4 and other Area boundary modifications.

Characteristics:

a) NPEA engineers and technicians employed or contracted by 8 reorganized SWCD TSAs / JPBs, coinciding with modified MASWCD Areas.
b) Area boundaries consider the key factors of common natural resources and associated expertise needs, technical center locations and workload (using average annual 2001 – 2006 NPEA accomplishments as a surrogate measure of workload, with consideration of practice types).
c) Maintain highly capable staff in current locations at this time. Have current TSA 6 staff employed by enlarged TSA 3, providing some assistance to revised Area 2, until TSA 6 staffing vacancies occur, or until a defined point in time.
d) Provide state grant funding at approximately $70,000 for full-time engineer, $50,000 for full-time technician, $5,000 per Host SWCD for rent and other administration, and require minimum 10% cash local share. If a TSA does not apply for the maximum grant funding, the annual allocation for an engineer and for a technician would be adjusted up, accordingly. (Work Group to verify/clarify recommendation.)
e) Allocate $60,000 per year for NPEA staff training, hardware, software, survey equipment and associated costs, based on an annual plan developed by NPEA staff and BWSR and coordinated with JPBs. Because state grant funding must be allocated in the year for which it is appropriated, this equipment and employee development plan would need to be developed for the upcoming FY and associated funds allocated to TSA fiscal agents along with grants for staffing.
f) Includes a recommendation for BWSR to have a dedicated engineer position to provide coordination, training, consultation and spot checks for NPEA staff, and periodic assistance where needed.

Pros:

a) Maintains more of the current SWCD local control for NPEA program delivery than Majority Alternatives 1) or 3), including standing organizations of 8 TSAs to help leverage other funds for projects and shared technical assistance.
b) Attempts to better balance workloads (although Area 2 is quite high and Area 6 significantly low).
c) Integrates ongoing trend toward an 11-county Metro area.
d) Doesn't have SWCDs outside 11-county Metro area served within the same area as the Metro.
e) If MASWCD would adopt the same area boundaries, this alternative could integrate SWCD JPB and MASWCD Area governance boundaries and functions, which is recommended.
f) Does not require Governor and Legislature action to use NPEA funding for BWSR staff, <u>if</u> BWSR could fund the dedicated engineer position identified above separate from NPEA grant funding, which would require SWCD support.
g) Two of the eight proposed TSAs are already aligned with MASWCD Areas.

Cons:

a) Does not provide opportunity to seek additional state grant funding for the NPEA program (i.e. NPEA program grant funding is lower priority to SWCDs than General Services grants), which would require local share (increasing with time) from the start.
b) Does not provide for one employer of NPEA staff to enable consistency of pay scales, fringe benefits, equipment, training and coordination of staff.
c) Retains hard boundaries for staff employment and work areas, which would require other ways to try to promote sharing and building of NPEA staff expertise statewide across these boundaries.
d) Requires revised SWCD JPB boundaries and agreements, and proposes MASWCD Area changes.
e) May necessitate some relocation and/or loss of staff over time, and requires unbalanced funding per area unless, or until, staffing levels are evened out, or worked out according to future workload.

Other Considerations:

Redistribution of existing TSA equipment and fund balances. (Work Group to develop recommendation.)

BWSR Resolution #_____, Attachment B

CTAC Short-Term Consensus Recommendation to Address Structure and Financial Challenges of the NPEA Program Proposed Clarifications by Recommendations Work Group 7-7-08

From CTAC Consensus Recommendation 3-12-08:
Characteristics:
d) Provide state grant funding at approximately $70,000 for full-time engineer, $50,000 for full-time technician, $5,000 per Host SWCD for rent and other administration, and require minimum 10% cash local share. If a TSA does not apply for the maximum grant funding, the annual allocation of an engineer and for a technician would be adjusted up, accordingly. (Work Group to verify/clarify recommendation.)
e) Allocate $60,000 per year for NPEA staff training, hardware, software, survey equipment and associated costs, based on an annual plan developed by NPEA staff and BWSR and coordinated with JPBs. Because state grant funding must be allocated in the year for which it is appropriated, this equipment and employee development plan would need to be developed for the upcoming FY and associated funds allocated to TSA fiscal agents along with grants for staffing.
Other Considerations:
a) Redistribution of existing TSA equipment and fund balances. (Work Group to develop recommendation.)

State NPEA Grant and Local Share Clarifications:
Transition period FY 2010 – 2011 state funding:
1. $65,000 per 1 FTE engineer (TSA staff or contracted)
2. $50,000 per 1 FTE technician (TSA staff or contracted)
3. Maximum annual grant amount for staff or contracted engineering services = $115,000 per TSA, except for TSA 3, which receives up to $165,000 per year for NPEA staff through FY 2011, or until it has 1 FTE engineer and 1 FTE technician, whichever occurs sooner. If less than the maximum is requested by one or more TSAs, the difference is split equally among all TSAs.
4. Additional $5,000 per Host and/or Fiscal Agent SWCD (up to 2 Host SWCDs per TSA). TSA decides how to distribute between Host and Fiscal Agent SWCD and Host-only SWCD.
5. 1 Fiscal Agent SWCD per TSA, must be a Host SWCD, if the TSA has staff
6. In order to help develop and maintain consistency across TSAs, the remaining state funding (estimate $30,000 / year, depending on number of Host SWCDs statewide) is used for NPEA staff training, computer hardware, software, survey equipment and associated costs, based on an annual plan developed by NPEA staff and BWSR and coordinated with TSAs prior to grant allocations for current fiscal year.
7. Minimum 10% cash local share, from other than NPEA grant $, for engineering assistance in the TSA.

FY 2012 and until NPEA Program state funding and/or program structure changes:
1. $70,000 per 1 FTE engineer (TSA staff or contracted)
2. $50,000 per 1 FTE technician (TSA staff or contracted)
3. Maximum grant amount for staff or contracted engineering services = $120,000 per TSA. If less than the maximum is requested by one or more TSAs, the difference is split equally among all TSAs.
4. Additional $5,000 per Host and/or Fiscal Agent SWCD (up to 2 Host SWCDs per TSA). TSA decides how to distribute between Host-Fiscal Agent SWCD and Host-only SWCD, as applicable.
5. 1 Fiscal Agent SWCD per TSA, must be a Host SWCD, if the TSA has staff
6. In order to help develop and maintain consistency across TSAs, the remaining state funding (estimate $40,000 / year, depending on number of Host SWCDs statewide) is used for NPEA staff training, computer hardware, software, survey equipment and associated costs, based on an annual plan developed by NPEA staff and BWSR and coordinated with TSAs prior to grant allocations for current fiscal year.
7. Minimum 10% cash local share, from other than NPEA grant $, for engineering assistance in the TSA.

TSA Equipment and Fund Balance Clarifications:
Equipment and fund balances stay with the new TSA where the current Host SWCD is located, except use current TSA 7 equipment for SE MN Flood response technical assistance in the short term. Transfer current TSA fund balance(s) to the Fiscal Agent for the new TSA.

MEMORANDUM OF AGREEMENT
Co-alignment of SWCD Technical Services Area Boundaries and
Minnesota Association of Soil and Water Conservation Districts Area Boundaries

This Memorandum of Agreement is between the Minnesota Board of Water and Soil Resources (BWSR) and the Minnesota Association of Soil and Water Conservation Districts (MASWCD).

Whereas, the Nonpoint Engineering Assistance (NPEA) Program has been implemented through 11 joint powers areas of SWCDs statewide (aka SWCD Technical Services Areas (TSAs)) since 1995, funded via state grants administered by BWSR, and at least 25% local share starting in Fiscal Year 2006;

Whereas, state funding for the NPEA Program has not increased with inflation, resulting in some loss of engineer and technician capacity since the program began and the need for increasing local share to maintain capacity (currently 15.4 FTEs, plus several engineering consultants on an as-needed project basis);

Whereas, the Joint Powers Boards of the current 11 SWCD TSAs involve 90 SWCDs and Supervisors and the 8 MASWCD Areas currently involve 89 SWCDs, with different area boundaries, except in MASWCD Areas 7 and 8;

Whereas, the SWCD Technical Assistance Ad Hoc Committee report dated April 16, 2003 recommended co-alignment of MASWCD Areas and SWCD Technical Services Areas to: create stronger connections to MASWCD organizational activities; improve the identity, marketability and ownership of shared SWCD technical expertise; and streamline SWCD shared technical assistance program governance and MASWCD Area governance;

Whereas, the SWCD Technical Assistance Ad Hoc Committee report dated April 16, 2003 also recommended realigning current MASWCD and SWCD TSA boundaries to better address resource based technical expertise needs, including specialized conservation technical assistance associated with agriculture, forestry, recreation and urban land uses;

Whereas, the MASWCD membership approved Emergency Resolution No. 1 at the 2007 Annual Convention directing the Conservation Technical Assistance Committee (CTAC), which involves SWCD TSA, BWSR, MASWCD and MACDE representatives, to make a recommendation to the BWSR to address the structure and financial resources of the eleven SWCD TSAs and NPEA Program ;

Whereas, the CTAC developed a consensus recommendation dated March 12, 2008 to reorganize the current 11 SWCD TSAs into 8 TSAs, as shown on Attachment 1 (CTAC Consensus Recommendation Boundaries for 8 SWCD Technical Services Areas, 3-12-08), considering resource based technical expertise needs, locations of technical centers, estimated workloads and other factors; and

Whereas, the recent CTAC deliberations supported co-alignment of MASWCD Area boundaries and SWCD TSA boundaries as shown on Attachment 1, contingent upon MASWCD membership approval via the resolution process.

Therefore, the BWSR and MASWCD agree to support and promote the co-alignment of reorganized SWCD TSAs and MASWCD Areas, as shown on Attachment 1, contingent upon MASWCD membership approval via the resolution process.

BWSR Agrees To:

- Facilitate CTAC meetings associated with reorganization of the SWCD TSAs.
- Attend MASWCD Area meetings to help explain the history, purposes and benefits of the recommendation for co-aligned SWCD TSAs and MASWCD Areas.
- Assist sharing of recent information and experience pertinent to updating of SWCD TSA Joint Powers Agreements.

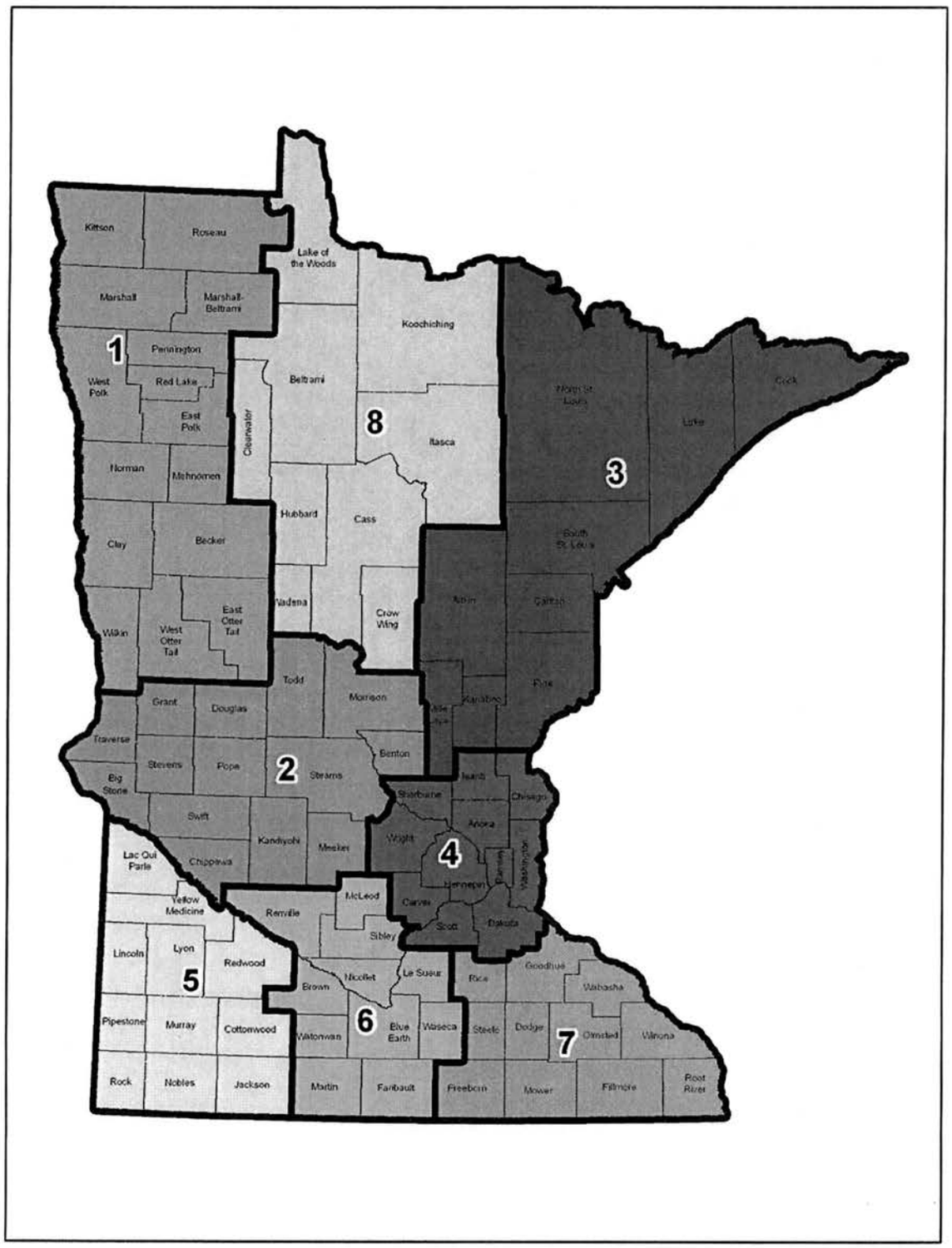
MASWCD Agrees To:

- Facilitate discussion by the MASWCD Board, MASWCD Areas and individual SWCDs about the history, purposes and benefits of the recommendation for co-aligned SWCD TSAs and MASWCD Areas.
- Facilitate the MASWCD resolution process, including consideration of SWCD resolutions for co-alignment of SWCD TSAs and MASWCD Areas.
- Support MASWCD adoption of the Area boundaries shown on Attachment 1, contingent upon MASWCD membership approval via the resolution process.

John Jaschke — Date 7/8/08
John Jaschke
Executive Director
Minnesota Board of Water and Soil Resources

LeAnn Buck — Date July 7 '08
LeAnn Buck
Executive Director
Minnesota Association of Soil and Water Conservation Districts

Attachment 1
CTAC Consensus Recommendation Boundaries for 8 SWCD Technical Services Areas
3-12-08



Board Resolution #_____

SWCD Technical Services Areas Reorganization for the Nonpoint Engineering Assistance Program

WHEREAS, several 2007 SWCD resolutions recommended changes in the funding and/or delivery structure for the Nonpoint Engineering Assistance (NPEA) Program;

WHEREAS, SWCDs passed a resolution at the 2007 MASWCD Convention recommending that the Conservation Technical Assistance Committee (CTAC), which involves representation from the 11 existing SWCD Technical Services Areas, MASWCD, MACDE and BWSR, develop a recommendation to the BWSR Board regarding changes to the NPEA program delivery;

WHEREAS, based on substantial investigation and discussion of the pros and cons of alternative program delivery structures and policies, the CTAC is recommending reorganization of the 11 SWCD TSAs into 8 TSAs statewide, and co-alignment of MASWCD Areas;

WHEREAS, the CTAC recommendations are contained in Attachment A (filename: CTAC – NPEA Consensus Recommendation 3-12-08 A.doc) and Attachment B (filename: CTAC – Clarifications of Consensus Recommendation 7-7-08 B.doc);

WHEREAS, BWSR and MASWCD have signed a Memorandum of Agreement to support co-alignment of SWCD TSAs and MASWCD Areas, as recommended by the CTAC;

NOW THEREFORE, the BWSR hereby approves the CTAC consensus recommendations in Attachments A and B dated 3-12-08 and 7-7-08, respectively, for delivery of the NPEA Program.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

FY 2009 Drainage Records Modernization Challenge Grants

BACKGROUND

The 2007 Legislature appropriated funding to the BWSR to develop guidelines for drainage records preservation and modernization, and $500,000 for cost-share grants to local governments for public drainage records modernization. These appropriations were in response to associated consensus recommendations of the stakeholder Drainage Work Group, which recommended $2,000,000 of additional state cost-share for this purpose. The BWSR has provided Local Water Management Challenge Grants for drainage inventories and drainage records modernization since the mid 1990s. A total of 24 such grants had been made to Chapter 103E drainage authorities through FY 2006, with a range of $5,000 to $55,000 and average grant of approximately $24,000. The BWSR contracted with the Water Resources Center, Minnesota State University, Mankato to assist in the development of drainage records modernization guidelines. The BWSR Grants Team drafted recommendations for implementation of these drainage records modernization challenge grants, considering previous Local Water Management Challenge Grant criteria and input from previous grant recipients.

ISSUE

Drainage Records Modernization Guidelines are scheduled to be complete in August 2008. These guidelines are based on the collective experience of Minnesota drainage authorities that have modernized their drainage records within approximately the past 10-15 years. The Grants Program & Policy Committee is proposing to implement the LGU challenge grant phase of the Drainage Records Modernization Program to include the following characteristics:

Application Period: September 15, 2008 – 4:00 p.m. October 31, 2008

Available Funding: $500,000

Eligible Local Government Units: Counties and Watershed Districts that administer public drainage systems under Minnesota Statutes Chapter 103E and have a current Comprehensive Local Water Management Plan or Watershed District Overall Plan.

Grant Maximum: Up to the larger of:

A) the number of Chapter 103E drainage systems administered for which drainage records modernization is proposed times up to $1,500 per drainage system up to $50,000 (Only include drainage systems jointly administered with an adjacent drainage authority if the applicant drainage authority is responsible for maintaining the primary records for the joint system.); or,

B) The miles of Chapter 103E drainage systems administered for which drainage records modernization is proposed times up to $75 per mile of drainage system up to $50,000. (For jointly administered drainage systems, only include the miles of the system that are within the applicant county or watershed district.)

(Because limited information is available to the BWSR regarding the number and total miles of drainage systems administered by Chapter 103E drainage authorities, the BWSR

reserves the authority to adjust the grant rate per number or mile of drainage system, based on evaluation of information provided by all eligible applicants. The intent is to provide grants ranging from about $10,000 to $50,000 in proportion to the number or miles of Chapter 103E drainage systems administered by an eligible drainage authority.)

Required Match: All grants must be matched at minimum one-to-one with non-state cash or in-kind contributions.

Applicable Guidance Document: Drainage Records Modernization Guidelines, August 2008. These guidelines are based on the collective experience of Minnesota drainage authorities that have modernized their drainage records within approximately the past 10-15 years.

Eligible Projects: Eligible projects must be for drainage records modernization of Chapter 103E drainage systems (e.g. digitizing, mapping and electronic filing).

Priority Ranking Considerations:

- Requested grant amount per drainage system or mile of drainage system (A request that is lower than the maximums stated above contributes to a higher grant funding priority.)
- Amount of local match above the required 1:1 minimum (Higher match commitment contributes to a higher grant funding priority.)
- Existence of previous drainage system inventory work within the jurisdiction of the applicant drainage authority (Previous investments in drainage records modernization by the drainage authority increases grant funding priority.)
- If a drainage authority has previously received a Local Water Challenge Grant for drainage records modernization, its application typically will be a lower priority than applications from drainage authorities that have not received a previous Local Water Challenge Grant for this purpose.

Ineligible Projects:
Drainage system field surveys that would typically be conducted for a drainage system establishment, improvement or repair project or proceeding.

RECOMMENDATION

The Grants Program & Policy Committee is requesting the Board to approve the attached resolution authorizing the 09 Drainage Records Modernization Challenge Grant Program and staff to implement the Program with these characteristics as discussed above.

(The Committee will be requesting the Board to approve specific LGU allocations at the December 2008 Board Meeting.)

H:09DRMCGPBA

Board Resolution #_____

FY 09 Drainage Records Modernization Challenge Grant Program

WHEREAS, the 2007 MN Legislature appropriated funding to the BWSR to develop guidelines for drainage records preservation and modernization;

WHEREAS, Drainage Records Modernization Guidelines are scheduled to be complete in August 2008; and

WHEREAS, the Legislature also appropriated $500,000 to the BWSR for FY 2009 for cost-share grants to local governments for public drainage records modernization.

NOW THEREFORE, the BWSR hereby authorizes the FY 2009 Drainage Records Modernization Challenge Grant Program to be implemented by staff with the following characteristics:

Application Period: September 15, 2008 – 4:00 p.m. October 31, 2008

Available Funding: $500,000

Eligible Local Government Units: Counties and Watershed Districts that administer public drainage systems under Minnesota Statutes Chapter 103E and have an current Comprehensive Local Water Management Plan or Watershed District Overall Plan.

Grant Maximum: Up to the larger of:

A) the number of Chapter 103E drainage systems administered for which drainage records modernization is proposed times up to $1,500 per drainage system up to $50,000 (Only include drainage systems jointly administered with an adjacent drainage authority if the applicant drainage authority is responsible for maintaining the primary records for the joint system.); or,

B) The miles of Chapter 103E drainage systems administered for which drainage records modernization is proposed times up to $75 per mile of drainage system up to $50,000. (For jointly administered drainage systems, only include the miles of the system that are within the applicant county or watershed district.)

(Because limited information is available to the BWSR regarding the number and total miles of drainage systems administered by Chapter 103E drainage authorities, the BWSR reserves the authority to adjust the grant rate per number or mile of drainage system, based on evaluation of information provided by all eligible applicants. The intent is to provide grants ranging from about $10,000 to $50,000 in proportion to the number or miles of Chapter 103E drainage systems administered by an eligible drainage authority.)

Required Match: All grants must be matched at minimum one-to-one with non-state cash or in-kind contributions.

Applicable Guidance Document: Drainage Records Modernization Guidelines, August 2008. These guidelines are based on the collective experience of Minnesota drainage authorities that have modernized their drainage records within approximately the past 10-15 years.

Eligible Projects: Eligible projects must be for drainage records modernization of Chapter 103E drainage systems (e.g. digitizing, mapping and electronic filing).

Priority Ranking Considerations:

- Requested grant amount per drainage system or mile of drainage system (A request that is lower than the maximums stated above contributes to a higher grant funding priority.)
- Amount of local match above the required 1:1 minimum (Higher match commitment contributes to a higher grant funding priority.)
- Existence of previous drainage system inventory work within the jurisdiction of the applicant drainage authority (Previous investments in drainage records modernization by the drainage authority increases grant funding priority.)
- If a drainage authority has previously received a Local Water Challenge Grant for drainage records modernization, its application typically will be a lower priority than applications from drainage authorities that have not received a previous Local Water Challenge Grant for this purpose.

Ineligible Projects:
Drainage system field surveys that would typically be conducted for a drainage system establishment, improvement or repair project or proceeding.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

H:09DRMCGBR

Comprehensive BWSR Clean Water Legacy FY 08-09 Budget

BWSR Board, Aug 28, 2008

1. Non-Point Source Restoration Assistance

(1a) Non-Point Source Restoration Legacy Assistance Grants—Legislative appropriation for financial assistance to install conservation practices and incentives associated with restoration projects. (Those waters with EPA approved TMDL pollutant allocations and MPCA-approved implementation plans.

(1b) BWSR agency appropriation —Appropriated funds available for BWSR staff, logistical support, and agency operations.

2. Restoration and Protection TA& Engineering Grants

(2a) Restoration and Protection TA& Engineering Grants —Legislative appropriation for Technical assistance, compliance and engineering assistance funds to address restoration and protection projects and assist with the installation of conservation practices initiated as a result of CWL funding or other conservation programs.

2b) Tillage Transect Survey—Continuation of comprehensive tillage transect survey begun in 2007. This information gathered by local SWCD staff and collated by Minnesota State University-Mankato will provide baseline information on land management, progress of TMDL implementation plans and can serve as one element of an effectiveness monitoring program for TMDL projects.

(2d) Farm Bill Assistance-Continuation of support for staff located in SWCD offices to provide marketing and technical assistance to landowners for CCRP, CREP EQIP and other Federal Conservation programs as well as CWL funds. These funds were identified in the June '07 board information packet.

(2e) BWSR agency appropriation—Legislative appropriation for BWSR staff, logistical support, and agency operations.

(2f) Continuation Funds---TA funds reserved for projects that received TA funding during the FY '07grant program. Those funds had a firm end date of June 30, '09. This amount will provide approximately 1 additional year of TA funding to carry those experienced staff through the '09 construction season and provide an additional opportunity to pursue long-term funding solutions at the legislature.

3. Evaluating and Reporting Practices/eLINK---Legislative appropriation to BWSR for reporting and evaluating applied soil and water conservation practices.

4. Grants to Implement County SSTS Programs

(4a) Subsurface Sewage Treatment System (SSTS) base grant funds -- For administration of county SSTS programs. These funds will be distributed as part of the NRBG grant in both FY08 and FY09.

(4b) SSTS county grants to inventory systems that are an imminent threat to public health or safety -- The program will be administered jointly with the MPCA. Funds will be available for counties to undertake SSTS inventories of systems that are imminent threats to public health or

(4c) SSTS grants to counties to address imminent threat and failing individual sewage treatment systems. Funding appropriated to BWSR. Local government (must be under an approved local water plan) options; may propose any one or combination of the three options.

- Option 1: Grants to cover significant portion of costs to low income households for system upgrade. Persons eligible for funds must attend SSTS ownership basics class to receive payment;
- Option 2: Incentive payment (not to exceed $500 per SSTS; maximum of $50,000/year/applicant) to all who upgrade, persons eligible for funds must attend SSTS ownership basics class to receive payment.
- Option 3: Capitalization of a revolving loan program; may be coordinated through the AgBMP program or other programs. There is a maximum award of $250,000 per county from this funding category.

5. Protection Lake and River Management Funds

(5a) Protection Lake and River Management Grants—Legislative appropriation for CWL grant funds to address non-point source protection activities only for FY '08. Protection activities can be initiated on unimpaired or un-assessed waters as well as those waters for which a TMDL allocation has not yet been prepared.

(5b) Protection Strategy Pilot Projects—Pilot projects led by local partners to identify protection strategies focused on those waters that are unimpaired and that can be implemented at the local level on a basin or watershed/multi-county scale. Protection strategy process can be used to provide context for the legislature and others about rational prioritization methods and implementation activity choices.

6. Feedlot Water Quality Funds for SWCDs

(6a) Feedlot Water Quality Grants—Legislative appropriation for feedlot-specific implementation practices. These funds were removed from the BWSR base cost-share budget and included in the CWL appropriation. The BWSR board authorized the distribution of funds for FY '08 at the June meeting. Funds remaining after that distribution will be included in the competitive round of CWL grants.

(6b) NPEA challenge grants—Continuation of support of NPEA areas by reserving 10% of the Feedlot Water Quality Grants as challenge grant opportunities.

7. Legislative Direct Appropriations

(7a) NE Wetland Mitigation Strategy—Direct legislative appropriation for furthering the NE MN wetland mitigation strategy. WCA staff is leading this effort.

(7b) Wetland Mine Reclamation Inventory—Direct legislative appropriation for NE MN wetland mitigation strategy though inventory and analysis of resources. WCA staff is leading this effort.

(7c) Ag hydro restoration C-S—Direct legislative appropriation. Project location, scope and program specifics are being developed.

(7d) MN Conservation Corp C-S—Direct legislative appropriation and requirement for contracting with MCC for services. A contract is in place with MCC to allow SWCDs, Counties, and WDs to work with MCC staff and crews to install implementation projects on impaired waters.

Table 1: Comprehensive BWSR Clean Water Legacy Budget

Funding Category	Category Funding Total	Sub Category	FY08	FY09	Biennium Total	Funding Mechanism
1) Non point Source Restoration C-S	$1,316,000	1a) Restoration assistance for TMDLs	$558,000	$558,000	$1,116,000	CWL Competitive Grant
		1b) BWSR agency appropriation	$100,000	$100,000	$200,000	Staff & logistic support
2) Restoration and Protection TA and Engineering	$2,625,000	2a) Restoration and Protection TA	$815,000	$490,000	$1,265,000	CWL Competitive Grant
		2b) Tillage Transect Survey	$85,000	$85,000	$170,000	Contract
		2d) Farm Bill Assistance	$100,000	$0	$100,000	One time for staffing
		2e) BWSR agency appropriation	$300,000	$300,000	$600,000	Staff and logistic support
		2f) Continuation Funds	$0	$450,000	$450,000	Grant for 2007 CWL project staff
3) Evaluating and reporting practices/eLINK	$400,000	BWSR agency appropriation	$200,000	$200,000	$400,000	Staff and logistic support
4) Grants to Implement County SSTS Programs	$3,450,000	4a) Base Grant	$730,000	$730,000	$1,460,000	NRBG
		4b) Grants up to $130K for county inventories	$990,000	$0	$990,000	CWL Competitive Grant
		4c) ISTS Grants for Imminent Health Threats	$1,000,000	$0	$1,000,000	CWL Competitive Grant
5) Protection Lake and River Management Funds	$1,000,000	5a) Protection Lake and River Management Grants	$850,000	$0	$850,000	CWL Competitive Grant
		5b) Protection Strategy Pilot Projects	$150,000	$0	$150,000	Contract
6) Feedlot Water Quality Funds to SWCDS	$3,000,000	6a) Grants to SWCDs	$1,000,000	$1,700,000	$2,700,000	Grants to SWCDs
		6b) NPEA Challenge Grant	$0	$300,000	$300,000	Grants to NPEAs
7) Legislative Direct Appropriations	$2,375,000	7a) NE Wetland Mitigation Strategy	$150,000	$0	$150,000	Contract
		7b) Wetland Mine Reclamation Inventory	$225,000	$0	$225,000	Contract
		7c) Ag hydro restoration C-S	$1,500,000	$0	$1,500,000	Outside of competitive process
		7d) MN Conservation Corp C-S	$500,000	$0	$500,000	Contract
Totals	**$14,166,000**		**$9,252,000**	**$4,914,000**	**$14,166,000**	

FY09 Interagency Competitive Clean Water Legacy Grant Time-Line

- **July 23rd:** BWSR Grants Policy Committee
- **August 28th:** BWSR Board Meeting— CWL package approval
- **September:** Outreach meetings with Local Governmental Units (LGUs)
- **October 1st to November 7th :** Application period open for LGUs
- **November 8th to December 1st :** Interagency Team reviews and ranks projects
- **December 11th:** BWSR SMT reviews recommended projects
- **~Dec 17th**: BWSR Grants Committee reviews SMT recommendations
- **~January 15, 2009:** BWSR Board Packet — Funding recommendations finalized
- **Jan. 26th:** Presentation to Clean Water Council on proposed funding recommendations
- **January 28th:** BWSR Board Approval of Funding Recommendations

FY09 Competitive Interagency Clean Water Legacy Funding Recommendation

Background

The 2007 legislature appropriated Clean Water Legacy (CWL) funds for best management practice (BMP) implementation to the Minnesota Board of Water and Soil Resources (BWSR). The MPCA is also supplying CWL implementation funds through its Federal Section 319 program. These agencies, along with the Minnesota Department of Natural Resources (DNR) and the Minnesota Department of Agriculture (MDA), have worked cooperatively to develop an interagency budget to address non-point source implementation through a competitive application process for grant and loan funds.

Clean Water Legacy funding is available for **restoration** practices to improve impaired waters that have EPA approved TMDLs and MPCA approved TMDL implementation plans. Below is a description of each specific component of this budget, along with the overall budget break-down, which is included in Table 2.

Table 2: Interagency CWL Budget

Agency Fund	FY09 Amount	Funding Eligibility
BWSR Financial Legacy Assistance Grant	$558,000	Restoration
BWSR Engineering and Technical Assistance Grant	$442,000	Restoration
BWSR Feedlot Water Quality Management Grants	$196,000	Restoration
MPCA Section 319 Grant	$2,000,000	Restoration
Totals	$3,196,000	

MPCA Section 319 Grant: The MPCA is proposing to contribute approximately $2,000,000 of Minnesota's Federal 319 grant allocation to the FY08 CWL competitive application process to fund Restoration activities.

BWSR Restoration Financial Legacy Assistance Grant: The BWSR is proposing to allocate $558,000 in FY09 for financial assistance and incentives for restoration activities.

BWSR Restoration Engineering and Technical Assistance Grant: The BWSR is proposing to allocate $442,000 in FY09 for competitive grants to local governmental units (LGUs) to provide technical assistance and engineering services for restoration activities

BWSR Feedlot Water Quality Management Grant: The BWSR is proposing to use $196,000 of remaining funds from the Feedlot Water Quality Management Grant program to help fix feedlot pollution problems in TMDL restoration areas. New or expansion feedlot projects are not eligible for funding and the feedlot operation must have less than 300 animal units. The feedlot must be out of compliance for feedlot runoff, milk house waste, or another feedlot water quality parameter in order to be eligible for grant funds. Feedlot contributions to identified impairments must be identified in the TMDL Implementation Plan.

Eligible Approved TMDLs Projects for Restoration

All restoration projects must have an EPA approved TMDL and an MPCA approved Implementation Plan. Implementation Plans must be approved no later than October 1, 2008. The TMDL projects that currently have an MPCA approved Implementation Plan and meet the criteria for restoration funding are:

- Carver-Bevens-Silver Creek Fecal Coliform TMDL
- Lake Independence Excess Nutrients TMDL
- Long Prairie River Watershed Dissolved Oxygen TMDL
- Lower Minnesota River Watershed Dissolved Oxygen TMDL
- Lower Mississippi River Basin Regional Fecal Coliform TMDL
- Lower Cannon River TMDL: Turbidity
- Lower Ottertail River Turbidity TMDL
- Shingle Creek Chloride TMDL
- North Branch Sunrise River Fecal Coliform TMDL
- South Branch Yellow Medicine Fecal Coliform TMDL
- Blue Earth River Fecal Coliform TMDL
- Twin and Ryan Lakes TMDL: Excess Nutrients
- Pipestone Creek TMDL: Fecal Coliform and Turbidity*
- Pomme de Terre Fecal Coliform TMDL*
- Rock River TMDL: Fecal Coliform and Turbidity*
- Burandt Lake TMDL: Excess Nutrients**

*TMDL study approved by EPA and TMDL implementation plan likely to be MPCA approved by October.
**TMDL public notice completed- TMDL and Implementation plan may be approved by October.

Board Resolution #_____

FY 09 CLEAN WATER LEGACY PROGRAM
PROJECT FUNDING ALLOCATIONS

WHEREAS, Governor Pawlenty signed the Clean Water Legacy Act (CWLA) into law on June 2nd, 2006; and,

WHEREAS, the BWSR endorsed an inter-agency strategy with the goal of coordinating non-point restoration and protection strategies and programs funded by the CWLA between the MN Department of Agriculture, the Department of Natural Resources, the Pollution Control Agency and the Board of Water and Soil Resources; and,

WHEREAS, An inter-agency implementation initiative was conducted to coordinate funding of restoration and protection activities; and,

WHEREAS, the 2007 legislature appropriated funds for Clean Water Legacy implementation activities in fiscal years 2008 and 2009; and

WHEREAS, the interagency work team has developed a budget, grant application process and supporting materials to support Clean Water Legacy implementation activities using the following eligibility and policy guidelines:

- Projects are eligible for funding from the restoration category if they have an approved TMDL and an MPCA approved TMDL implementation plan by the beginning of the current application period—October 1, 2008.
- Restoration application requests must closely follow the TMDL implementation plan that has been developed and, to the extent possible, address implementation activities that will result in the greatest pollutant load reductions.
- The FY 2009 CWL grant application scoring criteria will be:
  - Description and documentation of the relationship of the proposed implementation activities to specific TMDL implementation plans.
  - The measurable results and estimated effect of the implementation activities on the pollutant identified.
  - Funding that can be accessed from other sources to augment CWL funding.
  - Tracking installation and evaluating the effectiveness of the project initiatives
  - The amount of conservation practices or initiatives that will be accomplished during the first construction season after CWL funds are received.
  - The level of project partners' coordination, project management community support and general project description.

NOW THEREFORE, the Grant Policy and Program Committee recommends BWSR approval of the proposed budget and grant application process to implement the FY 09 CWLA Program with the grant application period beginning October 1, 2008 and ending November 7, 2008.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

ANNUAL PLAN – FY 2009

JULY 1, 2008 – JUNE 30, 2009

AREA II MINNESOTA RIVER BASIN PROJECTS, INC.

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FY 2009 TECHNICAL OFFICE BUDGET

2008 BOARD OF DIRECTORS

BROWN COUNTY
*ANDREW LOCHNER – **CHAIR***
CHARLES GUGGISBERG

COTTONWOOD COUNTY
*GARY SORENSON – **VICE CHAIR***
NORMAN HOLMEN

LAC QUI PARLE COUNTY
HAROLD SOLEM
TODD PATZER

LINCOLN COUNTY
CURT BLUMEYER
LARRY HANSEN

LYON COUNTY
*PHILIP NELSON - **SECRETARY/TREASURER***
RODNEY STENSRUD

MURRAY COUNTY
ROBERT MOLINE
JOHN GIESE

PIPESTONE COUNTY
LUKE JOHNSON
HAROLD MILLER

REDWOOD COUNTY
JOHN SCHUELLER
ALLEN KOKESCH

YELLOW MEDICINE COUNTY
LOUIS SHERLIN
RON ANTONY

ANNUAL PLAN – FY 2009
ADMINISTRATIVE WORK PLAN NARRATIVE

STAFF: Kerry Netzke ~ *Coordinator* Joe DeSchepper ~ *Engineering Technician* Duane Hansel, P.E. ~ *Consultant Engineer Bolton & Menk, Inc.*

Fiscal 2008, and particularly the 2007 construction season, was extremely busy with over $680,000 of projects constructed. The $500,000 LCMR funding from 2005 was successfully expended by June 30, 2007 (*see page 8*) with five projects spanning four member counties.

Spring 2008 was unusually wet which delayed the construction season well into the middle of June. The 2005 Bonding appropriation was due to expire June 30, 2008, however we were able to extend that deadline until September 30, 2008 simply due to the weather conditions. That funded will soon be expended in its entirety resulting in fourteen projects in excess of $1,537,017.82 (*see pages 5 and 6*).

Now the priority moves to spending the 2006 Bonding appropriation before its expiration date of June 30, 2009. Typically, Area II has received $500,000 in bonding every other year which has worked beautifully with our construction schedules. As you recall, there was no Bonding Bill in 2004 which resulted in Area II receiving $500,000 in bonding in 2005 and another $500,000 bonding appropriation in 2006. With a small staff and unending interest in floodwater retention projects, the shortened time frame to use the funding has been challenging. Page 7 lists the projects that are vying for this funding spanning five of the member counties.

Additionally, the 2008 Legislative Session provided construction funding to Area II via the Flood Damage Reduction Grants administered by the Department of Natural Resources. Although this funding is handled on a "first come, first served" basis, we hope to connect with the $30 million made available for work such as ours.

Beyond the routine projects, Area II is invited to participate in other projects related to floodwater retention (*see page 9*). Area II will provide this surveying and engineering expertise to our member counties in this manner.

Area II greatly appreciates the ongoing support given to them from the Minnesota Board of Water & Soil Resources. We have welcomed the new relationship with John Jaschke and look forward to what the future has in store. Area II will continue its good work and to make BWSR proud of the conservation practices that only we can do jointly in southwestern Minnesota.

FY 2008
COMPLETED PROJECTS

χ	**Monroe 3 Dam - Lyon County**	**$273,232.97**
	LCMR	$ 179,064.97
	2005 Bonding Funds	$ 18,354.00
	Lyon County	$ 72,464.02
	Area II Counties	$ 3,349.98
χ	**Monroe 7 Dam Repair - Lyon County**	**$ 40,483.48**
	2005 Bonding Funds	$ 30,362.60
	Landowner	$ 5,060.44
	Area II Counties	$ 5,060.44
χ	**Norman 35 Small Dam Repair – Yellow Medicine**	**$ 22,785.00**
	Federal EQIP Funds	$ 11,393.00
	2005 Bonding Funds	$ 5,696.00
	Landowner	$ 2,848.00
	Yellow Medicine River Watershed District	$ 2,848.00
χ	**Custer 15 Small Dam Repair - Lyon County**	**$ 11,374.81**
	RCRCA Cost-Share	$ 8,531.11
	Landowner	$ 2,843.70
χ	**Lake Marshall 31 Small Dam Repair - Lyon County**	**$ 53,606.05**
	2005 Bonding Funds	$ 32,704.55
	Federal EQIP Funds	$ 7,500.00
	Landowner	$ 13,401.50
χ	**Lynd 32 Dam - Lyon County**	**$ 47,393.00**
	LCMR	$ 35,544.75
	Landowner	$ 5,924.13
	Area II Counties	$ 5,924.12
χ	**Honner 29 Dam – Redwood County**	**$179,981.79**
	2005 Bonding Funds	$ 60,000.00
	City of Redwood Falls (Includes Federal Aviation funds)	$ 119,981.79
χ	**Germantown 4 Road Retention - Cottonwood County**	**$ 53,106.70**
	LCMR	$ 37,065.00
	Cottonwood County	$ 8,942.52
	Area II Counties	$ 7,099.18

COMPLETED PROJECTS TOTAL
$ 681,963.80

LCMR	**$251,674.72**
BONDING	**$147,117.15**
FEDERAL	**$ 18,893.00**
OTHER STATE	**$ 8,531.11**
LOCAL	**$ 255,747.82**

62/38 COST-SHARE RATIO

2005 BONDING PROJECTS

χ **Alta Vista 36 Road Retention – Lyon/Lincoln County** **$ 658,603.34**

MNDOT Local Road Improvement Grant	$250,000.00	Lyon County In-kind (asphalt surfacing)	$ 70,000.00
2005 Bonding Funds	$155,000.00	Lincoln County In-kind (engineering)	$ 58,521.98
Lincoln County – MNDOT State Aid	$ 73,104.66	Yellow Medicine Watershed District	$ 51,976.70

χ **Sodus 27 Dam - Lyon County** **$ 68,557.72**

2005 Bonding Funds	$ 51,418.29
Landowner	$ 17,139.43

χ **Amiret 29 Dam - Lyon County** **$ 14,216.57**

2005 Bonding Funds	$ 10,662.43
Landowner	$ 3,103.39
Area II Counties	$ 450.75

χ **Monroe 7 Small Dam Repair - Lyon County** **$ 40,483.48**

2005 Bonding Funds	$ 30,362.60
Landowner	$ 5,060.44
Area II Counties	$ 5,060.44

χ **Delhi 24 Small Dam Repair - Redwood County** **$ 64,904.00**

2005 Bonding Funds	$ 18,678.00
Landowner	$ 16,226.00
Federal EQIP Funds	$ 30,000.00

χ **Honner 29 Small Dam - Redwood County** **$ 179,981.79**

2005 Bonding Funds	$ 60,000.00
City of Redwood Falls	$ 119,981.79

χ **Lake Marshall 31 Small Dam Repair - Lyon County** **$ 53,606.05**

2005 Bonding Funds	$ 32,704.55
Landowner	$ 13,401.50
Federal EQIP Funds	$ 7,500.00

CONTINUED…

2005 BONDING PROJECTS

χ **Norman 35 Small Dam Repair – Yellow Medicine County** **$ 22,785.00**

2005 Bonding Funds	$ 5,696.00
Landowner	$ 2,848.00
Federal EQIP Funds	$ 11,393.00
Yellow Medicine River Watershed District	$ 2,848.00

χ **Lyons 3 Dam Repair - Lyon County** **$ 46,522.92**

Landowner	$ 10,000.00
Federal EQIP Funds	$ 34,592.19
Area II Counties	$ 1,930.73

χ **Marble 8 Dam Repair - Lincoln County** **$ 23,294.98**

2005 Bonding Funds	$ 17,471.24
Landowner	$ 4,950.17
LQP-YB Watershed District	$ 873.57

2005 BONDING
COMPLETED PROJECTS TOTAL
$1,537,017.82

χ **Monroe 3 Dam - Lyon County** **$ 238,753.29**

LCMR	$ 179,064.97
Lyon County	$ 59,688.32

χ **Hansonville 18 Dam - Lincoln County** **$ 86,101.50**

2005 Bonding Funds	$ 64,576.13
Landowner	$ 12,095.37
US Fish & Wildlife Service	$ 6,200.00
LQP-YB Watershed District	$ 3,230.00

χ **Lamberton 22 Dam Repair - Redwood County** **$ 29,268.50**

2005 Bonding Funds	$ 6,951.38
Landowner	$ 7,317.12
Clean Water Legacy Funds	$ 15,000.00

χ **Monroe 12 Small Dam Repair - Lyon County** **$ 9,938.68**

2005 Bonding Funds	$ 7,454.01
Landowner	$ 2,151.17
Area II Counties	$ 333.50

AREA II MINNESOTA RIVER BASIN PROJECTS, INC.

2006 BONDING PROJECTS FOR FY 2009

- χ **Drammen 15 Dam – Lincoln County**
- χ **Springdale 17 Dam - Redwood County**
- χ **Springdale 21 Road Retention - Redwood County**
- χ **North Hero 34 Road Retention - Redwood County**
- χ **Springdale 28 Dam - Redwood County**
- χ **Lynd 35 Small Dam Repair – Lyon County**
- χ **Lyons 12 Dam - Lyon County**
- χ **Amiret 18 Road Retention – Lyon County**
- χ **Island Lake 4 Dam – Lyon County**
- χ **Monroe 8 Dam – Lyon County**
- χ **Nordland 4 Dam – Lyon County**
- χ **Holly 22 Road Retention – Murray County**
- χ **Florida 22 Dam Repair – Yellow Medicine County**

LCCMR COMPLETED PROJECTS (6/30/07)

χ **Florida 9 Road Retention – Yellow Medicine County** ($112,367.09)
14.8 acres of flood easement acquired to reduce 100-year storm flows by 24.2% (947 cfs to 718 cfs); 99 acre-feet of storage.

LCMR	$ 81,207.57
Area II Counties	$ 31,059.52

χ **Holly 9 Dam and Small Dam Repair - Murray County** ($221,307.52)
13.25 acres of flood easement acquired to reduce 100-year storm flows by 82% (418 cfs to 77 cfs); 255 acre-feet of storage.

LCMR	$165,087.57
Area II counties	$ 36,219.95
Landowners	$ 20,000.00

Additionally, in-kind services of $10,640.00 were contributed by Area II and $900.51 from Murray County Hwy Dept.

χ **Monroe 3/10 Road Retention/Dam - Lyon County** ($273,232.97)
22.8 acres of flood easement acquired to reduce 100-year storm flows by 37.5% (1370 cfs to 860 cfs); 211 acre-feet of storage.

LCMR	$ 179,064.97
2005 Bonding Funds	$ 18,354.00
Lyon County	$ 72,464.02
Area II Counties	$ 3,349.98

LCMR Funding = $500,000.00
Local Match = $205,542.93
71/29 Cost-Share Ratio

χ **Lynd 32 Dam – Lyon County** ($46,933.00)
2.61 acres of flood easement acquired to reduce 100-year storm flows by 83.6% (78 cfs to 12.8 cfs); 9.6 acre-feet of storage.

LCMR	$ 35,544.75
Area II counties	$ 5,924.13
Landowners	$ 5,924.12

χ **Germantown 4 Road Retention - Cottonwood County** ($317,035.36)
98.84 acres of flood easement acquired to reduce 100-year storm flows by 10.4% (3327 cfs to 2985 cfs); 716 acre-feet of storage.

LCMR	$ 37,065.00
MNDOT Town Bridge Funds	$ 247,369.15
Cottonwood County	$ 24,423.71
Area II Counties	$ 6,177.50

FY 2009
OTHER PROJECTS

χ Lake Stay Outlet Dam Restoration – Lincoln County

The original concrete dam which was built in 1916 is now undermining and dangerously lowering the water of this popular area lake. Lincoln County has adopted ownership and responsibility of the dam and has asked Area II to assist in the survey and design of the new outlet structure. Plans and Specifications have been completed and we await lower water levels for construction to begin.

χ Beaver Creek Watershed – Murray County

Through the Murray County Comprehensive Local Water Plan, Area II was hired to assist Murray County in locating potential floodwater retention areas in the Beaver Creek watershed. This watershed is not within Area II watershed boundaries, however the water planners were willing to hire our services to help them achieve their goal to reduce floodwater damages. A meeting with the involved landowners, townships and other interested parties was held with much interest being exhibited. A bus tour of example projects in Lyon County was hosted in April with even more interest being raised.

χ Clean Water Legacy Funds – Redwood & Cottonwood Watersheds

A portion of the funding was earmarked to fund up to ten small dam repairs (up to $15,000 each) within the two watersheds. Area II is providing surveying and engineering design services. The following projects are stemming from this grant:

Paxton 2 – Redwood County	Charlestown 30 – Redwood County	Lynd 33 – Lyon County
Sherman 27 – Redwood County	Redwood Falls 17 – Redwood County	Monroe 4 – Lyon County
Lamberton 22 – Redwood County	Springdale 30 – Redwood County	Amiret 27 – Lyon County
Lamberton 25 – Redwood County	North Hero 3 – Redwood County	Amiret 35 – Lyon County

χ Wergeland 5 Streambank Stabilization – Yellow Medicine County

This streambank stabilization project lies on the watershed boundary of the Lac qui Parle and Yellow Medicine Rivers. Although the project is physically in the Lac qui Parle watershed, the damage is occurring in the Yellow Medicine watershed. A joint effort was made whereby Area II surveyed and designed the three stabilization areas, the Lac qui Parle Clean Water Partnership is provided 75% cost-share through the Clean Water Legacy appropriation, and the Yellow Medicine Watershed District is providing the 25% local match. Additionally, the adjoining landowner will receive incentives to plant a buffer along the stabilized area.

ATTACHMENT A

FY 2009 Technical Office Budget

OFFICE OPERATIONS

Personal Services:

*Directors' Compensation	$ *6,700.00**
*Directors' FICA	*512.50**
Employees' Salaries	89,100.00
Employees' FICA	6,816.00
Employees' Medical Insurance	14,995.00
Employees' Retirement	5,791.50
Employee' FlexPlan	420.00
Total Personal Services	**$ 124,335.00**

Supplies:

Office	$ 2,000.00
Field	500.00
Capital Outlay	0.00
Total Supplies	**$ 2,500.00**

Other Services and Costs:

*Directors' Expenses	$ *4,250.00**
Employees' Expenses	1,300.00
Continuing Education	0.00
Professional Services	40,000.00
Maintenance & Repairs	1,200.00
Telephone	675.00
Postage	1,000.00
Vehicle Expense	3,500.00
*Director's Insurance	*1,557.00**
Other Insurance	13,350.00
Rent	7,083.00
Miscellaneous & Other Expenses	3,000.00
*Miscellaneous Expenses - Directors	*0.00**
Total Other Services and Costs	**$ 76,915.00**

TOTAL OFFICE OPERATIONS	$ 203,750.00
Total Ineligible for Cost-Share by the State	*13,019.50**
Total Eligible for Cost-Share by the State	$ 190,730.50

**** These items not cost-shared by the State***

STATE SHARE OF ELIGIBLE OFFICE COSTS	**$ 140,000.00 (75%)**
Local Share of Eligible Office Costs	63,750.00 (25%)

Minnesota Board of Water & Soil Resources

Board Resolution #____

FY 2009 Area II Minnesota River Basins Project Inc. Work Plan and Grant

WHEREAS, the Area II Minnesota River Basins Project Inc. (Area II) is eligible to receive a $140,000 FY 2009 grant from the Minnesota Board of Water and Soil Resources (BWSR). This grant is available for administrative and implementation efforts of Area II within their 9 county flood control project area. This grant is available with a 25% local match requirement.

WHEREAS, Area II have developed an annual work plan to cover activities for FY 2009,

WHEREAS, Area II has secured their 25% match requirement,

NOW THEREFORE, the BWSR hereby approves the Area II FY2009 annual work plan and grant.

_____ Date:_____

Randy Kramer, Chair
Board of Water and Soil Resources

Minnesota River Basin Joint Powers Board

Plan of Work
July 1, 2008 - June 30, 2009 (FY09)*
*some aspects of the work plan extend beyond FY09

Contact Information:
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Minnesota River Board
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shannon.fisher@mnsu.edu
www.minnesotariver.org

MRB Approved on 5-19-08
Submitted by _____
Shannon Fisher, Executive Director

Minnesota River Board Basics

In 1992, the Minnesota River Citizen's Advisory Committee (MRCAC) was formed. In 1994, the MRCAC released the report, *Working Together: A Plan to Restore the Minnesota River.* The report detailed ten recommendations (listed below) that the participants believed would improve Minnesota River health.

- restore floodplains and riparian areas,
- restore wetlands,
- manage drainage ditches and storm sewers as tributaries,
- improve land management practices,
- monitor water quality throughout the Minnesota River Basin,
- establish a "Minnesota River Commission" to oversee the clean-up effort,
- establish local joint powers agreements,
- improve technical assistance to local governments,
- engage the general public, and
- enforce existing laws

As a result of the MRCAC recommendations and increasing Minnesota River awareness, the Minnesota River Basin Joint Powers Board (hereafter referred to as MRB) was forged in 1996 (*Minnesota Statute 103F.378*). The MRB was founded on

- the desire to collaborate and leverage in a judiciously appropriate manner and
- the desire to assume a leadership role and be more pro-active in the coordination of efforts at the local level.

Mission and Vision

The MRB is founded on and conducts its business based on the principles and objectives outlined in our Mission and Vision statements.

MRB Mission Statement

"To provide leadership, build partnerships, and support efforts to improve and protect water quality in the Minnesota River Basin"

MRB Vision Statement

"Conservation and restoration of Minnesota River resources and our way of life can only be achieved by a cooperative effort between citizens and all levels of government and business."

Organizational Structure

The MRB partnership structure (Figure 1) has been in place since 2003 and remains a desirable and productive organizational profile. The internal structure of the Minnesota River Board itself should be evaluated, possibly for greater inclusion of basin partners. The relationship between the Water Resources Center (WRC) and the MRB has been very good and has been highlighted by legislators during MRB negotiations. The WRC has facilitated stability and progress for both entities. Significant dedication to re-establishing relations and partnerships with the watershed programs needs to and will occur over the next few years.

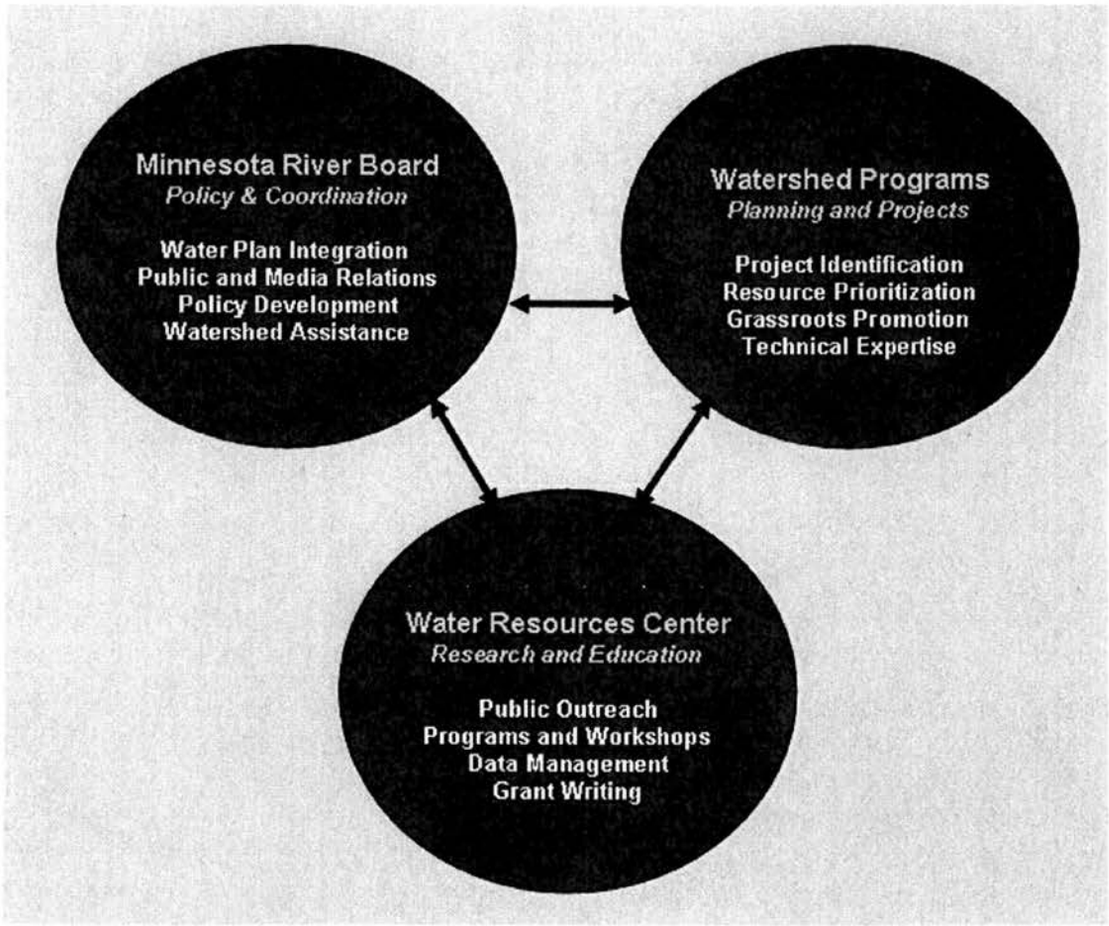

Figure 1. MRB Organizational Structure

Membership

The MRB is a joint powers board charged with coordinating efforts to improve water quality in the 38-county Minnesota River Basin and providing reporting for and assistance to 12 major watersheds (Figure 2). Upon acceptance of the joint powers agreement, each county with dues paid in full shall have one county commissioner as its delegate to the board and one county commissioner as an alternate. A technical and citizen advisory committee was established to advise the board and consisted of a technical representative from each participating county in the basin and citizens who are not county employees, but who have an interest in agriculture, conservation, sporting activities, and other relevant areas as determined by the board. This committee has not been active and should be revitalized, as input from these basin stakeholders is critical for the positive advancement of the board's mission. For counties wishing to return to the board, a new policy detailing re-admission procedures was approved in January of 2008. Contact the MRB staff for more information.

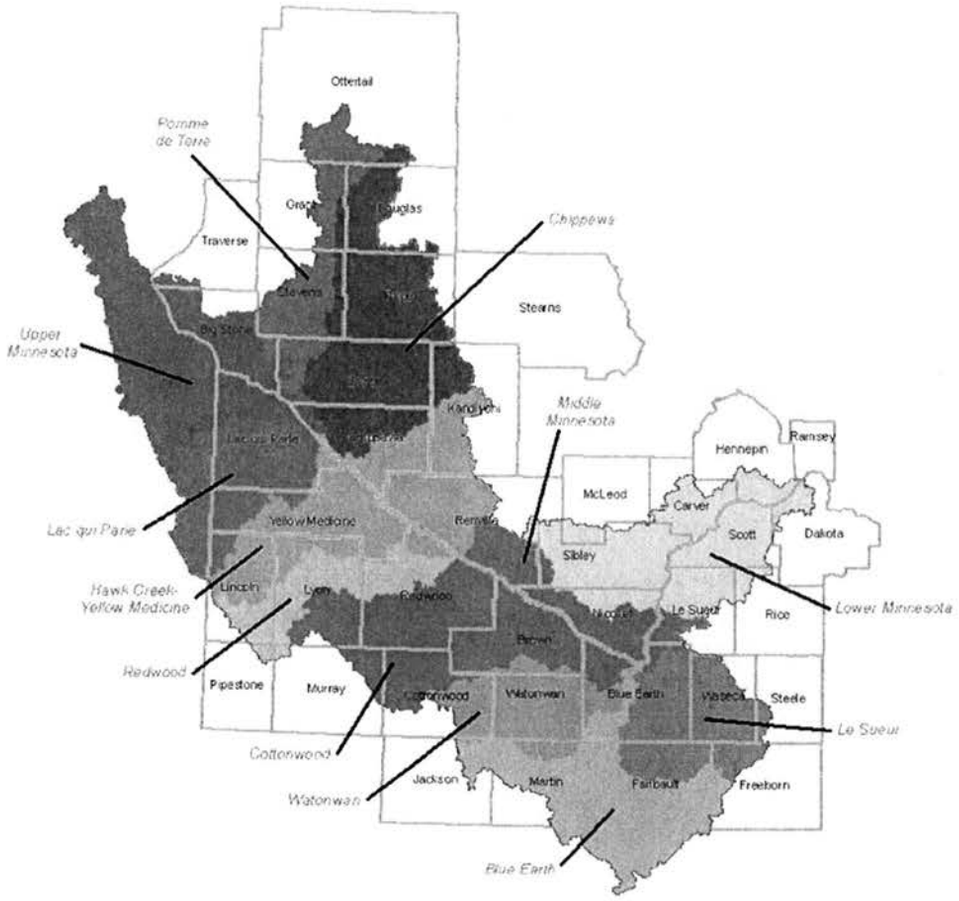

Figure 2. Figure denotes the Minnesota River basin made up of 12 major watersheds and 38 counties associated with the Minnesota River Basin Joint Powers Board.

FY09 Plan of Work

In 2006, the MRB completed a "Procedures Guide and Strategic Plan (2006-2010)" to guide our work (http://www.minnesotariver.org) and in FY08 produced the first work plan under the renewed legislative funding scenario. As a result of these plans, a substantive review of our statutory obligations and an ongoing assessment of what the MRB could and should be for the Minnesota River and our partners have been completed.

In FY08, we attempted to address all of the various statutory components where additional work was needed. For each of those components, we identified strategies for improvement; however, over this past year, the executive committee, MRB staff, and many of our partners thought it would be better to focus on areas where our services can be the most beneficial, rather than trying to be all things to all people. We quickly realized that there were several sections of the FY08 work plan that collectively were too much to handle given our available resources. We address our progress, shortcomings, and items to be carried forward (from the FY08 work plan to the FY09 work plan) in our FY08 end-of-year progress report.

Some uncompleted progress measures from the FY08 work plan were due to the magnitude of the work load, a work load that experienced several setbacks due to delays in state funds transfer to the MRB, which further delayed our hiring process. Although the funding was approved to start July 1, 2007, funds were not received until October 1, 2007 and our new staff person largely responsible for many aspect of the FY08 work plan was not hired until early January of 2008. Therefore, Director Fisher and the staff will utilize some remaining funds to get the critical aspects of the FY08 work plan completed during FY09.

The work plan for FY09 is structured using a set of goal statements that are then followed by a series of actions and products that will serve as our progress measures in FY09. Certain aspects of the FY09 plan rely heavily on completion of FY08 progress measures; therefore, several FY08 actions have been carried forward and are noted. The targeted completion dates for each item are noted in parentheses (month/year).

GOAL 1. Efficiently complete MRB administrative duties on schedule and be accountable for expenditures of public funds.

A) Prepare, obtain MRB and BWSR approval for, and implement FY09 Work Plan and budget. (9/08)
B) Evaluate and implement, if approved by the MRB, a plan to dissolve the existing Assistant Director Position and hire an administrative assistant (0.5 FTE; 9/08)
C) Finalize a calendar of events for FY09 and future years that establishes the upcoming calendar year's meeting times and locations, officer nominations and installments, budget preparation, staff reviews, award nominations, annual meetings, etc.... (10/08)
D) Provide a progress report to BWSR by February 1, 2009. (2/09)
E) Complete Executive Committee planning sessions in September of 2008 and April of 2009. (4/09)
F) Complete an annual internal audit. (5/09)
G) Conduct performance reviews as scheduled for the staff (6/09).
H) Continue to visit and communicate with county boards, water planners, SWCD representatives, and other water-quality related partners in the Minnesota River basin. (6/09)
I) Strive to bring non-member counties back to the MRB, with an objective of securing at least 1. (6/09)
J) Hold 6 full board meetings (bi-monthly), one of which will serve as the annual meeting, and two of which will be in partnership with basin organizations. (6/09)
K) Provide an Annual Report to BWSR and basin legislators by June 30, 2009. (6/09)
L) Write at least two grant and/or contract applications to bring external funds into the MRB to support our financial foundation and bring needed projects to the basin and provide significant cash and in-kind contributions to the projects. (6/09)

GOAL 2. Reconvene the technical and citizen advisory board to the MRB.*
**Completion of this goal will likely extend into FY10*

A) Establish and utilize a budget to defray the costs of participant travel to an initial advisory board meeting, to include county water planners, SWCD representatives, watershed organizations, and nongovernmental organizations. (9/08)
B) Utilize the collective experience of the basin citizens and technical staff to better develop a suite of services that the MRB can package for the basin. (12/08)
C) Establish a committee structure and process of technical representatives and citizen representatives whose input is critically important to the future work of the MRB. (1/09)
D) Develop a plan on which to formally gather input from and to provide services to the advisory group. (1/09)
E) Establish a meeting schedule and format based on input from the advisory committee. (1/09)
F) Establish a platform based on policy, education, and service, not implementation. (4/09)

GOAL 3. Resolve the real and perceived MRB identity problem.

A) Establish a committee to take another look at important questions surrounding the MRB identity, including further definition of our role(s), services that we could/should offer, and what sets the MRB apart from other watershed organizations. (9/08)
B) Provide recommendations to the MRB regarding the results of Goal 3A. (9/08)
C) Develop a proposed statutory revision based on the recommendations from Goal 3B and with input from the advisory committee. (11/08)
D) Request assistance from and work with basin legislative leaders to submit bills to make suggested modifications on Minnesota Statute 103F.378 in the 2009 legislative session (in conjunction with Goal 9 as appropriate). (11/08)

GOAL 4. Develop and implement a visibility plan.

A) Convene a committee to discuss visibility options and to develop a set of recommendations to the MRB regarding the visibility plan. (9/08)
B) Develop a brochure that highlights the MRB mission, programs, services, and strategic objectives. (11/08)
C) Develop a high quality display for use at county fairs, basin events, etc... (11/08)
D) Begin implementation of visibility plan components. (12/08)
E) Reformat the MRB website into a more user friendly and easily updated venue that can serve as a "go to" place for a variety of information. (12/08)

GOAL 5. Facilitate a process to improve and increase the level of communication within the MRB and between the MRB and our partners.

A) Implement bi-monthly MRB newsletters (2-4 pages), including features written by delegates, county staff, watershed professionals, and others. (10/08)
B) Begin to profile delegates/watershed professionals in each newsletter. (9/08)
C) Include condensed articles on major Minnesota River issues, similar to Envision 2020 reports. (9/08)
D) Develop and utilize a set of committees to draw on the expertise and input of delegates and our partners into the mainstream workings of the MRB. (11/08)
E) Enhance communications in conjunction with other media/outreach such as the Minnesota River Watershed Alliance, local newspapers, etc... (12/08)

GOAL 6. Elevate MRB involvement in continuing education and outreach.

A) Gather information as part of Goal 2 to determine what educational needs are truly warranted. (10/08)
B) Prepare a fact sheet for distribution to our various partners that highlights our programming options, available services (including funding assistance), and upcoming events. (11/08)
C) Increase activity with and visibility to the Minnesota River Watershed Alliance, watershed organizations, private partners, and county staff. (4/09)
D) Complete at least one major and one minor workshop in the basin, preferably based on needs identified from the technical advisory committee. (6/09)

GOAL 7. Serve as a "voice" and 'resource" for the Minnesota River Basin.*

**Completion of this goal will likely extend into FY10 and be ongoing*

A) Provide services as requested to support the various watershed and water quality interests in the Minnesota River basin, allowing the voice of 38 counties to be heard on issues in local areas, St. Paul, across the region, and beyond. (6/09)
B) Provide assistance to agencies, counties, watersheds, etc.... in the dissemination of information regarding policy changes, funding opportunities, and staffing/project service options. (6/09)
C) Provide *pro bono* grant preparation assistance/consulting services as requested, with a target of at least 2 collaborations that benefit MRB members and/or local partners. (6/09)
D) Provide a minimum of 2 presentations on behalf of the MRB and our partners as requested.(6/09)
E) Continue to provide assistance as needed to existing partnerships, such as BNC septic initiative, the BMP Challenge, and the Crystal Lake Clean Water Partnership. (6/09)
F) Serve as a resource for program information, legislative updates, etc.... (6/09)
G) Serve in a lobbyist capacity for approved MRB topics/legislation. (6/09)

GOAL 8. Evaluate progress measures identified in FY08 and develop a progress report for the Minnesota River Basin in FY09 that covers all the major watersheds.

A) In partnership with BWSR and water quality professionals from the Minnesota River Basin, evaluate the FY08 Progress Report Measures submitted to BWSR and the basin legislators, including ongoing collection of additional input received from agency, watershed, county, SWCD, private partner, and citizen representatives. (9/08)
B) Finalize the measures to be used and refine the data collection and reporting strategy, to include, but not be limited to, funding acquired, projects implemented, potential water quality improvements, future needs, and partner perceptions. (11/08)
C) Complete and submit a full Minnesota River Water Quality and Watershed Improvement Progress Report using the measures described above, to the legislature, governor, basin stakeholders, and other interested parties. (4/09)
D) Include in this report a summary of the county water plan updates and priorities and in conjunction with the progress report, include recommendations for measures of success on which to gauge water plans. (4/09)
E) Use the information garnered during this effort to assist MPCA, US Corp of Engineers, and others develop an updated Minnesota River Management Plan as opportunities arise. (6/09)

GOAL 9. Evaluate MRB membership structure and watershed funding and implement recommendations.

A) Form a committee to evaluate and consider revisions to the current MRB membership process and structure, to include a full consideration of the addition of watershed, citizen, and technical representatives as delegates to the MRB. (9/08)
B) Evaluate watershed-based funding scenarios, including a per household fee for water quality and watershed improvements. (11/08)
C) Work with legislators and watershed staff on future watershed-based management legislation. (11/08)
D) Utilize the information here to prepare draft bill language for the formation of a modified watershed management unit in the Minnesota River Basin in conjunction with Goal 3. (11/08)

GOAL 10. Recognize the contributions of professionals, citizens, and students in the Minnesota River Basin.

A) Re-evaluate an awards/incentive program for junior and senior high students from the basin participating in sanctioned science fair programs. (9/08)
B) Modify nominations process to allow staff to nominate after deadlines pass if no nominations are brought forward. (9/08)
C) Develop and implement an undergraduate scholarship program for students in the basin studying water quality issues. (10/08)
D) Award two deserving participants from the basin with the "Confluence" and "Tributary" awards. (6/09)

GOAL 11. Effectively manage the first year of the Conservation Innovation Grant from the NRCS for Water Quality Credit Trading

A) Provide support services for the $999,997 CIG grant to develop and implement a water quality credit trading program here in the Middle and Lower Minnesota River Watersheds, the Greater Blue Earth River Basin, and to provide administrative support for the Sauk River Watershed.
B) Provide significant administrative services and work with various partners to enhance market-driven water quality improvement via land use modifications.
C) Contract technical services with appropriate entities based on work plan requirements.

Proposed MRB FY09 Budget

Line Items (details listed below budget)	Funding Source Used for Line Item Expense: State of MN	County Income*	External**	Totals
FY08 Balances (6/30/08 estimates)	$ 44,372	$ 1,074	$ 967	$ 46,413
FY09 Funds (anticipated)	$ 100,000	$ 45,425	$ 43,473	$ 188,898
Total Funds for FY09	$ 144,372	$ 46,499	$ 44,440	$ 235,311
Expenses				
0.5 FTE Executive Director	$ 13,750	$ 23,044	$ 5,000	$ 41,794
0.45 FTE Administrative Assistant	$ 7,580	$ 4,900	$ 0	$ 12,480
1.0 FTE Program Director	$ 42,514	$ 0	$ 0	$ 42,514
CIG Related Contractual Labor	$ 0	$ 0	$ 21,739	$ 21,739
Student Worker	$ 4,000	$ 2,000	$ 0	$ 6,000
Fringe Benefits (All Staff)	$ 19,503	$ 7,158	$ 6,934	$ 33,595
MCIT Insurance	$ 0	$ 2,600	$ 0	$ 2,600
MRB Meeting Expenses	$ 0	$ 1,600	$ 0	$ 1,600
Communications	$ 2,400	$ 1,347	$ 0	$ 3,747
Travel	$ 10,750***	$ 1,450	$ 0	$ 12,200
Printing	$ 3,500	$ 0	$ 0	$ 3,500
Awards/Student Incentives Program	$ 2,600***	$ 400	$ 0	$ 3,000
Supplies/Equipment	$ 2,000	$ 0	$ 10,767	$ 12,767
Marketing/Promotions	$ 10,275***	$ 1,000	$ 0	$ 11,275
Outreach/Programming	$ 25,500***	$ 1,000	$ 0	$ 26,500
Total Expenditures	$ 144,372	$ 46,499	$ 44,440	$ 235,311

*County Dues for calendar year 2008 to be utilize for FY09 (July 1, 2008 – June 30, 2009). This column also includes other potential funds, such as insurance reimbursements, donations, etc....

**External funds include estimates on grants/contracts for projects and other paid services provided by the MRB.

***Portions of these funds may carry over into FY10 if the availability of appropriate projects is limited.

Executive Director: 50% of the Executive Director Fisher's annual salary

Administrative Assistant: 45% of an to-be-named Administrative Assistant (October-June)

Watershed Specialist: 100% of Program Director Susie Carlin's annual wages

CIG Related Contractual Labor: Funds that will be likely contracted to other organizations to help manage the CIG duties.

Student Worker: 768 hours of student worker assistance (includes internship opportunities)

Fringe Benefits: Estimated Health Insurance, Required Leave, FICA, etc.... for all MRB staff and students listed above

MCIT Insurance: Estimated Annual Insurance Payment

MRB Meeting Expenses: Expenses for 5 MRB business meetings, the annual meeting, 2 executive committee planning sessions, and other required committee meetings

Communications: Postage ($2,100), cellular phone and data services ($1,000), and web site expenses ($647).

Travel: Designated Vehicle for MRB use and lodging (7/08 – 6/09; $7,950), Guest Travel to various MRB Meetings ($2,750); staff and executive committee per diem and personal mileage ($1,500)

Printing: Preparation of various reports, newsletters, stationary needs, in-house copy needs ($3,500)

Awards Program: "Tributary" and "Confluence" Awards ($250), MRB Scholarship ($1,000), Science Fair Awards ($750), Undergraduate Student Research Award ($1,000)

Supplies/Equipment: Office furniture for staff, GPS navigator, computer hard/software, office supplies

Marketing/Promotions: MRB program advertising ($1,500), Brochure development/printing ($1,200), Display development and construction ($2,200), Marketing/visibility implementation ($2,100), Web Site Development/Updates ($4,275)

Outreach/Programming: Technical/citizen advisory committee meetings ($4,500), workshop, trainings, and conferences on grants/funding opportunities, ongoing research, program updates, etc... ($22,000)

BOARD RESOLUTION _____

MINNESOTA RIVER BASIN JOINT POWERS BOARD, FY09 ANNUAL WORK PLAN

WHEREAS, the Minnesota River Basin Joint Powers Board was granted $100,000 of General Funds in fiscal year 2009 from the 2007 Minnesota Legislature;

WHEREAS, the Minnesota River Basin Joint Powers Board has developed and adopted an Annual Plan of Work for fiscal year 2009 on May 19, 2008;

WHEREAS, the Board of Water and Soil Resources staff have completed its review of the Plan;

NOW THEREFORE BE IT RESOLVED, the Board of Water and Soil Resources enter into a grant agreement with the Minnesota River Basin joint Powers Board for these funds.

_____ _____

Randy Kramer, Chair
Minnesota Board of Water & Soil Resources

Date

August Board
Tour/Meeting
Renville County
Aug. 27-28

BWSR TOUR AND MEETING

AUGUST 27-28, 2008

RENVILLE COUNTY

CONTACTS:

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Max's Grill 320.523.2833
www.maxsgrillonline.com

Rustad Bus Service 320.264.2987 (Jean)

South Central Tent 320.222.8368 (James)

Randy Kramer (cell) 320.979.4208

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*****USE LAST FIVE DIGITS WHEN TRANSFERRING*****
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ntral Office

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Anderson, Mary Jo	297-4290
Bonde, Karen	297-3998
Buckhout, Don	296-0768
DeVoe, Natasha	205-4664
Donnelly, Conor (cell 612-408-7002)	282-3815
Engineers Cell Phone	485-8466
Eisele, Bill	282-2929
Fredbo, Tim	296-0880
Fure, Jon	296-0884
Germundson, Travis	297-4958
Girolamo, Dan	215-1703
Hubbell, Dianne	296-0873
Jaschke, John (cell 612-202-3815)	296-0878
Kean, Al (cell 651-245-6531)	297-2907
Keating, Kari	297-8029
Klocker, Julie (cell 651-308-8647)	297-5617
Larson, Greg (cell 612-998-1674)	297-7029
m, Les (cell 651-341-4208)	296-6057
Lewis, Michelle	296-2428
Lines, Kevin	297-1894
Luniewski, Jim	297-2622
Mack, Kristie	215-9420
Mohring, Eric (cell 612-309-1173)	297-7360
Ogg, Tim (cell 651-295-5737)	297-8024
Peterson, Joel	215-9008
Remick, Polly	297-4365
Salinas, Debbie	297-8025
Shaw, Dan (cell 612-236-6291)	296-0644
Sokatch, Char	297-4016
Spence, Aaron	296-0660
Straumanis, Sarma	297-7965
Strojny, Carol (cell 612-518-5545)	297-1893
Swenson, Karli (cell 612-807-0445)	282-2600
Wenzel, Tom (cell 612-720-1412)	296-0883
irens, Dave (ell 763-229-4308)	297-3432
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Zellmer, Wayne	297-7361
Zeug, Leon	296-0714

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Sill, David	(507) 537-6374

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Hedtke, Jeff (cell 651-485-8470)	(507) 359-6092
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Nielsen, Jeff	(507) 359-6075
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Hrubes, Jeff (cell 218-368-7683)	(218) 833-8608
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	cell (218) 770-2767
Waller, Pete	(218) 736-5445 ext 104
	cell (218) 770-3802

#	Name	Agency	Tues. Lodging	Wed. Lodging	Tour	Dinner	Randy's House
1	Dana Allen	BWSR Member	1	1	1	1	1
2	Paul Brutlag	BWSR Member	1	1	1	1	1
3	Bob Burandt	BWSR Member	1	1	1	1	1
4	Quentin Fairbanks	BWSR Member	1	1	1	1	1
5	Brian Kletscher	BWSR Member	1	1	1	1	1
6	Randy Kramer	BWSR Chair	0	0	1	1	1
7	Paul Langseth	BWSR Member	1	1	1	1	1
8	Brian Napstad	BWSR Member	1	1	1	1	1
9	Louise Smallidge	BWSR Member	1	1	1	1	1
10	Gene Tiedemann	BWSR Member	1	1	1	1	1
11	LuAnn Tolliver	BWSR Member	1	1	1	1	1
12	Wayne Anderson	MPCA	1	1	1	1	1
13	John Linc Stine	DNH	0	1	1	1	1
14	Joe Martin	MDA	1	1	1	1	1
15	Faye Sleeper	MES	1	1	1	1	1
16	Mary Jo Anderson	BWSR Staff	1	1	1	1	1
17	Matt Drewitz	BWSR Staff	0	0	1	1	1
18	Tom Fischer	BWSR Staff	1	1	1	1	1
19	Travis Germundson	BWSR Staff	1	1	1	1	1
20	Jim Haertel	BWSR Staff	0	1	1	1	1
21	Mark Hiles	BWSR Staff	0	0	1	0	0
22	Tabor Hoek	BWSR Staff		1	1	1	1
23	Jeff Hrubes	BWSR Staff	1	1	1	1	1
24	John Jaschke	BWSR Executive Director	1	1	1	1	1
25	Al Kean	BWSR Staff	0	1	0	1	1
26	Kari Keating	BWSR Staff	1	1	1	1	1
~~27~~	~~Melissa Lewis~~	BWSR Staff	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~
28	Kevin Lines	BWSR Staff	1	0	1	0	0
29	Eric Mohring	BWSR Staff	1	0	1	1	0
30	Jeff Nielsen	BWSR Staff	1	1	1	1	1
31	David Sill	BWSR Staff	0	0	1	0	0
32	Jason Weinerman	BWSR Staff	0	1	0	0	0
33	Tom Wenzel	BWSR Staff	0	1	0	1	1
34	Marcey Westrick	BWSR Staff	0	0	1	0	0
35	Steve Woods	BWSR Assistant Director	1	1	1	1	1
36	Ken Pederson	MASWCD President	1	0	1	1	1
37	Phyllis Pederson	Ken's wife	0	0	0	1	1
38	LeAnn Buck	MASWCD Executive Director	1	1	1	1	1
39	Beth Mason	NACD	0	0	1	1	1
40	Al Juhnke	State Representative	0	0	1	1	1
41	Bill Miller	Mayor of Olivia	0	0	1	1	1
42	Byron Hogberg	FSA	0	0	1	1	1
43	Gale Dahlager	Renville Co. Commissioner	0	0	1		
44	John Stahl	Renville Co. Commissioner	0	0	1	1	1
45	Karen Flom	Renville Co. SWCD Staff	0	0	1	1	1
46	Tom Kalahar	Renville Co. SWCD Staff	0	0	1	1	1
47	Tara Latozke	Renville Co. SWCD Staff	0	0	lunch	1	0
48	Cory Netland	Renville Co. SWCD Staff	0	0	lunch	1	
49	Loyal Fisher	Renville Co. SWCD Board	0	0	1	1	1
50	Kathryn Kelly	Renville Co. SWCD Board	0	0	1	1	1
51	Bill Rademacher	Renville Co. SWCD Board	0	0	1	0	0
52	Jim Schafer	Renville Co. SWCD Board	0	0	1	1	1
53	Diane Mitchell	Household & Hazardous Waste			1		
54	Darrell Schindler	Hawk Creek Watershed Project			1		
55	Jeff Kjorness	NRCS			1		
56	Vicki Christensen	USGS	1	0	1	1	0
57	Peter Scheffert	MDA	0	1	1	1	1
	TOTALS		27	30	~~54~~ 52	~~46~~ 47	43

George Schlagel Buffalo Creek WD

8/26/08

#	Name	Agency	Tues. Lodging	Wed. Lodging	Tour	Dinner	Randy's House
1	Dana Allen	BWSR Member	1	1	1	1	1
2	Paul Brutlag	BWSR Member	1	1	1	1	1
3	Bob Burandt	BWSR Member	~~0~~ 1	1	1	1	1
4	Quentin Fairbanks	BWSR Member	1	1	1	1	1
5	Brian Kletscher	BWSR Member	1	1	1	1	1
6	Randy Kramer	BWSR Chair	0	0	1	1	1
7	Paul Langseth	BWSR Member	1	1	1	1	1
8	Brian Napstad	BWSR Member	1	1	1	1	1
9	Louise Smallidge	BWSR Member	1	1	1	1	1
10	Gene Tiedemann	BWSR Member	1	1	1	1	1
11	LuAnn Tolliver	BWSR Member	1	1	1	1	1
~~12~~	~~Paul Eger~~	MPCA Wayne Anderson	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~
13	John Linc Stine	DNH	0	1	1	1	1
14	Joe Martin	MDA	1	1	1	1	1
15	Faye Sleeper	MES	1	1	1	1	1
16	Mary Jo Anderson	BWSR Staff	1	1	1	1	1
17	Matt Drewitz	BWSR Staff	0	0	1	1	1
18	Tom Fischer	BWSR Staff	1	1	1	1	1
19	Travis Germundson	BWSR Staff	1	1	1	1	1
20	Jim Haertel	BWSR Staff	0	1	1	1	1
21	Mark Hiles	BWSR Staff	0	0	1	0	0
22	Tabor Hoek	BWSR Staff		1	1	1	1
23	Jeff Hrubes	BWSR Staff	1	1	1	1	1
24	John Jaschke	BWSR Executive Director	1	1	1	1	1
25	Al Kean	BWSR Staff	0	1	~~lunch~~	1	1
26	Kari Keating	BWSR Staff	1	1	1	1	1
27	Melissa Lewis	BWSR Staff	1	1	1	1	1
28	Kevin Lines	BWSR Staff	1	0	1	0	0
29	Eric Mohring	BWSR Staff	1	0	1	1	0
30	Jeff Nielsen	BWSR Staff	1	1	1	1	1
31	David Sill	BWSR Staff	0	0	1	0	0
32	Jason Weinerman	BWSR Staff	0	1	0	0	0
33	Tom Wenzel	BWSR Staff	0	1	~~lunch~~	1	1
34	Marcey Westrick	BWSR Staff	0	0	1	0	0
35	Steve Woods	BWSR Assistant Director	1	1	1	1	1
36	Ken Pederson	MASWCD President	~~0~~ 1	0	1	1	1
37	Phyllis Pederson	Ken's wife	0	0	0	1	1
38	LeAnn Buck	MASWCD Executive Director	1	1	1	1	1
39	Beth Mason	NACD	0	0	1	1	1
40	Al Juhnke	State Representative	0	0	1	1	1
41	Bill Miller	Mayor of Olivia	0	0	1	1	1
42	Byron Hogberg	FSA	0	0	1	1	1
43	Gale Dahlager	Renville Co. Commissioner	0	0	1		
44	John Stahl	Renville Co. Commissioner	0	0	1	1	1
45	Karen Flom	Renville Co. SWCD Staff	0	0	1	1	1
46	Tom Kalahar	Renville Co. SWCD Staff	0	0	1	1	1
47	Tara Latozke	Renville Co. SWCD Staff	0	0	lunch	1	0
48	Cory Netland	Renville Co. SWCD Staff	0	0	lunch		
49	Loyal Fisher	Renville Co. SWCD Board	0	0	1	1	1
50	Kathryn Kelly	Renville Co. SWCD Board	0	0	1	1	1
51	Jim Schafer	Renville Co. SWCD Board	0	0	1	1	1
52	Diane Mitchell	Household & Hazardous Waste			1		
53	Darrell Schindler	Hawk Creek Watershed Project			1		
54	Jeff Kjorness	NRCS			1		
55	Vicki Christensen	USGS	1	0	1	1	0
56	Peter Scheffert	MDA	0	1	1	1	1
	TOTALS		~~25~~	30	~~54~~ 53	~~43~~ 46	43

Bill Rademacher Renville Co. SWCD 0 0 1 0 0

8/21/08

Mary Jo Anderson

From: Karen Flom [kmflom@yahoo.com]
Sent: Tuesday, August 19, 2008 9:48 AM
To: Mary Jo Anderson
Subject: Tour

Tom just met with the County Board on another matter and the tour came up in discussion. Here is the breakdown of what we know for CB participants:

John Stahl - yes (I'd given you that one b/4)
Gale Dahlager is coming (that's a change--I'd told you before he wasn't)
Bob Fox is not coming but he is designating Diane Mitchell from the Household & Hazardous Waste & Water Management office to represent him on the tour.
Ralph Novotny hadn't thought about it and probably won't come but was encouraged by the others to designate a county employee to represent him so we'll let you know if we hear anything--my guess would be the most liked county employee would be Bill Wells, Administrator or Mark Erickson from the Envronment & Community Development office but you never know..
Paul Setzepfandt will know on Monday.

I'm printing handouts for the folders as we speak. We'll have the 3 page spreadsheet with the tour sites. The tour map and a two page handout with a few facts and some other info.

Let me know if you need anything from me.

Karen Flom

Tour Attendees — RSVPs

Senator Gary Kubley
301 State Capitol

Senator Joe Gimsie
405 11th Avenue SE
Willmar, MN 56201

Senator Ellen Anderson
120 State Capitol

Senator Satveer Chaudhary
205 State Capitol

Representative Lyle Koenen
1017 N. Division Street
P.O. Box 327
Clara City, MN 56222

Representative Al Juhnke
3951 Horizon Hills Circle
Willmar, MN 56201

Representative Kent Eken
3463 170th Ave.
Twin Valley, MN 56584

Representative Jean Wagenius
449 State Office Buillding

Representative Rick Hansen
401 State Office Building

Ralph Novotny
Renville County Commissioner
45295 County Road 11
Hector, MN 55342

Bob Fox
Renville County Commissioner
69914 County Road 5
P.O. Box 100
Franklin, MN 55333

Diane Mitchell
Household & Hazardous Waste + Water Mgmt. office

Paul Setzepfandt
Renville County Commissioner
P.O. Box 534
Bird Island, MN 55310

John Stahl
Renville County Commissioner
402 S. 10th Street
Olivia, MN 56277

Gale Dahlager
Renville County Commissioner
13699 County Road 11
Sacred Heart, MN 56285

yes

Richard Falk
Kandiyohi County Commissioner
627 NW Knollwood Drive
Willmar, MN 56201

Richard B. Larson
Kandiyohi County Commissioner
920 Mary Avenue SE
Willmar, MN 56201

Dean Shuck
Kandiyohi County Commissioner
16281 140th Street NW
Sunburg, MN 56289

Dennis Peterson
Kandiyohi County Commissioner
3605 113th Avenue NE
Spicer, MN 56288

Harlan Madsen
Kandiyohi County Commissioner
15263 120th Avenue SE
Lake Lillian, MN 56253

Donald Belter, President
Buffalo Creek Watershed District
P.O. Box 55
Glencoe, MN 55336

The Honorable Bill Miller
Mayor of Olivia
1009 West Lincoln Avenue
Olivia, MN 56277

Karen Flom
Renville County SWCD
1008 W. Lincoln
Olivia, MN 56277

Tom Kalahar
Renville County SWCD
1008 W. Lincoln
Olivia, MN 56277

Beth Mason
NACD & Indiana (LeAnn) yes
2

Byron Hogberg
~~Perry Aasness~~, State Director
Farm Service Agency
~~375 Jackson Street, Suite 400~~
~~St. Paul, MN 55101~~ Renville

Bill Hunt, State Conservationist
NRCS
375 Jackson Street, Suite 600
St. Paul, MN 55101

LeAnn Buck, Executive Director
SWCD
790 Cleveland Avenue S., Suite 201
St. Paul, MN 55116

Ray Bohn, Executive Director
MAWD
540 Diffley Road
St. Paul, MN 55123

Tour Attendees — RSVPs

Senator Gary Kubley
301 State Capitol

Senator Joe Gimsie
405 11th Avenue SE
Willmar, MN 56201

Senator Ellen Anderson
120 State Capitol

Senator Satveer Chaudhary
205 State Capitol

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Hector, MN 55342

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Renville County Commissioner
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Franklin, MN 55333

Diane Mitchell
Household & Hazardous Waste + Water Mgmt. office

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Renville County Commissioner
P.O. Box 534
Bird Island, MN 55310

John Stahl
Renville County Commissioner
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Olivia, MN 56277

Gale Dahlager
Renville County Commissioner
13699 County Road 11
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Kandiyohi County Commissioner
627 NW Knollwood Drive
Willmar, MN 56201

Richard B. Larson
Kandiyohi County Commissioner
920 Mary Avenue SE
Willmar, MN 56201

Dean Shuck
Kandiyohi County Commissioner
16281 140th Street NW
Sunburg, MN 56289

Dennis Peterson
Kandiyohi County Commissioner
3605 113th Avenue NE
Spicer, MN 56288

Harlan Madsen
Kandiyohi County Commissioner
15263 120th Avenue SE
Lake Lillian, MN 56253

Donald Belter, President
Buffalo Creek Watershed District
P.O. Box 55
Glencoe, MN 55336

The Honorable Bill Miller
Mayor of Olivia
1009 West Lincoln Avenue
Olivia, MN 56277

Karen Flom
Renville County SWCD
1008 W. Lincoln
Olivia, MN 56277

Tom Kalahar
Renville County SWCD
1008 W. Lincoln
Olivia, MN 56277

Hawk Creek Watershed Project
Renville County Courthouse
500 East DePue
Olivia, MN 56277

Bill Hunt, State Conservationist
NRCS
375 Jackson Street, Suite 600
St. Paul, MN 55101

Byron Hogberg
~~Perry Aasness~~, State Director
Farm Service Agency
~~375 Jackson Street, Suite 400~~
~~St. Paul, MN 55101~~ Renville Co.

Tom Cherveny
West Central Tribune
2208 SW Troot Avenue
Willmar, MN 56201

LeAnn Buck, Executive Director
SWCD
790 Cleveland Avenue S., Suite 201
St. Paul, MN 55116

Ray Bohn, Executive Director
MAWD
540 Diffley Road
St. Paul, MN 55123

Frank Pafko
MNDOT
395 John Ireland Blvd.
St. Paul, MN 55155

David Trooien
MNDOT
2505 Transportation Road
Willmar, MN 56201

Renville County SWCD
Board and Staff
1008 W. Lincoln
Olivia, MN 56277
• Kathryn Kelly
• Jim Schafer
• Loyal Fisher

Kandiyohi County SWCD
Board and Staff
1005 High Avenue NE
Willmar, MN 56201

Jim Mulder, Executive Director
AMC
125 Charles Avenue
St. Paul, MN 55103-2108

Matt Holland
Pheasants Forever
679 W. River Drive
New London, MN 56273

Josh Gackle
Governor's Office
State Capitol

Faye Sleeper
U of M, Dept. of Soil, Water & Climate
439 Borlaug Hall
1991 Upper Buford Circle
St. Paul, MN 55108

Wayne Anderson
MPCA
520 Lafayette Road N.

~~Wayne Edgerton~~
DNR
500 Lafayette Road N.

Dan Wilson
Department of Health
625 N. Robert Street

Pete Scheffert
Department of Agriculture
Freeman Office Building
625 Robert St. N.

Randy Kramer, Chair
Board of Water & Soil Resources
42808 County Road 11
Bird Island, MN 55310

Dana Allen
11304 19th Street SW
Eyota, MN 55934

Paul Brutlag
27113 County Road 11
Wendell, MN 56590

Robert Burandt
1340 Waconia Pkwy. S.
Waconia, MN 55387

Quentin Fairbanks
16374 Stoner Memorial Dr. NE
Hines, MN 55647

Brian Kletscher
30427 County Hwy. 10
Vesta, MN 56292

Paul Langseth
412 5th Street S.
Virginia, MN 55792

Brian Napstad
51227 Long Point Place
McGregor, MN 55760

Louise Smallidge
10992 Point Douglas
Hastings, MN 55033

Gene Tiedemann
13099 310th Avenue SW
Euclid, MN 56722

LuAnn Tolliver
14801 Wychewood Road
Minnetonka, MN 55345

~~Faye Sleeper~~
~~U of M, Dept. of Soil, Water & Climate~~
~~439 Borlaug Hall~~
~~1991 Upper Buford Circle~~
~~St. Paul, MN 55108~~

Joe Martin
Department of Agriculture
Freeman Office Building
625 Robert St. N.
St. Paul, MN 55155

Commissioner Mark Holsten
Dept. of Natural Resources
500 Lafayette Road
St. Paul, MN 55155

[redacted]d Moore
Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155

John Linc Stine
Department of Health
PO Box 64975, 625 N. Robert St
St. Paul, MN 55164-0975

Larry Kramka
Dept. of Natural Resources
500 Lafayette Road
St. Paul, MN 55155

~~Paul Eger~~ ✓
Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155

Sandy Hooker
Minnesota Association of Townships
14418 – 618th Avenue
Mapleton, MN 56065

John Jaschke

~~Julie Klocker~~

Mary Jo Anderson

Steve Woods
Jeff Nielsen
Ron Shelito
Greg Larson
Al Kean

Bill Eisele
Kevin Lines
Dave Weirens
Tim Ogg
Jim Haertel

Tom Fischer

Travis Germundson
Melissa Lewis
Kari Keating

[illegible]

Jeff Hrubes

Matt Drewitz
Mark Hiles
David Sill
Tabor Hoek

* Tom Wenzel = Grass Lake
Al Kean will meet us at Grass Lake

– Darrell Schindler
Hawk Creek
Watershed Project

– Jeff Kjorness
NRCS

• Eric Mohring
• USGS staff

Mary Jo Anderson

From: Al Juhnke [rep.al.juhnke@house.mn]
Sent: Saturday, July 05, 2008 3:12 PM
To: Mary.Jo.Anderson@state.mn.us
Cc: Katherine Beyer
Subject: RSVP

I will attend the BWSR tour and meeting on August 27th & 28th.

See you then.

Rep. Al Juhnke - District 13B
Chair - Agriculture, Rural Economies &
Veterans Affairs Finance Committee
485 State Office Building
St. Paul, MN 55155
651-296-6206 (St. Paul Office)
320-235-4442 (Willmar Office)
rep.al.juhnke@house.mn (e-mail)
house.leg.state.mn.us/members/members.asp?district=13B (web site)

Jeff Nielsen to canoe on Tues. night

Steve = Tues + Wed.

Julie = Wed. night

LeAnn Buck Tues. + Wed.

Mary Jo Anderson

From: Al Juhnke [rep.al.juhnke@house.mn]
Sent: Saturday, July 05, 2008 3:12 PM
To: Mary.Jo.Anderson@state.mn.us
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320-235-4442 (Willmar Office)
rep.al.juhnke@house.mn (e-mail)
house.leg.state.mn.us/members/members.asp?district=13B (web site)

Mary Jo Anderson

From: Karen Flom [kmflom@yahoo.com]
Sent: Tuesday, July 08, 2008 11:00 AM
To: Mary Jo Anderson
Subject: RSVP for Tour

Mayor of Olivia, Bill Miller, got the invitation and would like to go on the tour. I told him I would send you his RSVP.

He is also interested in the canoe trip and I'll let Tom know about that.

Hope you are enjoying yoru vacation.

Karen Flom

Mary Jo Anderson

From: Pat Cook [Pat.Cook@state.mn.us]
Sent: Friday, July 18, 2008 11:21 AM
To: Mary.Jo.Anderson@state.mn.us
Cc: John Stine
Subject: RSVP for BWSR Tour & Meeting on August 27-28

I am RSVP'ing for John Linc Stine to attend the BWSR Tour and Meeting August 27-28, 2008.

John will be attending the tour and the board meeting, and will only need lodging for the night of August 27th.

Let me know if you need any other information. Thanks - Pat

Pat Cook, Director's Office
Division of Environmental Health
MN Department of Health
Freeman Building 4C
P.O. Box 64975
St. Paul, MN 55164-0975
Telephone: 651-201-4570

Sheep Shedde Inn
2425 West Lincoln Avenue
Olivia, MN 56277
Phone: 320-523-5000

Tuesday, August 26

1. Dana Allen
2. Mary Jo Anderson
3. Paul Brutlag
4. LeAnn Buck ****
5. ~~Paul Eger~~ **** Wayne Anderson
6. Quentin Fairbanks
7. Tom Fischer
8. Travis Germundson
9. Jeff Hrubes
10. John Jaschke
11. Kari Keating
12. Brian Kletscher — no show
13. Paul Langseth
14. ~~Melissa Lewis~~ — cancelled 8/26/08
15. Joe Martin ****
16. Brian Napstad
17. Jeff Nielsen
18. Faye Sleeper ****
19. Louise Smallidge
20. Gene Tiedemann
21. LuAnn Tolliver
22. Steve Woods
23. Vicki Christensen
24. Kevin Lines — no show
25. Eric Mohring
26. Bob Burandt ~~(hold)~~
27. Ken Rederson ****
28.
29.
30.
31.
32.

Wednesday, August 27

1. Dana Allen
2. Mary Jo Anderson
3. Paul Brutlag
4. LeAnn Buck ****
5. ~~Paul Eger~~ **** Wayne Anderson
6. Quentin Fairbanks
7. Tom Fischer
8. Travis Germundson
9. Jeff Hrubes
10. John Jaschke
11. Kari Keating
12. ~~Brian Kletscher~~ cancelled 8/27/08
13. Paul Langseth
14. ~~Melissa Lewis~~
15. Joe Martin ****
16. Brian Napstad
17. Jeff Nielsen
18. Faye Sleeper ****
19. Louise Smallidge
20. Gene Tiedemann
21. LuAnn Tolliver
22. ~~Steve Woods~~ cancelled
23. Bob Burandt
24. John Linc Stine ****
25. Peter Scheffert ****
26. Jason Weinerman
27. Tom Wenzel
28. Al Kean
29. Jim Haertel
30. Tabor Hoek
31.
32.

25

**** will pay for own room upon arrival

8/21/08

STATE OF MINNESOTA PURCHASE ORDER

WATER & SOIL RESOURCES BOARD

BOARD TOUR HOTEL ROOMS

PURCHASE ORDER NO: 34385235

DATE PRINTED: 08/25/08 FY: 09 PAGE NO: 1

REQN. NO. :
REQR. NAME : WATER & SOIL RESOURCES BOARD
AGENCY REQN. NO. :

SOLICITATION NO. :
CONTRACT NO. :
VENDOR QUOTE NO. :
VENDOR NO. : 200115509-00
VENDOR CONTACT : .
VENDOR PHONE : (320) 523-5000
VENDOR FAX :
VENDOR EMAIL :

SHEEP SHEDDE INN THE
2425 W LINCOLN
OLIVIA, MN 56277

SUPPLEMENTARY TERMS

1. Show the purchase order number on invoice and all tags, packages and correspondence.
2. This purchase order incorporates by reference all terms, conditions, and specifications of the Contract, the RFP/RFB and vendor's response. In case of a conflict in terms, the order of precedence shall be: First, this P.O., second the Contract, third the RFP/RFB and fourth the vendor's response.
3. All deliveries hereunder shall comply with all applicable State of Minnesota and Federal laws.
4. Invoicing must match line items on the purchase order.
5. The State of MN holds Direct Pay Permit 1114, issued July 1, 1995 and pays tax directly to Revenue. DO NOT CHARGE SALES TAX unless otherwise instructed to do so on this Purchase Order or the solicitation document.
6. Payment terms are NET 30 unless a discount is offered for early payment.

REQUESTED DELIVERY: 08/26/08
FREIGHT TERMS : DESTINATION
DISCOUNT TERMS : NONE

CONTACT FOR DELIVERY INSTRUCTIONS:
NAME : MARY JO ANDERSON
PHONE : (651) 297-4290

SHIP TO: **(Unless specified otherwise on the lines)**
BWSR/CENTRAL OFFICE
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

BILL TO:
BWSR/ST. PAUL
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
00001	COMMODITY CODE: 006-09-000000 ROOM RESERVATIONS FOR BOARD TOUR AUGUST 26, 2008 PLEASE SEE ATTACHED LIST	21.000	EACH	54.95	$ 1153.95
00002	COMMODITY CODE: 006-09-000000 ROOM RESERVATIONS FOR BOARD TOUR AUGUST 27, 2008 PLEASE SEE ATTACHED LIST	24.000	EACH	54.95	$ 1318.80
00003	COMMODITY CODE: 023-22-000000 TAX PAYMENT (PAY TAX TO VENDOR)	1.000	LOT	210.19	$ 210.19
				ORDER TOTAL	**$ 2682.94**

PURCHASING AGENT NAME: KARI KEATING
EXECUTIVE AGENCY: WATER & SOIL RESOURCES BOARD
PHONE NUMBER: (651) 297-8029
EMAIL ADDRESS: KARI.KEATING@STATE.MN.US

SIGNED Kari Keating
Authorized signature

VENDOR COPY

Minnesota Board of Water & Soil Resources

FAX

Minnesota Board of Water & Soil Resources
520 Lafayette Road North
St. Paul, MN 55155
Phone: (651) 296-3767
Fax: (651) 297-5615

Date: 8/22/08

To: Dan
Sheep Shedde Inn

From: Mary Jo Anderson
Phone: 651-297-4290

Fax: 320-523-5004

Pages: Including Cover Sheet: 2

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply

Re: Rooms for Aug. 26+27

Comments:

☐ Original will follow by U.S. Mail ☐ Original will NOT follow

BOARD OF WATER AND SOIL RESOURCES
INTERNAL REQUEST FOR GOODS OR SERVICES

VENDOR	**NAME** Sheep Shedde Inn	SHIPTO	**NAME** MN Board of Water and Soil Resources
	ADDRESS 2425 West Lincoln Avenue		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP Olivia, MN 56277		**CITY, STATE, ZIP** St. Paul, MN 55155
REMI TTO	**NAME**	BILLTO	**NAME** MN Board of Water and Soil Resources
	ADDRESS		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP		**CITY, STATE, ZIP** St. Paul, MN 55155

CONTRACT NO.

LINE NO.	COMMODITY CODE	UNIT(S) ORDERED	DESCRIPTION	UNIT	UNIT PRICE $	DISCOUNT $	TOTAL PRICE
1		21 ~~32~~	Sleeping Rooms on Tuesday, August 26, 2008	EA	54.95		$ 1,758.40
2		24 ~~32~~	Sleeping Rooms on Wednesday, August 27, 2008	EA	54.95		$ 1,758.40
							$ -
			for Board tour and Meeting				$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
			SUBTOTAL				$ 3,516.80
			SALES TAX (only for catering or lodging)		8.5% sales tax		#VALUE!
			GRATUITY				$ -

ORDERED BY: Mary Jo Anderson	**DATE:** 5/21/2008	**SUPERVISOR APPROVAL:**	**DATE:**	**TOTAL:** #VALUE!
PHONE NUMBER: 651-297-4290				

BOARD OF WATER AND SOIL RESOURCES
INTERNAL REQUEST FOR GOODS OR SERVICES

VENDOR	NAME ATTENTION: Jean 320-264-2987 RUSTAD TOURS	SHIPTO	NAME MN Board of Water and Soil Resources
	ADDRESS 208 North 12th Street, P.O. Box 346		ADDRESS 520 Lafayette Road North
	CITY, STATE, ZIP Kerkhoven, MN 56252		CITY, STATE, ZIP St. Paul, MN 55155
REMI TTO	NAME	BILLTO	NAME MN Board of Water and Soil Resources
	ADDRESS		ADDRESS 520 Lafayette Road North
	CITY, STATE, ZIP		CITY, STATE, ZIP St. Paul, MN 55155

CONTRACT NO.

LINE NO.	COMMODITY CODE	UNIT(S) ORDERED	DESCRIPTION	UNIT	UNIT PRICE $	DISCOUNT $	TOTAL PRICE
1		1	55-passenger coach bus for Board Tour on	EA	600.00		$ 600.00
			Wednesday, August 27, 2008				$ -
			8:00 a.m. - 4:30 p.m.				$ -
			Depart/Return at Sheep Shedde Inn, Olivia				$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
			SUBTOTAL				$ 600.00
			SALES TAX (only for catering or lodging)				$ -
			GRATUITY				$ -
						TOTAL:	$ 600.00

ORDERED BY: Mary Jo Anderson	DATE: 5/21/2008	SUPERVISOR APPROVAL:	DATE:
PHONE NUMBER: 651-297-4290			

Jean = confirmed w/Marilyn 8/22/08 1:45 AM

Rustad Bus Service
320-264-2987

55 passenger coach

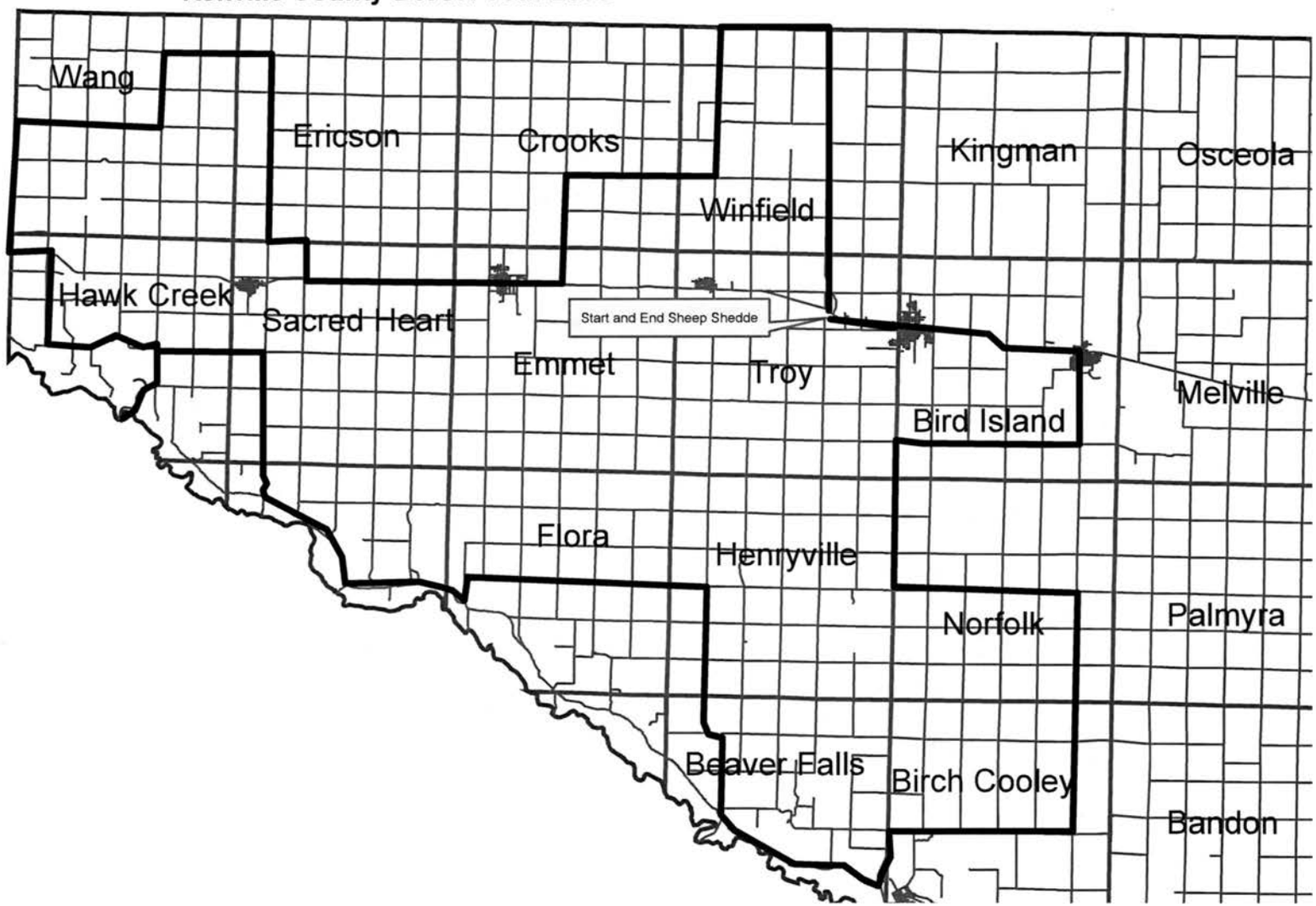
pick up at Sheep Shedde
8 AM - 4:00 pm

August 27

$600.00

~ 150 miles

Renville County BWSR Tour 2008



I am forwarding this document and a map of the Renville County portion of the BWSR Board Tour to be help on Wednesday, August 27, 2008. The beginning and ending point will be the Sheep Shedde/Max's parking lot in Olivia.

Tour will head up Highway 71 toward Willmar. There are several sites along this route including the first RIM wetland restoration in Renville County, a CREP ditch buffer, a CREP wetland restoration, farmstead shelterbelts and a biofilter project at two hog barns.

The Kandiyohi SWCD staff and BWSR Staff will give a presentation at the Grass Lake Project in Willmar. We will then head west on Highway 23 and then South on Kandiyohi County #5 heading into Renville County #1 and will stay in the western half of the county for the morning. Projects will include:

- An Ag Waste Project currently being designed
- A WMA
- A Vineyard (not visible from the road)
- Tillage practices
- CREP & RIM sites— some highlighting maintenance issues
- Several "value-added" industries
    - SMBSC (beet processing plant)
    - Christensen Farms (hogs)
    - Golden Oval (chickens)
    - MinAqua (fish)
- A grazing system
- Completed Ag Waste project(s)
- RIM/WRP wetland restoration(s) and buffers
- ISTS projects
- CRP Buffer projects
- Alternative drainage projects
- WMA
- A noncompliant feedlot
- Farmstead shelterbelts & field windbreaks
- CRP including newly enrolled area using the S.A.F.E practice
- WPA
- A hunting preserve
- Granite Falls Energy, LLC (ethanol plant)
- Water quality monitoring site.

We will be stopping at a Renville County Park for lunch. This park is located on the Minnesota River south of Sacred Heart and is the site of a direct hardwood seeding. Food will be provided by the Renville County Pork Producers and a local café.

We will spend much of the first part of the afternoon in or near the Minnesota River Valley highlighting the work that has been done to help with flooding issues and water quality issues in the Minnesota River using such programs as RIM, CREP, roadbank stabilization and others. We will make a short stop at a Granite Rock Outcrop to show the uniqueness of those areas and to discuss the LCCMR Grant to fund easements which protect these sites.

Once we head back onto Highway 71, we will take a break at the Steve & Vicki Madsen farm north of Morton where we will have refreshments and see a Living Snow Fence project that was installed after the 1996-97 winter. The Madsens also have a CREP wetland restoration and field windbreaks in and around the site.

The remainder of the afternoon will be through the more intensely farmed part of the county and will highlight projects such as DOT mitigation easement sites. We will stop briefly (and remain on the bus) to view the Revier Feedlot operation. Owner Tom Revier will jump on the bus for a very short description of the upcoming expansion project which will expand their operation to 10,000 cattle making it the largest feedlot in Minnesota. They have several innovative projects at their feedlot and have used EQIP funds for some of the projects.

We will also see a recently completed Ag Waste project funded with a combination of funds including a Feedlot Water Quality Management Grant. There is a wetland restoration that was a mitigation for a private industry and shortly before returning to the hotel we will see another Living Snow Fence and MN DOT mitigation site. There will be additional practices along this route highlighting some of the "working lands" practices and projects.

Sites on this tour will include projects completed using several funding sources and partnerships. We anticipate staff from the local SWCD office to present information about many of the projects but also included will be the NRCS District Conservationist and a staff representative from the Hawk Creek Watershed Project. We want to show conservation projects but also would like to show the BWSR Board some interesting and unique sites in Renville County which will include a couple historical sites.

We will be preparing a handout for each tour participant. This will include a very short title/description (less than 5 words) and then an "X" in the columns indicating the funding sources for each. They will also receive a copy of the map which by then will have numbers that correspond to the above handout. We also hope to include some information on the historical sites.

After driving the tour route recently, we feel we have adequate time to keep the tour casual and fun. We should be able to return to the hotel by our target time of 4:00 p.m. Once the tour sites have been finalized and the handout map completed, we will again drive the route to see if adjustments need to be made to keep within the allotted timeframe.

Mary Jo Anderson

From: Karen Flom [kmflom@yahoo.com]

Sent: Friday, June 20, 2008 9:38 AM

To: Mary Jo Anderson; Tom Fischer

Cc: Tara Iatozke; Cory Netland; Tom Kalahar; Jeff Kjorness; Darrell Schlindler; Kathryn K. Kelly; Loyal Fisher; Mary Oslund; Karen Flom

Subject: BWSR Tour update

I just spoke with Mary Jo and gave her some ideas about the tour route and the projects we will be seeing. She requested that I put the preliminary information in an email. She is aware that we will be meeting later this month to finalize the tour sites.

The tour will begin in Olivia at the hotel and go up Highway 71 to Willmar to view the **Grass Lake Project**. Staff from BWSR & Kandiyohi SWCD will be present to discuss that project.

There are a variety of projects along Hwy 71 that we can discuss on the way up--easements, ag waste, tree plantings. **Projects by a variety of agencies including the SWCD, the Hawk Creek Watershed Project and NRCS.**

Heading back into Renville County we will spend the morning in the western part of the county

Projects include:

An out-of-compliance **feedlot** we are currently working to bring into compliance and the Long Lake **WMA**

Several **"value added" industries** including Souther Minnesota Beet Sugar Coop, MinnAqua, Golden Oval.

Again a variety of practices including **easements** (some wetland restorations, some buffers, some riparian,etc.) , **farmstead shelterbelts, a WPA, CRP** including new S.A.F.E. contracts, several Hawk Creek Projects including **alternative intakes & ISTS.**

We will be going past the **ethanol plant** on the county line over by Minnesota Falls.

Lunch will be at a Renville County Park in the Minnesota River Valley

We will stay along the River Valley for awhile after lunch af see several floodplain easements, a variety of **mining projects, RC&D Roadside erosion projects**, During this part of the tour we will see example of **Granite Rock Outcrops and associated wetlands** as well as feedlots.

Going back up, there is a **MN DOT Living Snow Fence** project on Hwy 71 and later one on Hwy 212 outside the City of Bird Island, we will see **two MN DOT Wetland Mitigation easements** before the tour ends. Of course there are more shelterbelts, field windbreaks, CRP and CREP sites. We will be going past the **Revier Feedlot** site which will be the largest cattle feedlot in the state (10,000 head). Along this part of the tour is an example of an out of compliance feedlot that was fixed with FWQM grant funds in partnership with EQIP and Ag BMP loan monies.

The farthest east the tour will go is County Road 5 which comes into Bird Island from the south and then we will head the 5 miles back to Olivia. Our target time to arrive back at the Sheep Shedde is 4:00 p.m.

Our goal is to keep loading/unloading to a minimum to keep on schedule. SWCD, NRCS & Hawk Creek staff will all take part in the narrative part of the tour--of course BWSR staff are encouraged provide input at any time and if they would like to speak to a particular project/funding source, etc. please let us know so we can get them the necessary details before the date.

Mary Jo, if you need additional information at this time, please give me a call.

Karen Flom

Food Vendors

Kathy's Place
ATTENTION: Kathy
101 E. Maple Street
Sacred Heart, MN 56285
Work Phone: 320.765.2229
Home Phone: 320.765.8884

- Potato salad, fresh fruit salad, assorted bars
- Pick up food 10:30 AM
- Payment on state credit card **$190.00**

$5.00/PP x 60
$300.00 total

****added chicken pasta salad on 8/14/08 need cost**

Kim Anderson
Pork Producers
71716 County Road 3
Franklin, MN 55333
Phone: 320.848.6230
SS 472.68.2547

- Will grill pork tenderloin and provide buns
- Payment = purchase order **$75.00**

Master's Bakery
ATTENTION: Carlotta
809 East Lincoln Avenue
Olivia, MN 56277
Phone: 320.523.5061

- 6 dozen cookies
- Pick up cookies on Tuesday by 2:00 PM
- Payment on state credit card **$35.15**

BOARD OF WATER AND SOIL RESOURCES
INTERNAL REQUEST FOR GOODS OR SERVICES

VENDOR	**NAME** Kim Anderson	SHIPTO	**NAME** MN Board of Water and Soil Resources
	ADDRESS 71716 County Road 3		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP Franklin, MN 55333		**CITY, STATE, ZIP** St. Paul, MN 55155
REMIT TO	**NAME** Phone: 320.848.6230 SS#472-68-2547	BILL TO	**NAME** MN Board of Water and Soil Resources
	ADDRESS		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP		**CITY, STATE, ZIP** St. Paul, MN 55155

CONTRACT NO.

LINE NO.	COMMODITY CODE	UNIT(S) ORDERED	DESCRIPTION	UNIT	UNIT PRICE $	DISCOUNT $	TOTAL PRICE
1		~~55~~ 60	Pork Sandwiches for lunch on the Board Tour	EA	1.37		$ ~~75.35~~
			Wednesday, August 27, 2008 to be delivered to the				$ 82.20
			Skalbekken County Park in Renville County				$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
			SUBTOTAL				$ ~~75.35~~
			SALES TAX (only for catering or lodging)				$ -
			GRATUITY				$ -
						TOTAL:	$ ~~75.35~~

ORDERED BY: Kja **DATE:** 8/06/08

PHONE NUMBER:

SUPERVISOR APPROVAL: **DATE:**

STATE OF MINNESOTA PURCHASE ORDER

WATER & SOIL RESOURCES BOARD

BOARD TOUR FOOD

PURCHASE ORDER NO: 34376662

DATE PRINTED: 08/08/08 FY: 09 PAGE NO: 1

REQN. NO. :
REQR. NAME : WATER & SOIL RESOURCES BOARD
AGENCY REQN. NO. :

SOLICITATION NO. :
CONTRACT NO. :
VENDOR QUOTE NO. :
VENDOR NO. : 200720810-00
VENDOR CONTACT :
VENDOR PHONE : (000) 000-0000
VENDOR FAX : (000) 000-0000
VENDOR EMAIL :

ANDERSON KIM
71716 CO RD 3
FRANKLIN, MN 55333

SUPPLEMENTARY TERMS

1. Show the purchase order number on invoice and all tags, packages and correspondence.
2. This purchase order incorporates by reference all terms, conditions, and specifications of the Contract, the RFP/RFB and vendor's response. In case of a conflict in terms, the order of precedence shall be: First, this P.O., second the Contract, third the RFP/RFB and fourth the vendor's response.
3. All deliveries hereunder shall comply with all applicable State of Minnesota and Federal laws.
4. Invoicing must match line items on the purchase order.
5. The State of MN holds Direct Pay Permit 1114, issued July 1, 1995 and pays tax directly to Revenue. DO NOT CHARGE SALES TAX unless otherwise instructed to do so on this Purchase Order or the solicitation document.
6. Payment terms are NET 30 unless a discount is offered for early payment.

REQUESTED DELIVERY: 08/27/08
FREIGHT TERMS : DESTINATION
DISCOUNT TERMS : NONE

CONTACT FOR DELIVERY INSTRUCTIONS:
NAME : MARY JO ANDERSON
PHONE : (651) 297-4290

SHIP TO: **(Unless specified otherwise on the lines)**
BWSR/CENTRAL OFFICE
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

BILL TO:
BWSR/ST. PAUL
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
00001	COMMODITY CODE: 890-12-000000 PORK SANDWICHES FOR LUNCH ON THE BOARD TOUR WEDNESDAY, AUGUST 27, 2008 TO BE DELIVERED TO THE SKALBEKKEN COUNTY PARK IN RENVILLE COUNTY	55.000	EACH	1.37	$ 75.35
				ORDER TOTAL	**$ 75.35**

PURCHASING AGENT NAME: KARI KEATING
EXECUTIVE AGENCY: WATER & SOIL RESOURCES BOARD
PHONE NUMBER: (651) 297-8029
EMAIL ADDRESS: KARI.KEATING@STATE.MN.US

SIGNED Kari Keating
Authorized signature

VENDOR COPY

Skalbekken

We will be stopping at a Renville County Park for lunch. This park is located on the Minnesota River south of Sacred Heart and is the site of a direct hardwood seeding. Food will be provided by the Renville County Pork Producers and a local café.

Kathy's Plac
Sacred Hear
- fruit
- salad
- dessert

Pork Producer
- pork loin
- buns

Kathy's Place

Kathy 320.765.8884 Home
320.765.2229 work

pick up ~ 10:30
- potato salad
- fresh fruit salad
- assortment of bars

$190.00

* need serving bowls
* serving spoons
* tray for bars

(on credit card)

Skalbekken

We will be stopping at a Renville County Park for lunch. This park is located on the Minnesota River south of Sacred Heart and is the site of a direct hardwood seeding. Food will be provided by the Renville County Pork Producers and a local café.

Kathy's Place
Sacred Heart #

- fruit
- salad
- dessert

Pork Producers #

- pork loin
- beans

Mary Jo Anderson

From: Karen Flom [kmflom@yahoo.com]
Sent: Monday, June 16, 2008 9:24 AM
To: Mary Jo Anderson
Subject: BWSR Board Meeting in Olivia

Mary Jo, just checking in with you regarding the BWSR Board meeting in August. We are working on the tour and will be finalizing the route soon--Tom Fischer plans to be present for the meeting when we do that.

Couple questions:
1. Our Supervisors were wondering how many people we can invite on the tour locally. I know you were checking on the bus--what is the capacity and how many folks do you expect to be present for the tour. We were thinking of inviting Renville County Board members if there is room.

2. I'm assuming there is a budget for lunch. I have a loose idea for the meal and have contacted a couple members of the Pork Producers to be present at the park to cook riblet sandwiches. I did tell them we were not looking for a donation of the food since that would've required taking the whole idea to a larger board--the guy I talked to has several projects with the SWCD and was excited to be present and do the food--they bring the grill etc. I am planning on having the cafe in Sacred Heart prepare the rest of the meal but have not talked to them yet. Will need to set that up shortly and will need approximate numbers, etc.

The plan is for lunch to be mid-tour at Skalbakken Park which is a County Park south of Sacred Heart.

Just let me know anything you need me to help with and I'll be happy to work on it from this end.

Karen Flom, Office Manager

Renville SWCD

Corey & Traci Buchtel – *Owners / Operators*

Max's Grill

320-523-2833

email: maxsgrill@redred.com
www.maxsgrillonline.com

Sheep Shedde Inn

320-523-5000

www.sheepsheddeinn.com

2425 W. Lincoln Ave. – Olivia, MN 56277

Max's Grill

Wednesday, August 27

Continental Breakfast	50 x $4.95 =	$247.50
Coffee, juice, cereal, rolls/donuts, fruit		
Dinner 5:30 – 6:30 PM	38 x $15.00 =	$570.00
Includes salad and break		
Sirloin 8 oz.	$14.50	
Walleye	$15.00	
Grilled Chicken	$11.00	
Spaghetti	$10.00	
Dessert	38 x $3.00	$114.00
Strawberries/Angel Food Cake		
Banquet Room		$ 50.00

Thursday, August 28

Continental Breakfast	40 x $4.95 =	$198.00
Banquet Room		$ 50.00

STATE OF MINNESOTA PURCHASE ORDER

WATER & SOIL RESOURCES BOARD

BOARD TOUR

PURCHASE ORDER NO: 34385302

DATE PRINTED: 08/25/08 FY: 09 PAGE NO: 1

REQN. NO. :
REQR. NAME : WATER & SOIL RESOURCES BOARD
AGENCY REQN. NO. :

SOLICITATION NO. :
CONTRACT NO. :
VENDOR QUOTE NO. :
VENDOR NO. : 200638924-00
VENDOR CONTACT :
VENDOR PHONE : (320) 523-2833
VENDOR FAX :
VENDOR EMAIL :

MAXS GRILL
2425 W LINCOLN AVE
OLIVIA, MN 56277

SUPPLEMENTARY TERMS

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6. Payment terms are NET 30 unless a discount is offered for early payment.

REQUESTED DELIVERY: 08/27/08
FREIGHT TERMS : DESTINATION
DISCOUNT TERMS : NONE

CONTACT FOR DELIVERY INSTRUCTIONS:
NAME : MARY JO ANDERSON
PHONE : (651) 297-4290

SHIP TO: **(Unless specified otherwise on the lines)**
BWSR/CENTRAL OFFICE
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

BILL TO:
BWSR/ST. PAUL
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
00001	COMMODITY CODE: 890-12-000000 CONTINENTAL BREAKFAST WEDNESDAY, AUGUST 27, 2008	50.000	EACH	4.95	$ 247.50
00002	COMMODITY CODE: 890-12-000000 DINNER WEDNESDAY, AUGUST 27, 2008	38.000	EACH	15.00	$ 570.00
00003	COMMODITY CODE: 890-12-000000 CONTINENTAL BREAKFAST THURSDAY, AUGUST 28, 20008	40.000	EACH	4.95	$ 198.00
00004	COMMODITY CODE: 006-02-000000 MEETING ROOM RENTAL AUGUST 27 & AUGUST 28	1.000	EACH	100.00	$ 100.00
00005	COMMODITY CODE: 056-02-000000 18% GRATUITY	1.000	LOT	182.79	$ 182.79
00006	COMMODITY CODE: 023-22-000000 TAX PAYMENT (PAY TAX TO VENDOR)	1.000	LOT	110.36	$ 110.36

PURCHASING AGENT NAME: KARI KEATING
EXECUTIVE AGENCY: WATER & SOIL RESOURCES BOARD
PHONE NUMBER: (651) 297-8029
EMAIL ADDRESS: KARI.KEATING@STATE.MN.US

SIGNED Kari Keating
Authorized signature

VENDOR COPY

PRICE SHEET	ORDER NUMBER: 34385302	PAGE NO: 2

MAXS GRILL

VENDOR NUMBER: 200638924-00

UNLESS SPECIFIED OTHERWISE BELOW:

SHIP TO: WATER & SOIL RESOURCES BOARD
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

NEED DATE: 08/27/08

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT

ORDER TOTAL	$ 1408.65

BOARD OF WATER AND SOIL RESOURCES
INTERNAL REQUEST FOR GOODS OR SERVICES

VENDOR	**NAME** Max's Grill ATTENTION: Traci	SHIPTO	**NAME** MN Board of Water and Soil Resources
	ADDRESS 2425 W. Lincoln Avenue		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP Olivia, MN 56277		**CITY, STATE, ZIP** St. Paul, MN 55155
REMI TTO	**NAME**	BILLTO	**NAME** MN Board of Water and Soil Resources
	ADDRESS		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP		**CITY, STATE, ZIP** St. Paul, MN 55155

CONTRACT NO.

LINE NO.	COMMODITY CODE	UNIT(S) ORDERED	DESCRIPTION	UNIT	UNIT PRICE $	DISCOUNT $	TOTAL PRICE
1		50	Continental Breakfast Wed., August 27	EA	4.95		$ 247.50
2		38	Dinner on Wed., August 27	EA	15.00		$ 570.00
3		40	Continental Breakfast Thurs., August 28	EA	4.95		$ 198.00
4		1	Use of banquet room on Aug. 27 & August 28	EA	100.00		$ 100.00
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
							$ -
			SUBTOTAL				$ 1,115.50
			SALES TAX (only for catering or lodging)				$ -
			18% gratuity				$ 182.79
						TOTAL:	$ 1,298.29

ORDERED BY: Mary Jo Anderson
DATE: 8/21/2008
PHONE NUMBER: 651-297-4290

SUPERVISOR APPROVAL:
DATE:

Dinner 5:30 - 6:30 p.m. menus

Banquet Room

Max's Grill 320.523.2833

www.maxsgrillonline.com

- sirloin 14.50 8oz.
- Walleye 15.00
- grilled chicken 11.00
- ~~Pot roast~~ Pasta - 10.00

spaghetti

salad | bread

angel food 3.00

water

Randy Kramer talked w/ Corey re: desserts for Open House

Sheep Shedde

- flag (pledge)

continental breakfast

- coffee
- juice
- cereal
- rolls / donuts
- fruit

"Banquet Room ~~Meeting~~ Tours"

*wireless internet

bring LCD (Peter Scheffert will bring back-up)

Dinner 5:30 - 6:30 p.m. menus

Banquet Room

Max's Grill 320.523.2833

www.maxsgrillonline.com

Randy Kramer talked w/Corey re: desserts for Open House

*wireless internet

bring LCD (Peter Scheffert will bring back-up)

STATE OF MINNESOTA PURCHASE ORDER

WATER & SOIL RESOURCES BOARD

BOARD TOUR TENT RENTAL

PURCHASE ORDER NO: 34382568

DATE PRINTED: 08/20/08 FY: 09 PAGE NO: 1

REQN. NO. :
REQR. NAME : WATER & SOIL RESOURCES BOARD
AGENCY REQN. NO. :

SOLICITATION NO. :
CONTRACT NO. :
VENDOR QUOTE NO. :
VENDOR NO. : 200653683-00
VENDOR CONTACT :
VENDOR PHONE : (320) 222-8368
VENDOR FAX :
VENDOR EMAIL :

SOUTH CENTRAL TENT RENTAL
702 10TH ST SW
WILLMAR, MN 56201

SUPPLEMENTARY TERMS

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6. Payment terms are NET 30 unless a discount is offered for early payment.

REQUESTED DELIVERY: 08/27/08
FREIGHT TERMS : DESTINATION
DISCOUNT TERMS : NONE

CONTACT FOR DELIVERY INSTRUCTIONS:
NAME : MARY JO ANDERSON
PHONE : (651) 297-4290

SHIP TO: (Unless specified otherwise on the lines)
SEE ADDRESS BELOW
SEE ADDRESS BELOW
SEE ADDRESS BELOW
SEE BELOW, MN 55107

BILL TO:
BWSR/ST. PAUL
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
00001	COMMODITY CODE: 006-11-000000 EVENT EQUIP RENTAL (NOT PLANT MGMT) 20X30 POLE TENT - SCTR ERECTED TO BE DELIVERED TO RANDY KRAMER'S HOME 42808 COUNTY ROAD 11 BIRD ISLAND, MN 55310	1.000	EACH	200.00	$ 200.00
00002	COMMODITY CODE: 006-11-000000 EVENT EQUIP RENTAL (NOT PLANT MGMT) GLOBE LIGHTS	1.000	EACH	10.00	$ 10.00
00003	COMMODITY CODE: 006-11-000000 EVENT EQUIP RENTAL (NOT PLANT MGMT) WHITE FOLDING CHAIRS	30.000	EACH	1.00	$ 30.00
00004	COMMODITY CODE: 006-11-000000 EVENT EQUIP RENTAL (NOT PLANT MGMT) TABLE 30X8'	4.000	EACH	7.00	$ 28.00
00005	COMMODITY CODE: 010-02-000000 FREIGHT SERVICE	1.000	LOT	108.00	$ 108.00
				ORDER TOTAL	**$ 376.00**

PURCHASING AGENT NAME: KARI KEATING
EXECUTIVE AGENCY: WATER & SOIL RESOURCES BOARD
PHONE NUMBER: (651) 297-8029
EMAIL ADDRESS: KARI.KEATING@STATE.MN.US

SIGNED Kari Keating
Authorized signature

VENDOR COPY

STATE OF MINNESOTA
PURCHASE ORDER CHANGE
WATER & SOIL RESOURCES BOARD

PURCHASE ORDER NO: 34382568
CHANGE ORDER NO: 01

ORIG. DATE PRINTED: 08/20/08 REVISION DATE: 08/21/08

FY: 09 PAGE NO: 1

BOARD TOUR TENT RENTAL

REQN. NO. :
REQR. NAME : WATER & SOIL RESOURCES BOARD
AGENCY REQN. NO. :

SOLICITATION NO. :
CONTRACT NO. :
VENDOR QUOTE NO. :
VENDOR NO. : 200653683-00
VENDOR CONTACT :
VENDOR PHONE :
VENDOR FAX :
VENDOR EMAIL :

SOUTH CENTRAL TENT RENTAL
702 10TH ST SW
WILLMAR, MN 56201

SUPPLEMENTARY TERMS

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6. Payment terms are NET 30 unless a discount is offered for early payment.

FREIGHT TERMS : DESTINATION
REQUESTED DELIVERY: 08/27/08
DISCOUNT TERMS : NONE

CONTACT FOR DELIVERY INSTRUCTIONS:
NAME : MARY JO ANDERSON
PHONE : (651)297-4290

SHIP TO: (Unless specified otherwise on the lines)
SEE ADDRESS BELOW
SEE ADDRESS BELOW
SEE ADDRESS BELOW
SEE BELOW, MN 55107

BILL TO:
BWSR/ST. PAUL
520 LAFAYETTE RD NORTH
ST PAUL, MN 55155

TERMS AND CONDITIONS:
NEED TO ADD TAX LINE

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
00006	COMMODITY CODE: 023-22-000000 TAX PAYMENT (PAY TAX TO VENDOR)	1	LOT	24.44	$ 24.44
				NET AMT OF CHG	$ 24.44

PURCHASING AGENT NAME: KARI KEATING
EXECUTIVE AGENCY: WATER & SOIL RESOURCES BOARD
PHONE NUMBER: (651) 297-8029
EMAIL ADDRESS: KARI.KEATING@STATE.MN.US

SIGNED Kari Keating
Authorized signature

VENDOR COPY

BOARD OF WATER AND SOIL RESOURCES
INTERNAL REQUEST FOR GOODS OR SERVICES

VENDOR	**NAME** South Central Tent Rental, Inc. ATTENTION: James	SHIPTO	**NAME** MN Board of Water and Soil Resources
	ADDRESS 702 10th Street SW		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP Willmar, MN 56201		**CITY, STATE, ZIP** St. Paul, MN 55155
REMI TTO	**NAME**	BILLTO	**NAME** MN Board of Water and Soil Resources
	ADDRESS		**ADDRESS** 520 Lafayette Road North
	CITY, STATE, ZIP		**CITY, STATE, ZIP** St. Paul, MN 55155

CONTRACT NO.

LINE NO.	COMMODITY CODE	UNIT(S) ORDERED	DESCRIPTION	UNIT	UNIT PRICE $	DISCOUNT $	TOTAL PRICE
1		1	20x30 Pole Tent - SCTR erected	EA	200.00		$ 200.00
2		1	Globe Lights	EA	10.00		$ 10.00
3		30	white folding chairs	EA	1.00		$ 30.00
4		4	table 30x8'	EA	7.00		$ 28.00
5		1	delivery charge	EA	108.00		$ 108.00
							$ -
							$ -
			for open house event for BWSR at Randy Kramer's home				$ -
			on Wednesday, August 27, 2008 7:00 - 9:00 PM				$ -
							$ -
							$ -
							$ -
			SUBTOTAL				$ 376.00
			SALES TAX (only for catering or lodging)				$ 24.44
			GRATUITY				$ -
						TOTAL:	$ 400.44

ORDERED BY: Mary Jo Anderson

DATE: 8/19/2008

PHONE NUMBER: 651-297-4290

SUPERVISOR APPROVAL:

DATE:

South Central Tent Rental, Inc.

702 10th Street SW (Payment address only)
Willmar, MN 56201
320-222-8368/ 320-212-8550 (secondary phone)

www.southcentraltentrental.com

Rental Invoice

Date	Invoice #
8/26/2008	2050

Bill To
Board of Soil and Water Resources **42808 County Road 11** **Bird Island, MN 55310** **320-979-4208** **Randy Kramer**

Ship To
Board of Soil and Water Resources **42808 County Road 11** **Bird Island 320-979-4208** **Randy Kramer**

Terms	Rep	Ship Date	Ship Via
Due on receipt	JDJ	8/26/2008	SCTR Truck

Item	Description	Quantity	Rate	Amount
20x30P-E	20 x 30 Pole Tent - SCTR Erected	1	200.00	200.00T
GL	Globe Lights	1	10.00	10.00T
WFC	White Folding Chair	30	1.00	30.00T
BT-8'	Table 30" x 8'	4	7.00	28.00T
TC	Trip Charge	27	4.00	108.00T
	event from 7-9 PM			

South Central Tent Rental

NOTE: If you are picking up supplies from us, please do so at our warehouse location on South HWY. 12 between Willmar and Kandiyohi. (Look for our sign)

Subtotal	$376.00
Sales Tax (6.5%)	$24.44
Total	$400.44
Payments/Credits	$0.00
Balance Due	$400.44

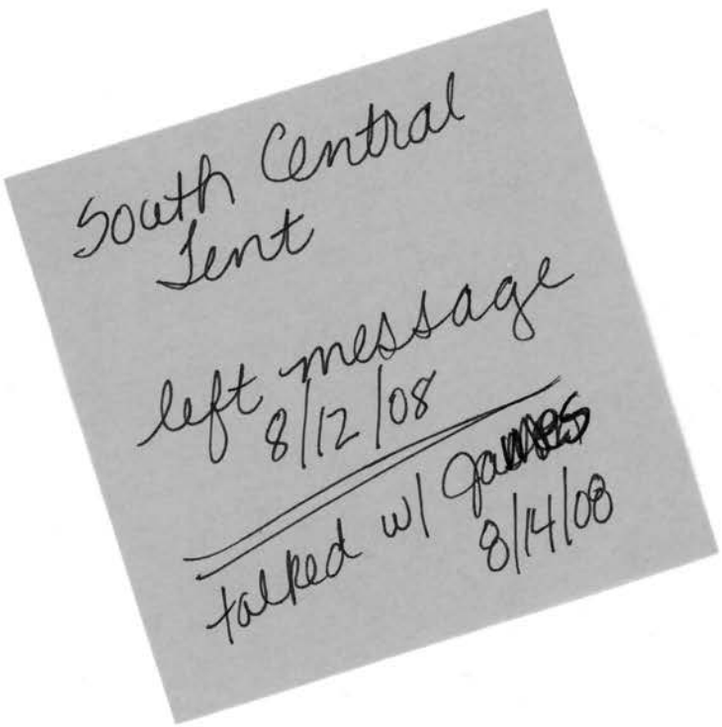
E-mail
Johnson613@charter.net

Mary Jo Anderson

From: Randy Kramer [rlkramer@westtechwb.com]
Sent: Thursday, July 24, 2008 9:29 PM
To: Mary.Jo.Anderson@state.mn.us
Cc: John Jaschke
Subject: Tent Rental

Mary Jo:
I have made contact with South Central Tent Rental of Willmar.
Jason has reserved Aug. 27th for a 20 X 30 foot tent without sides for the day.
He also will have four tables and 30 chairs reserved but that number can change with the amount of participants. I will forward the contract when I receive it.

Thank you,
Randy



Mary Jo Anderson

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Thank you,
Randy

LET US "TENT YOUR EVENT!"

www.SouthCentralTentRental.com

South Central Tent Rental

Home **Prices** **Contact Us**

We can supply much of what you may need for your outdoor event. Please give us a call as you are planning your celebration. We are available to answer your questions and make recommendations based on the number of guests you anticipate.

A pricelist is available upon request. A free on-site consultation can be arranged. Once you have decided to allow us the honor of "tenting your event", a 25% down payment will be required to hold your date and desired equipment. A contract will be signed at the time of tent and equipment rental.

Let us assure you that we will partner with you to help make this a seamless and successful event experience for you. We are sure you will be pleased with our attention to value as well. Don't hesitate to call today!

South Central Tent Rental, Inc.

Warehouse Location
East Highway 12, Willmar
(Meetings by appointment only.)

Payment Can Be Sent To:
702 10th Street SW, Willmar, MN 56201
(*Credit Cards not accepted at this time.)

Phone: 320-222-TENT (8368)
Toll Free: 1-866-922-TENT (8368)
Email: jjohnson613@charter.net

LET US "TENT YOUR EVENT!"

www.SouthCentralTentRental.com

South Central Tent Rental

Home **Prices** **Contact Us**

South Central Tent Rental, Inc
320-222-TENT (8368)
866-922-TENT (Toll Free)
Please call ahead for appointment.

2008 Price List

Pole Tents

Size	Price Picked Up	Price Set Up
16' x 16'	$60.00	$125.00
20' x 20'	$90.00	$160.00
20' x 30'	$120.00	$200.00
20' x 40'	$150.00	$260.00
30' x 30'		$315.00
30' x 45'		$440.00
30' x 60'		$600.00
40' x 40'		$550.00
40' x 60'		$775.00
40' x 80'		$1,000.00
40' x 100'		$1,225.00

40' x 120'	$1,450.00
40' x 140'	$1,675.00
40' x 160'	$1,900.00
40' x 180'	$2,125.00

Frame Tents

(All frame tents set up by S.C.T.R.)

Size	Price Set Up
10' x 10'	$90.00
12' x 12'	$100.00
15' x 15'	$125.00
20' x 20'	$210.00
20' x 30'	$250.00
20' x 40'	$310.00
30' x 30'	$360.00
30' x 40'	$475.00
30' x 50 '	$575.00
40' x 40'	$825.00
40' x 60'	$1,000.00
40' x 80'	$1,225.00

Let Us "Tent" your event!

Side Curtains: 75¢ per linear foot (example=$15 on a 20 foot side, $22.50 on a 30 foot side)

Cathedral Sides: $1.50 per linear foot

Tables: 30" x 8' - $7.00, round 60" - $9.00

Chairs: Brown (folding style) - 80¢, White (folding style) - $1.00, White wood with pad folding chairs - $1.75
Brand New Wedding White (folding style) - $1.50 - (200 available)

Dance Floors: Versatile size/shape up to 800 SQFT - 75¢ per square foot

Staging: 4' x 8' sections - $40.00, 4' x 4' section - $20.00, ***Also available:*** wedding arches - $45

Delivery Charge: $4.00 per mile one way only; price includes pickup after event (with a minimum

charge of $25.00) *Trip Charge is subject to change if gasonline prices surge this season.

Customer Pick Up: S.C.T.R. offers customer pick up on tents **at the Willmar warehouse (East Hwy 12)!**

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Website created by Sytek Communications

Minnesota Board of Water & Soil Resources

DATE: August 19, 2008

TO: Board of Water and Soil Resources' Members, Advisors, and Staff

FROM: John Jaschke, Executive Director

SUBJECT: August 27-28 BWSR Tour and Meeting Notice

The Board of Water and Soil Resources (BWSR) will tour western Renville County and a portion of Kandiyohi County on Wednesday, August 27, 2008. See the attached tour map.

Please let Mary Jo Anderson know your plans and RSVP to her as soon as possible at 651-297-4290 or mary.jo.anderson@state.mn.us

Tuesday, August 26, 2008 *(Options if you're arriving early to Olivia):*

1. Tom Kalahar, Renville SWCD Technician, is extending an invitation to take anyone who arrives early on Tuesday to a canoe trip on the Minnesota River. This is an opportunity to view the Granite Rock Outcrops and all the natural beauty of the Minnesota River. Contact Mary Jo Anderson if you're interested in this optional recreational activity.

2. If you are interested in golfing, see the attached listing of golf courses in the area. Call ahead to make your tee time. Please note that the Olivia Golf Course is closed at noon on Tuesday for "Men's Day".

3. If you are looking for other optional/recreational activities in the area, see the enclosed brochures or contact Karen Flom at the Renville County SWCD at 320-523-1559.

Sleeping rooms have been reserved at the Sheep Shedde Inn, 2425 West Lincoln Ave., in Olivia (phone: 320-523-5000) http://www.sheepsheddeinn.com for Tuesday and Wednesday evenings, August 26 and 27. See the attached room reservation list. The rooms have been direct billed (you do not pay for the room), unless noted on the rooming list. Please let Mary Jo Anderson know asap if you do not need a sleeping room.

Bemidji
Minnesota Avenue
Suite 234
Bemidji, MN 56601
phone (218) 755-4235
fax (218) 755-4201

Brainerd
1601 Minnesota Drive
Brainerd, MN 56401
phone (218) 828-2383
fax (218) 828-6036

Duluth
394 S. Lake Avenue
Room 403
Duluth, MN 55802
phone (218) 723-4752
fax (218) 723-4794

Fergus Falls
1004 Frontier Trail
Fergus Falls, MN 56537
phone (218) 736-5445
fax (218) 736-7215

Marshall
1400 E. Lyon Street
Box 267
Marshall, MN 56258
phone (507) 537-6060
fax (507) 537-6368

New Ulm
261 Highway 15 S.
New Ulm, MN 56073
phone (507) 359-6074
fax (507) 359-6018

Rochester
2300 Silver Creek
Road N.E.
Rochester, MN 55906
phone (507) 281-7797
fax (507) 285-7144

Saint Paul
520 Lafayette Road N.
Saint Paul, MN 55155
phone (651) 296-3767
fax (651) 297-5615

Chair Randy Kramer is hosting an *optional* Open House at his home on ***Wednesday*** evening after dinner, from 7:00 – 9:00 p.m. Again, this is optional; it's an opportunity for an informal casual gathering with Board Members, Advisors, Staff and others attending the tour or meeting. Randy's home is about fifteen miles from Olivia; carpooling is encouraged; see attached directions. RSVP is necessary, please let Mary Jo Anderson know if you plan to attend.

Wednesday, August 27, 2008 – Board Tour

Registration, coffee/rolls, welcome, introductions, and an overview of the day will be held at Max's Grill (down the hallway from the Sheep Shedde Inn), in the Banquet Room, in Olivia, at 7:30 a.m.

A coach bus will promptly depart from Max's Grill/Sheep Shedde Inn in Olivia at 8:00 a.m. The narrated tour will begin in Olivia and head to Willmar in Kandiyohi County via Highway 71 to view the Grass Lake Project. There are various partnership projects along Hwy. 71 including easements, ag waste, tree plantings, and other conservation measures completed with BWSR, local SWCDs, the Hawk Creek Watershed Project and NRCS participation.

Heading back into Renville County, we will spend the morning in the western part of the County. Sites will include an out-of-compliance feedlot (currently working to achieve compliance) the Long Lake WMA, and several "value added" industries including Southern Minnesota Beet Sugar Coop, MinnAqua, and Golden Oval. Additionally, we'll see a variety of practices including easements, wetland restorations, buffers, riparian, farmstead shelterbelts, a WPA, CRP including new S.A.F.E. contracts, and several Hawk Creek Projects including alternative intakes and ISTS. We will be going past the ethanol plant on the county line near Minnesota Falls.

We will have lunch at Skalbekken County Park in Renville County, on the Minnesota River, south of Sacred Heart. The Pork Producers will be grilling pork tenderloin for lunch.

Immediately following lunch at the park, we'll have a short presentation on USGS Research Findings: "Effects of Agricultural Land Retirement in the Minnesota River Basin", presented by Eric Mohring, BWSR staff, and Vicki Christensen, USGS staff.

After lunch, the tour will stay along the Minnesota River Valley and we will see several floodplain easements, a variety of mining projects, RC&D roadside erosion projects, Granite Rock Outcrops and associated wetlands, as well as feedlots.

We will see two MN DOT Living Snow Fence projects, one on Hwy. 71 and also one on Hwy. 212 outside the City of Bird Island. We will see two MN DOT wetland mitigation easements before the tour ends. Of course there are more shelterbelts, field windbreaks, CRP and CREP sites. We will be going past the Revier feedlot site which will be the largest cattle feedlot in the state (10,000 head). Along this part of the tour we will see an example of an out-of-compliance feedlot that was fixed with FWQM grant funds in partnership with EQIP and Ag BMP loan dollars.

The tour will continue in the afternoon. We plan to arrive back at Max's Grill/Sheep Shedde Inn in Olivia about 4:30 p.m.

Dinner reservations have been made at Max's Grill in Olivia. Dinner will be served from 5:30 p.m. – 6:30 p.m. Dinner will also be direct billed, however, you need to let Mary Jo Anderson know if you plan to join us for dinner as we need to know the number of attendees.

If you have special food needs, or require a vegetarian meal, please contact Mary Jo Anderson as soon as possible.

If you will not be present for the Wednesday coach bus tour, dinner in the evening, the Open House at Randy Kramer's; or if you do not need a room reservation on Tuesday or Wednesday evening at the Sheep Shedde Inn, please contact Mary Jo Anderson immediately, as we need to know the number of people attending.

Bemidji
[illegible] Minnesota Avenue
Suite 234
Bemidji, MN 56601
phone (218) 755-4235
fax (218) 755-4201

Brainerd
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fax (651) 297-5615

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Minnesota Board of Water & Soil Resources

DATE: July 2, 2008

TO:
Senator Gary Kubley
Senator Joe Gimse
Senator Ellen Anderson
Senator Satveer Chaudhary
Renville County Commissioners
Kandiyohi County Commissioners
Bill Miller, Mayor of Olivia
Renville County SWCD Board & Staff
Kandiyohi County SWCD Board & Staff
Matt Holland, Pheasants Forever
Ray Bohn, MAWD Coordinator
David Trooien, MNDOT District 8 Engineer
Frank Pafko, MNDOT Environmental Services Director
Representative Lyle Koenen
Representative Al Juhnke
Representative Kent Eken
Representative Rick Hansen
Representative Jean Wagenius
Buffalo Creek Watershed District
Hawk Creek Watershed Project
Bill Hunt, State Conservationist, NRCS
Perry Aasness, State Director, FSA
LeAnn Buck, Executive Director, MASWCD
Jim Mulder, Executive Director, AMC

FROM: Randy Kramer, Chair RK/lonja
John Jaschke, Executive Director

SUBJECT: BWSR Tour and Meeting, August 27-28, 2008

The Board of Water and Soil Resources (BWSR) annual Board tour is scheduled for Wednesday, August 27, 2008, in Renville County, starting at the Sheep Shedde Inn in Olivia. On behalf of the BWSR, I would like to extend an invitation for you to attend the Board tour and the Board meeting the following day.

A coach bus will promptly depart from the Sheep Shedde Inn at 8:00 a.m., on Wednesday, August 27. The narrated tour will begin in Olivia and head to Willmar in Kandiyohi County via Highway 71 to view the Grass Lake Project. There are various partnership projects along Hwy. 71 including easements, ag waste, tree plantings, and other conservation measures completed with BWSR, local SWCDs, the Hawk Creek Watershed Project and NRCS participation.

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Immediately following lunch at the park, we'll have a short presentation on USGS Research Findings: "Effects of Agricultural Land Retirement in the Minnesota River Basin", presented by Eric Mohring, BWSR staff, and USGS staff.

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The tour will return to the Sheep Shedde Inn at approximately 5:00 p.m.

The Board of Water and Soil Resources will hold its monthly meeting on Thursday, August 28, from 8:30 a.m. – noon. The meeting will be held in a conference room at Max's Grill. You are welcome to attend the meeting. Tentative agenda items include: whole farm planning; presentations on new conservation assessment and planning tools an update on the 2008 Federal Farm Bill programs, and several grant program decision items.

Attached is a list of various logistical arrangements. Please contact Mary Jo Anderson, 651-297-4290 or mary.jo.anderson@state.mn.us **by August 1st**, to confirm your attendance, or if you have any questions. We look forward to seeing you in Olivia on August 27-28!

cc: BWSR Board Members
Mary Jo Anderson, BWSR Staff
Karen Flom, Renville SWCD
Tom Kalahar, Renville SWCD
Kandiyohi County SWCD
Josh Gackle, Governor's Office

Bemidji
701 Minnesota Avenue
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LOGISTICS

Sleeping Rooms
A block of sleeping rooms have been reserved at the Sheep Shedde Inn (2425 Lincoln Ave. West) in Olivia for Tuesday, August 26, and Wednesday, August 27. Please contact Mary Jo Anderson at 651-297-4290 or mary.jo.anderson@state.mn.us if you need lodging accommodations.

Continental Breakfast
A continental breakfast will be served at the Sheep Shedde Inn on Wednesday morning from 6:30 a.m. – 7:30 a.m. Tour registration, welcome, introductions, and an overview of the day will be held at 7:30 a.m. at the Sheep Shedde Inn (Phone: 320-523-5000 www.sheepsheddeinn.com)

Lunch
Lunch will be provided at a park in Renville County in the Minnesota River Valley. This park is located on the Minnesota River south of Sacred Heart and is the site of a direct hardwood seeding. Food will be provided by the Renville County Pork Producers and a local café.

Dinner
Dinner will be provided at Max's Grill (adjacent to the Sheep Shedde Inn) in Olivia, from 5:30 – 6:30 p.m.

Optional Events

1. Tom Kalahar, Renville SWCD Technician, is extending an invitation to take anyone who arrives early on Tuesday to a canoe trip on the Minnesota River. This is an opportunity to view the Granite Rock Outcrops and all the natural beauty of the Minnesota River. Contact Mary Jo Anderson if you're interested in this optional recreational activity.

2. Chair Randy Kramer has invited tour attendees to his home for an informal gathering on Wednesday evening after dinner. Randy's home is about eight miles from Olivia; maps will be provided and carpooling is encouraged.

3. If you are looking for other optional/recreational activities in the area, such as golf, contact Karen Flom at the Renville County SWCD at 320-523-1559.

Minnesota Board of Water & Soil Resources

DATE: July 2, 2008

TO:
Senator Gary Kubley
Senator Joe Gimse
Senator Ellen Anderson
Senator Satveer Chaudhary
Renville County Commissioners
Kandiyohi County Commissioners
Bill Miller, Mayor of Olivia
Renville County SWCD Board & Staff
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Perry Aasness, State Director, FSA
LeAnn Buck, Executive Director, MASWCD
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FROM: Randy Kramer, Chair RK/lanja
John Jaschke, Executive Director

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Immediately following lunch at the park, we'll have a short presentation on USGS Research Findings: "Effects of Agricultural Land Retirement in the Minnesota River Basin", presented by Eric Mohring, BWSR staff, and USGS staff.

After lunch, the tour will stay along the Minnesota River Valley and we will see several floodplain easements, a variety of mining projects, RC&D roadside erosion projects, Granite Rock Outcrops and associated wetlands, as well as feedlots.

We will see two MN DOT Living Snow Fence projects, one on Hwy. 71 and also one on Hwy. 212 outside the City of Bird Island. We will see two MN DOT wetland mitigation easements before the tour ends. Of course there are more shelterbelts, field windbreaks, CRP and CREP sites. We will be going past the Revier feedlot site which will be the largest cattle feedlot in the state (10,000 head). Along this part of the tour we will see an example of an out-of-compliance feedlot that was fixed with FWQM grant funds in partnership with EQIP and Ag BMP loan dollars.

The tour will return to the Sheep Shedde Inn at approximately 5:00 p.m.

The Board of Water and Soil Resources will hold its monthly meeting on Thursday, August 28, from 8:30 a.m. – noon. The meeting will be held in a conference room at Max's Grill. You are welcome to attend the meeting. Tentative agenda items include: whole farm planning; presentations on new conservation assessment and planning tools an update on the 2008 Federal Farm Bill programs, and several grant program decision items.

Attached is a list of various logistical arrangements. Please contact Mary Jo Anderson, 651-297-4290 or mary.jo.anderson@state.mn.us **by August 1st**, to confirm your attendance, or if you have any questions. We look forward to seeing you in Olivia on August 27-28!

cc: BWSR Board Members
Mary Jo Anderson, BWSR Staff
Karen Flom, Renville SWCD
Tom Kalahar, Renville SWCD
Kandiyohi County SWCD
Josh Gackle, Governor's Office

Bemidji
01 Minnesota Avenue
Suite 234
Bemidji, MN 56601
phone (218) 755-4235
fax (218) 755-4201

Brainerd
1601 Minnesota Drive
Brainerd, MN 56401
phone (218) 828-2383
fax (218) 828-6036

Duluth
394 S. Lake Avenue
Room 403
Duluth, MN 55802
phone (218) 723-4752
fax (218) 723-4794

Fergus Falls
1004 Frontier Trail
Fergus Falls, MN 56537
phone (218) 736-5445
fax (218) 736-7215

Marshall
1400 E. Lyon Street
Box 267
Marshall, MN 56258
phone (507) 537-6060
fax (507) 537-6368

New Ulm
261 Highway 15 S.
New Ulm, MN 56073
phone (507) 359-6074
fax (507) 359-6018

Rochester
2300 Silver Creek
Road N.E.
Rochester, MN 55906
phone (507) 281-7797
fax (507) 285-7144

Saint Paul
520 Lafayette Road N
Saint Paul, MN 55155
phone (651) 296-3767
fax (651) 297-5615

LOGISTICS

Sleeping Rooms
A block of sleeping rooms have been reserved at the Sheep Shedde Inn (2425 Lincoln Ave. West) in Olivia for Tuesday, August 26, and Wednesday, August 27. Please contact Mary Jo Anderson at 651-297-4290 or mary.jo.anderson@state.mn.us if you need lodging accommodations.

Continental Breakfast
A continental breakfast will be served at the Sheep Shedde Inn on Wednesday morning from 6:30 a.m. – 7:30 a.m. Tour registration, welcome, introductions, and an overview of the day will be held at 7:30 a.m. at the Sheep Shedde Inn (Phone: 320-523-5000 www.sheepsheddeinn.com)

Lunch
Lunch will be provided at a park in Renville County in the Minnesota River Valley. This park is located on the Minnesota River south of Sacred Heart and is the site of a direct hardwood seeding. Food will be provided by the Renville County Pork Producers and a local café.

Dinner
Dinner will be provided at Max's Grill (adjacent to the Sheep Shedde Inn) in Olivia, from 5:30 – 6:30 p.m.

Optional Events

1. Tom Kalahar, Renville SWCD Technician, is extending an invitation to take anyone who arrives early on Tuesday to a canoe trip on the Minnesota River. This is an opportunity to view the Granite Rock Outcrops and all the natural beauty of the Minnesota River. Contact Mary Jo Anderson if you're interested in this optional recreational activity.

2. Chair Randy Kramer has invited tour attendees to his home for an informal gathering on Wednesday evening after dinner. Randy's home is about eight miles from Olivia; maps will be provided and carpooling is encouraged.

3. If you are looking for other optional/recreational activities in the area, such as golf, contact Karen Flom at the Renville County SWCD at 320-523-1559.

Minnesota Board of Water & Soil Resources

BOARD OF WATER AND SOIL RESOURCES

"OPEN HOUSE"

Wednesday, August 27, 2008

7:00 p.m. - 9:00 p.m.

at the home of
Randy Kramer, Chair
42808 County Road 11
Bird Island, MN 55310
Phone: 320.979.4208

Directions from the Sheep Shedde Inn
2425 W. Lincoln Avenue, Olivia

1.	*Start out going East on US-212E toward Bird Island, continue to follow US-212E.*	*6.4 miles*
2.	*Turn Left at stoplight onto CR-5/N Main St., continue to follow CR-5.*	*4.0miles*
3.	*Turn Right onto CR-11 follow "S" curve*	*4.3 miles*
4.	*End at 42808 County Road 11, north side of road*	
Estimated time: 23 minutes, estimated distance		*14.75 miles*

Light refreshments and dessert will be served. This is an optional informal, casual gathering for BWSR Members, Advisors, Staff, and others attending the tour or meeting.

RSVP to Mary Jo Anderson, 651.297.4290 or mary.jo.anderson@state.mn.us

Attendees	Invitation	SheepShedde	Rustad Bus	Lunch	Dinner	Open House	Other

Sheep Shedde Inn
2425 West Lincoln Avenue
Olivia, MN 56277
Phone: 320-523-5000

Tuesday, August 26

1. Dana Allen
2. Mary Jo Anderson
3. Paul Brutlag
4. LeAnn Buck ****
5. Paul Eger ****
6. Quentin Fairbanks
7. Tom Fischer
8. Travis Germundson
9. Jim Haertel
10. Jeff Hrubes
11. John Jaschke
12. Kari Keating
13. Brian Kletscher
14. Paul Langseth
15. Melissa Lewis
16. Joe Martin ****
17. Brian Napstad
18. Jeff Nielsen
19. Faye Sleeper ****
20. Louise Smallidge
21. Gene Tiedemann
22. LuAnn Tolliver
23. Steve Woods
24. Vicki Christensen
25. Kevin Lines
26. Eric Mohring
27.
28.
29.
30.
31.
32.

Wednesday, August 27

1. Dana Allen
2. Mary Jo Anderson
3. Paul Brutlag
4. LeAnn Buck ****
5. Paul Eger ****
6. Quentin Fairbanks
7. Tom Fischer
8. Travis Germundson
9. Jim Haertel
10. Jeff Hrubes
11. John Jaschke
12. Kari Keating
13. Brian Kletscher
14. Paul Langseth
15. Melissa Lewis
16. Joe Martin ****
17. Brian Napstad
18. Jeff Nielsen
19. Faye Sleeper ****
20. Louise Smallidge
21. Gene Tiedemann
22. LuAnn Tolliver
23. Steve Woods
24. Bob Burandt
25. John Linc Stine ****
26. Peter Scheffert ****
27. Jason Weinerman
28. Tom Wenzel
29.
30.
31.
32.

****** will pay for own room upon arrival** **8/18/08**

Minnesota Board of Water & Soil Resources

BOARD OF WATER AND SOIL RESOURCES

"OPEN HOUSE"

Wednesday, August 27, 2008

7:00 p.m. - 9:00 p.m.

at the home of
Randy Kramer, Chair
42808 County Road 11
Bird Island, MN 55310
Phone: 320.979.4208

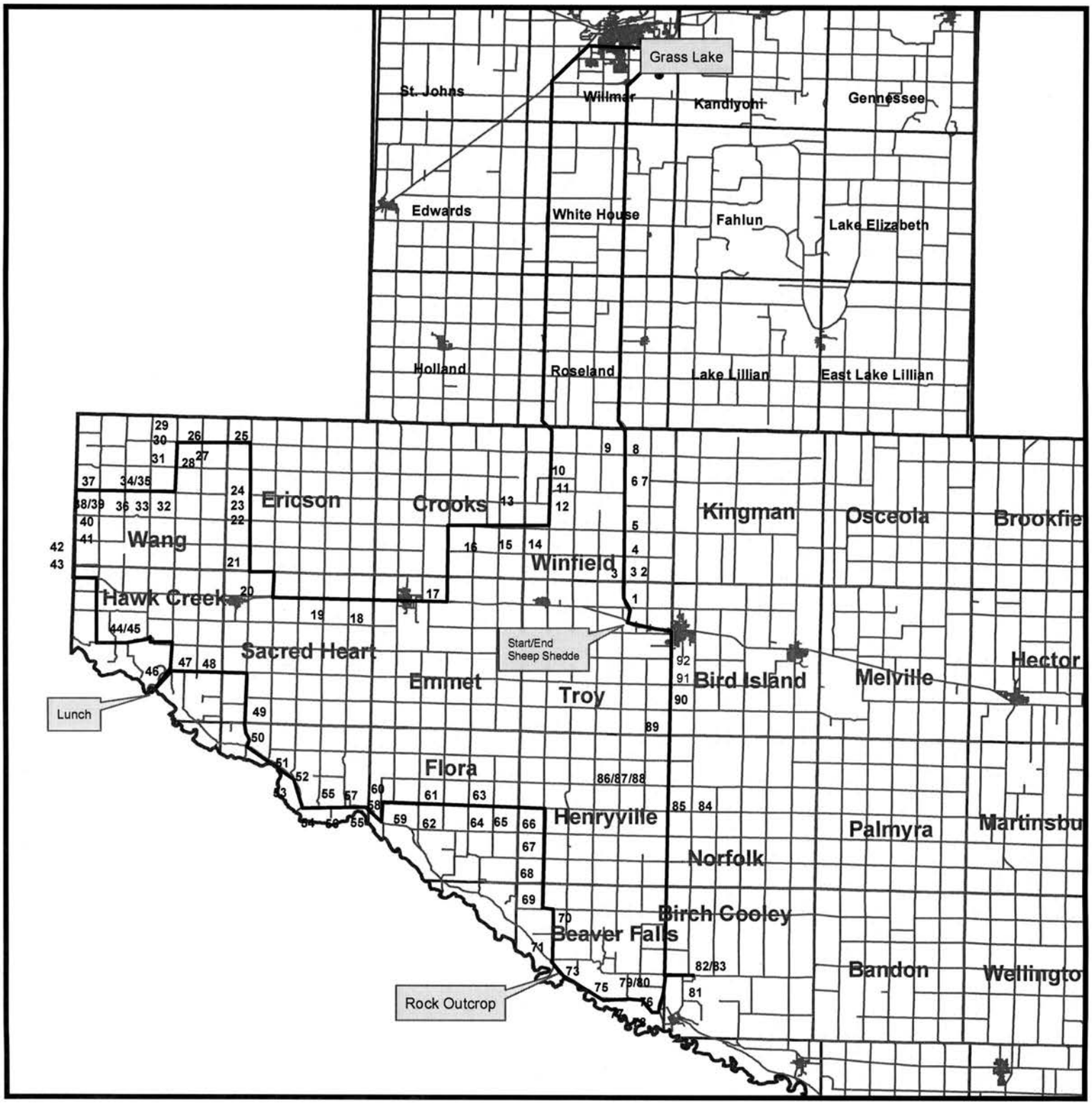
Directions from the Sheep Shedde Inn
2425 W. Lincoln Avenue, Olivia

1.	Start out going East on US-212E toward Bird Island, continue to follow US-212E.	6.4 miles
2.	Turn Left at stoplight onto CR-5/N Main St., continue to follow CR-5.	4.0miles
3.	Turn Right onto CR-11 follow "S" curve	4.3 miles
4.	End at 42808 County Road 11, north side of road	
Estimated time: 23 minutes, estimated distance		14.75 miles

Light refreshments and dessert will be served. This is an optional informal, casual gathering for BWSR Members, Advisors, Staff, and others attending the tour or meeting.

RSVP to Mary Jo Anderson, 651.297.4290 or mary.jo.anderson@state.mn.us

BWSR TOUR 2008
Renville and Kandiyohi Counties



Plans have been finalized for a tour that will begin and end at the Sheep Shedde in Olivia and include sites in the Western half of Renville County and a portion of Kandiyohi County. Included on the tour will be a variety of practices funded through a wide range of partnerships and programs. Also included are several business & industry sites, some historic sites and some unique natural resource sites.

Authentic Travel

Green Routes offers an alternative to conventional tourism.

Green Routes will direct you to places where you can get locally grown food, experience unique cultural attractions, and participate in outdoor activities that minimally affect the environment, like biking, canoeing, and birding.

Green Routes offers tools to plan and select travel destinations that reflect your values of sustainability. Since every dollar you spend on travel is effectively a vote in favor of a specific way of doing business, through Green Routes, you'll encourage new travel destinations to develop sustainable practices.

Take time to explore the back roads and learn about a region from the people who live and work there. You'll find no more gracious tour guides on your journeys than the owners of these green businesses. And, since the places highlighted are not necessarily your typical tourist destination, please respect the hours of operation as well as the spaces themselves, and call ahead if you have special needs.

GREEN ROUTES

Renewing the Countryside
2105 First Avenue South · Minneapolis, Minnesota 55404 USA
1.866.378.0587 · rtc@rtcinfo.org

www.GreenRoutes.org

Tatanka Bluffs

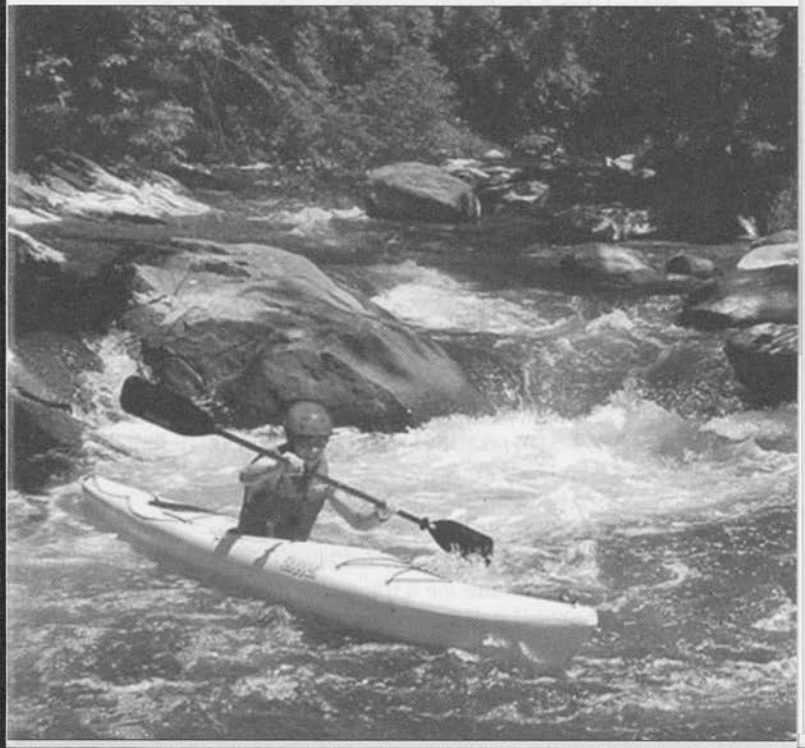
Upper Sioux Agency to
Fort Ridgely, Minnesota

GREEN ROUTES

Where cuisine, culture, and conservation come together

Tatanka Bluffs

Nestled in the beautiful Central Minnesota River Valley, Tatanka Bluffs is part of the nationally recognized Minnesota River Valley Scenic Byway. Explore the beautiful rolling prairie, spectacular bluffs, and quaint heritage-rich towns in this scenic river valley.



View the spectacular water falls at Alexander Ramsey Park, tour historic Fort Ridgely, or marvel at the 2000 American Indian images carved in quartzite outcrops at the Jeffers Petroglyphs. Find respite among the many parks and trails, or amble along in a canoe down scenic rivers and creeks in this picturesque region.

In this history-rich area, learn about the early fur trade, pioneer settlements, the Sioux uprising or the role that the steamboat had on developing parts of the region.

Experience the local flavor while tasting the bounty of the rich, fertile soil of the Minnesota River Valley at cafés, farmers markets and bed and breakfasts across the area. Sample wines made from Minnesota grapes at a local vineyard, tour beautifully restored historic buildings, or learn about the art of blacksmithing. Locally-made pottery, crafts and quilts make wonderful gifts or a fond reminder of your trip.

Tatanka Bluffs is a haven for renewable energy, with the production of bio-mass, ethanol, biodiesel and wind energy. We look forward to your visit!

This guide was developed in collaboration with business and community leaders from Redwood and Renville counties, the Redwood Area Development Corporation, Renville County HRA/EDA, and with support from the Southwest Initiative Foundation.

GREEN ROUTES

WWW.GREENROUTES.ORG

Renewable Energy in Tatanka Bluffs

E85

E85 is a fuel made of 85% cleaner burning, renewable ethanol and just 15% gasoline. E85 is designed for use in flex fuel vehicles, which are regular vehicles equipped to run on any blend of ethanol from zero to 85%. If you drive a FFV, it will be stated in your owner's manual or can be found on CleanAirChoice.org.

E85 is a locally grown commodity from corn grown in the #1 (Renville) and #2 (Redwood) counties in corn production in the state of Minnesota, meaning it reduces our dangerous dependence on foreign oil.

Green Routes destinations contribute to the local economy by employing local residents, using local products and growers, and supporting other local businesses.

Redwood County

Cenex C-Store
1400 E Bridge St, Redwood Falls, MN 56283
507-644-3383

Cenex - Belview
110 N Main St, Belview, MN 56214
507-938-3069

Cenex - Harvest Land Coop
710 Front Street Morgan, MN 56266
507-249-3196

Hoyt Oil & Convenience Sinclair
241 6th St, Walnut Grove, MN 56180
507-859-2552

Lamberton Amoco
26169 US Hwy 14, Lamberton, MN 56152
507-752-7558

Meadowland C-Store Wabasso
Hwy 68 East, Wabasso, MN 56293
507-342-5145

Meadowland Farmers Coop
101 1st Ave West, Lamberton, MN 56152
507-752-7352

Renville County

212 1-Stop
101 East Hwy 212, Danube, MN 56230
320-826-2660

Minnesota Energy
514 West Yellowstone Trail, Buffalo Lake, MN 55314
320-833-5321

Cenex - Farmers Coop Oil
118 NE Dupont, Renville, MN 56284
320-329-8351

Cenex - Farmers Coop Oil
537 E Hwy 12, Sacred Heart, MN 56285
320-765-2752

Cenex - Honzay's
1208 W Lincoln Ave, Olivia, MN 56277
320-523-1241

Fairfax Mobil Mart
Hwy 4 & 19, Fairfax, MN 55332
507-426-8396

South Central Grain & Energy - Cenex
100 Hwy Ave, Hector, MN 55342
320-848-2286

Green Routes involves local residents and business owners in creating a collaborative tourism plan that benefits both visitors and the community.

Renville-Sibley Cooperative Power Association

320-826-2593
www.renville-sibley.coop

Your source for renewable energy in Renville and Redwood Counties offering Prairie Wind credits for purchase to all customers.

Where to Buy Food Direct from Farmers While Traveling Tatanka Bluffs

Farmers Markets and Farm Stands

Be sure to call ahead to confim hours, directions and to find out what is in season.

Babe's Blossoms
7 Miles N on Hwy 4 Hector - Call 320-848-6566
Fridays through September 1pm - 5pm
Saturdays through September 9am - Noon

Buffalo Lake Farm and Flea Market
Buffalo Lake City Park Hwy 212
8am - 11am - Saturdays Starting July

Deutschland Meats
Downtown Sanborn - Call 507-648-3388
Open Monday - Friday 8am – 5:30pm Saturday 9am – 1pm
Authentic German Recipes for Beef and Pork Processing

Green Routes encourages individuals to eat and vacation in ways that support healthy rural communities as well as encourage businesses to contribute to environmental stewardship, economic vitality, and social and community well-being.

Fairfax Farmers Market
1st Street SE off Hwy 19 Fairfax
Tuesdays 4pm - 6pm; July - September

Feldman's Market
Corner of 212 and Main Street in Renville
Call 320-522-0465
August - October

Geis Farms
Lamberton - Call 507-752-7722
Please Call First
Bison Meat – USDA Inspected

Ron Hanson
Sacred Heart - Call 320-765-2379
Chemical Free Late Season Onions

Hilltop Harvest LLC
Call 507-641-8118 or 1-888-785-6655
Redwood Falls near Highway 19
Open 7am - 7pm Starting in Mid-June; Otherwise, Call First
Fresh Strawberries, Raspberries, and Pumpkins

Vern and Anita Kardell
66918 Cty Rd 27 Fairfax
Call 507-426-8298
Vegetables

Green Routes offers people the opportunity to learn how to incorporate economically, environmentally, and socially sustainable practices into their tourism, travel, and other business plans.

K&C Gardens
Ken & Cathy Balderston
36257 890th Ave.
(8 miles North of Olivia)
Call 320-523-2162
Monday - Friday 3pm - 8pm, Saturday 1pm - 8pm

Lundstrom Vegetables
Rural Bird Island
Call 320-365-4174
Open Daily - Buy From Farm

Morton Sidewalk Market
Downtown Morton - By City Hall
Saturdays 9am - Noon

Olivia Farmers Market
Lot Behind American Bank
9th Street and Fairview - Olivia
Thursdays 2pm - 5:30pm
July - October

The Prairie Gardener
Wabasso – 507-342-2626
Open Monday - Saturday 8am- 6pm; April – October
Green House Specializing in Daylilies

Renville Farmers Market
Water Tower Park - Renville
Fridays 3pm - 6pm

Norb and Cindy Serbus
Danube - Call 320-826-2165
Pumpkins, Squash, and Gourds

Trebesch Premium Pork
Call 507-249-3293 or 507-920-7980
Sales in Redwood Falls
trebpork@redred.com – Please Call First

Walter Organic Farms
Clements - 507-692-2223 – Please Call First
Organic Flax and Organic Fed Omega Broilers
Will UPS anywhere

Wertish Farm
Danube - Call 320-826-2451
Drug and Hormone Free Chickens

1 Fieldstone Vineyards
38577 State Highway 68, Morgan, MN 56266
507-249-9463 • info@fieldstonevineyards.com
www.fieldstonevineyards.com
Hours: Weekends May - Dec., Sat 11-6, Sun 12-5.
Other times by appointment.

Redwood County's first winery located on the 4th generation Reding Family Century Farm. Come and tour the vineyards and the 1930's dairy barn that was renovated into a winery. Fieldstone Vineyards pride themselves on providing 100% Minnesota grown products and making wine on site from berry to bottle.

2 Fort Ridgely State Park
72158 County Road 30, Fairfax, MN 55332
507-426-7840
www.dnr.state.mn.us/state_parks/fort_ridgely/index.html
Hours: Vary, call ahead or check website.

Immerse yourself in Minnesota history, spanning from 7000 years ago when this site was first occupied. Learn how the site has changed with each occupation from Native Americans, U.S. military, 1930's CCC camp to now. Located within two valleys, this park offers plenty of recreation: play a nine hole course, hike or ride the trails on horseback, fish and camp. In winter, cross country ski and sledding.

3 Gathering Friends Quilt Shop
101 South Main Street, Bird Island, MN 55310
320-365-4670 • info@gatheringfriendsquiltshop.com
www.gatheringfriendsquiltshop.com
Hours: Mon - Fri 9-5; Sat 9-3

As soon as you walk in you feel welcome in this full service quilt shop. This is not your run of the mill quilt shop, as the owners design and write their own patterns and books. Gathering Friends renovated a 1902 brick building, restoring the original flooring, windows, woodwork and tin ceiling. The shop carries over 3,000 bolts of quality fabric, yarn, unique gifts and garden accessories.

4 Gilfillan Estate Historic Site
28269 State Highway 67, Morgon, MN 56266
507-249-2210
www.redwoodcountyhistoricalsociety.org
Hours: June - Labor Day, Saturday & Sunday 1 - 4:30
Weekday tours by appointment. Admission fee.

The historic Gilfillan Estate and Manor House has been beautifully restored. It tells the story of early successful cattle breeding, farming and the continuing story of philanthropy by the Gilfillan family. Gilfillan Estate is the home of Farm Fest, held during the first week in August.

Green Routes destinations engage customers and visitors through active, personal, and meaningful participation in nature, people, places, history, and/or cultures.

5 Great Plain Designs
18233 County Highway 4, Walnut Grove, MN 56180
507-859-3101, 605-695-9033 • pete@petelandherr.com
www.petelandherr.com
Hours: Vary, call ahead

Combining art and landscapes, Great Plains Designs is blazing a trail in sustainable living. Come see a roman arch style kiln firing up, enjoy walks in restored prairie, buy dishes and stoneware, hand harvested prairie seed, or join in the seed harvesting yourself. Using as many environmentally sound practices as possible, this is a good place to visit for first hand understanding of sustainable living with style.

6 Hollatz Guest House
393 Laser Trail, Redwood Falls, MN 56283
507-641-2999 • tomshar@redred.com
Hours: Call for reservations

Set on seven acres of woods, this scenic family owned guesthouse is the perfect place to rest after a day of hiking at the nearby Alexander Ramsey Park Trail. Guests will learn about the area's best places to visit from the owners who were born in Redwood Falls. Come and relax in the backyard gazebo, take a walk in the woods down to the creek or take a bike ride to downtown Redwood Falls.

Green Routes destinations conserve natural resources by reducing the use of non-renewable resources or using energy efficient appliances.

7 Holmberg Orchard
12697 325th Street, Vesta, MN 56292
507-762-3131 • sindie@redred.com
www.holmbergorchard.com
Hours: September & October, daily 10 AM - 6 PM

Your family is bound to have a memorable time at this amazing orchard, set on 20 acres with 7,000 trees. In the fall you can enjoy hayrides, pumpkin patches, homemade apple pie and a tribute to the old days with a traditional apple butter stir over the fire. Visit an old school house that was saved and restored as the orchard's bargain center. With conservation in mind, the orchard was planted with wind/snowbreaks and green strips to hold moisture and eliminate the need for irrigation.

8 Jeffers Petroglyphs
27160 County Road 2, Comfrey, MN56019
507-628-5591 • jefferspetroglyphs@mnhs.org
www.jefferspetroglyphs.com
Hours: May & Sept: Fri & Sat 10-5, Sun 12-5;
Memorial Day - Labor Day: M-F 10-5, Sat 10-8, Sun 12-5.
Oct - April, by appointment. Admission fee.

Visit Jeffers Petroglyphs to experience one of the oldest continually used sacred sites in the world. You will find ancient carvings in outcroppings of red quartzite dating back 9,000 years ago. The Visitors Center does an excellent job of educating about the site and professional guides give tours of the area. Take walks in the 33 acres of virgin prairie, and 127 acres of restored prairie. There is even a fake bison for practicing the ancient hunting style of atlatl throwing.

9 Lamberton Historical Society
206 2nd Avenue E., Lamberton, MN 56152
507-752-7601
www.rrcnet.org/~lambrton/iron.htm
www.rrcnet.org/~lambrton/blacksmith.htm
Hours: Check website for dates.
Open during September Hot Iron Days.
Other times by appointment.

Visitors to the Lamberton Blacksmith Shop will find a wealth of history and artifacts from days gone by. The artisan craft of blacksmithing was once the cultural center of many farming communities. Each year in September, Hot Iron Day features blacksmithing demonstrations and a live iron pour.

10 Lower Sioux Historic Site
32469 County Road 2, Morton, MN 56270
507-697-6321 • lowersioux@mnhs.org
www.mnhs.org/places/sites/lsa/
www.mnhs.org/places/sites/lsa/images/lsa4.gif
Hours: Memorial Day through Sept 30
Saturday 10-5 Sunday 12-5 Admission fee.

The Lower Sioux Historic Site Museum tells the story of the Dakota people, their struggle to retain their culture and the 1862 US-Dakota War. The museum goes above and beyond with sustainable practices such as using low flow toilets, passive solar heating, maintaining native species, environmental and cultural education. Visit the exhibits, walk the trails, and check out a stone warehouse restored to its original 1861 appearance.

11 Merryweather Gardens
1488 Bunker Avenue, Walnut Grove, MN 56180
507-629-8276 • sruthchild@redred.com
www.merryweathergardens.com
Hours: Seasonal. Call ahead or check website.

A few miles from Walnut Grove, Merryweather Gardens offers an array of organic herbs, vegetables and specialty garlic. The gardens are dedicated to growing nutrition dense food, guaranteed to taste old-fashioned! At this charming farm, you will be greeted by colorful heritage turkeys and chickens. All the buildings on the grounds have been restored, including an old manure pit that now is a lovely water lily garden.

Green Routes destinations use sustainably produced or organically grown products.

12 Minnesota Inventors Hall of Fame
Redwood Area Community Center
901 Cook Street, Redwood Falls, MN56283
halloffame@minnesotainventors.org
www.minnesotainventors.org
www.ci.redwood-falls.mn.us/services_RACC.htm
Hours: Summer: M-F 6AM - 8PM
Winter: M-F 6AM -10 PM, Sat 8AM -8PM, Sun 12- 8PM

What do Post-it Notes, an aircraft autopilot system and biodegradable plastic made from corn all have in common? They were all invented by Minnesotans. Come visit this unique display highlighting a rotational display of MN inventors. Located in the Redwood Falls Community Center, the display is a proud tribute to Minnesotan ingenuity.

13 Redwood County Historical Society
913 W. Bridge, Redwood Falls 56283
507-641-3329
www.redwoodcountyhistoricalsociety.org
Hours: May - October, weekends & holidays.
Weekday tours by appointment. Admission fee

The Redwood County Historical Society is housed in a building converted from its original use as the county poor farm. With 30 rooms dedicated to various aspects of turn of the century life, visitors get a complete glimpse of what it was like to live in Redwood County in the early 20th century.

14 Renville County Historical Society
441 North Park Drive, Morton, MN 56270
507-697-6147 • rchs@redred.com
www.renvillecountyhistory.com
Hours: Summer: Tue - Sat 10-4; Sun 1-4.
Winter: Tue - Fri 1-4 Admission fee.

Renville County Historical Society and Museum is dedicated to preserving the history of Renville County. Among their large collection are freestanding structures such as a pioneer log cabin and two 19th century schoolhouses.

15 St. Aloysius Catholic Church
301 South 10th Street, Olivia, MN 56277
320-523-2030
Hours: Tours available by appointment.

Stop by this historic church to take in the remarkable Italian Romanesque Revival architecture. Often referred to as the "Cathedral on the Prairie", it was built in 1925 by Fr. Henry Pomije who served this parish for 42 years. The walls are decorated in oil canvas paintings by Gonippo Raggi, a well-known artist of the 1940s.

16 Tatanka Bluffs B&B
103 East 2nd Street, Redwood Falls, MN 56283
507-627-1875 • zuidema@newulmtel.net
www.tatankabluffsbandb.com
Hours: Call for reservations

This newly renovated bed & breakfast in the heart of Redwood Falls offers three guest rooms reflecting the history of the region. The works of local artists and authors are displayed throughout. Guests can tour the beautiful back roads and historic sites along this part of the Minnesota River Valley.

Green Routes directs people to places where they can get locally grown food and locally made products as well as participate in a community's natural attractions and amenities.

17 The Calf Fiend Café
220 East 2nd Street, Redwood Falls, MN 56283
507-637-3728
Hours: M-W 6 AM - 2 PM; Thurs 6AM - 11 PM;
Fri & Sat 6 AM - midnight.

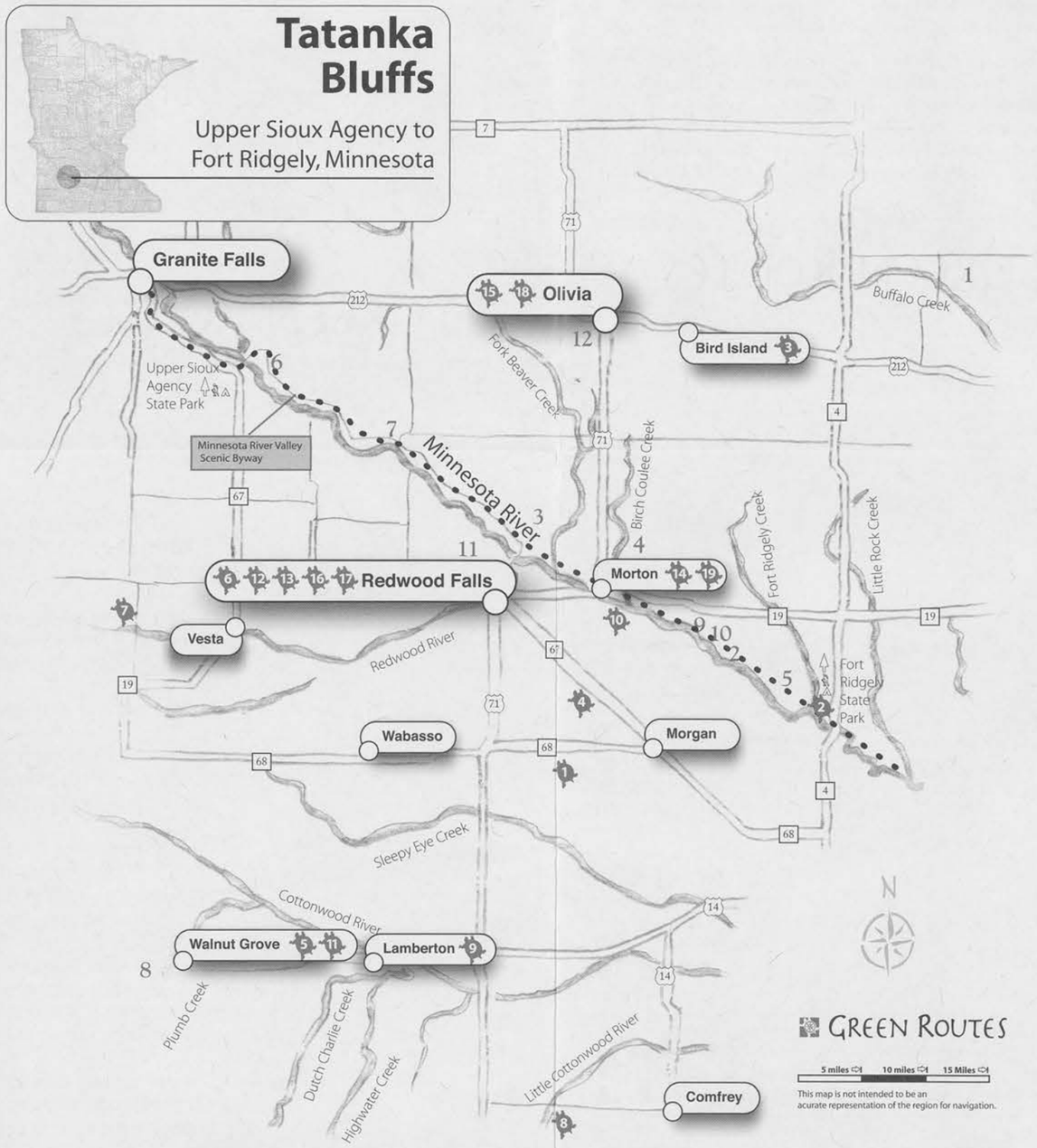
As a community gathering spot, this café serves as the "unofficial" tourist center and provides an inviting space to meet in the center of town. Stop by for a cup of fair trade coffee, a bowl of soup or a sandwich made from local products. Be sure to ask about local area attractions!

18 The Master's Coffee Shop & Bakery
809 East Lincoln Avenue (Hwy 212), Olivia, 56277
masters@mchsi.com
Hours: Mon - Fri 7AM - 4 PM; Sat 8:00AM - 11:00 AM

This charming locally-owned and operated café and bakery features homemade soups & sandwiches, desserts, cheesecakes, lunch specials, soft-serve ice cream, coffee and specialty drinks. Local 4-H youth raise the eggs served at the café and fresh produce comes from the owners' own garden and the local farmers market.

19 The Red Sled
121 West 2nd Street, Morton, MN 56270
507-697-6411
Hours: Mon - Sat 10 AM - 5 PM; Sun 12 - 4PM

This enchanting shop is packed with locally crafted items including pottery, quilts, home decorative items and seasonal gifts. Check out their selection of Birch Coulee Pottery made by a local potter who makes his glazes from local materials.



County Parks

1. Lake Allie Park
   6 Miles Northeast of Buffalo Lake on County Road 24
2. Anderson Lake Park
   Southeast of Franklin just West of the junction of County Road 3 or 5 Miles South of Highway 19
3. Beaver Falls Park
   South of Olivia - Renville County Road 2 or 3 Miles West of Highway 71
4. Birch Coulee Park
   North of Morton along County road 18
5. Mack Lake Park
   Southwest of Fairfax on County Road 5
6. Skalbekken Park
   6 Miles Southwest of Sacred Heart on County Road 10
7. Vicksburg Park
   10 Miles South of Renville on County Road 6
8. Plum Creek County Park
   Walnut Grove

City Parks with Overnight Camping

9. Ballpark
   Franklin - 3 night maximum for camping
10. Boat Landing
    Franklin - 7 night maximum for camping
11. Ramsey Park
    North of Highway 19 on Grove Street - Redwood Falls
12. Memorial Park
    Olivia on US Hwy 212 - 71

State Parks

Fort Ridgely State Park
South of Fairfax

Upper Sioux Agency State Park
8 Miles Southeast of Granite Falls and next to Skalbekken Park

Scenic Byway

Minnesota River Valley Scenic Byway:
www.mnrivervalley.com

Agriculture/Renewable Energy Committee Established

The HRA/EDA established the Agriculture/ Renewable Energy Committee in December of 2006. This committee was established to expand and enhance agriculture & renewable energy projects in Renville County.

Agriculture/Renewable Energy Committee Members
· Blair Anderson, Fairfax
· Barbara Frank, Danube
· Pete Kronlokken, Sacred Heart
· Joe Sullivan, Franklin

With the establishment of this committee, the HRA/EDA and the Agriculture/Renewable Energy Committee have helped sponsor multiple events in Renville County:

- Renewable Energy Conference 2007
- Agricultural/renewable energy bus tour
- A 'Look at Value Added Area Co-ops' seminar
- Large dairy farm informational meeting
- Small Wind Turbine meeting

This committee has completed or are in the process of completing numerous projects:

- Sent survey out to Renville County communities and residents regarding livestock development, ag business, and renewable energy to poll residents on what types of agriculture projects they would like to see happen in Renville County.
- Generated a list of Ag/Renewable Energy ideas for area students to create pod casts with for the "Get Broadband" project.
- Obtained a list of Renville County farmers under the age of 35 to be contacted to see if they need help getting their own operations started.
- Plans to host an Alternative Crop Development Seminar this coming Fall in Renville County.
- Working to compile a report on livestock zoning and variance laws in Renville County compared to other adjoining counties.

Agriculture Facts

According to the 2006 USDA MN Agriculture Statistics, Renville County is ranked #1 in the state of Minnesota for Sweet Corn, Corn for Grain, and Green Peas. Other County rankings include #4 in Dry Edible Beans & Soybeans, and #6 in Sugarbeet production. Along with the crops of which Renville County is a top producer, we cannot forget about the livestock. Renville County is host to 371 registered feedlots. In 2006, Renville County had 14,100 Cattle & Calves on Feed, 2300 breeding Sheep and Lambs, 3000 Dairy Cows, 1500 Beef Cows, and 191,000 Hogs & Pigs.

Major Agriculture Businesses of Renville County

Agraliance
Bird Island Farmers Co-op
Christensen Family LLC
Co-op Country Farmers Elevator & United Mills
Farmers Co-op Elevator
Golden Oval Eggs
Harvest Land Cooperative
Minaqua Fisheries
Minnesota Energy (Ethanol Plant)
Mor-Pork Inc.
Mycogen Seeds
Precision Soya of Minnesota
Remington Hybrid Seed Co.
Renk Seed
Revier Cattle Co.
South Central Grain & Energy
Southern MN Sugar Beet Co-op

Renville County Agriculture

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Renville County HRA/EDA
500 E. DePue Ave.
Olivia, MN 56277
(320) 523-3656
www.renville.com

About Renville County

Renville County is an agricultural county located in west central Minnesota. The county is well known for its agricultural innovations, including crop and animal cooperatives, seed crop breeding and production, and farmers who are willing to experiment with newly developed agricultural technology.

Renville County's present boundaries are within 982.92 square miles. The county is comprised of 27 townships and ten cities; Bird Island, Buffalo Lake, Danube, Fairfax, Franklin, Hector, Morton, Olivia, Renville, and Sacred Heart.

Renville County offers excellent shopping and dining facilities in its ten rural communities within the county, meeting the needs of all its residents. Also, there are four colleges located within 45 minutes of Renville County, providing ample educational opportunities for all.

The 2006 estimated census data indicated that there are 16,531 people living in Renville County. Of these, 29.7% are 17 and under, 51.7% are between the ages of 18 and 64, and 18.6% are 65 years of age or older. Overall, Renville County offers a variety of activities to satisfy everybody.

Renville County - A great place for agriculture, outdoor activities, and a great quality of life.

Alternative Energy

Throughout the past year, the Renville County HRA/EDA has continued to explore alternative energy development here in Renville County. Some of these alternatives include wind energy and biomass production. In February 2007, the Renville County HRA/EDA held a two day Renewable Energy Conference focusing on wind energy production and cellulosic ethanol. Over 200 people from all over the state of Minnesota attended the conference. Two University of MN graduate students prepared feasibility studies of wind energy in Renville County, which have shown that Renville County may be ideal for wind energy production. These reports were shared at the conference and are also posted on the HRA/EDA website, www.renville.com, for the general public to view.

Minnesota has become a national leader in developing wind energy; the fastest growing energy source in the world. Wind power is cleaner and safer than burning fossil fuels and has vast potential in Minnesota. According to the American Wind Energy Association (AWEA), Minnesota ranks fourth in the nation in installed capacity of wind power. Wind energy has proven to be a vital tool for economic development in Minnesota. Landowner revenue, tax revenue, and personal income have all increased because of wind development, which creates quality jobs in rural communities and keeps energy dollars in the state. As wind projects are developed in our county, it is the desire of the Renville County HRA/EDA to see that these investments remain local with the land that the towers sit on, and that the return on investment goes back to the local owners and into our local communities.

August 2007

Buffalo Lake Farm & Flea Market
Saturdays 8:00 -11:00 a.m. starting July 28th
Located in the Buffalo Lake City Park - Hwy 212

Fairfax Farmers Market
Tuesdays 4:00 - 6:00 p.m.; July - September
Located on 1st Street S.E. off Hwy 19 in Fairfax

Feldman's Market
August - October on the Corner of 212 & Main Street in Renville; Call 320-522-0465

Garden Market
Vern & Anita Kardell; Variety of Vegetables
66918 Cty. Rd. 27 Fairfax; Call 507-426-8298

Ron Hanson
Chemical free onions available through Autumn and Winter; Call 320-765-2379 to order

K & C Gardens
Ken & Cathy Balderston; Located 8 miles N. of Olivia
Open M-F 3:00 -8:00 p.m. & Sat. 1:00 - 8:00 p.m.
Call 320-523-2162 to order canning cucumbers and tomatos by 1/2 bushel or bushel

Lundstrum Vegetables
Rural Bird Island; Wide variety of vegetables, jams, and jellies; Free range chickens. Call 320-365-4174

Morton Sidewalk Market
Saturdays 9am-Noon; Downtown Morton by City Hall

Olivia Farmers Market
Thursdays 2:00 - 5:30pm; July - October; City parking lot of 9th Street & Fairview; Call Nancy for more information at 320-523-1350

Renville Farmers Market
Fridays 3-6pm at Water Tower Park in Renville

Norb & Cindy Serbus
Pumpkins, squash, & gourds; Call 320-826-2165
(produce not available until late August)

Wertish Farm
Drug & hormone free chickens and turkeys
Call 320-826-2451 to order

Olivia Golf Club

512 South 6th Street
Olivia, MN 56277
(320) 523-2313
www.oliviagolfclub.com

Course Description:
9-hole Semi-Private Course
Par 36
Year Founded: 1920
Tee Times: Please call in advance

Established in 1928, the Olivia Golf Club is one of the oldest and "best kept secrets" in the state of MN. Our course features bent grass greens & tee boxes, driving range, putting green, and rental carts. The clubhouse has a relaxing atmosphere. Tee times start at 8:00 a.m. daily (please call in advance), with the course closing on Tuesdays at noon for Men's Day and Thursdays until 4:00 p.m. for Ladies Day. For a day of relaxation and fun, come golf at the Olivia Golf Club!

Green Fees:
9 Hole Weekday: $13.00
9 Hole Weekend: $15.00
18 Hole Weekday: $17.00
18 Hole Weekend: $20.00

Cart Fees:
9 Holes: $15.00
18 Holes: $20.00

Located 5 blocks south of the Courthouse off Hwy 212

Stoney Creek Golf Course

21278 820th Avenue
Renville, MN 56284
(320) 329-8400
http://www.ci.renville.mn.us

Course Description:
9-hole Public Course
Par 36
Year Founded: 1999
Tee Times: Please call in advance

Our 9 hole course with putting green and driving range provides an unparalleled challenge, even to the most experienced golfer, with rates that every one can afford! We also offer food and beverages in the club house, along with a beverage cart on the course. The course is open to the public seven days a week with Ladies Night on Tuesdays at 6:00 pm, League Night on Wednesdays at 6:00 pm and Men's Night on Thursdays at 6:00 pm. Come and enjoy yourself with a relaxing day of golf at Stoney Creek!

Green Fees:
9 Hole Weekday: $13.00
9 Hole Weekend: $13.00
18 Hole Weekday: $20.00
18 Hole Weekend: $20.00

Cart Fees:
9 Holes: $13.00
18 Holes: $20.00

Located 2 miles west & 1 mile south of Renville off of US Highway 212

Renville County Golf Courses

Fort Ridgely Golf Course
72158 County Road 30
Fairfax, MN 55332
(507) 426-7840

Mayflower Country Club
Highway 4 South
Fairfax, MN 55332
(507) 426-9964

Oakdale Golf Club
55106 County Road 38
Buffalo Lake, MN 55314
(320) 833-5518

Olivia Golf Club
512 South 6th Street
Olivia, MN 56277
(320) 523-2313

Stoney Creek Golf Course
21278 820th Avenue
Renville, MN 56284
(320) 329-8400

Produced by the Renville County HRA/EDA
www.renville.com
320-523-3656

Fort Ridgely Golf Course

72158 County Road 30
Fairfax, MN 55332
(507) 426-7840
www.dnr.state.mn.us

Course Description:

9-hole Public Course
Par: 35
Year Founded: 1927
No Tee Times Taken - First Come, First Served
Walking Only - No Riding Carts Allowed

Our 9 hole course will be open to the public seven days a week after renovations are complete in the 2008 season. The clubhouse will have soft drinks and candy available via vending maching. There will also be a driving net available for use. Feel free to come and enjoy a day at Fort Ridgely until our golf course reopens. Come ride your horse; play volleyball or softball; fish and camp (drive-in and walk-in sites available), or to learn the history of this once thriving outpost.

Green Fees:

Green fees to be determined....

Located seven miles south of Fairfax on Minnesota Highway #4. Watch for the large brown signs.

Mayflower Country Club

Highway 4 South
Fairfax, MN 55332
(507) 426-9964
mayflocc@centurytel.net

Course Description:

9-hole Public Course
Par: 36
Year Founded: 1967
Tee Times: Please call in advance

Green Fees:

9 Hole Weekday: $12.00
9 Hole Weekend: $17.00
18 Hole Weekday: $18.00
18 Hole Weekend: $23.00

Cart Fees:

South of Fairfax 2 1/2 miles on MN Hwy 4. Turn Right (west) on Co Rd 39 - west 1 1/2 miles on south side of Road

Oakdale Golf Club

55106 County Road 38
Buffalo Lake, MN 55314
(320) 833-5518
www.oakdalegolfclub.com

Course Description:

18-hole Semi-Private Course
Par: 36
Year Founded: 1965
Tee Times: Please call in advance

Rolling hills, mature trees, and expertly maintained grees are only part of the golfing experience offered at the Oakdale Golf Club, an 18 hole championship course located on beautiful Lake Allie, featuring a driving range, practice green, and full service bar & grill. Our course is open to the public seven days a week and is well known as one of the friendliest courses around! Escape to the peacefulness of a rural setting where you can enjoy a day of golf and relaxation at a price everyone can afford!

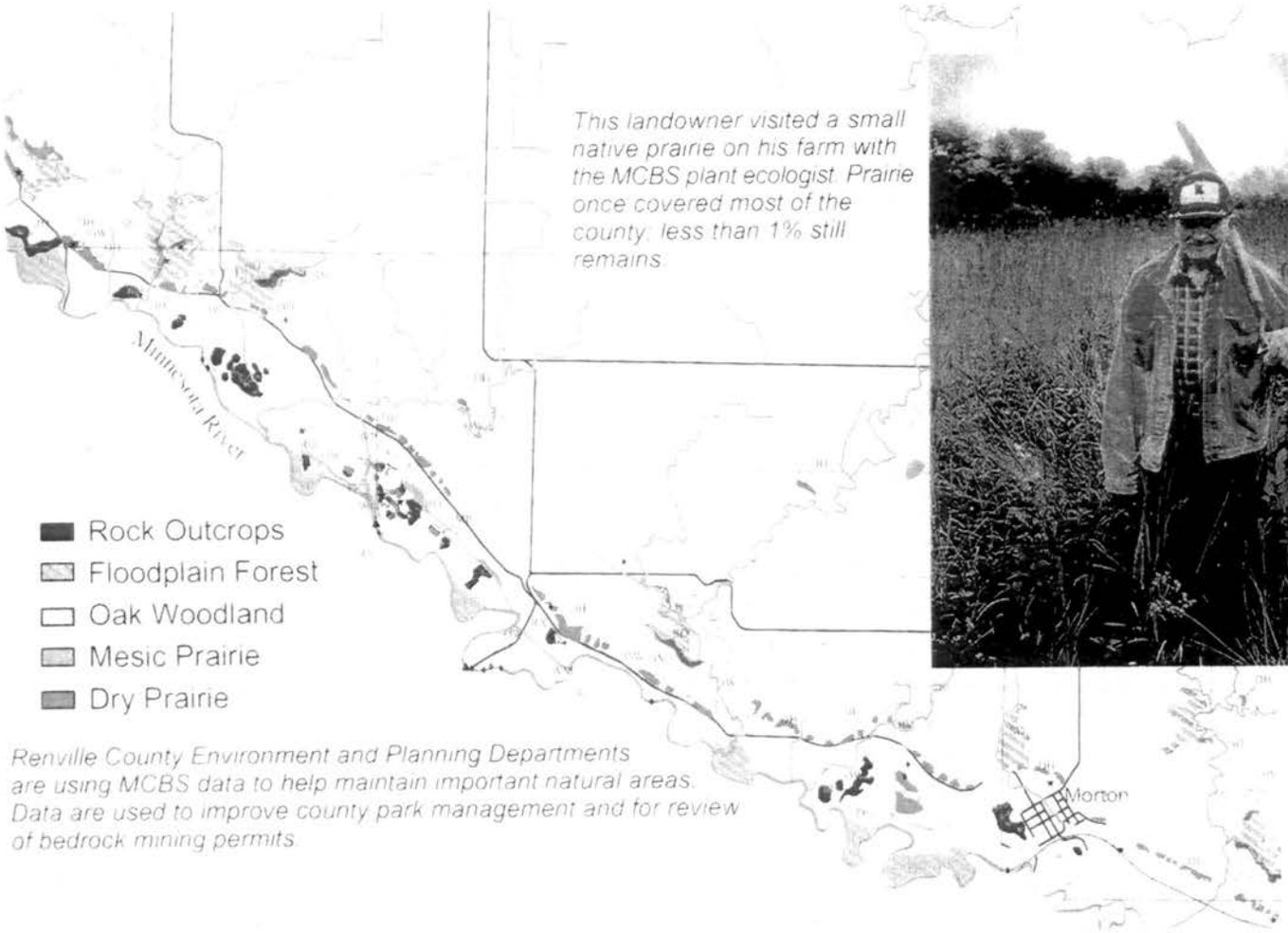
Green Fees:

9 Hole Weekday: $12.00
9 Hole Weekend: $16.00
18 Hole Weekday: $21.00
18 Hole Weekend: $27.00

Cart Fees:

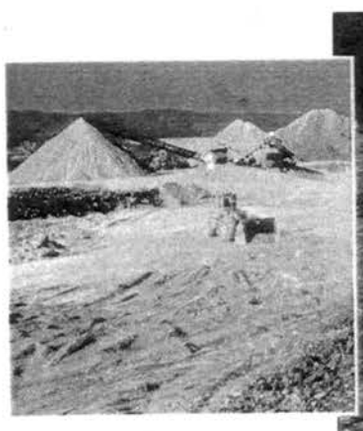
9 Holes (anytime): $8.00
18 Holes (anytime): $12.00

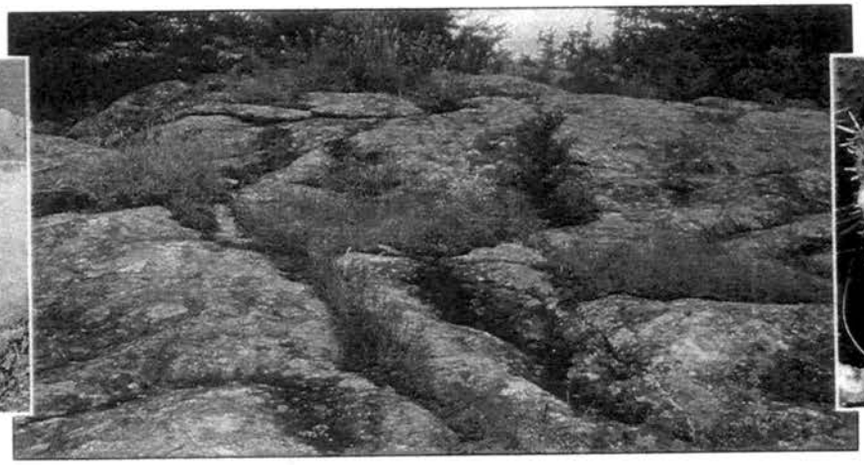
RENVILLE COUNTY



This landowner visited a small native prairie on his farm with the MCBS plant ecologist. Prairie once covered most of the county; less than 1% still remains.

Renville County Environment and Planning Departments are using MCBS data to help maintain important natural areas. Data are used to improve county park management and for review of bedrock mining permits.





The Minnesota River Valley contains most of the remaining native habitats identified by MCBS in the River counties. The rock outcrops of the River corridor are exposures of 3.6 billion year-old bedrock, some of the oldest bedrock found on the surface of the Earth. This distinctive feature provides habitat for the Great Plains prickly pear cactus *(Opuntia macrorhiza)*.

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MINNESOTA RIVER VALLEY

NATIONAL SCENIC BYWAY

Minnesota River Valley

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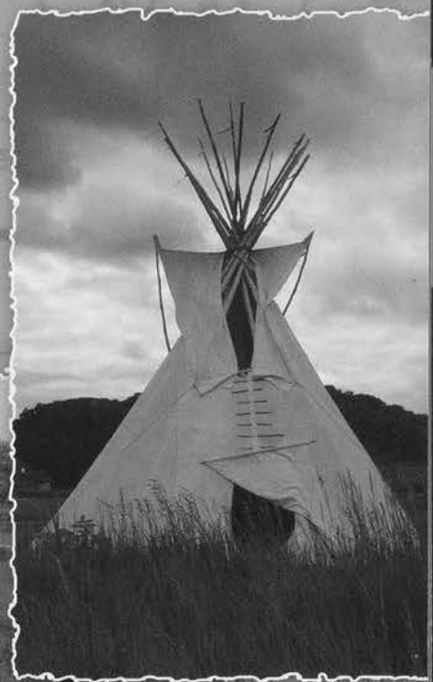

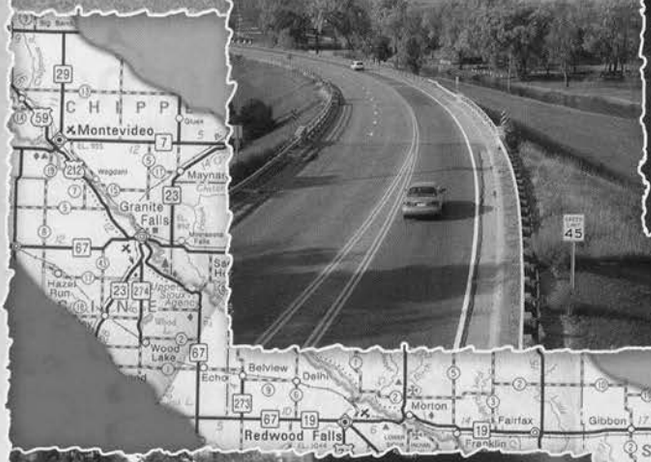

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Along the Byway you will find a wide variety of history, agriculture, and culture.

Located along the Minnesota River, the **Minnesota River Valley National Scenic Byway** is a destination in itself. Although time has brought changes, the river valley remains as beautiful as ever. Hardwood forests, 3.8 billion year old granite outcrops, and lush prairie grasses remain for you to enjoy. State and local parks dot the valley, inviting you to get out-of-doors all year long, while museums and historic sites offer vivid stories of prairie life.

Close your eyes and imagine becoming an explorer for a day. Relax in the tranquility of Big Bluestem prairie grasses. Watch for Dakota skipper butterflies among purple cornflowers. Scan the expansive blue sky for bald eagles or wait quietly at the river's edge to catch a glimpse of a deer at sunset. Too much quiet for you? How about a threshing show with chugging and puffing turn-of-the-century steam engines. A 19th century musket demonstration? Cross-country skiing? Power shopping in unique specialty stores? Take home one of our stories. We've got plenty to share!

FOR MORE BYWAY INFORMATION, VISIT
www.mnrivervalley.com OR CALL **1-888-463-9856**.

Minnesota River Valley
SCENIC BYWAY

CONTACT US:
1-888-463-9856
www.mnrivervalley.com
info@mnrivervalley.com

OR VISIT OUR MAIN INFORMATION CENTER:
New Ulm Area Chamber of Commerce
1 North Minnesota – New Ulm, MN 56073-0384
Fax 507-354-1504

Use this page to request additional information about specific byway destination areas or topics by marking an ✘ in the space. Fill in your mailing information then fax, mail, call or email us your request and we will send you the customized information.

I would like more information on the following:

Destination Areas
- ___ Henderson Area
- ___ Le Sueur Area
- ___ St. Peter Area
- ___ Mankato & North Mankato Area
- ___ New Ulm Area
- ___ Redwood Falls Area
- ___ Renville County Area
- ___ Granite Falls Area
- ___ Montevideo Area
- ___ Ortonville Area

Topics
- ___ Agriculture
- ___ Art & Culture Events
- ___ Biking
- ___ Camping
- ___ Casino
- ___ Festivals & Events
- ___ Golfing
- ___ Museums
- ___ Native American Heritage
- ___ Prairies
- ___ State Parks & Refuges
- ___ Wildlife Watching & Birding

NAME _____

MAILING ADDRESS _____

CITY _____

STATE _____ ZIP CODE _____

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FOR MORE BYWAY INFORMATION, VISIT US ONLINE OR CALL.
www.mnrivervalley.com
1-888-463-9856

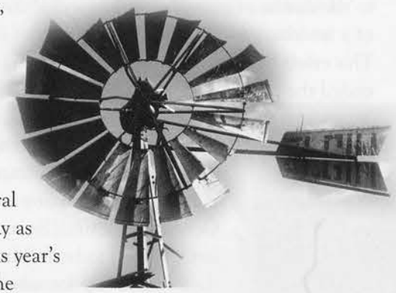
Food for a Nation

The pair of off-white, sweating oxen strained against the heavy wooden yokes as they listened to the sound of their master's voice pushing them to keep them moving forward. C'mup! C'mup! The deep prairie roots fought bravely for their existence, but they were no match for the oxen and plowshare. The average acre of prairie took two full days to reduce to small clumps ready for grain to be planted.

When the immigrant settlers came to this land to make themselves a new life, they brought with them the hopes and dreams of a lifetime. Some purchased land; others claimed land and settled under government programs agreeing to stay for at least ten years and build a home. Many spent years of hard work struggling to make a profit, with weather, insects, or injury finally ending in claim abandonment. Perseverance for a very few actually paid off. Friendships of neighbors made the isolation of homesteads bearable. Sitting around visiting was one of few entertainments, but everyone relished it. Neighbors helping neighbors allowed larger structures to be built. Many quaint home sites can still be seen along the byway.

Eventually, the sod was smoothed and the town sites were established, making store catalog purchases common. The stores and mail order businesses gave these families amenities like store-bought furniture, windows for their homes, and sewing machines and fabric for making clothing.

Fieldwork was eventually eased somewhat by cast iron plowshares and harrowing machines. The first horse drawn combine was used in 1884 for wheat. Joseph Renshaw Brown, founder of Henderson, was one of the first inventors to experiment with the steam engine tractor. The first tractors came into the American market by 1868, but were not generally affordable to the average farmers until well into the 1930's and 1940's. By 1954, the number of tractors out-numbered horses on farms for the first time in history. The Minnesota Machinery Museum in Hanley Falls has buildings packed full of these now outdated pieces of history. The production of products the average farm supplied increased immensely, and by 1960 a single farmer provided 26 people with food. The ease and automation of planting, fertilizing, weed control, and harvest have come with a price tag. The ability to work many more acres than in the past has increased the average farm size from 80-acre homesteads in the 1850's to farms that encompass a square mile today. This increase means less families farming and a change in how the farm site buildings are designed and built. Large round bales, machine sheds, and outside storage serve the purpose and reduce the need to maintain the traditional barns. The red barns along the Byway are becoming obsolete. See one of the remaining red barns at the Swensson Farm Museum near Montevideo. The need to preserve the valuable black topsoil encourages less tillage and can help to keep the waterways cleaner. Wise testing of the soil tells the farmers of today where and how much of specific types of fertilizer to apply, saving dollars and time. Travel the Byway in the fall and develop an appreciation for the agricultural managers of today as they combine this year's harvest, and at the same time enjoy the fall colors. Also stop and appreciate the traditional style buildings, learn more about what crops are grown most commonly along the Byway, and think back to the times when all of the land was first broken to feed a nation of people. This nation was built on the backs of pioneers like those who settled this land. If you take the time, you can still see the traces of their lives in many places along this beautiful valley ◆



Byway Bits

Prairies and Wetlands, Hardwoods and...Cactus?!

Landscape preserves along the Byway Corridor provide opportunities to study or observe rare and important plant and animal species, as well as historic landscapes.

Natural sites include native cactus at **Big Stone National Wildlife Refuge**, the country's largest pothole lake at **Swan Lake** and original tall-grasses prairie at the western end of the Byway. The **Minnesota River Valley** is home to some of the richest farmland in the world, mainly due to the decomposition of the tall-grasses. Slow down and reflect on how your food came to your table by watching the simple beauty of farmers working their fields in spring and fall. It's sublimely awesome!

The modern landscape benefits from enlightened programs to restore the river banks and marginal farmland by planting native vegetation, which will benefit not only the river quality, but wildlife, too. ◆

Farms & Red Barns

What does the Jolly Green Giant, a millionaire's estate and a 100 year-old "Century Farms" have in common? They're all here along the Byway!

Near **Redwood Falls** is the **Gilfillan Estate**, containing a tourable mansion, large farm museum, and the home to **Farmfest** - a huge agriculture festival every August.

Minnesota's Machinery Museum in **Hanley Falls** hosts Minnesota's largest collection of farm equipment and exhibits. Check out the old time **threshing show** every August!

East of **Montevideo** is the **Olof Swensson Farm Museum** built in 1901. You can see the large barn, 22-room home, and welcoming grounds.

Le Sueur is home to the **Green Giant Company**, the local museum and town markers tell the whole story! Ho, Ho, Ho!

The Byway is home to a variety of agricultural businesses. Corn-based ethanol gasoline, agricultural seed production, food processing and food production with both large scale and small local growers of all sorts exist here. Watch for local farmers markets or local stores showcasing "Minnesota Grown" local foods for the best selection! Or preview local sources at www.minnesotagrown.com. ◆

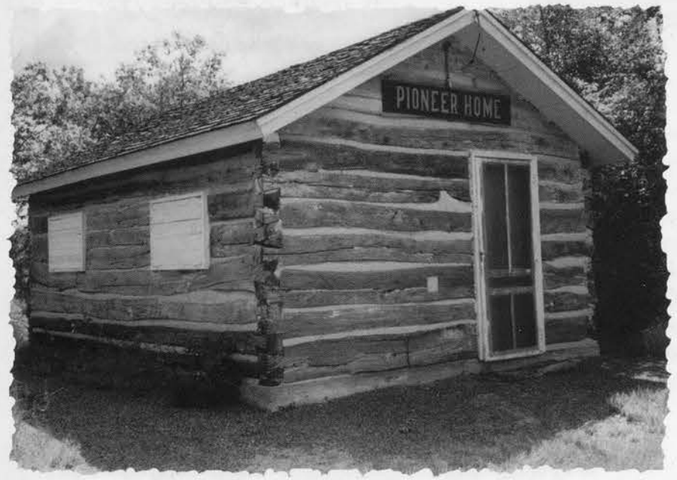
"The average acre of prairie took two full days to reduce to small clumps ready for grain to be planted."

Struggles for a Home

A young boy sat piling stones building a low wall, while his mom worked nearby tediously cutting up large chunks of freshly killed bison occidentalis. One of the men had been hurt deeply as his hunting group bravely approached the huge beasts with just spears in hand and rock outcroppings to hide behind. Life was hard for the Paleo-Indians.

A small, stone wall was found by archaeologists 9,000 years later, nearby fragile remains of bison skeletons. Chop marks on the masses of bones, a discarded stone scraper, and fire-cracked rocks told the story of what happened at this site. For thousands of years before today, people lived along this generous river valley. They hunted, fished, and gathered what they needed to exist. There is documented evidence of habitation over 8,000 years old at Browns Valley with the Browns Valley Man, and near Granite Falls at the Peterson Bison Kill Site. The original inhabitants progressively changed with new materials they found and traded. New ways of hunting were established with the addition of horses, tools, and knowledge. Seeds traded with other bands brought with them new tastes and ways to ease the workload. Eventually came the European traders and a complete change in some of the peoples' lives.

Soon the bison were gone and a once proud People had to change their lifestyles even more in order to feed their children. No more did the government leaders of the United States want the People to live off the ever moving, ever dwindling bison herds. Treaties promised amenities; promises that were never fully kept. Frustration consumed the People and in the late summer of 1862 while the Civil War was still being fought, a terrible conflict broke out along the valley. Both peaceful Dakota People and innocent immigrant settlers were caught in the middle of the strife, leading to the deaths of over 500 settlers and Dakotas. The actions of a few changed the future of a nation of Dakota People. This effort to take back what was originally their homeland ended the treaty's broken promises. The vast majority of the Dakotas, peaceful or not, were exiled from this land, ending the struggle to keep their homeland. The tragic event is now named the United States/Dakota Conflict of 1862. The remainder of the land, known today as Minnesota, was then opened up for sale and settlement. Sites honoring and remembering those six weeks of time in Minnesota's history are scattered all along the valley including the Lower Sioux Agency Historic Site and the Schwandt Memorial.



Eventually, small log cabins like the Rudi Memorial or sod homes dotted the landscape. Usually the only store bought item in the homes was the stove on which they cooked and heated the tiny dwellings. The floors were hard packed dirt. Men toiled in the fields for long, drawn-out days to break the thick prairie sod, plant grain seed and tend their meager livestock. Many didn't make it when their crops failed. They took work where they could. Even during the times of strife, their faith was strong; worship was held in each other's homes until churches and schools could be built. The people of the prairie were like the land they loved, strong and resilient.

We can only hope that the boy who built the stone wall lived a long life, for parts of the story are gone with the winds that blow steadily across the land. Gone are many of the stories of the immigrant settlers who worked so hard to make a better life for themselves and their families.

Remember the stories of the Dakota families who were torn apart by war, separation, and exile, and lost their way of life, their burial grounds, and their homeland. Respect all of their memories as you travel the Byway and learn the stories of those who came before you ◆

"The people of the prairie were like the land they loved, strong and resilient."

Byway Bits

Festivals

With 287 miles worth of towns, there's bound to be a festival for your taste or season. Here is just a sampling of some events: **Sauerkraut Days** (Henderson), **Rock Bend Folk Festival** (St. Peter), **Rib Fest** (Mankato), **Bavarian Blast** (New Ulm), **Farmfest** (Redwood Falls), **Fiesta Days** (Montevideo), **Applefest** (Appleton), **Corn Fest** (Ortonville) and the **Meander Upper Minnesota River Valley Art Crawl**.

As you can see, a wide range of interests and activities await you in the **Minnesota River Valley!** ◆

Golfing

There are more than 25 golf courses along the Byway with a wide variety of playing surfaces & layouts, many with beautiful bluff & valley views!

From the sandy greens at Ft. **Ridgely**, to the championship courses near **Redwood Falls** and many municipal courses on the prairie and in the valley, there is a course nearby for all skill and interest levels. ◆

Hunting & Fishing

Hunting in the valley begins in the fall with over 150,000 geese at the **Lac qui Parle Wildlife Management Area**. Deer, duck, pheasant, and turkey are numerous, and trapping muskrat, mink, fox, raccoon, and beaver is also viable. Bow and black powder hunting have grown recently with outfitters able to supply your needs along the Minnesota River Valley Byway.

Ortonville's Big Stone Lake is famous for national fishing contests, but all along the river and its tributaries walleye, largemouth bass, crappies, northern pike, perch, blue gill, and fighting catfish abound. Don't forget about ice fishing in the winter! ◆

Birding

Eagles--everyone seems to be interested in these majestic creatures and the river valley abounds with them! Hot spots include the **Lac qui Parle WMA**, and areas around **Granite Falls**, **Montevideo**, and **Nicollet**. Watch the skies or trees along the river or on ice near open water in spring, and you're sure to see some!

The **Minnesota River Valley Birding Trail** is almost entirely within the Scenic Byway and there have been sightings of nearly 350 species within the river's watershed! With many refuges, wildlife management areas, scientific and natural areas, parks and other specified lands, the habitat is healthy and widespread. Check **www.birdingtrail.org** for great details! ◆

A River's Legacy

Thirteen thousand years ago, glacial melt water from Lake Agassiz burst through a natural earthen berm and over the continental divide. This phenomenon created a huge torrent of water that carved the Minnesota River Valley as we see it today. There are places along the valley that the scouring force of this tremendous ancient river clawed the earth so deeply that 3.8 billion year old granite bedrock was exposed. These outcrops are scattered along the valley and now protect some very unique plant and animal communities. The Glacial River Warren was not the first

to flow this path, but the sheer volume of this ancient river carved a footprint upon this land that is recognizable from satellite images. With this landmark on the face of the earth, some still debate the true headwaters to the Minnesota River. The outlet of Big Stone Lake or a small stream known as the Little Minnesota that flows steadily from a place named Sici Hollow, both silently claiming the right to be the beginning of the proud Minnesota River. Now a slow and peaceful river remains. The river valley reaches a mile wide in places and stretches from Browns Valley to the river's confluence with the Mississippi River at Fort Snelling. Search the river of stories for your own experiences and memories.

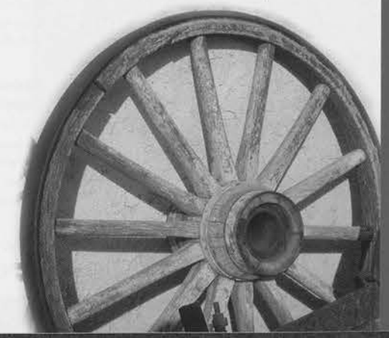
Along its winding path you will find remnants of prairie, the pre-settlement vegetation. While most speak of any open grassland area as prairie, once you learn what exists in a true prairie, you will never mistake it again. Those traveling the Byway can expect unique opportunities and experiences. Take the time to listen for the call of the red tailed hawk deftly hunting for its sustenance, or to retreat to a quiet grassy place and lie down on your back facing the brightness of the emerald blue sky while wisps of clouds float overhead. Relax and allow the chipping sounds of the resident bobolink to settle into your memory. Breathe deeply and inhale the fragrance of the carpet of lavender, shaggy blooms of the native blazing stars, or the intense scent of the common milkweed, much like the lilac. Some of the native grasses grow so tall you could get lost in an expanse of it. Become mesmerized by the waves of grass rippling in the breeze. Study the scattered, gnarly, burr oaks and their individual characteristics, as most of these majestic oaks have lived here for well over a hundred years. Respect the voices that come to you as time waifs away; they may be voices from the past.

People have lived here for thousands of years. Everything the original people had was a part of the land, and they respected it. The original inhabitants used various plants for medicine, nourishment, tools, and shelter. They also deftly hunted the bison. The thundering of the thousands of heavy hooves with the billowing dust clouds from the herds are now just records in history books. The great bison herds, along with our native prairie ecosystem, are almost gone. The prairie was plowed under to grow crops for a growing nation with less than one percent of the prairie yet to be enjoyed.

Whether at an early cemetery, along a railroad grade, or in the six state parks along the Byway, there are still places to rest and immerse yourself in what was here less than 200 years ago. Only occasional sounds of highway noise or a plane flying overhead may disrupt your solitude. These are the sounds of the development threats that challenge the remaining prairie today. So respect the nodding, tiny birds-foot violet and the tough, pale pasque flower, as they have existed here for many years and are a fragment of what once was. Become familiar with this proud river, its land, and especially its people, as they are as resilient as the prairie ◆

"History is a watercourse.
A river in the mind.
A precarious pattern we make
from the flow of time,
as we try to write our names
on the water."

--Lyall Watson



Minnesota River Valley BYWAY BITS

Canoeing, Kayaking and Hiking

The rivers along the byway provide a wide range of experiences for the water enthusiast. The **Minnesota River**, generally slow and winding, provides excellent game fishing including **walleye**, **northern**, **channel** and **flathead catfish**. There are smaller tributaries of the Minnesota that give something to come back for to the action-minded folks. Rock rapids, white water and fine fishing all rolled into the **Yellow Medicine River** and **Hawk Creek**, which some claim are two of the best white water rivers in the state. If that sounds too ambitious for you, try your luck on the **Chippewa** or the **Pomme de Terre Rivers**, as they are known for their wildlife viewing and gentle waters.

Prime spots for hiking are located in the **six state parks** and many other parks along the byway. A wide variety of hiking awaits you with forested, prairie and riparian ecosystems. Given the depth of the valley in many places, trail opportunities can challenge the serious hiker, or just be a walk in the park! Bring along a good bird book or if hiking the prairie, choose a good tall-grass prairie plant book. Bring along friends or family to make this trip a memorable one. Don't forget the camera! ◆

Geology, Mining and The Continental Divide

The oldest exposed rock in the world! That's what you'll find near **Granite Falls**, but there are several other places along the Byway that will excite the geologist in you.

The draining of **Glacial Lake Aggasiz** from west central Minnesota after the last ice age shaped the river valley. There is still evidence of those forces for the sharp eye.

The old town of **Ottawa** is ripe with limestone buildings from a local quarry, including a church, town hall, house, and barn.

There are still opportunities to watch **mining for aggregate gravel** taking place at various sites along the Byway, especially near **St. Peter**, **New Ulm**, **Renville**, **Granite Falls**, and **Ortonville**.

Near the **Minnesota/South Dakota** border is the **Continental Divide**, which separates water flowing south to the **Gulf of Mexico** and water flowing north to **Hudson Bay**. A sign at **Browns Valley** explains this phenomenon. ◆

FOR MORE BYWAY INFORMATION, **www.mnrivervalley.com** OR 1-888-463-9856.

Byway Guide Directory

ACCOMMODATIONS

Holiday Inn New Ulm. **507-359-2941**

Microtel Inns & Suites. **507-354-9800**
424 20th S St - New Ulm, MN 56073. **800-771-7171**
www.microtelinn.com
63 rooms, 25 suites, indoor pool & spa. Home of the FREE wireless high speed Internet, long distance & local calls. 40-person capacity meeting room.

The Morton Inn Morton **507-697-6205**

Prairie's Edge Casino Resort . . . **320-564-2121**
5616 Prairie's Edge Lane **866-293-2121**
Granite Falls, MN 56241 / deb@prairiesedgecasino.com
www.prairiesedgecasino.com
MN's newest casino offers slot machines, blackjack, a luxurious hotel, dining, entertainment, and a convention center. Coming this summer, a new 55-unit RV park.

Redwood Valley Lodge **507-644-5700**
Redwood Falls

Sunrise Motel Ortonville **800-337-6106**

ATTRACTIONS

Fieldstone Vineyards Morgan . . **507-249-WINE**

Historic Gilfillan Farm Estate . . **507-249-3451**
Redwood Falls

Le Sueur Museum **507-665-2050**
709 North 2nd Street - Le Sueur, MN 56058
Green Giant Genealogy Interpretive Center, one and only veterinary clinic, drug store, and much more.

Redwood County Historical Museum Redwood Falls **507-644-3329**

BED & BREAKFAST

Deutsche Strasse Bed & Breakfast. **866-226-9856**
404 S Germain St - New Ulm, MN 56073
www.deutschestrasse.com
5 rooms/5 private baths. Four course breakfast. In Historic district, 4 blocks from downtown. Wireless Internet.

CASINOS

Jackpot Junction Casino Hotel. **800-WIN-CASH**
PO Box 420 - Morton, MN 56270
www.jackpotjunction.com
Slots, table games, bingo, entertainment, restaurants, bars, 2 hotels, RV Park, convention center, golf course, childcare.

Prairie's Edge Casino Resort . . . **320-564-2121**
5616 Prairie's Edge Lane **866-293-2121**
Granite Falls, MN 56241 / deb@prairiesedgecasino.com
www.prairiesedgecasino.com
MN's newest casino offers slot machines, blackjack, a luxurious hotel, dining, entertainment, and a convention center. Coming this summer, a new 55-unit RV park.

CHAMBERS / CVB'S

Appleton Area Chamber **320-289-1527**
PO Box 98 - Appleton, MN 56208
appletonmn@fedtel.net / www.appletonmn.com
Close to Lac qui Parle State Park/Refuge/ MN River, ATV Park, Chippewa Prairie Preserve!

Big Stone Lake Area Chamber of Commerce **320-839-3284**
987 US Hwy 12 - Ortonville, MN 56278 **800-568-5722**
chamber@bigstonelake.com / www.bigstonelake.com
"Wild" about fishing, hunting, golf, birding? Visit unique Big Stone Lake. Call for FREE map.

Granite Falls Convention & Visitors Bureau. . **320-564-4039**
646 Prontice Street - Granite Falls, MN 56241
gfchamber@mvtvwireless.com / www.granitefallseda.org
Come visit Granite Falls, a beautiful River Valley Town.

Henderson Chamber of Commerce **507-248-3234**
PO Box 216 - Henderson, MN 56044
www.hendersonmn.com
One of Minnesota's oldest communities. Nestled in the "big woods" along the Minnesota River Valley. Historic Main Street features museums, antique shopping and unique shops, and old fashioned soda fountain and one of the state's finest B & B's.

Montevideo Area Chamber of Commerce & CVB . **320-269-3527**
110 N First St - Montevideo, MN 56265 **800-269-5527**
generalinfo@montechamber.com
www.montechamber.com
Parks, rivers, unique shops, antiques, and historic depot & village. 2004 All America City.

New Ulm CVB **507-233-4300**
PO Box 862 - New Ulm, MN 56073. . **888-463-9856**
nuchamber@newulmtel.net / www.newulm.com
Discover Germany in Minnesota in this charming town with festivals, super shopping & ethnic food.

Redwood Area Chamber & Tourism **507-637-2828**
200 South Mill Street - PO Box 21 . . . **800-657-7070**
Redwood Falls, MN 56283
betha@redwoodfalls.org / www.redwoodfalls.org
Escape to Redwood Falls...'The Scenic City'. Home of Alexander Ramsey Park - Minnesota's "Little Yellowstone"

Renville County Housing & Economic Development **320-523-3656**
500 E Depue Ave - Olivia, MN 56277
chris_h@co.renville.mn.us / www.renville.com
Restaurants, lodging, wild life, antique stores, parks, and museums, only 100 miles west of Minneapolis.

Sleepy Eye Convention & Visitors Bureau Sleepy Eye **800-290-0588**

St. Peter Tourism & Visitors Bureau **507-934-3400**
101 S Front St - St. Peter, MN 56082 . **800-473-3404**
spchamb@hickorytech.net / www.tourism.st-peter.mn.us
Welcome to historic Saint Peter - Home of unique attractions including Saint Peter's Pearly Gates.

Western Minnesota Prairie Waters CVB. **888-888-5432**
323 West Schlieman Ave - Appleton, MN 56208
info@prairiewaters.com / www.prairiewaters.com
Come to where the Prairie meets the River... Surrounding the northern portion of the Minnesota River Valley, enjoy outdoor adventures, wildlife, state parks, national wildlife refuge, historic sites, festivals and much more! Experience Life in the Relaxed Lane..

GOLF COURSE

Dacotah Ridge Golf Club **800-WIN-CASH**
PO Box 420 - Morton, MN 56270
www.dacotahridge.com
Designed by architect Rees Jones, 18-hole championship golf course. Nationally recognized by Golf magazine.

HERITAGE SITE

Historic Chippewa City and Chippewa County Historical Society. **320-269-7636**
151 Pioneer Dr PO Box 363 - Montevideo, MN 56265
cchs@maxminn.com
Late 1800's village, 24 buildings including log cabins and business district surrounded by wooden boardwalks.

RV PARK

Lakeshore Park RV Park **320-839-3701**
39445 Lake Shore RV Park Road **800-936-7386**
Ortonville, MN 56278
lakeshorerv@watco.midco.net
Newly expanded outdoor pool, cabins, 6 campsites, boatlift renting, and 18-hole mini-golf on Big Stone Lake.

SHOPPING / ANTIQUING

Ron's Hallmark Redwood Falls. . . . **507-637-8535**

FOR MORE BYWAY INFORMATION,
VISIT **www.mnrivervalley.com** OR CALL **1-888-463-9856.**

Byway Information Centers

Big Stone Lake Area
Chamber of Commerce
987 US Hwy 12
Ortonville, MN 56278-1406
(800) 568-5722

Ortonville

www.bigstonelake.com

Montevideo Area
Chamber of Commerce & CVB
110 N. 1st St.
Montevideo, MN 56265-1402
(800) 269-5527

Montevideo

www.montechamber.com

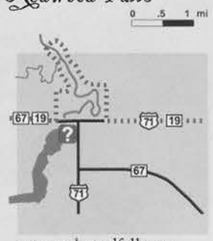
Granite Falls
Chamber of Commerce & CVB
646 Prentice St.
Granite Falls, MN 56241-1505
(320) 564-4039

Granite Falls

www.granitefallsmn.org

Redwood Area
Chamber & Tourism
200 S. Mill St.
Redwood Falls, MN 56283
(800) 657-7070

Redwood Falls



www.redwoodfalls.org

New Ulm
Chamber of Commerce
1 N. Minnesota St.
New Ulm, MN 56073-1727
(888) 463-9856

New Ulm

www.newulm.com

Greater Mankato CVB
122 S. River Front Drive
PO Box 999
Mankato, MN 56002
(800) 657-4733

Mankato and North Mankato

www.greatermankato.com

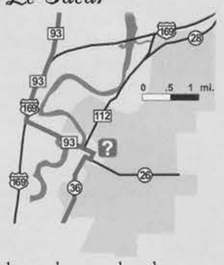
St. Peter Tourism
and Visitors Bureau
101 S. Front St.
St. Peter, MN 56082-2500
(800) 473-3404

St. Peter

www.tourism.st-peter.mn.us

Le Sueur Area
Chamber of Commerce
500 N. Main St.
Le Sueur, MN 56058-5500
(507) 665-2501

Le Sueur



home.lesueurchamber.org

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Your Place to Stay on the Prairie
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| Historic Rail Yard & Depot | Artisans & Gift Shops |
1-800-269-5527 | www.montechamber.com
generalinfo@montechamber.com

Your road to memories...

The Minnesota River Valley National Scenic Byway

www.mnrivervalley.com

FOR MORE BYWAY INFORMATION, VISIT www.mnrivervalley.com OR CALL 1-888-463-9856.

AMERICA'S BYWAYS

SCENIC BYWAY MINNESOTA RIVER VALLEY

Minnesota River Valley Scenic Byway Paved Surface
Minnesota River Valley Scenic Byway Gravel Surface
Alternate Route Paved Surface
Alternate Route Gravel Surface
Minnesota River
Interstates
U.S. Highways
State Highways
County Roads
Byway Information

Scale 0 5 10 20 mi.

Visit www.mnriveryvalley.com for more information.

Venture into the Valley!

Here are more places to see and things to do.

- Golf Courses
- River Access Points
- Recreational Trails
- Casinos
- Farmers' Markets
- Antique Stores & Specialty Shops
- Festivals and Events
- Fishing
- Hunting
- Wildlife Viewing
- Whitewater Canoeing
- Local museums
- Historic Sites

DAVID LARSON, MN/DOT

56 miles from Worthington to Sioux Falls, SD

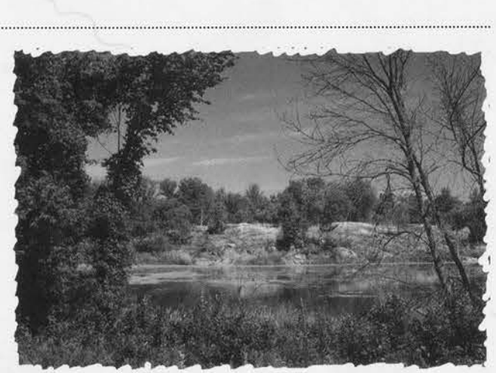
Browns Valley, Beardsley, Ortonville, Big Stone City, Odessa, Correll, Appleton, Louisburg, Milan, Madison, Watson, Montevideo, Dawson, Wegdahl, Granite Falls, Sacred Heart, Upper Sioux Community, Hanley Falls, Wood Lake, Echo, Belview, Delhi, Morton, Redwood Falls, Lower Sioux Community, Marshall, Canby, Benson, Willmar, Olivia, Franklin, Fairfax, Morgan, Sleepy Eye, New Ulm, Courtland, Nicollet, Cambria, Judson, North Mankato, Mankato, Kasota, St.Peter, LeSueur, Norseland, Ottawa, Henderson, Gaylord, Glencoe, Belle Plaine, Blakeley, Minneapolis, St. Paul, Faribault, Owatonna, Albert Lea, Fairmont, Blue Earth, Jackson, Worthington

Discovery Sites

The list of discovery sites along the Byway are listed in order from west to east along the Minnesota River Valley. Many of the sites are seasonal and variable and may charge an admission fee.
More discovery sites can be found at www.mnrivervalley.com.

Samuel Jerome Brown Memorial Park

West Broadway Avenue in Browns Valley.
Samuel Jerome Brown was known as the "Paul Revere" of the northwestern frontier, for his noble and kindhearted character. This memorial has a restored log cabin built by Samuel's father, Major Joseph R. Brown, which exhibits many artifacts of this early pioneer's life. The cabin served as a trading post, stage line stop, tavern and inn.
(320-695-2608 or 2110)



Big Stone National Wildlife Refuge

One mile southeast of Ortonville, off Highway 7/75.
The Big Stone National Wildlife Refuge consists of 10,795 acres of marsh and open water created by the three-mile dam across the Minnesota River. The refuge offers a four mile self-guided auto tour along which you will experience western prairie, mixed hardwoods, and wetlands with over 230 different species of birds living there. A foot trail provides a close-up view of prairie plants, meandering rivers and wildlife. The 100 acres of granite rock outcrops support unusual species of cactus and other plants and provide an excellent view of the refuge.
(320-273-2191)

Chippewa Prairie Preserve

From the junction of Hwy 40 and Lac qui Parle County Rd 33, cross Lac qui Parle Lake on Hwy 40 and turn left onto Chippewa Cty Rd 30. Go 3 miles, turn left onto County Line Rd and go 1/2 mile. Chippewa Prairie's 1,102 acres represent a small remnant of the once vast northern tall grass prairie ecosystem. For hundreds of years, the area was home to the Dakota Indians who camped along the river, harvesting wild plants and following the vast herds of buffalo, elk, white-tailed deer, and migrating waterfowl. Settlers began arriving but found the boulder-strewn terraces and steep ravines too difficult to plow. Here the prairie continued to bloom, interrupted mainly by grazing livestock and seasonal mowing.

Lac qui Parle Wildlife Management Area and Refuge

Located on the lower end of Lac qui Parle Lake between Watson and Milan. Canada geese use Lac qui Parle Wildlife Management Area as a stopover during fall migration. Fall is the best time to see the largest concentration of Canada geese. Flocks of up to 100,000 can be seen during peak migration in late October. Bald eagles can also be seen nesting on an island sanctuary. Located adjacent to the newly renovated Lac qui Parle State Park.

Lac qui Parle Mission State Historic Site

From Watson, one mile northwest on Highway 7, turn left on County Road 13, go 2.2 miles, turn right on County Road 32 and go one mile, on left side of road. Interpretive sign marks the location of Joseph Renville's fur trading post established in 1826 at a Wahpeton Dakota village on the Lac qui Parle Lake shore. Renville invited missionaries to establish the Lac qui Parle Mission near his post in 1835, and a trail with interpretive signs connects the two sites. The Chippewa County Historical Society administers this Minnesota Historical Society site.

Historic Chippewa City

Located at 151 Pioneer Drive, Junction of Highway 59/7, Montevideo.
A unique 23 building, turn of the century village. Stroll the boardwalks as you reminisce of times gone by. Visit the Millinery Shop, Law Office, School House, and our authentic log cabins.
A 1915 Seagraves Pumper and a 1914 Dodge hearse are also on display.
(320-269-7636)

Olof Swensson Farm Museum

From Montevideo go six miles east on Highway 7, turn right and go five miles south on County Road 6, turn left and go 1/4 mile on County Road 15.
The Olof Swensson Farm Museum contains a 22-room house, timber-framed barn, family burial cemetery, and remains of a grist mill. Constructed in 1901, the house contains original furnishings from this unique Norwegian/Swedish family. Listed in the National Register of Historic Places.
(320-269-7636)

Minnesota's Machinery Museum

Located 1 and 1/2 blocks west of Highway 23, Hanley Falls. Five large buildings contain a marvelous collection of antique tractors, gas engines, implements, and tools in mint condition. Many fond memories will surface as you stroll through the farm home rooms and general store. New in 1996 is a building to display vintage automobiles. Plan an hour and a half to experience rural Minnesota's finest look at yesterday and today's agriculture and transportation.
(507-768-3522)

Upper Sioux Agency State Park

Eight miles southeast of Granite Falls on Highway 67.
This 1,280 acre park was named for the historic site within its boundaries. The Upper Sioux Agency (or Yellow Medicine Agency) was established by the federal government in 1854 to be a center for instructing the Dakota people in farming methods. The park offers three campgrounds, 18 miles of trails, two picnic areas, river fishing, and two rental tipis. It is listed in the National Register of Historic Places.
(320-564-4777, 800-766-6000, www.dnr.state.mn.us)

Joseph R. Brown State Wayside

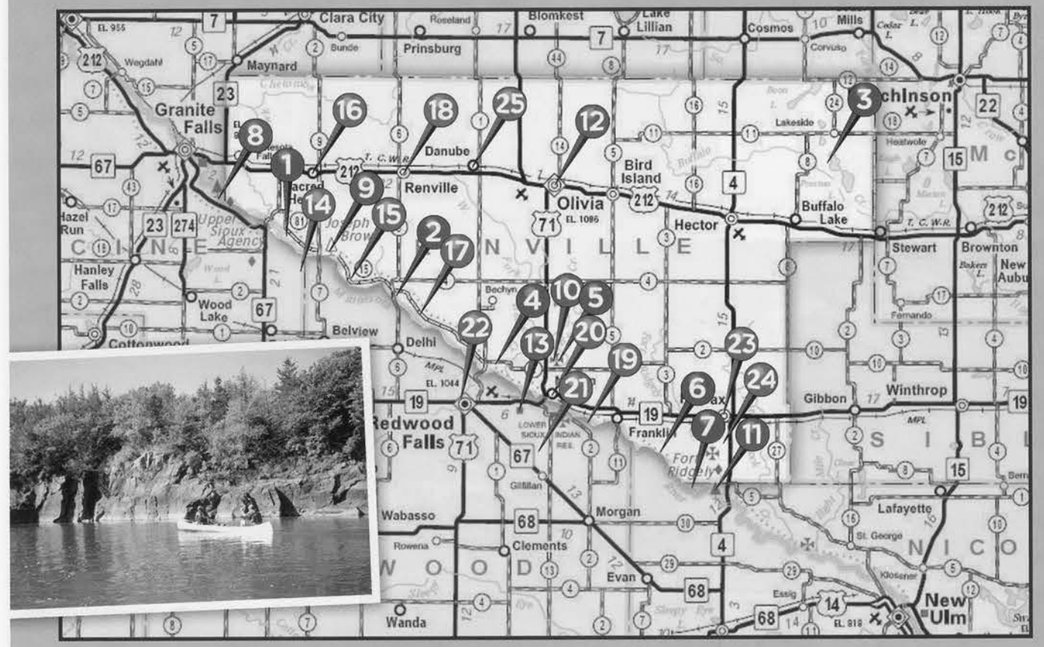
Located on Renville County Road 81, south of Sacred Heart.
The Joseph R. Brown State Wayside Rest displays the granite ruins of Brown's home from 1862. Destroyed during the U.S./Dakota Conflict of 1862, the three-story home was a mansion compared to normal pioneer homes. Brown's family was spared because of his wife Susan's Native American heritage. Brown was a politician, inventor, publisher, and Indian Agent.
(320-564-4777)

Lower Sioux Agency State Historic Site

Located on Redwood Co. Hwy #2, south of Morton. In 1853 the U.S. Government established the Agency to administer treaty obligations with the Dakota people living on reservations along the Minnesota River. Explore the history and culture of the Dakota, learn how government employees and missionaries sought to change their traditional way of life at the agency, and discover the roots of the U.S./Dakota Conflict of 1862 in the visitor center exhibit. Outdoors, investigate the original 1861 agency warehouse and three miles of trails with interpretive signs telling more of the agency's story. Administered by the Minnesota Historical Society.
(507-697-6321, www.mnhs.org)

RENVILLE COUNTY AREA...

You may want to bring your binoculars, canoe, camera, tent, horse, car, and a good pair of hiking shoes!



RENVILLE COUNTY PARKS
-- GREEN PUSH PINS --

1 – **Skalbekken**
2 – **Vicksburg**
3 – **Lake Allie**
4 – **Beaver Falls**
5 – **Birch Coulee**
6 – **Anderson Lake**
7 – **Mack Lake**

Experience the natural beauty of Renville County by visiting our more than 1,300 acres of county parks featuring primitive stands of trees, wildflowers, native prairies, and wildlife. See unique bedrock outcroppings that were formed 3.6 billion years ago along the banks of the Minnesota River.

For more information, call 320.523.3768.

MINNESOTA HISTORIC SITES/BUILDINGS
-- BROWN PUSH PINS --

8 – **Upper Sioux State Park** 320.564.4777
5908 Highway 67 Granite Falls, MN 56241

9 – **Joseph R. Brown Historic site**
651.296.6126
10 – **Birch Coulee Historic Site**
www.mnhs.org/places/sites/bc
11 – **Fort Ridgely State Park** 507.426.7840
72158 County Road 30, Fairfax, MN 55332
12 – **Renville County Courthouse**
Olivia
13 – **Lower Sioux Agency** 507.697.6321
Lower Sioux Agency Historic Site,
32469 Redwood County Hwy 2,
Morton, MN 56270

MUSEUMS, PARKS, AND OTHER POINTS OF INTEREST
-- RED PUSH PINS --

14 – **Swedes Forest Scientific and Natural Area** (SNA)
15 – **Rudi Memorial**
16 – **Sacred Heart Area Museum**
320.765.8868
17 – **Schwandt Monument**
18 – **Renville Museum** 320.329.3541
19 – **Redwood Ferry Site**
20 – **Renville County Museum** 507.697.6147
www.renvillecountyhistory.com
21 – **Jackpot Junction Casino Hotel**
800.946.2274
22 – **Ramsey Park**
Redwood Area Chamber/Tourism
507.637.2828 or 800.657.7070
23 – **Fairfax Depot Museum** 507.426.7385
24 – **FairRidge Bike Trail** 800.535.3160
www.cityoffairfax-mn.gov
25 – **Danube Town Depot Museum**
320.826.2274

Call for information about these sites and other outstanding sites such as our golf courses, restaurants, antique stores, unique gift stores and motels and to receive a free county map or visit us online.

320.523.3656
www.renville.com

Come Home to Renville County...where business, agriculture, and opportunity go hand in hand!

Renville County HRA/EDA 500 E. DePue Avenue, Olivia, MN 56277
Ph **320.523.3656** Fax **320.523.3833** Web **www.renville.com** Email **chris_h@co.renville.mn.us**
Visit our beautiful Minnesota River Valley **www.mnrivervalley.com** or the Minnesota River Valley Birding Trail **www.birdingtrail.org**.

Redwood County Historical Museum

West edge of Redwood Falls on Highway 19/67. The Old Redwood County Poor Farm, which was constructed in 1908, houses two stories of relics. (507-637-3329)

Alexander Ramsey Park

North of Highway 19 on Grove Street in Redwood Falls. Minnesota's largest municipal park featuring Ramsey Falls, 217 acres of wooded Redwood River Valley, a zoo with bison, playgrounds, campgrounds, shelters, golf club, hiking and skiing trail system, and fishing. (507-637-5755)

Gilfillan Farm Estate (Farmfest Site)

Eight miles southwest of Redwood Falls on Highway 67. This historic estate was built by the Gilfillan family which was known for exporting prime beef for European consumption during the early 1900s. The site is also the location of Farmfest, an agricultural extravaganza held each summer. (507-644-2490)

Fort Ridgely State Park and Historic Site

Located off Highway 4, south of Fairfax. This state park offers opportunities for camping, golfing, hiking, horse trails, and picnicking. Within the boundaries of the state park is the Fort Ridgely State Historic Site. Built in 1853 without a protective outer wall, Fort Ridgely was intended to serve as a "police station" between the line of settlement and the Dakota reservations along the upper Minnesota River. A staging ground for Civil War volunteers, Fort Ridgely was attached twice during the U.S./Dakota Conflict of 1862. The restored commissary building houses an audio-visual program, exhibits and gift shop. The Friends of Fort Ridgely administers this Minnesota Historical Site. (507-426-7888, 507-697-6321, www.mnhs.org) The state park is administered by the Department of Natural Resources. (507-426-7840, www.dnr.state.mn.us)

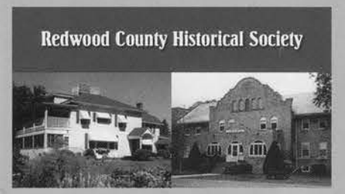
REDWOOD FALLS AREA
Home of Alexander Ramsey Park - "Minnesota's Little Yellowstone"

AREA ATTRACTIONS:
- Minnesota River Valley Scenic Byway
- Beautiful State and Municipal Parks
- Great Specialty Shopping
- Historic Farm Estate
- PGA & Championship Golf Courses
- Winery
- Orchard
- Casino Gaming
- Museums
- Sod Houses
- Alpaca Farm
- Battlefields
- Petroglyphs
- Zoo

Chamber Tourism — Redwood Area

PO Box 21, Redwood Falls, MN 56283
or further information contact us at:
1-800-657-7070
Email: chamber@redwoodfalls.org
Website: www.redwoodfalls.org

507-644-5700 • 1382 Bridge Street • Redwood Falls



Historic Gilfillan Farm Estate
OPEN JUNE - LABOR DAY WEEKEND
Lorraine Tauer
507-249-3451
Redwood County Historical Museum
OPEN JUNE - OCTOBER 1 or BY APPOINTMENT
507-641-3329

Field Stone Vineyards
Fine Wine and Gifts From the Prairie of Southwestern Minnesota
507-249-9463 (WINE) / www.fieldstonevineyards.com

The Morton Inn
bp www.mortoninn.com
Reservations: 1-800-245-9800
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507-697-6205 Fax: 507-697-6498
400 Kokesch Drive P.O. Box 189 Morton, MN 56270

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Harkin Store

Eight miles northwest of New Ulm on County Road 21. Sit a spell and play checkers, enjoy the old-fashioned smells of camphor and cinnamon, chat with the costumed staff, and investigate the line of wares - many of them original inventory - at this 1870s general store. The Harkin Store was important to early settlers arriving by steamboat to the town of West Newton, which flourished until the railroad bypassed the community by in 1873. The Nicollet County Historical Society administers this Minnesota Historical Society site.
(507-354-8666, 888-463-9856, harkin@nchsmn.org, www.mnhs.org)

Monuments in New Ulm & Glockenspiel

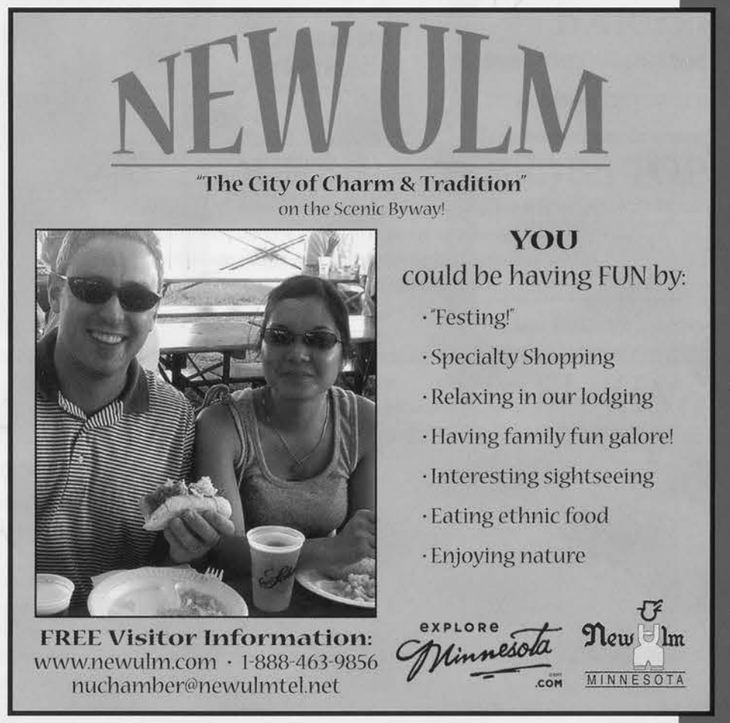
Some of the monuments which grace New Ulm are The Defender Monument (Center & State Streets), Waraju Distillery Chimney (Center & Linden Streets), Melges Bakery Building (213 South Minnesota Street), the Hermann Monument (Center & Monument Streets), and the Glockenspiel (4th & Minnesota Street), a unique 45-foot, free-standing clock tower with animated figures that depict the city's history.
(507-233-4300, 888-463-9856, www.newulm.com)

August Schell Brewery Museum and Gardens

South on Broadway, then west on 18th Street, New Ulm. New Ulm's oldest industry, the August Schell Brewing Company, was founded in 1860 and is still a family business. Schell's brews have won several honors in national brewing competitions. The brewery also offers a walking garden, Museum of Brewing, gift shop and brewery tours.
(507-354-5528, www.schellsbrewery.com)

R. D. Hubbard House

606 South Broad Street, Mankato.
Built in 1871, the Hubbard House was declared by the newspaper to be one of the finest homes of its day. The high level restoration has returned the home to its former splendor. Its oak and birch woodwork, three marble fireplaces, silk wall coverings, and Tiffany and Quetzal lamp shades enhance the French Second Empire style architecture. The fine Carriage House contains a collection of horse-drawn vehicles and antique autos. Victorian gardens landscape the two buildings. The house is listed on the National Register of Historic Places.
(507-345-5566, www.rootsweb.com/~mnbechs)



Traverse des Sioux Treaty Site History Center

1851 North Minnesota Avenue, St. Peter.
The home of the Nicollet County Historical Society, the History Center museum was built next to the site where the Treaty of 1851 between the Dakota people and the federal government was signed. The museum contains three exhibit halls, audio-visual room, and archives. A variety of changing and traveling exhibits are featured throughout the year.
(507-934-2160, museum@nchsmn.org)

Ottawa Village

Le Sueur County Road 23 (Ottawa Road).
This State Registered Historic District dates back to 1853. The platted village is a long narrow tract of land along the Minnesota River. Ottawa progressed in the 1860s to 1890s but by 1900 was falling into decline. Ottawa's seven locally quarried stone buildings on the National Register of Historic Places stand like markers of the birth, life and passing on of this once busy townsite. Self-guided map and tour available at Town Hall Kiosk. One of the sites, the Ottawa Methodist Church, was built in the 1860s of native limestone and is one of the oldest Methodist Church buildings in Minnesota.
(507-665-2501, www.lesueurchamber.org)

Le Sueur Museum and Green Giant Room

709 North 2nd Street, Le Sueur.
Exhibits, videos, and archives tell the story of the Green Giant Company along with an old time drug store with veterinary display, agriculture room, one room school, post office, art, radios, military, Le Sueur History, and family research center.
(507-665-2050, www.lesueurchamber.org)

Joseph R. Brown Minnesota River Center and Research Library

600 Main Street, Henderson, MN.
An interpretive center telling the life story of this exceptional man who shaped early Minnesota history. A place to study the geographical and cultural history of the Minnesota River Valley with an exhibit called the "Minnesota River Table". The valley carved by the Ancient River Warren has been home to successive waves of natives, from prehistoric people to the Dakota in the valley when white explorers, fur traders, and then settlers arrived. Joseph R. Brown founded Henderson in 1852 when settlement of southern Minnesota was about to begin. His influence on early Minnesota government, relations with Indians, and his business endeavors are explained in the center.
(507-248-3234, 507-248-3687, jrbsoc@mchsi.com, www.mnriverjrb.org)

HENDERSON

EST. 1852

Experience the History · Enjoy the Beauty

Whether it's the historic intrigue, antique shopping and unique shops, or the beautiful river valley activities, Henderson offers something for everyone.

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- Beautiful City Parks
- Historic Museums
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Henderson House
BED & BREAKFAST
104 N 8th Street
hendersonhouse@frontiernet.net
507-248-3356

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507-248-3850

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—BAR—
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JOSEPH R. BROWN
MINNESOTA
RIVER CENTER
The history of the
MINNESOTA
RIVER VALLEY
600 Main Street • 507-248-3234

HENDERSON
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515 Main Street
Mon. 6-9 • Sat. 9-5
By Appt. - Dee Thomas
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GAS & GROCERIES
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SIBLEY COUNTY
MUSEUM
700 W. Main Street
www.history.sibley.mn.us
507-248-3818

Ney Center
Environmental Learning Center
450 Acres, Hiking Trails, Wetlands, Scenic Overlooks, Bird Watching, X-C Skiing, Programs by Appt.
Hwy. 19, 2 Miles East of Henderson
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FESTIVALS
Sauerkraut Days - Last Weekend in June • Heritage Days - 2nd Weekend in Sept. • Eskimo Days - 1st Saturday in Feb.

www.HendersonMN.com

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- New RV Park Opening August 2005

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Local: 320.564.2121

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Owned and Operated by the Upper Sioux Community

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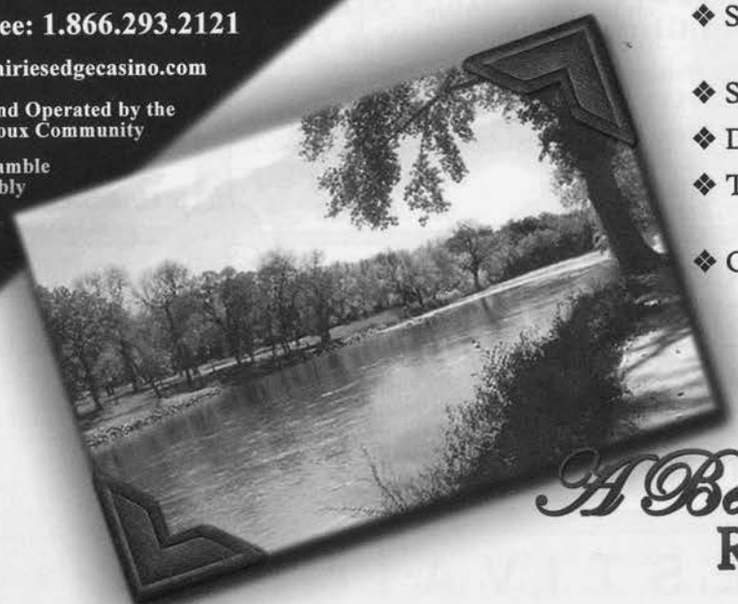


Come visit Granite Falls

- Camp by the river at Memorial Park.
- Swim & exercise at our Kilowatt Community Center.
- Shop our Retail & Gift Shop.
- Dine at our Great Restaurants.
- Try your luck at Prairies Edge Casino Resort.
- Golf at our Beautiful Golf Course.

See all that Nature has to offer
The River, The Oldest Rock & our Wonderful State Park.

A Beautiful River Valley Town!

Granite Falls Convention & Visitor's Bureau

646 Prentice Street, Granite Falls, Minnesota 56241
Local: 320.564.4039 ❖ Fax: 320.564.3843
Email: gfchamber@mvtvwireless.com ❖ granitefallsmn.org

~ 150 miles

BWSR Tour Driving Directions

Load at Sheep Shedde in Olivia at 8:00 a.m.

10:40 Left onto Hwy 212 then right on Highway 71 North to Willmar (Grass Lake Site) where tour participants will leave the bus for a presentation. 23 mi.

11:03 Head west on Highway 23 then left (south) on Kandiyohi County #5 which becomes Renville County #1 and continue south 4 miles after entering Renville County.

11:10 Turn right onto Renville County #11. Go west 4 miles then left onto Renville County #21. Stop at SMBSC for short presentation on the bus. Continue south and turn right onto Highway 212.

11:30

11:38 Continue west on Highway 212 for 7 miles then take a right onto 180th St. (gravel)

Beet Plant Go one mile north on 180th St. and then left onto 840th Ave for one mile. Turn right onto County Road #9. egg Golden Oval

11:50 Continue north on County Road #9 for 6 miles and then turn left onto 890th Ave. (gravel)

12:35 Continue west on 890th Ave for 3 miles and then turn left onto County #10 for 2 miles and then right onto County Road #11 to Highway #23. Turn left onto #23 and continue to State Highway #212. Turn left onto #212 and go 1 mile east and the turn right onto County Road #37. The road will curve to the east. Follow it for 3 miles and then turn right (south) onto county Road #10. Continue on #10 into Skalbekken Park..

12:42

1:10 Stop for Lunch in Park

Load bus and head back up hill on #10 to 800th Ave. Turn right onto 800th Ave. and go 3 miles east.

Turn right (south) onto County Road #9 for 3 miles. Turn left onto #81 and follow 81/12/15 to County Road #6 (6 or 7 miles).

Turn left onto #6 and go up the hill. Turn right onto #4 and continue for 6 miles to County Road #1. turn right (south) on #1 and travel for about 6 miles to #15.

2:10 Turn left onto #15 and within the first mile we will be taking a break and people will get off the bus to view a Granite Rock Outcrop site right along the road.

Load bus and continue east on county road #15 for about 4 miles to State Highway #71.

Turn left onto #71. At the top of the hill on the left is a sign "Marvin Madsen Living Snow Fence". ~~We will pull in there for a break~~ (field to the left of Highway 71 with good field road).

Break at Birch Coulee Battlefield (Co. park)

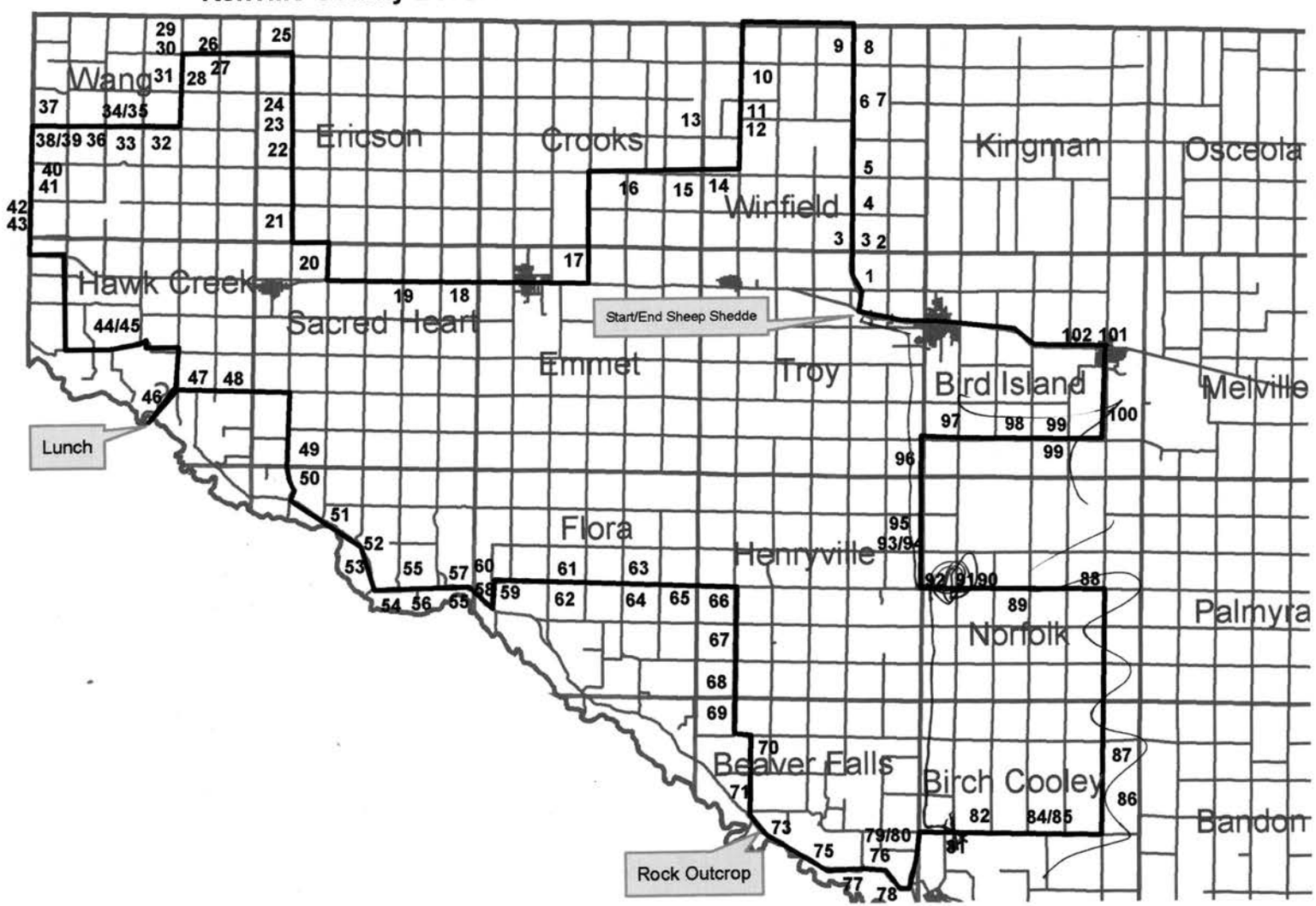
Head north on Highway 71 after the break and then take a right onto County Road #2. Continue east for 5 miles to County Road #5. Turn left and head north.

Continue north on #5 for about 6 miles to County Road #4. Turn left onto #4 and head west. In the 4th mile, we will be pulling off into Revier Feedlots (there is a U shaped drive for easy access and turn around). Pull back out onto #4 and go west to Hwy 71. Turn right onto Hwy 71.

Head north onto Hwy 71 for 4 miles. Then right onto County Road #17 and head east for 5 miles to County Road #5.

Turn left onto #5 and head north to Bird Island. Turn left onto Hwy #212 and back to the Sheep Shedde to unload the bus.

Renville County BWSR Tour 2008



BWSR Tour
Renville County
Wednesday, August 27, 2008

			Funding Source(s)																
#	Practice Description	Location	PF	LWM	HCWP	RIM	CREP	State C/S	FWQMG	DOT	DNR	EQIP(ACP)	CRP	WHIP	WRP	RC&D	USFWS	Other	Comments
1	Hog Barns/Shelterbelt	TR 2										X							Erickson/Peterson
2	1988 Wetland Restoration	WI 35				X													Ed Steffel
3	Ditch 59 buffer	WI 34/35					X												Zenk
4	Farmstead Shelterbelt	WI 26										X							Mertz (planted late-88 drought)
5	Farmstead Shelterbelt	WI 23																	Laumer
6	Wetland Res/Ditch buffer	WI 11					X												Bill Steffel
7	Biofilters/Hog Barns	WI 11										X							Huisinga (permit requirement)
8	Rock Intakes	WI 2																	4 or 5 intakes
9	Wetland Restoration	WI 3					X												M Bratsch (DOT coop-renter request)
	enter Kandiyohi County																		
	Stop @ Grass Lake Project																		
10	Ag Waste Project	WI 8		X	X			X				X							Heinemann
11	Long Lake WMA	WI 17									X								
12	Sed Basin	WI 17			X														Heller
13	Vineyard	CR 13																	Kluver
14	CREP	WI 30					X												Furr
15	Field Windbreak	CR 25						X				X							Tepfer
16	Ridge & Strip Till	CR 25/26/27										X							Link
17	Stop @ SMBSC, et al	EM 4																	
18	CREP	SH 12					X												Eekhoff
19	RIM	SH 10/11				X													Hillesheim
20	prescribed grazing	SH 5																	Aalderks
21	Ag Waste Project	ER 31																	Schneider
22	RIM/WRP	ER 20				X									X				Lester
23	Grove/Field Windbreaks	ER 17																	Santjer
24	Chetomba WMA	ER 17/8	X		X						X								Santjer
25	Waterway	ER 6			X							X							Rick Aalderks
26	Septic System	WA 2			X														Richard Fagen
27	CREP Restoration/Buffer	WA 2				X													Richard Fagen
28	CREP Restoration/Buffer	WA 11				X													Lerohl
29	Buffer	WA 3																	
30	CRP FWP/CP 21 filter	WA 3			X								X						Haugen
31	CREP Restoration/Buffer	WA 10					X												Lerohl

#	Practice Description	Location	PF	LWM	HCWP	RIM	CREP	State C/S	FWQMG	DOT	DNR	EQIP(ACP)	CRP	WHIP	WRP	RC&D	USFWS	Other	Comments
32	Farmstead Shelterbelt	WA 22											X						Dahlager
33	Grass Back Terraces	WA 21						X				X							Heiling
34	RM Riparian Pasture	WA 16				X													Holien
35	CCRP SAFE	WA 16											X						Holien
36	RIM - 2nd RIM in County	WA 20				X											X		Thein
37	CREP Stream Buffer	WA 18					X												Dahlager
38	WPA	WA 19															X		USFWS
39	CREP	WA 19					X												Bob Lecy
40	CREP Restoration/Buffer	WA 30					X												Holien Brothers
41	CREP Restoration/Buffer	WA 30					X							X					Anderson
42	Pheasant Hunting Preserve	Chippewa					X												
43	Granite Falls Energy, LLC	Chippewa																	
44	Hawk Creek Outlet Monitor	HC 16			X														
45	Streambank Stabilization	HC 16			X														
46	Direct Seeding hardwoods	HC 27														X			
	Lunch																		
47	CREP	HC 23	X				X				XX			X					Craig Ramsey-2nd owner
48	CREP	HC 23/24					X												John Kane
	Grove removal	HC 24																	
49	#119 Rock Intakes/Side Inlets	SH 29/32			X													Ditch	Enesvedt
50	RC&D Roadside Erosion	LSH 5														X			
51	Floodplain CREP	LSH 8					X				X			X					Janet Pedersen
52	Joe Brown Historic Site	LSH 8																	
53	Terrace/CRP/River Wetlands	LSH 16											X						Enesvedt
54	Old CRP renewed to SAFE	LSH 22											X						Tufto
55	Abandoned Gravel Pit	LSH 23																	
56	CREP Stream/Floodplain	LSH 23					X												Helgeson
57	RIM MN River Buffer	LSH 24				X													Rigge
58	CREP Floodplain buffer	FL 19					X												Hemingsen
59	RC&D Roadside Erision	FL 19														X		County	
60	Shelterbelt	FL 18						X											Hemingsen
61	CREP Ditch 35A buffer	FL 16					X												Breitkreutz
62	Septic System	FL 21			X														
63	Tillage	FL 14										X							Schroeder
64	Strip Till	FL 23										X							
65	Field Windbreak	FL 24																	
66	CRP Re-enrollment	HN 19											X						Myron Frank
67	Hog Barns/Tree planting	HN 30																	Dolezel
68	CREP Ditch Buffer	HN 31					X												Myron Frank
69	Hog Barns/Shelterbelt	BF 6						X										AgBMP	Malecek

#	Practice Description	Location	PF	LWM	HCWP	RIM	CREP	State C/S	FWQMG	DOT	DNR	EQIP(ACP)	CRP	WHIP	WRP	RC&D	USFWS	Other	Comments
70	CREP Smith Creek Buffer	BF 8					X												Sally Vavrika
71	RC&D Roadside Erision	BF 20														X			
72	***Malecha Rock Outcrop***	BF 20																	Depart bus to view site
73	CREP Floodplain/Creek	BF 26/27					X												Schottenbauer
74	Beaver Creek																		
75	RIM Wetland/River Buffer	BF 26				X													Schottenbauer
76	Feedlot Violation	BF 26																	Goelz
77	SMC Granite Mine	BF 35																	
78	Rock Outcrop & Wetland	BF 35																	Kanne
79	Living Snow Fence	BF 25								X			X						Madsen
	Stop for afternoon break																		
80	CREP Wetland Restoration	BF 25					X												Madsen
81	Roadbank Mitigation	BC 19				X				X									Dienken
82	Birch Cooley Battlefield																		
83	CREP	BC 20					X												Keavany
84	Farmstead Shelterbelt	BC 22						X											Sullivan
85	CRP Buffer Incentive	BC 22		X									X						Sullivan
86	Bob Fox Home	BC 13																	
87	Ag Waste Project	BC 12										X							Roger Lee
88	Ag Waste Project	NO 14							X			X						AgBMP	Tom Hagen
89	Farmstead Shelterbelt/Field Windb	NO 21																	Tisdell
90	CREP Ditch Buffer	NO 17					X												Kern
91	Revier ~~Feedlots~~ Cattle Co.	NO 17										X							
92	Grove Renovation	NO 18						X											Tom Einerson
93	CREP	HN 12					X												Kathryn Kelly
94	Sed Basin	HN 12						X											Herdina
95	Native Veg Conversion	HN 12				X		X											Kelly (Native Buffer Program)
96	LSF	TR 36								X			X						Zeismer LSF/Tauber Grove
97	Organic Farming	BI 29/30/31																	Roske
98	Ag Waste Project	BI 28			X							X							Tersteeg
99	CRP	BI26/35											X						Neubauer/McNamara
100	MN DOT Mitigation Site	BI 14				X				X									Neubauer
101	Private Industry Mitigation	BI 14																WCA	Prokosch
102	LSF	BI 14								X			X						Prokosch
	Sheep Shedde																		

MAPQUEST.

Sorry! When printing directly from the browser your directions or map may not print correctly. For best results, try clicking the Printer-Friendly button.

START **520 Lafayette Rd N**
Saint Paul, MN 55155-4102

END Renville County Soil & Water
1008 W Lincoln Ave
Olivia, MN 56277
Website | 320- 523-1559

Total Estimated Time: 2.0 hours

Total Estimated Distance: 106.47 miles

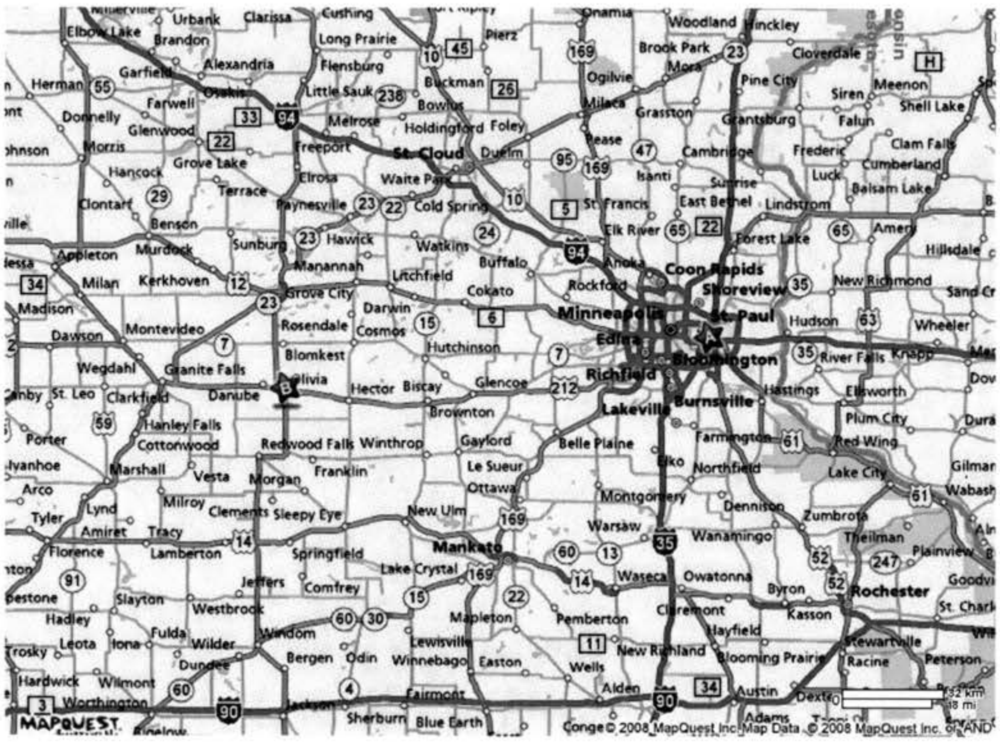
Notice to Interstate 35W Travelers in the Minneapolis Area:
Due to the bridge collapse over the Mississippi River in central Minneapolis, Interstate 35W is closed northbound and southbound on both sides of the river. MapQuest is working with the Minnesota Dept. of Transportation to reflect alternate routes established by Mn/DOT. We also recommend visiting the Mn/DOT homepage for additional information. For your safety, please obey all local detour signage and police instructions.

▼ Directions from A to B:

START	1: Start out going SOUTHEAST on LAFAYETTE RD N.	0.4 mi
SOUTH 52	2: LAFAYETTE RD N becomes US-52 S.	5.2 mi
WEST 494	3: Merge onto I-494 W.	17.9 mi
EXIT	4: Take the US-212 W exit, EXIT 11A, toward SHAKOPEE/ CHASKA.	0.8 mi
WEST 212	5: Turn LEFT onto FLYING CLOUD DR/ US-212 W. Continue to follow US-212 W.	82.1 mi
END	6: End at 1008 W Lincoln Ave Olivia, MN 56277	

Estimated Time: 2.0 hours Estimated Distance: 106.47 miles

Total Estimated Time: 2.0 hours **Total Estimated Distance:** 106.47 miles



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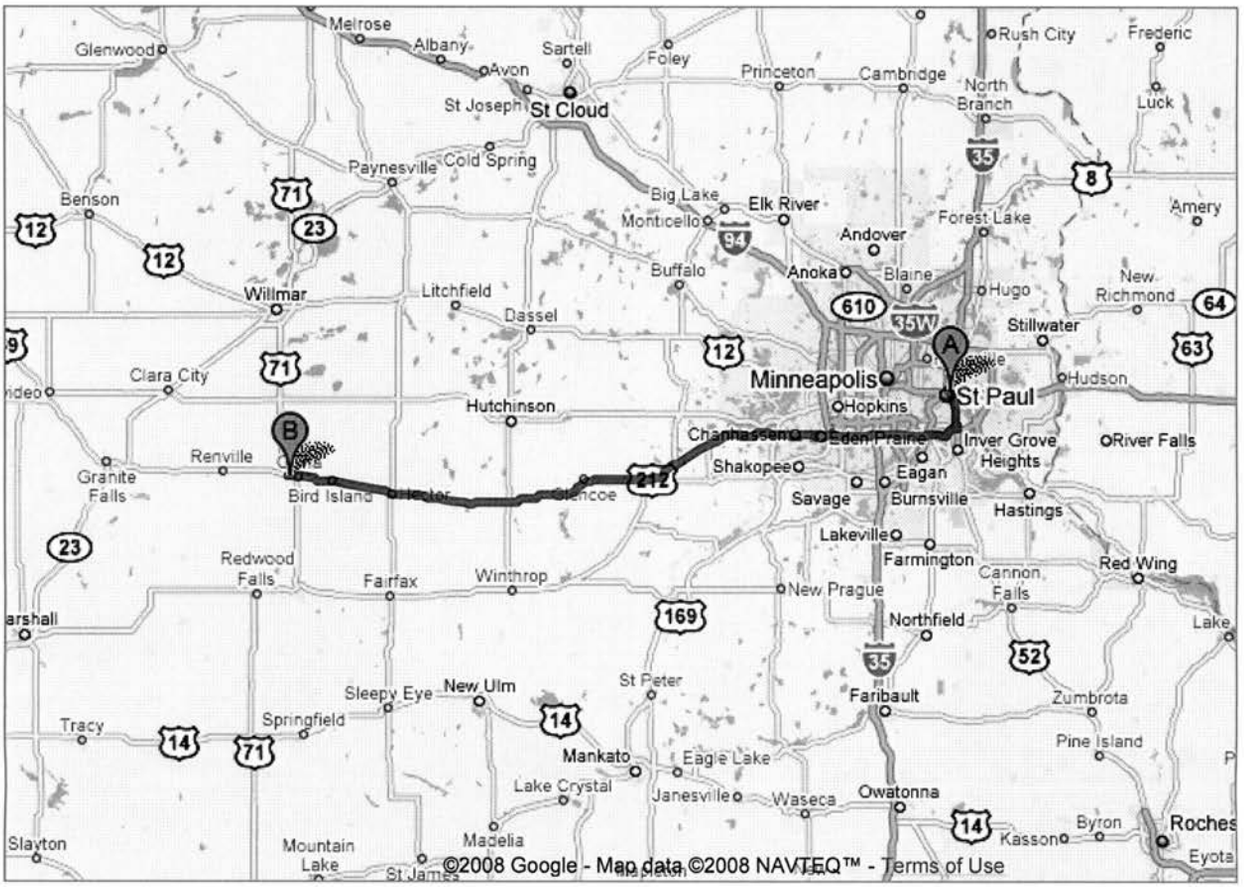
Google Maps

Sheep Shedde



A **520 Lafayette Rd N**
St Paul, MN 55101

Drive: 107 mi – about 2 hours 14 mins

1.	Head **south** on **Lafayette Rd N** toward **Grove St**	0.4 mi
2.	Continue on **US-52 S**	5.2 mi
3.	Take the exit onto **I-494 W**	19.0 mi
4.	Take exit **11C** to merge onto **MN-5 W**	1.8 mi
5.	Exit onto **W 78th St/MN-5 W** Continue to follow MN-5 W	28.2 mi
6.	Continue on **US-212 W**	52.8 mi

B **2425 Lincoln Ave W**
Olivia, MN 56277

These directions are for planning purposes only. You may find that construction projects, traffic, or other events may cause road conditions to differ from the map results.

Map data ©2008 NAVTEQ™, Sanborn

USGS Research Findings:

EFFECTS OF AGRICULTURAL LAND RETIREMENT IN THE MINNESOTA RIVER BASIN

Victoria G. Christensen and Kathy E. Lee*
U.S. Geological Survey
2280 Woodale Drive
Mounds View, Minnesota 55112
Phone 701-277-0682
Fax 701-281-5018

ABSTRACT: The effects of agricultural land retirement on nutrient concentrations and biological conditions of three streams in the Minnesota River Basin were assessed using data collected during 2005-2007. The Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River subbasins, which range in size from 52,500 to 96,031 acres, have similar geologic and hydrologic settings, but differ with respect to the amount, type, and location of retired land. Preliminary results show that nitrite plus nitrate concentrations were highest (mean=13.4 milligrams per liter [mg/L]) in South Branch Rush River, the subbasin with little to no land retirement, and lower in Chetomba Creek (mean=10.9 mg/L) and West Fork Beaver Creek (mean=7.8 mg/L), subbasins with more riparian or upland land retirement. Fish data indicate better resource quality for the West Fork Beaver Creek than other streams likely due to a combination of factors including habitat quality, food resources, and dissolved oxygen characteristics. Index of biotic integrity (IBI) scores increased as local land retirement percentages (50- and 100-ft buffers) increased. Data and analysis from this study can be used to evaluate the success of agricultural best management practices (BMPs) and land retirement programs for improving stream quality.
KEY TERMS: Minnesota River Basin, agricultural land retirement, CRP, nutrients, physical habitat, IBI scores.

DRAFT

Eric Mohring
*presentation
after lunch
at park (four)

INTRODUCTION

Streams in the Minnesota River Basin (fig. 1) ... determine the effect of agricultural land retirement on stream quality. Agri... retired, or taken out of production and planted with native grasses, on ... shows land retirement leads to improved water quality. However, li... ed-scale effects of land retirement. To provide information ... ission on Minnesota Resources and the Minnesota Boar... S. Geological Survey (USGS) to compare water quality a... arying degrees and location of land retirement.

The objectives of the study are ... ty, and biological conditions in the Minnesota River Bas... n water quality and biological conditions to the amount ... urpose of this paper is to provide an overview of nutrie... he Chetomba Creek, West Fork Beaver Creek, and South ...

The Minnesota River originates nea... Mankato (fig. 1), and then turns northeast to join the ... and Matsch, 1982). The basin lies primarily within south-... by dissected till plains, undulating till plains, lake plains, and gl... 8).

Data collection sites established for this s... GS stream-gaging stations located on Chetomba Creek (site 1, fig. 1), West Fork Beaver Cr...), and South Branch Rush River (site 6). The three subbasins differ with respect to the amount and ...tion of land retirement (table 1), but have similar

* Respectively, Hydrologist, U.S. Geological Survey, 2280 Woodale Drive, Mounds View, Minn., 55112, Phone: 701-277-0682, vglenn@usgs.gov and Hydrologist, U.S. Geological Survey, 2280 Woodale Drive, Mounds View, MN, 55112, Phone: 763-783-3100, klee@usgs.gov

USGS Research Findings:

"EFFECTS OF AGRICULTURAL LAND RETIREMENT IN THE MINNESOTA RIVER BASIN"

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U.S. Geological Survey
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ABSTRACT: The effects of agricultural land retirement on nutrient concentrations and biological conditions of three streams in the Minnesota River Basin were assessed using data collected during 2005-2007. The Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River subbasins, which range in size from 52,500 to 96,031 acres, have similar geologic and hydrologic settings, but differ with respect to the amount, type, and location of retired land. Preliminary results show that nitrite plus nitrate concentrations were highest (mean=13.4 milligrams per liter [mg/L]) in South Branch Rush River, the subbasin with little to no land retirement, and lower in Chetomba Creek (mean=10.9 mg/L) and West Fork Beaver Creek (mean=7.8 mg/L), subbasins with more riparian or upland land retirement. Fish data indicate better resource quality for the West Fork Beaver Creek than other streams likely due to a combination of factors including habitat quality, food resources, and dissolved oxygen characteristics. Index of biotic integrity (IBI) scores increased as local land retirement percentages (50- and 100-ft buffers) increased. Data and analysis from this study can be used to evaluate the success of agricultural best management practices (BMPs) and land retirement programs for improving stream quality.
KEY TERMS: Minnesota River Basin, agricultural land retirement, CRP, nutrients, physical habitat, IBI scores.

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INTRODUCTION

Streams in the Minnesota River Basin (fig. 1) are being studied to determine the effect of agricultural land retirement on stream quality. Agricultural land commonly is retired, or taken out of production and planted with native grasses, on the basis of field-scale research that shows land retirement leads to improved water quality. However, little information exists regarding watershed-scale effects of land retirement. To provide information for this goal, the Legislative-Citizen Commission on Minnesota Resources and the Minnesota Board of Water and Soil Resources cooperated with the U.S. Geological Survey (USGS) to compare water quality and biological conditions across three streams with varying degrees and location of land retirement.

The objectives of the study are to characterize and compare streamflow, water quality, and biological conditions in the Minnesota River Basin and to compare spatial and temporal variability in water quality and biological conditions to the amount and location of agricultural land retirement. The purpose of this paper is to provide an overview of nutrient concentrations and biological conditions within the Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River subbasins.

The Minnesota River originates near the western border of Minnesota, flows southeast to Mankato (fig. 1), and then turns northeast to join the Mississippi River at St. Paul, Minn. (Ojakangas and Matsch, 1982). The basin lies primarily within south-central Minnesota in an area characterized by dissected till plains, undulating till plains, lake plains, and glacial moraines (Stark and others, 1996).

Study Area

Data collection sites established for this study include USGS stream-gaging stations located on Chetomba Creek (site 1, fig. 1), West Fork Beaver Creek (site 3), and South Branch Rush River (site 6). The three subbasins differ with respect to the amount and location of land retirement (table 1), but have similar

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geologic and hydrologic settings. A second site was selected in the Chetomba Creek subbasin, Judicial Ditch No. 1 (site 2, fig. 1). Chetomba Creek was re-routed through Judicial Ditch No. 1 in the 1970s, making this site downstream from the Chetomba Creek site 1. The intervening drainage area between these two sites has few tributary ditches or streams and substantial land retirement (table 1). Secondary sites were established on West Fork Beaver Creek (site 4, fig. 1) and South Branch Rush River (site 5) for instream comparisons; however, these two sites did not have sufficient data to include here.

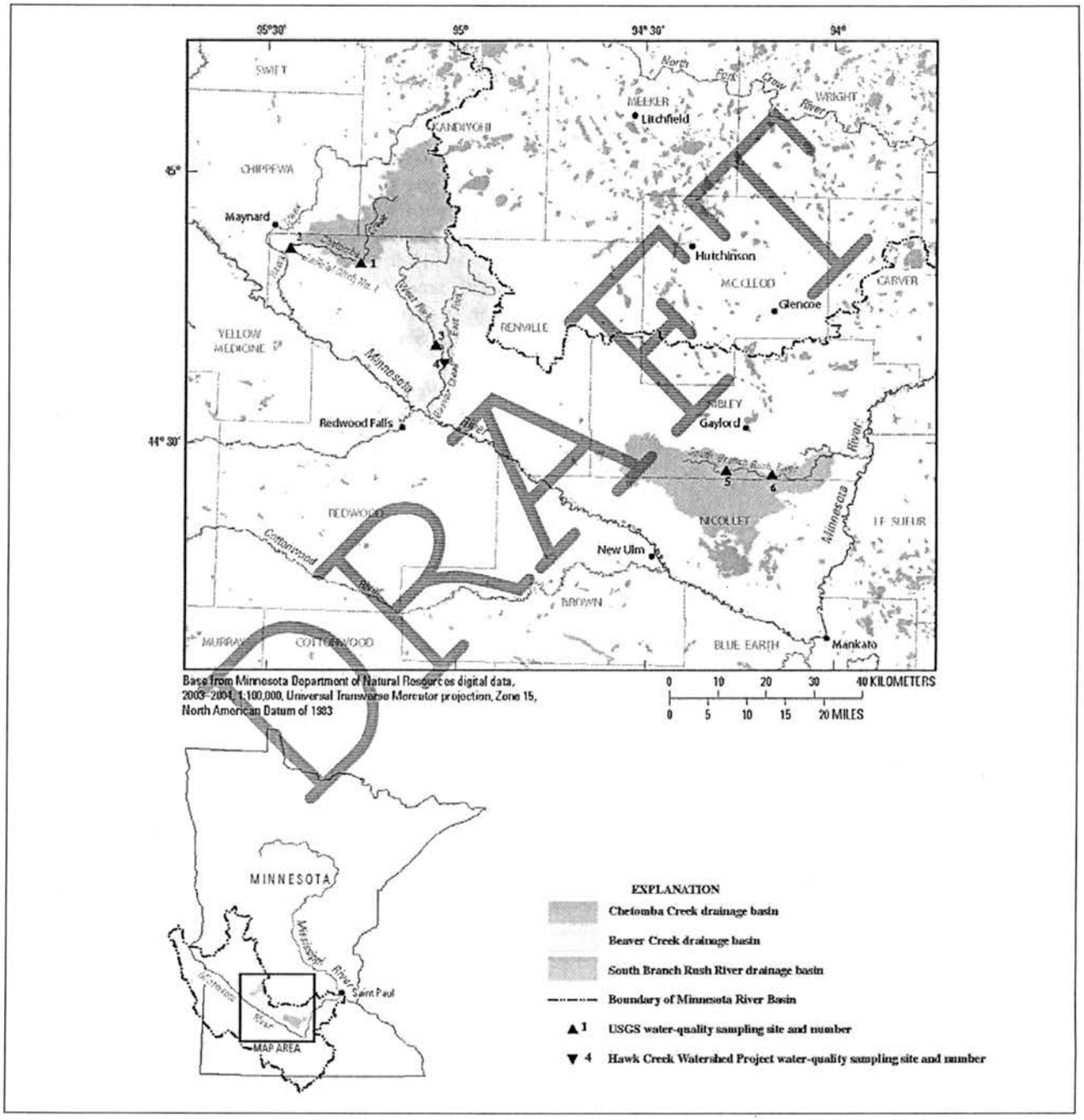

Figure 1. Sampling sites in Chetomba Creek, Beaver Creek, and South Branch Rush River subbasins, Minnesota River Basin, south-central Minnesota.

Table 1. Percentage of land retirement in selected subbasins of the Minnesota River Basin, 2005-2007.

[Percentage land retirement for Judicial Ditch No. 1 is for intervening drainage area only; ft, feet]

Site name	Site number	Drainage area (acres)	Percentage Land Retirement				
			Basin	300-ft buffer[1]	200-ft buffer[1]	100-ft buffer[1]	50-ft buffer[1]
Chetomba Creek	1	74,476	3.1	3.9	4.3	5.1	5.7
Judicial Ditch No. 1	2	96,031	6.3	9.4	11.3	15.3	18.7
West Fork Beaver Creek	3	58,974	3.7	6.2	7.5	9.5	10.4
South Branch Rush River	6	52,915	1.5	2.7	3.2	5.1	7.6

[1] The buffers are defined by the percentage of retired land within 300, 200, 100, and 50 feet on either side of the stream.

Agriculture has a major influence on water quality in the Minnesota River Basin (Battaglin and Goolsby, 1999; Kroening and others, 2003). Intensive use of agricultural chemicals has resulted in nonpoint-source contamination of surface water throughout the basin. Because of the poorly drained soils and resulting low infiltration rates in much of the Minnesota River Basin, ditches and tile drains are used to help drain the water from agricultural fields. This type of drainage may reduce flood damage to the fields and may draw oxygen into the soil. However, tile drains also provide a direct path for surface water and any associated contaminants to reach drainage ditches and streams (Wilson and others, 1997). Ditch and tile systems direct excess soil water to surface water without the longer residence time of ground-water storage.

Stream conditions are influenced by interactions among physical and chemical factors at differing spatial scales. However, loss of riparian vegetation and natural land cover in the Minnesota River Basin has reduced habitat, modified hydrologic conditions, and changed water quality (Stark and others, 1996). Two important factors that influence physical, chemical, and biological conditions are local and watershed-wide land-cover characteristics. Retired land cover may be important to water quality, aquatic habitat, instream temperature, and reduction of sediment and overland runoff.

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METHODS

An objective of this study was to characterize effects of retired lands on the water quality and biological conditions of streams in the Minnesota River Basin that could be used to evaluate the success of agricultural best management practices and land retirement programs for improving stream quality. Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River subbasins were selected after considering a set of parameters (for example, slope, basin size, and absence of in-line lakes). The selection required minimizing the differences in these parameters, while maximizing differences in percentages of land retirements.

Land retirement data were obtained in 2007 from the Farm Services Agency (FSA, St. Paul. Minn.) and included a geographic information system (GIS) coverage of land with Conservation Reserve Program (CRP) contracts. Land retirement data also were obtained from the Conservation Reserve Enhancement Program (CREP), Re-invest in Minnesota (RIM) program, and some smaller amounts of retired agricultural land in other programs including Pheasants Forever, Wildlife Management Areas, and U.S. Fish and Wildlife Service Waterfowl Production Areas.

Water-quality samples were collected manually according to methods described in the USGS National Field Manual (Wilde and others, 1998) using depth- and width-integrating techniques with the exception of samples collected with automated sampling equipment and occasional grab samples. Nutrient samples were analyzed (Patton and Kryskalla, 2003) at the USGS National Water Quality Laboratory (NWQL) in Denver, Colorado. Water-quality samples were collected between October 2005 and September 2007 and were classified as either *event*, which refers to samples collected during rainfall events, or *routine*, which are samples collected during monthly maintenance trips. Most event samples were collected with an autosampler, except for a few cases when the autosamplers malfunctioned. In these situations, a grab (single point) sample was collected if field personnel were onsite. Quality assurance was assessed with field blanks and replicate samples. No detectable concentrations of nitrite plus nitrate, total nitrogen, or total phosphorus were present in blank samples. The median analytical variation between duplicate analyses of nitrite plus nitrate, total nitrogen, and total phosphorus was less than 1 percent.

Periphyton and phytoplankton samples were collected at each stream during 2007 and sent to the USGS NWQL for analyses of chlorophyll-a using fluorometric methods (Arar and Collins, 1997). Fish were collected during August and September 2006-2007 at each stream by electrofishing equipment (pulsed DC), conducted according to protocols established for the USGS's National Water-Quality Assessment Program (Moulton and others, 2002). Briefly, backpack electrofishing gear was used to make two collection passes within the reach. Sampling time was recorded to normalize catch per unit of effort. Index of biotic integrity (IBI) scores were used to measure fish community response and community health. The IBI was calculated following Bailey and others (1993) using 12 metrics related to the composition and structure of the fish community. The sum of the metric scores is the IBI score, which ranges from 12 to 60 (greater number indicates better aquatic resource quality). Physical habitat was characterized at each stream location at the time of fish collections following Fitzpatrick and others (1998).

RESULTS AND DISCUSSION

Nitrite plus nitrate concentrations (table 2) were highest in South Branch Rush River, the subbasin with little to no land retirement, and lower in Chetomba Creek and West Fork Beaver Creek, subbasins with more riparian or upland land retirement. Nitrite plus nitrate and total nitrogen (table 2) decreased with increasing retired land percentage (table 1). Total phosphorus concentrations were lowest in Judicial Ditch No. 1 and highest in West Fork Beaver Creek. Judicial Ditch No. 1, which is downstream from a substantial amount of retired land (table 1), had lower nutrient concentrations than the upstream Chetomba Creek site. This may indicate that the retired land between the Chetomba Creek site and the Judicial Ditch site leads to improved water quality.

Table 2. Average chlorophyll-a and nutrient concentrations at selected streams in the Minnesota River Basin, 2005-2007.

[All nutrient concentrations are in milligrams per liter; chy-a, chlorophyll-a concentrations in micrograms per liter; number in parentheses is number of samples; --, not applicable]

Site name (site number, table 1)	Chy-a	Nitrite plus nitrate			Total nitrogen			Total phosphorus		
		Routine	Event	Total	Routine	Event	Total	Routine	Event	Total
Chetomba Creek (1)	13.7(6)	9.6(11)	15.9(3)	10.9(14)	10.3(10)	17.4(3)	11.9(13)	0.13(11)	0.23(3)	0.15(14)
Judicial Ditch No. 1 (2)	6.08(5)	8.2(8)	--(0)	8.2(8)	7.5(8)	--(0)	7.5(8)	0.10(8)	--(0)	0.10(8)
West Fork Beaver Creek (3)	19.1(6)	6.1(12)	13.0(4)	7.8(16)	6.7(12)	14.0(4)	8.5(16)	0.21(12)	0.39(4)	0.26(16)
South Branch Rush River (6)	15.1(6)	10.0(11)	19.5(6)	13.4(17)	11.3(11)	19.8(6)	14.3(17)	0.14(11)	0.19(6)	0.16(17)

Physical characteristics varied among streams and among years (table 3). Stream reach volume and habitat composition changed between 2006 and 2007 due to flow conditions. During 2006, stream widths and depths generally were greater than in 2007, leaving less habitat volume in 2007. Chetomba Creek had the greatest overall reach volume during both years. The dominant types of instream cover at Chetomba Creek and South Branch Rush River were macrophyte/macroalgal cover and overhanging vegetation. West Fork Beaver Creek had little or no macrophyte/macroalgal cover; rather the instream cover consisted of overhanging vegetation and woody debris. The bottom substrate at Chetomba Creek, and South Branch Rush River was primarily sand and gravel. At West Fork Beaver Creek the bottom substrate tended toward finer silt and clay.

There were 21 species of fish within five families collected among all sites and time periods. The majority of fish were in the Cyprinidae family (12), followed by two taxa each of the remaining families (Cataostomidae, Centarchidae, Gasterosteidae, Ictaluridae, and Percidae). Most of the fish collected were invertivores, planktivores, or detritivores, and five of the taxa were classified as tolerant fish. At Chetomba Creek, fathead minnows, creek chubs, and bigmouth shiners composed most (more than 50 percent) of the abundance during 2006 and creek chubs composed most of the abundance during 2007. At West Fork Beaver Creek, common shiner and bluntnose minnows (*Pimephales notatus*) composed most of the abundance during both years. At South Branch Rush River, fathead minnows and bluntnose minnows composed most of the abundance in 2006, whereas creek chubs composed most of the abundance during 2007.

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Table 3. Summary of physical habitat and biological characteristics at selected streams in the Minnesota River Basin, 2006-2007.

[m, meters; m², square meters; m³, cubic meters; mm, millimeters; >, greater than]

	Chetomba Creek		West Fork Beaver Creek		South Branch Rush River	
Site number (fig. 1)	1		3		6	
Collection year	2006	2007	2006	2007	2006	2007
Reach length (m)	150	150	150	150	150	150
Average wetted channel width (m)	6.2	4.9	4.6	3.9	4.2	2.6
Average depth (m)	0.17	0.14	0.15	0.16	0.10	0.08
Average velocity (m)	0.04	0.03	0.06	0.02	0.08	0.008
Reach volume (m^3)	158	103	104	94	63	31
Reach area (m^2)	930	735	690	585	630	390
			Instream habitat cover			
Macrophyte/macroalgal cover (percent)[1]	98	44	1.8	0.0	22	22
Overhanging vegetation (percent)	75	22	16	15	38	18
Woody debris (percent)	0	0	26	6	0	0
			Bottom substrate composition			
Silt, clay, and organic detritus (percent)	0	2	70	89	0	0
Sand > 0.062 – 2 mm (percent)	0	18	15	4	13	60
Fine gravel > 2 – 16 mm (percent)	77	55	6	7	78	40
Coarse gravel > 16 – 32 mm (percent)	23	24	6	0	9	0
			Fish characteristics			
Number of fish species collected	8	9	13	15	16	11
Percent of fish classified as tolerant[2]	56	41	8	11	33	78
Index of biotic integrity (IBI) scores[2]	14	20	30	28	19	23

[1]Percentage of measurements where selected cover was present (out of 55 measurements)
[2]Bailey and others (1993) was used for fish tolerance classification and IBI calculations; Bailey and others (1993) rates streams with IBI scores of 50-60 as "excellent," 40-49 as "good," 30-39 as "fair," 20-29 as "poor," and 12-20 as "very poor."

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IBI scores indicated poor quality at all streams during both sampling periods except the West Fork Beaver Creek had a rating of "fair" during 2006. IBI scores generally decrease with increasing physical and chemical perturbations such as poor water quality, poor instream habitat, and migration barriers (Karr and others, 1987). Two of the metrics that influenced the overall IBI score, species richness (the number of fish taxa collected) and percent tolerant fish, show that West Fork Beaver Creek had a moderate number of fish species and the smallest percentage of tolerant species, whereas South Branch Rush River had a moderate number of fish species and a high percentage of tolerant species.

In this study, IBI scores increased as the local land retirement percentages (50- and 100-ft buffers) increased. The relation was not as clear with retired land percentages at greater buffer distances. In addition to low percentages of retired land, the Chetomba Creek site has very little instream habitat diversity with the exception of very dense macrophyte and macroalgae mats that may not provide good habitat due to increased dissolved-oxygen variability. Number of fish species collected indicates better resource quality for the West Fork Beaver Creek than other streams likely due to a combination of factors including habitat quality, food resources, and dissolved oxygen characteristics. The greater IBI score at West Fork Beaver Creek compared to Chetomba Creek and South Branch Rush River coincides with greater percentages of retired land and diversity of physical habitat cover types. The substrate at West Fork Beaver Creek was primarily silt and clay which is not preferable for many fish and invertebrate species but a lack of extensive macroalgae cover may lead to more stable dissolved oxygen conditions within the stream.

CONCLUSION

Retired land is assumed to improve water quality and aquatic resource quality by reducing surface runoff and reducing agricultural chemical entry into streams. In this study, both nitrogen and phosphorus concentrations were lowest in the subbasin with the highest retired land percentage. Nitrogen concentrations were highest in the subbasin with little to no land retirement. IBI scores increased as local land retirement percentages (50- and 100-ft buffers) increased likely due to a combination of factors including habitat quality, food resources, and dissolved oxygen characteristics.

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DRAFT

From: Karen Flom <kmflom@yahoo.com>
To: Mary Jo Anderson <maryjo.anderson@bwsr.state.mn.us>
Date: 4/7/2008 11:36:33 AM
Subject: BWSR Board meeting

Just wanted to let you know that Renville SWCD Technician, Tom Kalahar, is extending an invitation to take anyone who wants to arrive early for the August BWSR Board meeting on a canoe trip on the Minnesota River.

So if any folks are able to come earlier on the 26th, he could plan a canoe outing for the afternoon and/or evening--depending on when majority can arrive, how many are going--we'd have to work all that out.

He's done this trip with several elected officials in the past couple years and it's been very popular--an opportunity to view the Granite Rock Outcrops and all the natural beauty of the Minnesota River.

This is an optional recreational activity for those who are interested and can work it into their schedules.

Karen Flom
Renville SWCD

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CC: Tom Kalahar <kalahar@yahoo.com>, Tom Fischer <Tom.Fischer@BWSR.State.MN.US>

- Jeff Nielsen
- Major Bill Miller

From: Tom Fischer
To: Flom, Karen; kalahar, tom; Mitchell, Diane; Schindler, Darrell
Date: 2/22/2008 9:11:59 AM
Subject: August 2008 BWSR Tour/Meeting in Renville County

The first and most important item has been accomplished...I've talked with the Sheep Shedde Inn folks...we have the entire 32 rooms blocked out for our August event. Here's a brief summary of what the event will consist of:

Tuesday evening August 26...a lot of folks will arrive at their discretion and stay over night at the Sheep Shedde. Nothing formal/informal planned.

Wednesday August 27...is the day-long tour. Need comfortable bus. Looking at 8:30am to 4:30pm or so. Will need to discuss things to fine-tune: a light breakfast at the Sheep Shedde before the tour; what to do about a picnic-lunch somewhere during the tour; and an evening meal followed by a slide-show presentation by Ron Bolduan at the Sheep Shedde's large meeting room. (Room is reserved)

Thursday August 28...BWSR Board meeting, 9:00am, at the Sheep Shedde's large meeting room. (Room is reserved). We will need to fine-tune a breakfast to be held before the meeting. Meeting should be done by noon...folks can leave, or stay and eat at Max's and then leave.

You folks should continue to think about the tour...SWCD, County, Hawk Creek. (See previous e-mail for suggested items.) Don't forget we need to work in a stop outside of Willmar to visit Grass Lake...I'll talk with Kandiyohi SWCD folks to have them meet us at Grass Lake and they give a brief presentation on the bus.

In time, MaryJo Anderson of BWSR St. Paul will contact the Sheep Shedde Inn to make arrangements for the hotel room and meal billings. MayJo may also be in touch with you as well. At some point, MaryJo and I will ask that you do a dry-run of the tour with us...probably early August (preferably the first week, I'm in Alaska, again from August 11-25).

Thanks so much for agreeing to host this event. BWSR does appreciate it...

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Thomas Fischer
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FAX: 507-359-6018

CC: Anderson, MaryJo; Hoek, Tabor; Nielsen, Jeff; Swanson, Carla
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Mary Jo Anderson

From: Tom Fischer
Sent: Monday, June 02, 2008 10:06 AM
To: Mary Oslund
Cc: Mary Jo Anderson
Subject: August 2008 BWSR board tour / meeting

MARY:

Each year the BWSR board goes to rural MN to conduct its monthly meeting...and asks the specific county/SWCD/etc. to host a tour. On August 27 – 28, 2008, the BWSR board will be in the Renville County area...tour on August 27, board meeting on August 28. The Sheep Shedde Inn in Olivia, MN will be utilized for the two-day event. More information will be provided in August.

Although the tour is pretty much based within Renville County, the tour bus will head to Willmar for a stop to view the Grass Lake restoration area. Is there a chance of having your SWCD RIM Coordinator Ryan Peterson and SWCD Board Chairman Doug Hanson meet the tour bus at a specific over-look site and participate with appropriate BWSR staff to provide a brief 10-15 minute overview of this restoration project? It's too early to give you an exact time right now, but I think it would be mid-morning for tour bus arrival.

Thomas Fischer, Board Conservationist

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From: Tom Fischer
To: Anderson, MaryJo; Nielsen, Jeff; Woods, Steve
Date: 2/15/2008 1:33:18 PM
Subject: August BWSR Bd Tour & Meeting

This is lengthy, but please read through it.

I attended the Renville SWCD board meeting on February 14th. I spoke to the group (SWCD, NRCS, LWPer, Co. Commissioner) about the August 27-28 BWSR Board tour and meeting, asking if Renville County would consider hosting and planning the two-day event. They whole-heartedly accepted. Following the meeting, a couple of us also spoke to two of the Hawk Creek Watershed Project staff...they, too, are very receptive to helping host and plan.

I need MaryJo to inform me of how many motel rooms we typically have for the overnight accommodations. I did stop by the "Sheep Shedde" (www.sheepsheddeinn.com) to check out the facility. I have stayed there several times over the past years...it is an adequate, nice place. They have 32 rooms. They checked their calendar, August 26 & 27 are wide open, all rooms are available.

Attached to the Sheep Shedde is "Max's Grill" (www.maxsgrillonline.com) , a very nice, new bar and restaurant. It has a couple of different sized meeting rooms, the larger looks like it would easily hold our BWSR board meeting...50+ people should be no problem.

Both places are owned/operated by new owners...Corey and Traci Buchtel. I spoke with Cori, who was very interested in working with us to house the event and provide food service. Their e-mail address is maxsgrill@redred.com

I promised to get back to Cori within a week after finding out if their number of available rooms would fit our needs. I need MaryJo to let me know this info. If it doesn't fit our needs, then we will need to look to Willmar, or Jackpot Junction, or Redwood Falls, all of which are outside of Renville County. Any of these would work, but would make things a little more difficult to plan...but could be done.

As for the tour... I mentioned several suggestions to consider...Hawk Creek projects, RIM/CREP easements and long-term maintenance, rock out-crop easements, Grass Lake by Willmar, native prairie still in place owned by DNR... They suggested showing local industry (beet plant, egg plant, fish farm), maybe coordinate some BMP construction with a tour stop/drive-by, invite local legislators(who probably will attend) , local newspaper folks that they have built a relationship with... Other topics that I didn't mention that could be considered are road mitigation wetland bank projects, water quality improvement data due to BMPs on Hawk Creek (Pat Baskfield and Joe Stangel work), show-case the Minnesota River Valley area... Renville County folks will do a very good job of putting together an interesting tour. They will develop a first-cut, I'll meet with them to discuss, they will update/revise, then we'll do a drive to check things out.

One last note... There is a local New Ulm photographer who is doing a show-case photo package for Renville County. I saw him and Tom Kalahar of Renville SWCD give a presentation at the New Ulm Public Library last night. I spoke with the photographer about August 27-28 and asked if he would be interested in providing a 30-45 minute slide-show presentation...he is very interested. Kalahar will work with the SWCD to bring him into the mix...probably the evening after returning from the tour and evening meal.

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Thomas Fischer
Board Conservationist
BWSR
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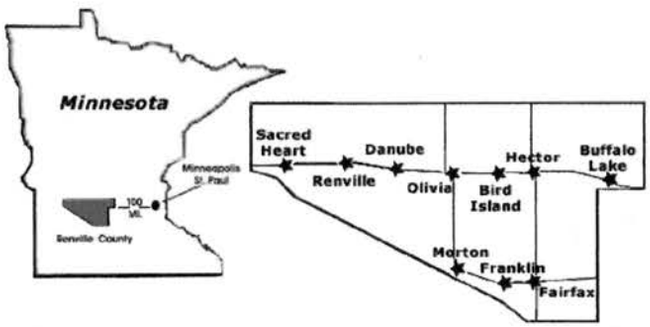
Board Tours

❑ August 2007	Koochiching and Lake of the Woods
❑ August 2006	Fairmont (Martin County)
❑ September 2005	Faribault (Rice County)
❑ September 2004	Metro (Ramsey, Dakota, Scott Counties)
❑ August 2003	Mahnomen (Red River Basin–Mahnomen, Norman, Polk Co.)
❑ September 2002	Hinckley (LWP conference)
❑ July 2002	Willmar (Kandiyohi County)
❑ June 2002	Mankato (CREP Celebration)
❑ October 2001	Caledonia (Houston County)
❑ September 2001	New Ulm (CREP tour with the Governor)
❑ August 2001	McGregor (Aitkin County)
❑ June 2001	Morton (LWP conference)
❑ May 2001	U of M (welcome to MES)
❑ September 2000	Two Harbors (LWP conference)
❑ June 2000	Montevideo (Lac Qui Parle/Yellow Medicine Counties)
❑ September 1999	St. Cloud (Stearns County)
❑ June 1999	Rochester (LWP conference)
❑ October 1998	Lanesboro (Mower/Fillmore Counties)
❑ September 1998	State Office Building ("Watershed Management – Governance at the Local Level")
❑ June 1998	Mora (Snake River)
❑ April 1998	Monticello (Riverwood – Retreat)
❑ August 1997	Crookston (Norman/Red Lake/Pennington/Polk Co.)
❑ June 1997	Redwood Falls (Redwood/Renville Counties)
❑ July 1996	New Ulm (LWP conference)
❑ May 1996	Fairmont (Martin County)
❑ July 1995	Duluth (St. Louis/Lake/Cook Counties)

BWSR Board Tour
August 27, 2008
Renville County



Renville County is an agricultural county located in west central Minnesota. The county is well known for its agricultural innovations including crop and animal cooperatives, seed crop breeding and production and farmers willing to experiment with newly developed agricultural technology.

Renville County's present boundaries are within 982 square miles and are comprised of 27 Townships and 10 cities (Bird Island, Buffalo Lake, Danube, Fairfax, Franklin, Hector, Morton, Olivia, Renville and Sacred Heart).

The county was established in 1855 by an act of the Minnesota Legislature. The first county election was held in 1862 but the records were lost during the Sioux outbreak. These election results were not filed with the State and no action was taken by the Legislature to declare Renville County an organized county. Finally in 1866 the County was declared organized and the second election was held.

Renville County was named for Joseph Renville, a famous pioneer in the west central frontier of Minnesota. Renville was born in 1779 in the village of Kaposia. His father was a French fur trader and his mother a Dakotah and member of the Little Crows band of Sioux. Renville at the age of 10 was sent to Canada to study the French language and the fundamentals of the Christian religion under the guidance of a Catholic priest. Upon his return to Minnesota he served as a guide and interpreter for the government and fur trading companies. He established his own trading post at La Qui Parle where he later died. Renville is remembered as a friend to the Sioux Indians and white travelers alike. His relationship with the Indian tribes was instrumental in maintaining peace for the new frontier.

The 2000 census data indicates there are 17,154 people living in Renville County. Of these 25% (4,356) are under 18 years of age, 55% (9,397) are between the ages of 18 and 65, and 20% (3,401) are of the age of 65 and older. The median age for people living in Renville County is 40 years old. Olivia is the seat with a population of 2,570

More Facts about Renville County

Total Acres: 630,000

Cropland Acres: Approximately 581,000

Crop Production: (2006)

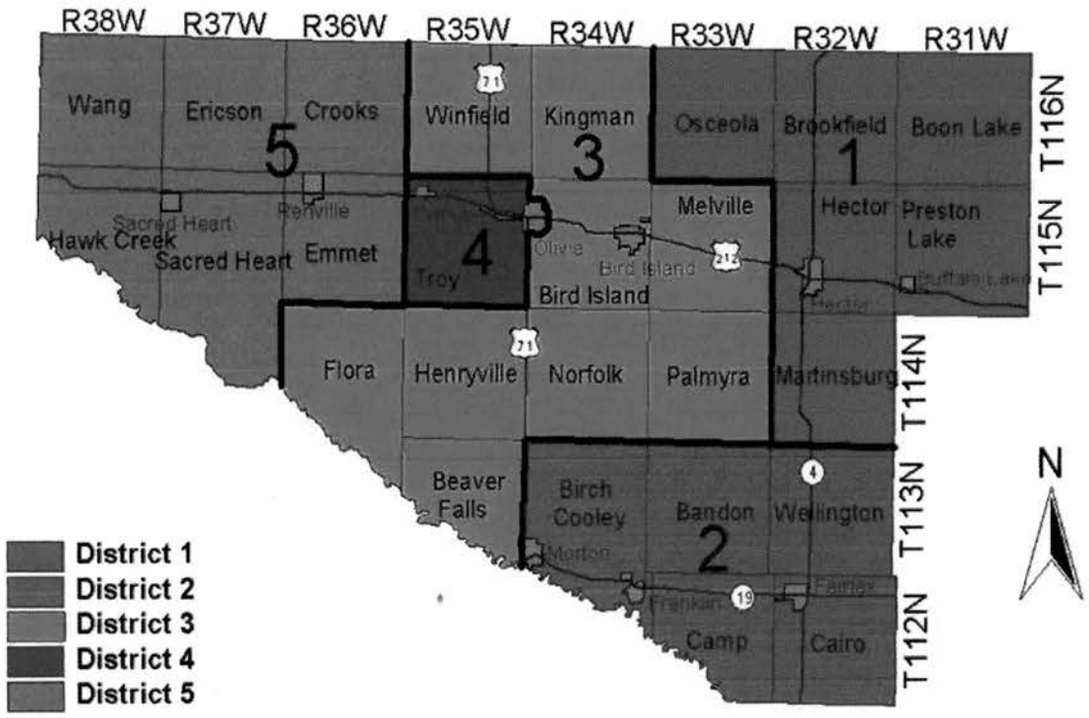
- #1 Corn, Green Peas, Sweet Corn
- #2 Soybeans
- #3 Dry Edible Beans
- #5 Sugarbeets

850 Miles of Drainage Ditches

Conservation Lands

- #1 in CREP with 236 easements totaling 9,501.40 acres
- #1 in perpetual easements totaling 14,735.40 acres
- CRP Acres = 5,868.6

Renville County Commissioner/SWCD Supervisor Districts

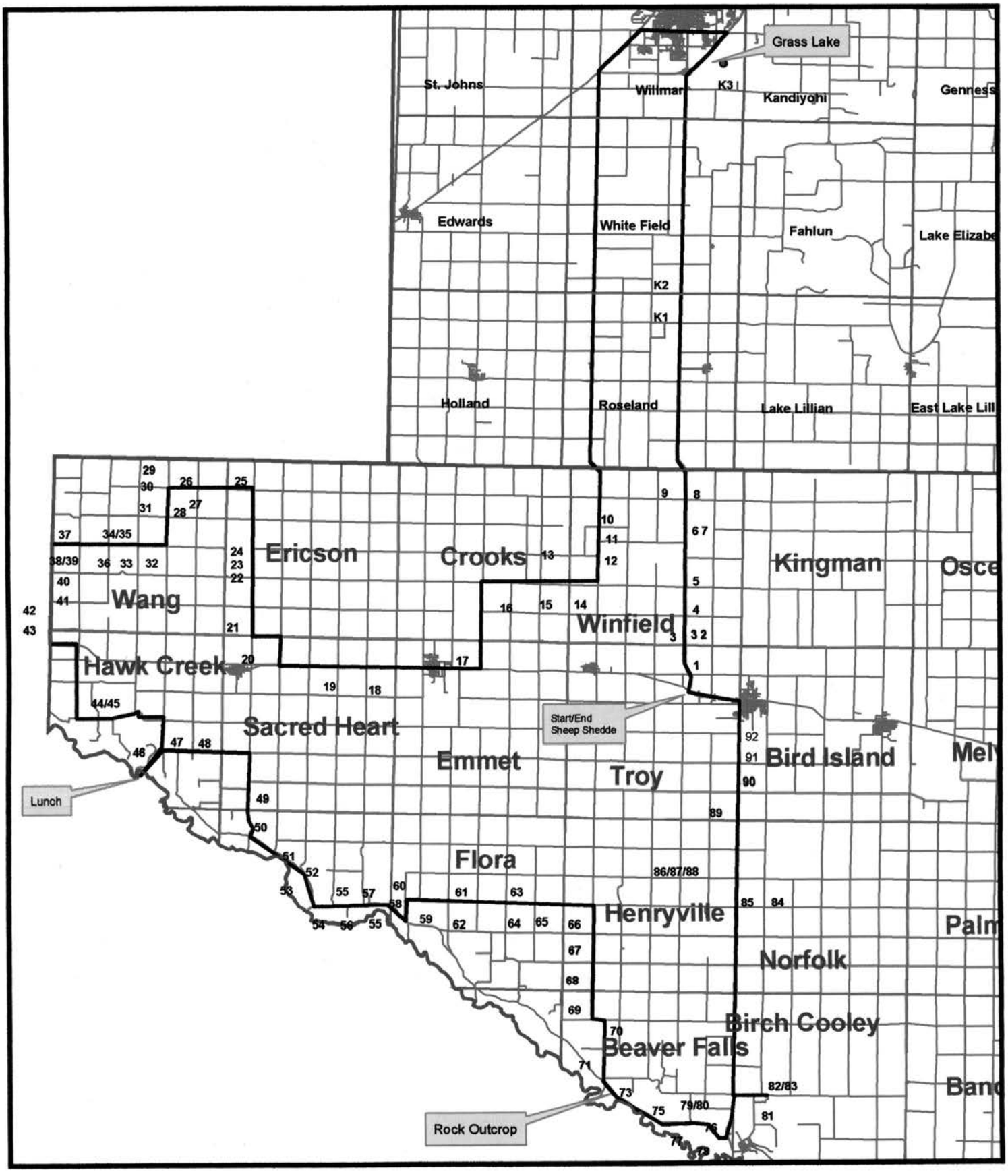


District 1 is represented by Ralph Novotny on the County Board and Jim Schafer, SWCD Supervisor
District 2 is represented by Bob Fox on the County Board and Bill Radermacher, SWCD Supervisor
District 3 is represented by Paul Setzepfandt, County Board and Marc Iverson, SWCD Supervisor
District 4 is represented by John Stahl on the county Board and Kathryn K. Kelly, SWCD Supervisor
District 5 is represented by Gale Dahlager on the County Board and Loyal Fisher, SWCD Supervisor

Meet the SWCD Staff

Tom Kalahar, District Technician (Easement Programs & Feedlot Inspections)
Karen Flom, Office Manager
Taralee Latozke, District Technician (WCA, State Cost-Share, et al)
Cory Netland, Farm Bill Technician (USDA Conservation Programs)

BWSR TOUR 2008
Renville and Kandiyohi Counties



BWSR Tour
Renville County
Wednesday, August 27, 2008

			Funding Source(s)																
#	Practice Description	Location	PF	LWM	HCWP	RIM	CREP	State C/S	FWQMG	DOT	DNR	EQIP/ACP	CRP	WHIP	WRP	RC&D	USFWS	Other	Comments
1	Hog Barns/Shelterbelt	TR 2										X							
2	1988 Wetland Restoration	WI 35				X													
3	Ditch 59 buffer	WI 34/35					X												
4	Farmstead Shelterbelt	WI 26										X							
5	Farmstead Shelterbelt	WI 23																	
6	Wetland Res/Ditch buffer	WI 11					X												
7	Biofilters/Hog Barns	WI 11										X							
8	Rock Intakes	WI 2																	
9	Wetland Restoration	WI 3					X												
K1	Side Inlets/Alternative Intakes	RSL3			X													Ditch	
K2	Harvestable Buffer	WHI25			X														
K3	Grass Lake	WIL25	X	X		X									X		X	*	*City/County/SWCD
10	Ag Waste Project	WI 8		X	X			X				X							
11	Long Lake WMA	WI 17									X								
12	Sed Basin	WI 17			X														
13	Vineyard	CR 13																	
14	CREP	WI 30					X												
15	Field Windbreak	CR 25						X				X							
16	Ridge & Strip Till	CR 25/26/27										X							
17	***SMBSC--Morning Break***																		
18	CREP	SH 12					X												
19	RIM	SH 10/11				X													
20	prescribed grazing	SH 5																	
21	Ag Waste Project	ER 31																	
22	RIM/WRP	ER 20				X									X				
23	Grove/Field Windbreaks	ER 17																	
24	Chetomba WMA	ER 17/8	X		X						X								
25	Waterway	ER 6			X							X							
26	Septic System	WA 2			X														
27	CREP Restoration/Buffer	WA 2				X													
28	CREP Restoration/Buffer	WA 11				X													
29	Buffer	WA 3																	
30	CRP FWP/CP 21 filter	WA 3			X								X						

#	Practice Description	Location	PF	LWM	HCWP	RIM	CREP	State C/S	FWQMG	DOT	DNR	EQIP(ACP)	CRP	WHIP	WRP	RC&D	USFWS	Other	Comments
31	CREP Restoration/Buffer	WA 10					X												
32	Farmstead Shelterbelt	WA 22											X						
33	Grass Back Terraces	WA 21						X				X							
34	RIM Riparian Pasture	WA 16				X													
35	CCRP SAFE	WA 16											X						
36	RIM - 2nd RIM in County	WA 20				X											X		
37	CREP Stream Buffer	WA 18					X												
38	WPA	WA 19															X		
39	CREP	WA 19					X												
40	CREP Restoration/Buffer	WA 30					X												
41	CREP Restoration/Buffer	WA 30					X							X					
42	Pheasant Hunting Preserve	Chippewa					X												
43	Granite Falls Energy, LLC	Chippewa																	
44	Hawk Creek Outlet Monitor	HC 16			X														
45	Streambank Stabilization	HC 16			X														
46	Direct Seeding hardwoods	HC 27														X			
	Lunch-Skalbekken Park																		
47	CREP	HC 23	X				X				XX			X					
48	CREP	HC 23/24					X												
	Grove removal	HC 24																	
49	#119 Rock Intakes/Side Inlets	SH 29/32			X													Ditch	
50	RC&D Roadside Erosion	LSH 5														X			
51	Floodplain CREP	LSH 8					X				X			X					
52	Joe Brown Historic Site	LSH 8																	
53	Terrace/CRP/River Wetlands	LSH 16											X						
54	Old CRP renewed to SAFE	LSH 22											X						
55	Abandoned Gravel Pit	LSH 23																	
56	CREP Stream/Floodplain	LSH 23					X												
57	RIM MN River Buffer	LSH 24				X													
58	CREP Floodplain buffer	FL 19					X												
59	RC&D Roadside Erision	FL 19														X		County	
60	Shelterbelt	FL 18						X											
61	CREP Ditch 35A buffer	FL 16					X												
62	Septic System	FL 21			X														
63	Tillage	FL 14										X							
64	Strip Till	FL 23										X							
65	Field Windbreak	FL 24																	
66	CRP Re-enrollment	HN 19											X						
67	Hog Barns/Tree planting	HN 30																	
68	CREP Ditch Buffer	HN 31					X												

#	Practice Description	Location	PF	LWM	HCWP	RIM	CREP	State C/S	FWQMG	DOT	DNR	EQIP(ACP)	CRP	WHIP	WRP	RC&D	USFWS	Other	Comments
69	Hog Barns/Shelterbelt	BF 6						X										AgBMP	
70	CREP Smith Creek Buffer	BF 8					X												
71	RC&D Roadside Erision	BF 20														X			
72	***Malecha Rock Outcrop***	BF 20																	
73	CREP Floodplain/Creek	BF 26/27					X												
74	Beaver Creek																		
75	RIM Wetland/River Buffer	BF 26				X													
76	Feedlot Violation	BF 26																	
77	SMC Granite Mine	BF 35																	
78	Rock Outcrop & Wetland	BF 35																	
79	Living Snow Fence	BF 25								X			X						
80	CREP Wetland Restoration	BF 25					X												
81	Roadbank Mitigation	BC 19				X				X									
82	Birch Coolee Battlefield																		
83	***Break-Birch Coulee Park***																		
84	***Revier Cattle Company***	NO 17										X							
85	Grove Renovation	NO 18						X											
86	CREP	HN 12					X												
87	Sed Basin	HN 12						X											
88	Native Veg Conversion	HN 12				X		X											
89	LSF	TR 36								X			X						
90	Organic Farming	BI 29/30/31																	
91	Ditch 66 Buffer																		
92	City of Olivia Windbreaks																		
	Sheep Shedde																		

Grass Lake Wetland Restoration

Kandiyohi County

Restoration will provide water quality, flood control and wildlife habitat benefits

The Grass Lake Prairie Wetland is located southeast and adjacent to the city of Willmar. The 1,000 acre wetland is currently drained by Kandiyohi County Ditch 23A along with a network of additional private drainage systems. As the headwaters of the South Fork of the Crow River, Kandiyohi County Ditch 23A starts in Willmar and flows southeast through the Grass Lake basin. Approximately 3,261 acres of stormwater runoff from the city of Willmar and approximately 7,665 acres of watershed runoff from a primarily agricultural landscape contribute runoff to the ditch system as it passes through the drained lakebed and then downstream to Wakonda and Little Kandiyohi Lakes.

Efforts are currently underway to restore the drained wetland for the purposes of improving downstream water quality, providing downstream flood damage reduction, and for restoring wildlife habitat benefits. The county, city and other project partners have agreed to cooperate and undertake this project to secure the few remaining easements, conduct the necessary drainage proceedings, and make the necessary site modifications to restore the drained lakebed and achieve the anticipated project benefits. Those benefits include improving water quality for the downstream chain of lakes, including Wakanda, Little Kandiyohi, and Big Kandiyohi; the impaired South Fork of the Crow River; and, ultimately, the Mississippi River.

Conservation easements make restoration possible

To date, perpetual conservation easements through the Reinvest in Minnesota (RIM) Reserve program have been secured on 11 properties on about 1,100 acres. Native vegetation and some wetland areas have already been restored on those lands. Project partners are working with other landowners to enroll the remaining 400-500 acres in conservation easements, which will allow the full restoration to be completed.

Grass Lake project area (blue lines indicates boundary of lakebed)

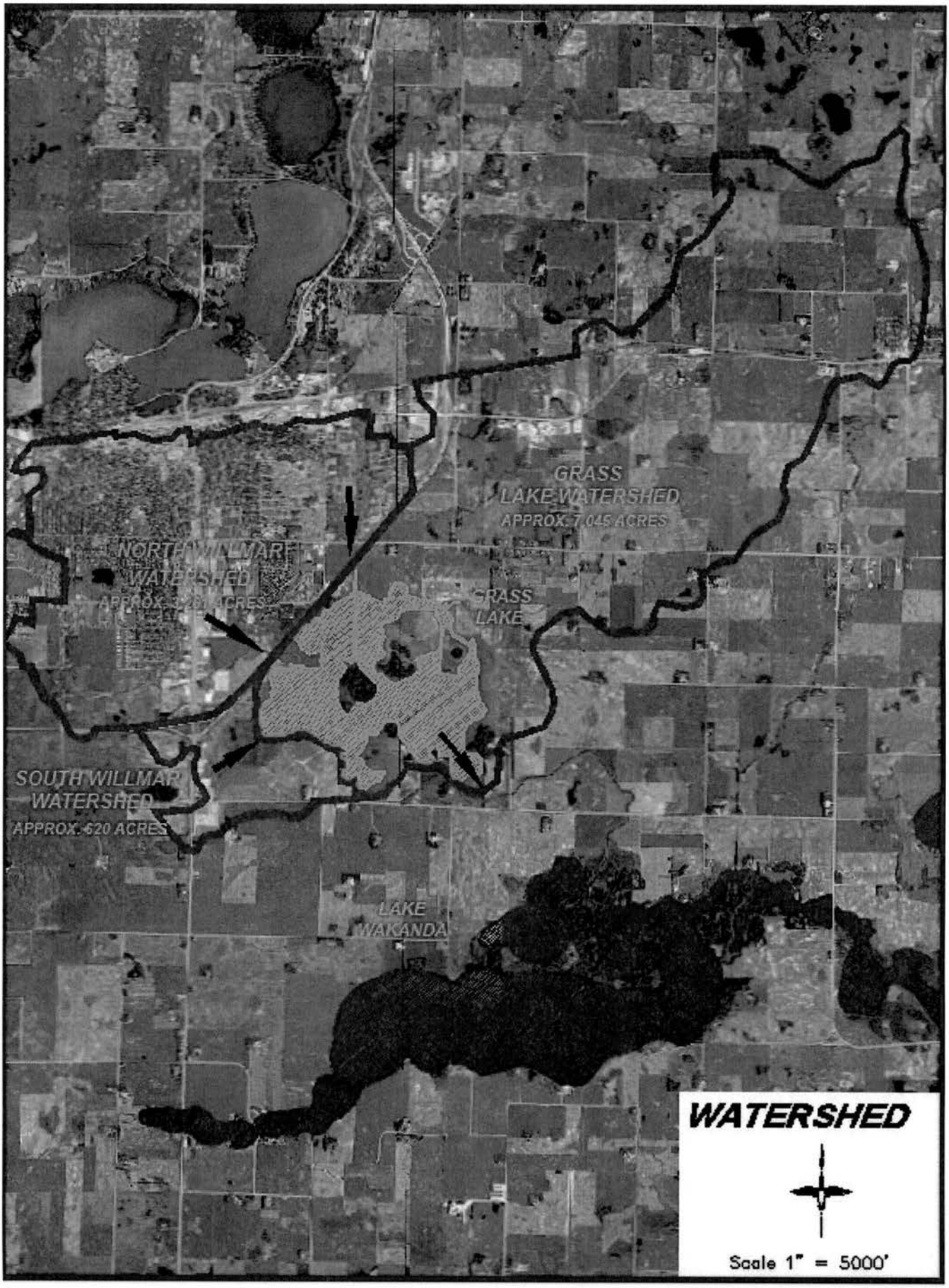
Total projected cost: $6.5 million

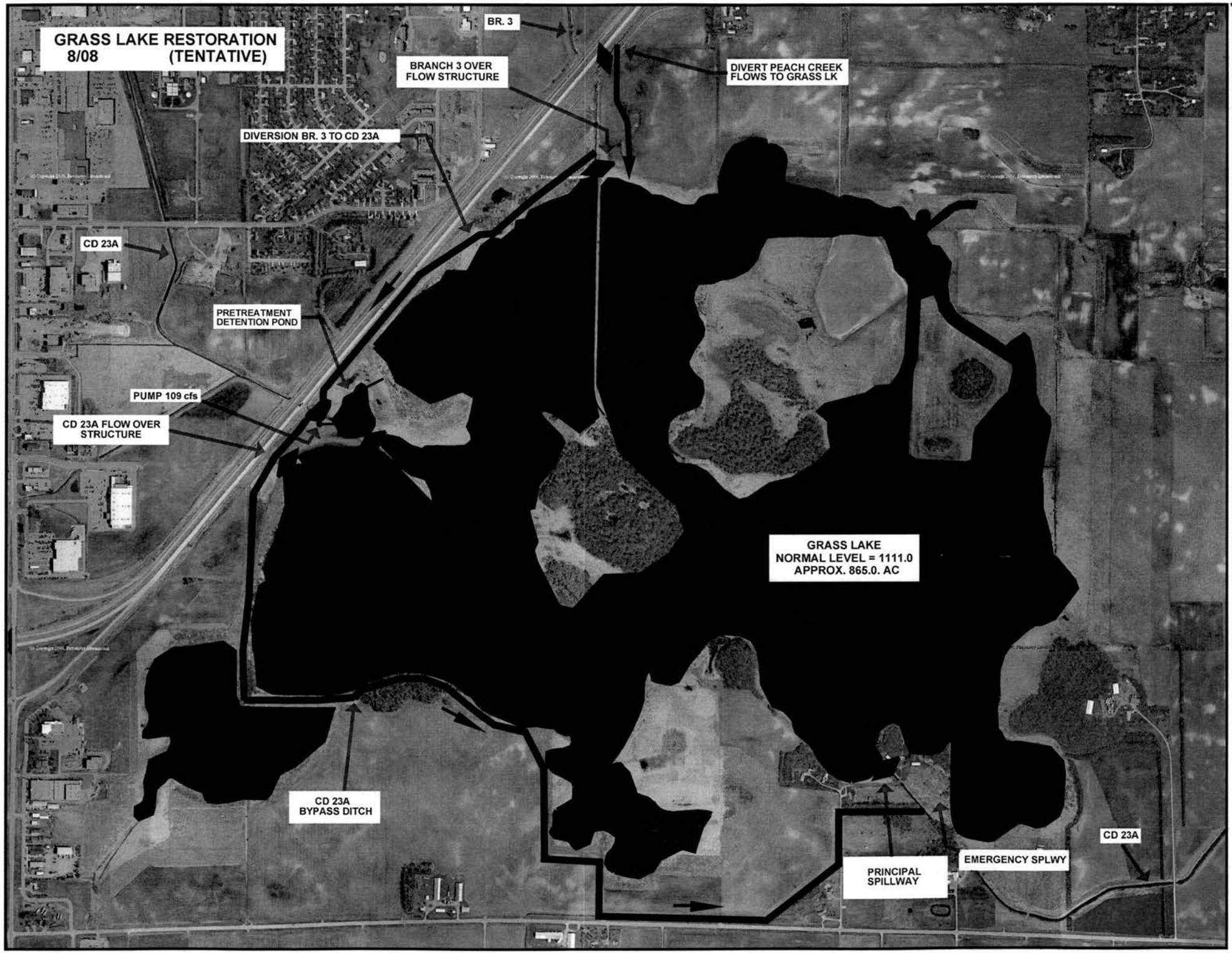
Completing the restoration project will require:

- Easement acquisition of remaining 400-500 acres
- Re-routing County Ditch 23A high flows around the western and southern sides of Grass Lake
- Constructing a lift station to pump "first flush" stormwater runoff from Willmar into Grass Lake
- Constructing a treatment pond for pumped stormwater
- Diverting runoff from the 7,000-acre Peach Creek watershed into the Grass Lake basin
- Constructing a dam and water control structure at the outlet

Total estimated project cost	**$6.5 million**
State funds spent to date	$1.3 million
Current state funds available	$3 million
Required local and partner contribution	$2.2 million

Minnesota Board of Water & Soil Resources


GRASS
LAKE WATERSHED
APPROX. 7,045 ACRES
NORTH WILLMAR
WATERSHED
APPROX. 3,261 ACRES
GRASS
LAKE
SOUTH WILLMAR
WATERSHED
APPROX. 620 ACRES
LAKE
WAKANDA
WATERSHED
Scale 1" = 5000'


GRASS LAKE RESTORATION
8/08 (TENTATIVE)
BR. 3
BRANCH 3 OVER FLOW STRUCTURE
DIVERT PEACH CREEK FLOWS TO GRASS LK
DIVERSION BR. 3 TO CD 23A
CD 23A
PRETREATMENT DETENTION POND
PUMP 109 cfs
CD 23A FLOW OVER STRUCTURE
GRASS LAKE
NORMAL LEVEL = 1111.0
APPROX. 865.0. AC
CD 23A BYPASS DITCH
PRINCIPAL SPILLWAY
EMERGENCY SPLWY
CD 23A

Effects of Agricultural Land Retirement of the Minnesota River Basin

Victoria Christensen and Kathy Lee
USGS, Mounds View, MN

Prepared in cooperation with the Minnesota Board of Water and Soil Resources with partial funding from the Minnesota Environment and Natural Resources Trust Fund

U.S. Department of the Interior
U.S. Geological Survey

Reason for Study

- RIM, CREP, and CRP were all designed to improve water quality.
- Agricultural land commonly is retired on the basis of field-scale research that shows improved water quality
- Currently no Minnesota or Federal programs exist to evaluate the effectiveness on water quality and aquatic biology on a watershed scale
- This study evaluates the effectiveness of agricultural land retirement programs for 3 streams in the Minnesota River Basin and try to answer the question:
  - Does the amount and proximity of retired lands improve biological integrity?

Reason for Study

The Minnesota River Basin

- Primarily agricultural
- Concern over soil erosion
- Sediment and nutrient loads are high

Objectives

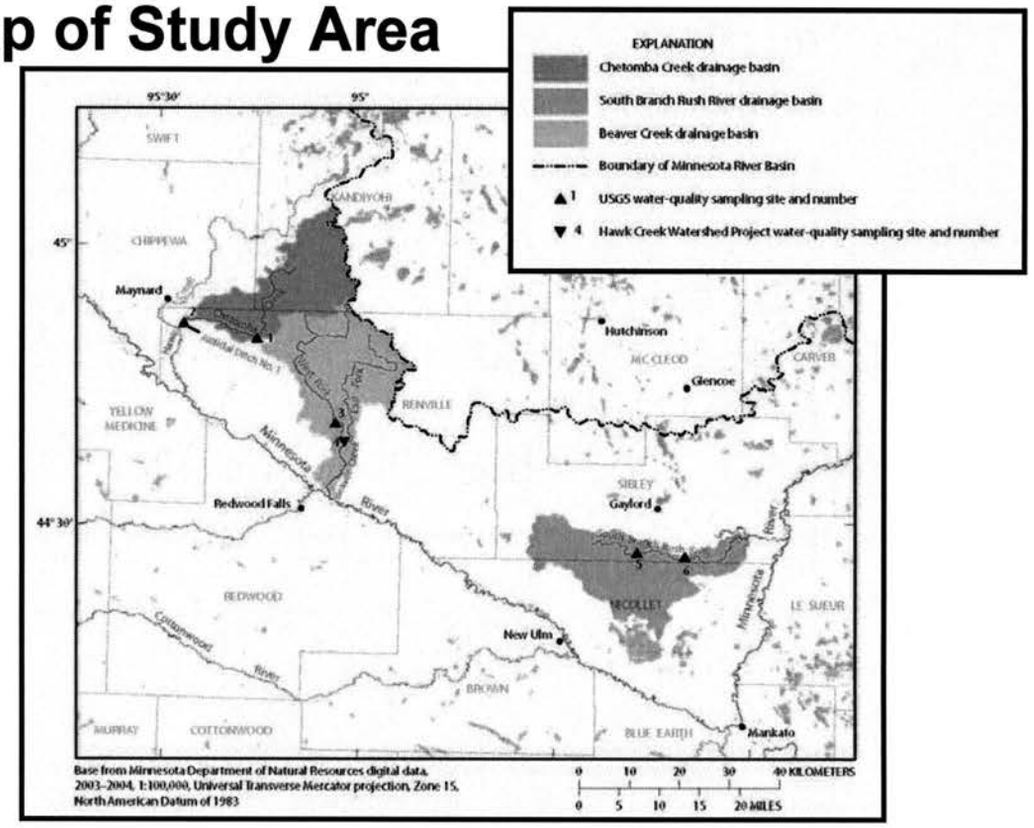
- Characterize and compare streamflow, water quality, and biological conditions in the Minnesota River Basin
- Compare spatial and temporal variability in water quality and biological conditions to the amount and location of land retirement

Today's Presentation

- Nutrient and chlorophyll-a concentrations in Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River, 2005-2007
- Biological conditions in 2006 and 2007

Map of Study Area

Map of Study Area



Site selection

- 17 site selection parameters included:
  - Slope
  - Basin size
  - No in-line lakes
  - Climate
  - Basin drainage and sinuosity
  - Soil type (cluster analysis)
  - Range of land retirement conditions

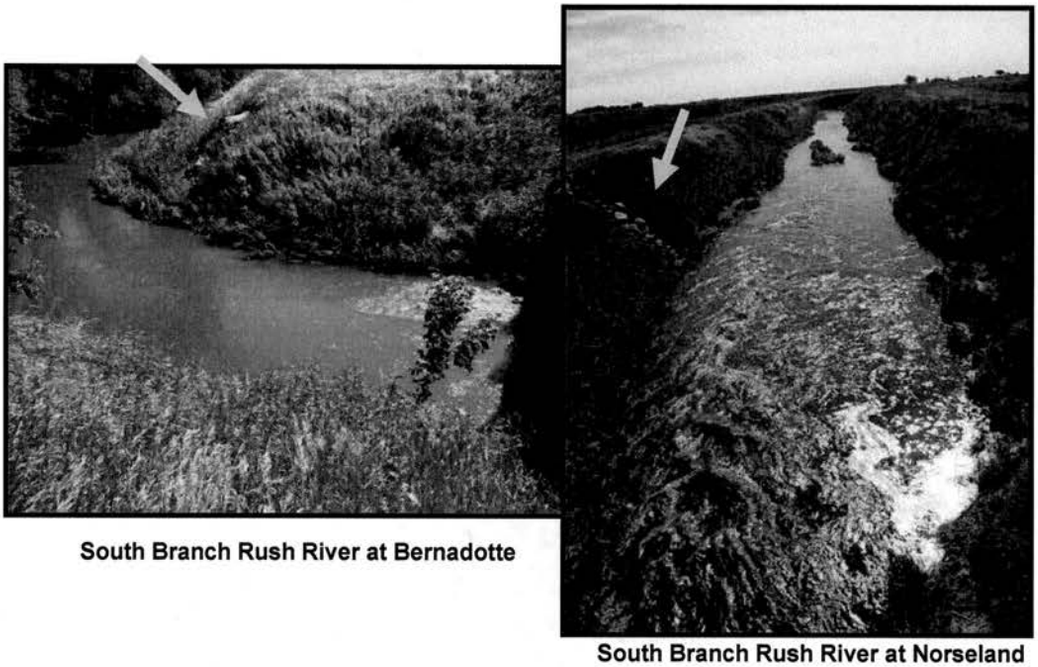
Land use

Photo by Loren Engleby, Kandiyohi County

Land use

Photo by Loren Engleby, Kandiyohi County

Land use



South Branch Rush River at Bernadotte

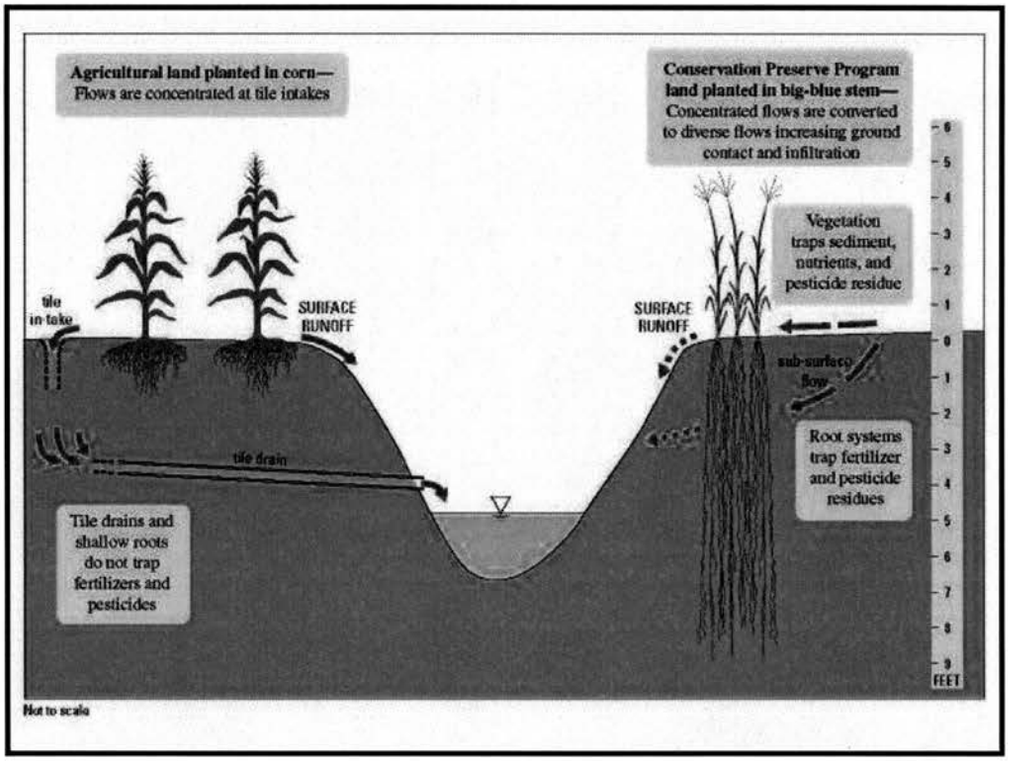
South Branch Rush River at Norseland

Land use

West Fork Beaver Creek

Photo by Stephanie Klamm, Hawk Creek Watershed Project

Land use

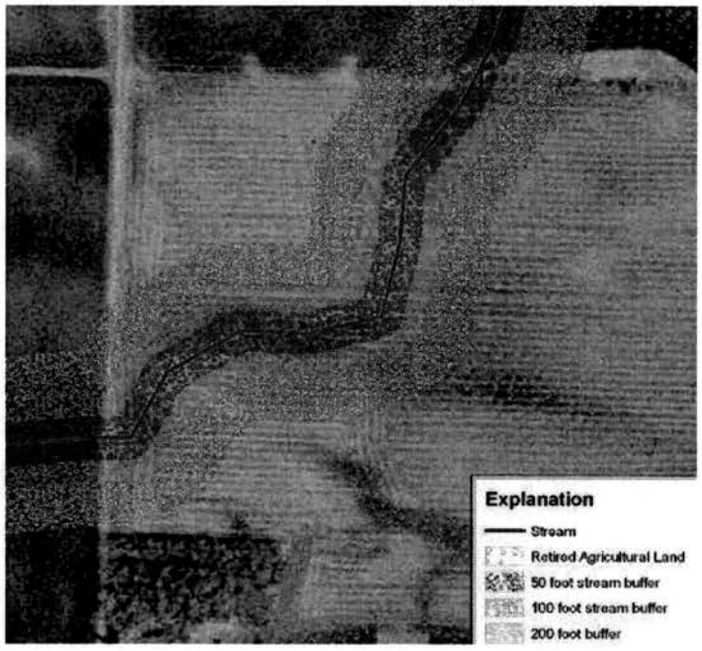


Methods: GIS land retirement data

- Land retirement data included:
  - Conservation Reserve Program (CRP)
  - Conservation Reserve Enhancement Program (CREP)
  - Reinvest in Minnesota (RIM)
  - Pheasants Forever
  - Wildlife Management Areas
  - USFWS Waterfowl Production Areas

Intensity of Retired Lands

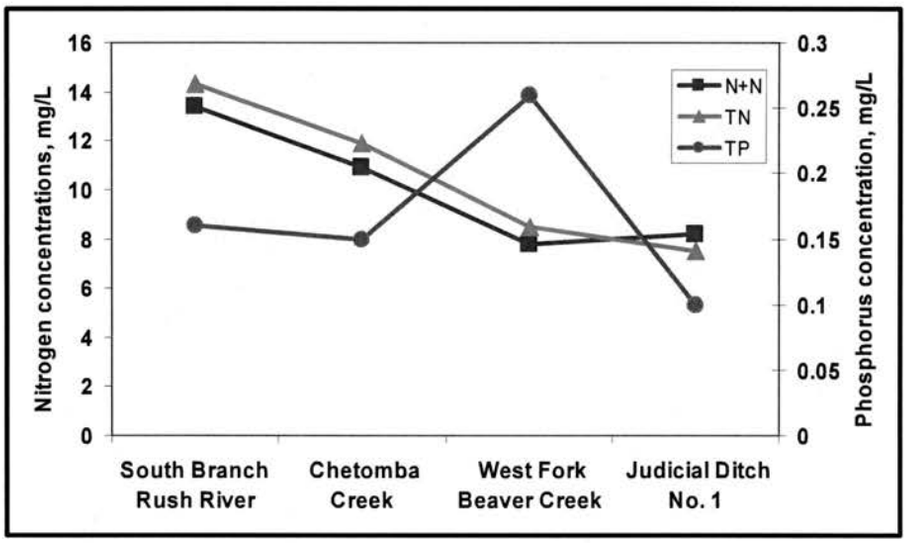
- Calculated for 50ft, 100ft, 200ft, and 300ft buffers
- Most retired land in these basins is riparian
- Intensity of retired lands is greatest in the 50ft buffer



Percentage of Land Retirement

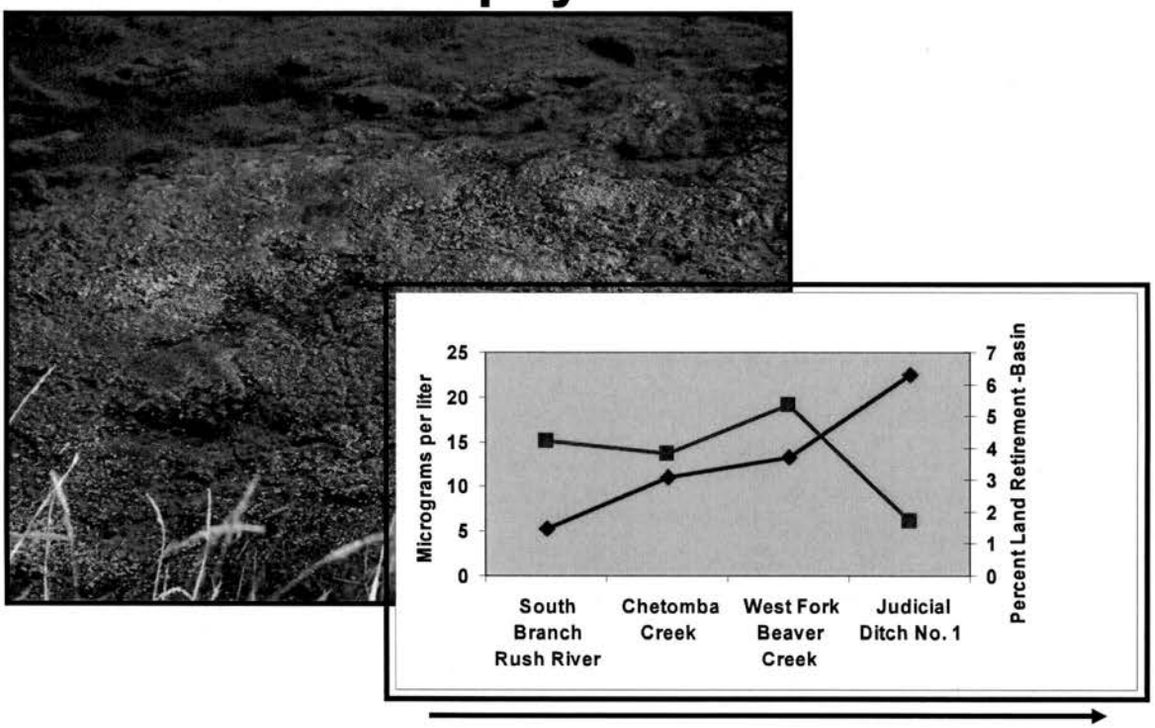
Basin	300-ft Buffer	200-ft Buffer	100-ft Buffer	50-ft Buffer
[illegible]	[illegible]	[illegible]	[illegible]	5.7
Judicial Ditch No. 1	8.3	9.4	11.3	18.7
[illegible]	[illegible]	[illegible]	[illegible]	10.4
South Branch Ruth River	[illegible]	[illegible]	[illegible]	7.6

Results: Nutrients



Increasing land retirement percent (basin)

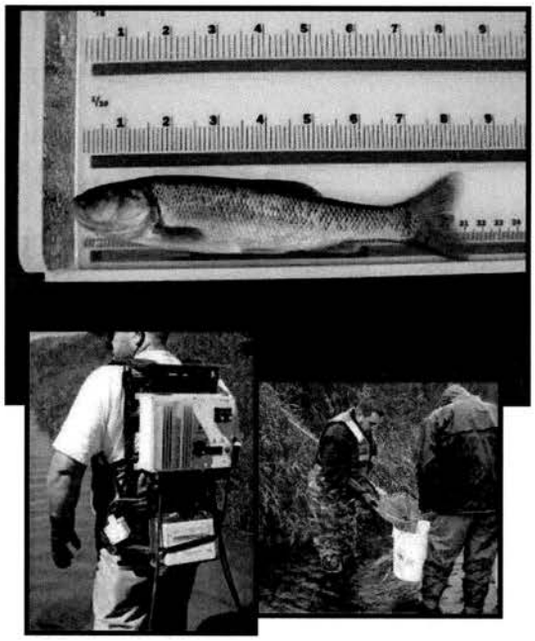
Results: Chlorophyll-a



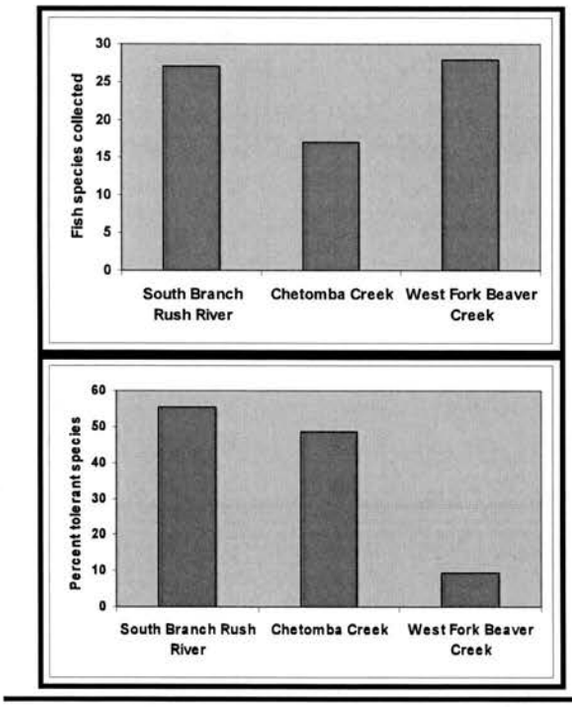
Increasing land retirement percent (basin)

Results: Fish

- 21 species of fish from 5 families collected
- Majority of fish were from Cyprinidae family
- Five taxa were classified as tolerant fish
- West Fork Beaver and South Branch Rush similar numbers of fish collected, but South Branch Rush had more tolerant species



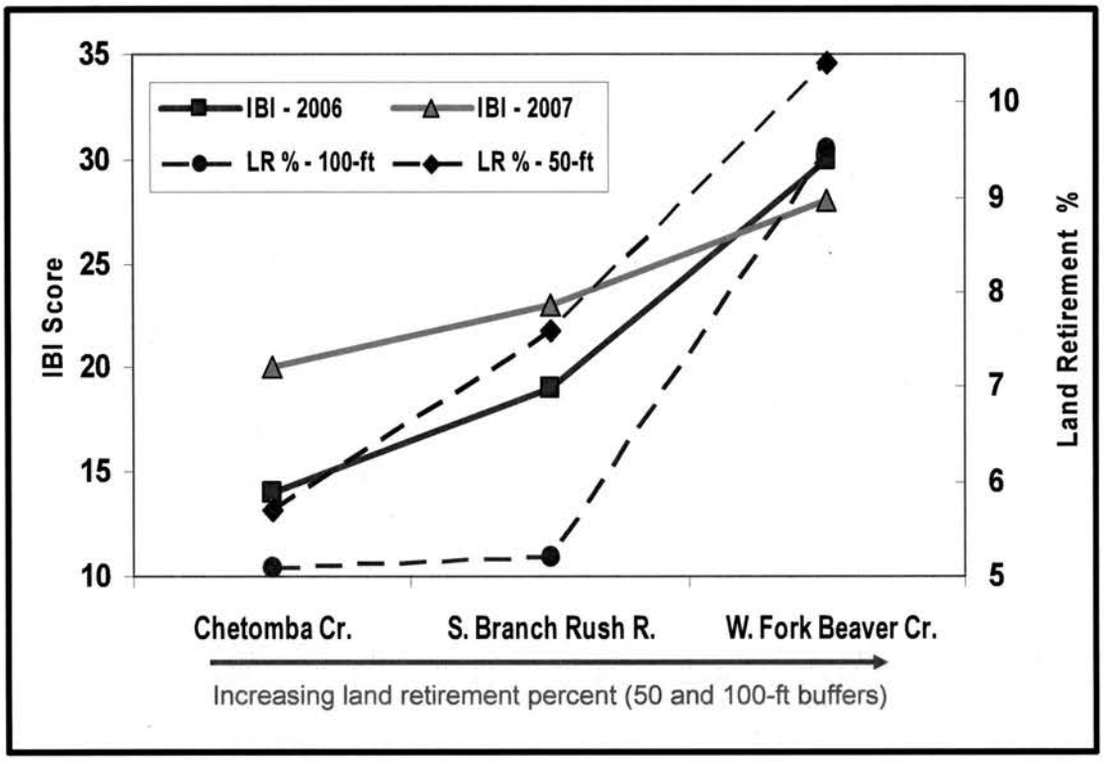
Fish Collection 2006 and 2007



- Number of species collected at West Fork Beaver Creek indicates better resource quality

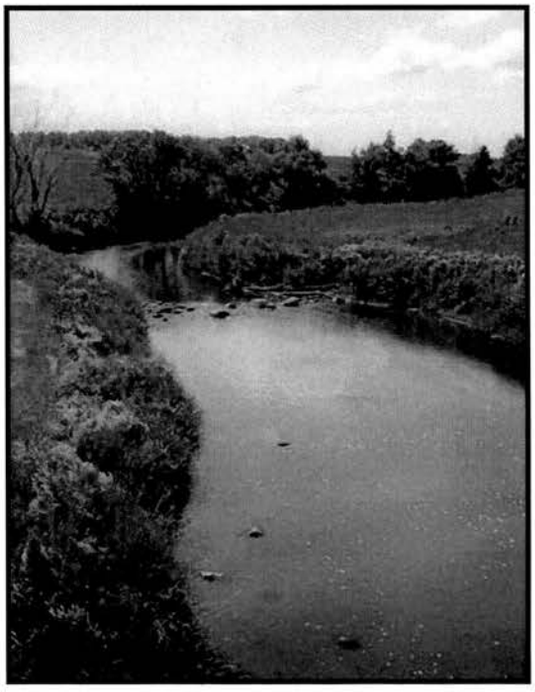
Increasing land retirement percent (basin)

Results: IBI Scores



Conclusions

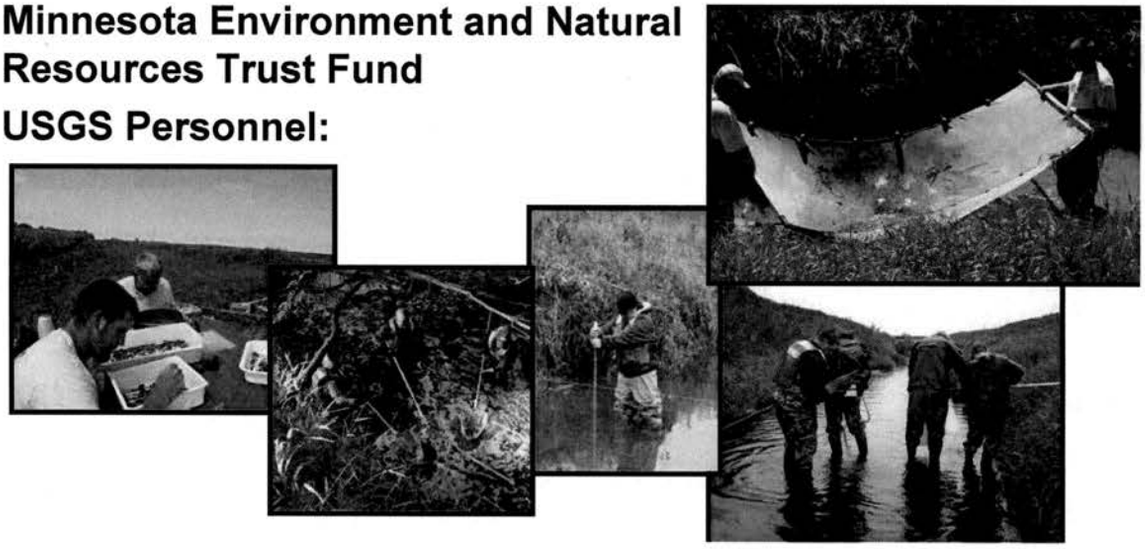
- Total nitrogen decreased with increasing retired land percentage
- Most tolerant fish species were found at the sites with the least land retirement
- IBI scores increased as local land retirement percentages (50-ft and 100-ft buffers) increased



West Fork Beaver Creek

Acknowledgments

- Eric Mohring, Minnesota Board of Water and Soil Resources
- Konrad Schmidt, Minnesota Department of Natural Resources
- Minnesota Environment and Natural Resources Trust Fund
- USGS Personnel:



For More Information:

- vglenn@usgs.gov
- http:mn.water.usgs.gov

Effects of Agricultural Land Retirement in the Minnesota River Basin

USGS, BWSR, LCCMR project
Summary for BWSR Staff and Board - August 2008
Eric Mohring, BWSR and Victoria Christensen, USGS

Background

The United States Geological Survey (USGS), BWSR, and the Legislative-Citizen Commission on Minnesota Resources (LCCMR) began a project in 2005 to evaluate the effect of agricultural land retirement (set-aside) on stream quality. The project has continued through a second LCCMR funding cycle.

We are all aware of the substantial amount of time, effort, and money that has gone towards land retirement programs such as RIM, CRP, CREP, and the like, as well as large-scale best management practices (BMPs) such as buffer strips and filter strips. One of the primary goals is water quality improvement. Field scale research, as well as pollution reduction estimation methods, shows the positive effects of land retirement and riparian buffers on water quality. Intuitively, we know these programs are a good idea, and all field-scale indications and estimates back this up.

However, to date there has been little or no evaluation of ***watershed-scale*** improvements to water quality and aquatic biology resulting from land retirement. Furthermore, the efficacy of prioritizing retired lands near streams is unknown.

Methods

Selection

The main objective of the study was to compare water quality and biological conditions in small watersheds **as similar as possible** except for the **amount and location of agricultural set-aside land**. (This is inherently **very** difficult, as all watersheds have differences and no watersheds are identical. Other "lurking variables" such as variations in climate, agricultural practices, retirement acreages, etc. call into question the interpretation of any short-term data set.)

The **Chetomba Creek**, **West Fork Beaver Creek**, and **South Branch Rush River** sub-basins were selected after considering a set of 17 parameters such as slope, basin size, and absence of dams or in-line lakes. The selection required **minimizing** the differences in these parameters, while **maximizing** differences in percentages of land retirements.

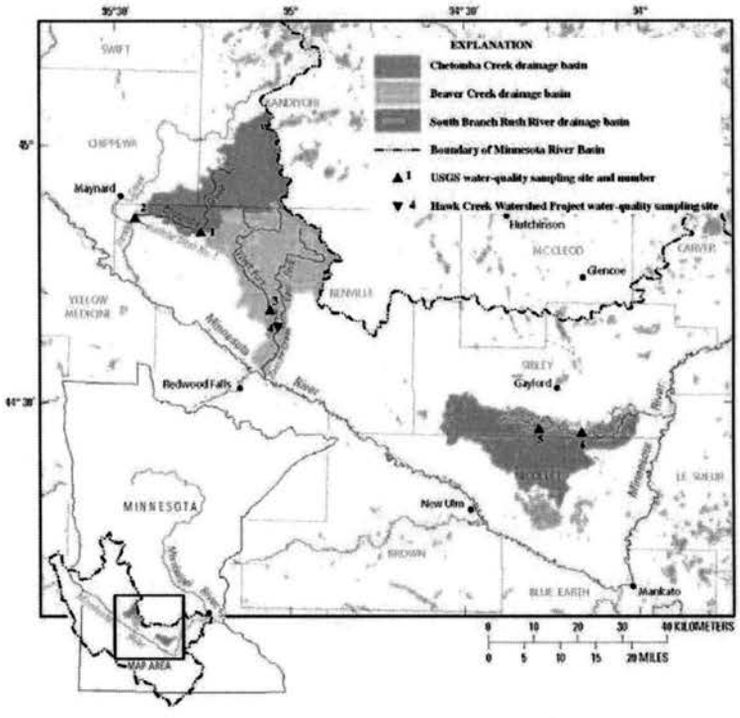


Figure 1: Sampling sites in Chetomba Creek, Beaver Creek, and South Branch Rush River sub-basins, Minnesota River Basin.

Land Retirement Data

Land retirement data were obtained from various sources, and included GIS coverages of CRP, CREP and RIM lands, and some smaller amounts of retired agricultural land in other programs including Pheasants Forever, Wildlife Management Areas, and U.S. Fish and Wildlife Service Waterfowl Production Areas.

Stream flow Measurement

Stream water-surface elevation (stage) was measured at 3 stream-gaging stations. The data were electronically recorded and transmitted by satellite. Stream flow measurements were made approximately every six weeks during the open-water season. A stage-stream flow relation was developed on the basis of stream flow measurements and the stage of the stream at the time of measurement.

Sampling

Water-quality samples were collected manually and with automated samplers between October 2005 and September 2007. Nutrient and Sediment samples were collected for lab analysis, and samples were analyzed on site for conductance, pH, temperature, dissolved oxygen, and turbidity. Continuous, real-time water-quality monitoring was used at 3 stream gaging sites, and data were transmitted via satellite. Biological monitoring included sampling for algae, invertebrates, and fish.

IBI Scoring

Index of biotic integrity **(IBI)** scores were used to measure fish community response and community health. The IBI was calculated using 8 metrics related to the composition and structure of the fish community. The sum of the metric scores is the IBI score, which ranges from 12 to 60 (greater number indicates better aquatic resource quality).

Results

IBI Scoring

In this Study, Index of biotic integrity (IBI) scores increased as local land retirement percentages increased (Figure 2). This relationship showed the best correlation when the percentages were calculated in 50- and 100-foot buffer zones around streams. The correlation decreased as the buffer distance from the stream over which the land retirement percentages were calculated increased.

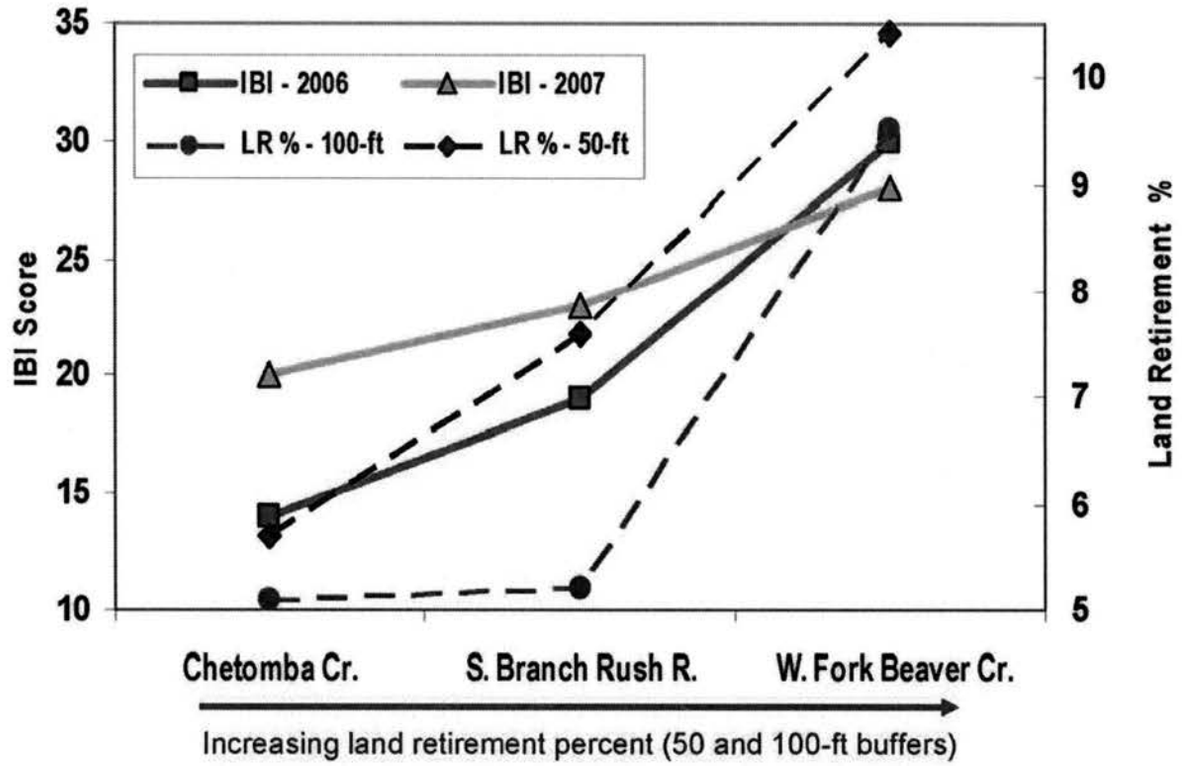


Figure 2: Index of Biotic Integrity (IBI) Scores and Land Retirement percentages in 50- and 100-ft buffers for Chetomba Creek, S. Branch Rush R., and W. Fork Beaver Creek.

Nutrients

Both nitrogen and phosphorus concentrations were lowest in the sub-basin with the highest retired land percentage. Nitrogen concentrations were highest in the sub-basin with little to no land retirement. The data show a trend of decreasing nitrogen and phosphorus concentrations with increasing land retirement percentage, though the correlation is better for nitrogen than for phosphorus (Figure 3). The correlation shows little sensitivity to the buffer distance over which the percentages are calculated.

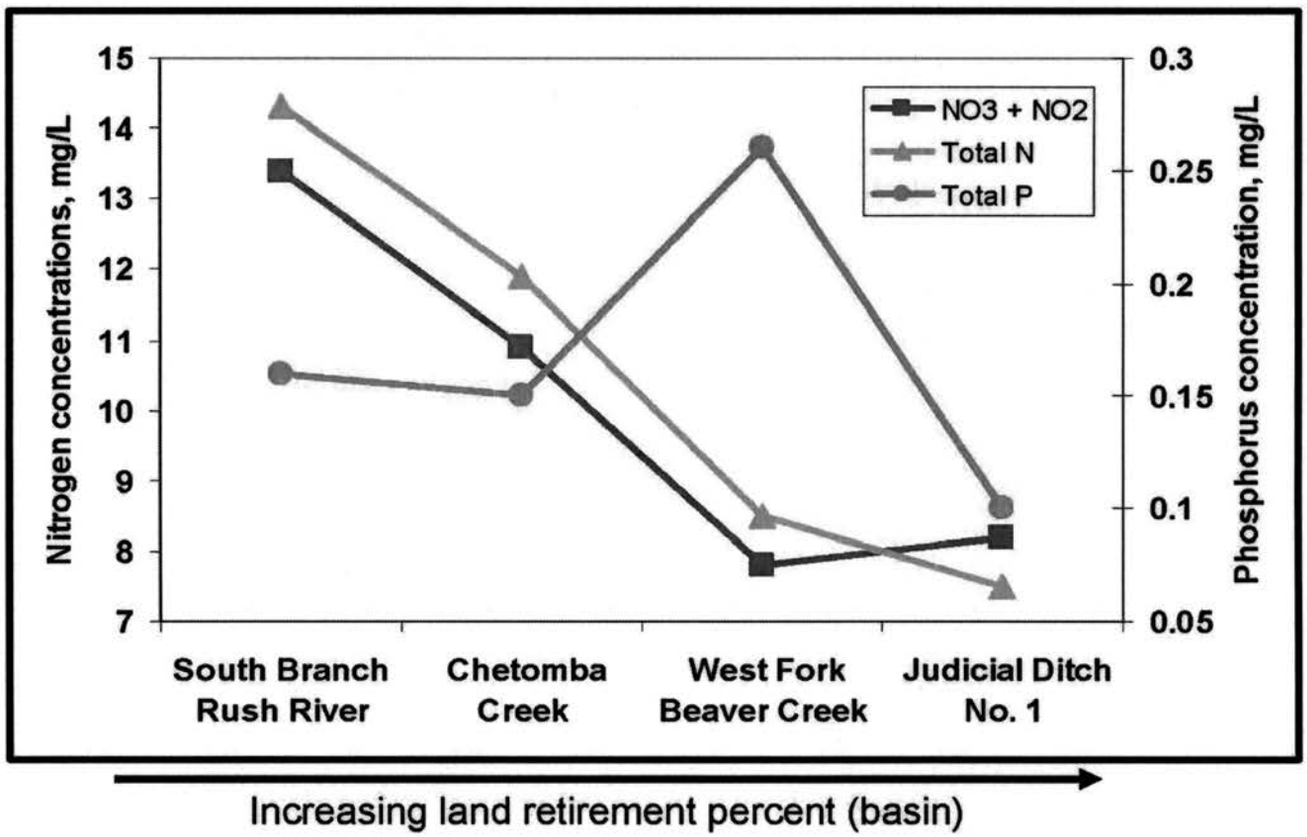


Figure 3: Nutrient results

Summary and Conclusions

Retired land is assumed to improve water quality and aquatic resource quality by reducing surface runoff and reducing agricultural chemical entry into streams. Riparian land (land adjacent to streams) and land near surface water bodies is typically assumed to be of higher priority for retirement. This study strengthened the validity of both assumptions. It showed:

- Increasing Index of Biotic Integrity (IBI) scores with increasing percentage of retired land;
- Decreasing total nitrogen concentrations with increasing percentage of retired land; and
- Lowest nitrogen and phosphorus concentrations in the sub-basin with the highest retired land percentage.
- Better correlation of IBI score with percentage of land retired with decreasing buffer distance from the stream.

Paired watershed studies, such as the one presented here, have their challenges. It is difficult to find watersheds that are similar and impossible to find watersheds with no differences. The relation between land retirement percentage and stream quality is likely affected by the differences among sites. Also, conditions in the Minnesota River basin are highly variable from year to year and therefore it may not be prudent to draw conclusions from such a short term data set.

Continuing the data collection will add important information to this data set. Land retirement contracts are decreasing across the Midwest due to the increase in corn prices. Data from this study should serve as a baseline should land retirement in these basins decrease substantially.

The data from 2006-2007 provide a response that a watershed may have to land retirement. Land owners, scientists, and local, State, and Federal agencies can use this information to improve management of natural resources in the Minnesota River basin, while sustaining economically viable agricultural production.

EFFECTS OF AGRICULTURAL LAND RETIREMENT IN THE MINNESOTA RIVER BASIN

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ABSTRACT: The effects of agricultural land retirement on nutrient concentrations and biological conditions of three streams in the Minnesota River Basin were assessed using data collected during 2005-2007. The Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River subbasins, which range in size from 52,500 to 96,031 acres, have similar geologic and hydrologic settings, but differ with respect to the amount, type, and location of retired land. Preliminary results show that nitrite plus nitrate concentrations were highest (mean=13.4 milligrams per liter [mg/L]) in South Branch Rush River, the subbasin with little to no land retirement, and lower in Chetomba Creek (mean=10.9 mg/L) and West Fork Beaver Creek (mean=7.8 mg/L), subbasins with more riparian or upland land retirement. Fish data indicate better resource quality for the West Fork Beaver Creek than other streams likely due to a combination of factors including habitat quality, food resources, and dissolved oxygen characteristics. Index of biotic integrity (IBI) scores increased as local land retirement percentages (50- and 100-ft buffers) increased. Data and analysis from this study can be used to evaluate the success of agricultural best management practices (BMPs) and land retirement programs for improving stream quality.
KEY TERMS: Minnesota River Basin, agricultural land retirement, CRP, nutrients, physical habitat, IBI scores.

INTRODUCTION

Streams in the Minnesota River Basin (fig. 1) are being studied to determine the effect of agricultural land retirement on stream quality. Agricultural land commonly is retired, or taken out of production and planted with native grasses, on the basis of field-scale research that shows land retirement leads to improved water quality. However, little information exists regarding watershed-scale effects of land retirement. To provide information for this goal, the Legislative-Citizen Commission on Minnesota Resources and the Minnesota Board of Water and Soil Resources cooperated with the U.S. Geological Survey (USGS) to compare water quality and biological conditions across three streams with varying degrees and location of land retirement.

The objectives of the study are to characterize and compare streamflow, water quality, and biological conditions in the Minnesota River Basin and to compare spatial and temporal variability in water quality and biological conditions to the amount and location of agricultural land retirement. The purpose of this paper is to provide an overview of nutrient concentrations and biological conditions within the Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River subbasins.

The Minnesota River originates near the western border of Minnesota, flows southeast to Mankato (fig. 1), and then turns northeast to join the Mississippi River at St. Paul, Minn. (Ojakangas and Matsch, 1982). The basin lies primarily within south-central Minnesota in an area characterized by dissected till plains, undulating till plains, lake plains, and glacial moraines (Stark and others, 1996).

Study Area

Data collection sites established for this study include USGS stream-gaging stations located on Chetomba Creek (site 1, fig. 1), West Fork Beaver Creek (site 3), and South Branch Rush River (site 6). The three subbasins differ with respect to the amount and location of land retirement (table 1), but have similar

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geologic and hydrologic settings. A second site was selected in the Chetomba Creek subbasin, Judicial Ditch No. 1 (site 2, fig. 1). Chetomba Creek was re-routed through Judicial Ditch No. 1 in the 1970s, making this site downstream from the Chetomba Creek site 1. The intervening drainage area between these two sites has few tributary ditches or streams and substantial land retirement (table 1). Secondary sites were established on West Fork Beaver Creek (site 4, fig. 1) and South Branch Rush River (site 5) for instream comparisons; however, these two sites did not have sufficient data to include here.

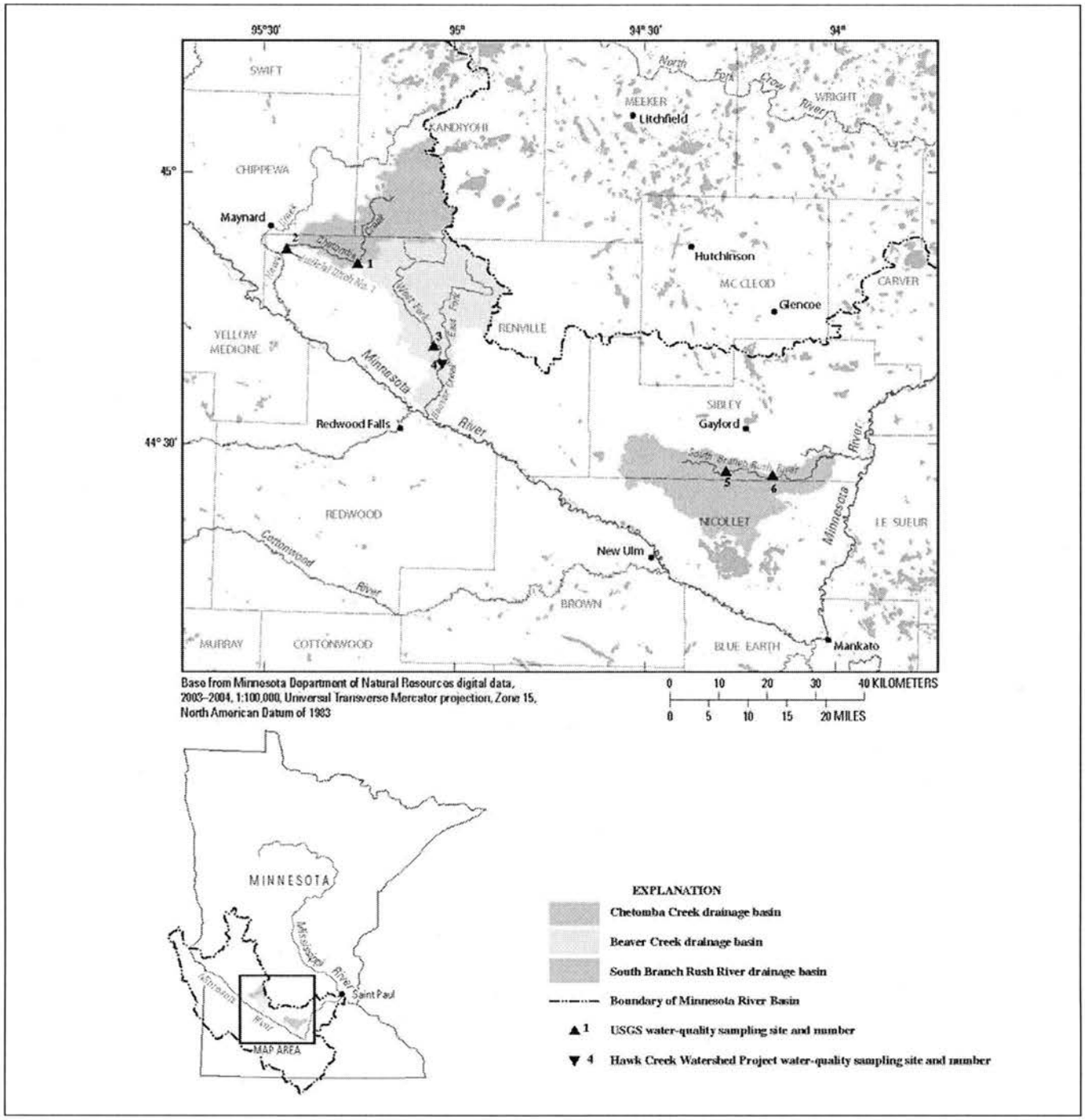

Figure 1. Sampling sites in Chetomba Creek, Beaver Creek, and South Branch Rush River subbasins, Minnesota River Basin, south-central Minnesota.

Table 1. Percentage of land retirement in selected subbasins of the Minnesota River Basin, 2005-2007.

[Percentage land retirement for Judicial Ditch No. 1 is for intervening drainage area only; ft, feet]

Site name	Site number	Drainage area (acres)	Percentage Land Retirement				
			Basin	300-ft buffer[1]	200-ft buffer[1]	100-ft buffer[1]	50-ft buffer[1]
Chetomba Creek	1	74,476	3.1	3.9	4.3	5.1	5.7
Judicial Ditch No. 1	2	96,031	6.3	9.4	11.3	15.3	18.7
West Fork Beaver Creek	3	58,974	3.7	6.2	7.5	9.5	10.4
South Branch Rush River	6	52,915	1.5	2.7	3.2	5.1	7.6

[1] The buffers are defined by the percentage of retired land within 300, 200, 100, and 50 feet on either side of the stream.

Agriculture has a major influence on water quality in the Minnesota River Basin (Battaglin and Goolsby, 1999; Kroening and others, 2003). Intensive use of agricultural chemicals has resulted in nonpoint-source contamination of surface water throughout the basin. Because of the poorly drained soils and resulting low infiltration rates in much of the Minnesota River Basin, ditches and tile drains are used to help drain the water from agricultural fields. This type of drainage may reduce flood damage to the fields and may draw oxygen into the soil. However, tile drains also provide a direct path for surface water and any associated contaminants to reach drainage ditches and streams (Wilson and others, 1997). Ditch and tile systems direct excess soil water to surface water without the longer residence time of ground-water storage.

Stream conditions are influenced by interactions among physical and chemical factors at differing spatial scales. However, loss of riparian vegetation and natural land cover in the Minnesota River Basin has reduced habitat, modified hydrologic conditions, and changed water quality (Stark and others, 1996). Two important factors that influence physical, chemical, and biological conditions are local and watershed-wide land-cover characteristics. Retired land cover may be important to water quality, aquatic habitat, instream temperature, and reduction of sediment and overland runoff.

METHODS

An objective of this study was to characterize effects of retired lands on the water quality and biological conditions of streams in the Minnesota River Basin that could be used to evaluate the success of agricultural best management practices and land retirement programs for improving stream quality. Chetomba Creek, West Fork Beaver Creek, and South Branch Rush River subbasins were selected after considering a set of parameters (for example, slope, basin size, and absence of in-line lakes). The selection required minimizing the differences in these parameters, while maximizing differences in percentages of land retirements.

Land retirement data were obtained in 2007 from the Farm Services Agency (FSA, St. Paul. Minn.) and included a geographic information system (GIS) coverage of land with Conservation Reserve Program (CRP) contracts. Land retirement data also were obtained from the Conservation Reserve Enhancement Program (CREP), Re-invest in Minnesota (RIM) program, and some smaller amounts of retired agricultural land in other programs including Pheasants Forever, Wildlife Management Areas, and U.S. Fish and Wildlife Service Waterfowl Production Areas.

Water-quality samples were collected manually according to methods described in the USGS National Field Manual (Wilde and others, 1998) using depth- and width-integrating techniques with the exception of samples collected with automated sampling equipment and occasional grab samples. Nutrient samples were analyzed (Patton and Kryskalla, 2003) at the USGS National Water Quality Laboratory (NWQL) in Denver, Colorado. Water-quality samples were collected between October 2005 and September 2007 and were classified as either *event*, which refers to samples collected during rainfall events, or *routine*, which are samples collected during monthly maintenance trips. Most event samples were collected with an autosampler, except for a few cases when the autosamplers malfunctioned. In these situations, a grab (single point) sample was collected if field personnel were onsite. Quality assurance was assessed with field blanks and replicate samples. No detectable concentrations of nitrite plus nitrate, total nitrogen, or total phosphorus were present in blank samples. The median analytical variation between duplicate analyses of nitrite plus nitrate, total nitrogen, and total phosphorus was less than 1 percent.

Periphyton and phytoplankton samples were collected at each stream during 2007 and sent to the USGS NWQL for analyses of chlorophyll-a using fluorometric methods (Arar and Collins, 1997). Fish were collected during August and September 2006-2007 at each stream by electrofishing equipment (pulsed DC), conducted according to protocols established for the USGS's National Water-Quality Assessment Program (Moulton and others, 2002). Briefly, backpack electrofishing gear was used to make two collection passes within the reach. Sampling time was recorded to normalize catch per unit of effort. Index of biotic integrity (IBI) scores were used to measure fish community response and community health. The IBI was calculated following Bailey and others (1993) using 12 metrics related to the composition and structure of the fish community. The sum of the metric scores is the IBI score, which ranges from 12 to 60 (greater number indicates better aquatic resource quality). Physical habitat was characterized at each stream location at the time of fish collections following Fitzpatrick and others (1998).

RESULTS AND DISCUSSION

Nitrite plus nitrate concentrations (table 2) were highest in South Branch Rush River, the subbasin with little to no land retirement, and lower in Chetomba Creek and West Fork Beaver Creek, subbasins with more riparian or upland land retirement. Nitrite plus nitrate and total nitrogen (table 2) decreased with increasing retired land percentage (table 1). Total phosphorus concentrations were lowest in Judicial Ditch No. 1 and highest in West Fork Beaver Creek. Judicial Ditch No. 1, which is downstream from a substantial amount of retired land (table 1), had lower nutrient concentrations than the upstream Chetomba Creek site. This may indicate that the retired land between the Chetomba Creek site and the Judicial Ditch site leads to improved water quality.

Table 2. Average chlorophyll-a and nutrient concentrations at selected streams in the Minnesota River Basin, 2005-2007.

[All nutrient concentrations are in milligrams per liter; chy-a, chlorophyll-a concentrations in micrograms per liter; number in parentheses is number of samples; --, not applicable]

Site name (site number, table 1)	Chy-a	Nitrite plus nitrate			Total nitrogen			Total phosphorus		
		Routine	Event	Total	Routine	Event	Total	Routine	Event	Total
Chetomba Creek (1)	13.7(6)	9.6(11)	15.9(3)	10.9(14)	10.3(10)	17.4(3)	11.9(13)	0.13(11)	0.23(3)	0.15(14)
Judicial Ditch No. 1 (2)	6.08(5)	8.2(8)	--(0)	8.2(8)	7.5(8)	--(0)	7.5(8)	0.10(8)	--(0)	0.10(8)
West Fork Beaver Creek (3)	19.1(6)	6.1(12)	13.0(4)	7.8(16)	6.7(12)	14.0(4)	8.5(16)	0.21(12)	0.39(4)	0.26(16)
South Branch Rush River (6)	15.1(6)	10.0(11)	19.5(6)	13.4(17)	11.3(11)	19.8(6)	14.3(17)	0.14(11)	0.19(6)	0.16(17)

Physical characteristics varied among streams and among years (table 3). Stream reach volume and habitat composition changed between 2006 and 2007 due to flow conditions. During 2006, stream widths and depths generally were greater than in 2007, leaving less habitat volume in 2007. Chetomba Creek had the greatest overall reach volume during both years. The dominant types of instream cover at Chetomba Creek and South Branch Rush River were macrophyte/macroalgal cover and overhanging vegetation. West Fork Beaver Creek had little or no macrophyte/macroalgal cover; rather the instream cover consisted of overhanging vegetation and woody debris. The bottom substrate at Chetomba Creek, and South Branch Rush River was primarily sand and gravel. At West Fork Beaver Creek the bottom substrate tended toward finer silt and clay.

There were 21 species of fish within five families collected among all sites and time periods. The majority of fish were in the Cyprinidae family (12), followed by two taxa each of the remaining families (Cataostomidae, Centarchidae, Gasterosteidae, Ictaluridae, and Percidae). Most of the fish collected were invertivores, planktivores, or detritivores, and five of the taxa were classified as tolerant fish. At Chetomba Creek, fathead minnows, creek chubs, and bigmouth shiners composed most (more than 50 percent) of the abundance during 2006 and creek chubs composed most of the abundance during 2007. At West Fork Beaver Creek, common shiner and bluntnose minnows (*Pimephales notatus*) composed most of the abundance during both years. At South Branch Rush River, fathead minnows and bluntnose minnows composed most of the abundance in 2006, whereas creek chubs composed most of the abundance during 2007.

Table 3. Summary of physical habitat and biological characteristics at selected streams in the Minnesota River Basin, 2006-2007.

[m, meters; m², square meters; m³, cubic meters; mm, millimeters; >, greater than]

	Chetomba Creek		West Fork Beaver Creek		South Branch Rush River	
Site number (fig. 1)	1		3		6	
Collection year	2006	2007	2006	2007	2006	2007
Reach length (m)	150	150	150	150	150	150
Average wetted channel width (m)	6.2	4.9	4.6	3.9	4.2	2.6
Average depth (m)	0.17	0.14	0.15	0.16	0.10	0.08
Average velocity (m)	0.04	0.03	0.06	0.02	0.08	0.008
Reach volume (m^3)	158	103	104	94	63	31
Reach area (m^2)	930	735	690	585	630	390
			Instream habitat cover			
Macrophyte/macroalgal cover (percent)[1]	98	44	1.8	0.0	22	22
Overhanging vegetation (percent)	75	22	16	15	38	18
Woody debris (percent)	0	0	26	6	0	0
			Bottom substrate composition			
Silt, clay, and organic detritus (percent)	0	2	70	89	0	0
Sand > 0.062 – 2 mm (percent)	0	18	15	4	13	60
Fine gravel > 2 – 16 mm (percent)	77	55	6	7	78	40
Coarse gravel > 16 – 32 mm (percent)	23	24	6	0	9	0
			Fish characteristics			
Number of fish species collected	8	9	13	15	16	11
Percent of fish classified as tolerant[2]	56	41	8	11	33	78
Index of biotic integrity (IBI) scores[2]	14	20	30	28	19	23

[1]Percentage of measurements where selected cover was present (out of 55 measurements)

[2]Bailey and others (1993) was used for fish tolerance classification and IBI calculations; Bailey and others (1993) rates streams with IBI scores of 50-60 as "excellent," 40-49 as "good," 30-39 as "fair," 20-29 as "poor," and 12-20 as "very poor."

IBI scores indicated poor quality at all streams during both sampling periods except the West Fork Beaver Creek had a rating of "fair" during 2006. IBI scores generally decrease with increasing physical and chemical perturbations such as poor water quality, poor instream habitat, and migration barriers (Karr and others, 1987). Two of the metrics that influenced the overall IBI score, species richness (the number of fish taxa collected) and percent tolerant fish, show that West Fork Beaver Creek had a moderate number of fish species and the smallest percentage of tolerant species, whereas South Branch Rush River had a moderate number of fish species and a high percentage of tolerant species.

In this study, IBI scores increased as the local land retirement percentages (50- and 100-ft buffers) increased. The relation was not as clear with retired land percentages at greater buffer distances. In addition to low percentages of retired land, the Chetomba Creek site has very little instream habitat diversity with the exception of very dense macrophyte and macroalgae mats that may not provide good habitat due to increased dissolved-oxygen variability. Number of fish species collected indicates better resource quality for the West Fork Beaver Creek than other streams likely due to a combination of factors including habitat quality, food resources, and dissolved oxygen characteristics. The greater IBI score at West Fork Beaver Creek compared to Chetomba Creek and South Branch Rush River coincides with greater percentages of retired land and diversity of physical habitat cover types. The substrate at West Fork Beaver Creek was primarily silt and clay which is not preferable for many fish and invertebrate species but a lack of extensive macroalgae cover may lead to more stable dissolved oxygen conditions within the stream.

CONCLUSION

Retired land is assumed to improve water quality and aquatic resource quality by reducing surface runoff and reducing agricultural chemical entry into streams. In this study, both nitrogen and phosphorus concentrations were lowest in the subbasin with the highest retired land percentage. Nitrogen concentrations were highest in the subbasin with little to no land retirement. IBI scores increased as local land retirement percentages (50- and 100-ft buffers) increased likely due to a combination of factors including habitat quality, food resources, and dissolved oxygen characteristics.

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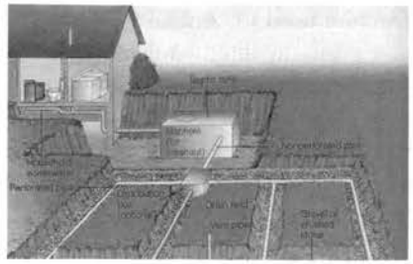
Septic System Upgrade



A septic system is designed to treat waste water for a specific site. Proper treatment of wastewater reduces health risks to humans and animals and prevents surface and groundwater contamination. Chippewa, Kandiyohi and Renville Counties along with the Hawk Creek Watershed Project have funds allotted for septic system upgrades, these are new systems put in in place of systems that do not meet requirements. The program uses loans at 3% interest to the homeowner for 10 years. This is an assessment on the property taxes.

Stream Bank Stabilization

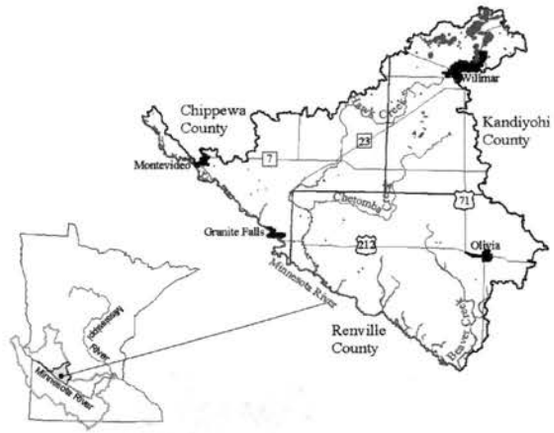
Stabilizations are used to stabilize and protect banks of streams or constructed channels, and shorelines of lakes, reservoirs, or estuaries.
The purpose is to prevent the loss of land or damage to land uses, or facilities adjacent to the banks of streams or constructed channels, shoreline of lakes, reservoirs, or estuaries including the protection of known historical, archeological, and traditional cultural properties. To maintain the flow capacity of streams or channels. Reduce the offsite or downstream effects of sediment resulting from bank erosion. To improve or enhance the stream corridor for fish and wildlife habitat, aesthetics, recreation.

Hawk Creek near the mouth before it enters the Minnesota River (June 2006)

For More Information about the Hawk Creek Watershed Project and its BMP's

Call : 320-523-3666
Or visit : www.hawkcreekwatershed.org

Hawk Creek Watershed Project



The Hawk Creek Watershed Project (HCWP) started in 1997 by a group of citizens concerned about the water quality and quantity within the Hawk Creek. In 1999, the HCWP started water quality monitoring and in 2000 the HCWP received its first grant to implement projects. HCWP along with assistance from a variety of agencies, have been helping landowners improve the quality of the water in the watershed through a variety of cost-share programs and a septic system upgrade low interest loan program. HCWP is funded by local, State and Federal grants.
The Hawk Creek Watershed drains over 623,105 acres (973 square miles) of land in Chippewa, Renville, and Kandiyohi counties.
HCWP work area includes Beaver Creek, Hawk Creek, Chetomba Creek, and smaller tributaries of the Minnesota River. With 100s of miles of artificial drainage and the growth of cities, water moves through the watershed very quickly.

The water carries excess nutrients, sediment, and bacteria. Monitoring of the watershed's streams began in 1999 and continues today. The Project monitoring the amount of pollutants (excess nutrients, sediment, and bacteria) in the water.

The Hawk Creek Watershed Project is focusing on implementing Best Management Practices (BMPs) to correct and prevent land use challenge that negatively affect water quality.

Alternative Tile Intakes

(Rock Intake, Dense Pattern Tile, Hickenbottom)

Alternative Surface Drainage Systems and tile intake protection practices are becoming a very popular practice and are widely accepted by area landowners.
All of these techniques involve replacing an open intake with a different intake either rocks, perforated rises or dense pattern tile.

Rock or Blind Intake
This design involves placeing a t-connector and a length of tile into a main tile line, and filling the trench with small rock. One of the advantage of this system is that it is farmable.

Pattern Tile with Open Intake Removed (Dense Pattern Tile)
This design involves the removal of an open tile intake and replacing it with dense pattern tile.

Hickenbottom Intake
This technique involves replacing an open intake with a perforated riser.

Harvestable Buffer Strip

Buffers are areas or strips of vegetation along ditch banks and stream that are designed to intercept pollutants. Properly placed buffers on the landscape can effectively minimize movement of soil, nutrients and chemicals from farm fields, they can also enhance wildlife habitat.
Harvestable buffers are also placed along watercourse, and planted with alfalfa and other hay type crops for harvesting of hay for dairy and livestock operations.

Grassed Waterway

A natural or constructed channel shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff.

Ditch Bank Side Inlet/Drop Pipe

A structure used to control the grade and head cutting primarily ditch banks. The purpose of this project is to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advance of gullies, and to enhance environmental quality and reduce pollution hazards.

Side inlet pipe being installed

Installation complete

A large ditch bank washout before repair

Ditch bank washout repaired with drop pipe

Malecha Rock Outcrop Species

Species listed are unique to Rock Outcrops Communities or unusual to this area of the state.

Flags identifying species throughout rock outcrop

1. Prairie Wild Onion
2. Blue Grama
3. Porcupine Grass
4. Brittle Prickle Pear
5. Small-flowered Fameflower
6. Mock Pennyroyal
7. Bluets
8. Pursh's Plantain
9. Japanese Brome
10. Toadflax spp.
11. Prairie Dropseed
12. Prairie Coneflower
13. Dwarf False Indigo
14. Butterfly Weed
15. Tall Cinquefoil

Please feel to ask Cory or Tara to identify plants

Note: Please watch your step broken glass is a hazard on the outcrop

Historic Sites

Joseph Brown Site – Joseph Brown joined the Army at age 13 and was stationed at Fort Snelling. He later began trading with the Indians and eventually became a trapper associated with the American Fur Company headed by Henry Sibley. He was stationed along the Minnesota River near the Chippewa River, Big Stone Lake and Lake Traverse. In 1835 at Lake Traverse he married Susan who was the daughter of a French/Canadian father and a Dakota/Scotch mother. They later lived near Stillwater and eventually lived at Henderson where he was the newspaper editor and he platted that city. In 1857 he was appointed US Indian Agent for the Dakota by Henry Sibley. The family lived at the Upper Sioux form 1857-1861 where he had the responsibility for both the Upper and Lower Sioux Reservations. In 1858 he lead a delegation to Washington DC which resulted in ratification of the 1858 Treaty where the Dakota forfeited their lands north of the Minnesota River. In 1861 he was replaced by a Republican nominee, Thomas Gailbraith, who was unfamiliar and unsympathetic to the Dakota and their needs. In June of 1861 construction began on a new home for Joseph Brown and his family. This was a 3 ½ story home with 19 rooms that measured 48X28. The exterior was granite from a nearby quarry and it is believed to be the first house in Minnesota constructed from granite. The South side of the house had a wood porch and the 3rd floor had a balcony. When the war broke out in August of 1862, the house had just been completed. Joseph was in Washington DC at the time and Susan, her 12 children, the staff and several neighbors abandoned the house and it was gutted by fire. The Division of State Parks did an archeological excavation in 1938 and the Minnesota Historical Society did another excavation in 1968. Those two groups found the ruins of items which indicated that the house was indeed luxurious for its day. Among the ruins were parts of kerosene lamps, a sewing machine and a piano. In 1959 a marker was placed at the site of the home.

Florita Monument in Flora Township - In 1994 the Flora Town Board approved the erection of a monument to commemorate the settlement of Florita. This was an old settlement that was named for the Township of Flora. In 1888 there was a General Store with a barber shop in the back and in 1898 a creamery was built. There was a post office with 40 mailboxes located in the General Store. The settlement was also known as Peanutville because folks used to gather there to visit and while they did they ate peanuts, throwing the shells on the floor. Sometimes the shells would be 4 inches high. When the creamery closed in 1912 and the settlers began to have access to better forms of transportation, the settlement disappeared.

Birch Coulee Battlefield – The Dakota War of 1862 began on August 17, 1862.

Treaty violations, late or unfair annuity payments and a crop failure in 1861 had increased hunger and hardship among the Dakota. In 1862 the Dakota requested that payments be given to them directly instead of to the traders as was the previous custom (that payment system could lead to corruption between the Agent & the traders). Traders were refusing to give anymore credit and negotiations were at an impasse. Trader's representative Andrew Myrick is quoted as saying "So far as I'm concerned, if they are hungry, let them eat grass or their own dung". He was among the first killed on August 18th when Little Crow led a group that attacked the Lower Sioux Agency—Andrew Myrick's body was found with his mouth stuffed with grass. Later, a column of soldiers headed by Captain Marsh was attacked near Redwood Ferry and many soldiers were killed and others, including Captain Marsh, drowned trying to cross the River. Beginning on August 18th the Dakota began traveling in bands of 10-20 men attacking white settlers throughout the area. Hundreds were killed or captured.

On August 31st a party left Fort Ridgely, where Colonel Henry Hastings Sibley was training soldiers and attempting to organize supplies. The party's mission was to find and bury the bodies of settlers and soldiers. The monument at the Birch Coulee Battlefield states that Captain Hiram P. Grant was in command of that party, but historians generally acknowledge that Joseph Brown was actually the one in command. After the party reached Redwood Ferry and buried the dead there, Brown took a group south of the river and Grant and his infantry stayed on the north side. At the end of the day on September 1st they met up at a campsite near Birch Coulee. Since neither group had seen any Indians, they figured they were safe. They had however been spotted by Indian scouts. The campsite was not easily defensible since the Indians could approach from all sides and still have cover. The Dakota attacked at dawn on September 2nd with a mixed arsenal of weapons. Many soldiers were killed or wounded and most of the horses were killed within the first few minutes. The soldiers were pinned down for over 30 hours with no food or water while the Indians were free to move up and down the Coulee and continue fighting. Colonel Sibley could hear the battle from Fort Ridgely and sent relief. The first party was nearly surrounded and went back for more reinforcements. Colonel Sibley himself entered the camp on September 3rd and said it was a sickening site. The Battle of Birch Coulee was the most deadly for the US forces in the Dakota War of 1862.

The war eventually came to an end in September at Wood Lake where Sibley accepted the surrender of nearly 2,000 Dakota. Trials were held, some lasting less than 5 minutes, and 307 men were sentenced to hanging. Episcopal Bishop Henry Whipple, a longtime critic of the government's reservation policies, appealed the sentences to President Abraham Lincoln. Lincoln ordered a review of the trial transcripts. He later reduced the roster of condemned to 39 men, one of whom received a last-minute reprieve, and on December 26, 1862 38 men were hanged in Mankato and their bodies buried in a shallow grave along the river. The Dakota were banned from Minnesota and their reservations abolished by the US Congress.

Minnesota Board of Water & Soil Resources

DATE: September 16, 2008

TO: Board of Water and Soil Resources' Members, Advisors, and Staff

FROM: John Jaschke, Executive Director

SUBJECT: September 24, 2008 Board Meeting Notice

The Board of Water and Soil Resources (BWSR) will meet on Wednesday, September 24, 2008, beginning at 9:00 a.m. The meeting will be held in the second floor conference room at 520 Lafayette Road N., St. Paul. Parking is available in the lot directly in front of the building (use hooded parking areas).

The following information pertains to agenda items:

OLD BUSINESS

1. **RIM/WRP Sign-Up and Implementation Report -** The RIM/WRP application and selection process are complete for Phase I. The board selection committee members (Paul Brutlag, Wayne Edgerton for Larry Kramka, Paul Langseth and Joe Martin) approved the staff recommendation to proceed with the acceptance letters/offers as outlined below.

   Cedar/Turtle Creek: fund all 9 projects that applied and were eligible. The ranking scores of those approved were from 74 to 57.2 with the lowest five of them being within one point. The cumulative RIM cost for these projects is $760,672 with a total acreage of 398.

   Red River Valley Area: fund the first 24 projects that applied and were eligible. The ranking scores of those approved were from 90 to 70.2. The cumulative RIM cost for these projects is $3,342,571 with 4,889 acres total.

   All other areas: fund 86 projects that applied and were eligible. The ranking scores of those approved were from 94.6 to 70. The cumulative RIM cost for these projects is $11,804,356 with 7950 total acres.

   TOTAL = 13,237 acres; $15.91M

   Due to current program flood-related efforts, field staff in the southeast flood areas opted to wait for Phase II to pursue landowners and determine interest.

NRCS, BWSR and SWCD staff are beginning the realty and pre-design steps for Phase I projects.

Program goals and recommendations for Phase II will begin soon, including recommendations to the application and scoring worksheets, prioritization of project areas, developing specific projects such as those targeting riparian areas, and expanding the funding to include a 3rd tier of non-ag, non-cropland, among others. A subcommittee of the state technical committee and BWSR representatives met to discuss, review and flesh out some of these technical recommendations further. ***INFORMATION ITEM***

NEW BUSINESS

1. **Southeast Minnesota Flood Relief** - BWSR approved a SE MN Flood Relief Resolution on September 25, 2007 adopting program policy waivers and guidelines for implementing regular and Special Session appropriations and policy. In June 2008, the Department of Employment and Economic Development (DEED) transferred $1.89 Million of 2007 Special Session appropriations to BWSR, in accordance with Special Session authorities, for additional erosion, sediment and water quality control cost-share and technical assistance. The 2008 Legislature also appropriated $0.725 Million of supplemental funding to BWSR for additional flood response in the DR-1717 area of SE MN and extension of associated deadlines. The BWSR Board is requested to approve an amendment to resolution #07-85 for implementation of these funds. See attachments. ***DECISION ITEM***

2. **Wetland Enforcement; 2008 Field Report** – The DNR Wetland Enforcement Officers have added to their complement (see: http://files.dnr.state.mn.us/enforcement/map_wetlandCOs.pdf) and expanded their duties over the past year . A summary of their field season activities will be presented by Unit Manager, Capt. John Hunt. ***INFORMATION ITEM***

3. **Watershed Approach Discussion** – ***INFORMATION ITEM***
   A. **One Water Program Approach – Concept for review and comments**: Gaylen Reetz, MPCA, will provide information on The One Water Program Approach, a proposed integrated strategy to improve water quality management in Minnesota. As monitoring of waters increases, more impaired waters will be found. The current TMDL process schedule is out to well over 10 years and stakeholders do not like the unpredictability of the schedule for TMDL water studies. The agencies and the Clean Water Council are questioning what the correct scale, pace and schedule for TMDL studies should be. See attachment.

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B. **Watershed Organization/Project Inventory** – There are a variety of organizations established in Minnesota specifically to address watershed issues, from long-standing Watershed Districts authorized via legislation passed in 1955 to joint-powers organization watersheds mandated in the metro 7 county area since 1983 (see: http://www.bwsr.state.mn.us/relatedlinks/watersheddistricts.html) to a variety of voluntary joint-powers organizations, non-profits and partnerships established for advocacy, project, grant or data collection purposes. BWSR staff have been compiling a list of these organizations or collaboratives as a starting point to determine what more can be done to enhance local water management efforts.

COMMITTEE RECOMMENDATIONS

Metro Water Planning Committee

1. **Amendment to Coon Creek Watershed District Boundary Change** - A boundary change for the District was approved by Board Order dated March 26, 2008. The Order included three tables that included numerous parcels affected by the boundary change. When updating their records, the Anoka County Department of Property Records and Taxation discovered errors on the tables. The County, the District and Board staff coordinated the revisions required to amend the tables. An amendment to the Order is necessary to correct the errors. The Metro Water Planning Committee met on August 4, 2008 and reviewed the new information from the District and Anoka County. The Committee recommends approval of the amendment to the Order by the full Board. See attachments. ***DECISION ITEM***

2. **Rice Creek Watershed District Comprehensive Wetland Protection and Management Plan for the City of Lino Lakes** - This Plan is more encompassing than a typical wetland plan, thus the District refers to the plan as a "Resource Management Plan" (RMP). The RMP came about through a partnership between the District and the City of Lino Lakes. This collaboration was initiated in 2006 and included extensive coordination between the City, the District, the regulatory agencies and citizens. The purpose of the Plan and RMP is to provide a watershed-based approach to wetland management that is consistent with District goals. The approach addresses management in the context of wetland functions and the effects of anticipated future land use. This framework of guiding where wetland impacts and replacement may occur is intended to have the effect of reestablishing larger, contiguous areas of wetland and riparian edge. It is also intended to afford landowners more flexibility to create larger contiguous areas of upland for use and development than reasonably could be fashioned under

standard parcel-based wetland permitting. The Metro Water Planning Committee met on August 4, 2008 and reviewed the contents of the Plan along with comments that were made. The Committee recommends approval of the Plan by the full Board. See attachments. ***DECISION ITEM***

If you have any questions regarding the agenda, please feel free to give me a call at 651-296-0878. The meeting will adjourn about noon. I look forward to seeing you on September 24th!

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BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD N.
ST. PAUL, MINNESOTA 55155
WEDNESDAY, SEPTEMBER 24, 2008

PRELIMINARY AGENDA

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF AUGUST 28, 2008

OPEN MIKE (10-minute agenda time, two-minute limit/person)

INTRODUCTION OF NEWLY APPOINTED BOARD MEMBERS
- Gordy Behm, Watershed District representative
- Faye Sleeper, University of Minnesota Extension representative

INTRODUCTION OF NEW EMPLOYEES
- Terry Ragan, Southeast Project Engineer
- Jeff Larson, Southeast Engineering Technician

REPORTS
- Chair – Randy Kramer
- Executive Director – John Jaschke
- Dispute Resolution Committee – Randy Kramer
- Wetlands Committee – LuAnn Tolliver
- Grants Program & Policy Committee – Louise Smallidge
- Public Relations, Outreach & Strategic Planning Committee – Brian Napstad
- Administrative Advisory Committee – Randy Kramer

OLD BUSINESS
1. RIM/WRP Sign-Up and Implementation Report – Kevin Lines, BWSR; and Tim Koehler, NRCS – *INFORMATION ITEM*

NEW BUSINESS

1. Southeast Minnesota Flood Relief – Mary Kells - *DECISION ITEM*

2. Wetland Enforcement; 2008 Field Report – Captain John Hunt, DNR Enforcement – *INFORMATION ITEM*

3. Watershed Approach Discussion – *INFORMATION ITEM*
   A. One Water Program Approach – Concept for review and comments: Gaylen Reetz, MPCA

   B. Watershed Organization/Project Inventory – Steve Woods, BWSR

COMMITTEE RECOMMENDATIONS

Metro Water Planning Committee

1. Amendment to Coon Creek Watershed District Boundary Change – Jim Haertel – *DECISION ITEM*

2. Rice Creek Watershed District Comprehensive Wetland Protection and Management Plan for the City of Lino Lakes – Jim Haertel, BWSR and Doug Thomas (RCWD) – *DECISION ITEM*

AGENCY REPORTS

- Minnesota Department of Agriculture – Joe Martin
- Minnesota Department of Health – John Linc Stine
- Minnesota Department of Natural Resources – Larry Kramka
- Minnesota Extension Service – Faye Sleeper
- Minnesota Pollution Control Agency – Paul Eger

ADVISORY COMMENTS

- Association of Minnesota Counties (AMC) – Annalee Garletz
- Minnesota Association of Conservation District Employees (MACDE) – Rick Reimer
- Minnesota Association of Soil and Water Conservation Districts (MASWCD) – LeAnn Buck
- Minnesota Association of Townships (MAT) – Sandy Hooker
- Minnesota Association of Watershed Districts (MAWD) – Ray Bohn
- Natural Resources Conservation Service (NRCS) – Tim Koehler

UPCOMING MEETINGS

- BWSR Board Meeting, October 22, 2008

Noon **ADJOURN**

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
MAX'S GRILL, BANQUET ROOM
2425 WEST LINCOLN AVENUE
OLIVIA, MINNESOTA 56277
THURSDAY, AUGUST 28, 2008

BOARD MEMBERS PRESENT:
Dana Allen, Wayne Anderson, MPCA Alternate; Paul Brutlag, Bob Burandt, Quentin Fairbanks, Randy Kramer, Paul Langseth, John Linc Stine, MDH; Joe Martin, MDA; Brian Napstad, Faye Sleeper, U of M Extension; Louise Smallidge, Gene Tiedemann, LuAnn Tolliver

BOARD MEMBERS ABSENT:
Brian Kletscher
Larry Kramka, DNR

STAFF PRESENT:
Mary Jo Anderson, Matt Drewitz, Tom Fischer, Jim Haertel, Tabor Hoek, Jeff Hrubes, John Jaschke, Kari Keating, Al Kean, Jeff Nielsen, Jason Wienerman, Tom Wenzel

OTHERS PRESENT:
Rebecca Baumann, The Minnesota Project
LeAnn Buck, MASWCD
Karen Flom, Renville SWCD
Paul Flynn, NRCS
Warren Formo, MAWRC
Tim Gieseke, Ag Resource Strategies
Sandy Hooker, MAT
Representative Al Juhnke
Tom Kalahar, Renville SWCD
Kathryn Kelly, Renville SWCD Board
Andrew Lochner, Area II Brown County
Beth Mason, NACD
Cory Netland, Renville SWCD
Kerry Netzke, Area II Minnesota River Basin
Rick Reimer, MACDE
Peter Scheffert, MDA
Paul Setzepfandt, Renville County Commissioner
Harold Solem, Area II Lac qui Parle County

Chair Kramer called the meeting to order at 8:30 a.m.

PLEDGE OF ALLEGIANCE

Chair Kramer welcomed everyone and thanked them for coming to Renville County!

** 08-69 **ADOPTION OF AGENDA** – Moved by Louise Smallidge, seconded by Quentin Fairbanks, to adopt the agenda as presented. Motion passed on a voice vote.

** 08-70 **MINUTES OF JUNE 25, 2008** – Moved by Paul Brutlag, seconded by Brian Napstad, to approve the minutes of June 25, 2008 as circulated. Motion passed on a voice vote.

Chair Kramer thanked the Renville County SWCD for the great tour! On behalf of BWSR, Chair Kramer appreciated the successful tour and thanked Tom Fischer and Mary Jo Anderson for their assistance in planning the tour and logistics.

REPORTS

Chair's Report – Randy Kramer asked Gene Tiedemann to serve on the RIM Reserve Planning Committee; Gene has agreed to serve. Chair Kramer asked board members to contact him if they know of persons interested in serving on the Star Lakes Board. Chair Kramer reported that Paul Eger has been appointed as Deputy Commissioner of MPCA. Chair Kramer has worked closely with John Jaschke and communicated with him on various issues.

Executive Director's Report – John Jaschke reported that several committee meetings have occurred since the last Board meeting and several recommendations are on the agenda today. John attended the August Red River Watershed Management Board meeting.

John reported that the Marshall County Board requested BWSR to evaluate the Middle-Snake-Tamarac River Watershed District through the Performance Review and Assistance Program (PRAP). The report is on the BWSR website. Six pilot Level III PRAP evaluationswill be done; two counties, two watershed districts, and two SWCDs.

John attended the AMC Policy Committee meetings in St. Cloud. Discussions included the Lanning Bill. Brian Napstad stated that county commissioners are sensitive to new taxing authority. An AMC task force has been established to work on that issue.

John attended Farm Fest on August 5. John reported that a two-day WCA rule meeting with field staff will be held next week. Several meetings have been held with the U.S. Army Corps of Engineers on wetland issues. John reported that Julie Klocker met with MAWD to address legislative issues. Steve Woods attended the MASWCD Legislative and Watershed Committee meetings.

John reported that Koochiching County adopted an SSTS ordinance on August 26th as required by the conditionally approved water plan. John stated that Ken Robinson's position on the Board is still vacant. Three people have applied for the board member position. The Governor's office is working to fill that vacancy.

Dispute Resolution Committee – Jim Haertel reported that 22 appeals are pending; six new appeals have been filed. One appeal (#27-8) has been resolved.

Wetlands Committee – LuAnn Tolliver reported that the Wetlands Committee met on July 22 to discuss WCA permanent rules; expect to meet in September to continue discussion on wetland rules.

Grants Program & Policy Committee – Louise Smallidge reported that the Grants Program & Policy Committee met on July 23 with several recommendations on the agenda today.

Public Relations, Outreach & Strategic Planning Committee – Brian Napstad reported that the Committee did not meet.

Administrative Advisory Committee – Randy Kramer stated that the Administrative Advisory Committee has not met since June.

COMMITTEE RECOMMENDATIONS
Metro Water Planning Committee
Carnelian-Marine-St. Croix Watershed District Watershed Management Plan Amendment – Bob Burandt reported that the Metro Water Planning Committee reviewed the Carnelian-Marine-St. Croix Watershed District Watershed Management Plan Amendment and recommends approval. Moved by Bob
** 08-71 Burandt, seconded by Louise Smallidge, to approve the Carnelian-Marine-St. Croix Watershed District Watershed Management Plan Amendment. Motion passed on a voice vote.

Comfort Lake-Forest Lake Watershed District Revised Watershed Management Plan – Bob Burandt reported that the Metro Water Planning Committee reviewed the Comfort Lake-Forest Lake Watershed District Revised

** 08-72 Watershed Management Plan and recommends approval. Moved by Bob Burandt, seconded by LuAnn Tolliver, to approve the Comfort Lake-Forest Lake Watershed District Revised Watershed Management Plan. John Jaschke explained that watershed districts fully within the seven county metropolitan area come under the authorities of Minnesota Statutes Chapter 103B and 103D. The District sought and gained this same statutory designation under Minnesota Statues Chapter 103B in the 2008 legislative session. This change in designation allows the District to access a wider variety of funding sources in the implementation of the Watershed Management Plan; however, it also necessitated a revision to the Plan to meet the additional requirements of 103B. LuAnn Tolliver stated that there will be a new plan in 2011. Motion passed on a voice vote.

Richfield-Bloomington Watershed Management Organization, Watershed Management Plan – Bob Burandt reported that the Metro Water Planning Committee reviewed the Richfield-Bloomington Watershed Management

** 08-73 Organization, Watershed Management Plan and recommends approval. Moved by Bob Burandt, seconded by Louise Smallidge, to approve the Richfield-Bloomington Watershed Management Organization, Watershed Management Plan. Motion passed on a voice vote.

Shingle Creek and West Mississippi Watershed Management Organizations' Plan Amendment – Bob Burandt reported that the Metro Water Planning Committee reviewed the Shingle Creek and West Mississippi Watershed

** 08-74 Management Organizations' Plan Amendment and recommends approval. Moved by Bob Burandt, seconded by Louise Smallidge, to approve the Shingle Creek and West Mississippi Watershed Management Organizations' Plan Amendment. Motion passed on a voice vote.

Northern Water Planning Committee

Benton County Local Water Management Plan – Quentin Fairbanks reported that the Northern Water Planning Committee met on August 13, reviewed the Benton County Local Water Management Plan and recommends approval.

** 08-75 Moved by Quentin Fairbanks, seconded by Brian Napstad to approve the Benton County Local Water Management Plan. Motion passed on a voice vote.

Crow Wing County Local Water Management Plan – Brian Napstad reported that the Northern Water Planning Committee reviewed the Crow Wing County

** 08-76 Local Water Management Plan and recommends approval. Moved by Brian Napstad, seconded by Quentin Fairbanks, to approve the Crow Wing County Local Water Management Plan. Motion passed on a voice vote.

Mahnomen County Local Water Management Plan – Quentin Fairbanks reported that the Northern Water Planning Committee reviewed the Mahnomen County Local Water Management Plan and recommends approval. Moved by Quentin Fairbanks, seconded by Paul Brutlag, to approve the Mahnomen County Local Water Management Plan; with BWSR staff review, in person, on an annual basis. Motion passed on a voice vote.

** 08-77

Aitkin County Priority Concerns Scoping Document (PCSD) – Brian Napstad reported that the Northern Water Planning Committee reviewed the Aitkin County PCSD and recommends approval. Moved by Brian Napstad, seconded by Paul Brutlag, to approve the Aitkin County Priority Concerns Scoping Document. Paul Brutlag suggested that the Aitkin County task force process be part of a presentation to the Board at a future meeting. Motion passed on a voice vote.

** 08-78

Ottertail County Priority Concerns Scoping Document (PCSD) – Paul Brutlag reported that the Northern Water Planning Committee reviewed the Ottertail County PCSD and recommends approval. Moved by Paul Brutlag, seconded by Quentin Fairbanks, to approve the Ottertail County Priority Scoping Document. Brian Napstad commented on a variance issue and the need for resource decisions in the future. Brian suggested that MCIT present information to the Board at a future meeting. Motion passed on a voice vote. Paul Brutlag commented on the Supreme Court decision ramifications and requested that the Attorney General's office present information to the Board at a future meeting.

** 08-79

Red Lake County Priority Concerns Scoping Document (PCSD) – Gene Tiedemann reported that the Northern Water Planning Committee reviewed the Red Lake County PCSD and recommends approval. Moved by Gene Tiedemann, seconded by Quentin Fairbanks, to approve the Red Lake County Priority Concerns Scoping Document. Motion passed on a voice vote.

** 08-80

Quentin Fairbanks stated that County Water Plans are lengthy documents and staff need to work with them on this. John Jaschke stated that the water plans are the basis for performance evaluation under PRAP.

Southern Water Planning Committee

Blue Earth County Local Water Management Plan – Paul Langseth reported that the Southern Water Planning Committee reviewed the Blue Earth County Local Water Management Plan and recommends approval. Moved by Paul Langseth, seconded by John Linc Stine, to approve the Blue Earth County Local Water Management Plan. Motion passed on a voice vote

** 08-81

Brown County Local Water Management Plan – Paul Langseth reported that the Southern Water Planning Committee reviewed the Brown County Local
** Water Management Plan and recommends approval. Moved by Paul Langseth,
08-82 seconded by John Linc Stine, to approve the Brown County Local Water Management Plan. Motion passed on a voice vote.

Nicollet County Local Water Management Plan – Paul Langseth reported that the Southern Water Planning Committee reviewed the Nicollet County Local
** Water Management Plan and recommends approval. Moved by Paul Langseth,
08-83 seconded by John Linc Stine, to approve the Nicollet County Local Water Management Plan. Motion passed on a voice vote.

RIM Reserve Planning Committee

RIM/WRP Partnership Grant Payment Schedule for SWCD Services – Tabor Hoek reported that the RIM Reserve Planning Committee recommends a proposed payment schedule for SWCD services related to the RIM/WRP Wetland Restoration
** partnership. Moved by Paul Brutlag, seconded by Paul Langseth, to approve and
08-84 authorize staff to allocate the grant formula for SWCD services in support of the RIM/WRP partnership. Discussion followed. Paul Brutlag stated that SWCDs have thoroughly reviewed this proposal and strongly recommend approval. Motion passed on a voice vote.

NEW BUSINESS

Overview of Whole Farm Planning Bill (HF 2867) – Representative Al Juhnke appreciated the Board coming to Renville County. Representative Juhnke presented an overview of the Whole Farm Planning Bill. This bill would provide a farm plan for each farm in the State of Minnesota. The bill proposes to establish a task force with agencies and others to work together with the landowners on best management practices for enhancement of their farming operations and economic value. He looks to the Board for assessment and potential implementation of this bill. Discussion followed. Dana Allen stated that carbon trading could also be another use to the outcomes in this bill. Representative Juhnke stated that this is a proactive piece of legislation providing information to landowners. Representative Juhnke asked for the Board's input on this draft piece of legislation. Chair Kramer thanked Representative Juhnke for his presentation.

Presentation on New Assessment and Planning Tools – Tim Gieseke, Ag Resource Strategies, LLC, presented preliminary findings on using resource management indices as an assessment, education, targeting, assurance and valuation tool. The integrated resource management process allows natural resource outcomes to become commoditized and potentially formalized into the

agricultural economy. Tim appreciated the opportunity to present this information. Chair Kramer thanked Tim for his presentation and looks forward to working with him.

Demonstration of an On-line Tool-in-Progress Conservation Funding Advisor – Peter Scheffert, Minnesota Department of Agriculture, presented information on the "one-stop" source for practices, programs, and payments for landowners linked together as an interactive tool on MDA's website. The Conservation Funding Advisor is also reference material for conservation professionals and policymakers. Peter acknowledged Barbara Weisman's work on this endeavor. Chair Kramer stated that this may be a joint venture in working on this effort. Discussion followed. Chair Kramer thanked Peter for his presentation.

Chair Kramer called for a break in the meeting at 10:40 a.m. The meeting reconvened at 10:55 a.m.

2008 Federal Farm Bill Update – Paul Flynn, NRCS, presented information on the "Food Conservation and Energy Act". Paul distributed *2008 Farm Bill - Summary of Legislative Changes* and provided an overview of the program provisions and funding. Paul Flynn distributed a copy of the federal legislation *Sec. 12020. Crop Production on Native Sod* referring to federal crop insurance provisions. NRCS is working with entities on this issue and needs the Governor's approval in order for Minnesota to comply. Discussion followed. Chair Kramer thanked Paul for his presentation.

Joe Martin left the meeting at 11:30 a.m.

'09 Non-Point Engineering Assistance Challenge (NPEA) Grants – Al Kean explained that the NPEA challenge grant provides funding assistance to NPEA Joint Powers Boards (JPBs) for providing accelerated technical assistance to landowners to apply conservation practices. Al reported that the Grants Program and Policy Committee recommends adoption of allocation option four; the NPEA program needs its own stable funding and future Clean Water Legacy appropriations may be allocated. Moved by Louise Smallidge, seconded by Paul Langseth, to authorize staff to allocate the FY09 NPEA challenge grant of $100,000 each to Joint Powers Boards 5, 9, and 11. Motion passed on a voice vote.

** 08-85

SWCD Technical Services Areas (TSAs) Reorganization – Al Kean reported that several 2007 SWCD resolutions recommended changes in the funding and

delivery structure for the Non-Point Engineering Assistance (NPEA) Program. SWCDs passed a resolution at the 2007 MASWCD Convention recommending that the Conservation Technical Assistance Committee (CTAC), which involves representation from the 11 existing SWCD TSAs, MASWCD, MACDE and BWSR, develop a recommendation to the BWSR regarding changes to the NPEA program delivery. The CTAC, together with NPEA Host SWCD Managers, developed a consensus recommendation to reorganize the existing 11 SWCD TSAs to 8 TSAs statewide, and co-alignment of MASWCD Areas. BWSR and MASWCD have signed a Memorandum of Agreement to support the co-alignment of SWCD TSAs and MASWCD Areas, as recommended by the CTAC. The Grants Program and Policy Committee is recommending approval of the
** CTAC consensus recommendations. Moved by Quentin Fairbanks, seconded by
08-86 Louise Smallidge, to approve the SWCD Technical Services Areas reorganization, to adopt the CTAC consensus recommendations dated 3/12/08 and 7/7/08; for delivery of the NPEA program. Discussion followed. Al reported that he, John Jaschke, and Julie Klocker will be attending all MASWCD area meetings this fall. Chair Kramer stated that there are concerns locally but no alternative resolution or recommendations have been received. Motion passed on a voice vote.

FY 09 Drainage Records Modernization Challenge Grants – Al Kean explained that the 2007 Legislature appropriated funding to the BWSR to develop guidelines for drainage records preservation and modernization and $500,000 for cost-share grants to local governments for public drainage records modernization. The Water Resources Center, Minnesota State University Mankato was contracted to assist in development of Drainage Records Modernization Guidelines, based on the collective experience of Chapter 103E drainage authorities that have modernized their records to date. Al reported that the Grants Program and Policy Committee recommends approval of the FY 09 Drainage Records Modernization Challenge Grants Program.
** Moved by Louise Smallidge, seconded by Paul Langseth, to authorize the FY
08-87 2009 Drainage Records Modernization Challenge Grant Program to be implemented by staff. Discussion followed. Motion passed on a voice vote.

FY 2009 Clean Water Legacy Grant Funding Package – Matt Drewitz and Jeff Hrubes reported that the interagency work team has developed a budget, grant application process and materials to support the Clean Water Legacy implementation activities using eligibility and policy guidelines. The Grants Program and Policy Committee recommends approval of the funding package for
** restoration projects. Moved by Quentin Fairbanks, seconded by Brian Napstad,
08-88 to approve the proposed budget and grant application process to implement the FY09 Clean Water Legacy Program with the grant application period beginning

October 1, 2008 and ending November 7, 2008; allocations distributed in January 2008. Discussion followed. Quentin Fairbanks requested a map showing the geographic allocations. Motion passed on a voice vote.

Area II Minnesota River Basins Project Inc. FY 2009 Annual Work Plan – Tabor Hoek introduced Kerry Netzke, Area II Coordinator, Andrew Lochner, Area II Brown County, and Harold Solem, Area II Lac qui Parle County. Tabor explained that BWSR has oversight of project and administrative funding related to the flood control efforts of the Area II nine county joint powers. Administrative funding for Area II is $140,000 from the general fund for FY 2009. Project funding for FY 2009 consists of bonding appropriations that was awarded in 2006. Tabor stated that a minimum 25% local match is required of all state dollars. Kerry Netzke presented a brief overview of the Area II Minnesota River Basins projects. Kerry also
** presented before and after pictures of projects. Moved by Louise Smallidge,
08-89 seconded by Brian Napstad, to approve the Area II Minnesota River Basins Project FY2009 annual work plan and grant. Motion passed on a voice vote. Chair Kramer thanked Tabor and Kerry for their presentation.

Minnesota River Basin Joint Powers Board, FY09 Annual Work Plan – Jeff Nielsen explained that BWSR has oversight of administrative funding related to the efforts of the Minnesota River Basin Joint Powers Board (MRBJPB). Administrative funding for MRB, via state general funds, has been restored to $100,000 for two
** years from the 2007 legislative session. Moved by LuAnn Tolliver, seconded by
08-90 Dana Allen, to approve the Minnesota River Basin Joint Powers Board FY09 Annual Work Plan. Motion passed on a voice vote.

AGENCY REPORTS

Minnesota Department of Health (MDH) – John Linc Stine reported that the Well Code took effect August 1, 2008. John reported that a toxicological evaluation process meeting will be held on September 15 with a hearing on October 10; rules will be promulgated by the end of this year.

John stated that MDH has updated the information about the Health Risk Limits (HRL) rule revision. A copy of the proposed rules has been published in the State Register September 2, 2008 issue. For more information regarding the publication of the proposed rules see:
http://www.health.state.mn.us/divs/eh/groundwater/hrlgw/revrule.html

University of Minnesota Extension Service – Faye Sleeper reported that the feasibility report and executive summary of the Discovery Farm Report is on their website: http://wrc.umn.edu/outreach/onfarmresearch/index.html

for board members' information. She noted that Warren Formo, MAWRC, will be the point person on moving this forward in Minnesota.

Minnesota Pollution Control Agency (MPCA) – Wayne Anderson reported that Paul Eger has been appointed as MPCA Deputy Commissioner. Wayne will continue to attend BWSR meetings as Paul's alternate. Wayne reported that the Legislature has scheduled a TMDL program hearing on September 8.

ADVISORY COMMENTS

Minnesota Association of Conservation District Employees (MACDE) – Rick Reimer welcomed the Board to west central Minnesota. Rick reported that MACDE held their Board meeting/summer session at Breezy Point. Rick thanked John Jaschke and BWSR staff for their assistance with planning the well-attended session. Rick reported that MACDE is offering an individual scholarship to the MASWCD leadership program. MACDE has $300 available for employee training. Rick reported that Pam Tomevi, Koochiching SWCD, received a $2000 scholarship to attend the NACD session. MACDE is involved with Area Envirothons, and working closely with partners on training and education, as well as administrative training. Rick stated that Julie Klocker gave a great presentation at their summer session. Ken Pederson and LeAnn Buck also gave great presentations at the summer session. MACDE's next meeting will be held September 30, at the Waite Park Service Center; Rick invited John Jaschke to attend.

Minnesota Association of Soil and Water Conservation Districts (MASWCD) – LeAnn Buck introduced Beth Mason, NACD, from Indianapolis. Beth is liaison for eight states. LeAnn thanked BWSR for ongoing assistance. MASWCD has been working with NACD on farm bill discussions. LeAnn stated that MASWCD is pleased with the $32-34M for the RIM/WRP Partnership. LeAnn thanked board members for their commitment and support of MASWCD. LeAnn appreciated Julie Klocker's attendance with MASWCD in Washington, DC.

Minnesota Association of Townships (MAT) – Sandy Hooker welcomed the Board to this area of the State.

Natural Resources Conservation Service (NRCS) – Paul Flynn stated that the revised Minnesota Food Conservation and Energy Act needs to coordinate efforts so it is well understood, and looks forward to jointly working with BWSR.

UPCOMING MEETINGS

- Next Board Meeting is September 24, 2008 in St. Paul.

Chair Kramer thanked everyone again for coming to Renville County!

** 08-91 Moved by Paul Brutlag, seconded by Brian Napstad, to adjourn the meeting at 12:35 p.m. Motion passed on a voice vote.

Respectfully submitted,

Mary Jo Anderson
Recorder

Dispute Resolution Report
September 12, 2008
by: Travis Germundson

There are presently **20** appeals pending. All of the appeals involve WCA except File 05-24. Only **1** new appeal has been filed since the last report dated August 28th.

Format note: New appeals that have been filed since last report to the Board.
~~Appeals that have been decided since last report to the Board.~~

File 08-26 (08/27/08) This is an appeal of a restoration order in Stearns County. The appeal regards the draining and filling of approximately 4 acres of wetland associated with a ditch cleanout/improvement project. No decision has been made on the appeal.

File 08-25 (08/25/08) This is an appeal of a after-the-fact wetland replacement plan application in Benton County. The LGU denied the wetland replacement plan application based on the fact that it does not adequately replace the wetland impacts. It involves the same project and issue as File 07-27. No decision has been made on the appeal.

File 08-24 (08/11/08) This is an appeal of a restoration order in Grant County. The appeal regards drainage impacts to a 32 acre Type 3 wetland resulting from agricultural drain tile improvements. No decision has been made on the appeal.

~~File 08-23 (08/06/08) This is an appeal of a after-the-fact replacement plan decision in Itasca County. The LGU denied an after-the-fact wetland replacement plan application for a fill strip because wetland impacts can be avoided by the construction of an elevated boardwalk. No decision has been made on the appeal.~~ *The appeal has been denied.*

~~File 08-22 (07/31/08) This is an appeal of a restoration order in Cass County. The appeal regards the filling of approximately 16,800 square feet in a Type 7 wetland to provide storage and parking areas for several recreation vehicles. No decision has been made on the appeal.~~ *The appeal has been withdrawn.*

File 08-11. (04/29/08) This is an appeal of a restoration order in Hennepin County. The appeal regards the filling of 1.75 acres of a type 2/3 wetland for the construction of a pole barn and pasture area. The restoration order has been stayed until and the appeal has been placed in abeyance for submittal of a wetland replacement plan, exemption, or no-loss application.

File 08-9. (03/06/08) This is an appeal of a replacement order in Pine County. The appeal regards impacts to approximately 11.26 acres of wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-8. (04/03/08) This is an appeal of a replacement order in Pine County. The appeal regards the filling of over 18,000 square feet of Type 2 wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-4. (01/24/08) This is an appeal of no-loss and exemption decisions in Waseca County. In addition to the no-loss decision, at issue are denials of the agricultural exemption, approved development exemption, incidental wetland exemption, and claims of numerous procedural issues that were prejudicial to the applicants. Further, a Minn. Stat. § 15.99 (60-day rule) claim is pending in District Court. The appeal has been remanded for further technical work at the local level.

File 08-1. (02/04/08) This is an appeal of a restoration order in Aitkin County. The appeal involves the filling of wetland for a road in shoreland area. The restoration order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 07-37. (12/16/07) This is an appeal of a restoration and replacement order in the City of Sturgeon Lake, Pine County. The appeal involves the excavation and filling of wetland. The restoration and replacement order has been placed in abeyance to allow for the submittal of a complete replacement plan.

File 07-33. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-32. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-31. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a restoration order for unauthorized filling of wetland for a building. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-29. (10/25/07) This is an appeal of a restoration order in Crow Wing County. The appeal involves the filling of wetland along a driveway. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work.

File 07-27. (10/19/07) This is an appeal of a restoration and replacement order in Benton County. The appeal involves the excavation of an island that was in wetland and the filling of wetland along the wetland edge. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work this spring.

File 06-23. (05/19/06) This is an appeal of a replacement plan decision in Kanabec County. The LGU denied the wetland replacement plan application. A previous denial of the same replacement plan application had been appealed, the appeal was remanded for a hearing, and now the current denial has been appealed. The appeal has been placed in abeyance pending the outcome of a lawsuit between the landowner and the county. The lawsuit concerns the county's possible noncompliance with the 60-day rule. The county prevailed in district court, however the decision was appealed to the Court of Appeals where the county again prevailed. An appeal to the Minnesota Supreme Court was denied review. It is likely the appeal will soon be placed on the calendar for DRC proceedings.

File 06-17. (05/27/06) This is an appeal of a replacement plan decision in the City of Montgomery in LeSueur County. The LGU denied an after-the-fact wetland replacement plan application based on a lack of sufficient reasons why the restoration could not be completed. The appeal has been remanded for further processing at the local level.

File 06-12. (04/13/06) This is an appeal of a no-loss decision in Stearns County. It involves the same project and issues as File 06-6. After a restoration order was issued, a no-loss application was submitted by the developer and denied by the LGU. The appeal has been remanded for further technical evaluation.

File 06-6. (02/16/06) This is an appeal of a restoration order in Stearns County. At issue are numerous wetlands impacted by filling, sedimentation, reduction of hydrology and lack of Best Management Practices associated with a residential development. The appeal has been denied in part. The Restoration Order has been affirmed in part and has been stayed in part.

File 05-24. (03/04/05) This is an appeal, actually three appeals, of the Bois de Sioux Watershed District compensation to landowners related to a project. The appeal has been held in abeyance pending settlement discussions. It appears at least two of the appeals have been settled.

File 05-1. (01/13/05) This is an appeal of a replacement plan decision by the Rice Creek Watershed District. The District previously made a decision that was appealed which resulted in a remand for an expanded TEP. Now there is an appeal of the decision made under remand since the decision differed from the TEP report. At issue is a wetland delineation and the Comprehensive Wetland Protection and Management Plan that BWSR approved. After a hearing before the DRC, the board remanded the matter for a new wetland delineation and for submission on an updated, complete replacement plan application.

~~File 04-23. (08/25/04) This is an appeal of a forestry exemption decision in Kittson County. Unpermitted fill was placed in a Type 7 wetland for a road. A Cease and Desist Order was issued. Additional filling has recently occurred in violation of the CDO. Corps and DNR violations also exist. The appeal has been accepted and is in abeyance pending completion of a wetland delineation and submittal of a replacement plan application.~~ *A replacement plan was approved by the LGU and the appeal has been withdrawn.*

NEW BUSINESS

1. Southeast Minnesota Flood Relief – Mary Kells - *DECISION ITEM*

2. Wetland Enforcement; 2008 Field Report – Captain John Hunt, DNR Enforcement – *INFORMATION ITEM*

3. Watershed Approach Discussion – *INFORMATION ITEM*
   A. One Water Program Approach – Concept for review and comments: Gaylen Reetz, MPCA

   B. Watershed Organization/Project Inventory – Steve Woods, BWSR

SOUTHEAST MINNESOTA FLOOD RELIEF

Background:

BWSR adopted the SE MN Flood Relief Resolution on September 25, 2007 covering program waivers for both regular and Special Session appropriations for conservation. Implementation of SE Conservation Flood Recovery activities resulted in the 2008 Legislative Session appropriating additional funds ($725,000) and providing the necessary time extensions for continued SE Flood Recovery Implementation. In addition, MN DEED authorized the use and transfer of $1.89 M for cost-share and engineering assistance.

Currently:

The Board SE MN Flood Relief Resolution adopted September 25, 2007 needs Resolution to incorporate the additional SE Flood Recovery funds appropriated and transferred to BWSR and the extended timeline of June 30, 2010.

BWSR staff has developed a SE Conservation Flood Recovery Publication in partnership with SWCD and NRCS. Staff will present information on the coordinated efforts of the SE Flood Recovery activities.

A BWSR SE Engineer and a Civil Engineering Technician have been hired. Staff will introduced to the Board. Information on the BWSR/NRCS/SWCD engineering and technical assistance for implementing repairs and protection of flood damaged lands will be provided.

Recommendation:

The Staff, after review by the Administrative Advisory Committee, is requesting that the Board consider the provisions as noted in the attached resolution.

Status of BWSR SE Flood Relief C-S Program Budget
As of August 19, 2008:

SE Flood Relief Funds – Sept. 2007	3.0 M
Supplement Budget – May 2008 *	0.725 M
DEED Transfer – June 2008	1.89 M
Total State C-S Funds Available	$ 5.615 Million
Minus Engineering/Staff Budget Proposed by BWSR -	.988 M
And minus budget for engineering subcontracts **	.290 M
Budgeted Funds for C-S Projects and SWCD T&A	$ 4.337 M
Following Grant Agreement Totals Sent Out Already - (Table below shows status as of July 28, 2008)	$ 2.199 M
Total Budget Remaining for C-S of current Flood Damage Repair Needs Documented	**$ 2.138 Million**

NOTE:
* $450 M available FY09, $.275 Million available FY10.
** BWSR will need to finalize Engineering staffing and consulting budget (.988 + .290 M?) to determine available funds for cost-share projects and SWCD assistance.

Total Grant Agreements and funds sent out to SWCDS as of July 28, 2008.

	Total Dollars				
SWCD	Total Grant Amount	Total T & A Amount	Total Project Amount	Total Amount Encumbered	Total Amount Spent
Root River	$777,458.00	$128,721.00	$648,737.00	$503,521.94	$199,302.30
Olmsted	$168,750.00	$33,750.00	$135,000.00	$40,000.00	$15,082.44
Winona	$706,422.00	$122,369.00	$584,053.00	$483,230.11	$192,386.10
Wabasha	$50,000.00	$10,000.00	$40,000.00	$0.00	$0.00
Steele	$50,000.00	$10,000.00	$40,000.00	$0.00	$0.00
Fillmore	$395,416.00	$69,083.20	$326,332.80	$166,126.38	$52,970.97
Dodge	$50,000.00	$10,000.00	$40,000.00	$40,000.00	$0.00
Total	$2,198,046.00	$383,923.20	$1,814,122.80	$1,232,878.43	$459,741.81

BWSR SE FLOOD RECOVERY
TIMELINE OF ACTIVITIES

AUGUST 2007

- On August 23, a federal disaster was declared for Dodge, Fillmore, Houston, Olmsted, Steele, Winona and Wabasha counties.
- State/Federal disaster response is coordinated by the MN Recovers Task Force, which consists of 17 state and federal agencies, including BWSR.
- SWCD/NRCS field staff and local officials begin to assess flood damage to determine extent of conservation funding need.

SEPTEMBER 2007

- NRCS/SWCD work with counties, cities and townships to document emergency erosion measures and identify site for EWP Federal fund.
- Gov. Tim Pawlenty calls Legislature into Special Session and authorizes nearly $148 million for flood recover, including $4 million for BWSR.
- BWSR/LGU Implementation Meeting held in Rochester to discuss strategies for repairing conservation practices and addressing soil and water erosion caused by event.
- BWSR approves SE MN Flood Relief Resolution at Sept. Board meeting based on SWCDs' input for prioritizing project fixes and rule waivers needed to get the work done.
- Damage assessment continues. BWSR provides direct allocations of $650,000 of State Cost-Share funds to SWCD to begin project repairs.

OCTOBER 2007

- MN Recovers Task Force received Community Applications including over $12M request in sedimentation/soil erosion category. SWCD/NRCS instrumental in coordinating repair measures.
- SWCD/BWSR develops RIM program guidelines covering eligibility/payments to re-vegetate flood damaged riparian lands and enroll into RIM perpetual easements.
- BWSR staff coordinate/facilitate a Garvin Brook Watershed Options Meeting in MN City at the request of Representative Steve Drazkowski. Local leadership request watershed-planning assistance from NRCS.
- BWSR announces the special SE RIM Program Sign Up. SWCDs begin accepting application from landowners with deadline date of January 15, 2008.
- SWCD/NRCS local staff continues to work with landowners to fix flood damaged sites. BWSR allocates additional state funds.

NOVEMBER 2007

- "Flood Stops" incorporated into the SE Legislative "Watershed, Wetland and Buffers" House Subcommittee Tour. Root River SWCD staff guided participates and provided information on flood damage repair in Houston County.
- SE Conservation Partners meet and submit application to MN Recovers Task Force for additional engineering and technical staff.
- Conservation Agency Partners conduct public information meeting in Stockton, MN to get input on watershed management options. Over 70 people attend.

DECEMBER 2007

- Conservation Partners meet with newly formed Garvin Brook Steering Committee to discuss watershed goals and structure.
- SWCD/NRCS staff conducts "after harvest" assessment of flood damage repair needs and assist landowners in applying for federal and state programs.
- Regional agency reps. begin plans for technical "Flood Impact" forum.
- Status report of projects completed, current workload and emerging issues presented at BWSR Board Meeting.

JANUARY 2008

- BWSR presents check for state cost-share funds to Winona SWCD. A total of $1.8 Million already allocated to 7 SWCDs for conservation flood recovery.
- SWCDs submit 56 landowner applications for enrolling over 1,376 acres and requesting $3.6 million of RIM state funds.
- Governor provides legislature with funding/policy changes needed for flood recovery.
- BWSR approves Clean Water Legacy Program funds of $51,700 for MN Conservation Corps work in flood damaged areas.

FEBRUARY 2008

- Winona SWCD reps. provide testimony during MN legislative committee hearings on behalf of SE flood disaster area.
- Fed/state/local partners continue technical assistance and conservation planning to landowners affected by the flood in preparation for spring.

MARCH 2008

- BWSR/NRCS/SWCD implementation meeting held to reaffirm short/long term engineering needs and to plan spring construction workloads.

APRIL 2008

- Regional Partners conduct the forum "Understanding the August 2007 Flood: Implications for Natural Resource Management". Over 150 resource professionals and local officials share information.
- Work begins on other projects and damage assessment continues.

MAY 2008

- Legislature and Gov. Tim Pawlenty provide $725,000 in additional funding for flood recovery, as well as a 2-year extension for using existing funds. An additional $2 Million of RIM funds targeted for continued flood recovery efforts.
- Additional BWSR Native Buffer C-S Program funds allocated to SWCDs in flood damaged counties.
- Many projects completed and more underway. Coordination of federal and state funding sources, as well as technical assistance, continue making it possible to complete projects with minimal delays.
- BWSR/NRCS/SWCD makes plans for hiring BWSR SE engineer and two civil engineering technicians to increase technical capacity.

JUNE 2008

- DEED authorizes the use of and transfers to BWSR $1.9 Million for conservation practices and temporary engineering staff.
- NRCS presents preliminary conclusions on Garvin Brook Watershed Assessment and steering committee looks at alternatives.
- Flooding again causes major damage in disaster-declared counties, as well as in Mower and Freeborn counties.
- NRCS EWP and EQIP sign-up begin for 2008 flood damaged sites.

JULY 2008

- SWCDs submit assessment reports of eligible flood damaged sites and status of project implementation.
- BWSR/NRCS/SWCD coordinate workload and eligibility of both flood events.

AUGUST 2008

- BWSR completes pending allocations for remaining state cost-share funds with over $3.2 Million of repairs documented by the assessment reports. In addition, over 70 sites have been documented as a result of the June 2008 flood event mainly in Mower, Fillmore and Houston counties.
- Coordination of Federal EWP/EQIP and State Cost-Share funds to maximize flood recovery.

SEPTEMBER 2008

- BWSR sends additional state cost-share allocations to SWCDs for flood recovery.
- BWSR Engineering staff hired. SE Engineering Team (BWSR/NRCS/SWCD) meets to coordinate technical workload.
- SE Conservation Flood Recovery Report presented to BWSR at September Board Meeting. Board reviews recommended changes to program policy and rule waivers due to additional funding for flood recovery.

Minnesota Board of Water & Soil Resources

QUESTIONS?
Mary Kells
BWSR Rochester Office
2300 Silver Creek Road NE
Rochester, MN 55906
(507)206-2890
mary.kells@state.mn.us

BWSR Field Summary:
Date: September 4, 2008

Current Assessment of Flood Damage, Engineering Needs, and Costs
Compiled by Mary Kells, Board Conservationist

Caution when using this information:

SWCD/NRCS field staff continue to conduct site assessments and cost estimates to determine reasonable fixes, priority for state c-s funds and leveraging federal program funds. These assessment numbers are a snapshot in time and will continue to evolve as technical assistance is delivered to the landowners.

County	# of Projects Total	Estimated Costs	#Field Office TAA Capacity	# Needing Engineering	2007 Aug. Event	2008 June Event
Dodge	3	88,000.00	0	3	3	0
Fillmore (6)*	15	68,000.00	11	5	0	15
Olmsted (4)*	18	100,000.00	5	13	18	0
Root River (47)*	94	1,305,350.00	29	65	51	43
Wabasha (4)*	14	698,700.00	0	14	14	0
Winona	144	1,008,053.00	111	33	144	0
Mower (13*)	13	0.00	0	13	0	13
Totals	**301**	**$3,268,103.00**	**156**	**146**	**230**	**71**

*** Preliminary cost-estimates have not been completed on 74 (25%) of the damaged sites listed. (12 sites-2007, 62 sites-2008)**

Type of Project	Dodge	Fillmore	Olmsted	Root River	Wabasha	Winona	Mower	Totals
CCC Repair						1		**1**
Critical Area Planting				13		1		**14**
Debris Removal		10	1	5				**16**
Diverson Repair				1		17		**18**
Grade Stab/Structure		1	7	12				**20**
Gully/Washouts			3	6		16	12	**37**
Pond Cleanout				9		11		**20**
Pond Repair				5		40		**45**
Sinkholes				1		6		**7**
Stream Bank Stabilization	3	1		22	14	27	1	**68**
Terrace Repair			4	5				**9**
Waterway Repair		2	3	11		24		**40**
Well Sealing								**0**
Driveway washouts		1		4		1		**6**
Totals	**3**	**15**	**18**	**94**	**14**	**144**	**13**	**301**

Board Resolution #_____

SOUTHEAST MINNESOTA FLOOD RELIEF RESOLUTION AMENDMENT

WHEREAS, a Presidential Disaster was declared on August 23, 2007 in Fillmore, Houston, Olmsted, Steele, Winona, Wabasha, and Dodge Counties, due to damage resulting from severe storms on August 18 – 20, 2007 (DR-1717); and

WHEREAS, the Minnesota Legislature in their September 12, 2007 Special Session in H.F. No. 1, Article 1, Sec. 6, appropriated cost share and easement funding to the Board of Water and Soil Resources (BWSR), and in Sec. 16 provided for the waiver of State Cost Share Program and Re-Invest in Minnesota (RIM) Reserve Conservation Easement Program Rules, including M.S. 103F.515, for both 2007 Special Session and past appropriations; and

WHEREAS, The Board adopted SE MN Flood Relief Resolution #07-85 on September 25, 2007 authorizing implementation of 2007 Special Session appropriations and waivers to BWSR for flood relief in the DR-1717 area; and

WHEREAS, In June 2008, the Department of Employment and Economic Development (DEED) transferred $1.89 million of 2007 Special Session appropriations to BWSR, in accordance with Special Session authorities, for additional erosion, sediment and water quality control cost-share and technical assistance; and

WHEREAS, The 2008 Minnesota Legislature extended use of 2007 Special Session funds to June 30, 2010 and provided $450,000 for FY09 and $275,000 for FY10 of supplemental appropriations for SE MN Flood Response in the DR-1717 area; and

WHEREAS, The 2008 MN Legislature passed a Bonding Bill that included RIM funds appropriated to BWSR for acquiring permanent easements and directed the Board to give priority to the area designated for relief and recovery from the flooding that occurred on or after August 18, 2007 in the area of SE MN designated under Presidential Declaration of Major Disaster, DR-1717.

NOW, THEREFORE, The Board amends its Resolution #07-85 adopted September 25, 2007 to include the following funds and legislative authorizations:

1. $1.89 Million transferred from DEED to BWSR from 2007 Special Session appropriations.
2. 2008 Regular Session Supplemental Appropriations for BWSR SE Flood Response.
3. Extension of availability and applicability of all 2007 Special Session funds appropriated or transferred to BWSR for SE Flood Response to June 30, 2010.

AND, The Board directs staff to include priority for use of RIM program funds appropriated by the 2008 MN Legislature in the DR-1717 area for flood relief and recovery.

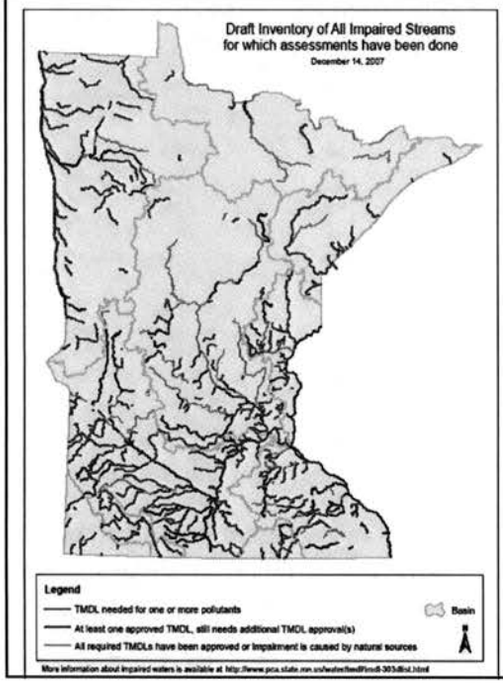
AND, furthermore, the Board authorizes staff to enter into grant agreements, contracts, easements, or other agreements for project implementation of these identified programs, appropriations and transferred funds.

_____ Date: _____

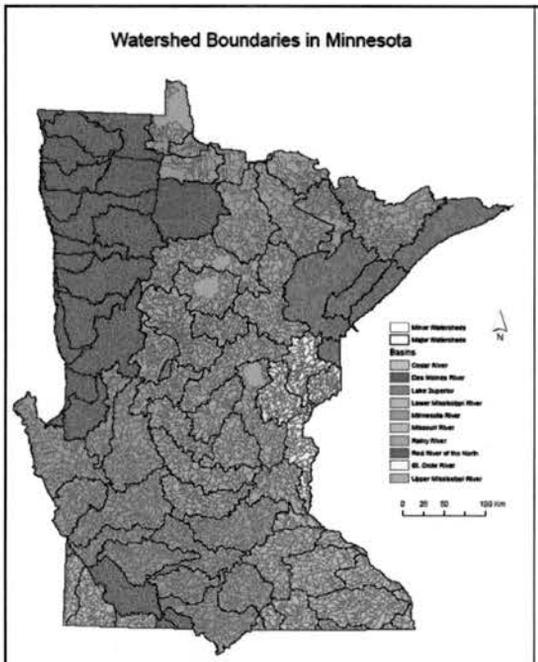
Randy Kramer, Chair
Board of Water and Soil Resources

An integrated strategy to improve Water Quality Management in MN

Major watersheds as a framework for:
monitoring and assessment;
watershed planning/TMDL's;
and implementation.

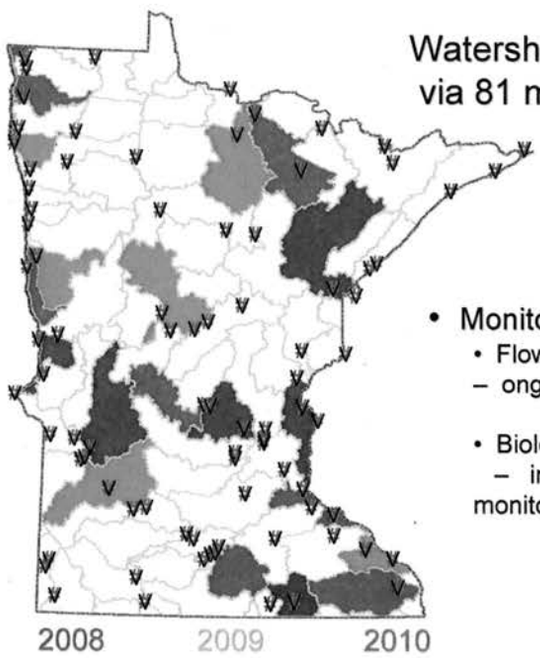


- As monitoring ramps up, will result in more listings.
- May complete a TMDL only to need to return to same locality to do another.
- Current approach has been driven by the Listing process.
- Lacks predictability.
- Current schedule is out well over ten years.
- Close segments likely have similar problems, potential efficiencies by doing TMDL and implementation at the same time.



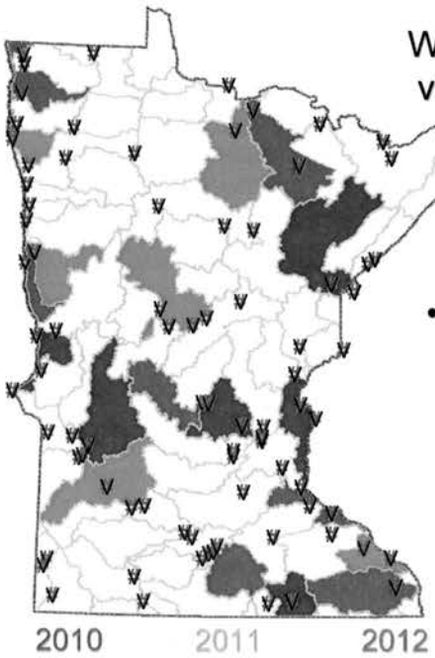
- What is the right scale and pace?
  - Pepin too large.
  - Some individual segments are too small

- Manage water quality through a ten year cycle of monitoring, plannng and implementation via the 81 Major watersheds.



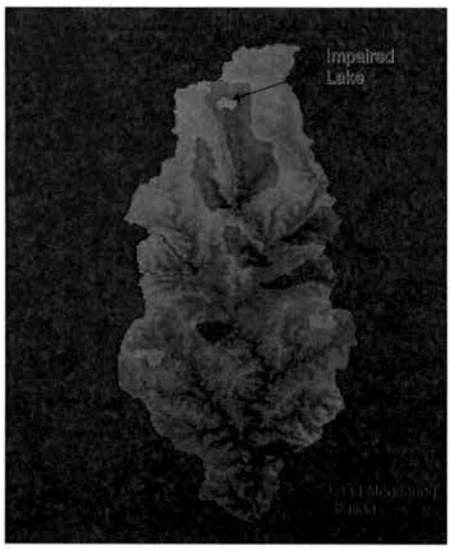
Watershed Management via 81 major watersheds

- Monitoring and Assessment
  - Flow/chemical/load monitoring
    - ongoing at 81 pour points
  - Biological/Physical monitoring
    - intensive watershed monitoring on a 10 cycle



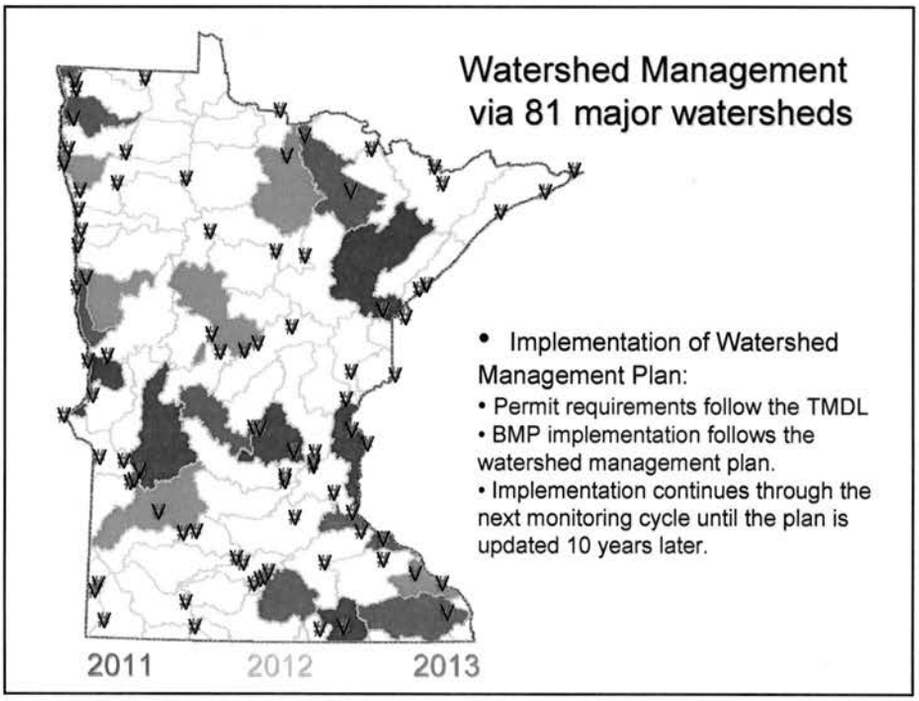
Watershed Management via 81 major watersheds

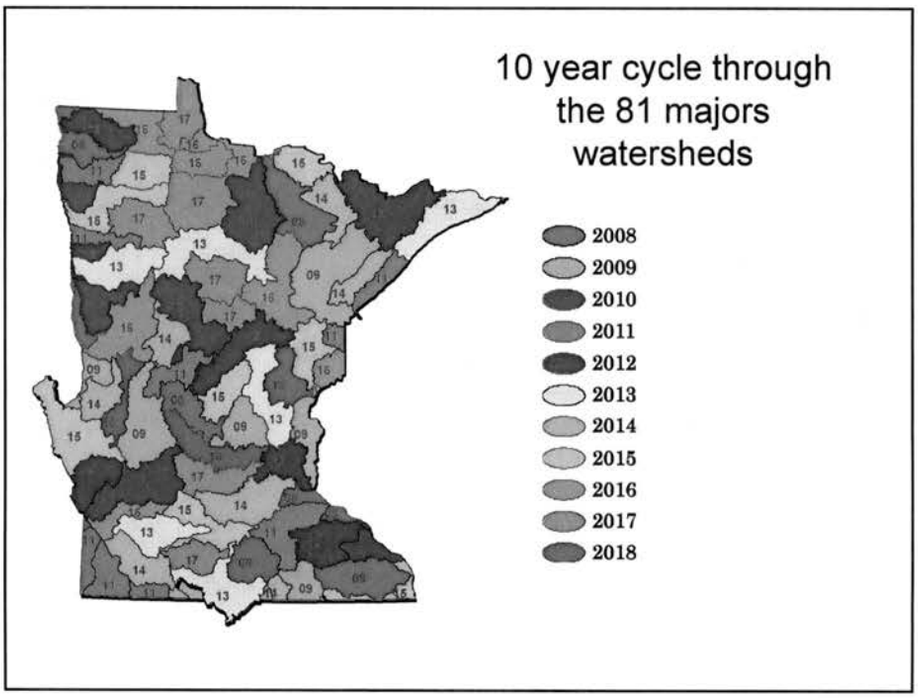
- Planning and TMDL Studies:
  - Prepare watershed management plan.
  - Plan should cover both TMDLs and protection strategies.
  - Follow cycle of watershed monitoring for the 81 major watersheds.

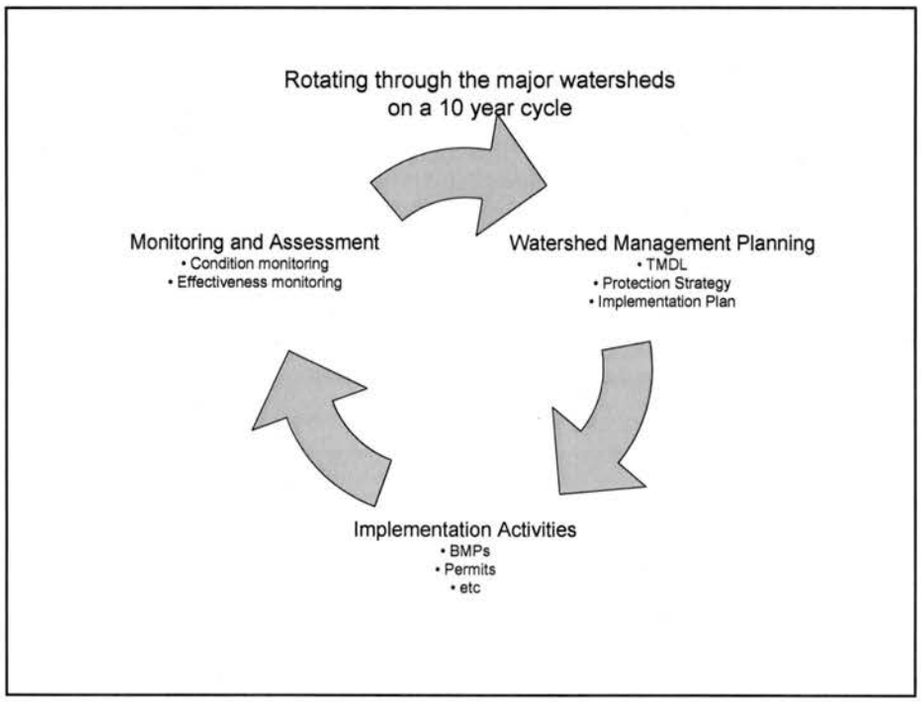


Watershed Management Plan

- **It is a TMDL for Impaired Subwatersheds**
- **It is a protection strategy for Unimpaired subwatersheds**
- **It integrates the implementation plan for both TMDLs and protection strategies**


Watershed Management
via 81 major watersheds
• Implementation of Watershed Management Plan:
• Permit requirements follow the TMDL
• BMP implementation follows the watershed management plan.
• Implementation continues through the next monitoring cycle until the plan is updated 10 years later.
2011
2012
2013


10 year cycle through
the 81 majors
watersheds
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018



Watershed Management via 81 major watersheds

Pros

- Get through all watersheds in 10 years
- Integrates impaired/unimpaired into a single management plan.
- Preventative approach
- Watershed focus
- Impaired waters list isn't the driver
- Predictable cycle
- Engage everyone in the watershed
- It's a plan people can understand
- Predictable path
- Should limit impairments
- Starts an ongoing cycle of management and evaluation
- Can integrate source water protection

Cons

- Some watersheds wait 10 years
- Will take a couple years to transition to this approach
- Depends on long term stable funding
- Unusual events could disrupt cycle

COMMITTEE RECOMMENDATIONS

Metro Water Planning Committee

1. Amendment to Coon Creek Watershed District Boundary Change – Jim Haertel – *DECISION ITEM*

2. Rice Creek Watershed District Comprehensive Wetland Protection and Management Plan for the City of Lino Lakes – Jim Haertel, BWSR and Doug Thomas (RCWD) – *DECISION ITEM*

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota

In the Matter of the Boundary Change for the Coon Creek Watershed District in Anoka County pursuant to Minnesota Statutes § 103B.215

AMENDMENT TO BOUNDARY CHANGE ORDER

Whereas, the Coon Creek Watershed District filed a Petition dated December 10, 2007 with the Board of Water and Soil Resources (Board) on December 13, 2007, to change the boundary of the Coon Creek Watershed District (CCWD) pursuant to Minn. Stat. § 103B.215, and;

Whereas, the Board has completed its review of the Petition;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order.

FINDINGS OF FACT

1. **Boundary Change.** The Petition to change the boundary of the CCWD with the Upper Rum River Watershed Management Organization (URRWMO) was filed by the CCWD Board of Managers with the Board on December 13, 2007. The boundary change was made according to the petition by Board Order dated March 26, 2008.

2. **Affected Property.** The territory included in the boundary change, the Petitioned Area, is located in Anoka County entirely within the metropolitan area. The Petitioned Area includes the transfer of area from the CCWD to the URRWMO, the assignment of area currently under both jurisdictions to the CCWD, and the assignment of area currently under both jurisdictions to the URRWMO. The Petitioned Area is depicted on seven maps attached to the Petition and further identified in three property identification tables attached to the Petition.

3. **Amendment to Affected Property.** The Anoka County Department of Property Records and Taxation discovered errors on the property identification tables attached to the Petition and the Board Order. The CCWD requested an amendment to the Board's Boundary Change Order dated March 26, 2008. The County, CCWD and Board staff coordinated the revisions required to amend the tables, as follows:

   A. Remove from Table 1 the following parcels:
      01-32-24-44-0009
      12-32-24-11-0002
      12-32-24-11-0014

   B. Remove from Table 1 and include on Table 2 the following parcels:
      04-32-23-14-0001
      04-32-23-33-0001
      04-32-23-33-0008
      04-32-23-33-0010
      05-32-23-23-0016
      05-32-23-42-0008
      05-32-23-44-0002
      05-32-23-44-0003
      05-32-23-44-0019
      06-32-23-14-0009
      07-32-23-22-0002
      07-32-23-22-0014
      07-32-23-22-0021

   C. Remove from Table 2 the following parcels:
      06-32-23-14-0002
      06-32-23-14-0008

   D. Add to Table 1 the following parcels:
      04-32-23-32-0041
      05-32-23-23-0002

4. **Metro Water Planning Committee.** On August 4, 2008, the Board's Metro Water Planning Committee and staff met to review and discuss the requested amendment. Those in attendance from the Board's Committee were Louise Smallidge, Faye Sleeper, LuAnn Tolliver and Robert Burandt as chair. Board staff in attendance were Metro Region Supervisor Jim Haertel and Board Conservationists Melissa Lewis and Brad Wozney. Board staff recommended approval of the amendment. After discussion and based on the entire record in this matter including no

comments or requests for hearing in response to the published Notice of Filing, the Committee unanimously voted to recommend to the full Board that the requested amendment to the Board's Boundary Change Order dated March 26, 2008 be approved for the CCWD because the amendments to the property identification Table 1 and Table 2 are necessary for the Petitioned Area to be divided as close as practicable to the hydrologic boundary, areas of overlap should not exist, the change is consistent with the purposes and requirements of the Metropolitan Surface Water Management Act in Minn. Stat. §§ 103B.205 to 103B.255, the change can be accomplished in conformance with Minn. Stat. § 103B.225 regarding benefits and damages, and the governing bodies of the City of Ham Lake, the CCWD and the URRWMO concur in the requested boundary change. Because the Board does not have the authority to change the URRWMO boundary, the URRWMO should be encouraged to change their organizational boundary consistent with the CCWD boundary change.

CONCLUSIONS

1. The Petition for boundary change of the Coon Creek Watershed District and the District's request for amendment to the Board's Boundary Change Order is valid in accordance with Minn. Stat. § 103B.215.

2. All relevant substantive and procedural requirements of law and rule have been fulfilled.

3. The Board has proper jurisdiction in the matter of ordering a watershed district boundary change.

4. The territory included in the requested boundary change amendment is within the hydrologic boundaries of the Coon Creek Watershed District or the Upper Rum River Watershed Management Organization.

5. The governing bodies of the City of Ham Lake, the Coon Creek Watershed District and the Upper Rum River Watershed Management Organization concur in the requested boundary change.

6. The requested amendment to the Boundary Change Order is consistent with the purposes and requirements of Minn. Stat. §§ 103B.205 to 103B.255.

7. The requested amendment to the Boundary Change Order can be accomplished in conformance with Minn. Stat. § 103B.225 regarding benefits and damages.

8. The requested amendment to the Boundary Change Order should be approved for the Coon Creek Watershed District and the Upper Rum River Watershed Management Organization should be encouraged to change their organizational boundaries consistent with this Order.

ORDER

The Board hereby orders that the Boundary Change Order for the Coon Creek Watershed District dated March 26, 2008 be amended at property identification Table 1 and Table 2 which are attached to this Order and made a part hereof. Property identification Table 3 remains unchanged. The Board strongly recommends the Upper Rum River Watershed Management Organization take immediate action to change its organizational boundary consistent with this Order.

Dated at Saint Paul, Minnesota this 24th day of September, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

By: _____
Randy Kramer, Chair

9/24/08

Property Identification

Table 1 indicates parcels currently within Coon Creek Watershed District that are proposed to be transferred to Upper Rum River Watershed Management Organization. This area totals 445.77 acres.

Table 1. Parcels to be subtracted from CCWD and added to URRWMO

	PIN	Acres	Owner	Address	City	State, Zip
Delete	~~003-013224440009~~	~~2.20~~	~~JOHNSON JEFFREY J & DIANE J~~	~~28 173RD LN NW~~	~~ANDOVER~~	~~MN, 55304~~
Delete	~~003-123224110014~~	~~9.74~~	~~CAPELING LAWRENCE & R M~~	~~17251 BUTTERNUT ST NW~~	~~ANDOVER~~	~~MN, 55304~~
Delete	~~003-123224110002~~	~~0.95~~	~~LENARZ BONNIE D~~	~~17182 CROSSTOWN BLVD NW~~	~~ANDOVER~~	~~MN, 55304~~
	003-043223120002	11.84	KNUTSON GREGORY E	2217 SWEDISH DR	HAM LAKE	MN, 55304
	003-043223210001	34.56	HAM LAKE HOLDINGS LLC	2195 SILVER LAKE RD	NEW BRIGHTON	MN, 55112
	003-043223130003	2.99	G E KNUTSON INC	14855 ABERDEEN ST NE	HAM LAKE	MN, 55304
	003-053223130001	31.29	EICHI INC	2195 SILVER LK RD	NEW BRIGHTON	MN, 55112
	003-043223240001	36.27	HAM LAKE HOLDINGS LLC	2195 SILVER LAKE RD	NEW BRIGHTON	MN, 55112
	003-043223230001	35.52	HAM LAKE HOLDINGS LLC	2195 SILVER LAKE RD	NEW BRIGHTON	MN, 55112
	003-053223230008	3.93	BYERS LAURA	17820 FILMORE ST NE	HAM LAKE	MN, 55304
	003-053223230018	0.91	PHILLIPS TODD A & JENNY L J	1205 178TH AVE NE	HAM LAKE	MN, 55304
	003-053223230017	2.50	HANSON LANCE	17829 FILLMORE ST NE	HAM LAKE	MN, 55304
	003-063223140002	23.16	LINDSAY ROBERT T	17712 CONCORD DR NE	HAM LAKE	MN, 55304
	003-053223230014	2.72	CURTISI ANTHONY & CHRISTINE	17812 TAYLOR ST NE	HAM LAKE	MN, 55304
	003-053223230005	2.40	HEILLE DALE R & MARY K	17827 TAYLOR ST NE	HAM LAKE	MN, 55304
	003-063223140006	1.22	OSBORNE WALTER & LORETTA	17100 HIGHWAY 65 NE	HAM LAKE	MN, 55304
	003-043223240004	3.48	HRBACEK JOSEPH R & STEPHANIE L	2159 SWEDISH DR NE	HAM LAKE	MN, 55304
	003-053223230011	2.95	ETTER ERIC	17755 FILLMORE ST NE	HAM LAKE	MN, 55304
	003-063223140001	0.99	BERENS RICHARD A & SANDRA L	17803 CONCORD DR	HAM LAKE	MN, 55304
	003-053223230007	2.50	RYLANDER TANJA M & NELSON B D	1121 177TH LN NE	HAM LAKE	MN, 55304
	003-053223230015	3.33	ZELLNER ERIC W	17848 TAYLOR ST NE	HAM LAKE	MN, 55304
	003-063223140010	0.75	LEYSEN NATHAN A	17751 CONCORD DR NE	HAM LAKE	MN, 55304
	003-053223230006	1.77	LACOURSIERE DONALD	17751 TAYLOR ST NE	HAM LAKE	MN, 55304
	003-063223140007	0.86	LIVINGOOD AARON	17741 CONCORD DR NE	HAM LAKE	MN, 55304
	003-053223230012	2.62	LEE CHAD W & KRISTEN M	1130 177TH LN NE	HAM LAKE	MN, 55304
	003-063223140008	1.08	HAM LAKE CITY OF	15544 CENTRAL AVE NE	HAM LAKE	MN, 55304

9/24/08

PIN	Acres	Owner	Address	City	State, Zip
move to Tbl2 ~~003-053223230016~~	~~2.33~~	~~OSBORNE WALTER F~~	~~17100 HWY 65 NE~~	~~HAM LAKE~~	~~MN, 55304~~
003-053223240023	2.66	ROOT MICHAEL J & MICHELLE A	17714 JOHNSON ST NE	HAM LAKE	MN, 55304
move to Tbl2 ~~003-063223140009~~	~~2.32~~	~~KOWALZEK THEO S~~	~~17717 CONCORD DR NE~~	~~HAM LAKE~~	~~MN, 55304~~
003-053223230013	1.39	WALSH SUSAN	17717 TAYLOR ST NE	HAM LAKE	MN, 55304
003-043223320004	1.09	REYNOLDSON WM L & MARY E	17655 SWEDISH DR NE	ANOKA	MN, 55304
003-053223410002	2.15	CRAWFORD MAUREEN M & DARIN D	1755 176TH LN NE	HAM LAKE	MN, 55304
003-053223410003	0.88	FRANK DALE R & JUDY K	1737 176TH LN NE	ANOKA	MN, 55304
003-043223320001	6.70	KETZ BRADLEY K & COLLEEN A	1920 SWEDISH DR NE	HAM LAKE	MN, 55304
003-053223410014	20.75	HAENSEL PAUL & PHYLLIS	1647 CROSSTOWN BLVD NE	ANOKA	MN, 55304
003-053223410005	4.91	HER MAO	17626 SWEDISH DR NE	HAM LAKE	MN, 55304
003-053223410004	0.65	FRANK DALE R & JUDY K	1737 176TH LN NE	ANOKA	MN, 55304
003-043223310027	2.56	TRIMBO JOSEPH G & VICTORIA A	17655 LONDON ST NE	HAM LAKE	MN, 55304
003-053223420006	0.91	H K & A LLP	1837 86TH LN NE	BLAINE	MN, 55449
003-053223420012	4.42	CROSSTOWN SHOPPING CENTER INC	17 WASHINGTON AVE N STE 500	MINNEAPOLIS	MN, 55401
003-043223320003	1.30	REYNOLDSON WILLIAM L & MARY	17655 NE SWEDISH DR	ANOKA	MN, 55304
003-053223420005	1.89	WESTYS PROPERTIES LLC	17758 PALM ST NW	ANDOVER	MN, 55304
003-043223310028	2.62	CLICK AUDREY	17630 LONDON ST NE	HAM LAKE	MN, 55304
003-053223420025	1.02	21ST CENTURY BANK	9380 CENTRAL AVE NE	BLAINE	MN, 55434
003-043223320034	2.21	BOWEN JR RON	17633 SWEDISH DR NE	HAM LAKE	MN, 55304
003-043223320004	0.76	REYNOLDSON WM L & MARY E	17655 SWEDISH DR NE	ANOKA	MN, 55304
003-053223420022	0.70	CROSSTOWN SHOPPING CTR	9380 CENTRAL AVE NE	BLAINE	MN, 55434
003-043223320024	0.37	BOWEN JR RON	17633 SWEDISH DR NE	HAM LAKE	MN, 55304
003-043223320023	0.39	TEESELINK PAUL	1821 176TH AVE NE	HAM LAKE	MN, 55304
003-043223320022	0.33	BONA ROCKFORD R	1809 176TH LN NE	HAM LAKE	MN, 55304
003-053223420026	2.94	CROSSTOWN SHOPPING CTR	9380 CENTRAL AVE NE	BLAINE	MN, 55434
003-053223420019	0.65	CROSSTOWN SHOPPING CTR	9380 CENTRAL AVE NE	BLAINE	MN, 55434
003-053223420013	1.72	HAM LAKE PROFESSIONAL CENTER LLC	29490 FRANCIS LAKE DR NW	ISANTI	MN, 55040
003-053223410006	0.52	SODERQUIST JARRYL D & R	17614 SWEDISH DR NE	ANOKA	MN, 55304
003-053223410007	0.43	SODERQUIST JARRYL D & R	17614 SWEDISH DR NE	ANOKA	MN, 55304
003-043223320039	8.35	ZURN ROBERT M & ELIZABETH	17540 LONDON ST NE	HAM LAKE	MN, 55304

9/24/08

PIN	Acres	Owner	Address	City	State, Zip
003-053223410008	1.80	SODERQUIST JARRYL D & R	17614 SWEDISH DR NE	ANOKA	MN, 55304
003-043223320033	0.38	CITY OF HAM LAKE	15544 CENTRAL AVE NE	ANOKA	MN, 55304
003-053223420023	1.55	CROSSTOWN SHOPPING CTR	9380 CENTRAL AVE NE	BLAINE	MN, 55434
003-043223320016	0.35	MURAWSKI ROY SCOTT & PATRICIA	17565 SWEDISH DR NE	HAM LAKE	MN, 55304
003-043223320017	0.33	HIPP THOMAS E	17558 ISANTI ST NE	HAM LAKE	MN, 55304
003-053223420021	0.38	CROSSTOWN SHOPPING CTR	9380 CENTRAL AVE NE	BLAINE	MN, 55434
003-043223320029	0.34	FORWARD TRENT J & BAHIA M	17565 ISANTI ST NE	HAM LAKE	MN, 55304
003-043223320031	0.81	JOHNSON DOUGLAS	17545 ISANTI ST NE	HAM LAKE	MN, 55304
003-053223420020	0.52	CROSSTOWN SHOPPING CTR	9380 CENTRAL AVE NE	BLAINE	MN, 55434
003-043223320015	0.35	OLSON JEFFREY A & MARY B	17557 SWEDISH DR NE	HAM LAKE	MN, 55304
003-043223320018	0.31	HIPP CONSTANCE M	17558 ISANTI ST NE	ANOKA	MN, 55304
003-053223410009	2.31	PETRY LESTER H & MARLYS V	1703 175TH LN NE	ANOKA	MN, 55304
003-043223320028	0.31	NELSON DARYL O & TABITHA R	17557 ISANTI ST NE	HAM LAKE	MN, 55304
003-053223410013	1.88	KIKEN DUANE C	1733 175TH LN NE	ANOKA	MN, 55304
003-053223410010	0.45	CHRISTIANSEN DANIEL W	17556 SWEDISH DR NE	ANOKA	MN, 55304
003-053223420003	1.97	ANDERSON HOWARD A & RITA E	17535 CHISHOLM ST NE	HAM LAKE	MN, 55304
003-043223320014	0.38	FREUND DANIEL & THERESA A	17545 SWEDISH DR NE	ANOKA	MN, 55304
003-043223320019	0.36	AMUNDSON JOHN P	17548 ISANTI ST NE	HAM LAKE	MN, 55304
003-043223320027	0.36	JOHNSON DOUGLAS	17545 ISANTI ST NE	HAM LAKE	MN, 55304
003-053223420010	0.93	CROSSTOWN SHOPPING CENTER INC	17 WASHINGTON AVE N STE 500	MINNEAPOLIS	MN, 55401
003-053223410011	0.52	RUDE ANN L & ROBERT B	17552 SWEDISH DR NE	HAM LAKE	MN, 55304
003-043223320013	0.36	DUMIRE WANDA L	17537 SWEDISH DR NE	ANOKA	MN, 55304
003-043223320020	0.33	ZACH DONALD A & DIANNE M	17538 ISANTI ST NE	HAM LAKE	MN, 55304
003-043223320026	0.33	JONES KENNIETH S SR & JULIE R	17537 ISANTI ST NE	ANOKA	MN, 55304
~~003-053223420008~~	~~2.85~~	~~SODERQUIST & SODERQUIST~~	~~17525 HIGHWAY 65 NE~~	~~HAM LAKE~~	~~MN, 55304~~
003-043223320032	0.51	BALL RICKY T & GAYLENE M	1861 175TH LN NE	HAM LAKE	MN, 55304
003-053223410012	0.40	ODONNELL JOLENE M	17530 SWEDISH DR NE	HAM LAKE	MN, 55304
003-043223320012	0.36	SCHULE THOMAS J & CARRIE A	17525 SWEDISH DR NE	HAM LAKE	MN, 55304
003-043223320021	0.32	JOHNSON JAMES A & CYNTHIA J	17528 ISANTI ST NE	ANOKA	MN, 55304
003-043223320025	0.34	MARTY RICHARD R & LUANN M	17500 ISANTI ST NE	ANOKA	MN, 55304
003-043223320036	2.56	MEISTER GREGORY	1926 175TH LN NE	HAM LAKE	MN, 55304

move to Table 2

9/24/08

PIN	Acres	Owner	Address	City	State, Zip
003-043223320040	2.30	NEUMAN CLAYTON L & BEVERLY J	17520 LONDON ST NE	HAM LAKE	MN, 55304
003-043223320006	0.34	HEDIN BERNICE	1810 175TH LN NE	HAM LAKE	MN, 55304
003-043223320007	0.36	POJANOWSKI PAUL M & IRENE B	1820 175TH LN NE	HAM LAKE	MN, 55304
003-043223320008	0.38	FORD MICHAEL V & LINDA M	1830 175TH LN NE	HAM LAKE	MN, 55304
003-043223320009	0.37	BERNDT JOHN L	1840 175TH LN NE	ANOKA	MN, 55304
003-043223320010	0.35	REGINO ANTONIO	1850 175TH LN NE	HAM LAKE	MN, 55304
003-043223320038	0.43	SABA BRANDI	1860 175TH LN NE	HAM LAKE	MN, 55304
~~003-053223440002~~	~~1.64~~	~~MOUA MAI~~	~~1747 SODERVILLE DR~~	~~HAM LAKE~~	~~MN, 55304~~
~~003-053223440003~~	~~1.55~~	~~SMITH RUEDIGER & TURNER L A~~	~~1731 SODERVILLE DR NE~~	~~HAM LAKE~~	~~MN, 55304~~
~~003-053223440019~~	~~2.83~~	~~SODERQUIST DONALD A & L~~	~~3652 SAYBROOK PL~~	~~BONITA SPRINGS~~	~~FL, 34134~~
~~003-043223330008~~	~~1.32~~	~~SCHOLL JEROME D~~	~~1811 SODERVILLE DR NE~~	~~HAM LAKE~~	~~MN, 55304~~
~~003-043223330001~~	~~1.43~~	~~HIRSCH GLEN & SHARON~~	~~1827 SODERVILLE DR NE~~	~~ANOKA~~	~~MN, 55304~~
~~003-043223330010~~	~~0.74~~	~~GUNDERSON DAWN~~	~~1851 SODERVILLE DR NE~~	~~HAM LAKE~~	~~MN, 55304~~
003-043223330009	1.86	OLMSCHEID KEITH L & SUSAN E	1909 SODERVILLE DR NE	HAM LAKE	MN, 55304
003-043223330011	0.93	NORDIN CRAIG	1929 SODERVILLE DR NE	HAM LAKE	MN, 55304
003-043223330007	0.82	HANSE GARY H & MARY J	1943 SODERVILLE DR	HAM LAKE	MN, 55304
003-043223330002	1.56	HELMBRECHT MARY A	2011 SODERVILLE DR NE	HAM LAKE	MN, 55304
003-043223340036	0.15	MN STATE OF IN TRUST	2100 3RD AVE	ANOKA	MN, 55303
003-073223220019	7.78	MITCHELL JAMES W & BETH A	99 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
~~003-073223220002~~	~~1.06~~	~~ROGERS DANIEL~~	~~304 CROSSTOWN BLVD NE~~	~~HAM LAKE~~	~~MN, 55304~~
~~003-073223220021~~	~~3.16~~	~~BRAASTAD RONALD~~	~~21119 CEDAR DRIVE~~	~~CEDAR~~	~~MN, 55011~~
~~003-073223220014~~	~~0.87~~	~~CHA TXIA & VANG BEE~~	~~17150 3RD ST NE~~	~~HAM LAKE~~	~~MN, 55304~~
003-053223410020	0.84	GALE JAMES G & WENDY M	17504 SWEDISH DR NE	HAM LAKE	MN, 55304
003-053223410019	1.00	VANREESE L I & K J	1730 175TH LN	HAM LAKE	MN, 55304
003-053223410018	1.25	NIKSTAD RONALD G & TRACY J	1716 175TH LN	HAM LAKE	MN, 55304
~~003-043223140001~~	~~41.97~~	~~DOSEDEL JOHN F & JOAN A~~	~~17102 E LAKE NETTA DR NE~~	~~HAM LAKE~~	~~MN, 55304~~
003-053223140002	13.25	EICHI INC	2195 SILVER LAKE RD	NEW BRIGHTON	MN, 55112
003-053223140003	27.00	HAM LAKE HOLDINGS LLC	2195 SILVER LAKE RD	NEW BRIGHTON	MN, 55112
003-043223320003	0.78	REYNOLDSON WILLIAM L & MARY	17655 NE SWEDISH DR	ANOKA	MN, 55304
003-043223320004	0.05	REYNOLDSON WM L & MARY E	17655 SWEDISH DR NE	ANOKA	MN, 55304

move to Table 2

move to Table 2

move to Tbl 2

Add to Table 1 the following parcels:
04-32-23-32-0041
05-32-23-23-0002

9/24/08

Table 2 indicates parcels currently within both Coon Creek Watershed District and Upper Rum River Watershed Management Organization that are proposed to be assigned to Coon Creek Watershed District. This area totals 145.06 acres.

Table 2. Parcels in overlap area to be assigned to CCWD

PIN	Acres	Owners	Address	City	State, Zip
~~003-063223140002~~	~~23.16~~	~~LINDSAY ROBERT T~~	~~17712 CONCORD DR NE~~	~~HAM LAKE~~	~~MN, 55304~~
~~003-063223140008~~	~~1.08~~	~~HAM LAKE CITY OF~~	~~15544 CENTRAL AVE NE~~	~~HAM LAKE~~	~~MN, 55304~~
003-063223140009	2.32	KOWALZEK THEO S	17717 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223410012	9.12	GILBERT DONALD A & BARBARA	939 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
003-063223410015	7.45	ZARLING LINDA L	17665 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223410014	3.50	ZARLING LINDA L	17665 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223410011	4.17	OLSON ROGER E & CONNIE M	919 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
003-063223410009	3.76	HALVORSON DEAN H & MONICA A	17545 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223420020	3.10	NUTTER MICHAEL J	745 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
003-063223410010	2.72	TRAUTWEIN THOMAS F & M M	839 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
003-063223410004	0.84	WIENER FRANCIS D	901 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
003-063223410003	1.10	MARTINI JEROME WILMER	811 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
003-063223440001	35.00	RONO LYNDIA JEAN ETAL	831 173RD AVE NE	HAM LAKE	MN, 55304
003-063223430006	30.71	RONO LYNDIA JEAN ETAL	831 173RD AVE NE	HAM LAKE	MN, 55304
003-063223430002	0.74	HOLMQUIST JAMES	600 CROSSTOWN BLVD NE	ANOKA	MN, 55304
003-063223340002	0.29	HOLMQUIST JAMES	600 CROSSTOWN BLVD NE	ANOKA	MN, 55304
003-063223340004	10.56	RONO LYNDIA JEAN ETAL	831 173RD AVE NE	HAM LAKE	MN, 55304
003-063223440002	2.76	RONO FRANCIS E & LYNDIA J	831 173RD AVE NE	ANOKA	MN, 55304
003-063223430005	2.68	RONO ARNOLD H & JEAN M	609 173RD AVE NE	HAM LAKE	MN, 55304

Delete
Delete

Remove from Table 1 and include on Table 2 the following parcels:

04-32-23-14-0001
04-32-23-33-0001
04-32-23-33-0008
04-32-23-33-0010
05-32-23-23-0016
05-32-23-42-0008
05-32-23-44-0002
05-32-23-44-0003
05-32-23-44-0019
06-32-23-14-0009
07-32-23-22-0002
07-32-23-22-0014
07-32-23-22-0021

9/24/08

Table 3 indicates parcels currently within both Coon Creek Watershed District and Upper Rum River Watershed Management Organization that are proposed to be assigned to Upper Rum River Watershed Management Organization. This area totals 276.57 acres.

Table 3. Parcels in overlap area to be assigned to URRWMO

PIN	Acres	Owners	Address	City	State, Zip
003-043223240001	36.27	HAM LAKE HOLDINGS LLC	2195 SILVER LAKE RD	NEW BRIGHTON	MN, 55112
003-043223230001	35.52	HAM LAKE HOLDINGS LLC	2195 SILVER LAKE RD	NEW BRIGHTON	MN, 55112
003-053223230009	1.97	NIEKEN LYLE E & KAREN L	17865 FILLMORE ST NE	HAM LAKE	MN, 55304
003-053223230008	3.93	BYERS LAURA	17820 FILMORE ST NE	HAM LAKE	MN, 55304
003-053223230004	1.77	ORCHARD ROBERT W & ROBIN L	1025 178TH LN NE	HAM LAKE	MN, 55304
003-053223230003	1.28	JUMER LARRY M & ROBYN M	1019 178TH LN NE	HAM LAKE	MN, 55304
003-063223140004	2.22	MURRAY TIMOTHY L & JENELL E	17865 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223140003	3.09	JESINOSKI THEODORE & GWEN	17862 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223130007	21.97	DOWNS DAVID R & JOANNE M	17815 NE JEFFERSON ST	HAM LAKE	MN, 55304
003-053223230018	0.91	PHILLIPS TODD A & JENNY L J	1205 178TH AVE NE	HAM LAKE	MN, 55304
003-053223230017	2.50	HANSON LANCE	17829 FILLMORE ST NE	HAM LAKE	MN, 55304
003-063223140002	23.16	LINDSAY ROBERT T	17712 CONCORD DR NE	HAM LAKE	MN, 55304
003-053223230014	2.72	CURTISI ANTHONY & CHRISTINE	17812 TAYLOR ST NE	HAM LAKE	MN, 55304
003-063223140012	0.77	OSBORNE WALTER F	17100 HWY 65 NE	HAM LAKE	MN, 55304
003-053223230005	2.40	HEILLE DALE R & MARY K	17827 TAYLOR ST NE	HAM LAKE	MN, 55304
003-063223130001	10.84	LAKE JEANNE	17745 JEFFERSON ST NE	HAM LAKE	MN, 55304
003-063223140006	1.22	OSBORNE WALTER & LORETTA	17100 HIGHWAY 65 NE	HAM LAKE	MN, 55304
003-063223130006	6.81	SCHENDEL TIMOTHY T & JEANNIE A	715 176TH LN NE	HAM LAKE	MN, 55304
003-063223240005	3.97	MEYER LAWRENCE & MITZIE	460 177TH AVE NE	HAM LAKE	MN, 55304
003-063223130008	2.39				
003-063223140008	1.08	HAM LAKE CITY OF	15544 CENTRAL AVE NE	HAM LAKE	MN, 55304
003-063223130005	3.40	STRAND MELVIN A	17715 JEFFERSON ST NE	HAM LAKE	MN, 55304
003-063223420023	2.58	HEINISCH DENIS & MARY TRUSTEES	712 176TH LANE NE	HAM LAKE	MN, 55304
003-063223410002	2.64	ANDERSON CARL E & S A	17670 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223310002	6.77	STEIN DOUGLAS A & BARBARA A	17620 JEFFERSON ST NE	HAM LAKE	MN, 55304
003-063223420012	3.19	BRANDJORD MARY	639 176TH LN NE	HAM LAKE	MN, 55304
003-063223410006	1.16	BLATCHLEY BRUCE	17640 CONCORD DR NE	HAM LAKE	MN, 55304

9/24/08

PIN	Acres	Owners	Address	City	State, Zip
003-063223420005	3.87	FAGERNESS STANLEY & P K	5306 408TH ST	NORTH BRANCH	MN, 55304
003-063223420007	0.37	ANOKA CTY COMM ACTION PROGRAM	1201 89TH AVE NE	BLAINE	MN, 55434
003-063223420008	0.61	NYMAN JOEL G & LISA A	644 176TH LN NE	HAM LAKE	MN, 55304
003-063223420002	1.09	RAMBOW RICHARD E & MARIE D	660 176TH LN NE	HAM LAKE	MN, 55304
003-063223420006	0.60	STHILAIRE ARTHUR W & SHARON	17625 JEFFERSON ST NE	HAM LAKE	MN, 55304
003-063223410014	3.50	ZARLING LINDA L	17665 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223420003	0.68	ALEXANDER JACK L & J L	17609 JEFFERSON ST NE	HAM LAKE	MN, 55304
003-063223420010	0.94	BRUESTLE MARK & TRACY	17532 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223420011	0.58	PETERSON SANDRA	17526 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223420022	2.51	PETERSON SANDRA E	17526 CONCORD DR	HAM LAKE	MN, 55304
003-063223420016	1.24	JAMES JOSEPH C	2714 KNOX AVE N	MINNEAPOLIS	MN, 55411
003-063223420015	1.22	ROHLOFF WILLIAM M & TRACY L	17550 MADISON ST NE	HAM LAKE	MN, 55304
003-063223420001	4.54	CEDAR UNITED METHODIST	17541 JEFFERSON ST NE	HAM LAKE	MN, 55304
003-063223410009	3.76	HALVORSON DEAN H & MONICA A	17545 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223420020	3.10	NUTTER MICHAEL J	745 CROSSTOWN BLVD NE	HAM LAKE	MN, 55304
003-063223420009	1.18	CHOUINARD PETER J & LINDA K	17522 CONCORD DR NE	HAM LAKE	MN, 55304
003-063223420021	1.30	MORRIS MARLENE M	659 175TH AVE NE	HAM LAKE	MN, 55304
003-063223420019	1.29	LARSON WILLIAM E & B J	643 175TH AVE NE	HAM LAKE	MN, 55304
003-063223430006	30.71	RONO LYNDIA JEAN ETAL	831 173RD AVE NE	HAM LAKE	MN, 55304
003-063223430004	2.65	RONO LYNDIA JEAN ETAL	831 173RD AVE NE	HAM LAKE	MN, 55304
003-063223340006	20.67	RONO LYNDIA JEAN ETAL	831 173RD AVE NE	HAM LAKE	MN, 55304
003-053223210009	2.43	CRISLIP MARTHA & MICHAEL J	1206 180TH LN NE	HAM LAKE	MN, 55304
003-063223130009	1.20				

The addition or transfer of the property as described above in this Petition will not affect the benefits or damages for any improvement previously constructed by the Coon Creek Watershed District or the Upper Rum River Watershed Management Organization, and such boundary change can be accomplished in accordance with Minnesota Statutes section 103B.225.

Minnesota Board of Water and Soil Resources
August 2008 Metro Committee Meeting

RICE CREEK WATERSHED DISTRICT, LINO LAKES COMPREHENSIVE WETLAND MANAGEMENT PLAN OVERVIEW

Purpose

Minnesota Statutes Section 103G.2242, Subd. 1 (c) and Minnesota Rules Chapter 8420.650 allow the Board to approve a comprehensive wetland protection and management plan developed by a local government unit, provided it is implemented by a rule adopted under Minnesota Statues Chapter 103D. Since this Plan is more encompassing than the typical wetland plan, Rice Creek Watershed District (RCWD) refers to the plan as a "Resource Management Plan" (RMP). The RMP came about through a partnership between the RCWD and the City of Lino Lakes. This collaboration was initiated in 2006 and included extensive coordination between the City, the Watershed and other regulatory agencies.

The stated purpose of the RMP is to:

- Provide maximum consistency with Minnesota Wetland Conservation Act (WCA) requirements for a Comprehensive Wetland Management Plan and no net loss in acreage and function of wetland resources;
- Be consistent with the Federal Clean Water Act requirements for Section 404;
- Provide an implementation strategy for multiple Total Maximum Daily Load projects;
- Provide watershed-based context to the public Ditch Repair process proceeding on a parallel track;
- Provide guidance to the City of Lino Lakes for ecological-based land use decisions during their Comprehensive Plan Update process;
- Provide stormwater management guidance to the City of Lino Lakes for their Comprehensive Plan Update requirements and municipal stormwater permitting.

The RMP provides a watershed-based approach to wetland management that is consistent with RCWD goals. The approach addresses management in the context of wetland functions and the effects of anticipated future land use. This framework of guiding where wetland impact and replacement may occur is intended to have the effect of reestablishing larger, contiguous areas of wetland and riparian edge. It is also intended to afford landowners more flexibility to create larger contiguous areas of upland for use and development than reasonably could be fashioned under standard parcel-based wetland permitting. This is one of several respects in which the RCWD believes that the plan will provide benefits to landowners as compared with standard wetland permitting, while providing for greater water resource protection.

Nature of the Watershed

Public Ditch System

The majority of the drainage system was constructed during the late 1800's and early 1900's. Over the decades, much of the system was minimally maintained by different ditch authorities. Today, many ditches function as straightened creeks within a partially or marginally drained wetland slough or riparian corridor. The major public ditch systems in Lino Lakes are:

- ACD 10-22-32
- ACD 25
- ACD 55
- ACD 72

ACD 55 and 72 are each separate tile systems. Also found within Lino Lakes is the former public ditch ACD 47 , a small portion of Anoka/Washington Judicial Ditch #3 (Clearwater Creek) and a small portion of Anoka Ramsey Judicial Ditch 8.

Watershed Runoff

Lino Lakes is at a midpoint in the Rice Creek watershed. From the Chain of Lakes, Rice Creek flows west to the Mississippi River. Three large subwatersheds contribute to Peltier Lake: Clearwater Creek, Hardwood Creek, and Upper Rice Creek (Figure 4). Through Peltier Lake these subwatersheds contribute to the condition of the entire Chain of Lakes. The majority of the Clearwater Creek, Hardwood Creek, and Upper Rice Creek subwatersheds are located in other communities.

Lake Amelia, located in the southeast corner of Lino Lakes does not have such large contributing surface water flows. The drainage area flows south into North Oaks and the Vadnais Lake Area Watershed Management Organization.

Nutrient Loads

Five lakes are impaired from excess phosphorus in the water. All of the 'listed waters' in Lino Lakes recently had investigations completed to determine the sources of pollution. Peltier Lake receives inflow from Rice Creek from the north, Hardwood Creek from the northeast, and Clearwater Creek from the southeast.

The Status of Wetlands

A great diversity of wetlands exist in both large, diverse assemblages and scattered throughout the City of Lino Lakes. Marshes and shallow lakes are the most common wetland habitats.

Past alterations to wetlands were primarily agricultural ditching and draining. These activities resulted in areas that have hydric soils but are not mapped as wetland. Wetland restoration projects function to retain and treat stormwater and at the same time enhance natural resources, all of which were determined to be of highest priority for the citizens of Lino Lakes.

Creeks

Hardwood Creek and Clearwater Creek, both TMDL-listed streams, are directly impacted by development activities in the Lino Lakes and Centerville portions of their drainage area. For both of these streams, stormwater volume and sediment load are stressors to biotic life. The Hardwood Creek TMDL is expected to be finalized in 2008. In 2007 the Clearwater Creek went through the stressor identification process. The TMDL project for Clearwater Creek is expected to be funded by MPCA in 2008

Key Elements of the Plan

High Priority Wetlands and Wetland Preservation Corridors

The RCWD identified core selection criteria for establishing high priority wetlands at a landscape scale. These criteria included the following:

- High Wetland restoration potential
- High Vegetative Integrity
- Within trunk drainageways, including ditch systems
- Within the documented floodzone
- Harboring documented rare species
- Includes groundwater-dependent plant communities

Based on these criteria, preliminary high priority wetlands were identified and "Wetland Preservation Corridors" (WPC's) were mapped. These WPC's form the basis of the resulting wetland regulations. Regulations are applied such that wetland impacts within WPC's are discouraged (via higher

replacement ratios) and wetland replacement within WPC's is encouraged (increased credit allocations). See table below from proposed rule.

Table 1. Wetland Impact Ratios

Wetland Plant Community Type	Location	
	Outside WPC	Within WPC
*Degraded** shallow, deep marshes or open water	1:1	2:1
Non-Degraded shallow, deep marshes or open water	1.25:1	2.25:1
*Degraded** sedge meadow, wet meadow, or wet to mesic prairie	1:1	2:1
Non-Degraded sedge meadow, wet meadow, or wet to mesic prairie	1.5:1	2.5:1
*Degraded** shrub carr or alder thicket	1:1	2:1
Non-Degraded shrub carr or alder thicket	1.5:1	2.5:1
*Degraded** hardwood, coniferous swamp, floodplain forest, or bog	1.25:1	2.25:1
Non-Degraded hardwood, coniferous swamp, floodplain forest, or bog	2:1	3:1
*Degraded** seasonally flooded basin	1:1	2:1
Non-Degraded seasonally flooded basin	1.25:1	2.25:1

* The term degraded includes marginally, moderately & severely degraded per the definitions.

Table 2. Replacement Credit Ratios

1. Primary Replacement Credits For all replacement meeting the minimum 1:1, Percentages are applied to area of proposed replacement activity.	Column 1 In WPC	Column 2 Outside WPC
Hydrologic and vegetative restoration of partially drained marginally degraded wetlands	25%	12.5%
Hydrologic and vegetative restoration of partially drained moderately degraded wetlands	50%	25%
Hydrologic and vegetative restoration of partially drained severely degraded wetlands	75%	37%
Establishment (creation) in nonnative upland (refer to 5 (h ii))	75%	37%
Restoration of effectively drained, former wetland	100%	50%
2. Secondary Replacement Credits For all replacement obligations exceeding 1:1		
Upland buffer contiguous with wetland	25%	12.5%
Upland habitat area contiguous with final WPC wetland (2 ac. minimum)	100%	n/a
Vegetation restoration of existing low scoring wetland for "Vegetative Integrity" using MnRAM in the final WPC	100%	n/a
Exceptional Natural Resource Values Wetlands (WCA guidance)	50%	25%

Resource Management Unit Recommendations

Resource Management Units (RMUs) are subwatershed based drainage areas that break the City of Lino Lakes into distinct hydrologic units. The purpose of creating RMUs is to provide drainage-area specific management recommendations that address the unique conditions of the area. This level of analysis requires a full understanding of the resources and the stressors that cause impairments. For some RMU's stormwater volume is a stressor, for others it is nutrients, for example. The plan provides

recommendations on management strategies for each RMU. These Resource Management Unit recommendations are intended to meet plan goals for aquatic resource protection and management and to satisfy a watershed approach to high priority wetland and flood protection. Although impaired waterbody TMDL goals have not been finalized, the recommendations follow the expected implementation strategies to work towards meeting the loading reduction goals.

Plan Review and Approval

The final draft Plan was submitted to BWSR, other state agencies, and local governments for the official 60-day BWSR review and approval period on July 24, 2008.

Citizen & Agency Participation

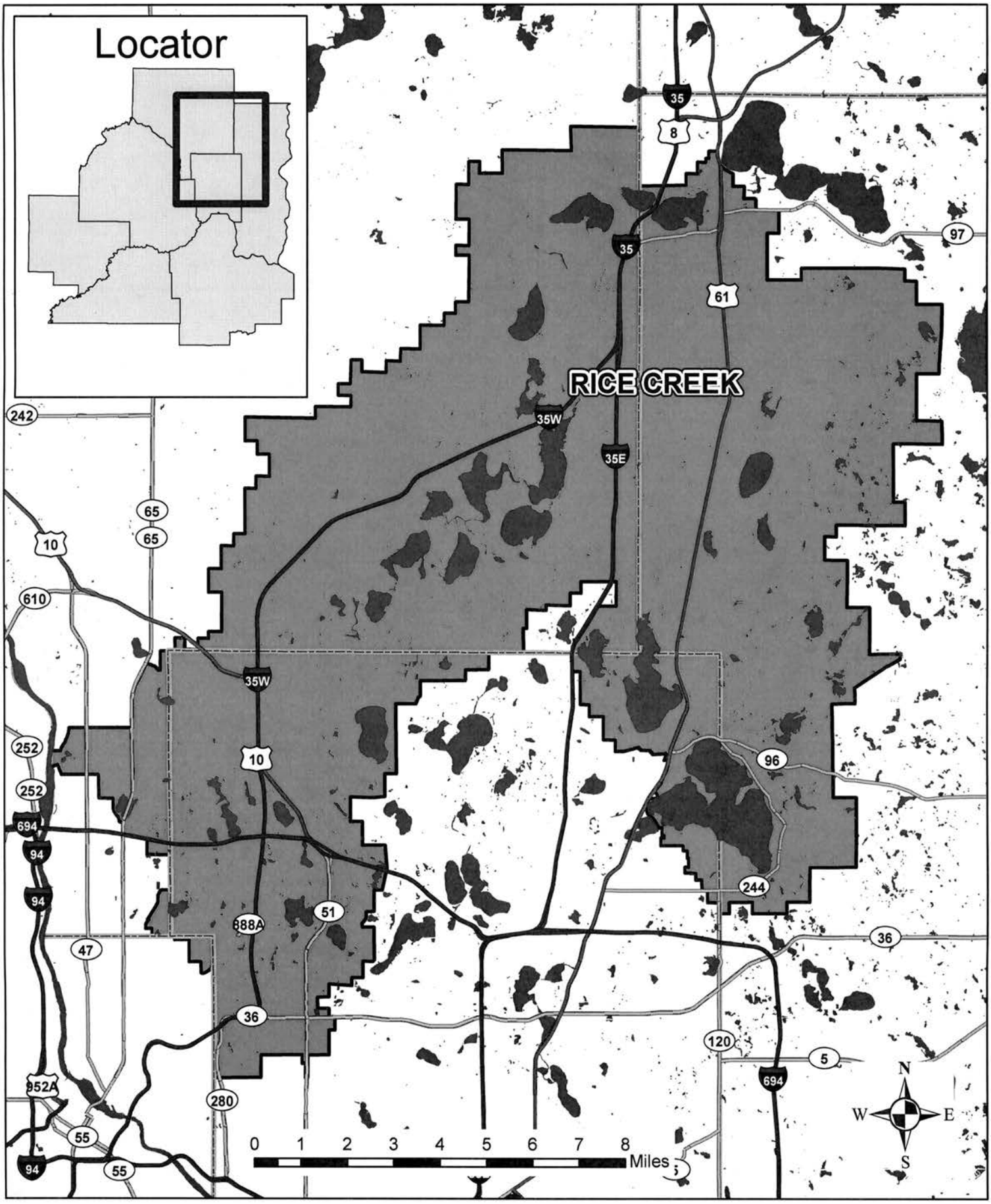
Citizen and agency participation is well documented in the accompanying checklist and table. BWSR staff provided technical input at TEP meetings on elements of the plan and implementing rule. The current version of the rule reflects most of the changes suggested by BWSR staff. Remaining items for discussion are minor in nature and include the following:

- BWSR staff recommends that the rule provide more specificity as to who (RCWD staff versus RCWD Board) makes decisions regarding both technical and nontechnical matters in the permit review process.
- BWSR staff recommends that paragraph 5d in the rule be re-worded to better clarify the process for establishment of the WPZ for project-specific permitting.
- BWSR staff recommends that paragraph 5g in the rule be altered to reference the applicable wetland functions in MnRAM rather than the abbreviated functional references.
- In Table 2 of the rule (Replacement Credit Ratios), BWSR staff recommends that the percentages associated with the ENRV replacement credits be replaced with "per current WCA guidance".

Staff Recommendation

BWSR Senior Wetland Specialist Ken Powell recommends approval of the Rice Creek Watershed District Comprehensive Wetland Management Plan for the City of Lino Lakes.

Rice Creek Watershed District



Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota 55155

In the Matter of the review of the Comprehensive Wetland Protection and Management Plan for the **Rice Creek Watershed District, City of Lino Lakes,** pursuant to Minnesota Statues Section 103G.2242, Subdivision 1 (c)

ORDER APPROVING COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLAN

Whereas, the Rice Creek Watershed District (District) submitted a Comprehensive Wetland Protection and Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes Section 103G.2242, Subd. 1 (c), and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **Authority to Plan.** Minnesota Statutes Section 103G.2242, Subd. 1 (c) and Minnesota Rules Chapter 8420.0650 allow the Board to approve a Comprehensive Wetland Protection and Management Plan developed by a local government unit, provided it is implemented through the local government unit's official controls.

   The purpose of the Resource Management Plan (RMP), which the Comprehensive Wetland Protection and Management Plan is a part of, is to provide a watershed-based approach to wetland management that is consistent with District goals. The approach addresses management in the context of wetland functions and the effects of anticipated future land use. This framework of guiding where wetland impacts and replacement may occur is intended to have the effect of reestablishing larger, contiguous areas of wetland and riparian edge. It is also intended to afford landowners more flexibility to create larger contiguous areas of upland for use and development than reasonably could be fashioned under standard parcel-based wetland permitting. The RMP was developed through a partnership between the District and the City of Lino Lakes. This collaboration was initiated in 2006 and included extensive coordination between the City, the District and other regulatory agencies.

2. **Nature of the Plan Area.** Lino Lakes is at a midpoint in the Rice Creek watershed. From the Chain of Lakes, Rice Creek flows west to the Mississippi River. Three large subwatersheds contribute to Peltier Lake: Clearwater Creek, Hardwood Creek, and Upper Rice Creek. Through Peltier Lake these subwatersheds contribute to the condition of the entire Chain of Lakes. The majority of the Clearwater Creek, Hardwood Creek, and

Upper Rice Creek subwatersheds are located in other communities. The area includes extensive public drainage ditch systems. The majority of the drainage system was constructed during the late 1800's and early 1900's. Over the decades, much of the system was minimally maintained by different ditch authorities. Today, many ditches function as straightened creeks within a partially or marginally drained wetland slough or riparian corridor.

3. **Local Review.** The Plan was developed, reviewed, and revised in consultation with the state agencies, the technical evaluation panel, citizens, and local governments. The plan development process included numerous drafts and opportunities for comment. The Plan has an attached Rule that will be officially adopted by the District to implement the Plan.

4. **Highlights of the Plan.** The critical elements of the Plan include:

- The plan identified high priority wetlands and "Wetland Preservation Corridors" (WPC's) were mapped. These WPC's form the basis of the resulting wetland regulations. Regulations are applied such that wetland impacts within WPC's are discouraged (via higher replacement ratios) and wetland replacement within WPC's is encouraged (via increased credit allocations).

- The plan identifies Resource Management Units (RMU's) which are subwatershed based drainage areas that break the City of Lino Lakes into distinct hydrologic units. The purpose of creating RMU's is to provide drainage-area specific management recommendations that address the unique conditions of the area. This level of analysis requires a full understanding of the resources and the stressors that cause impairments. For some RMU's stormwater volume is a stressor, for others it is nutrients, for example. The plan provides recommendations on management strategies for each RMU. These Resource Management Unit recommendations are intended to meet Plan goals for aquatic resource protection and management, and to satisfy a watershed approach to high priority wetland and flood protection. Although impaired waterbody TMDL goals have not been finalized, the recommendations follow the expected implementation strategies to work towards meeting the loading reduction goals.

5. **Metro Water Planning Committee Meeting.** The Board's Metro Water Planning Committee met on August 4, 2008 with representatives of the District to review and discuss the Plan. Those in attendance from the Board's Committee were Louise Smallidge, Faye Sleeper, LuAnn Tolliver and Robert Burandt as chair. Board staff in attendance were Metro Region Supervisor Jim Haertel and Senior Wetland Specialist Ken Powell. The representatives from the District were District Administrator Doug Thomas, District consultant Jason Naber, and City of Lino Lakes Community Development Director Mike Grochala. Board staff recommended approval of the Plan. After discussion, the Committee unanimously voted to recommend approval of the Plan to the full Board.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving a Comprehensive Wetland Protection and Management Plan for the Rice Creek Watershed District pursuant to Minnesota Statutes Section 103G.2242, Subd. 1 (c).

3. The Rice Creek Watershed District Comprehensive Wetland Protection and Management Plan attached to this Order provides a functional assessment framework for all wetlands within the City of Lino Lakes, management strategies based on this assessment, and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Statutes Sections 103G.221 to 103G.2373 and Minnesota Rules Chapter 8420.

ORDER

The Board hereby approves the attached Comprehensive Wetland Protection and Management Plan, dated June 2008, for the Rice Creek Watershed District City of Lino Lakes, Anoka County, Minnesota.

Dated at Saint Paul, Minnesota this 24th day of September, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

FOR YOUR INFORMATION

September 24, 2008

- Updated Board Member Listing
- BWSR Committees, September 2008
- BWSR Committee Schedule
- Updated Board Staff Listing
- *Minnesota NewsWatch* "A focus on pure water"
- "2008 Watershed Achievements Report"

MINNESOTA BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD NORTH
ST. PAUL, MINNESOTA 55155
Phone: 651-296-3767 Fax: 651-297-5615

Appointed Members	***Appointment Designation***	***Term Expires***	***Telephone/Fax***	
Randy Kramer, Chair 42808 County Road 11, Bird Island, MN 55310 rlkramer@westtechwb.com	**Citizen**	01-03-11	320-365-3094 320-365-4784	*Home* *Office*
Dana Allen 11304 19th Street, SE, Eyota, MN 55934 dm.allen@myclearwave.net	**Citizen**	01-05-09	507-545-3969 507-951-5597	*Home* *Office*
Paul Brutlag 27113 County Road 11, Wendell, MN 56590 brutlagp@runestone.net	**Citizen**	01-02-12	218-458-2113 320-589-4151	*Home* *Office*
Quentin Fairbanks 16374 Stoner Memorial Dr., NE, Hines, MN 55647 quentin@blackduck.net	**Co. Commissioner**	01-03-11	218-835-4184 218-679-3378	*Home* *Fax*
Brian Kletscher 30427 County Hwy. 10, Vesta, MN 56292 bk3376@redred.com	**Co. Commissioner**	01-05-09	507-762-3376 507-828-1429	*Home* *Office*
Brian Napstad 51227 Long Point Place, McGregor, MN 55760 bnapstad@yahoo.com	**Co. Commissioner**	01-04-10	218-426-3008 218-426-4662	*Home* *Office*
Paul Langseth 35505 280th St., Worthington, MN 56187 paul.langseth@gmail.com	**SWCD**	01-04-10	507-360-5844 507-376-5686	*Office* *Home*
Louise Smallidge 10992 Point Douglas, Hastings, MN 55033 Choregirl2@juno.com	**SWCD**	01-02-12	651-459-5600	*Home*
Robert Burandt 1340 Waconia Pkwy. S., Waconia, MN 55387 rlburandt@gmail.com	**SWCD**	01-10-09	952-442-4216	*Home*
Gene Tiedemann 13099 310th Ave., SW, Euclid, MN 56722 gtiedemann@rrv.net	**Watershed**	01-04-10	218-289-3511 218-281-6723	*Office* *Home*
LuAnn Tolliver 14801 Wychewood Road, Minnetonka, MN 55345 mltolly@aol.com	**Watershed**	01-02-12	952-938-6749 952-221-9796	*Home* *Office*
Gordon Behm 13851 Diamond Shores Road, Atwater, MN 56209 gbehm@frontiernet.net	**Watershed**	01-03-11	320-974-8242 320-979-0737	*Home* *Cell*

State Agency Members:

Joe Martin Freeman Office Bldg., 625 Robert St. N., St. Paul, MN 55155 Joe.Martin@state.mn.us	**Department of Agriculture**	651-201-6551 651-297-5522	*Office* *Fax*
John Linc Stine P.O. Box 64975, St. Paul, MN 55164-0975 john.stine@health.state.mn.us	**Department of Health**	651-201-4675 651-201-4572	*Office* *Fax*
Larry Kramka 500 Lafayette Road, St. Paul, MN 55155 Larry.Kramka@dnr.state.mn.us	**Department of Natural Resources**	651-259-5033 651-296-4799	*Office* *Fax*
Faye Sleeper Room 173 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 fsleeper@umn.edu	**U of M/Water Resources Center**	612-624-3738 612-625-1263	*Office* *Fax*
Paul Eger 520 Lafayette Road, St. Paul, MN 55155 Paul.Eger@state.mn.us	**Pollution Control Agency**	651-296-7319 651-296-7923	*Office* *Fax*

September 2008

BOARD OF WATER AND SOIL RESOURCES
COMMITTEES
September 2008

ADMINISTRATIVE ADVISORY COMMITTEE

Membership:	Randy Kramer, chair	citizen
	Paul Brutlag, vice-chair	citizen
	Louise Smallidge	soil & water conservation district
	Brian Napstad	county commissioner
	LuAnn Tolliver	watershed district/WMO
	John Jaschke	staff
	Mary Jo Anderson	staff

Responsibility:

The administrative advisory committee consists of the Board's chair and vice-chair and the chairs of the Board's standing committees. The administrative advisory committee will make evaluations and recommendations to the Board on various Board issues including ethics; expenses/per diem; bylaws; and legislation and budgets. The Administrative Advisory Committee will act as the personnel committee for personnel actions relating to the Board's executive director. The chairman may include additional members ad hoc to address special or unique topics or issues.

Meetings: The committee will meet at the call of the chair.

DISPUTE RESOLUTION COMMITTEE (DRC)

Membership:	Randy Kramer, chair	citizen
	Paul Brutlag	citizen
	LuAnn Tolliver	watershed district/WMO
	Quentin Fairbanks	county commissioner
	Louise Smallidge	soil & water conservation district
	Travis Germundson/Jim Haertel	staff lead

Responsibility:

The DRC is responsible for appeals relating to the Wetland Conservation Act rule decisions of local governments, watershed district rule and permit decision appeals, and, under MS103A.301, determinations of water law and policy. The authority of the DRC is established in statute and assigned to the DRC by the Board. Under current guidelines the DRC receives the appeals; hears the issues; and makes recommendations to the Board.

Meetings:

The Committee will meet as needed to process appeals that have been filed with the Board.

GRANTS PROGRAM AND POLICY COMMITTEE

Membership:	Louise Smallidge, chair	soil & water conservation district
	Dana Allen	citizen
	Brian Kletscher	county commissioner
	Bob Burandt	soil & water conservation district
	Paul Langseth	soil & water conservation district
	Gene Tiedemann	watershed district/WMO
	Joe Martin	Department of Agriculture
	Paul Eger	Pollution Control Agency
	Wayne Zellmer	staff lead
	Julie Klocker, Assistant Director	SMT staff

Responsibility:

The committee is responsible for reviewing cost-share, non-point engineering, clean water legacy, natural resources block grants, local water management challenge grants and services grants allocations, policies, and rules and making recommendations to the Board.

Meetings:

The committee will meet at least two times a year; once prior to the June allocation of cost-share (feedlots, general and special projects); non-point engineering; and services grants.

PUBLIC RELATIONS, OUTREACH AND STRATEGIC PLANNING COMMITTEE

Membership:	Brian Napstad, chair	county commissioner
	LuAnn Tolliver	watershed district/WMO
	Gordon Behm	watershed district/WMO
	Dana Allen	citizen
	Paul Langseth	soil & water conservation district
	Faye Sleeper	University of Minnesota Extension
	Jon Fure	staff lead
	Steve Woods	SMT staff

Responsibility:

The Public Relations, Outreach and Strategic Planning Committee is responsible for the development of strategic and outreach strategies and plans for the Board including identification of key outcomes, partnerships and opportunities.

Meetings: Committee will meet twice a year or at the call of the chair.

RIM RESERVE PLANNING COMMITTEE (April 2007)

Membership:	Paul Brutlag, chair	citizen
	Dana Allen	citizen
	Bob Burandt	soil & water conservation district
	Paul Langseth	soil & water conservation district
	Joe Martin	Department of Agriculture
	Larry Kramka	Department of Natural Resources
	Kevin Lines	SMT staff

WATER PLANNING and COMPREHENSIVE WETLAND PLAN REVIEW COMMITTEES: NORTHERN/SOUTHERN/METRO

Membership: The committee consists of Board Members from the BWSR administration regions – metro, north, and south.

Chairs: *north – Quentin Fairbanks*
south – Brian Kletscher
metro – Bob Burandt

North (4)	**South (4)**	**Metro (3)**
Quentin Fairbanks - CC	Brian Kletscher – CC	Bob Burandt – SWCD
Paul Brutlag – CIT	Dana Allen – CIT	Louise Smallidge – SWCD
Gordon Behm - WD	Randy Kramer – CIT	LuAnn Tolliver – WD
Brian Napstad – CC	Paul Langseth – SWCD	Faye Sleeper – UM/Extension
Gene Tiedemann – WD	Joe Martin – MDA	Paul Eger – PCA
Wayne Edgerton – DNR	Dan Wilson – MDH	Jim Haertel, SMT staff
Ron Shelito, SMT staff	Jeff Nielsen, SMT staff	

Responsibility:

The committee has the responsibility to review county water plans, water management organization plans, watershed district overall plans, comprehensive wetland plans, and amendments to same and to advise the Board on the adequacy of the plans.

Meetings:

*The committee will meet as necessary to review the local plans and amendments. A **majority** of the committee members must be present. The BWSR northern, southern, and metro regional supervisors will coordinate meeting schedules with members.*

CC = county commissioner
CIT = citizen
SWCD = soil and water conservation district
WD = watershed district
WMO = watershed management organization

WETLANDS COMMITTEE

Membership:	LuAnn Tolliver, chair	watershed district/WMO
	Paul Brutlag	citizen
	Bob Burandt	soil and water conservation district
	Gordon Behm	watershed district/WMO
	Brian Kletscher	county commissioner
	Brian Napstad	county commissioner
	Gene Tiedemann	watershed district/WMO
	Larry Kramka	Department of Natural Resources
	Joe Martin	Department of Agriculture
	Paul Eger	Pollution Control Agency
	Les Lemm	WCA Coordinator, staff lead
	Dave Weirens	SMT staff

Responsibility:

The Wetlands Committee is responsible for reviewing Wetland Conservation Act (WCA) and wetland banking rules, policies, guidelines and projects and making recommendations to the Board.

Meetings: The committee will meet twice during the year or at the call of the chair.

STATUTORY COMMITTEES

Committee: Committee on Wells and Borings

Membership: Eric Mohring, staff lead; Board members assigned by Chairman as needed

Responsibility:

Interest and availability with regard to Advisory Council on Wells and Borings and Pesticide Advisory Committee. Policy issues will be brought before the Board for discussion as a new business agenda item.

Meetings: The committee will meet when necessary.

GENERAL COMMITTEE MEETING SCHEDULE

*The Board has adopted a resolution that **committees shall schedule meetings in conjunction with monthly Board meetings as much as possible.** A majority of each committee's membership should be available for a scheduled meeting. The committee chair and staff are expected to develop an agenda and staff are responsible for keeping minutes of the committee proceedings. The committee meetings are considered to be **public meetings** under the open meeting law and therefore must be noticed in the same manner as regular board meetings. All committee agendas should be e-mailed to Mary Jo Anderson for appropriate notice posting.*

Advisory members have offered to serve and may serve on BWSR committees as non-voting members and provide assistance as needed.

Advisory members:

Local Government Partners

- *Association of Minnesota Counties (AMC) – Annalee Garletz*
- *Minnesota Association of Conservation District Employees (MACDE) – Brian Watson/Rick Reimer*
- *Minnesota Association of Soil & Water Conservation Districts (MASWCD) – LeAnn Buck*
- *Minnesota Association of Townships (MAT) – Sandy Hooker*
- *Minnesota Association of Watershed Districts (MAWD) – Ray Bohn*
- *Minnesota County Planning and Zoning Administrators (MCPZA) – Norman Craig*
- *League of Minnesota Cities (LMC) - Jim Miller*

Federal Partners

- *U.S. Army Corps of Engineers (USCoE) – Bob Whiting*
- *U.S. Fish and Wildlife Service (USF&WS) – Robyn Thorson, Regional Director*
- *USDA Farm Services Agency (FSA) – Perry Aasness*
- *USDA Natural Resources Conservation Service (NRCS) – Tim Koehler*

State Agencies

- *Met Council – Peter Bell*
- *Minnesota Department of Transportation (MNDOT) – Frank Pafko*

Interest Partners

- *Allete Minnesota Power – Blake Francis*
- *Audubon Society of Minnesota – Ken Finch, Executive Director*
- *Builders Association – Nate Duer*
- *Fish and Wildlife Legislative Alliance – Lance Ness*
- *Izaak Walton League – Gary Schwartz*
- *Mining Industry Association of Minnesota – Wayne Brandt*
- *Minnesota Agricultural Water Resources Coalition – Warren Formo, Director*
- *Minnesota Agri-Growth Council – Daryn McBeth*
- *Minnesota Association of Realtors – Glen Dorfman*
- *Minnesota Barley Research & Promotion Council – Marv Zutz, Executive Director*
- *Minnesota Cattlemen's Association – Steve Brake, President*
- *Minnesota Center for Environmental Advocacy – Martha Brand*
- *Minnesota Conservation Federation – Gary Botzek*
- *Minnesota Corn Growers Association – Bruce Stockman, Executive Director*
- *Minnesota Ducks Unlimited – Ryan Heiniger*
- *Minnesota Environmental Partnership – Steve Morse, Executive Director*
- *Minnesota Farm Bureau Federation – Kevin Paap, President*
- *Minnesota Farmers Union – Doug Peterson, President*
- *Minnesota Forest Industries & Timber Producers Association – Wayne Brandt*
- *Minnesota Land Trust – Jane Prohaska, Executive Director*
- *Minnesota Milk Producers Association – Bob Lefebvre*
- *Minnesota Native Wildflowers/Grass Producers Association – Bill Olson, President*
- *Minnesota Pork Producers Association – Dave Preisler, Executive Director*
- *Minnesota Sierra Club – Judy Chucker, President*
- *Minnesota Soybean Growers Association – Jim Palmer, Executive Director*
- *Minnesota Turkey Growers Association – Steve Olson, Executive Director*
- *Minnesota Viewers Association – Ron Ringquist*
- *Minnesota Waterfowl Association – Brad Nylin, Executive Director*
- *Minnesota Waters – Marian Bender, Executive Director*
- *Minnesota Wetland Professionals Association – Andi Moffatt, Vice President*
- *Minnesota Wheat Growers Association – Dave Torgerson, Executive Director*
- *Pheasants Forever – Matt Holland, Field Supervisor*
- *Red River Valley Sugarbeet Growers, Nick Sinner, Executive Director*
- *The Nature Conservancy – Tom Landwehr, Assistant State Director*
- *Urban Wetland Management Coalition – Cliff Aichinger*
- *Wetlands for Minnesota (Bankers) – Mike Wyatt*

BWSR Committee Schedule (tentative agenda items)

September 19, 2008

(Contact Mary Jo Anderson @ 651-297-4290 if you have any questions)

September 24

- ***Wetlands Committee*** (immediately following Board meeting)
- ***Grants Program & Policy Committee*** (immediately following Board meeting)

October 21

- ***Wetlands Committee*** 5:00 p.m. – 9:00 p.m. (location to be determined)

October 22

- ***RIM Reserve Planning Committee*** (immediately following Board meeting)

November 19

- ***Wetlands Committee***

Mary Jo Anderson

From: David Weirens
Sent: Monday, June 30, 2008 2:54 PM
To: Mary Jo Anderson
Cc: 'John Jaschke'; 'Julie Klocker'; Les Lemm
Subject: Future Wetland Committee Meetings

Maryjo,

Les and I met with LuAnn after last week's Board meeting to discuss the role of the Wetland Committee in the WCA rule amendments. We decided that the Committee should plan to meet in September, October, and November. Please reserve the time after the September and October Board meetings for the Wetland Committee. For November, the tentative plan is for the Committee to meet November 19. Thank you.

Dave Weirens
Land and Water Section Manager
Mn Board of Water and Soil Resources
(651) 297-3432 (o)
(763) 229-4308 (c)
NEW email: david.weirens@state.mn.us

PHONE NUMBERS FOR BWSR STAFF

USE LAST FIVE DIGITS WHEN TRANSFERRING*

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Severts, Chad	(218) 333-8028
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(cell 218-820-3794)	
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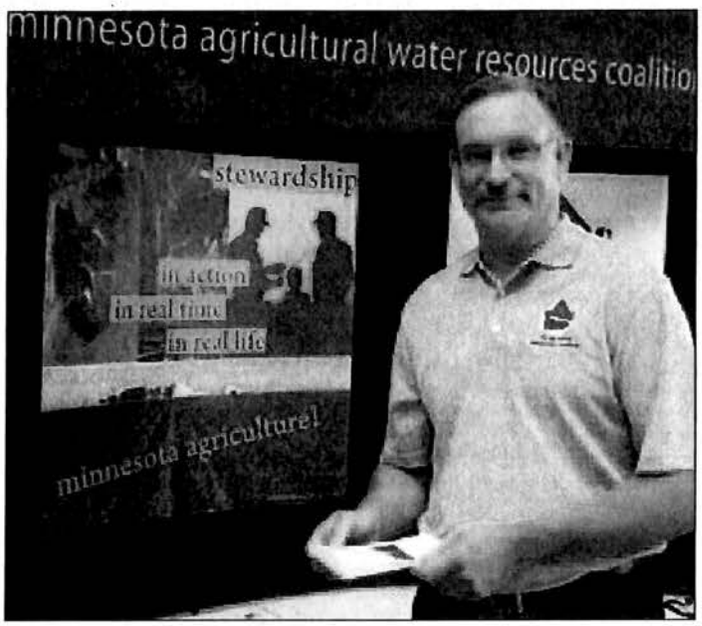
A focus on pure water

By **PAULA MOHR**



KEEPING WATER CLEAN: Agriculture plans to do its part to keep state waters clean for future generations, says Warren Formo, director of the Minnesota Agricultural Water Resources Coalition.

Key Points

- The water resources coalition represents water-quality interests of 13 farm groups.
- The coalition wants farmers to understand the impact of TMDLs on their operations.
- MPCA will work with the coalition to make sure that farmers' voices are heard.

MINNESOTA farmers know that lands surrounding our 15,000-plus lakes and water bodies require sound conservation practices to ensure clean soil and water for generations to come.

Now there is one organization — the Minnesota Agricultural Water Resources Coalition — that will focus only on water issues and coordinate communication among farmers, conservationists, and local and state government agencies. So far, 13 agricultural groups have signed on as members.

Warren Formo, MAWRC director, says the mission of MAWRC is to bring a farmer perspective to water-quality issues. Many people who hear about polluted rivers, lakes and streams assume that farming practices are to blame, due to manure and chemical runoff. However, other nutrient and chemical pollution sources are sometimes overlooked or discounted as minor contributors. These include private septic systems, runoff from parks and golf courses, industrial and municipal sources, wildlife, and natural bioloads.

"The fact is, farming practices have improved," Formo says. "We've made a lot of strides as an agricultural community. We want to be involved in water-quality discussions so that standards asked of agriculture are practical. We want farmers to be able to still produce a product and still protect water."

Right now, MAWRC is busy getting the word out about its mission and getting farmers involved. "For too long, agriculture kept its head down and let [water and environmental policies] evolve," Formo says. "We didn't think we would have the threat of regulation against us."

The coalition also is attending meetings of local soil and water groups, the Minnesota Pollution Control Agency, and watershed districts when Total Maximum Daily Load development is on the agenda. The term TMDL describes both a process and a number, says the MPCA. The process involves two to four years of technical study and stakeholder and public input. The number is a calculation of the maximum amount of a pollutant the water body can receive and still meet water-quality standards. A TMDL results in a pollution-reduction plan that identifies all the sources of the pollutant in the watershed and allocates needed reduction among them.

Enhancing the dialogue

Wayne Anderson, MPCA agricultural liaison, says MAWRC is "coming alongside to help at just the right time.

"Agriculture has always had a great interest and respect for the land and natural resources," Anderson says. "We want to tap farmers' interest in the environment, along with their inventiveness and no-nonsense approach, to bring our waters back to where they are not impaired."

Farmers and MAWRC can give input to the TMDL process by getting involved as early as possible in gathering and sharing data and understanding the science and technical information needed to produce the numbers. Most TMDLs are conducted by local government organizations that notify landowners in their watersheds about upcoming meetings. Anderson says MPCA will work with MAWRC on how to make sure agricultural stakeholders find out about meetings enough in advance so they can participate. Farmers also may visit MPCA's Web site for a list of ongoing projects. Go to *www.pca.state.mn.us/water/tmdl/tmdl-projects.html*.

"Farmers wear many hats in the process as landowners and beneficiaries of good water quality," Anderson says. "They also manage much of the land in rural watersheds and must be part of the solution. Ownership of the plan will be critical to implementation. We do not want plans that sit on a shelf. Rather, we want to make sure we get boots on the ground for water-quality improvement."

Understanding TMDLs

Key Points

- TMDLs are a starting point to help clean up Minnesota's waters.
- Pollutants and sources must be identified and a plan written and followed.
- TMDLs, depending on the size of the project, range from $50,000 to $1 million.

FARMERS are hearing more about Total Maximum Daily Loads since the EPA recently approved the 2008 impaired waters list.

According to the Minnesota Pollution Control Agency, Minnesota has a total of 2,575 impaired waters. Of that number, 1,475 need TMDLs and 1,100 already have approved TMDLs.

"This overall number of 2,575 impaired waters is important because completing the TMDL is just the first step in the process," says Jeff Risberg, MPCA impaired waters coordinator. "[A TMDL] determines the problems and pollution-reduction goals as required by the Clean Water Act, but the water is still impaired until it again meets water-quality standards, typically achieved after the implementation of best management practices over several years to fix the problem."

As work begins on a TMDL study, local technical experts, such as soil and water conservationists or watershed district staff, with assistance from university or consulting experts, identify the source of pollutants. In some of the larger projects, involving such water resources as Lake Pepin or the Minnesota River, the MPCA will provide the leadership.

"There is room on these technical teams for agricultural scientists and experts to help us identify where pollutants are coming from and how to economically solve the impaired waters problem," says Wayne Anderson, MPCA agricultural liaison. "The most satisfying results are when a win-win solution that is good for landowners and good for the environment is found."

The technical teams rely on scientific studies and extensive water-quality and flow-monitoring data to establish TMDLs. Where data is supplemented by models to help the technical experts understand cause-and-effect relationships, Anderson says a TMDL scientific panel, led by university experts, ensures that MPCA is using proven methods and appropriately calibrating and verifying the models.

TMDL studies come with a hefty price tag. They range in cost, depending on the size of the watershed and complexity of the problems causing the impairment, Risberg says. In general, smaller lake TMDLs range from $50,000 to $100,000, while lakes with large watersheds may cost as much as $200,000 or more. For impairments to small river watersheds, TMDLs may cost $50,000 to $300,000, while large river watersheds may range from $400,000 to $1 million. Nearly 95% of all the state's TMDL funding passes through the MPCA to local governments and contracts.

The state Legislature passed the Clean Water Legacy Act in 2006. It provided initial funding of $24.95 million, including $3 million for TMDL development. Lawmakers approved an additional $31 million for funding in 2008 and 2009. MPCA notes that the growing number of TMDL projects will require continued, substantial resources.

The TMDL Process

Assess the state's waters

↓

List those that do not meet standards

↓

Identify sources and reductions needed (TMDL study)

↓

Implement restoration activities (implementation plan)

↓

Evaluate water quality

Minnesota Agricultural Water Resources Coalition

Members:
Broiler and Egg Association of Minnesota
Minnesota Association of Wheat Growers
Minnesota Corn Growers Association
Minnesota Corn Research and Promotion Council
Minnesota Farm Bureau Federation
Minnesota Farmers Union
Minnesota Milk Producers Association
Minnesota Pork Board
Minnesota Pork Producers Association
Minnesota Soybean Growers Association
Minnesota Soybean Research and Promotion Council
Minnesota State Cattlemen's Association
Minnesota Turkey Growers Association

For more information on MAWRC, contact Warren Formo, director, 651-905-2106, warren@mawrc.org, or visit *www.mawrc.org*.

2008 Annual Report to the U.S. Environmental Protection Agency

Clean Water Act Section 319 and
Clean Water Partnership Projects in Minnesota

Minnesota Pollution Control Agency

Minnesota Pollution Control Agency

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www.pca.state.mn.us

wq-cwp8-09

Cover Photo: Middle Cullen Lake, north of Nisswa,
by Stephen Mikkelson, MPCA.

Minnesota Pollution Control Agency

2008 Annual Report to the U.S. Environmental Protection Agency

Clean Water Act Section 319 and Clean Water Partnership Projects in Minnesota

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Introduction

Supporting water quality restoration and protection in 2008

2008 saw a marked increase in activity addressing the state's impaired waters. Funds allocated by the state legislature to implement the Clean Water Legacy Act (CWLA) of 2006 enabled many new Total Maximum Daily Load (TMDL) studies to get started, and the implementation of water quality restoration and protection efforts. This increased level of activity will continue into 2009 under existing appropriations. Beyond fiscal year 2009, dedicated funding hinges on a referendum that will be voted on by the citizens of Minnesota in the November 2008 election, and on action on funding taken by the state legislature in the 2009 legislative session.

The combination of state CWLA funds with federal Clean Water Act Section 319 (Section 319) funds is enabling great work improving and protecting water quality to happen. CWLA funds in this biennium have accounted for on average over $15 million a year to the Minnesota Pollution Control Agency (MPCA) to monitor and assess waters, and to develop TMDLs. Section 319 funds provide over $6.5 million a year to support implementation, education, and research projects. CWLA funds also provided over $18 million over the biennium to the Board of Water and Soil Resources (BWSR) and the Minnesota Department of Agriculture (MDA) for implementation activities.

The CWLA has provided funding to help Minnesota's counties, cities, and other water organizations conduct the important work of studying specific impairments in our waters and preparing TMDL implementation plans to address those impairments. TMDL projects that have received state CWLA funding through the MPCA, since the passage of the Act, are listed on page 2. Some of these projects have received additional funding from other sources or will be receiving additional CWLA funds currently allocated; however, this project list only reflects the CWLA – TMDL development project dollars encumbered at the time of this publication.

New emphasis for Clean Water Partnership

With increased emphasis on TMDLs and restoration efforts in recent years, there is a need to ensure that protection of clean waters is not ignored. As a small initial step in this direction, the MPCA dedicated about $425,000 to a Clean Water Partnership (CWP) funding round for resource investigation projects focused on protecting clean waters and preventing them from becoming impaired. The balance of (CWP) funds (under $2 million) will be used to continue support of current restoration implementation projects. We are excited to have a funding round dedicated solely to protection efforts. The MPCA is exploring the possibility of making permanent changes to CWP based on the level of interest in, and what we learn from, this pilot funding round.

Clean Water Legacy Act

The CWLA has provided funding to help Minnesota's counties, cities, and other water organizations conduct the important work of studying specific impairments in our waters and preparing TMDL implementation plans to address those impairments. TMDL projects that have received state CWLA funding through the MPCA, since the passage of the Act, are listed below. Some of these projects have received additional funding from other sources or will be receiving additional CWLA funds currently allocated; however, this project list only reflects the CWLA – TMDL development project dollars encumbered at the time of this publication.

Basin	Title	Sponsor	$ Amount
Lake Superior	Deer Creek/Nemadji River Turbidity TMDL	Carlton SWCD	$176,419.00
	Knife River Watershed TMDL Project Part 3	So. St. Louis SWCD	$20,000.00
	Poplar River Watershed Project	Cook County SWCD	$80,000.00
Lower Mississippi	Cedar River Basin Turbidity and Excess Nutrients TMDL in Multiple Counties	Mower SWCD	$214,725.00
	Lake Pepin Watershed TMDL	University of Minnesota	$495,126.00
	Lower Vermillion River Effectiveness Monitoring	Dakota County SWCD	$31,739.00
	Root River Basin Turbidity TMDL	Fillmore County	$300,000.00
	Zumbro River Watershed Turbidity and Excess Nutrients TMDL Project	Barr Engineering	$200,000.00
Minnesota River	Bluff Creek Watershed TMDL	Barr Engineering	$50,000.00
	Cottonwood River Watershed Fecal Coliform TMDL River Control Area	Redwood Cottonwood	$50,000.00
	Credit River Turbidity TMDL Development	Scott County	$125,000.00
	Fish Lake & Schwanz Lake Nutrient Impairment TMDL Project	City of Eagan	$90,000.00
	Lake Crystal Excess Nutrients TMDL	Water Resources Center- MSU	$39,698.85
	LeSueur River Basin Sediment Study—NCED	University of Minnesota	$482,810.67
	Pomme de Terre River Fecal Coliform TMDL	Stevens County SWCD	$8,500.00
	Ravine, Bluff, and Streambank Erosion in the MN River Basin	University of Minnesota	$214,388.00
	Redwood River Fecal Coliform TMDL River Control Area	Redwood Cottonwood	$35,000.00
	Turbidity TMDL Assessment of Pomme de Terre River Watershed	Stevens County SWCD	$120,000.00
Minnesota River and Lower Mississippi	HSPF Modeling for MN River Basin Turbidity TMDL and Lake Pepin Excessive Nutrient TMDL	Tetra Tech, Inc.	$336,502.00
	Crystal Lake, Keller Lake, Lee Lake, Earley Lake Nutrient Impairment TMDL Project	Black Dog Watershed Management Commission	$174,102.00
Red River	Clearwater River Evaluation of DO Impairment	Bemidji State University	$80,304.00
	Red River Basin Turbidity TMDL Year 3	Red River Watershed Management Board	$100,000.00
St. Croix	Ann River Watershed	Kanabec Soil and Water Conservation District	$44,860.00
	Browns Creek Impaired Biota TMDL	Washington Conservation District	$249,001.00

St. Croix	Comfort and Forest Lakes Watershed District Impaired Lakes TMDL	Comfort Lake Forest Lake Watershed District	$57,191.00
	Land Cover & Impervious Surface Classifications	University of Minnesota	$45,000.00
	Sunrise River Watershed TMDL Phase 1	Chisago County	$24,986.50
	Typo & Martin Lakes TMDL Update	Anoka Conservation District	$2,900.00
Statewide	CWLA Tracking and Reporting Strategy	University of Minnesota	$25,000.00
Upper Mississippi	Big Sandy Area Lakes Nutrient Impairment TMDL Study	Aitkin County SWCD	$265,012.00
	Buffalo Creek Watershed Turbidity and Pathogen TMDL (South Fork Crow)	Wenck Associates, Inc.	$93,713.00
	Clearwater River & Lake Louisa TMDL	Clearwater River Watershed District	$70,052.00
	Clearwater River DO and Fecal Coliform TMDLs Project	Red Lake Watershed District	$100,000.00
	Clearwater River Ongoing TMDL Studies	Clearwater River Watershed District	$66,832.00
	Getchell, Stony, and Unnamed Creeks Turbidity	Sauk River Watershed District	$80,000.00
	Hardwood Creek CONCEPTS Model 2008	Emmons & Olivier Resources	$22,428.00
	Lake Osakis, Faille, Clifford and Smith Lakes Excessive Nutrient Impairment TMDL	Sauk River Watershed District	$20,000.00
	Lake Sarah Excess Nutrients TMDL Project	Pioneer Sarah Creek Watershed Management Commission	$34,912.80
	Little Rock Creek TMDL (Biological Impairment Project)	Benton SWCD	$15,000.00
	Little Rock Lake Nutrient TMDL	Benton SWCD	$180,224.54
	Minnehaha Creek Lake Hiawatha TMDL Gap Analysis	Tetra Tech, inc.	$18,748.00
	Minnehaha Creek Watershed Lakes TMDLs	Emmons & Olivier Resources	$103,520.00
	Peltier Lake and Centerville Lake Nutrient Impairment TMDL	Emmons & Olivier Resources	$71,763.00
	Sauk Lake Nutrient TMDL Project	Sauk River Watershed District	$60,000.00
	Shingle Creek DO & Impaired Biota TMDL	Shingle Creek Watershed Management Commission	$113,000.00
	Sweeney Lake TMDL Phase II	Bassett Creek Watershed Management Commission	$78,650.00
		Total Funding	**$5,267,108.36**

TMDL training materials developed for local government officials and other water resource professionals

Over the past several years, MPCA TMDL Program staff has collaborated to create 19 training modules that address development of TMDL Studies. The modules provide a wide range of information pertaining to TMDL studies. The modules were developed primarily for local government officials who are developing a TMDL study for the first time, reflecting the combined wisdom and experience of technical and planning experts in the TMDL program. The modules are not intended to be "a cookbook" for developing a TMDL study, rather, they integrate important information, advice and lessons learned from previous watershed projects and other TMDL projects around the state.

In addition to the 19 Powerpoint modules, there is an accompanying manual, as well as project planning worksheets.

The MPCA is in the process of placing all modules on its web site, at: **www.pca.state.mn.us/water/tmdl/tmdl-training.html**.
Contact Lynne Kolze at 651-659-0785.

Watershed approach

Improved funding is enabling greatly improved water condition monitoring. At current funding levels, in 10 years Minnesota will have a thorough assessment of waters statewide. Monitoring and assessments will be performed at the major watershed level in all 81 of our state's watersheds on a rotating basis, yielding information on water chemistry, biological integrity, and flow rates. The approach has already been piloted in the Snake River (St. Croix River Basin), Pomme de Terre River (Minnesota River Basin), and North Fork Crow River (Upper Mississippi River Basin). Having this information on a watershed basis will enable a stronger data driven approach to watershed planning, including TMDL and protection strategy development, and to subsequent implementation efforts. Focusing on the 81 major watersheds will help guide MPCA water management activities, in concert with local water planning and implementation efforts.

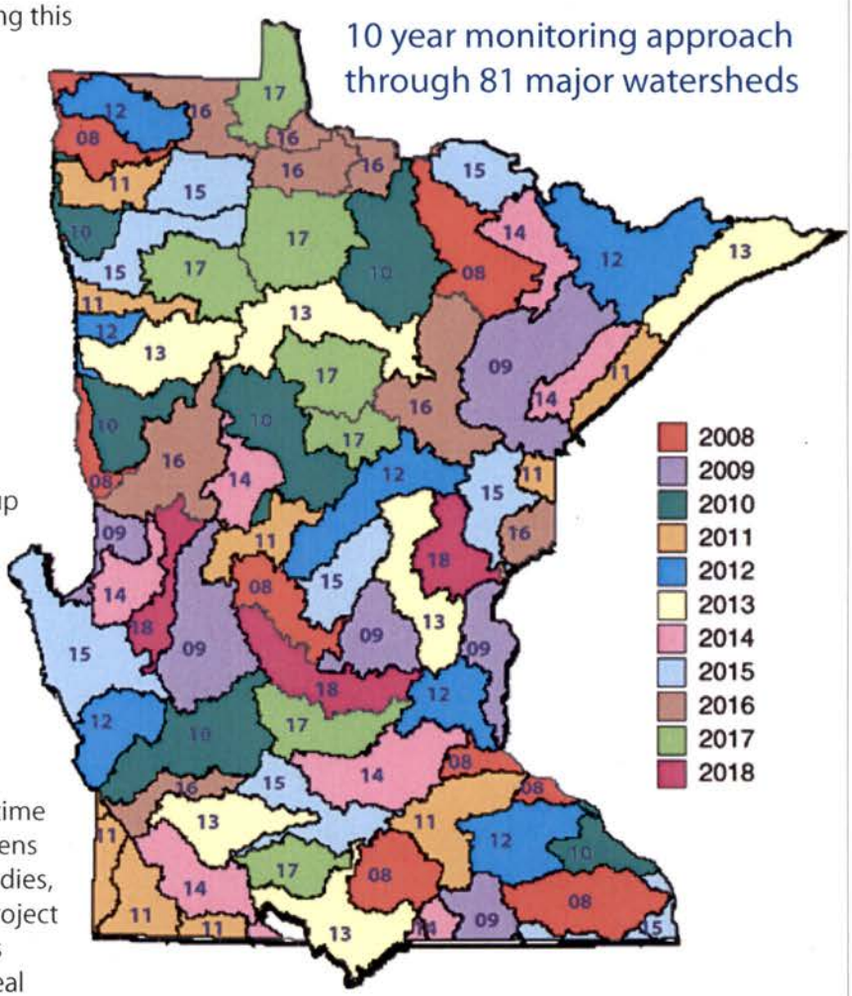
Clean Water Council

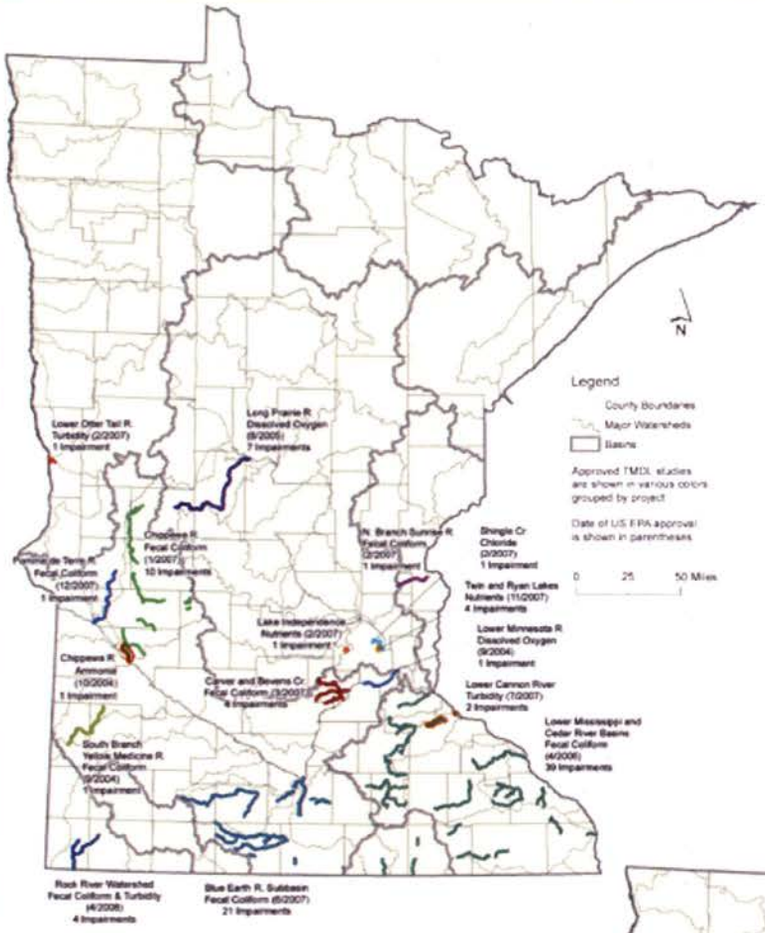
As in the past, the future of water quality in Minnesota depends on everyone with a stake in clean water, whatever the reasons, coming together to work to achieve that goal. The group charged with helping ensure we leave a "Clean Water Legacy", is the Clean Water Council. See page 6 for more information on the Council.

Reporting on project successes

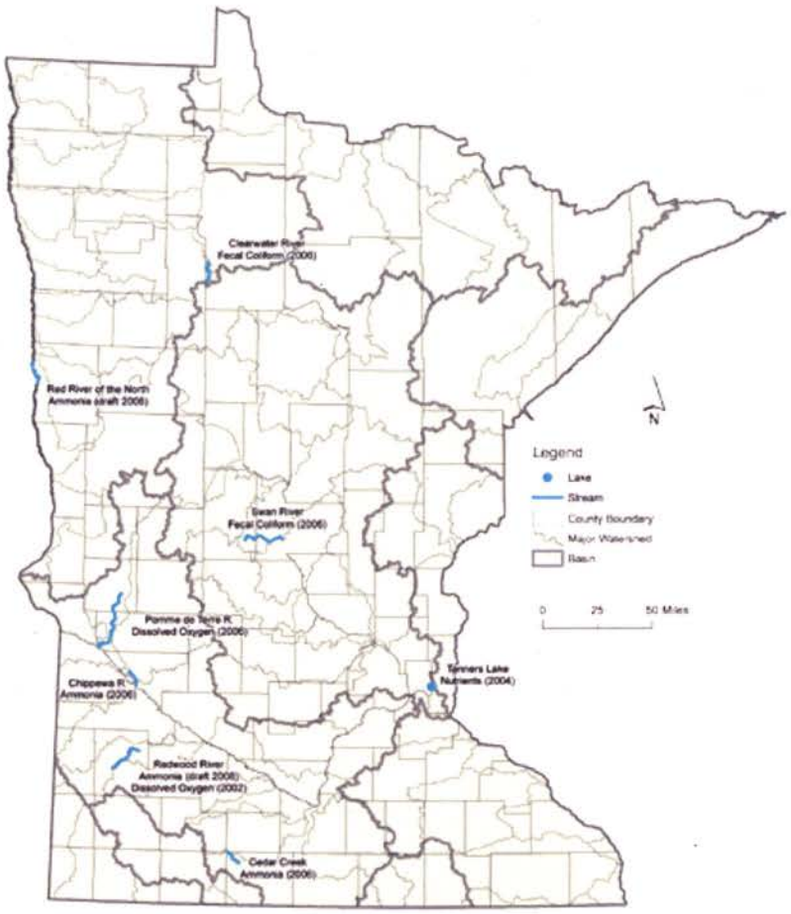
At the project scale, this report gives details on accomplishments of specific CWP, Section 319, and TMDL watershed projects. Please take the time to read what water resource managers and citizens are accomplishing together on specific waterbodies, watersheds, and water pollution issues in the project descriptions that follow. Perhaps these projects are struggling with similar problems that you deal with in your work. Perhaps they have learned lessons and developed approaches that can be helpful to you as well. Perhaps you have information that can help further their work. Contact project representatives to share information and help each other reach the common goal of clean water.

Exciting water restoration and protection work and developments continue to happen and increase, thanks to improved funding and the dedication and hard work of water resource managers from all sectors and levels of government. All Minnesotans—citizens, agricultural producers, industry—are water resource managers by the daily actions we take and decisions we make. Whatever your role in preserving and restoring our water quality, thanks for all you do to help keep Minnesota "the land of sky-blue waters"!





Approved TMDLs in Minnesota as of June 2008



Impairments delisted due to implementation efforts as of July 2008

Clean Water Council

Creation and membership

The Clean Water Council was established in the Clean Water Legacy Act, which was signed into law June 2, 2006. The Council consists of 23 members: including 19 appointed by the Governor representing local government, agriculture, industry, the University of Minnesota, fishing and hunting interests, and environmental organizations; as well as four non-voting representatives from the following state agencies: Minnesota Pollution Control Agency, Department of Agriculture, Department of Natural Resources, and Board of Water and Soil Resources.

The Council's role is to advise on the administration and implementation of the Clean Water Legacy Act, including:

- Fostering coordination among public agencies and private entities to ensure cooperation with relevant plans and programs.
- Prioritization strategies for TMDLs, restoration and protection activities.
- Development of appropriate processes for expert scientific review.
- Development of education and participation strategies for citizens and stakeholders.

Council meetings

The Clean Water Council held their inaugural meeting in March 2007 and they have been continuing to meet on a monthly basis in St. Paul. Council meetings are generally held the third Monday of the month from 9:00 a.m.- 3:30 p.m. All Council meetings are open to the public.

Council work

The Council developed a work plan which further defines how they will fulfill their statutory requirement to advise on implementation of the CWLA. The work plan outlines strategies and tasks to address the following needs:

- Civic Engagement in the impaired waters process.
- Priority Recommendations for TMDLs, restoration and prevention activities.
- Work Integration of state agencies to maximize effectiveness of program delivery.

Council member Paul Torkelson explains the farming process and the economics of agricultural production to other members, while touring his farm in St. James, MN.

- Local Partnerships to identify effective solutions, enhance outreach, and seek ways to leverage local expertise and state funding.
- Measurable Outcomes to gauge program performance.
- Prevention activities to protect water quality.
- Strategic Research needed to protect and restore water quality.
- Monitoring needs and ways to better utilize government agencies and citizen volunteers.

The Council organized itself into work groups in order to carry out the associated strategies and tasks within each of these organizing principles. The four work groups include:

- Prevention & Monitoring,
- Civic Engagement & Local Partnerships,
- TMDL Development & Implementation, and
- Research & Measurable Outcomes

The Council is in the process of developing budget and policy recommendations to be included in their December 2008 Legislative Report.

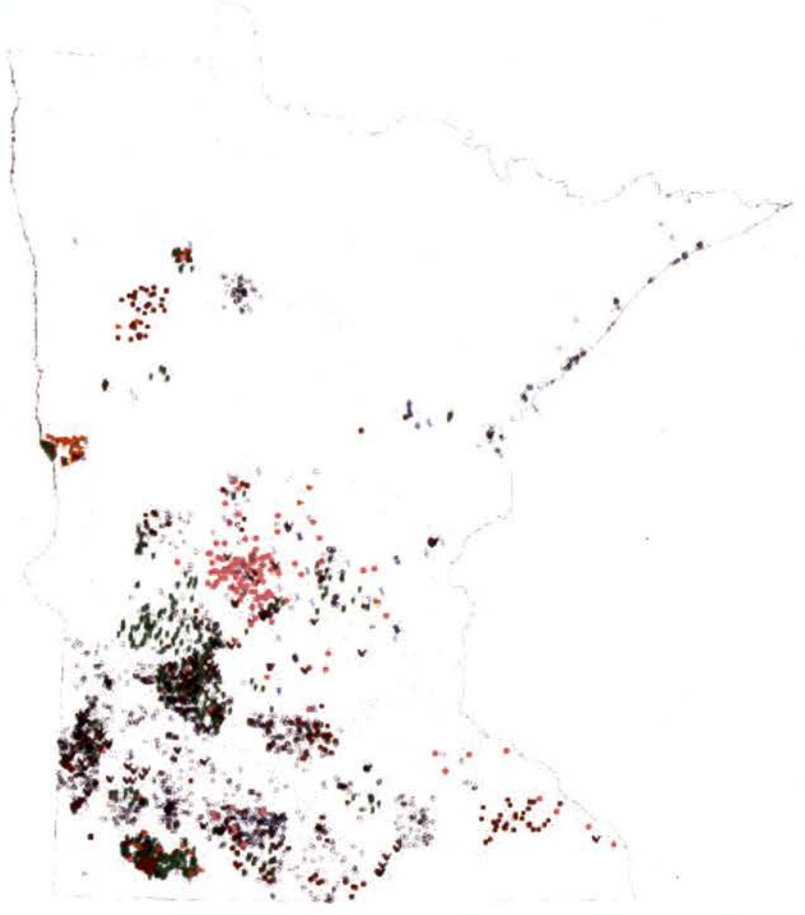
For additional information on the Council, visit their web site at www.pca.state.mn.us/water/cleanwatercouncil/index.html or contact Jeff Risberg, jeff.risberg@state.mn.us or 651-296-7231.

LARS and eLINK results from Section 319 & CWP projects 1997–May, 2008

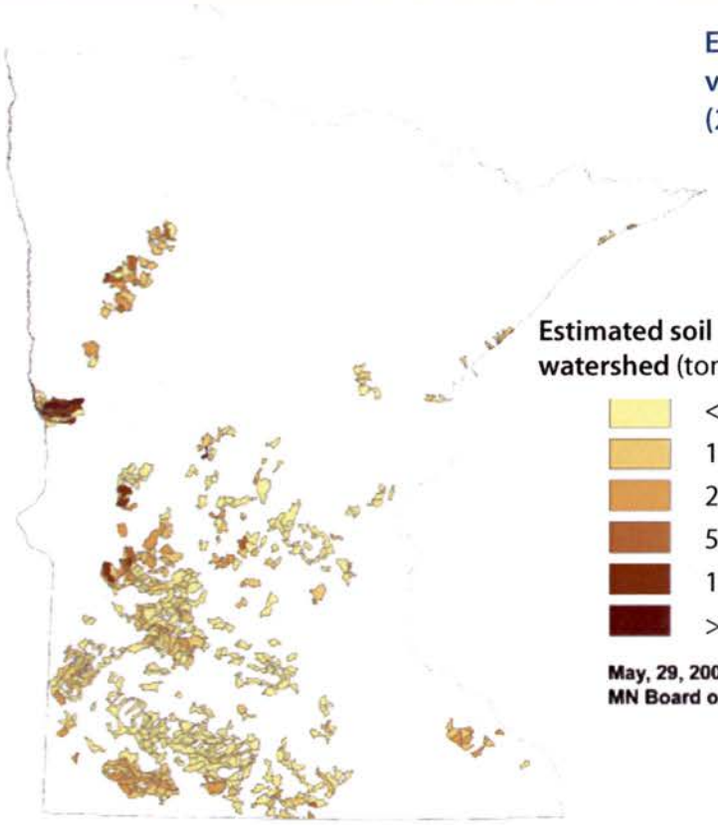
The table following shows progress through May 2008 based on previous Local Annual Reporting System (LARS) reporting (1997-2002) and reporting data from eLINK(2003 – May 2008). Based on LARS/eLINK reporting by Clean Water Partnership (CWP) and Section 319 Project Partners, these projects are estimated to have reduced soil loss from 1998 through May 2008 by more than 180,000 tons/year. During the same period, sedimentation was estimated to have been reduced by over 70,000 tons/year. Phosphorus loading was estimated to have been reduced by over 265,000 pounds/year.

Pollution reduction estimate type	# of BMPs	Estimated soil loss reduction (tons/yr	Estimated sediment reduction (tons/yr)	Estimated phosphorus reduction (pounds/yr)
Feedlot	159	0	0	6,190
Filter Strip Project	573	64,567	30,829	35,514
Gully Stabilization	196	11,878	7,643	8,354
Sheet & Rill Erosion Control	312	43,331	28,386	35,833
Stream & Ditch Stabilization	101	5,190	5,190	4,815
Wind Erosion	54	52,629	0	555
Other	2,069	2,817	0	175,104
Total	**3,464**	**180,412**	**72,048**	**266,366**

CWP/319 BMPs eLINK (2003–present) & LARS (1997–2002)



Estimated soil loss reduction—CWP/319 BMPs via local government reporting, eLINK (2003–present) & LARS (1997–2002)

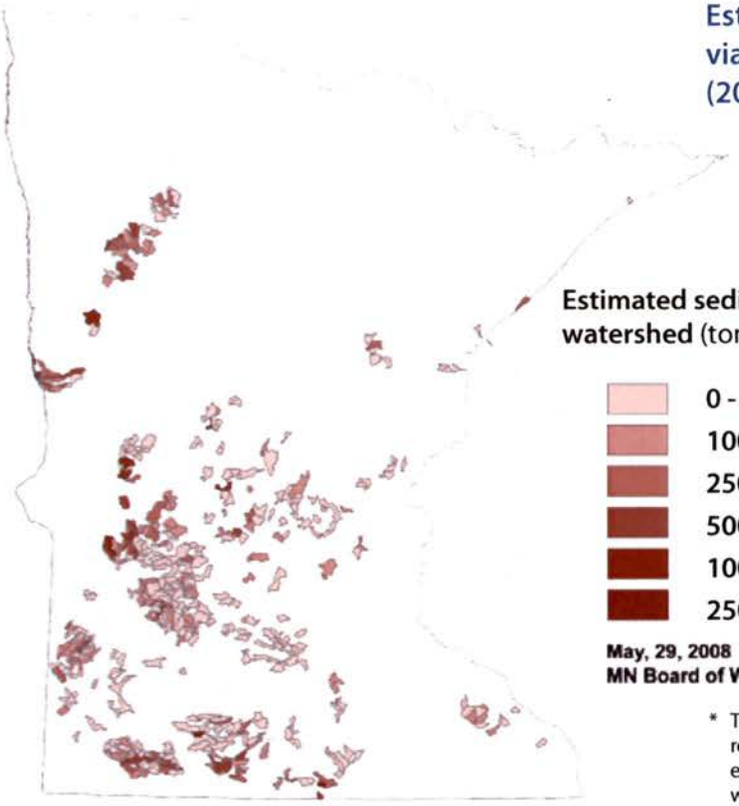


Estimated soil loss reduction by minor watershed (tons per year)

- <100
- 100 - 250
- 250 - 500
- 500 - 1000
- 1000 - 5000
- >5000

May, 29, 2008
MN Board of Water & Soil Resources

Estimated sediment reduction—CWP/319 BMPs via local government reporting, eLINK (2003–present) & LARS (1997–2002)



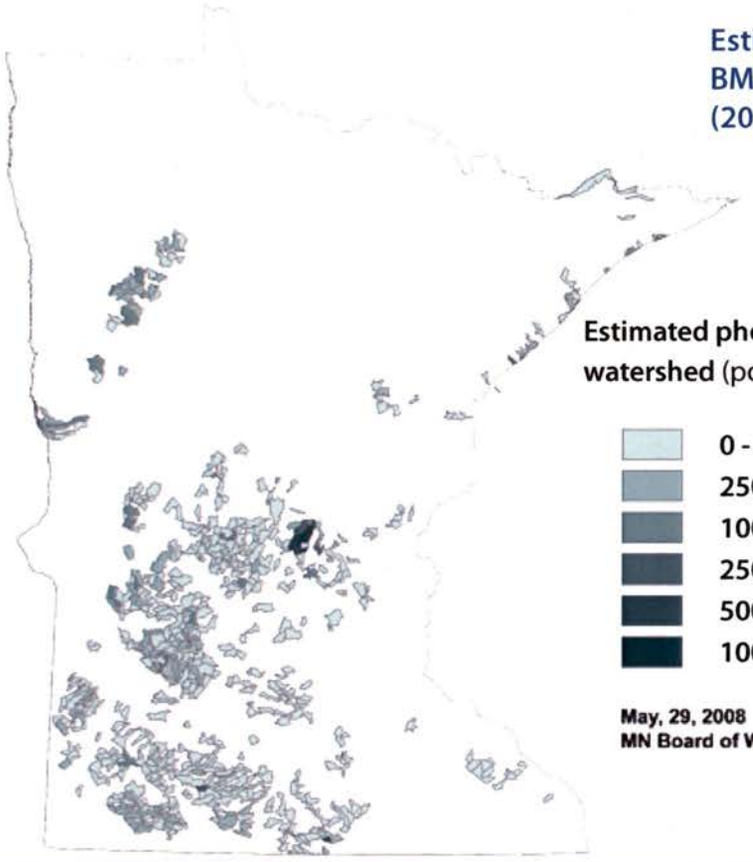
Estimated sediment reduction by minor watershed (tons per year)

- 0 - 100
- 100 - 250
- 250 - 500
- 500 - 1000
- 1000 - 2500
- 2500 - 5000

May, 29, 2008
MN Board of Water & Soil Resources

* These are ESTIMATED sediment reductions. They DO NOT represent reductions in WATERSHED sediment yield. They represent the sum of estimated sediment reductions to all water bodies (even isolated ones) within the geographic regions of the watershed.

Estimated phosphorous reduction—CWP/319 BMPs via local government reporting, eLINK (2003–present) & LARS (1997–2002)



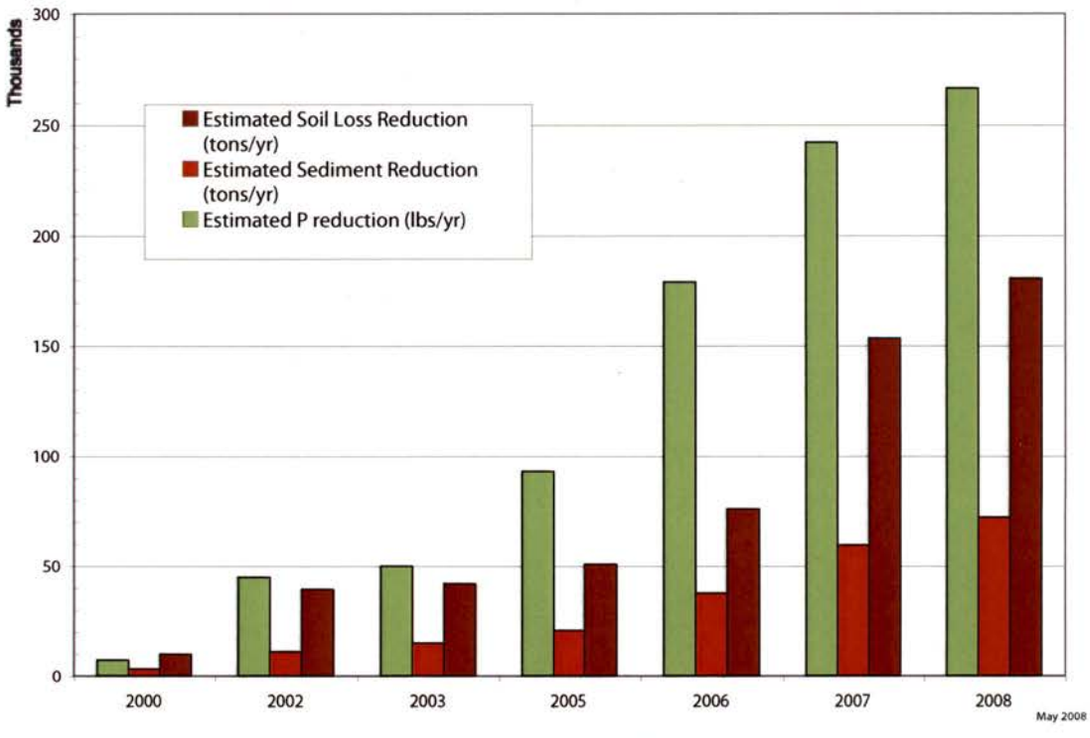
Estimated phosphorus reduction by minor watershed (pounds per year)*

- 0 - 250
- 250 - 1000
- 1000 - 2500
- 2500 - 5000
- 5000 - 10000
- 10000 - 25000

May, 29, 2008
MN Board of Water & Soil Resources

* These are ESTIMATED phosphorus reductions. They DO NOT represent reductions in WATERSHED phosphorus yield. They represent the sum of estimated phosphorus reductions to all water bodies (even isolated ones) within the geographic regions of the watershed.

CWP/319 cumulative estimated pollution reduction benefits via local government reporting, LARS (1997–2002) and eLINK (2003–present)



Projects completed for 2007–2008

Statewide

- Conservation tillage demonstration project
- Evaluating feedlot runoff pollution and ways to reduce impacts
- Local nitrate testing and educational outreach for private well owners
- Sediment transport at selected stream sites in MN
- Wetland models for TMDL assessment: wetland and receiving water impairments-Phase II

Des Moines River Basin

- Development of TMDLs for Heron Lake Watershed
- Development of TMDLS for the West Fork Des Moines River Watershed
- Heron Lake Watershed District: Clean Water Partnership project

Lake Superior Basin

- Knife River Watershed TMDL project, part II
- Nemadji River Basin project

Lower Mississippi River Basin

- Byllesby Reservoir phosphorus TMDL project
- Cannon River Watershed Partnership
- Improved livestock management in riparian areas
- Reduction of fecal coliform bacteria from human sources TMDL implementation project
- Straight River fecal coliform reduction project
- Whitewater Watershed paired watershed monitoring project

Minnesota River Basin

- Chippewa County Watershed continuation
- Cottonwood River restoration project-continuation
- Cottonwood River restoration project BMP implementation continuation
- Hawk Creek: Beaver Tales
- Hawk Creek Watershed project: Land of the Lost
- High Island implementation project
- Lake Shaokatan continuing restoration project
- Lower Main Stem Chippewa River Subbasin
- Minnesota River Report 2006-2007—Minnesota River Summit
- Pomme de Terre River fecal coliform TMDL project
- Redwood River Watershed phosphorus TMDL compliance project
- Research project to develop the Greater Blue Earth turbidity TMDL

Rainy River Basin

- Jessie Lake Watershed TMDL project

Red River Basin

- Red River Basin Buffer initiative
- Red River Basin turbidity reduction project, Part II
- Upper Red River of the North SWAT modeling for impaired waters studies

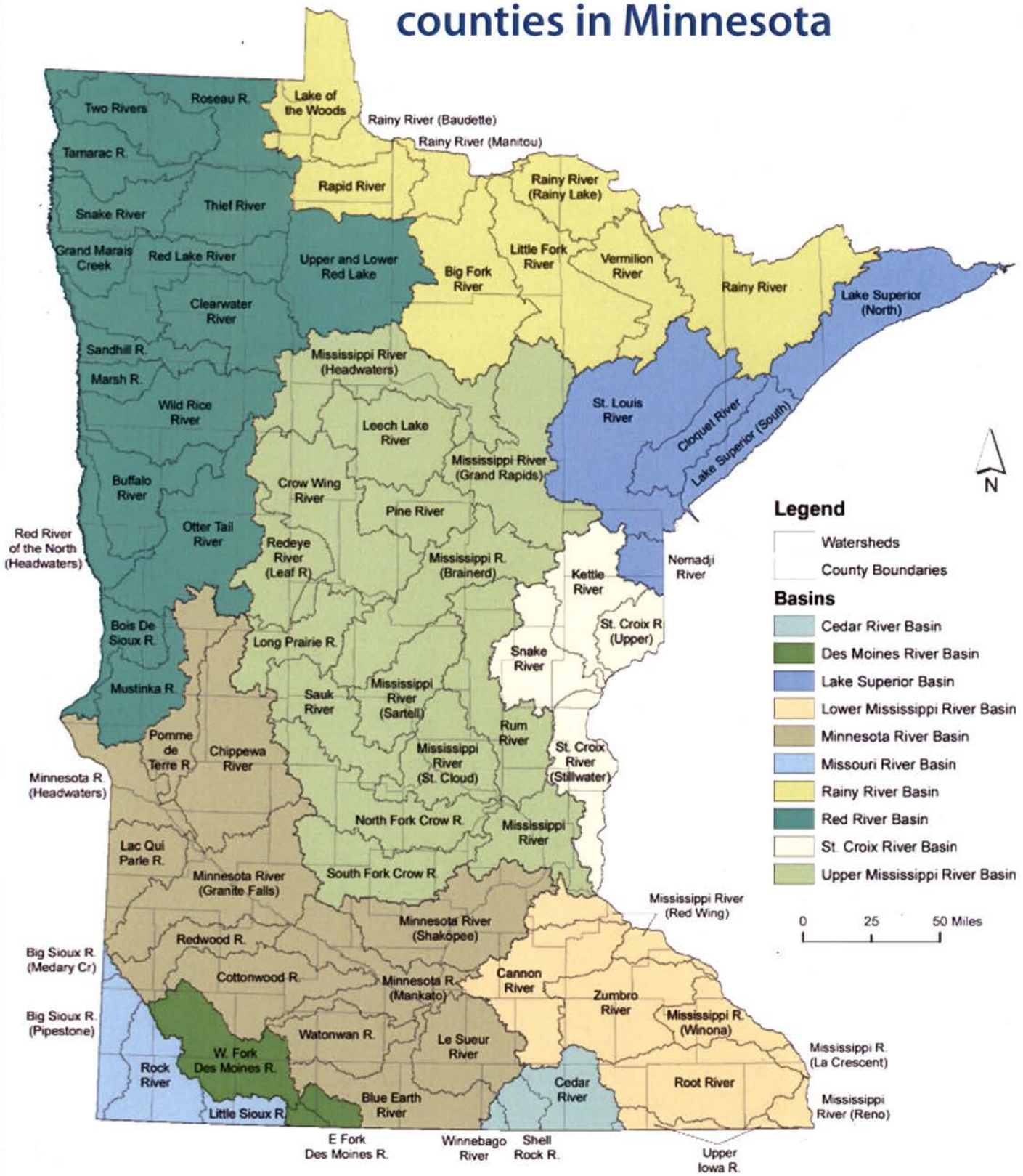
St. Croix River Basin

- Snake River Watershed enhancement project
- Sunrise River Watershed TMDL phase I

Upper Mississippi River Basin

- Big Birch Lake Watershed management project continuation
- Clearwater River and Lake Louisa phase II TMDL
- Elk River Watershed priority lakes phosphorus reduction
- Lambert Creek Phase III—water quality improvement project-continuation
- Manure management—ecologically sensitive areas
- North Fork—Lower Crow Watershed DO, turbidity and fecal coliform TMDL
- Rice Creek index of biological integrity (IBI)
- Shingle Creek Lake TMDL project phase I: dual endpoint Twin and Ryan Lakes nutrient TMDL project

Basins, major watersheds and counties in Minnesota



Statewide

Minnesota has vast water resources—12,200 lakes larger than 10 acres and 105,000 miles of stream and rivers. Many partners across the state are working to improve the quality of Minnesota's waters. The projects in the statewide section represent demonstration projects that can be used on a statewide level, so that partners may learn from the work that is being done across the state.

Projects completed

- Conservation tillage demonstration project
- Evaluating feedlot runoff pollution and ways to reduce impacts
- Local nitrate testing and educational outreach for private well owners
- Sediment transport at selected stream sites in MN
- Wetland models for TMDL assessment: wetland and receiving water impairments—Phase II

Watersheds and counties in Minnesota

Conservation tillage demonstration project

The corn-soybean rotation is the dominating system in the southern half of Minnesota. Conventional tillage (chisel plow) for corn following soybeans leaves too little residue for prevention of soil erosion, especially on sloping soils. Most farmers still chisel in the fall to provide faster spring soil warm-up for early planting. On-station, small-plot research has shown that some reduced tillage systems provide, on average, yields and economic returns equal to the fall chisel, while leaving sufficient residue for soil and water protection.

The University of Minnesota, in partnership with staff of Soil and Water Conservation Districts and Monsanto Company, worked with farmers to carry out two years of on-farm, replicated strip-trials of four tillage systems using farmer-owned commercial-scale equipment. The on-farm trials were placed across the southern half of the state to verify and demonstrate results obtained in the on-station trials, and to communicate those results to a wide farmer audience.

Goals for this project

- Strengthen and extend partnerships to design and establish on-farm demonstrations of reduced tillage systems.
- Compare tillage systems on 14 producer fields with field-scale equipment for preparation and harvest.
- Organize field days at demonstration sites, and associated winter workshops.
- Publish trial results and tillage recommendations for south central and southwest Minnesota in fact sheets, bulletins, and the UM Extension Web site

Results that count

- Partnerships established on this project will continue, with on-farm conservation tillage trials for corn following corn and additional strip-tillage expos where the information from the project will be presented.
- On-farm trials were completed at 17 locations over two years. On average, yields from the fall chisel plow, fall strip-till, and spring field cultivate treatments for corn following soybeans were about equal, and generally exceeded those for no-till on glacial till soils. Some risk of yield depression with high residue systems in cold, wet years can be offset by their lower costs of production over years.
- Research results and conservation tillage management information were presented at 12 field days at on-farm trial sites, 25 winter crops management meetings, and four large summer strip-tillage expos attended by a total of 4250 farmers and agricultural professionals. Farmers attending just the 4 expos reported managing a total of 1,600,000 acres.
- Two Extension bulletins summarizing on-station and on-farm research were prepared and are available in print form and on-line at www.extension.umn.edu/distribution/cropsystems/DC8483.html.

Financial information

Funding type	Section 319
Grant amount	$247,200
Matching funds and in-kind	$268,000
Total project cost	$515,200

Contact

Les Everett
UM Water Resources Center
173 McNeal Hall, 1985 Buford Ave
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612-625-6751
evere003@umn.edu
MPCA project manager: Chris Zadak

Evaluating feedlot runoff pollution and ways to reduce impacts

In the late 1970s and early 1980s, the USDA Agricultural Research Service, working in conjunction with four state and federal agencies, developed an evaluation system to rate feedlot pollution potential. The resulting computer model, known as the Minnesota Feedlot Evaluation Model (MFEM) has been used extensively in Minnesota by county feedlot officers, Soil and Water Conservation Districts (SWCDs), Natural Resource Conservation Service (NRCS), MPCA staff, and watershed managers. The model is increasingly being used in conjunction with watershed models and in basin planning.

With nearly 20,000 outdoor open lots in the state, a good feedlot model is essential for these applications. Shortfalls in the original MFEM model were addressed by the 319 grant. Of particular importance is extending the MFEM model to include annual loading of pollutants, without a significant increase in the complexity of user inputs.

The project has resulted in a new model called the Minnesota Feedlot Annualized Runoff Model or MinnFARM. It operates within the Microsoft EXCEL spreadsheet framework. MinnFARM is currently being implemented in Minnesota for both regulatory evaluation of feedlot pollution potential and for the state and federal cost-share prioritization process. Model outputs include annual loading estimates of chemical oxygen demands (COD), biochemical oxygen demands (BOD), phosphorus, nitrogen and fecal coliforms along with a relative rating of the pollution potential of the specific feedlot based on the type of receiving water.

The project began with an extensive literature review on the processes involved in feedlot runoff and pollutant removal in vegetative treatment areas. Results of this literature review were incorporated into the model. An advisory group comprised of state and local compliance staff, engineers from the NRCS and the Board of Water and Soil Resources directed the course of work on the project. The model was tested extensively in the field prior to being adopted for use in the state and federal cost share program and as an indicator of regulatory compliance.

Goals for this project

- Develop an improved modeling tool for animal feedlots.
- Enhance user efficiency and consistency of model use.
- Assist in the tracking and prioritizing pollutant load reductions from cost-share projects.
- Improve regulatory compliance.

Results that count

- The EXCEL spreadsheet model and user guide MinnFARM was developed.
- Model is currently being used to prioritize state and federal cost share assistance.
- Model is currently being used as an indicator for regulatory compliance.

Financial information

Funding type	Section 319
Grant amount	$90,000
Matching funds and in-kind	$90,000
Total project cost	$180,000

Contact

Dr. Bruce Wilson
University of Minnesota Department of Biosystems and Agricultural Engineering
1390 Eckles Avenue
Saint Paul, Minnesota 55108
612-625-6770
Wilson@umn.edu
MPCA project manager: Nick Gervino

Local nitrate testing and educational outreach for private well owners

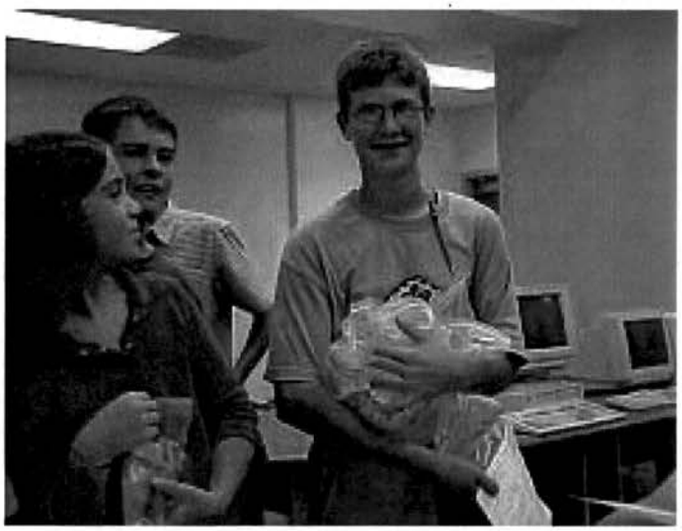
This project provided technical support, an organizational framework, equipment, lab quality control, educational supplies, and media assistance so local entities could provide nitrate water testing services and water quality educational outreach on a county level. This project was a continuation of an existing EPA 319 project. Previous 319 and LCMR funds allowed the creation of a network of strategically placed host sites; the formation of these sites was a critical step toward successful, locally-driven programs. The seven host sites, each serving 10-20 counties, were equipped with spectrophotometers, diluters and other analysis related equipment, signs, A-frames, educational materials, coolers and other necessary supplies. Conducting nitrate analysis was anticipated on approximately 3,000 well samples per year and working with 30 to 35 counties.

Goals for this project

- To ensure that Minnesota residents are highly informed about the nitrate levels in their drinking water supplies.
- To assist the local cooperators in becoming as self-sufficient as possible in conducting the clinics.
- To ensure that the local cooperators are knowledgeable with regard to issues related to nitrate contamination.

Results that count

- Local cooperators continue to successfully use the clinic format to maintain outreach opportunities with homeowners, lake associations, and public schools. 50 counties participated in hosting a nitrate clinic in the past 3 years.
- Over the life of the project, nearly 9,000 well samples were analyzed. Eight percent of the samples exceeded the 10 mg/L NO3-N Health Standard. In 2006, 38 counties conducted 79 separate events which analyzed roughly 2,600 samples. In 2005, 32 counties conducted 72 separate events which analyzed roughly 3,000 samples. In 2004, 41 counties conducted 86 separate events which analyzed more than 3,300 samples.
- Response from the lake associations has been very positive with many lake associations incorporating the testing clinics into their annual meetings or holding independent events as a service to the residents of their lake and surrounding area. For many years, science teachers at the Perham and New York Mills Middle Schools have conducted nitrate testing clinics as a tool for introducing water quality educational concepts into the classroom. A GIS component was added allowing the students to enter the results into a database and map out results over time.



Nitrate testing clinic at New York Mills.

Financial information

Funding type	Section 319
Grant amount	$100,000.00
Matching funds and in-kind	$126,834.37
Total project cost	$226,834.37

Contact

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651-201-6178
bruce.montgomery@state.mn.us
MPCA project manager: Chuck Regan

Sediment transport at selected stream sites in MN

A cooperative effort to collect and analyze stream sediment-related data at selected streams in Minnesota began in 2007 by the MPCA and USGS. The project was initiated to provide a greater understanding of the type, movement, and transport of sediment in Minnesota streams identified as being impaired for turbidity. This effort will provide one "piece of the puzzle" needed to better understand sediment in streams. Other "pieces of the puzzle" are also being worked on or will be incorporated as the MPCA addresses sediment issues in the turbidity TMDLs and forms a framework to better address sediment and physical stream condition as impairments to aquatic life. Project activities in 2007 included initial sampling and laboratory analysis for suspended sediment concentration (SSC), particle size, total suspended solids (TSS) and turbidity; installation of box samplers; and two training workshops presented by USGS to MPCA and other staff. The project currently involves sampling at seven sites across Minnesota. The project will continue for at least five years through a joint funding agreement established in 2008 assuming adequate funding is available.

Goals for this project

- Describe sediment concentrations and load and turbidity as a function of streamflow and season at selected stream sites.
- Describe relations between mean cross-sectional suspended sediment concentrations and point measurements of water transparency.
- Provide training about sediment transport processes and sediment sampling techniques to MPCA staff.

Results that count

- Three to five samples were collected at each of the seven sites by USGS staff.
- Box samplers were installed by USGS at each site.
- Two to five box samples (single vertical depth integrated samples) and grab samples were collected at each of the sites by MPCA and local observers.
- The project provided the start of a multiple year data collection effort needed to address the overall goals of the project.
- Two one-and-a-half day training sessions on suspended sediment in streams concepts, sampling methods, and data analysis methods were presented to MPCA and local staff by USGS staff.

Financial information

Funding type	Water Environmental Fund
Grant amount	$39,300

Contact

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2280 Woodale Drive
Mounds View, MN 55112
763-783-3131
kiesling@usgs.gov
MPCA project manager: Greg Johnson

Box sampler installation at Knife River, near Knife River, MN.

Wetland models for TMDL assessment: wetland and receiving water impairments—Phase II

To quantify the impact of human activities on wetlands and wetland functions, and thereby help to ameliorate the impact of these activities, models of wetland hydrology and biogeochemistry are of great assistance. The intended purpose of the model is to facilitate assessment of the impact of contributing watershed areas on wetland function, and the impact of wetlands on the quality of receiving waters. A comprehensive literature review was performed in order to select the conceptual model most appropriate for the purposes of the project. The developed model, Wet-HAWQ (Wetland Hydrologic and Water Quality), is based on the Peatland Hydrologic Impact Model (PHIM), as the basic framework for the hydrology component of the model. The biogeochemical components considered in the model (vegetation, carbon, nitrogen, oxygen, bacteria, phosphorus, and sediments) are based on the SET-WET model developed at Virginia Tech by Tess Wynn and Erik Lee. Wet-HAWQ includes a graphical user interface (GUI) for enhanced input data management and results output/analysis, and is being developed for the Windows operating system, using the Delphi programming language. Another task of the project was data acquisition from wetlands in Minnesota and in neighboring mid-western states for use in testing of the model; the data collected so far was not as completed as expected, and the model was manually calibrated using data from a constructed wetland located in Benton, KY. It is expected to continue to develop the model, and test it in a local wetland to be selected. Guidelines for use the model for TMDL assessment are in preparation. A poster was presented in the 2007 Conference of the Society of Wetland Scientists, held in Sacramento, CA.

Goals for this project

- Develop a hydrologic and water quality model for palustrine wetlands.
- Acquire and accumulate wetland data from Minnesota and nearby states to test the model.
- Develop guidelines to use the model for TMDL assessment.

Results that count

- The model was developed as expected.
- The data acquisition process was performed, although the results were not as good as expected.
- The guidelines to use the model for TMDL assessment are in preparation.

Financial information

Funding type	Section 319
Grant amount	$68,393

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Statewide projects currently active in 2008

On-farm manure management demonstration—2004

Sponsor: University of Minnesota

Funding: Section 319 (Grant) $279,600

Purpose: Adopt best management practices and new technology for field application of manure.

Winter parking lot/sidewalk maintenance training and certification—2006

Sponsor: Fortin Consulting, Minneapolis

Funding: Section 391 (grant) $80,000

Provide training for staff working in winter road maintenance to reduce the amount of road salt in runoff to surface and groundwater.

Statewide projects awarded in 2008

Section 319 Projects

Developing selection, design and assessment standards for shoreline bioengineering practices

Sponsor: Regents of the University of Minnesota

Funding: Section 319 (Grant) $134,417

Purpose: This project will use selected lake and river shorelines within Minnesota to research and promote the effective use of shoreline bioengineering BMPs. Site-specific BMP selection, design standards, evaluation protocol will be developed. Demonstration sites will be installed and training modules will be delivered to citizen and professional audiences. The goal is for a reduction in sediment and nutrient loads to surface water.

Drainage systems management education and stakeholder feedback workshops

Sponsor: Minnesota Department of Agriculture

Funding: Section 319 (Grant) $90,000

Purpose: To develop and increase the existing awareness of conservation drainage practices in three areas of the state. Workshops will provide direct outreach to targeted groups involved in agricultural drainage management activities.

Maximizing the economic benefits of manure to reduce nutrient loading

Sponsor: University of Minnesota Water Resources Center

Funding: Section 319 (Grant) $275,000

Purpose: The goal of this statewide education/ demonstration project is to reduce nitrogen, phosphorus, and pathogens reaching surface waters and ground water by motivating agricultural producers to apply manure at appropriate rates, appropriate time applications, and incorporate/inject manure for environmental and economic benefits.

Performance of low impact development (LID) practices on stormwater pollutant load abatement

Sponsor: University of Minnesota

Funding: Section 319 (Grant) $300,000

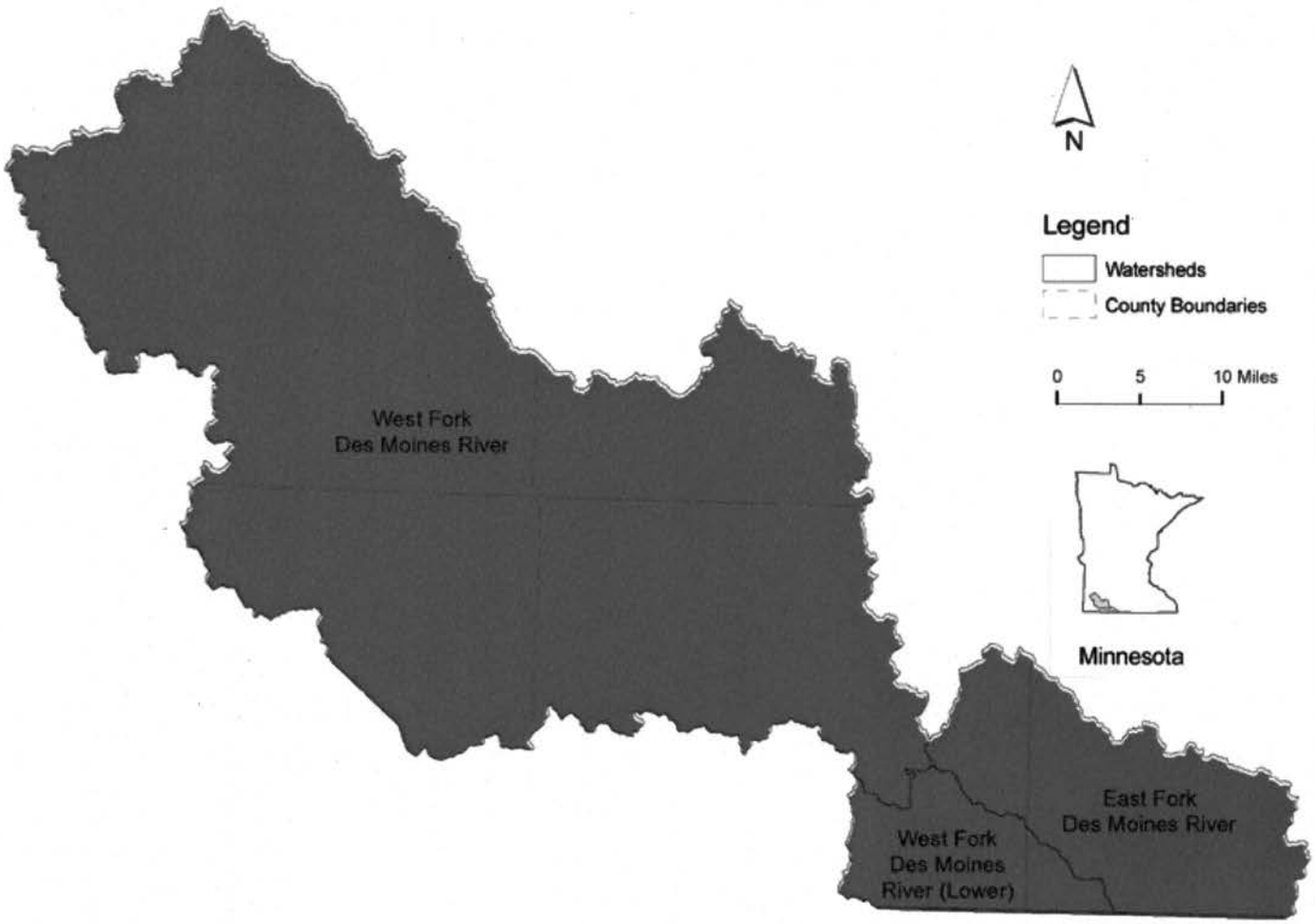
Purpose: Managing urban stormwater runoff has become an important issue for flood control and water-quality protection. LID practices, including infiltration basins and trenches, porous pavements, rain gardens, vegetative swales and filter strips, are currently used in urban settings by mimicking predevelopment hydrology. This project will develop a four-level assessment protocol for stormwater BMPs including LIDs, which consist of visual inspection, capacity testing, synthetic runoff testing and monitoring. This project will provide a methodology for planning, designing and maintaining LID practices to meet TMDL regulatory requirements.

Des Moines River Basin

The Des Moines River is a tributary river of the Mississippi River approximately 525 miles (845 km) long to its farther headwaters, in the upper Midwest. The largest river flowing across the state of Iowa, it rises in southern Minnesota, and flows across the state of Iowa from northwest to southeast, passing from the glaciated plains into the unglaciated hills near the city of Des Moines, which takes its name from the river.

Projects completed

- Development of TMDLs for Heron Lake Watershed
- Development of TMDLS for the West Fork Des Moines River Watershed
- Heron Lake Watershed District: Clean Water Partnership Project



Development of TMDLs for Heron Lake Watershed District (HLWD)

This project is part of a larger Total Maximum Daily Load (TMDL) effort encompassing the West Fork Des Moines River (WFDMR) watershed in southwest Minnesota. The Heron Lake subwatershed is 472 square miles and is dominated by agricultural land. Thirty-three impaired waters listings are addressed in this project, including fecal coliform bacteria, turbidity, pH and excess nutrients in North and South Heron Lakes. The project began in late 2003 and the TMDL study is expected to be submitted to EPA in the summer of 2008. This grant was completed in cooperation with the WFDMR TMDL project primarily to provide public and stakeholder participation and education and outreach services to the project.

Goals for this project

- Co-lead efforts for public and stakeholder participation.
- Co-lead efforts for education and outreach.
- Participation in project team for development of TMDLs.

Results that count

- Three formal public meetings were held during the project and were well attended. A stakeholder advisory group was created and four meetings were held and periodic updates were provided to them throughout the project.
- A considerable amount of education and outreach was done. This included a PowerPoint presentation regarding the TMDL study that was developed and presented on eight separate occasions to audiences which included county commissioners, city councils, and the HLWD board. Other activities included assistance with project web site development a display board that was used at fairs and other locations.
- Participation with the project team provided important perspective regarding local concerns and history.

Financial information

Funding type	Section 319
Grant amount	$963.72

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Development of TMDLs for West Fork Des Moines River Watershed

This Total Maximum Daily Load (TMDL) development project encompasses the West Fork Des Moines River (WFDMR) watershed in southwest Minnesota. This watershed is approximately 1300 square miles and is dominated by agricultural land. Thirty-three impaired waters listings are addressed in this project, including fecal coliform bacteria, turbidity, pH and excess nutrients in North and South Heron Lakes. The project began in late 2003 and the TMDL study is expected to be submitted to EPA in the summer of 2008. Cottonwood County Environmental services was the lead local partner and provided technical and administrative support. Key contributions included providing pollutant source data and information, public and stakeholder participation and education and outreach services.

Goals for this project

- Provide technical support.
- Co-lead efforts for public and stakeholder participation.
- Co-lead efforts for education and outreach.

Results that count

- Providing technical support involved gathering data and information related to fecal coliform sources within the watershed and reviewing technical information produced by MPCA and the engineering firm developing the TMDL.
- Three formal public meetings were held during the project and were well attended. A stakeholder advisory group was created and four meetings were held and periodic updates were provided to them throughout the project.
- A considerable amount of education and outreach was done. This included meetings with local groups, project web site development, project brochure, and creating a display board that was used at fairs and other locations.

Financial information

Funding type	Section 319
Grant amount	$81,652

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Heron Lake Watershed District: Clean Water Partnership

The Heron Lake watershed encompasses many of the same issues seen in other rural, agricultural areas in Minnesota. There are numerous pollution problems in the Heron Lake Watershed including non-compliant septic systems, feedlots and urban storm water runoff.

The major goal for the project was to improve water quality for the benefit of the public health, welfare, and recreation, and to provide for the preservation and enhancement of wildlife habitat.

In order to complete the overall goals of the project, several different implementation measures, educational efforts, and dedicated staff and partners pulled together to complete this project. Education efforts through partnerships have been undertaken that provide landowners with current information on projects underway and allows for public input and direction for further education needs.

This picture shows the importance of water quality improvement efforts. On the left is Jack Creek, and on the right is water from Jack Creek that has passed through a wildlife management area, which contains wetland restorations that help to enhance water quality and wildlife habitat. The difference is dramatic!

Goals for this project

- Increase public awareness.
- Reduce non point source pollutants and improve habitat for wildlife through best management practices.
- Improve water quantity management within the watershed.

Results that count

- Worked with partners to hold tours, workshops, and educational meetings and on various topics relating to projects, updates and water quality.
- Installed best management practices using cost-share and loans. Types of practices implemented include: farmstead windbreaks, field windbreak cost incentives, filter strips, grassed waterways, terraces, tree planting, wetland restoration, rock inlets, rain gardens, wildlife ponds, septic system and equipment purchases.
- The Heron Lake Watershed District (HLWD) and Okabena-Ocheda Watershed District worked on a joint effort to develop rules for storm water and erosion control. Due to the popularity of the rock inlet cost-share program, the HLWD, in partnership with the SWCDs in the four counties, received funding for an grant for replacing open tile intakes with rock inlets.

Financial information

Funding type	Section 319
Grant amount	$161,750.00
Matching funds and in-kind	$768,631.11
Loan funds	$206,341.78
Total project cost	$1,136,722.89

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Projects currently active in 2008 in the Des Moines River Basin

Beaver Creek Watershed improvement project continuation—2005

Sponsor: Murray County

Funding: CWP (Grant) $62,122; CWP (Loan) $178,800

Purpose: Develop manure management plans, design and implement grass waterways, restore wetlands, complete sediment control/water retention structures, prepare demonstration plots for fertilizer applications, protect priority lands, upgrade septic systems, establish stream bank protection and continue monitoring, outreach and education.

Elk Creek conservation tillage incentive program—2006

Sponsor: Heron Lake Watershed District

Funding: CWP (Grant) $28,200

Purpose: This project will enlist landowners within the project area to change their tillage practices. Options include no-till, strip-till, minimum-till, ridge-till and forage residue management, which will prevent further soil and nutrient loss and decrease nonpoint-source pollution in the watershed.

Heron Lake alternative tile intake cost-share program—2006

Sponsor: Heron Lake Watershed District

Funding: Section 319 (Grant) $36,000

Purpose: Reduce sediment in runoff from farm fields by replacing open tile intakes with subsurface rock intakes.

Heron Lake Watershed District—BMP program for Alba Township—2007

Sponsor: Heron Lake Watershed District

Award: Section 319 (Grant) $40,800

The goal of this project is to decrease water movement, reduce erosion, and improve water quality throughout approximately 23,000 acres in Alba Township through changing tillage methods from conventional tillage to conservation tillage. Conventional tillage is the main practice undertaken on the silty clay loam soils. Creating an awareness among landowners about the relationship between soil conservation and water quality will be critical to the project's success.

Heron Lake Watershed District – Fulda Lakes Project—2007

Sponsor: Heron Lake Watershed District

Award: Section 319 (Grant) $55,800

The Heron Lake watershed is rural and agricultural. In a watershed such as this, agricultural best management practices (BMPs) are crucial. Landowners are hesitant to try new methods.

The goal of this project is to improve the water quality in Fulda Lakes through the use of cost share and incentive programs, and education of residents and landowners.

Des Moines River Basin projects awarded in 2008

Section 319 Projects

Heron Lake Watershed District—Conservation tillage demonstration plot

Sponsor: Heron Lake Watershed District

Award: $20,547

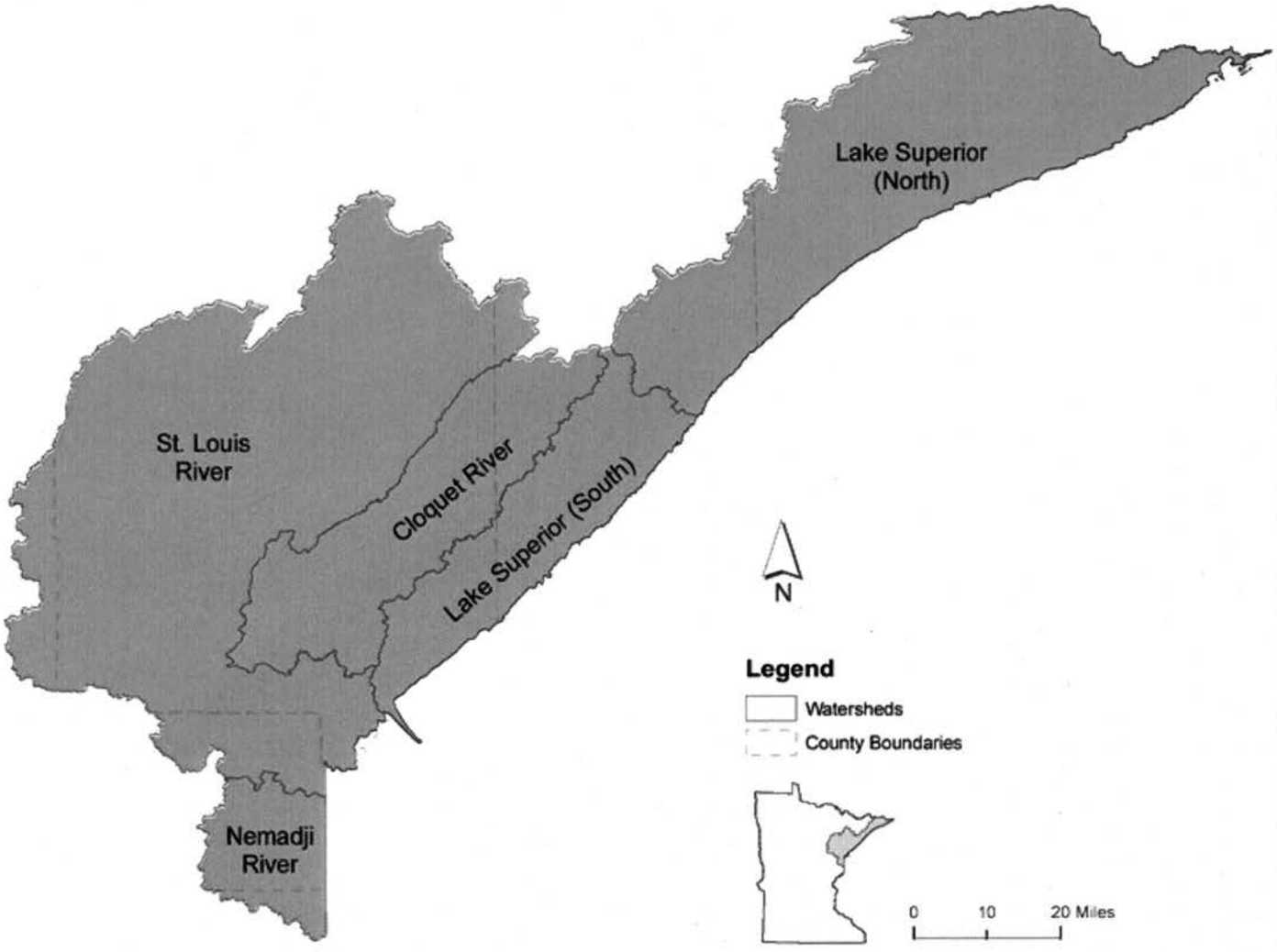
This grant will allow continued research in conservation tillage used on the demonstration plot developed in 2005. The economic and environmental benefits of six treatments of reduced tillage, including strip till, will be evaluated. This project will demonstrate 1) several tillage practices that have the potential to reduce sediment delivery to surface waters and preserve agricultural soils through increased crop residue cover on row-cropped fields, and 2) economic and environmental benefits of reduced tillage systems.

Lake Superior Basin

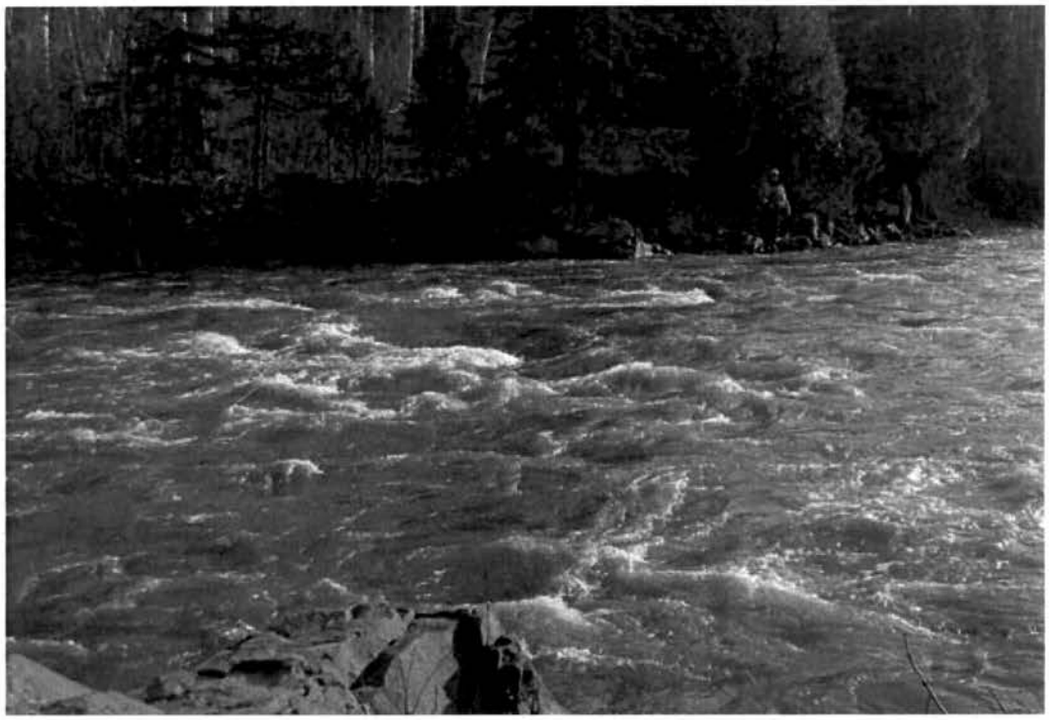
The Minnesota part of the Lake Superior Basin encompasses portions of Aitkin, Carlton, Cook, Itasca, Lake, Pine and St. Louis counties, covering approximately 6,200 square miles. Major watersheds in the basin include the Cloquet, Nemadji and St. Louis River systems, as well as the North Shore tributaries to Lake Superior.

Projects completed

- Knife River Watershed TMDL project—Part II
- Nemadji River Basin project



Knife River TMDL project—Part II



Steelhead fishing during spring runoff near the mouth of the Knife River.

The Knife River TMDL project will produce an EPA-approved TMDL document for the Knife River turbidity impairment and an evaluation of pH as an impairment. The project was to be completed in two parts. Part I included gathering existing data, collecting new data over three years of stream monitoring, generating needed GIS layers, and gathering geomorphology data. Part I included stream observations to help better understand the stream and what drives the sediment problem in the river. Part I provided additional pH data to evaluate its listing as an impairment in the Knife River. Part II entailed the analysis of the data gathered in Part I to identify the sources and loads of sediment associated with the elevated turbidity levels in the river. Data analysis included statistical analyses, computation of a TSS surrogate for the turbidity standard, load estimation, and duration curve completion. Part II did not result in a completed turbidity TMDL due to a decision to do additional physical channel assessment and modeling via a MPCA Impaired Waters Master Contract contractor. The extra work resulted in the project timeline being delayed. A third contract (Part III) will be set up to provide the time and funding to bring the TMDL to completion with the funds remaining from Part II.

Goals for this project

- To complete the data analysis for developing a TMDL for turbidity.
- To complete a draft TMDL for turbidity for internal MPCA review.

Results that count

- Data analyses including statistical analyses, computation of a TSS surrogate for the turbidity standard, load estimation, and load duration curve for the draft TMDL were completed.
- Two drafts of a TMDL have been completed. The first draft was reviewed by the MPCA project manager. The second draft incorporated the MPCA project manager comments and was submitted for additional MPCA staff review.

Financial information

Funding type	Section 319
Grant amount	$31,000

(Note that the Grant amount is the amount provided for the Part II contract for the TMDL study only.)

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Nemadji River Basin project

The Nemadji River Basin has approximately 433 square miles (277,400 acres) of drainage area and is located south of Duluth, Minnesota, straddling the Minnesota-Wisconsin border. In Minnesota, the land cover is 69 percent forest, 18 percent cropland and pasture, 11 percent wetlands and lakes, and two percent other categories. The majority of land ownership is non-industrial private land (55 percent). The remainder is county (22 percent), state (16 percent), railroad and industrial (six percent), and Tribal, City, and Township (one percent).

Highway 23 road culvert project.

Approximately 80 percent of the Minnesota portion of the Nemadji River basin is located within Carlton County, including all of the clay-erosion prone areas and most of the headwater tributaries. Sediment carried into the Nemadji River from converging streams and rivers then down the Nemadji River into Superior Harbor and out into Lake Superior is the major concern. Fourteen percent (19,000 tons) of all the silt and clay is trapped in Superior Bay. Seventy-four percent (98,000 tons) is carried out into Lake Superior.

Approximately 33,000 tons of Nemadji River sediment is dredged annually by the U.S. Army Corps of Engineers to maintain adequate depth for shipping traffic in Superior Bay. The high sediment yield of the Nemadji River Basin is largely a result of changes in the hydrologic system. Hydrologic changes caused by human activities have resulted in increased volumes and rates of runoff and stream-flow. These changes have resulted in higher stream-flow energies that, in turn, have increased streambank and bluff erosion and slumping.

Goals for this project

- To positively affect hydrology in the identified small hydrologic units within the 11 subwatersheds of the Nemadji River Basin.
- To work on fish habitat and wildlife habitat improvement.
- To restore beneficial uses to the Nemadji River Basin.

Results that count

- Awareness of the issues in the Nemadji River Basin was elevated and discussed with public and agency stakeholders.
- Nemadji turbidity issues were documented leading to an Impaired Waters listing.
- 3 fish habitat improvement projects were completed.
- 45 acres of reforestation projects were completed.

Financial information

Funding type	CWP
Grant amount	$126,712
Matching funds and in-kind	$128,917
Total project cost	$255,629

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Projects currently active in the Lake Superior Basin in 2008

Miller Creek Watershed implementation—2006

Sponsors: City of Duluth and South St. Louis Soil and Water Conservation District

Funding: CWP (Grant) Award: $31,000 grant

Funding for this project continues tree planting to prevent solar radiation from reaching the stream, installation of streambank stabilization and stream habitat structures, completion of annual stream trout surveys and habitat assessments, and installation of an innovative stormwater practice; provides information regarding BMPs and Miller Creek's water quality for Miller Hill-area businesses and the public; maintains the sediment trap installed in Miller Creek in 2004; and removes sediment via street sweeping before it reaches the stream.

Miller Creek Watershed TMDL project—2003, 2004, 2005

Sponsor: South St. Louis Soil and Water Conservation District

Funding: Section 319 (Grant) $115,190

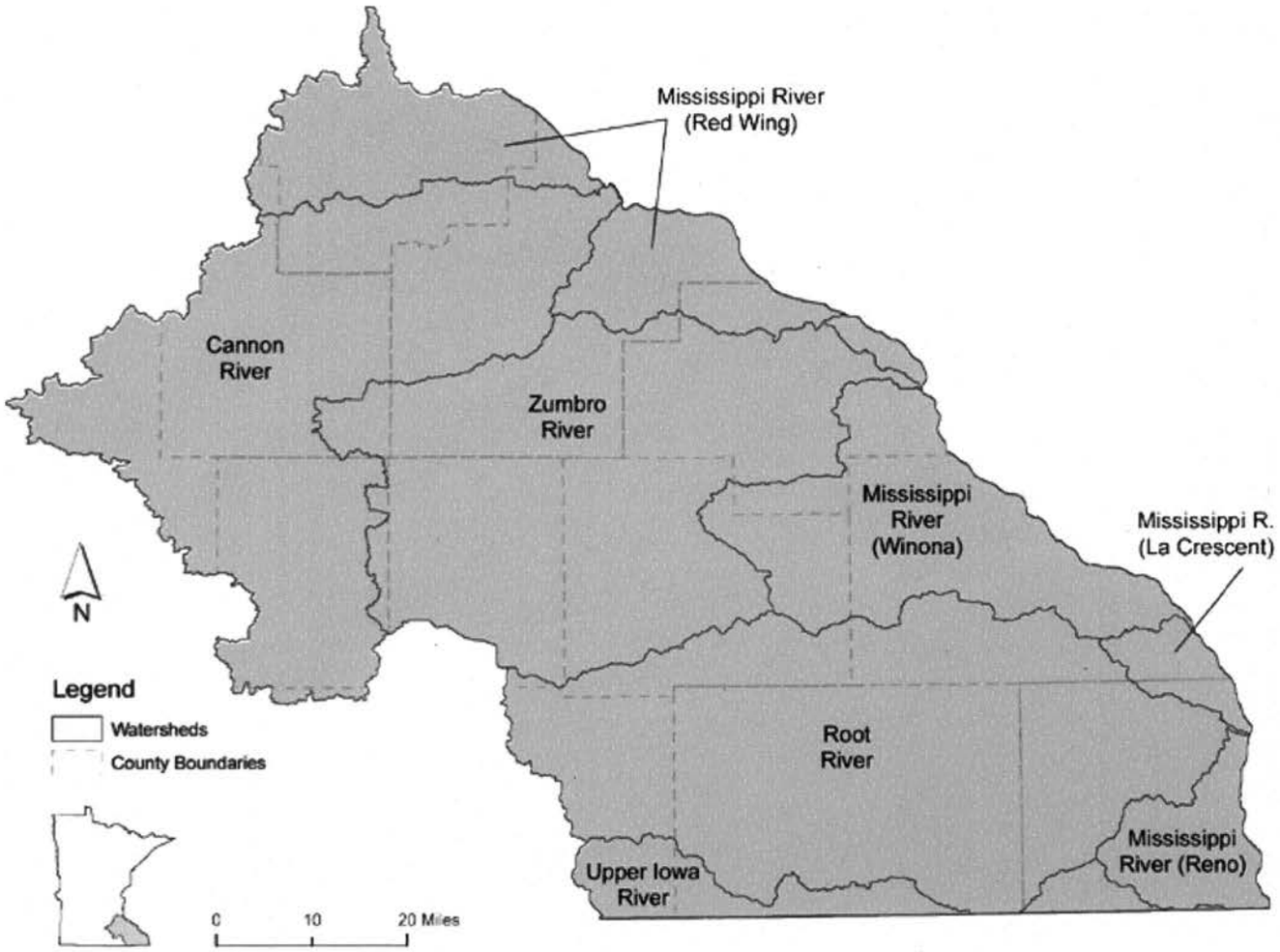
Purpose: Monitor, model and develop land use data to identify potential pollutants in order to develop a total maximum daily load for impaired biota and temperature.

Lower Mississippi River Basin

The Lower Mississippi River Basin, which includes the Cedar River Basin, is located in southeastern Minnesota. It includes all or part of 17 counties and has 12 major watersheds covering about 7,266 square miles.

Projects completed

- Byllesby reservoir phosphorus TMDL project
- Cannon River Watershed Partnership
- Improved livestock management in riparian areas
- Reduction of fecal coliform bacteria from human sources TMDL implementation project
- Straight River fecal coliform reduction project
- Whitewater Watershed paired watershed monitoring project



Byllesby reservoir phosphorus TMDL project

Lake Byllesby was placed on Minnesota's 303(d) impaired waters list in 2002 due to excessive nutrient (phosphorus) levels. In early 2004, a TMDL study was initiated. The project included extensive data analysis, particularly of flow records for the Cannon and Straight rivers upstream of Lake Byllesby, for the North American Hydro dam that creates the lake, and for the USGS gaging station at Welch downstream on the Cannon River. A thorough understanding of flow was critical for TMDL work on a reservoir system such as Lake Byllesby. The project also included in-lake and inflow water chemistry monitoring, many stakeholders meetings, and an extensive public education campaign. The project was led by the Cannon River Watershed Partnership, with substantial support from state agencies and local units of government.

Goals for this project

- To complete a TMDL study of sufficient quality to be fully supported by stakeholders, and approvable by US EPA.
- To involve stakeholders in a way that they will actively participate in the implementation activities ultimately developed from the TMDL study.
- To provide public education in a manner that would bolster the implementation efforts developed from the TMDL study.

Results that count

- A draft TMDL study and substantial supporting materials were completed. Minnesota Pollution Control Agency staff is finalizing the TMDL study.
- Stakeholders were involved throughout the project. This involvement is well documented as part of the project report.
- A range of public education formats and venues were used to provide clear information to the primary problems, and the solutions necessary to improve the lake. The public education is well documented in the project report.

Financial information

Funding type	Section 319
Grant amount	$63,500
Matching funds and in-kind	$45,190
Total project cost	$108,690

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Cannon River Watershed Partnership

In April 2006, the US EPA approved the MPCA revision of the Lower Mississippi River Fecal Coliform TMDL. As a result, the existing implementation plan for this TMDL also needed to be revised. The MPCA contracted with the Cannon River Watershed Partnership (CRWP) to draft this revised implementation plan. Work on the project took place from December 2006 through February 2007. The implementation plan contains a review of projects and activities that have taken place since the original TMDL and implementation plan were put in place four years ago and lists the many new projects that were funded in 2007 with funds from the Clean Water Legacy Act. The degree of impairment of the reaches and source reduction required per reach were estimated by comparison with other reaches in the Basin. The pollutant source categories were reviewed, and reduction strategies and critical areas were discussed. A section on monitoring summarizes some existing work and gives suggestions for additional work needed. The document concludes with a discussion of coordination of activities and the concept of a small watershed scale approach.

Goals for this project

- The goal of this project was to revise the Fecal Coliform Bacteria Implementation Plan for the Lower Mississippi River Basin.

Results that count

- Input was gathered from stakeholders.
- A draft of the document was sent out to these stakeholders for review and comment prior to submittal to the MPCA.
- CRWP and MPCA staff worked together to develop the degree of impairment and source reduction information.
- A final document was created.

Financial information

Funding type	Water Environmental Fund
Grant amount	$4,790.95
Matching funds and in-kind	$2,471.25
Total project cost	$7,262.20

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Improved livestock management in riparian areas

This project, led by the Minnesota Department of Agriculture, was part of a basin-wide response to the findings of the Regional Total Maximum Daily Load (TMDL) study which identified the streams of the Lower Mississippi River Basin in Minnesota as posing a risk of human illness from excessive levels of fecal coliform bacteria. This study identified the need for a 65 percent reduction in sources of fecal coliform in order to achieve major progress toward achievement of the fecal coliform water quality standards in streams and rivers of the basin.

Monitoring set-up to capture pasture runoff.

This project focused on improved management of cattle in sensitive environmental areas—especially stream corridors. Improved management of livestock in sensitive areas could be a critical practice for making the necessary reductions in fecal coliform concentrations in the waters, as cattle are particularly prominent in this part of the basin. The project included demonstration sites, field days, on-farm water monitoring, economic analysis, and the development and distribution of educational materials.

Goals for this project

- Develop grazing demonstration sites.
- Establish on-farm water monitoring at multiple sites.
- Conduct outreach and education based on results of performance of grazing BMPs, water monitoring, and economic analysis.

Results that count

- Improved grazing practice demonstrations were developed for 5 farms.
- Water monitoring systems were installed at 4 farms sites; the monitoring is continuing beyond the term of this grant.
- In addition to several successful field days, a manual entitled "Managed Grazing in Stream Corridors" was published and can be found at: www.mda.state.mn.us.

Financial information

Funding type	Section 319
Grant amount	$185,000
Matching funds and in-kind	$215,129
Total project cost	$400,129

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Reduction of fecal coliform bacteria from human sources TMDL implementation project

The project built on the wastewater treatment projects already underway in the region by addressing remaining obstacles to the development of wastewater treatment solutions for unsewered communities and individual residents. This proposal provided incentives to communities to solve their wastewater treatment problems by offering a 1:1 match for the funding necessary to conduct both an initial needs assessment and an engineering feasibility study.

A second component of this proposal was to enable counties to improve the level of oversight of existing Individual Sewage Treatment Systems (ISTS) by creating record-keeping and communication functions between and among county staff, ISTS owners, and pumpers. This would facilitate the following operations: monitoring of performance systems and holding tanks; owner notification of the need for tank maintenance; tracking of septage disposal by pumpers; on-line permitting. Funding for this portion of the project was used to

- Assess the current management practices and needs of county ISTS programs.
- Research and evaluate the capabilities of available ISTS management programs.
- Contract for a new data management system.
- Conduct a pilot project in one county.
- Install software and provide training to county staff and service providers on use of new management programs.
- Enter backlogged ISTS data.

Goals for this project

- Provide financial assistance in the form of cost-share funding to small undersewered communities for initial needs assessments and feasibility studies.
- Obtain and implement a region wide ISTS data management system customized to each county's needs.

Results that count

- The cost-share incentives goal was met and considered highly successful. Assuming 30 homes/community averaging three persons/home, and 12 communities where most homes have no treatment or have a septic tank without subsequent treatment, then the project could achieve a phosphorous reduction of 3240 lbs/yr, a nitrogen reduction of 8910 lbs/yr, and a fecal coliform bacteria reduction of up to one billion colonies/100 ml per community.
- The goal of having all counties in the region using a single data management program was not ultimately met. The product was less than satisfactory. The internet-based program was slow to respond at first and was also more complicated than needed for permitting of standard systems. In hindsight, using the product to assess its user friendliness before signing an agreement should have been tried. However, without the program database being populated with county-specific data, it would have been difficult to assess its usability.

Financial information

Funding type	Section 319
Grant amount	$154,000
Matching funds and in-kind	$169,574
Total project cost	$323,574

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Community straight pipe into the stream at the small town of Taopi. All the systems in this town are now compliant and sewage no longer flows through this pipe.

Straight River fecal coliform reduction project

The Straight River was added to Minnesota's Impaired Waters list in 1998 due to violations of the water quality standard for fecal coliform bacteria. A TMDL study was initiated in the Straight River and later integrated with a study encompassing the entire Lower Mississippi River (in Minnesota) basin. Analysis of both the Straight River watershed and the entire basin pointed to livestock manure and inadequately functioning individual sewage treatment systems as important sources. This project, which focused on livestock manure, was led by the Cannon River Watershed Partnership, the Steele County Soil and Water Conservation District, and the Steele County Planning and Zoning and Environmental Services Offices. A companion project, addressing the individual sewage treatment systems, was led by Steele County Environmental Services.

Straight River in the City of Faribault.

Goals for this project

- Reduce fecal coliform bacteria by 20 percent in priority areas.
- 100 percent sign up in the open lot agreement.
- Install 4500 acres of buffers and filter strips.
- Manure management plans developed and implemented.

Results that count

- Water monitoring results are insufficient to make a judgment on the first goal listed above.
- The goal of 100 percent sign up for the open lot agreement was achieved for Steele County, which encompasses 80 percent of the land in the watershed.
- 1815 acres of buffers and filter strips were installed through 2006 as a result of this project. While less than half of the 4500 acre goal, it is still a substantial accomplishment.
- At the beginning of the project, 77 feedlots sites were identified that needed manure management plans. Plans were developed for these sites, plus an additional 30 smaller sites that were not required to have a plan, but will benefit from a plan.

Financial information

Funding type	Section 319
Grant amount	$256,750
Matching funds and in-kind	$359,753
Total project cost	$616,503

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MPCA project manager: Lee Ganske

Whitewater Watershed paired watershed monitoring project

The 2007 work order for the Whitewater Watershed Paired Watershed monitoring project entailed project close-out activities. These activities represented the culmination of field monitoring in a ten-year project that is a part of the US EPA Section 319 National Monitoring Program.

The Whitewater Watershed U.S. EPA Section 319 National Monitoring Program Project was developed to evaluate the effectiveness of best management practices in improving water quality. The overall project used a paired-watershed monitoring design to compare the use of BMPs in a treatment watershed versus a control watershed where no management practices were changed.

The activities were set to collect additional storm flow event samples and flow data, remove the monitoring equipment and H-flumes, and provide additional analysis of the data collected. Additional data was not collected due to the presence of drought conditions with little to no discharge from the springs in the paired-watersheds. Monitoring equipment was removed and the sites were demolished at the end of the project period. The University of Minnesota staff provided additional data analyses for use in writing the final report for the Section 319 National Monitoring Program.

As the close-out year for the project, the project goals were rather limited.

Goals for this project

- Collect additional storm event runoff samples and flow data.
- Remove monitoring equipment and H-flumes from the sites.
- Provide additional data analysis for use in NMP final report.

Results that count

- No samples were collected due to drought conditions.
- Monitoring equipment was removed and the sites were demolished at the end of the project period.
- Additional data compilation and analysis was provided for use in NMP final report to be written in 2008.

Financial information

Funding type	Section 319
Grant amount	$10,031.04
Total project cost	$10,031.04

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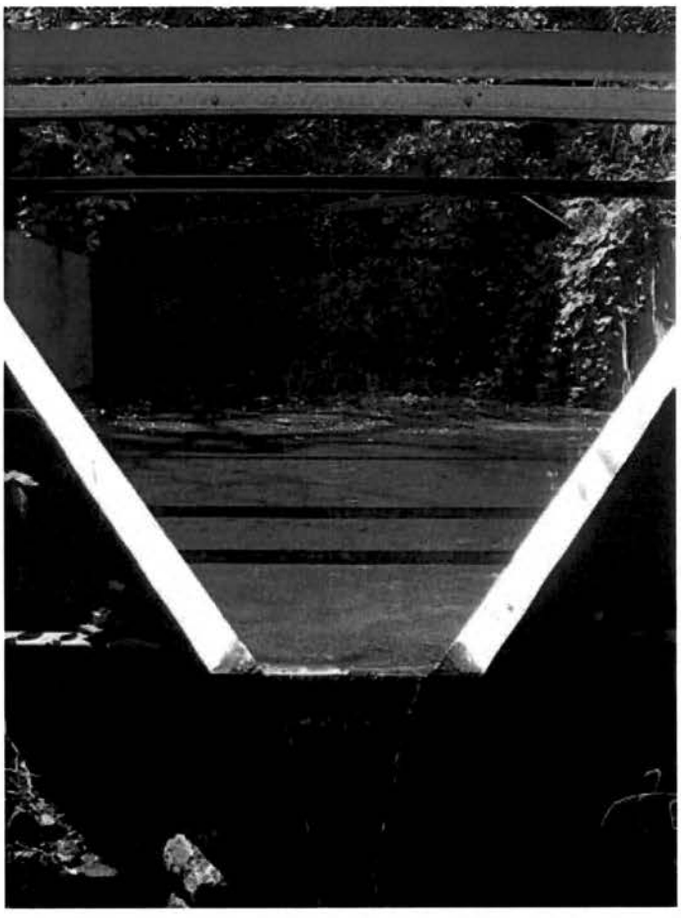


HL flume used to measure flow at paired-watershed monitoring sites, Whitewater River Watershed NMP Project, near St. Charles, MN.

Projects currently active in 2008 in the Lower Mississippi River Basin

Cannon River Wastewater project—2005

Sponsor: Cannon River Watershed Partnership

Funding: Section 319 (Grant) $300,000

Purpose: Provide financial incentives for assessment and engineering feasibility studies of current wastewater conditions.

Cost-share incentives for small feedlot fixes—2004

Sponsor: Hiawatha Valley Resource Conservation and Development Association

Funding: Section 319 (Grant) $242,000

Purpose: Provide a 50 percent cost share for feedlot fixes for 220 feedlots.

Dakota County non-point source reduction project—2004

Sponsor: Dakota County

Funding: Section 319 (Grant) $191,539

Purpose: Initiate an intensive one-on-one farmer outreach program, purchase permanent conservation easements along the Vermillion River and its tributaries; and expand water-quality monitoring of both groundwater and the Vermillion River.

Designing feedlot improvements in targeted areas under the open lot agreement—2004

Sponsor: Southeast Minnesota Water Resources Board

Funding: Section 319 (Grant) $300,000

Purpose: Provide financial and technical assistance for designing low-cost solutions for feedlot runoff

Jefferson-German Lakes water quality improvement project continuation—2004

Sponsor: Le Sueur County

Funding: CWP (Grant) $55,000; CWP (Loan) $250,000

Purpose: Upgrade best management practices for priority feedlots, devise solutions for highly erodible lands in four priority sub-watersheds, provide loan funding to upgrade nonconforming individual septic treatment systems, continue water quality monitoring/data analysis, assistance in updating the Le Sueur County water plan, planning best management practices demonstration sites and developing information materials.

Lower Mississippi feedlot runoff control—2006

Sponsor: Southeast Minnesota Water Resources Board

Funding: Section 319 (Grant) $300,000

Purpose: Hire technicians to assist eligible open livestock feedlots and provide some funds for low-cost improvements to reduce runoff.

Lower Vermillion River Watershed turbidity TMDL project—phase III—2003, 2004

Sponsor: Dakota County Soil and Water Conservation District

Funding: Section 319 (Grant) $176,128

Purpose: Complete monitoring, modeling and development of land use data to identify potential pollutants in order to develop a total maximum daily load for turbidity.

South Branch Root River Watershed fecal coliform bacteria reduction project—2004

Sponsor: Fillmore County

Funding: Section 319 (Grant) $299,420; CWP (Loan) $300,000

Purpose: Reduce fecal coliform levels by 20 percent, turbidity/total suspended solids by 10 percent, reduce harmful bacteria by 65 percent and sediments by 30 percent in southeastern rivers and stream within 10 years.

South Branch Whitewater River Watershed bacteria reduction project—2005

Sponsor: Whitewater Joint Powers Board

Funding: Section 319 (Grant) $174,660; CWP (Loan) $100,000

Purpose: Upgrade septic systems, implement best management practices to reduce bacteria runoff, complete managed grazing plans, bring feedlots into compliance with state rules, install vegetative buffers along river corridors, and provide education and outreach.

Southeast Minnesota milk house wastewater treatment demonstration—2004

Sponsor: University of Minnesota

Funding: Section 319 (Grant) $183,822

Purpose: Install different milk house wastewater handling systems on cooperating dairy farms for evaluation and demonstration. In southeastern Minnesota, different soils, karst conditions, topography and cultural practices drive the need for this type of research and demonstration.

Steele County septic system loan program—2004

Sponsor: Steele County

Funding: Section 319 (Grant) $66,000; CWP (Loan) $500,000

Purpose: Provide administrative and financial assistance low-interest loans for individual land owners to upgrade inadequate septic systems.

Targeted feedlot open lot implementation engineering assistance—2006

Sponsor: Southeast Soil and Water Conservation District Technical Support Joint Powers Board

Funding: Section 319 (Grant) $300,000

Purpose: Provide engineering technical assistance and work with producers who sign up for the open lot agreement.

Vermillion River and Chub Creek ISTS inspection and upgrade program—2006

Sponsor: Dakota County

Funding: Section 319 (Grant) $160,500

Purpose: Inspect individual sewage treatment systems near streams, provide incentives for improvements.

Volunteer nitrate monitoring network in target areas demonstration—2005

Sponsor: Southeast Minnesota Water Resources Board

Funding: Section 319 (Grant) $275,000

Purpose: Develop and test a process for obtaining long-term trend data for nitrate occurrence in private drinking water supplies by training homeowners to sample for nitrates and ship their samples to specified county locations.

Lower Mississippi River Basin projects awarded in 2008

Section 319 projects

Assistance for unsewered communities in the Lower Mississippi/Cedar River Basin

Sponsor: Southeast Minnesota Water Resources Board

Funding: 319 (Grant) $272,080

Purpose: This project will be implemented within the boundaries of the thirteen counties in the basin. The regional TMDL study identified streams in the basin posing a risk of human illness from excessive levels of fecal coliform bacteria. This study also found that failing septic systems and unsewered communities comprised an estimated 52% of the bacteria load during spring and summer, making it the single greatest pollutant source. In order to achieve a 65% reduction of this load by 2012, this project will assist those small communities with expertise and resources needed to achieve a wastewater solution.

Steele County septic system loan program continuation (Lower Mississippi River)

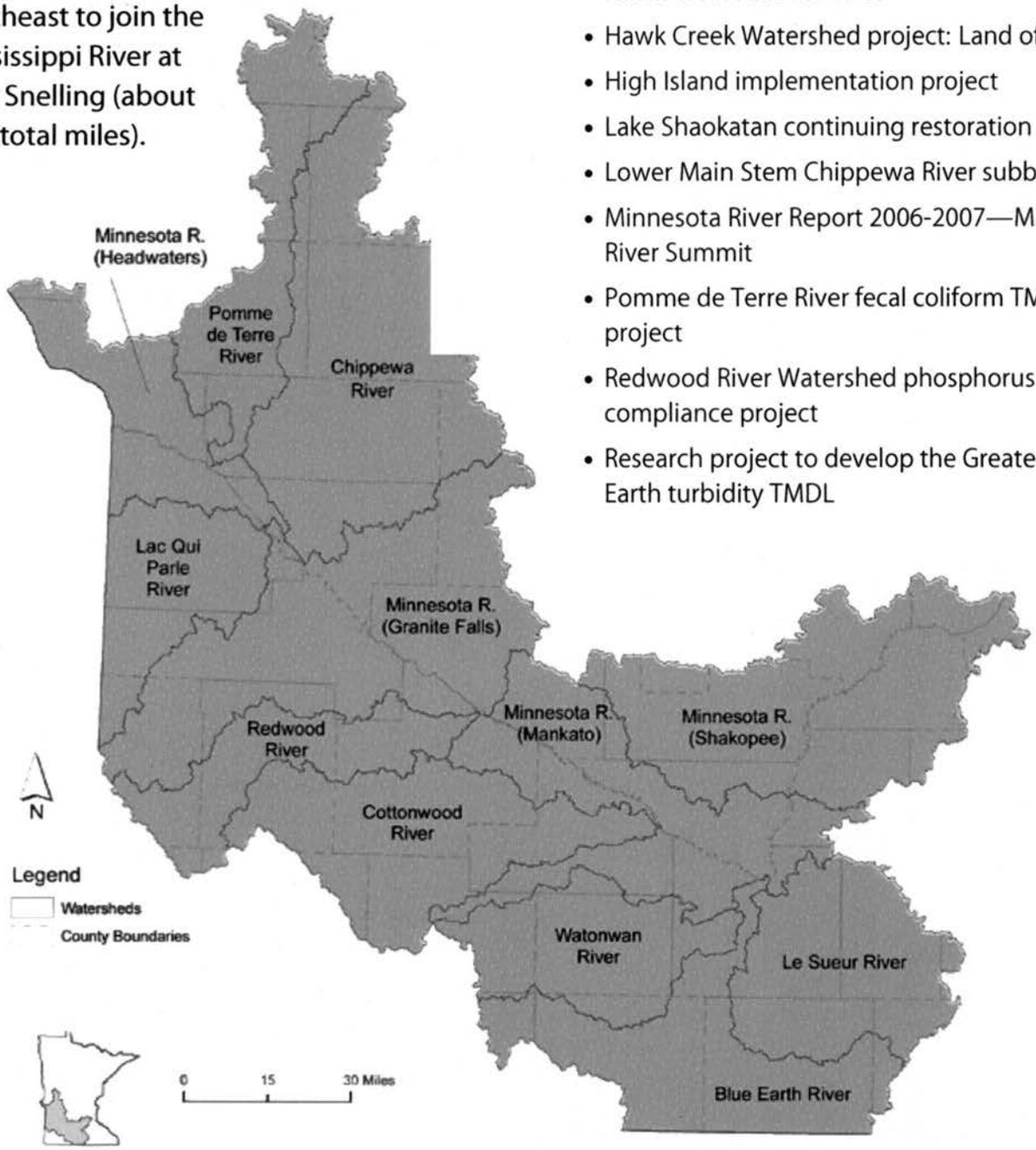
Sponsor: Steel County

Award: CWP (Loan) $1,000,000

Steele County is continuing its septic system loan program that began in 2004. Landowners with failing or noncomplying septic systems are eligible for the loan program and may use the loan to replace existing septic systems that are contributing to fecal coliform pollution in the Straight River watershed, which has completed a TMDL study.

Minnesota River Basin

The Minnesota River Basin covers approximately 16,770 square miles, roughly 10 million acres. Thirteen major watersheds in Minnesota drain into the basin, which touches 37 counties. The Minnesota River flows southeast from its source at Big Stone Lake on the South Dakota border to Mankato then northeast to join the Mississippi River at Fort Snelling (about 335 total miles).



Projects completed

- Chippewa County Watershed continuation
- Cottonwood River restoration project-continuation
- Cottonwood River restoration project BMP implementation continuation
- Hawk Creek: Beaver Tales
- Hawk Creek Watershed project: Land of the Lost
- High Island implementation project
- Lake Shaokatan continuing restoration project
- Lower Main Stem Chippewa River subbasin
- Minnesota River Report 2006-2007—Minnesota River Summit
- Pomme de Terre River fecal coliform TMDL project
- Redwood River Watershed phosphorus TMDL compliance project
- Research project to develop the Greater Blue Earth turbidity TMDL

Chippewa River Watershed project continuation

This continuation phase of the Chippewa River Watershed Project (CRWP) was designed to enable the CRWP to continue the water quality/quantity monitoring program, the education and information program, coordination of the entire watershed and to seek funds for implementation of best management practices. One intent of the continuation project is to educate and raise awareness on the state of the Chippewa River with the data from the CRWP's ongoing water quality/quantity monitoring program and most importantly, present landowners with solutions they can implement to enhance the water quality.

The Chippewa River carries high sediment and phosphorus loads during the growing seasons as a result of rainfall-driven polluted runoff that occurs throughout most of the watershed. The entire length of the river exceeds the fecal coliform bacteria standard and is listed on the impaired waters list along with a turbidity impairment. The size of the watershed, non point source pollution being a principal determinant of water quality, and non point source pollution being dispersed, there is a substantial increase in the difficulty of achieving quick, measurable results. With the immense size of the watershed, the decision was made to apply for implementation funds for each priority management area separately over the next six years, which was a success.

Goals for this project

- Obtain funding for the six priority management areas defined in the implementation plan.
- Provide for continued water quality/quantity monitoring program.
- Engage in public outreach and education which includes recruitment and retainment of the citizen monitor network.

Results that count

- All six priority areas received funding for implementing BMPs according to the Implementation Plan. At the close of this project, 11 projects were funded with each priority area receiving at least one grant.
- The data collected with the continued monitoring of water quality/quantity can be viewed in three reports that resulted from this project. These reports include: "2004 Chippewa River Watershed Project Monitoring Report – Cleaning Up the Chippewa One Day At A Time", "2005 Chippewa River Watershed Project Monitoring Report – Watching The Chippewa Wash Away One Day At A Time", and "2006 Chippewa River Watershed Project Monitoring Report – Following the Remarkable Journey of the Chippewa River."
- There were many events that took place during this project that reach many citizens within the watershed. These events include: conservation field days, water festivals, three CRWP annual meetings and information presented at nine county fairs. The citizen monitor network recruited and retained 11 volunteers in 2005 and 2006 that collected transparency tube data.

Chippewa River Watershed project annual meeting, watershed residents and partners' displays.

Financial information

Funding type	CWP
Grant amount	$279,210.79
Matching funds and in-kind	$719,187.00
Total project cost	$998,397.79

Contact

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Cottonwood River restoration continuation project

The Cottonwood River carries high sediment and phosphorus loads during the growing season. This is predominantly the result of rainfall-driven polluted runoff that occurs throughout most of the watershed. The lower reach is affected by bacteria, exceeding the fecal coliform standard, and is subject to a total maximum daily load (TMDL) study in the next few years. The usefulness and aesthetic qualities of the river are impaired, and conditions are unlikely to improve unless changes are made in land use and water management practices within the watershed. These changes can be accomplished through an implementation plan that reflects real problems occurring on the landscape, and clearly identifies solutions to those problems while developing and organizing sufficient resources to attain meaningful and effective solutions.

The purpose of the implementation phase of the Cottonwood River restoration project is to facilitate watershed land-use changes that will lead to reductions necessary to meet both main stem and tributary goals. An important aspect of BMP promotion and adoption is targeting. Priority management areas have been selected in the watershed based on their relative contribution of non-point source pollution. Within each priority area, appropriate BMPs are promoted to achieve the greatest benefit. To help insure the most cost-effective use of cost-share funds and to compensate for decreases in state funding levels, practices within designated priority areas are subjected to a ranking procedure. The criteria upon which each practice is evaluated reflect important variables affecting surface water quality (e.g., proximity, soil loss reduction, etc.) and are consistent with Project goals and objectives.

Goals for this project

- To achieve the highest water quality attainable for ecoregion streams.
- To have watershed residents take an active role in enhancing and protecting the Cottonwood River.
- To develop the Cottonwood River as a major recreational resource within the Minnesota River Basin.

Results that count

- Twenty-five various best management practices were installed in the Cottonwood River Watershed to reduce direct sediment and phosphorus delivery to the Cottonwood River and its receiving tributaries. These BMPs have the potential to reduce phosphorus losses by 7,813.42 pounds per year and reduce net sediment in surface water by 6,790.45 tons per year.
- During the project, RCRCA conducted numerous outreach events which allowed for 2,658 individual contacts with an additional 19 watershed wide events through the media. This program has effectively increased watershed awareness and has accelerated BMP implementation either through individual participation in the project's cost share program or landowner usage of the federal funding and state cost-share funding programs.

Financial information

Funding type	CWP
Grant amount	$500,000
Matching funds and in-kind	$500,000
Total project cost	$1,000,000

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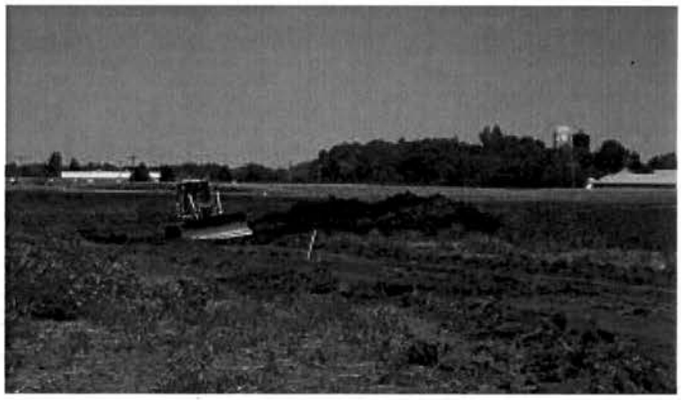
Cottonwood River restoration project BMP implementation continuation

The implementation plan for the Cottonwood River Watershed acknowledges the complex nature of non-point source pollution and the central role played by watershed residents in achieving water quality improvements. It is based, in part, on experiences gained through the Redwood River Clean Water Project. The Redwood River Project emphasizes best management practices (BMPs) on agricultural land supported by an information and education program that uses a variety of techniques to achieve participation. Because the Cottonwood Watershed is very similar to the Redwood Watershed in terms of land use, topography, soils, and climate, it is likely that the successfully applied accelerated BMP program in the Redwood Watershed will also be successful in the Cottonwood Watershed.

The purpose of the implementation phase of the Cottonwood River restoration project is to facilitate watershed land-use changes that will lead to reductions necessary to meet both main stem and tributary goals. An important aspect of BMP promotion and adoption is targeting. Priority management areas have been selected in the watershed based on their relative contribution of non-point source pollution. Within each priority area, appropriate BMPs are promoted to achieve the greatest benefit. To help insure the most cost-effective use of cost-share funds and to compensate for decreases in state funding levels, practices within designated priority areas are subjected to a ranking procedure. The criteria upon which each practice is evaluated reflect important variables affecting surface water quality (e.g., proximity, soil loss reduction, etc.) and are consistent with project goals and objectives.

Goals for this project

- To achieve the highest water quality attainable for ecoregion streams.
- To have watershed residents take an active role in enhancing and protecting the Cottonwood River;
- To develop the Cottonwood River as a major recreational resource within the Minnesota River Basin.



Results that count

- Implemented BMP contracts consisting of 25 various BMPs in the Cottonwood River Watershed to reduce direct sediment and phosphorus delivery to the Cottonwood River. These projects have the potential to reduce phosphorus losses by 7,813.42 pounds per year and reduce net sediment in surface water by 6,790.45 tons per year.
- Joint Power Member, Lyon County, participating in the Project's low interest loan program, implemented 26 septic loan systems or 88 bedrooms of a maximum 2 person occupancy. These systems have the ability to reduce phosphorus loading by 10.84 tons over their 30-year lifespan or 8,627,400.00 pounds of algae reduction.
- Over 13,760.72 acres of watershed have been enrolled into CREP and permanently set aside by watershed landowners who were assisted by partner Soil and Water Conservation Districts. For more information, go to www.rcrca.com.

Financial information

Funding type	CWP
Grant amount	$161,942
Matching funds and in-kind	$343,553
Total project cost	$505,495

Contact

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Hawk Creek Watershed project—"Beaver Tales"

The Hawk Creek Watershed drains 623,424 acres (974 square miles) of land. It is unique among the other major watersheds of the Minnesota River in that it is comprised of a main tributary (Hawk Creek) and several other streams that flow directly into the Minnesota River. Hawk Creek originates in the lakes region of Kandiyohi County and flows approximately 65 miles to the Minnesota River. The 'Beaver Tales' project area comprises approximately 122,302 acres and over 161 miles of water courses. Beaver Creek and similar tributaries can play a significant role in determining the health of the Minnesota River.

Agriculture with extensive drainage is the primary land use. It is estimated that nearly 98 percent of the original wetlands in the watershed have been drained to increase agricultural opportunities. Corn, soybeans and sugar beets are the primary crops. Livestock production includes dairy, beef, swine, and poultry. A diagnostic study found sediment and nutrients well over the 50th percentile of the Western Corn Belt Plains Eco-Region.

Goals for this project

- The ultimate goal of the Hawk Creek Watershed Project is to implement land use changes that will improve the water quality and quantity issues in the watershed while also promoting a healthy agricultural, industrial, and recreation based economy for the region.

Results that count

- 23 Buffer Strips installed affecting 121.7 acres.
- Two side inlet/drop inlets installed affecting 54.5 acres.
- Four alternative surface drainage systems intakes and tile intake protection projects were installed affecting 21 acres.
- Eight projects with 21 individual sediment basins were installed affecting 196.2 acres.
- Six additional BMPs were installed affecting 1,319 acres.
- BMPs provide estimated soil loss reductions of 704.96 tons/yr. and reduced phosphorus loading by 560.83 lbs./yr.

Financial information

Funding type	Section 319
Grant amount	$174,137
Matching funds and in-kind	$517,008
Total project cost	$691,145

Contact

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Hawk Creek "Land of the Lost" watershed project

The Hawk Creek Watershed drains 623,424 acres (974 square miles) of land. It is unique among the other major watersheds of the Minnesota River in that it is comprised of a main tributary (Hawk Creek) and several other streams that flow directly into the Minnesota River. Hawk Creek originates in the lakes region of Kandiyohi County and flows approximately 65 miles to the Minnesota River. The 'Land of the Lost' project has 25 small streams in the Hawk Creek Watershed Project area comprising of approximately 197,765 acres and over 191 miles of watercourses. They include Smith, Middle, Timms, Sacred Heart, Palmer, Brafees, Three-mile Creeks and several unnamed natural streams some of which are county ditches. These tributaries are often forgotten about but play a significant role in determining the health of the Minnesota River.

Agriculture with extensive drainage is the primary land use. It is estimated that nearly 98 percent of the original wetlands in the watershed have been drained to increase agricultural opportunities. Corn, soybeans and sugar beets are the primary crops. Livestock production includes dairy, beef, swine, and poultry. A diagnostic study found sediment and nutrients well over the 50th percentile of the Western Corn Belt Plains Eco-Region.

Twenty-two cities, towns and small villages are found in the Hawk Creek Watershed. Six major recreational lakes also lie within its borders, including significant waters such as Eagle, Long, Foot and Willmar. Additionally, several County/Regional parks and more than 15 State Wildlife Management areas dot the watershed's landscape.

Goals for this project

- The ultimate goal of the Hawk Creek Watershed Project is to implement land use changes that will improve the water quality and quantity issues in the watershed while also promoting a healthy agricultural, industrial, and recreation based economy for the region.

Results that count

- Sediment and nutrient loss continue to be a major concern in the watershed. Since this project began in 2002 a total of 86 BMPs were installed affecting 1,627.1 acres. BMPs provide estimated soil loss reductions of 1192.63 tons/yr. and reduced phosphorus loading by 1484.89 lbs./yr.
- 12 Buffer Strips installed affecting 178.2 acres.
- 22 side inlet/drop inlets installed affecting 257.1 acres.
- 39 Alternative intakes and tile intake protection projects were installed affecting 219.2 acres.
- 13 Additional BMPs were installed affecting 972.6 acres.

Financial information

Funding type	Section 319
Grant amount	$169,680
Matching funds and in-kind	$374,756
Total project cost	$544,436

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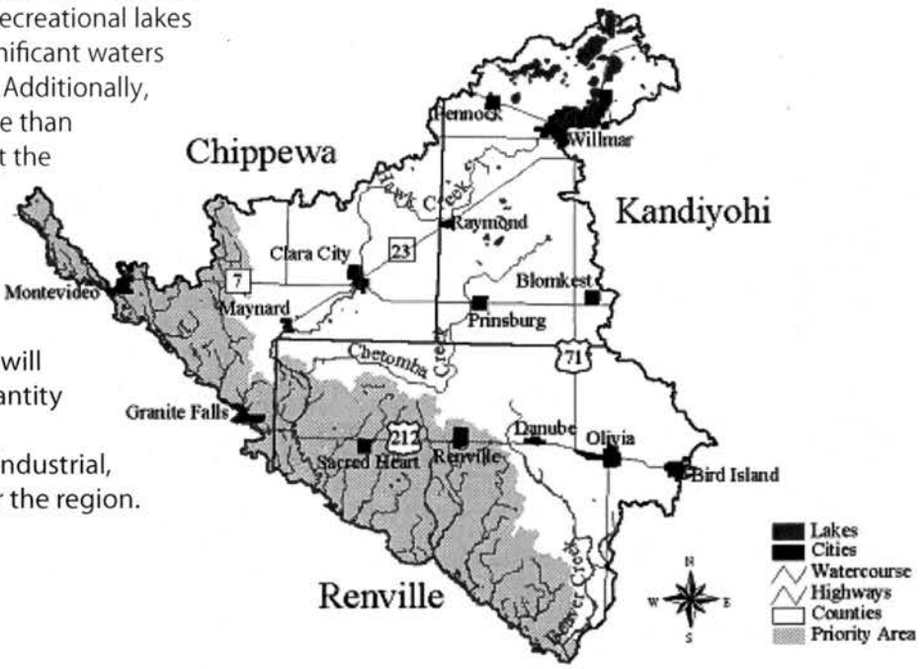

High Island Creek implementation project

A rain garden in New Auburn.

The High Island Creek Watershed is located in south central Minnesota and is part of the Lower Minnesota Watershed. The state of water quality in the High Island Creek Watershed is characterized by high levels of fecal coliform bacteria, total phosphorus, nitrate-nitrite nitrogen, and total suspended solids. Excessive peak flows are also a major concern. Severe down-cutting has taken place in the steep bluff areas perhaps resulting from hydrologic alterations in the uplands. Stream bank erosion along the ditch network and natural stream sections is another potential problem for water quality.

An implementation plan was initiated to provide cost-share and incentive funds for landowners to put conservation practices on the ground. A fecal coliform bacteria Total Maximum Daily Load (TMDL) study was conducted in partnership with the Water Resources Center at Minnesota State University Mankato.

Goals for this project

- To increase adoption of BMPs in the watershed.
- To achieve compliance with the water quality standard for fecal coliform bacteria.
- To increase awareness and adoption of BMPs throughout High Island Creek Watershed through education and information.

Results that count

- Many BMPs were adopted in the watershed, including slotted risers, rock tile intakes, grade stabilization structures, water/sediment control basins, terrace projects, cover crops, wetland restorations, filter strips, rain gardens and septic upgrades.
- Though local reductions in sediment, nutrients and bacteria may have been achieved, watershed scale reductions would require much broader adoption of best management practices. The High Island Creek Implementation Continuation CWP will strive to establish conservation practices sufficient to make watershed scale improvements to water quality.
- Education and information based activities were utilized to increase awareness and adoption of best management practices throughout High Island Creek Watershed including: two small-group manure and nutrient management planning workshops; quarterly distributed watershed newsletter (14 issues); three fecal coliform bacteria TMDL open houses; public survey for fecal coliform TMDL and many others.

Financial information

Funding type	Section 319 & MN River
Grant amount	$261,474
Matching funds and in-kind	$571,695
Total project cost	$833,169

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Lake Shaokatan continuing restoration project—CWP continuation

Lake Shaokatan, located in west central Lincoln County, has a watershed area of 8,400 acres in size, a lake surface of 1,018 acres, an average depth of eight feet and a maximum depth of 12 feet. Historically, the lake once was home to Indian encampments.

The total funding received from MPCA CWP grants and loans provided for a large improvement in water quality in Lake Shaokatan. The major proof for this is the resurgence of native plant populations in the lake. Native plants that are increasing in frequency are Sago Pondweed and Richardson's Clasping Leaf Pondweed along with more cattail and coontail. This is a positive sign of a healthier lake.

Since the project began, much local interest in the lake water quality improvement has arisen and several economic benefits have resulted, including the re-opening of the single lake shore restaurant and resort, the creation of a beach and extended recreational facilities, and increased public recreation.

One unforeseen outcome of the Lake Shaokatan Restoration projects is a general willingness of the County Commissioners to recognize the importance and value our county lakes and waterways. They also have agreed to take steps to improve, preserve and protect our lakes and rivers in a way that did not exist in the last century.

Goals for this project

- To modify the various watershed land use practices to significantly reduce inputs to Lake Shaokatan, and show a measurable improvement to the lake water quality.
- To further remove possible sources of pollution to the lake by upgrading the tile lines and septic systems within the entire watershed.

Results that count

- Re-routed and relocated a large 12" tile line that outletted directly into the lake. This tile line carried runoff for the land around a nearby dairy, which was a major contributor of phosphorus to the lake. This tile line relocation reduces phosphorus and treats the water outletting from the tile to the Lake.
- Removal and replacement of surface intakes on tile lines that outletted into the lake.
- Using CWP loan funds, 4 additional septic systems were upgraded around the Lake. This brings the total number of upgraded systems around the lake to 34. This makes about 69 percent of the existing systems compliant.

Financial information

Funding type	CWP
Grant amount	$45,000.00
Matching funds and in-kind	$67,533.00
Total project cost	$112,533.00

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Lower Main Stem Chippewa River subbasin

This project was created with the goal of enhancing and protecting the Chippewa River and to achieve water quality improvements pertinent to the scheduled Total Maximum Daily Loads (TMDLs) and also targeted for pollutants to address the TMDL for dissolved oxygen on the Lower Minnesota River. The Chippewa River Watershed impairments include: fecal coliform bacteria, turbidity, excess nutrients, fish IBI and mercury. These impairments affect the uses of aquatic life, aquatic recreation, and aquatic consumption. The activities conducted through this project address all of the impairments except mercury. The Lower Main Stem Chippewa River (LMS) is one of six major sub-basins of the Chippewa River Watershed; these sub-basins were delineated as priority project areas during the diagnostic study through a previous grant.

Plans for Implementation included incentive or cost share programs for the following Best Management Practices (BMPs): buffer strip initiative, nutrient and residue management, livestock exclusion, alternative tile intakes, and special projects. Water quality and quantity monitoring were conducted and are summarized in the Chippewa River Watershed Project (CRWP) Monitoring Summary 2006, "Following the Remarkable Journey of the Chippewa River" by Paul Wymar, Watershed Scientist, CRWP. Education activities include two annual meetings reaching 230 watershed residents, participation at county fairs, bus tour of BMPs installed, canoe trip viewing streambank stabilization project with 60 residents, numerous presentations at area schools and monthly updates on the CRWP web site.

Goals for this project

- Installation of BMPs that were identified in the CRWP diagnostic study and implementation plan. A goal was set to have 425 acres in buffer strips.
- Monitor the water quality and quantity of the Lower Main Stem.
- Educate the public by holding public events and by providing information that is easily accessible.

Results that count

- From this project, 169 percent of the goal was accomplished as 720.1 acres were enrolled in to the CRP continuous sign-up program. Other BMPs that were utilized in this project were two side inlets, 900 feet of streambank stabilization, one feedlot upgrade, and six projects using stream barbs to alleviate streambank erosion.
- The 2006 monitoring data revealed that the lower channel in the Lower Main Stem subbasin was responsible for 21 percent of the Total Suspended Solids. The flow weighted mean for phosphorous at the Highway 40 monitoring site was 0.14 parts per million or 48.2 tons. The flow weighted mean for nitrogen was 3.36 parts per million or 1,121 tons.
- Annual meetings were held with approximately 230 residents attending and presentations of water monitoring results, installation of BMPs, and available BMPs to landowners were given. This information was available at the Swift and Chippewa County Fairs and also on the CRWP web site: www.chippewariver.com.

Streambank restoration Big Bend Cemetery Project, Main Stem of Chippewa River.

Financial information

Funding type	Section 319
Grant amount	$170,860
Matching funds and in-kind	$353,932
Total project cost	$524,792

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Minnesota River Report—2006–07 and Minnesota River Summit

Minnesota State University and partners developed a State of the Minnesota River Report using water quality and flow data from 2000 – 2005. Data from thirty-two monitoring sites over a six year period were used to present levels of sediment, nitrogen and phosphorus.

The Minnesota River Summit was a gathering of 180 people representing various sectors from the Minnesota River Basin. They convened to celebrate success and to determine the next steps. Issues of importance identified at the event were the impact of hydrology, population changes, and energy issues on the Minnesota River and the need for communication.

Goals for this project

- Summarize water quality data.
- Celebrate success.
- Identify high leverage activities.

Results that count

- Identified the need for an ongoing dialogue.
- Identified high priority issues.
- Identified the need to see the Minnesota River as a system.

Financial information

Funding type Minnesota River Funding
Grant amount $57,372

Contact

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MPCA project manager: Larry Gunderson

Pomme de Terre River fecal coliform TMDL project

This project was funded for the development of a TMDL for one reach within the Pomme de Terre River that was placed on Minnesota's Impaired Waters list in 1994. This reach is from Muddy Creek to Marsh Lake, where the Pomme de Terre enters the Minnesota River and was found to have an excess amount of fecal coliform bacteria. The project was scheduled to begin in 2006 and be completed in 2010. A local group, the Pomme de Terre River Association, was ready to begin work in 2005 which allowed for an early completion of a TMDL report. A TMDL Report was approved by the US EPA in December of 2007. An implementation plan is under development through another grant which will use a watershed wide approach.

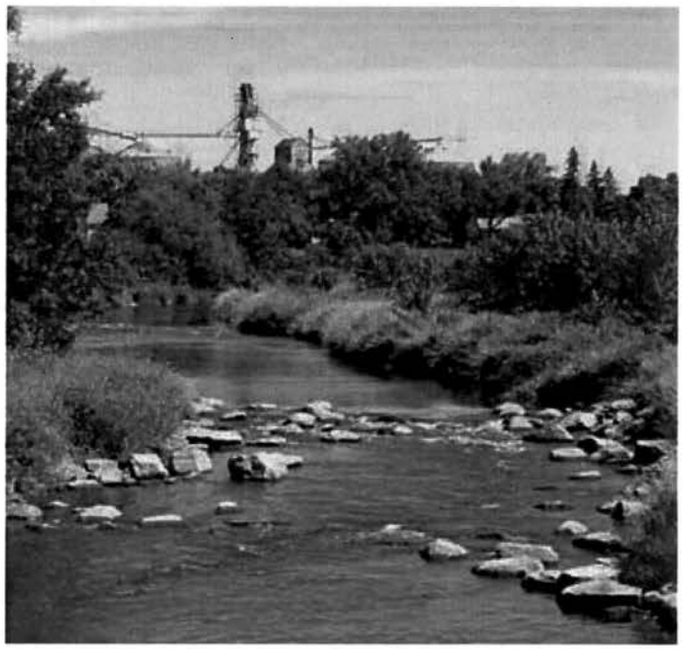
The Pomme de Terre River is located in western Minnesota in the upper Minnesota River Basin. The watershed consists of approximately 905 square miles and is largely rural with cultivation as the major land use. Data has been found on the impaired reach dating back to 1971 at a sampling site in Appleton, Minnesota and further data sampling occurred through 2004.

Goals for this project

- Determine the sources of fecal coliform throughout the Pomme de Terre River watershed and specifically in the listed reach. These sources include agricultural runoff, urban runoff, wastewater treatment facilities, and individual sewer treatment systems.
- Determine the loading capacity for fecal coliform through modeling. Determine the allocations for the load, wasteload, and margin of safety.
- Educate the public about the fecal coliform impairment and also to involve the public in the process.

Results that count

- The sources of fecal coliform were largely from non point sources, mainly agricultural runoff. Wastewater Treatment Facilities and urban runoff were found to be a small percentage of the fecal coliform source.
- The load duration curve produced a loading capacity for five flow regimes: high, moist, mid, dry, and low, with the highest loading capacity at high flows and the lowest at low flows. Table 5.21D in the TMDL Report lists the actual loading capacities and allocations.
- A web site was developed for the Pomme de Terre River watershed, www.pdtriver.org, which contains information about the history, characteristics, monitoring, and events in and along the river. Citizens were also involved with a canoe trip and a public meeting where they were given the opportunity to be part of the stakeholder committee for the implementation plan.



Upstream of the footbridge in Appleton, MN. The data used in this project was collected at this site.

Financial information

Funding type	319 & Water Environmental Fund
Grant amount	$48,443
Matching funds and in-kind	$29,011
Total project cost	$77,454

Contact

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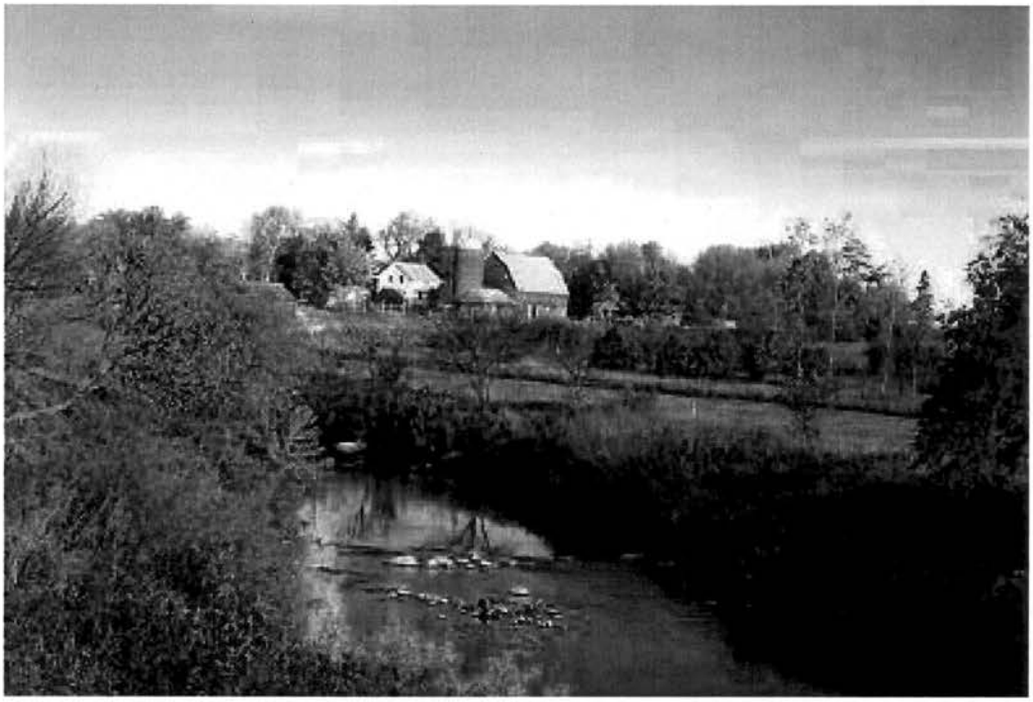
MPCA project manager: Katherine Pekarek-Scott

Redwood River Watershed phosphorous TMDL compliance project



The Redwood River Watershed phosphorous TMDL compliance project implemented contracts consisting of 67 various best management practices in the Redwood River Watershed to reduce direct sediment and phosphorus delivery to the Redwood River. These projects have the potential to reduce phosphorus losses by 4,133 pounds per year and reduce net sediment in surface water by 2,731.20 tons per year. Over the ten year life expectancy of each BMP, a potential reduction of 20.67 tons of phosphorus or 16,533,200 pounds of algae is possible.

Participating counties in the project's low interest loan program implemented 66 septic loan systems with grants and loans from MPCA. These systems have the potential to reduce phosphorus loading by 40.60 tons over their 30-year lifespan or 32,521,500 pounds of algae reduction.

Major land use changes made by this project come from the treatment of gullies with a structural practice and requiring mulch tillage in the contributing watershed. In addition, over 7,000 acres of watershed have been enrolled into CREP and permanently set aside by watershed landowners who were assisted by partner Soil and Water Conservation Districts.

Goals for this project

- The goal of this project is to work to de-list the Lower Minnesota River phosphorus TMDL.

Results that count

- Public participation was very good with the project. On average the project made 974 one on one watershed resident contacts per year with 5 watershed wide media events via newspaper and radio.
- Total annual loads of Total Suspended Solids and Total phosphorus have dropped over the past several years.

Financial information

Funding type	Section 319
Grant amount	290,000
Matching funds and in-kind	290,000
Total Project Cost	580,000

Contact

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MPCA project manager: Mark Hanson

Research project to develop the Greater Blue Earth turbidity TMDL

The Blue Earth River (BER) basin is a major contributor of sediment and nutrients to the Minnesota River. The BER and its tributaries (including Elm Creek) are on the 303(d) list for turbidity. Historic Clean Water Partnership work in Martin County provided a framework for constructing wetland-complex treatment systems and a monitoring program to evaluate the effectiveness of the integrated land use approach in the headwaters of Elm Creek. Martin County SWCD in concert with local land owners converted over 450 acres of row crops into perennial vegetated cover over several years. Because Elm Creek was listed for turbidity, longitudinal water quality data was collected at 10 locations from the headwaters to the mouth.

Inflow from corn-soybean fields was compared with outflow from restored wetland-perennial vegetation complexes; flashy surface runoff into a wetland-complex carried high concentrations of sediment and Phosphorous (P). In-stream sampling showed that suspended volatile solids (SVS) contributes to turbidity in channel reaches receiving inflow from eutrophic lakes; SVS comprised 14-100 percent of TSS in channels and lake outlets.

Turbidity increased non-linearly downstream, dramatically increasing midway down elm creek. Increasing stream power and entrenchment with excess sediment supply promoted high turbidity levels in lower elm creek. Widespread channel instability was characterized by frequent mass-wasting, channel entrenchment and lateral migration rates up to 5.6 ft/year. Fine-grained sediment (median depth 1-3 ft) was stored in headwater ditches, lakes and wetlands, with significantly less sediment accumulation in lower reaches, in opposition to the usual trend of sediment fining downstream. Land-use, drainage alterations and channel adjustment are integrally linked and will need to be addressed in the TMDL load allocation.

Goals for this project

- Investigated the sources, movement and storage of sediment and nutrients from subwatersheds and channels of Elm Creek.
- Evaluate the effectiveness of wetland-complexes in reducing NPS pollutants.
- Define the relative influence of SVS within TSS of Elm Creek.

Results that count

- Subsurface tile-flow from croplands carried 75-90% of flow volume into the wetland, with NO3-N concentrations of 17 - 19 mg/l.
- The wetland complexes reduced peak flows and annual TSS loads by over 90% and reduced out-flowing NO3-N to zero during the growing season, but were less effective at removing P due to residual nutrients in pond sediments from agriculture.
- SVS contributes to turbidity in channel reaches receiving inflow from eutrophic lakes; SVS comprised 14-100% of total suspended sediment in channels and lake outlets; increasing percentage during late summer low flows.

Financial information

Funding type	
Section 319 and State Match to Section 319	
Grant amount	$179,726
Total project cost	$179,726

Contact

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MPCA project manager: Dr. Joe Magner

Projects currently active in 2008 in the Minnesota River Basin

Blue Earth River channel modifications and nutrients in the Blue Earth River Basin—2006

Sponsor: University of Minnesota

Funding: $296,060 Section 319 grant

Purpose: Advances the work begun by the Blue Earth River Basin Initiative to reduce levels of sediment, turbidity, and nutrients in the river to meet the goals of the Total Daily Maximum Load being developed for the basin.

Carver County turbidity and excess nutrients TMDL Project—2005

Sponsor: Carver County

Funding: Section 319 (Grant) $179,800

Purpose: Monitor, model and develop land use data to identify potential pollutants in order to develop total maximum daily loads for turbidity and excessive nutrients.

Cottonwood River Watershed phosphorus reduction project—2005

Sponsor: Redwood-Cottonwood Rivers Control Area

Funding: Section 319 (Grant) $290,000

Purpose: Upgrade septic systems, restore stream banks and create grassed waterways, terraces and sediment control basins.

Dry weather/lines/Spring Creek Sub-basin of the Chippewa River—2006

Sponsor: Chippewa County

Funding: $264,100 Section 319 grant, $300,000 CWP loan

Purpose: Reduce nutrients, sediment and bacteria through tree plantings, nutrient and residue management, alternative tile intakes, septic system improvements, and nutrient insurance.

East Branch Chippewa River implementation project continuation—2006

Sponsor: Chippewa County

Funding: $175,000 CWP grant, $135,000 loan

Purpose: Provides continued water-quality monitoring and data analysis, upgrading of individual septic systems, and cost-share or incentive programs for buffer strips, shoreline naturalization projects, livestock exclusion, nutrient management, residue management, wetland restoration, water and sediment control basins, grassed waterways, streambank restoration/erosion control, terraces, and alternative tile inlets. Education activities to heighten awareness of local water quality, pollution, and proper BMPs will continue.

Expansion of the "red top" farm demonstration Concept—2004

Sponsor: Minnesota Department of Agriculture

Funding: Section 319 (Grant) $87,000

Purpose: Obtain year-round quantification of nutrient and pesticide losses from the fields under different best management practices and scenarios.

Greater Blue Earth River Watershed BMPs focus on the Big Cobb—2006

Sponsor: Greater Blue Earth River Basin Alliance

Funding: $299,988 Section 319 grant, $100,000 loan

Purpose: Hire staff and provide cost-share for installation of conservation practices to reduce phosphorus and sediment.

Greater Yellow Medicine River phase II project continuation—2004

Sponsor: Yellow Medicine River Watershed District

Funding: CWP (Grant) $251,608; CWP (Loan) $625,000

Purpose: Continue water quality monitoring, data analysis, project administration, local education activities, and implementation of agricultural best management practices such as nutrient management, filter strip construction, conservation easements and cost-share with other conservation programs.

Hawk Creek Watershed project—2006

Sponsor: Renville County

Funding: $300,000 Section 319 grant, $900,000 loan

Purpose: Implement practices to reduce phosphorus: Promote alternative tile intakes, improve septic systems, develop ditch buffers, urban storm water management, and education.

Hawk Creek Watershed project—Hawk TMDL—2004

Sponsor: Renville County

Funding: Section 319 (Grant) $247,509

Purpose: Provide financial incentives to landowners to implement conservation practices that will reduce the impacts of non-point source water pollution on the creek.

Interpreting a century of sediment in Redwood Lake—2006

Sponsor: Redwood-Cottonwood Rivers Control Area

Funding: Section 319 (Grant) $89,140

Purpose: Redwood Lake is filled with up to 27 feet of sediment that has accumulated behind the dam in Redwood Falls, and has been proposed for dredging and restoration. This project will sample the sediment to help analyze the long-term impacts of land use on water resources.

Lac qui Parle River main stem water quality enhancement effort—2005

Sponsor: Lac qui Parle-Yellow Bank Watershed District

Funding: Section 319 (Grant) $298,000

Purpose: Implement best management practices, including upgrade of individual septic treatment systems

Lake Shaokatan TMDL project—2004

Sponsor: Yellow Medicine River Watershed District

Funding: Section 319 (Grant) $62,804

Purpose: Monitor, assess, model and develop land use data to identify potential pollutants in order to develop a total maximum daily load for excess nutrients.

Lily and Center Creeks—Blue Earth River clean water partnership—2006

Sponsor: Martin County

Funding: $450,000 CWP grant, $300,000 loan

Purpose: This continuation project expands the activities of the original Center and Lily Creeks implementation project. Two technical positions are funded to promote all the conservation programs available to the Blue Earth Watershed and will assist with cost-share programs such as grassed waterways, filter strips, sediment control basins, tile intake buffers or conversions, alternative easements, and easements through Conservation Reserve Programs and EQIP. Septic-system upgrades are another part of this project. The grant also provides funds for water-quality monitoring and data analysis to assure effectiveness of improvements and get a better understanding of nonpoint-source water pollution in the area. Education activities such as newsletters, an annual canoe trip, community education classes, the Ecology Bus, and special projects that schools provide their students will continue.

Lincoln County/Redwood River Watershed management project continuation—2005

Sponsor: Redwood-Cottonwood Rivers Control Area

Funding: CWP (Grant) $310,000; CWP (Loan) $440,000

Purpose: Continue urban and stream bank best management practices implementation, monitoring, outreach, evaluation and project administration.

Little Cottonwood River restoration project continuation—2005

Sponsor: Brown, Nicollet and Blue Earth Counties

Funding: CWP (Grant) $157,696, CWP (Loan) $150,000

Purpose: Continue funding staff positions responsible for targeting, marketing, creating relationships and enrolling environmentally sensitive agricultural lands into state and federal programs. Nutrient management demonstrations, EQIP funding for polluting feedlots, and upgrading noncompliant septic systems are also priorities for this project. Continued watershed monitoring, data analysis, maintaining an interactive watershed Web site, newsletters, and other educational efforts will round out the work of this continuation.

Lower Maple River Watershed project—2006

Sponsor: Blue Earth County

Funding: $474,100 CWP grant, $100,000 loan

Purpose: Funding for this project will be used for cost-share in installing rock inlets, grass buffers, terraces, waterways, sediment basins, harvestable buffer strips, crop residue management, nutrient management, septic-system upgrades. and other technical assistance. This grant will also fund continued water-quality monitoring, data assessment and macroinvertebrate sampling, and will continue information and education activities, especially for appropriate BMPs and education for tomorrow's water-quality stakeholders.

Rush River implementation project—2005

Sponsor: Sibley County

Funding: Section 319 (Grant) $95,440

Purpose: Complete a TMDL for fecal coliform and reduce bacteria, sediment, and nutrient levels through best management practices implementation.

Seven Mile Creek Watershed project Continuation—2005

Sponsor: Brown, Nicollet and Cottonwood Counties

Funding: CWP (Grant) $225,812; CWP (Loan) $395,000

Purpose: Continue information, education and outreach, water quality monitoring and assessment, best management practices promotion and implementation and project administration.

Seven Mile Creek glacial sediment fingerprinting—2006

Sponsor: Brown-Nicollet-Cottonwood Water Quality Board

Funding: Section 319 (Grant) $84,930

Purpose: Determine what portion of sediment and nutrient pollution in Seven Mile Creek is due to such natural processes as stream-bank erosion.

Shakopee Creek headwaters project—2004

Sponsor: Kandiyohi County

Funding: Section 319 (Grant) $217,863

Purpose: Promote conservation practices that target water-quality improvement and flood reduction through education and incentives and encourage active landowner participation in developing strategies that create a sustainable environment.

Shakopee Creek headwaters project continuation—2005

Sponsor: Kandiyohi County

Funding: CWP (Grant) $254,346; CWP (Loan) $200,000

Purpose: Continue information and education, water quality monitoring and evaluation, best management practices promotion and implementation and project administration.

Upper main stem Chippewa River implementation—2004

Sponsor: Chippewa County

Funding: Section 319 (Grant) $164,210; CWP (Loan) $200,000

Purpose: Implement a buffer strip initiative, the Filters for the Future Initiative, septic inspection fee, livestock exclusion projects, manure testing, shoreline naturalization site installation, the Alternative Tile Intake Initiative, sediment basins, terraces, wetland restoration and other best management practices.

Watonwan River major watershed implementation plan continuation – 2004

Sponsor: Watonwan County

Funding: CWP (Grant) $256,820; CWP (Loan) $500,000

Purpose: Implement agricultural best management practices for nutrient management, stream bank stabilization, channel restoration, drainage inventory, residue management, water retention, upgrade individual septic treatment systems, ongoing monitoring and data analysis and education activities.

Minnesota River Basin projects awarded in 2008

Carver, Bevens and Silver Creek fecal coliform TMDL implementation plan—phase II

Sponsor: Carver County Land and Water

Funding: Section 319 (Grant) 148,420

Purpose: To continue work begun in Phase I – including bringing into compliance up to 100 direct discharge

SSTSs, install 26 miles of buffer strips, install 80 alternative tile intakes, and write 15 manure management plans in the targeted sub-watershed areas of Carver, Bevens and Silver Creek watersheds.

Cottonwood/Redwood River project

Sponsor: Redwood-Cottonwood Rivers Control Area (RCRCA)

Award: Section 319 (Grant) $300,000

Purpose: This is a long term water quality program designed to restore the watersheds through local efforts. The overall project goals are to achieve the highest water quality attainable to eco-region streams, have watershed residents take an active role in enhancing and protecting the project area and to develop it as a major recreational resource within the Minnesota River Basin.

Hawk Creek Watershed project continuation (Minnesota River)—2008

Sponsor: Renville County

Award: CWP (Grant) $180,839

"Beaver Tales" continues to reduce erosion and nutrient loading in the Hawk Creek watershed by enrolling riparian areas into the Reinvest in Minnesota Program, improving agricultural drain-tiling systems, developing alternative tile inlet projects, installing buffer strips, supporting drainage ditch bank stabilization and implementing other priority BMPs. This project also continues water quality monitoring activities from previous projects to evaluate the effectiveness of BMPs. Educational activities include the recruitment and support of watershed assessment teams and coordination of promotional events, displays, tours and demonstrations.

Hawk Creek Watershed project continuation (Minnesota River)—2008

Sponsor: Renville County

Award: CWP (Grant) $177,437

"Land of the Lost" continues to reduce erosion and nutrient loading in the Hawk Creek watershed by enrolling riparian areas into the Reinvest in Minnesota Program, improving agricultural drain-tiling systems, developing alternative tile inlet projects, installing buffer strips, supporting drainage ditch bank stabilization and implementing other priority BMPs. This project also continues water quality monitoring activities from previous projects to evaluate the effectiveness of BMPs. Educational activities include the recruitment and support of watershed assessment teams and coordination of promotional events, displays, tours and demonstrations.

Heron Lake Watershed District: Clean Water Partnership continuation (Minnesota River)—2008

Sponsor: Heron Lake Watershed District

Award: CWP (Grant) $428,752.50

CWP (Loan) $500,000

This implementation project will continue to increase public awareness of water quality issues. The watershed district will establish cost-share, incentive, and loan programs for best management practice (BMPs) installation. Conservation tillage equipment purchases will continue. This project will control water flow in the watershed through the installation of alternative surface tile intakes and water/sediment control basins, wetland restoration, storm water retention ponds, critical area plantings, and riparian easements. The monitoring effort will ensure timely completion of the watershed treatment strategies and their effectiveness in improving the stream and lake water quality. Installation of BMPs such as filter strips and wetland restorations will provide habitat for resident and migrant wildlife species.

High Island Creek implementation project continuation (Minnesota River)—2008

Sponsor: Sibley County

Award: CWP (Grant) $500,000

CWP (Loan) $500,000 loan

This project continues activities related to the installation, planning and design of BMP's in the watershed, with funding which includes cost-share monies, incentive payments and loan dollars. This project will continue the water quality and quantity monitoring plan established during the diagnostic study. It will also include additional watershed monitoring (streambank and aquatic surveys) to further define priority areas. This project will continue activities related to education and outreach, including workshops, brochures, surveys, displays, tours, demonstrations and newsletters. This project will also

provide GIS analyses to estimate potential sediment and nutrient reductions of BMPs. Monitoring data will be evaluated to examine trends in sediment and nutrient concentrations and loads. Agricultural surveys will be utilized to evaluate the effectiveness of educational based activities. Septic system loans will be provided for systems in need of upgrade.

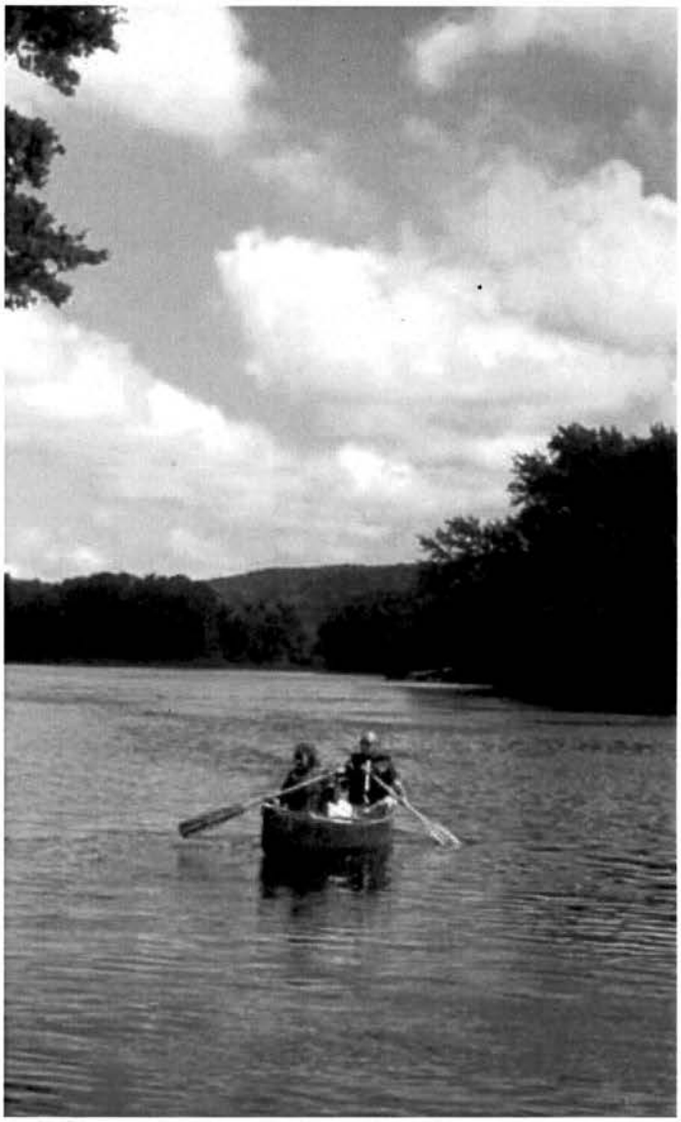
Rush Lake Watershed implementation project continuation (Minnesota River)—2008

Sponsor: Sibley County

Award: CWP (Grant)$500,000

CWP (Loan) $500,000

This project continues activities related to the installation, planning and design of BMP's in the watershed, with funding which includes cost-share monies, incentive payments and loan dollars. This project will continue the water quality and quantity monitoring plan established during the diagnostic study. It will also include additional watershed monitoring (streambank and aquatic surveys) to further define priority areas. This project will continue activities related to education and outreach, including workshops, brochures, surveys, displays, tours, demonstrations and newsletters. This project will also provide GIS analyses to estimate potential sediment and nutrient reductions of BMPs. Monitoring data will be evaluated to examine trends in sediment and nutrient concentrations and loads. Agricultural surveys will be utilized to evaluate the effectiveness of educational based activities. Septic system loans will be provided for systems in need of upgrade.

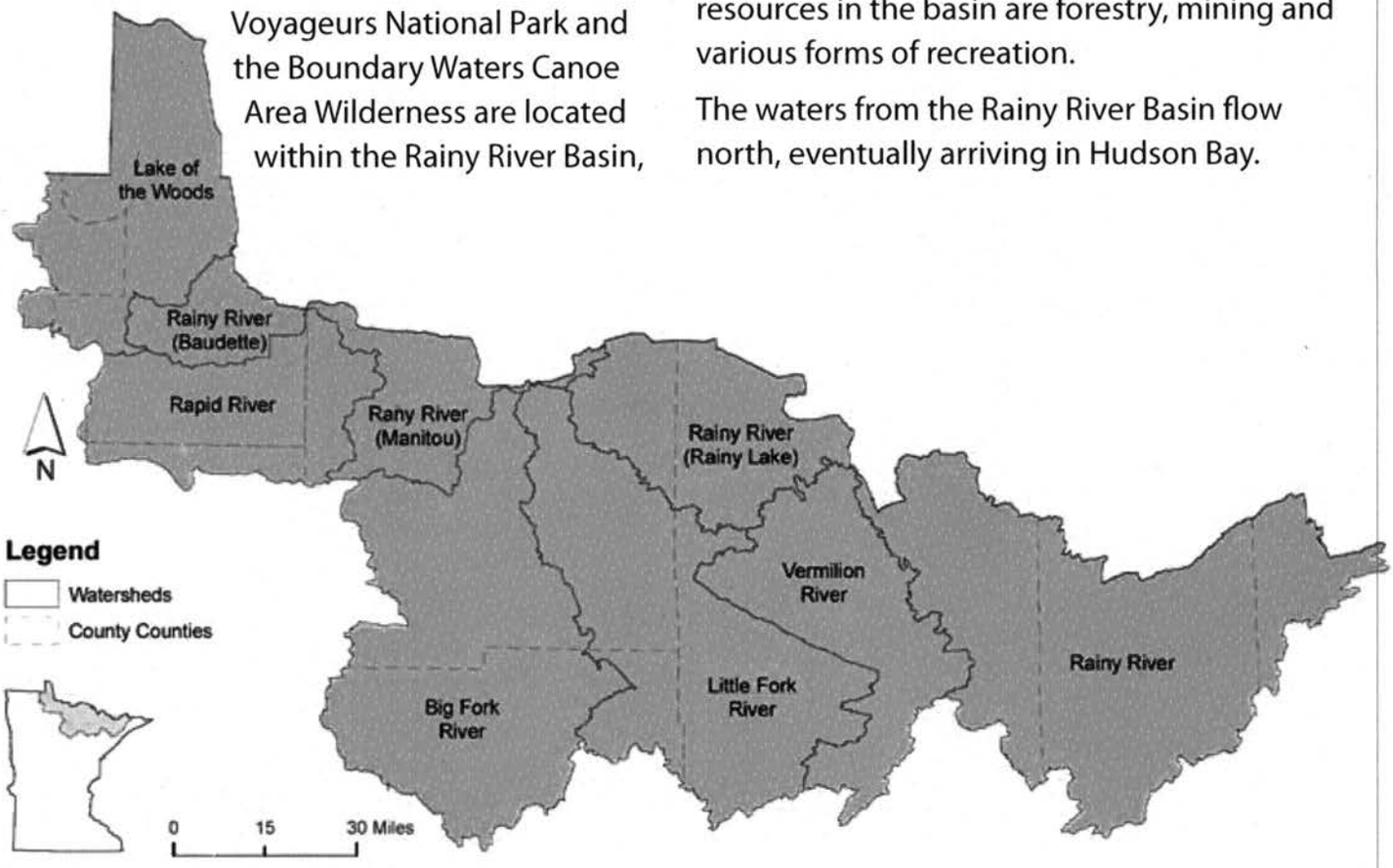


Rainy River Basin

The Rainy River Basin sits on Minnesota's border with Canada and is home to some of the state's finest forest and water resources.

Voyageurs National Park and the Boundary Waters Canoe Area Wilderness are located within the Rainy River Basin, as are several of Minnesota's most famous walleye fisheries and many top-notch trout streams. Other prominent uses of natural resources in the basin are forestry, mining and various forms of recreation.

The waters from the Rainy River Basin flow north, eventually arriving in Hudson Bay.



Projects currently active in 2008 in the Rainy River Basin

Jessie Lake Watershed TMDL Project—2005

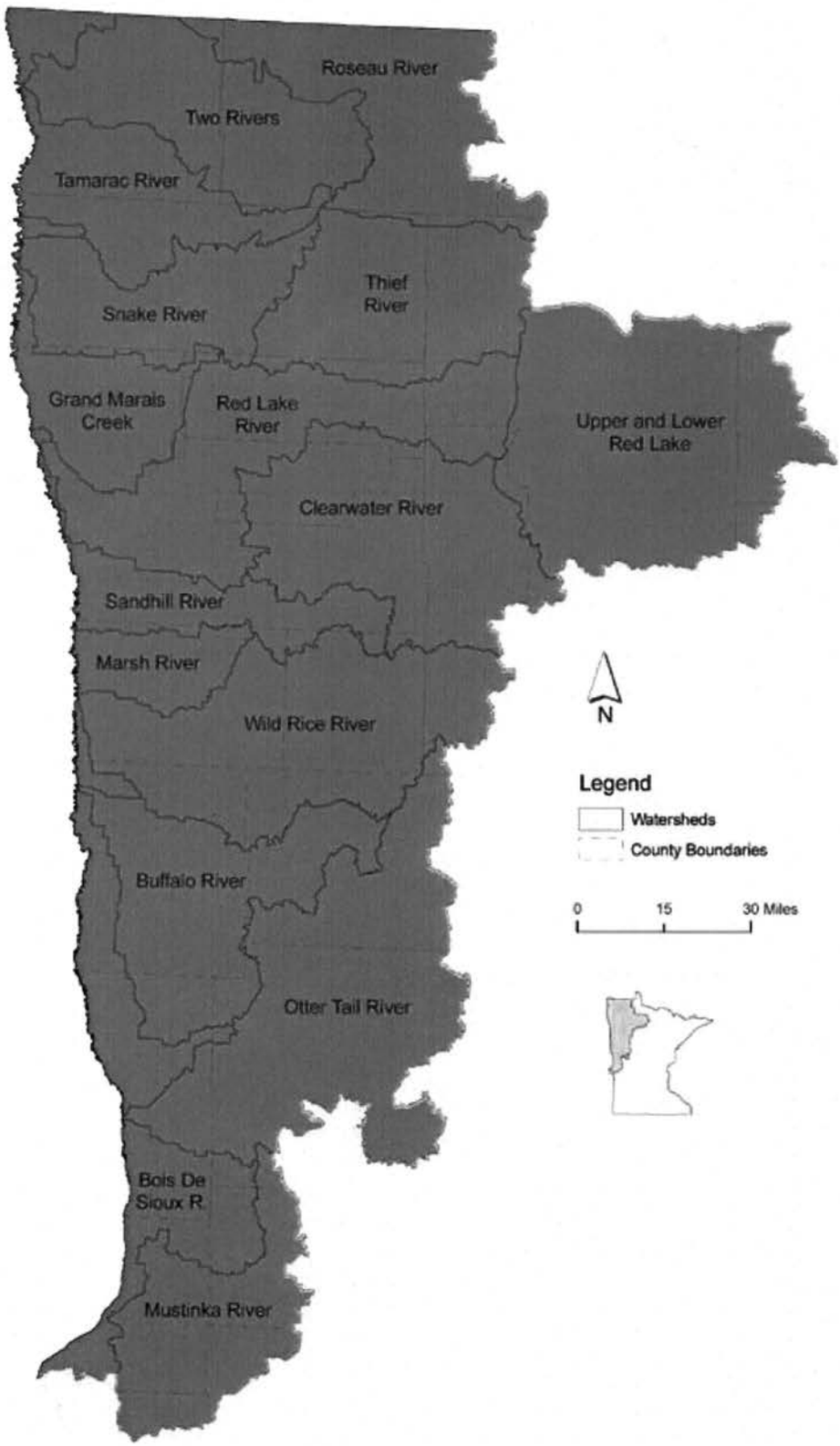
Sponsor: Itasca County Soil and Water Conservation District

Funding: Section 319 (Grant) $23,200

Purpose: Monitor, model and develop land use data to identify potential pollutants in order to develop a total maximum daily load for excessive nutrients.

Red River Basin

The Minnesota portion of the Red River Basin covers about 37,100 square miles in northwestern Minnesota in all or part of 21 counties. It is home to about 17,842 miles of streams and 668,098 acres of lakes. The Red River of the North Basin stretches from northeastern South Dakota and west-central Minnesota northward through eastern North Dakota and northwestern Minnesota into southern Manitoba. It ends where the Red River empties into the southern end of Lake Winnipeg. Water quality is impaired locally by soil erosion, due high flows and unstable channel conditions. The state and local government are working with the agricultural community—the region's predominante land use—to address these issues.



Projects completed

- Red River Basin buffer initiative
- Red River Basin turbidity reduction project, Part II
- Upper Red River of the North SWAT modeling for Impaired waters studies

Red River Basin buffer initiative

The establishment of a cooperative approach between the Red River Basin Commission, Pheasants Forever, and the Soil and Water Districts (SWCDs) from Clay, Becker, Wilkin, Mahnomen, Norman, and Clearwater Counties to implement agricultural best management practices (BMPs) in four targeted pilot project sub-watersheds to improve water quality where excessive turbidity, high fecal coliform concentrations, and excessive nutrients have been problems in the past.

Buffer strips in the Red River Basin.

Each SWCD was provided funds to hire staff specifically dedicated to contacting property owners in each of the pilot project areas during a 3-year period to try to enlist their participation in various conservations programs.

The individual pilot project approaches met varying degrees of success with the total establishment of 13,000 acres in riparian buffers, 200 acres in wetland restorations, and an estimated reduction in sediment load to surface waters in the pilot project areas of approximately forty percent.

Three thousand producers in four watershed areas were contacted using the development of outreach materials, surveys, mailings, public meetings, and face to face contact. Four hundred and thirty-four contracts for agricultural practices were initiated. A community based social marketing (CBSM) through a separate grant was initiated to identify barriers and benefits to adopting preferred conservation practices.

Goals for this project

- The establishment of seventy-five percent of the prescribed buffers in those pilot project sub-watersheds.
- The restoration of twenty-five percent of the prescribed wetlands within those pilot project sub-watersheds.
- Reduce sediment concentrations/load at stream sites by forty percent.

Results that count

- 13,000 acres of riparian buffer were established
- 200 acres of wetland was restorated
- Soil loss is estimated to be reduced by 89,000 tons/year

Financial information

Funding type	Section 319
Grant amount	$218,510.53
Matching funds and in-kind	$487,476.21
Total project cost	$705,986.74

Contact

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Red River Basin turbidity reduction project 2006, part II

This project is a phased turbidity TMDL diagnostic and modeling study for 15 reaches within the Red River Basin that were determined to be impaired due to turbidity. The project included water quality sampling on and above impaired reaches; the collection of flow data and station establishment; water quality analysis and STORET entry; the development of processes to define load and waste load allocations for the impaired reaches; a visual assessment of the impaired reaches, public meetings with stakeholders, and the sponsoring of a sediment summit in the basin.

Goals for this project

- Water quality sampling to verify the extent of the turbidity impairments.
- The identification of the appropriate load determinations tools.
- The development of GIS maps for the basin and the impaired reaches.

Results that count

- 20 samples were taken at 15 locations on impaired reaches from April through October including storm events. Parameters included field data, temperature, dissolved oxygen, conductivity, turbidity, total suspended solids and nutrients.
- The Surface Water Assessment Tool (SWAT) and load duration curve modeling were analyzed among other models and determined to be suitable for waste load and load modeling for sediment.
- GIS maps were generated for all 15 impaired reaches.

Financial information

Funding type	State match to 319 funds
Grant amount	$100,000
Matching funds and in-kind	$65,000
Total project cost	$165,000

Contact

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Upper Red River of the North SWAT modeling for impaired waters studies

The purpose of the two grants was for the Energy and Environmental Research Center (EERC) to develop the soil and water assessment tool (SWAT) model to assess water quality in the Bois de Sioux, Mustinka, and Upper Red River watersheds located in the Red River Basin of the North. The activities accomplished during the grant included: the development, calibration, and validation of the model for each of the watersheds; the assessment of water quality for each of the watersheds focusing on the most prevalent impairment in the basin which is aquatic impairments based on significant turbidity caused by sedimentation; the identification of areas that contribute to sedimentation due to erosion, runoff, and river bank and bed stabilization issues; the evaluation of the effectiveness of hypothetical Best Management Practices (BMP) implementation techniques; and, the compilation of the results of the modeling for each of the watersheds.

The results predicted an estimated annual sediment loading from the watersheds to be 75,065 tons for the Bois de Sioux watershed, 87,853 tons for the Mustinka watershed, and 52,589 tons from the Upper Red watershed.

The model will be used for the development of Total Maximum Daily Load (TMDL) studies within the watersheds, and to assess the effectiveness of TMDL implementation activities within each of the watersheds.

Goals for this project

- Develop the model for each watershed.
- Calibrate the model for each watershed.
- Validate the model for each watershed.

Results that count

- Developed, calibrated, and validated the model for each watershed.
- Developed sediment loads for each watershed.
- Reported development.

Financial information

Funding type	Water Environmental Fund
Grant amount	$138,584

(two grants for $88,584 and $50,000)

Contact

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MPCA project manager: Jack Frederick

Projects currently active in 2008 in the Red River Basin

Buffalo Red River Watershed Sediment Modeling for BMP Implementation—2007

Sponsor: Buffalo Red River Watershed District (BRRWD)

Funding: Section 319 (Grant) $30,940

Under a current Section 319 grant, a computer model, the annualized Agricultural Non-Point Source Model (annAGNPS), was developed for estimating the amount of sediment leaving the landscape, reaching the waterways, and accumulating in the South Branch of the Buffalo River. The focus of this proposed study is to expand upon the work. The annAGNPS computer model will be used to develop sediment water quality goals, and practical measures to achieve these goals, for the entire BRRWD.

Detroit Lake Water-Quality Improvement Nutrient Reductions—2006

Sponsor: Pelican River Watershed District

Funding : CWP (Grant) $50,000 grant, CWP (Loan) $450,000

Enhances educational activities, monitoring, and data analysis in the watershed. Emphasis will be on nutrient and sediment reductions, identifying methods, treatment options, designs and implementation. Sites will be determined for grazing and feedlot management practices, stormwater treatment, biomass reductions, and aquatic plant management. Cost-share incentives will be provided for shoreline restorations and improved erosion and sediment control.

Thief River Watershed Sediment Investigation—2007

Sponsor: Red Lake Watershed District

Funding: CWP (Grant) $96,500

This study will perform investigative water quality, sediment and flow monitoring, as well as data analysis, at up to 11 sites to diagnose the impact of hydrologic modification, other anthropogenic and natural factors influencing water quality in the Thief River watershed. This study will also develop a diagnostic study and implementation plan to address impairments discovered in the watershed.

Red River Basin projects awarded in 2008

Lower Otter Tail River Sediment Reduction Project

Sponsor: Wilkin Soil and Water Conservation District

Funding: Section 319 (Grant) $100,000

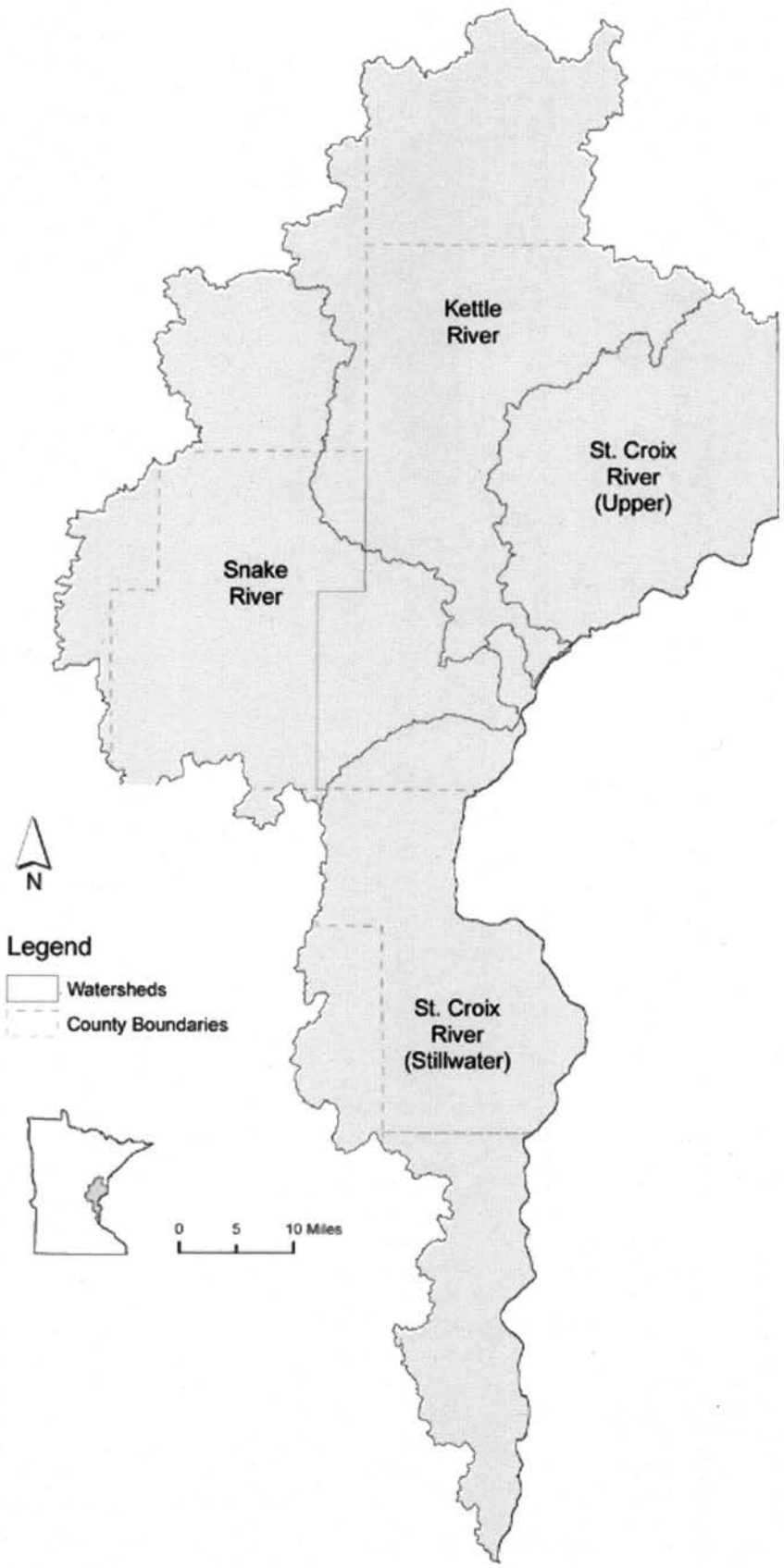
Purpose: The project is a continuation of our 2006 Clean Water Legacy Restoration Project which addresses turbidity in the Lower Otter Tail River. The objective of this grant is to reduce sedimentation in the Otter Tail River through education, cultural and structural best management practices. We will target four sediment sources identified in the TMDL approved plan. They are wind erosion, water erosion, streambank erosion, and in-stream erosion.

St. Croix River Basin

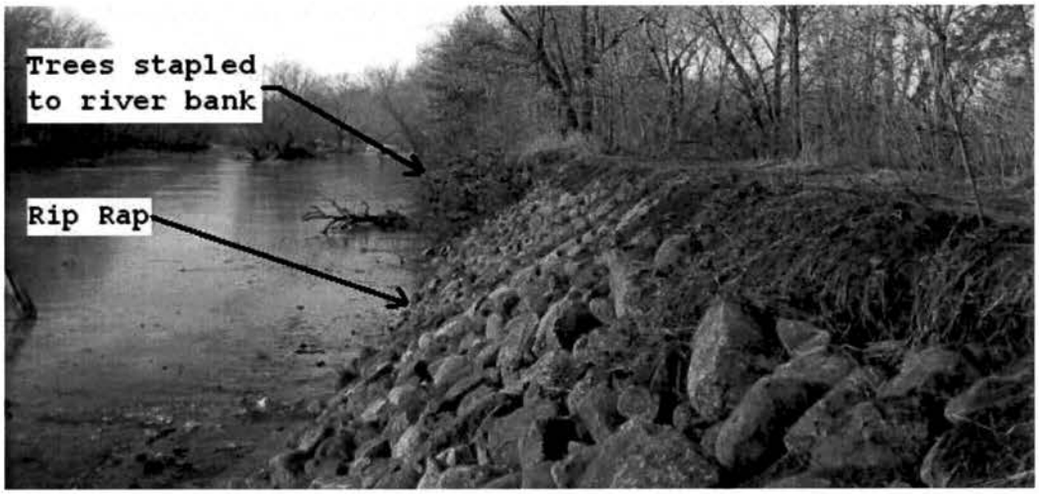
The St. Croix River's headwaters are at St. Croix Lake near Solon Springs, Wisconsin, from where it flows west and south over 160 miles until it joins the Mississippi River at Prescott, Wisconsin. Approximately 80 percent (129 miles) of the St. Croix River forms part of the boundary between Wisconsin and Minnesota. The upper 20 percent of the river is entirely within Wisconsin. The watershed covers approximately 7,760 square miles and extends from near Mille Lacs Lake in Minnesota on the west to near Cable, Wisconsin, on the east. Approximately 46 percent of the watershed is located in Minnesota.

Projects completed

- Snake River Watershed enhancement project
- Sunrise River Watershed TMDL—Phase I



Snake River Watershed enhancement project



The Snake River Enhancement Project began in the late summer of 2003 with the award of a Clean Water Partnership Grant from the Minnesota Pollution Control Agency. The project is designed to investigate water quality conditions in the Snake River, then design and implement measures to improve the river. Throughout the Snake River Enhancement Project Implementation period, managers have promoted conservation techniques most suited for their respective region of the Snake River Watershed.

The Snake River Enhancement Project has been a very successful project in a number of areas. As a result of the Snake River Watersheds and MPCA water quality monitoring and data collection, a number of impaired waters were identified. At this time, there are three TMDL projects progressing within the watershed. They include the Groundhouse River, Mission Creek and the Ann River sub-watersheds. With this information, projects are addressed and prioritized that would have the highest positive effects in those waters. BMPs that need to be implemented are voluntary by the landowners and require their approval and participation.

Goals for this project

- Implement watershed improvement projects throughout the Snake River watershed.
- Educate local landowners and the public on the activities being undertaken and the available assistance, including on-site system upgrades.
- Educate and assist owners of forest lands with forest management planning and best management practices for timber harvesting.

Results that count

- Two wetland restorations with water control structures were installed. The purpose and benefit of these projects was to improve groundwater recharge and provide for open water habitat for wildlife. One erosion control / stabilization project along the downstream wing wall of the Knife Lake Dam was installed to control erosion on the steep slope areas.
- A total of $200,000.00 has been used for 23 septic upgrades/replacements of non-compliant septic systems within the Snake River Watershed, Kanabec County. Information is given to all property owners that receive a "Certificate of Non-Compliance" on an existing septic system.
- A number of partners held a series of woodland management workshops. The classes where held in the four-county area. As part of the stewardship program over the last five years, 70 Forest Stewardship Plans have been completed in the watershed covering a total of 6,895 acres of privately owned woodlands.

Financial information

Funding type	Section 319 & CWP
Section 319	$250,000
CWP Loan	$200,000 ISTS
Matching funds and in-kind	$35,000 SRWMB Cash
	$347,650 In-kind
Total project cost	$832,650

Contact

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Sunrise River Watershed TMDL—Phase I

The Sunrise River Watershed TMDL, Phase I project started in December 2007, and worked through April 30, 2008. This first phase of the TMDL project was initiated to aid in developing a watershed-based plan and strategies for water quality and aquatic ecosystem management, restoration, and protection. To help achieve this a detailed work plan was needed to act as a guide to complete these tasks.

The final Sunrise River Watershed TMDLs Work Plan was developed to not only act as a guide but provide detailed information about all the impaired waters within the watershed, what data is available, and what data gaps need to be filled. This workplan will be used by State and Local Government to decide on where to start planning for the next TMDLs, what types of impairments are in the watershed, and what data needs to be collected before doing the TMDLs.

A copy of this document can be found at: www.pca.state.mn.us/water/tmdl/project-sunrisewatershed.html

Goals for this project

- Provide background information on the Sunrise River.
- Assess water quality within the watershed.
- Develop work plan to complete priority Sunrise River Watershed TMDLs.

Results that count

- Compiled a final report that aids in understanding the general watershed characteristics within the Sunrise Watershed. All of this information was put into the final Sunrise River Watershed TMDL work plan.
- Compiled and evaluated all the available stream and lake data for the watershed. The locations of all the data was identified and listed in the work plan report.
- Received a final TMDL Workplan that helps to identify and guide in the development of TMDLs in the Watershed.

Financial information

Funding type	Clean Water Legacy
Grant amount	$24,685.97

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Projects currently active in 2008 in the St. Croix River Basin

Groundhouse River TMDL Project, Phase 1—2004

Sponsor: Kanabec County

Funding: Section 319 (Grant) $19,118

Purpose: Monitor, assess, model and develop land use data to identify potential pollutants in order to develop a total maximum daily load for fecal coliform.

Groundhouse River TMDL Project, Phase 1, year 2—2004

Sponsor: Tetra Tech, Inc.

Funding: Section 319 (Grant) $93,700

Purpose: Complete monitoring, assessment, modeling and development of land use data to identify potential pollutants in order to develop a total maximum daily load for fecal coliform.

Valley Creek Repair and Rehabilitation Program—2005

Sponsor: Valley Branch Watershed District

Funding: Section 319 (Grant) $150,000

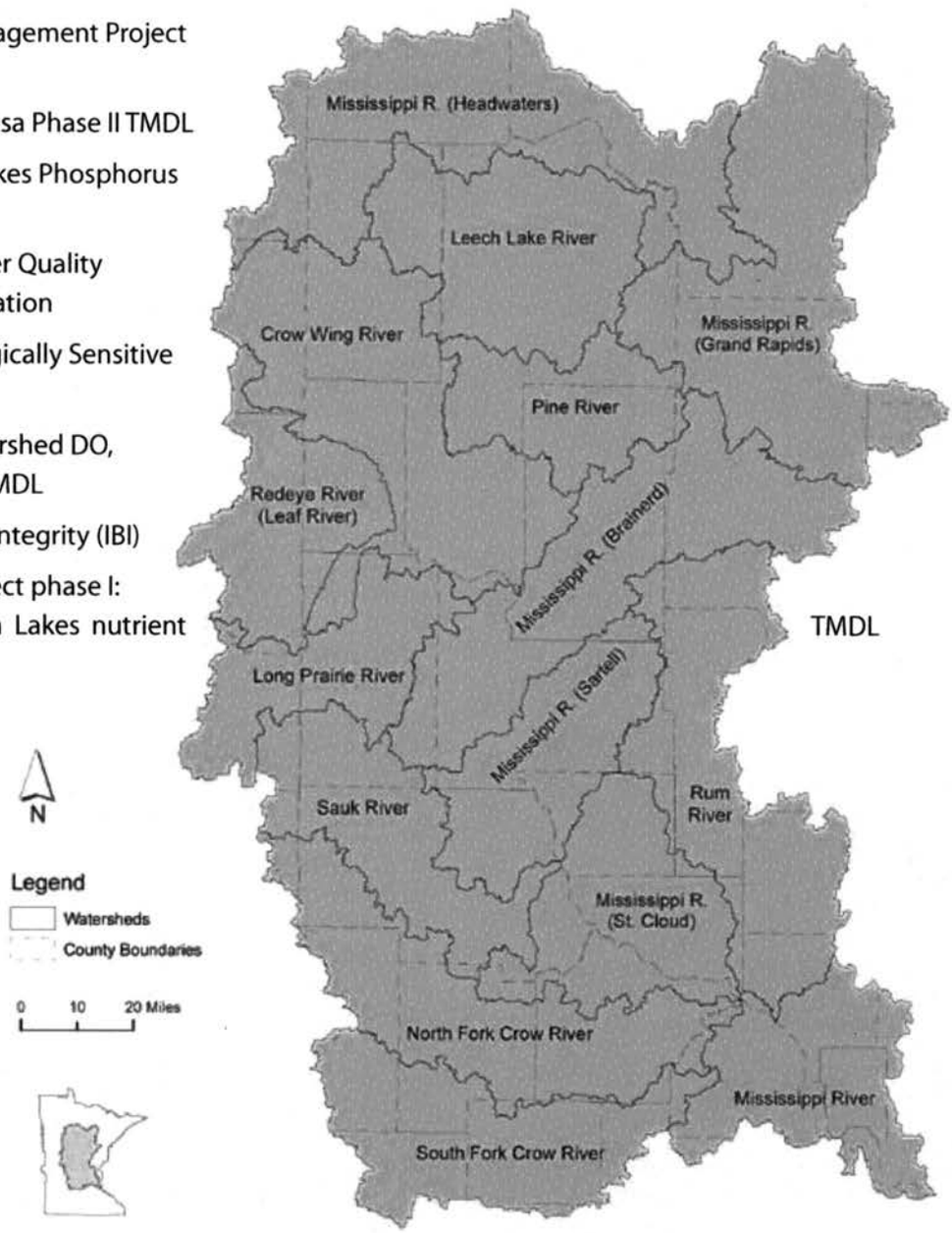
Purpose: Develop education and outreach activities, and address severe gully erosion sites, stream bank erosion sites, and roadway sites.

Upper Mississippi River Basin

The Mississippi River's first basin is called the Upper Mississippi River Basin and is the only Basin wholly within the State. The basin stretches from the Headwaters of the Mississippi River at Lake Itasca to Lock and Dam Number 2 near Hastings. It covers approximately 20,100 square miles and includes 15 of the 80 major watersheds in Minnesota and all or parts of 21 counties. The water resources in the Basin include over 720,659 acres of lakes and 13,090 miles of rivers and streams. Water quality management priorities include protection projects and restoration of excess nutrient, dissolved oxygen, turbidity, and pathogen impairments.

Projects completed

- Big Birch Lake Watershed Management Project Continuation
- Clearwater River and Lake Louisa Phase II TMDL
- Elk River Watershed Priority Lakes Phosphorus Reduction
- Lambert Creek Phase III—Water Quality Improvement Project-Continuation
- Manure Management—Ecologically Sensitive Areas
- North Fork—Lower Crow Watershed DO, Turbidity and Fecal Coliform TMDL
- Rice Creek Index of Biological Integrity (IBI)
- Shingle Creek Lake TMDL project phase I: dual endpoint Twin and Ryan Lakes nutrient project



Big Birch Lake Watershed Management Project continuation

Big Birch Lake has experienced decreasing water clarity and increased areas of submerged aquatic vegetation since the early 1970s. The 1994 Phase I Diagnostic Study, which was solely funded by local landowners, documented that Big Birch Lake experienced declining transparency, with the northeast basin being impacted more severely than the main basin. The Big Birch Lake Watershed Management Project (BBLWMP) was a logical extension of the Diagnostic Study. The BBLWMP began in 1995 as a MPCA Clean Water Partnership project and continued through EPA 319 projects. This ongoing watershed management project developed strong partnerships with local agencies, citizen organizations and individual landowners.

The BBLWMP was funded by two implementation projects (CWP Phase IIA and 1995-1998 and Phase IIB, 2001-2004) that focused on implementing BMPs within the watershed to improve in-lake water quality. The monitoring results of these projects showed that Big Birch Lake's Trophic Status Index shifted from eutrophic in 1994 to mesotrophic in 2004. To verify these results, the Sauk River Watershed District attained the Big Birch Lake Watershed Management 319 continuation grant (2005-2007) to monitor the lake, enhance public outreach and encourage shoreland restoration.

Kids engage in activities at the Middle Sauk Water Festival.

The goal of this grant was to monitor Big Birch Lake for three years to track the effectiveness of the water quality improvements made within the watershed since 1995 and to provide a better understanding of the non-point source pollution entering the lake. The monitoring data collected by the Sauk River Watershed District, with assistance from Big Birch Lake Association members, indicates that Big Birch Lake is maintaining mesotrophic conditions despite extreme wet and dry weather patterns.

Goals for this project

- To restore Big Birch lakeshore
- To help citizens implement best management practices
- To provide education and outreach to the public

Results that count

- Restored 200 feet of lakeshore using native vegetation and rip rap. Native vegetation was planted from the top of the rock 10-15 feet landward creating a natural buffer along the shoreline.
- Big Birch Lake Association offered area landowners a yearly cash incentive to maintain a grass buffer strips along Fish Creek to protect the water quality of Big Birch Lake. Approximately 25 acres were installed. Additionally, State Revolving Funds (SRF) were utilized to help three rural residents upgrade their septic systems during this grant project.
- The City of Grey Eagle installed storm sewer plates that read "Dump No Waste – Drains to Fresh Water" along the city streets. These storm drains discharge to Bass Lake and down to Big Birch Lake. The Middle Sauk Water Festival was conducted for all area schools and generated library boards for hands on water quality education. Articles were printed in the Big Birch Lake Association newsletter regarding Shoreland BMPs, native restoration and available cost share funds.

Financial information

Funding type	CWP
Grant amount	$40,000.00
Matching funds and in-kind	$58,761.42
Total project cost	$98,761.42

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Clearwater River & Lake Louisa Phase II TMDL

This report, prepared by Wenck Associates, Inc. (Wenck) for the Clearwater River Watershed District (CRWD), presents data collected in Phase II of the TMDL process for the listed segment of the Clearwater River between Clear Lake and Lake Betsy and for Lake Louisa in the CRWD located in central Minnesota. Two 303(d) Impaired Waters are addressed in this report: Lake Louisa (excess nutrients) and Clearwater River (dissolved oxygen (DO) and fecal coliform) between Clear Lake and Lake Betsy in Meeker County.

During Phase I of this TMDL, existing data collected by the MPCA, CRWD, and United States Geological Survey (USGS) between 1981 and 2003 was analyzed to define the extent, persistence, and severity of the DO depletion and FC exceedance in the Clearwater River, and sources of excess nutrients in Lake Louisa. Potential sources were reviewed. The results of that study are contained in the Phase I Report. Phase II of the TMDL study included field data collection to fill the data gaps necessary to establish the TMDL in Phase III.

Goals for this project

- Define the spatial extent, persistence, severity, and causes of the dissolved oxygen depletion and high bacteria problem in the Clearwater River.
- Quantify point and non-point sources of oxygen demand and bacteria to the Clearwater River and nutrients to Lake Louisa. Assess their contributions to water quality impairments by land use category and main-stem river and tributary sub-watersheds for targeting priority areas for rehabilitation as well as protection.
- Allocate the Clearwater River and Lake Louisa assimilative capacity to both point and non-point sources of pollution and develop a margin of safety (MOS) protective of water quality standards.

Results that count

- Long-term monitoring conducted between 1981 and 2003 show that 56 percent of DO violations occurred between 1989 and 1994; however, recent data collection indicates the impairment is ongoing. Data shows that DO concentrations are fairly consistent from upstream to downstream, with the exception of a DO sag in the area of Kingston Wetland.
- The variety of conditions under which bacteria concentrations in the Clearwater River and its tributaries exceed standards point to a combination of sources that influence in-stream bacteria concentrations differently under different conditions. Specific conditions contributing to the impairment are non-point source and include manure application, urban runoff, and livestock grazing in riparian areas. Bacteria concentrations routinely exceed the chronic standard in tributaries along the listed reach indicating that the sources are widespread geographically.
- Phosphorus loads to Lake Louisa are primarily the result of loads from Clearwater River, but are also affected by internal cycling of phosphorus. The wetland upstream of the lake is acting as a sedimentation basin removing nutrients from river inflows to the lake.

Financial information

Funding type	Section 319
Grant amount	$149,628

Contact

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Elk River Watershed priority lakes phosphorus reduction

This grant focused on managing agricultural and lakeshore activities including:

1) Installing high visibility manure management BMP demonstration plots to illustrate that proper manure management improves water quality and is profitable;
2) Installing filter strips and buffer strips in highly sensitive riparian areas;
3) Installing low cost common sense feedlot practices on small to medium sized lots to reduce phosphorus discharged directly into surface waters;
4) Demonstrate the re-establishment of natural shoreline vegetation and implement projects to reduce runoff from developed areas using filter strips and methods to promote infiltration.

Streams were sampled for fecal coliform bacteria, phosphorus, dissolved oxygen and temperature to assess water quality during the project. Stream flow was monitored and a phosphorus mass balance was calculated for four watershed lakes. Volunteers conducted lake monitoring for Secchi disc transparency, phosphorus and chlorophyll-a. The goal for stream monitoring in this project was to establish the current water quality status. We do not have data for a sufficient number of years to do a trend analysis.

Goals for this project

- Reduce nutrient loading to water resources from livestock.
- Reduce nutrient loading from agricultural non-point sources.
- Reduce nutrient loading to surface water from runoff from urban and residential areas.

Results that count

- Three sites established low cost feedlot management practices and thirty-four plots implemented manure management plans.
- Riparian forested buffers were established on 12.3 acres and filter strips were established on 102.1 acres.
- Eight sites established lakeshore buffer demonstration sites in residential areas and six sites installed stormwater best management practices.

Financial information

Funding type	Section 319
Grant amount	$122,780.00
Matching funds and in-kind	$150,565.34
Total project cost	$273,345.34

Contact

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Lambert Creek phase III water quality improvement project—continuation

Between June 2002 through January 2008, the Vadnais Lake Area Water Management Organization completed projects that will cut down the level of phosphorous that Lambert Creek delivers to Vadnais Lake in Vadnais Heights. Vadnais Lake is the reservoir for the St. Paul Water Utility, which serves 400,000 drinking-water customers in eight communities.

Lambert Creek's contribution to Vadnais Lake water quality degradation is significant, and a 50 percent reduction of phosphorus from this source is necessary to meet the Vadnais Lake phosphorus-reduction goals. In 2005, researchers monitored river flow and chemical composition, but overall, the Lambert Creek watershed has been intensively monitored and the phosphorus loading patterns and the subsequent lake response are relatively well understood. These patterns remained consistent for the grant period. In order to reduce phosphorous, Vadnais Lake Area Water Management Organization partially restored the Rice Lake, Grass Lake and Lambert Lake wetlands.

Goals for this project

- The primary focus of the work plan is to reduce the mass of phosphorus runoff to Vadnais Lake. Long term statistical analysis has indicated that in order to lower taste and odor episode frequencies to acceptable levels, total P values need to remain equal to or less than 25 micrograms per liter in mixed layer samples from April through September. This should reduce the frequency of chlorophyll A (algae) concentrations exceeding 20 micrograms per liter, which is the nuisance level at which taste and odor episodes are likely. In order to achieve the 25 ppb management goal, Lambert Creek P loads need to be reduced by as much as 50 percent.

Results that count

- To restore the wetlands, the water management organization constructed a 530-foot low-head weir (a small, overflow dam) with adjustable notches to distribute flows to the greater wetland without raising the current 100-year frequency flood elevation. The weir contains a 1.7-acre pond with a depth of four feet to act as a stilling pool and to disperse the flow into the greater wetland.
- More than 2,200 feet of county ditch was filled and an overflow channel was constructed. A small berm was constructed along the length of this filled portion of the ditch and a permanent 600-foot, Class 5 utility road provides access to the site.
- Other work required for the construction of these features included clearing and grubbing, post-construction wetland restoration, installation of a flotation silt curtain during construction, installation of rip rap at critical outfalls, soil borings, and the purchase of easements. All the projects outlined in the original and the continuance grant were completed by January 2008.

Financial information

Funding type	CWP
Grant amount	$250,000.00
Matching funds and in-kind	$432,545.00
Total Project Cost	$682,545.00

Contact

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St. Paul Regional Water Service
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John Blackstone, 651-266-6324

MPCA project manager: Barb Peichel

Manure management within ecologically sensitive areas

Stearns County has approximately 2,900 livestock operations with 2,000 of these operations having 300 animal units or less. Most of the remaining 900 operations have between 300 and 999 animal units. Proper manure management and storage within and near Ecologically Sensitive Areas will enhance or sustain surface and groundwater quality throughout the county.

The area of concern is livestock producers and landowners located in and near Ecologically Sensitive Areas in Stearns County. Ecologically Sensitive Areas includes:

- Wellhead protection areas and drinking water supply management areas,
- Designated lakesheds and shoreland areas,
- Lands identified on Minnesota County Biological Survey Maps,
- Watershed Management Districts, and
- "Special Protection Areas", such as impaired waters, and coarse textured soils.

Of particular concern are Special Protection Areas, or lands within 300 feet of all protected waters, protected wetlands and intermittent streams and ditches.

Goals for this project

- Construction of animal waste control facilities and manure management plans for as many as 40 livestock producers.
- Enroll approximately 1,000 livestock producers into the Open Lot Certification Program (OLCP).
- Leverage 319 grant funds to provide additional assistance to livestock producers and landowners resulting in five feedlot pollution abatement systems and five erosion control conservation practices.

Results that count

- Fourteen feedlot animal waste control facilities were constructed.
- 547 producers have signed up for OLCP. Much work remains to be done on the producers that signed up for the OLCP. Of the 547 OLCP producers, 174 have been addressed.
- The Stearns County Environmental Services has identified and prioritized additional livestock producers with pollution potential. The 20 unpermitted manure storage basin investigations resulted in 15 failing to meet the MPCA specifications. These producers will be targeted in the future with technical and financial assistance.

Financial information

Funding type	Section 319
Grant amount	$300,000
Matching funds and in-kind	$1,141,200
Total project cost	$1,441,200

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North Fork Lower Crow River Watershed DO, turbidity & fecal coliform TMDL—phase I

The purpose of this project is to develop a TMDL for the impaired waters listings for the North Fork—Lower Crow River. The project is broken down into three phases:

Phase I – Data review and recommendations

Phase II – Monitoring and data analysis

Phase III – TMDL Development

This report addresses Phase I of the study. It is important to note that due to data limitations some of the elements will require further development once additional data is collected. For example, only limited relationships have been identified for the causes of impairment at this time. The sheer size of this watershed makes developing this TMDL a challenge. Impairments that are geographically separated and yet inter-related over hundreds of thousands of acres are one of many issues that must be addressed throughout this process. It is important to note that this TMDL development will require refinement as the process unfolds. The strategy developed later in this report provides a relatively simple straightforward approach that will be necessary for this large project with a limited budget. This TMDL can be developed in terms of adaptive management which is a strategy for addressing pollutant load uncertainty that emphasizes taking near term actions to improve water quality. Adaptive management can be employed when data may only weakly quantify links between sources, allocations and in stream targets. Adaptive management identifies site-specific actions leading toward water quality standards attainment, future data collection and analysis, and reassessment of appropriate actions.

Goals for this project

- Review existing data & define problems.
- Develop initial watershed model.
- Recommend additional monitoring and specialized field studies.

Results that count

- Previous studies and historical data were reviewed to define missing data needs.
- An initial model framework was created.
- A monitoring plan to collect additional field data was developed.

Financial information

Funding type State match to 319 grant
Grant amount $76,474.00

Contact

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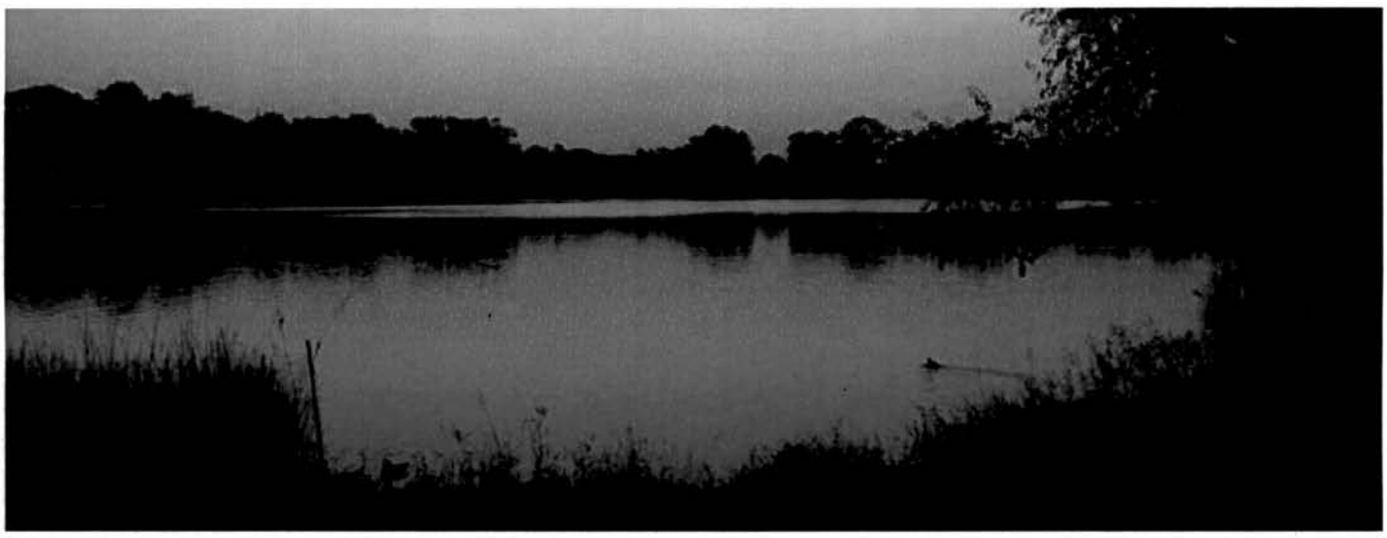

Rice Creek Watershed IBI

The Rice Creek IBI (Index of Biological Integrity), commonly referred to as the Stream Health Evaluation Program (SHEP), used trained adult volunteers to measure the biological health of streams using advanced bioassessment protocols and indices specifically developed for this region. The protocol was divided into two sections: a physical habitat assessment and a biological assessment of aquatic macroinvertebrates.

The program is unique in providing volunteer generated, scientifically viable benthic macroinvertebrate monitoring data for decision makers. SHEP also offers extensive opportunities for interaction and relationship building between volunteer monitors and local officials and decision makers. These relationships allow SHEP volunteers to better understand how local decisions impact water quality and stream health. In addition, local decision makers enhance constituent relationships that underscore the importance of water quality in their communities.

The project recruited 28 adult volunteers, organized into three teams, to monitor a total of six sites in the Fall of 2006. These sites, at Hardwood Creek, Rice Creek, and the inlet/outlet of Locke Lake, were chosen in part to gauge the effects of recent restoration and stewardship activity on these sites.

Goals for this project

- Recruit new volunteers to monitor additional sites.
- Offer volunteer training for new volunteers.
- Report the results of the SHEP to the local community.
- Conduct a physical habitat assessment and complete a biological assessment of benthic macroinvertebrate populations at six sites.

Results that count

- Recruited 28 adult volunteers to monitor six sites at Hardwood Creek, Rice Creek, and the inlet/outlet of Locke Lake, to gauge the effects of recent restoration and stewardship activity on these sites.
- Offered volunteer training (1.5 days) which included in-stream physical assessment, macroinvertebrate collection methods, and laboratory macroinvertebrate identification procedures.

- Project staff and volunteers reported on the results of the Stream Health Evaluation Program to the following audiences:
  - Rice Creek Watershed District staff
  - The City of Lino Lakes Environmental Commission
  - The Lino Lakes City Council
  - The City of Shoreview Environmental Quality Commission
  - The City of Fridley Environmental Quality & Energy Commission
- The project's primary product is the Rice Creek Watershed Stream Health Evaluation Program—2006/2007 Benthic Macroinvertebrate Stream Monitoring Field Report. The report has been distributed to project partners and is available online at www.fmr.org.

Financial information

Funding type	Section 319
Grant amount	$21,500.00
Matching funds and in-kind	$22,038.57
Total project cost	$43,538.57

Contact

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Shingle Creek Lake TMDL project phase I—dual endpoint Twin and Ryan Lakes nutrient TMDL project

The goal of this TMDL is to quantify the pollutant reductions needed to meet State water quality standards for nutrients in South Twin, Middle Twin, North Twin and Ryan Lakes.

The Twin Lake chain of lakes is located in Hennepin County, Minnesota, in the Shingle Creek watershed, specifically in the cities of Brooklyn Center, Crystal, Minneapolis, and Robbinsdale. The lakes are heavily used for recreation supporting fishing and swimming and also providing aesthetic values.

Water quality in North and South Twin Lake is considered poor with frequent algal blooms while Ryan and Middle Twin Lakes have more moderately degraded water quality. North Twin Lake, a hypereutropic lake, has both internal and watershed loading that appear to be significant phosphorus sources. The majority of phosphorous in Middle Twin Lake is from water coming from North Twin Lake and the watershed. South Twin Lake is a eutrophic lake where internal loading has the potential to increase algal productivity. Ryan Lake, the last lake in the chain, is a mesotrophic lake that has relatively good water quality for an urban lake.

Wasteload and Load Allocations indicate that nutrient load reductions ranging from 0-76 percent would be required to consistently meet state standards under average precipitation conditions. North Twin contributes a substantial load downstream to the other lakes, thus improvements to that lake should result in improvement to the lower lakes in the chain. Improvements to an upstream wetland, internal load management, and reduction of non point sources of phosphorus in the watershed by retrofitting BMPs would have the most impact on reducing phosphorus load and improving water quality in the chain of lakes.

Goals for this project

- The goal of the Twin and Ryan Lakes Nutrient TMDL Project was to quantify the pollutant reductions needed to meet State water quality standards for nutrients in South Twin, Middle Twin, North Twin and Ryan Lakes.

Volunteers plant aquatic vegetation as part of a shoreline restoration in Twin Lake Park on Middle Twin Lake in Brooklyn Center.

Results that count

- Wasteload and Load Allocations for South Twin, Middle Twin, North Twin and Ryan Lakes indicate that nutrient load reductions ranging from 0-76 percent would be required to consistently meet state water quality standards.
- The TMDL for South Twin, Middle Twin, North Twin and Ryan Lakes was approved by the U.S. EPA on November 9, 2007.

Financial information

Funding type	Section 319 & Water Environmental Fund
Grant amount	$90,468
Matching funds and in-kind	$64,282
Total project cost	$154,750

Contact

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Projects currently active in 2008 in the Upper Mississippi River Basin

Big Sandy Area Lakes Watershed management project—2006

Sponsor: Aitkin County

Funding: CWP (Grant): $260,000

The project continues funding for water-quality monitoring, staffing for project administration and local ordinance coordination, and lake and agricultural BMPs such as shoreland revegetation, lakeshore protection, riparian livestock operations, streambank stabilization, riparian buffer strips, conservation easements, and implementation of operation and maintenance plans. Information and education activities will include watershed-wide newsletters, education of schools, lake associations, and county boards, new landowner contacts, small neighborhood meetings, and participation in information fairs.

Elk River Watershed priority lakes II—2006

Sponsor: Elk River Watershed Association

Funding: Section 319 (Grant): $185,187

Re-establish shoreland vegetation around area lakes, reduce phosphorus and nitrogen applications on farmland, improve and create wetlands.

Feedlot runoff pollution removal by organic bio-filter demonstration—2005

Sponsor: Stearns County Soil and Water Conservation District

Funding: Section 319 (Grant) $150,000

Purpose: Develop a demonstration project to utilize a carbon-rich bio-filter to treat feedlot runoff and produce technical information so that Natural Resources Conservation Service can approve this as a best management practice.

Little Rock Creek TMDL project—2005

Sponsor: Benton County Soil and Water Conservation District

Funding: Section 319 (Grant) $82,000

Purpose: Monitor, model and develop land use data to identify potential pollutants in order to develop a total maximum daily load for biota.

Long Prairie River TMDL project—2005

Sponsor: Todd County Soil and Water Conservation District

Funding: Section 319 (Grant) $300,000

Purpose: Provide cost share, install and maintain best management practices with a focus on riparian buffers, manure and nutrient management, and grassed waterways.

Long Prairie River dissolved oxygen TMDL implementation project —2007

Sponsor: Todd County Soil and Water Conservation District

Funding: Section 319 (Grant) $150,000

The MPCA has observed dissolved oxygen (DO) concentrations below the 5-mg/L standard near Motley and Browerville, and during the summer months near Carlos. The primary goal for the project is to use certain BMPs to keep nutrient levels at or below the standard. The BMPs to be constructed include, but are not limited to, riparian buffers, contour cropping, grassed waterways and others, along with the use of alternative water sources, seed varieties, rotations, cover crops and fertilizers.

Middle Fork Crow River Watershed restoration and enhancement project

Sponsor: Middle Fork Crow River Watershed District

Funding: CWP (Grant) $242,000, CWP (Loan) $200,000

This project focuses on protecting high quality lakes and restoring lakes with poorer water quality by restoring wetlands, providing educational opportunities that link people to the resources, implementing best management practices to reduce non-point source pollution and targeting specific lake management projects that will harness internal loading in lakes. Activities will focus on citizen information (a new district web site, workshops, newsletters, and volunteer training), continued water quality monitoring and evaluation, agricultural and rural land use BMPs, wetland, streambank and shoreland restoration, stormwater and urban BMPs and septic system upgrades.

Middle Sauk River rehabilitation project continuation—2005

Sponsor: Sauk River Watershed District

Funding: CWP (Grant) $237,000; CWP (Loan) $500,000

Purpose: Continue information and education, water quality monitoring and evaluation, agricultural and urban best management practices, shore land and riparian restoration, project administration, upgrading septic systems, and reducing erosion and sediment.

Middle Sauk River water quality restoration project—2007

Sponsor: Sauk River Watershed District

Funding: CWP (Grant) $216,892, CWP (Loan) $500,000

The objective of this project is to assist agricultural producers in applying conservation practices, such as riparian restoration, feedlot management and buffer strip installation. This project will also work with local municipalities to address stormwater runoff concerns and local septic system upgrades. In addition, this project will expand the current monitoring program to investigate new sources of pollution and to assess the effectiveness of current and future BMPs. Information and education will focus on changing behaviors to reduce nutrient loading in the watershed. Activities will include, school visits, elementary student water festivals and hands-on workshops in areas such as shoreline restoration and maintenance, citizen monitoring training and stormwater runoff alternatives.

Osakis Lake Watershed management program – phase 3 continuation—2005

Sponsor: Sauk River Watershed District

Funding: CWP (Grant) $235,000, CWP (Loan) $310,000

Purpose: Continue information and education, water quality monitoring and evaluation, stormwater, agricultural, rural land use and urban best management practices, shore land and riparian restoration, project administration, upgrade septic systems, and reduce erosion and sediment.

Restoring water resources of the Sauk River Chain of Lakes—2004

Sponsor: Sauk River Watershed District

Funding: Section 319 (Grant) $250,000; CWP (Loan) $500,000

Purpose: Continue to carry out the goal of phosphorus reduction and loading by following the recommendations made in the CWP Phase IIA Final Report.

Sauk Lake Basin restoration project continuation—2005

Sponsor: Sauk River Watershed District

Funding: CWP (Grant) $267,200; CWP (Loan) $500,000

Purpose: Continue information and education, water quality monitoring and evaluation, agricultural, rural land use, stormwater and urban best management practices, shore land and stream bank restoration, project administration and upgrading septic systems.

Sauk River Chain of Lakes TMDL project—2005

Sponsor: Sauk River Watershed District

Funding: Section 319 (Grant) $125,000

Purpose: Monitor, model and develop land use data to identify potential pollutants in order to develop a total maximum daily load for excessive nutrients.

Sauk River Chain of Lakes Watershed Basin restoration project continuation—2005

Sponsor: Sauk River Watershed District

Funding: CWP (Grant) $224,700; CWP (Loan) $500,000

Purpose: Continue information and education, water quality monitoring and evaluation, agricultural, rural land use, stormwater and urban best management practices, shore land and stream bank restoration, project administration and upgrading septic systems.

Shingle Creek chloride reduction project—2007

Sponsor: City of New Hope

Funding: Section 319 (Grant) $15,000

Purpose: Shingle Creek, an 11-mile stream located in northwestern Hennepin County, was designated an Impaired Water by the MPCA and USEPA for chloride concentrations that exceed State established standards. A TMDL analysis determined that the majority of chloride in the watershed is derived from non-point sources including road salt deicing. The TMDL concluded that an overall 71% reduction in chloride load must be achieved to meet State chloride concentration standards. The use of a new deicing product, ClearLane, is identified by the City of New Hope as a BMP to reduce chloride levels in Shingle Creek in the Implementation Plan for the Shingle Creek Chloride TMDL. The City intends to implement this proposed BMP by replacing standard road salt applications with ClearLane for the 2007/2008 deicing season.

Stearns County manure basin abandonment project—2006

Sponsor: Stearns County

Funding: Section 319 (Grant): $57,150

Purpose: Evaluate ground water beneath six abandoned manure basins, with the aim of learning more about the effect of such facilities on regional ground-water resources.

Swan River Watershed management plan implementation—2006

Sponsor: Morrison County Soil and Water Conservation District

Funding: Section 319 (Grant) $70,000

Purpose: Identify and work with smaller feedlots to reduce over-application of manure to cropland with nutrient management plans, buffer strips and other conservations practices.

Targeted implementation/compliance activity within TMDL and ecologically sensitive areas—2004

Sponsor: Stearns County Soil and Water Conservation District

Funding: Section 319 (Grant) $300,000

Purpose: Investigate unpermitted earthen manure storage basins; target and accelerate compliance; implement educational initiatives, manure management, feedlot pollution abatement systems, erosion control; promote related best management practices and continue water-quality monitoring.

Targeted implementation/compliance activity within TMDL and ecologically sensitive areas, phase II—2005

Sponsor: Stearns County Soil and Water Conservation District

Funding: Section 319 (Grant) $300,000

Purpose: Accelerate best management practices adoption by providing technical and financial assistance to producers, investigate unpermitted earthen manure storage basins; identify feedlots in need of pollution abatement, reconstruction or abandonment; develop manure management plans and implement soil erosion best management practices.

Targeted implementation/compliance activity within impaired and ecologically sensitive areas in the Upper Mississippi River Basin in Stearns County (Continuation)—2006

Sponsor: Stearns County SWCD

Funding: Section 319 (Grant) $300,000

Purpose: Hire inspector and technician to investigate unpermitted earthen manure storage basins, conduct feedlot evaluations, develop manure management plans.

Targeted implementation activity within impaired and ecologically sensitive areas in Stearns County—2007

Sponsor: Stearns County Soil and Water Conservation District

Funding: Section 319 (Grant) $300,000

Purpose: This project targets livestock producers and landowners located in and near wellhead protection areas and drinking water supply management areas, designated lakesheds and shoreland areas. Funds would be made available to encourage livestock producers to work with a Certified Crop Adviser in developing a comprehensive Manure Management Plan, and to correct feedlot pollution problems and soil erosion for producers within the ecologically sensitive areas.

Water quality improvement project continuation—2005

Sponsor: North Fork Crow River Watershed District

Funding: CWP (Grant) $85,000; CWP (Loan) $450,000

Purpose: Continue feedlot and manure upgrades, agriculture and rural best management practices, septic system upgrades and water quality monitoring and evaluation.

Working together to improve water quality—2005

Sponsor: Crow River Organization of Water

Funding: Section 319 (Grant) $300,000; CWP (Loan) $500,000

Purpose: Upgrade septic systems, install alternative tile intakes, enroll filter or buffer strips, stabilize shore land erosion, work with cities on stormwater/water quality issues, provide financial incentives to landowners to reduce sediment and nutrient loads and increase education efforts.

Upper Mississippi River source-water protection plan implementation Project—2006

Sponsor: City of St. Cloud Public Utilities

Funding: CWP (Grant) $425,000

Purpose: Funding allows the project to conduct a dye-trace study on the South Fork of the Crow in order to refine the earlier travel-time estimates, obtain locational data from local units of government on potential point and non point contaminant sources, identify areas susceptible to nitrate contamination, hire a project data specialist to update state and federal data files and incorporate the data into the project data base, quantify tributary inflows and in-stream flows (allowing for estimates of groundwater contributions to and losses from the Mississippi River), identify areas of potential contaminant transport between ground and surface waters, support the delineation of wellhead protection areas for ground water-based suppliers, identify areas of high sediment loading potential, implement local source water protection plans, and continue administration and education activities.

Upper Mississippi River Basin projects awarded in 2008

Improving rural water quality in the Crow River Basin Project—2008

Sponsor: Crow River Organization of Water (CROW)

Funding: Section 319 (Grant) $272,480, CWP (Loan) $770,000

Purpose: This project will continue CROW's goal of reducing nutrients and sediment from the Crow River and its tributaries. The focus of this project includes implementation efforts in highly ranked priority management areas as identified in the Crow River Phase I Diagnostic Study. The management areas cover portions of Renville, McLeod, Kandiyohi and Meeker counties.

Improving stormwater management in ecologically sensitive watersheds

Sponsor: Middle Fork Crow River Watershed District

Funding: Section 319 (Grant) $140,000, CWP (Loan) $100,000

Purpose: This project's goal is to reduce the impacts of stormwater runoff into the Middle Fork Crow River, Nest Lake and Green Lake by implementing a variety of stormwater treatment options, including retrofits, in areas that are already highly impervious or rapidly increasing the imperviousness.

Lake Independence channel stabilization project

Sponsor: Three Rivers Park District

Funding: Section 319 (Grant) $119,500

Purpose: The Lake Independence TMDL study identified numerous eroding channels adjacent to the lake as significant sources of phosphorous and sediment loading. The TMDL Implementation Plan included recommendations to stabilize these eroding channels. A series of these eroding channels are in the Baker Park Reserve Campground adjacent to Lake Independence. The main objective of this project is to repair and stabilize four of these ravines to reduce phosphorous and sediment loading to the lake.

Osakis Lake Shoreland Enhancement Project

Sponsor: Sauk River Watershed District

Funding: Section 319 (Grant) $160,000, CWP (Loan) $100,000

Purpose: Osakis Lake is on the MPCA's Impaired Waters list for excess nutrients. To reduce in-lake TSS concentrations, the Osakis Lake Shoreland Enhancement Project will primarily focus on restoring the 24 miles of lakeshore to a more natural state to reduce shoreland erosion and sediment loading. The education component will set the stage by offering area residents information on the benefits of lakescaping and "how to" workshops. The incentive program is designed to encourage lakeshore owners to convert their high maintenance and manicured lakeshore to native vegetations to protect the lakeshore, improve water quality and provide better aquatic habitat.

Restoring Water Resources of the Sauk River Chain of Lakes Continuation

Sponsor: Sauk River Watershed District

Funding: Section 319 (Grant) $200,000, CWP (Loan) $200,000

Purpose: This restoration project proposes a three year implementation plan. The first year will involve installing monitoring equipment and attaining baseline monitoring data, comprehensive stream bank assessments, feedlot inventories, stormwater assessments and begin a tailored education program. The following years will focus on implementing stormwater, urban and Ag BMPs. Monitoring and education programs will continue until project completion.

Snake River Enhancement Project Continuation

Sponsor: Snake River Watershed Management Board

Funding: CWP (Grant) $500,000, CWP (Loan) $400,000

Purpose: The Snake River Watershed Management Board will assist local technical people working with landowners to identify issues, find solutions to problems and provide technical and engineering assistance for appropriate BMPs targeted to impaired waters. The CWP loan program is targeted to identify, repair or replace non-compliant systems in shoreland areas.

Targeted BMP Implementation within Impaired Areas in the Upper Mississippi Basin – Continuation II

Sponsor: Stearns County Soil and Water Conservation District

Funding: Section 319 (Grant) $300,000

Purpose: This project will address the following items: Unpermitted manure storage basin investigations and feedlot evaluations, non point BMPs educational initiatives, manure management plan development, animal waste management systems, erosion control and promotion of other related BMPs. In addition, water quality monitoring from the Sauk River Watershed District will be used to identify impaired areas and improvements to designated impaired waters.

Wetland 639W Restoration

Sponsor: Shingle Creek Watershed Commission

Funding: Section 319 (Grant) $60,000

Purpose: This project is a feasibility study and design for the restoration of Wetland 27-639W, which is a major external phosphorous source to Impaired Water 27-0042-01, North Twin Lake. This wetland restoration is the highest priority implementation action in the Twin and Ryan Lakes Nutrient TMDL Implementation Plan. Wetland 639W contributes an estimated 730 pounds of total phosphorous per year into North Twin Lake. The goal is to identify and evaluate options to reduce or eliminate phosphorous discharge to the lake, and design and prepare construction plans for the future construction of the design.

Glossary of acronyms

annAGNPS—annualized Agricultural Non Point Source model

BERBI—Blue Earth River Basin Initiative

BMP—best management practices

BOD—biochemical oxygen demand

BWSR—Board of Water and Soil Resources

CCA—certified crop advisor

COD—chemical oxygen demand

CROW—Crow River Organization of Water joint powers board

CRP—Conservation reserve program

CREP—conservation reserve enhancement program

CRWP—Chippewa River Watershed Project

CSM—citizen stream monitoring

CSMP—citizen stream monitoring program

CWA—Clean Water Act (1987)

CWLA—Clean Water Legacy Act

CWP—Clean Water Partnership

DO—dissolved oxygen

EPA or **USEPA**—Environmental Protection Agency or United States Environmental Protection Agency

ESD—Environmental Services Department

FLEval—Feedlot evaluation model

GBERBA—Greater Blue Earth River Basin Alliance

GPS—global positioning system

IBI—index of biological integrity

IPHT—imminent public health threat

ISTS—individual sewage treatment system

LCMR—Legislative Commission on Minnesota Resources

LID—low impact development

MDA—Minnesota Department of Agriculture

MMP—manure management plan

MPCA—Minnesota Pollution Control Agency

NMP—national monitoring program

NO^3—nitrate/nitrogen

NPS—non point source

NPSP—non point source pollution

NRCS—Natural Resource Conservation Service

OLCP—open lot certification program

P—Phosphorus

RCRCA—Redwood-Cottonwood Rivers Control Area

Section 319—section of Clean Water Act

SHEP—Stream Health Evaluation Program

SRF—state revolving fund

SRWD—Sauk River Watershed District

SSC—suspended sediment contamination

SSTS—Subsurface Sewage Treatment System

STORET—storage and retrieval system—EPA database

SVS—Suspended volatile solids

SWAT—surface water assessment tool

SWCD—Soil and Water Conservation District

TMDL—total maximum daily load

TP—total phosphorus

TSS—total suspended solids

TT—transparency tube

UM—University of Minnesota

USEPA—United States Environmental Protection Agency

USGS—United States Geological Survey

WD—watershed district

Minnesota Pollution Control Agency

520 Lafayette Road North
St. Paul, MN 55155
651-296-6300 or
toll-free 800-657-3864
www.pca.state.mn.us

A list of completed projects and history can be found at:
www.pca.state.mn.us/water/cwp-319.html#reports

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Minnesota Board of Water & Soil Resources

DATE: October 14, 2008

TO: Board of Water and Soil Resources' Members, Advisors, and Staff

FROM: John Jaschke, Executive Director

SUBJECT: October 22, 2008 Board Meeting Notice

The Board of Water and Soil Resources (BWSR) will meet on Wednesday, October 22, 2008, beginning at 9:00 a.m. The meeting will be held in the second floor conference room at 520 Lafayette Road N., St. Paul. Parking is available in the lot directly in front of the building (use hooded parking areas).

The following information pertains to agenda items:

OLD BUSINESS

1. **Clean Water Legacy (CWL) Technical Assistance Continuation Funds for FY07 Projects.** See attachments. ***DECISION ITEM***

NEW BUSINESS

1. **Cook County SWCD Request for Allocation of State Cost Share Program Rollover Funds to Facilitate Flood Response to June 6, 2008 Storm Event –** The Cook County SWCD has requested additional Cost-Share funds to assist private landowners with erosion control and water quality improvement projects resulting from a flood event that occurred on June 6, 2008. The Cook SWCD submitted a needs request, documentation of disaster declarations and potential project list to the Grants Program and Policy Committee at their meeting on September 24. The Committee's recommendations are included in the resolution prepared for the Board's consideration. See attachments. ***DECISION ITEM***

2. **Statewide Conservation and Preservation Plan -** In 2006 the University of Minnesota Institute on the Environment was awarded a contract by the Legislative-Citizen Commission on Minnesota Resources (LCCMR) to produce a Statewide Conservation and Preservation Plan ("Plan") with funds from the Minnesota Environment and Natural Resources Trust Fund. The resulting plan is an integrated inventory and assessment of Minnesota's environment and natural resources with recommendations to guide decision-makers on future short and long term planning, policy, and funding investments. The Plan consists of two parts: a Preliminary Plan (released July 2007) and a Final Plan (released July 2008). The Preliminary Plan identified critical issues and trends having impacts or implications for Minnesota's environment and natural resources. The Final Plan provides a series of recommendations for addressing the issues and trends identified. The recommendations included in the Final Plan are useful to a wide variety of public and

private entities, but in particular, they will be used to help guide expenditures from the Minnesota Environment and Natural Resources Trust Fund. The Preliminary and Final Plan are available at www.lccmr.leg.mn. ***INFORMATION ITEM***

3. **Presentation "Working Together to Address Drinking Water Issues in the City of Hastings and the Vermillion River Watershed"** - The City of Hastings has struggled since the mid-1990s with rising nitrate levels in its public water supply. Dakota County worked with the City of Hastings, the Minnesota Department of Health, Minnesota Department of Agriculture, Dakota Soil and Water Conservation District, and Metropolitan Council to identify the extent and sources of nitrate contamination in groundwater and to develop an implementation strategy to address it. Implementation included outreach to the agricultural community and the general public; protection and improvement of the Vermillion River; protection of natural areas within the Watershed; septic system maintenance and upgrades; and regulation of well construction and sealing. Implementing these activities has been a collaboration between the County, the SWCD, the Vermillion River Watershed Joint Powers Organization, the University of Minnesota Extension, Minnesota Department of Agriculture, the City of Hastings, and other agencies. David Swenson and Jill Trescott, Dakota County Waters Resources Department, will provide an overview of this effort. See attachment. ***INFORMATION ITEM***

4. **Minnesota Waters Update** - Engaging citizens in watershed monitoring and stewardship is a key component to many comprehensive water plans. However, due to staff and budget considerations many local units find it difficult to provide the specialized training and assistance to build a network of active volunteers. Minnesota Waters works with many watershed districts, SWCD's and counties to fill the gap and expand citizen engagement. Marian Bender, Executive Director of Minnesota Waters, will give an update on the organization's programs and partnerships with BWSR clientele. ***INFORMATION ITEM***

5. **Star Lakes Update** - Legislation passed in the 2008 session called for the creation of a Star Lakes program and the development of a non-profit corporation to oversee the program. BWSR was given the responsibility to appoint a member of the new Star Lakes board and call the first meeting. Julie Klocker will give an overview of the legislation, BWSR's effort to organize the group, and on the progress the appointed board members made at their inaugural meeting which was held October 9. ***INFORMATION ITEM***

If you have any questions regarding the agenda, please feel free to give me a call at 651-296-0878. The meeting will adjourn about noon. I look forward to seeing you on October 22nd!

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BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD N.
ST. PAUL, MINNESOTA 55155
WEDNESDAY, OCTOBER 22, 2008

PRELIMINARY AGENDA

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF SEPTEMBER 24, 2008

OPEN MIKE (10-minute agenda time, two-minute limit/person)

RECOGNITION OF RETIREES
- Jim Anderson, Board Member
- Greg Larson, BWSR State Soil Scientist

REPORTS
- Chair – Randy Kramer
- Executive Director – John Jaschke
- Dispute Resolution Committee – Randy Kramer
- Wetlands Committee – LuAnn Tolliver
- Grants Program & Policy Committee – Louise Smallidge
- Public Relations, Outreach & Strategic Planning Committee – Brian Napstad
- Administrative Advisory Committee – Randy Kramer

OLD BUSINESS
1. Clean Water Legacy (CWL) Technical Assistance Continuation Funds for FY07 Projects – Matt Drewitz – ***DECISION ITEM***

NEW BUSINESS

1. Cook County SWCD Request for Allocation of State Cost Share Program Rollover Funds to Facilitate Flood Response to June 6, 2008 Storm Event – Jeff Hrubes and Dan Steward - ***DECISION ITEM***

2. Statewide Conservation and Preservation Plan – Susan Thornton, LCCMR Staff Member; Jean Coleman, Project Coordinator, and Randy Neprash, Land Use Practices Team Member - ***INFORMATION ITEM***

3. Presentation "Working Together to Address Drinking Water Issues in the City of Hastings and the Vermillion River Watershed" - David Swenson and Jill Trescott, Dakota County Waters Resources Department – ***INFORMATION ITEM***

4. Minnesota Waters Update - Marian Bender, Executive Director, Minnesota Waters – ***INFORMATION ITEM***

5. Star Lakes Update – Julie Klocker – ***INFORMATION ITEM***

AGENCY REPORTS

- Minnesota Department of Agriculture – Joe Martin
- Minnesota Department of Health – John Linc Stine
- Minnesota Department of Natural Resources – Larry Kramka
- Minnesota Extension Service – Faye Sleeper
- Minnesota Pollution Control Agency – Paul Eger

ADVISORY COMMENTS

- Association of Minnesota Counties (AMC) – Annalee Garletz
- Minnesota Association of Conservation District Employees (MACDE) – Rick Reimer
- Minnesota Association of Soil and Water Conservation Districts (MASWCD) – LeAnn Buck
- Minnesota Association of Townships (MAT) – Sandy Hooker
- Minnesota Association of Watershed Districts (MAWD) – Ray Bohn
- Natural Resources Conservation Service (NRCS) – Tim Koehler

UPCOMING MEETINGS

- MAWD Annual Meeting, December 4-6, 2008, Arrowwood Conference Center in Alexandria
- MASWCD Annual Meeting, December 7-9, 2008, Crown Plaza, St. Paul Riverfront
- AMC, December 8-10, 2008, Duluth
- Next BWSR Board Meeting, December 17, 2008

Noon **ADJOURN**

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD N.
SECOND FLOOR CONFERENCE ROOM
ST. PAUL, MINNESOTA 55155
WEDNESDAY, SEPTEMBER 24, 2008

BOARD MEMBERS PRESENT:
Dana Allen, Gordy Behm, Paul Brutlag, Bob Burandt, Paul Eger, MPCA; Quentin Fairbanks, Brian Kletscher, Randy Kramer, Larry Kramka, DNR; Paul Langseth, John Linc Stine, MDH; Joe Martin, MDA; Brian Napstad, Faye Sleeper, U of M Extension; Louise Smallidge, Gene Tiedemann, LuAnn Tolliver

STAFF PRESENT:
Mary Jo Anderson, Jim Haertel, John Jaschke, Al Kean, Julie Klocker, Melissa Lewis, Kevin Lines, Ken Powell, Dave Weirens, Steve Woods, Wayne Zellmer

OTHERS PRESENT:
Ray Bohn, MAWD
Jack Frost, Met Council
Sandy Hooker, MAT
Doug Thomas, RCWD

Chair Kramer called the meeting to order at 9:02 a.m.

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA – Chair Kramer suggested moving the Old Business item, "RIM/WRP Sign-Up and Implementation Report" under the Chair's report, as Tim Koehler has another commitment and needs to leave the meeting early.

** 08-92 Moved by Brian Napstad, seconded by Paul Langseth, to adopt the amended agenda as presented. Motion passed on a voice vote.

** 08-93 **MINUTES OF AUGUST 28, 2008** - Moved by Louise Smallidge, seconded by Bob Burandt, to approve the minutes of August 28, 2008 as circulated. Motion passed on a voice vote.

INTRODUCTION OF NEWLY APPOINTED BOARD MEMBERS

Chair Kramer welcomed newly appointed board members Gordy Behm and Faye Sleeper to the Board.

- Gordy Behm, Watershed District representative, Middle Fork Crow River Watershed District, provided brief background information about himself.
- Faye Sleeper, University of Minnesota Extension representative, provided brief background information about herself. Faye offered her assistance with information requested for the University of Minnesota, and is happy to be officially with BWSR.

INTRODUCTION OF NEW EMPLOYEES

- Al Kean introduced Terry Ragan, newly hired Project Engineer for the southeast flood response. Terry provided background information about himself. Terry will work out of the Winona SWCD office in Lewiston.
- Al Kean introduced Jeff Larson, newly hired Engineering Technician for the southeast flood response. Jeff provided background information about himself. Jeff will work out of the Root River SWCD office in Caledonia.

Chair Kramer welcomed Terry and Jeff to the Board of Water and Soil Resources and thanked them for coming in today.

REPORTS

Chair's Report – Randy Kramer reported that the Environmental Quality Board (EQB) did not meet this month. Chair Kramer announced that he appointed Dale Gustafson from Golden Valley, to represent BWSR on the Star Lakes Board.

OLD BUSINESS

RIM/WRP Sign-Up and Implementation Report – Kevin Lines distributed a map of the RIM Reserve/WRP Partnership Phase I total applications by County, a map of selected projects, and a spreadsheet of the projects funded. Kevin gave a brief overview of the application process and the projects selected. Kevin reported that a total of 119 project applications were selected for funding; nearly $32M obligated for project funding. Tim Koehler reported that Minnesota received almost 20% of the nationwide total of WRP funds for federal FY08. Tim commended everyone involved at the local level that worked diligently to meet the deadlines and obtain applications. Tim thanked the Board and commended Kevin Lines and BWSR as well as SWCD staff for efficient efforts in getting the sign-up in place. John stated that staff are working on policy and guidelines for easement enhancement options. Tim reported that John Jaschke and Bill Hunt have entered into agreement to continue and expand an engineering contract to work on easements. Paul Brutlag stated that BWSR's role in establishing program payments, partnerships and criteria on this effort has resulted in effective implementation. Dana Allen stated that she's impressed with the effort; however, there is a need to look for ways to always improve land value information. Chair Kramer thanked Kevin and Tim for their report.

Executive Director's Report – John Jaschke reported that he met with new board member Gordy Behm yesterday; they took a boat tour of the Mississippi River, hosted by the Mississippi WMO. John attended a carbon trading conference sponsored by MEI. John reported that the BWSR Northern Region will conduct "BWSR Academy" a comprehensive training for LGUs on October 21-23. John reported that the state biennial budget process is underway. John reported that MASWCD has a newly formed Elections and Watershed Approach Committees, Steve Woods will participate on the committees representing BWSR. John will be on jury duty starting October 6.

John asked Don Buckhout to provide an update of the Performance Review and Assistance Program (PRAP) pilot efforts and the report on the Middle-Snake-Tamarac Rivers Watershed District (MSTRWD). Don explained the three levels of the pilot program: Level 1 is routine tracking of all LGUs, review and oversight responsibility; Level 2 is the "heart and soul" of the legislative request for BWSR to review the progress of implementation of comprehensive plans for each local water management authority; and Level 3 is a more direct and prescriptive engagement with an LGUs management challenges. Don explained that the PRAP process will include the Coon Creek WD and Two Rivers WD; Jackson SWCD and Crow Wing SWCD; Renville County and Mille Lacs County; and Pioneer Sarah Creek WMO in Hennepin County. A preliminary round of meetings with LGUs has been completed. A review of findings and recommendations will be completed in the next few months, then a meeting with the LGU to develop assistance actions to overcome barriers in operations. All reports will

be on the BWSR website. Don explained that requests were received from Marshall County and the RRWMB for BWSR to review the MSTRWD. The completed report is on the BWSR website. Don explained that findings included internal conflicts, lawsuits among the Board, and the need to address several issues in order to be ready for plan development and project implementation. BWSR staff are actively involved in assisting the watershed district. Don will convene the PRAP advisory committee this fall to review the process and evaluate the consistency of measuring the performance standards. LuAnn Tolliver stressed the importance of evaluating and improving the process; the advisory committee is a good group to evaluate the procedures. Don stated that BWSR is not imposing the standards, but holds the LGU accountable for their measures and outcomes, operations and execution of planned projects and programs as an LGU. LuAnn asked if this report will go to the Legislature. John Jaschke stated that the report is public information, on BWSR's website, but does not go to the Legislature. John commended the Middle-Snake-Tamarac Rivers Watershed District on their efforts to get the issues resolved. BWSR staff will continue to assist the MSTRWD as needed.

Dispute Resolution Committee – Jim Haertel reported that Travis Germundson is attending mediation training today. Jim reported that one new appeal has been received since the last report was distributed. Discussion followed.

Wetlands Committee – LuAnn Tolliver reported that the Wetlands Committee will meet this afternoon. LuAnn and staff are scheduling committee meeting dates for the duration of the year. She asked Dave Weirens to schedule a meeting with Gordy Behm to brief him on the Wetlands Committee topics, especially WCA rulemaking.

Grants Program & Policy Committee – Louise Smallidge reported that the Grants Program & Policy Committee is meeting this afternoon.

Public Relations, Outreach & Strategic Planning Committee – Brian Napstad reported that the Public Relations, Outreach & Strategic Planning Committee plans to meet in November; the date to be determined.

Administrative Advisory Committee – Randy Kramer reported that the Administrative Advisory Committee (AAC) met this morning. The AAC discussed the southeast flood response; preliminary budget process; staffing report; Star Lakes Board appointment; SWCD/MAWD/county meetings; and other items that will be addressed on the agenda today.

NEW BUSINESS

Southeast Minnesota Flood Relief –Al Kean distributed a handout "Conservation Flood Recovery 2007-2008". Al stated that there has been a coordinated effort on the flood response

in the southeast, partnerships and leveraging. Wayne Zellmer distributed the updated budget summary of the southeast flood relief effort. This is the largest single most grant effort that BWSR has ever had, $5.6M. John Jaschke explained that in June 2008, the Department of Employment and Economic Development (DEED) transferred $1.89 million of 2007 Special Session appropriations to BWSR for additional erosion, sediment and water quality control cost-share and technical assistance. The 2008 Legislature also appropriated $0.725 million of supplemental funding to BWSR for additional flood response in the southeast. Al stated that there are 301 project sites, a significant challenge is ahead of us to put this on the ground.

** 08-94 Moved by Brian Napstad, seconded by Louise Smallidge, to approve the amendment to resolution #07-85 for implementation of funds for southeast Minnesota flood relief. Discussion followed. Motion passed on a voice vote.

Wetland Enforcement; 2008 Field Report – Captain John Hunt, DNR Enforcement, reported that DNR Wetland Enforcement Officers have expanded their duties over the past year, their workload has doubled. Captain Hunt reported that there were 735 cease and desist orders issued since 2006. DNR flyovers will continue to focus on violations and involve LGU staff in planning and follow-through. Chair Kramer thanked Captain Hunt for his report.

Chair Kramer called for a break in the meeting at 10:40 a.m. The meeting reconvened at 10:55 a.m.

Watershed Approach Discussion

One Water Program Approach – Gaylen Reetz, MPCA, presented information on an integrated strategy to improve water quality management in Minnesota and Total Management Daily Loads (TMDLs). Gaylen provided information on major watersheds as a framework for monitoring and assessment; watershed planning/TMDL's; and implementation on a ten-year cycle. Discussion followed. Chair Kramer thanked Gaylen for his presentation.

Watershed Organization/Project Inventory – Steve Woods explained that there are a variety of organizations established in Minnesota specifically to address watershed issues. BWSR staff have been compiling a list of these organizations as a starting point to determine what more can be done to enhance local water management efforts. Steve distributed maps of the major river basins, watershed districts, watershed organizations in the metro area, and water management entities in Minnesota. Steve also distributed a listing of watershed contact information. Steve will provide a comprehensive report at a later date once the listing of watershed organizations has been tabulated. This is a work in progress. Joe Martin would like to see a listing aligning with the projects and organizations within the 81 major watersheds. Chair Kramer thanked Steve for his report.

COMMITTEE RECOMMENDATIONS

Metro Water Planning Committee

Amendment to Coon Creek Watershed District Boundary Change – Jim Haertel explained that a boundary change for the Coon Creek Watershed District was approved by Board Order dated March 26, 2008. The Order included three tables that included numerous parcels affected by the boundary change. When updating their records, the Anoka County Department of Property Records and Taxation discovered errors on the tables. The County, the District and Board staff coordinated the revisions required to amend the tables. An amendment to the Order is necessary to correct the errors. The Metro Water Planning Committee met on August 4, 2008 and reviewed the new information from the District and Anoka County, and recommends approval of the amendment to the Order. Moved by LuAnn Tolliver, seconded by Quentin Fairbanks, to approve the amendment to the Coon Creek Watershed District boundary change. Motion passed on a voice vote.

** 08-95

Rice Creek Watershed District Comprehensive Wetland Protection and Management Plan for the City of Lino Lakes – Ken Powell explained that this Plan is more encompassing than a typical wetland plan, the District refers to the plan as a "Resource Management Plan" (RMP). The RMP came about through a partnership between the Rice Creek Watershed District and the City of Lino Lakes. Ken reported that the Metro Water Planning Committee met on August 4, 2008 and recommends approval of the Plan. Doug Thomas, RCWD, provided an overview of the Plan. The purpose of the Plan and RMP is to provide a watershed-based approach to wetland management that is consistent with District goals. The approach addresses management in the context of wetland functions and the effects of anticipated future land use. This framework of guiding where wetland impacts and replacement may occur is intended to have the effect of reestablishing larger, contiguous areas of wetland and riparian edge. It is also intended to afford landowners more flexibility to create larger contiguous areas of upland for use and development than reasonably could be fashioned under standard parcel-based wetland permitting. Doug stated that the Rice Creek Watershed District looks forward to implementation of this Plan. Moved by Louise Smallidge, seconded by Bob Burandt, to approve the Rice Creek Watershed District Comprehensive Wetland Protection and Management Plan for the City of Lino Lakes. Motion passed on a voice vote. Chair Kramer thanked Doug for coming in and to keep up the good work!

** 08-96

AGENCY REPORTS

Minnesota Department of Agriculture – Joe Martin reported that the bovine tuberculosis looks manageable in the State. Joe stated that there doesn't seem to be a problem in Minnesota with the Chinese dairy products melamine scare, although some ethnic stores are being checked. Joe reported that there is additional treatment of the gypsy moth protection in the State. Joe reported that MDA is working on legislative issues.

Minnesota Department of Natural Resources – Larry Kramka reported that a significant groundbreaking event was held in the Iron Range -- the first steel mill in the State of Minnesota! Larry stated that public hearings will be held in November regarding aquatics, the public will have ample time to comment and DNR will schedule to accommodate the hunting season.

University of Minnesota Extension – Faye Sleeper reported that the Minnesota Water Resources Conference will be held October 27-28, 2008, at the St. Paul River Center. Faye distributed the conference brochure and encouraged board members to attend.

Minnesota Pollution Control Agency – Chair Kramer congratulated Paul Eger on his appointment as Deputy Commissioner of MPCA. Paul reported that the MPCA Citizens Board met yesterday and had good outcomes. Paul stated that the "2008 Watershed Achievements Report" is in the board members' packet today. The report lists the successful projects throughout the State.

ADVISORY COMMENTS

Minnesota Association of Watershed Districts (MAWD) – Ray Bohn invited board members to attend the MAWD annual meeting December 4-6, 2008. Pre-conference seminars will be held including: drainage; new managers orientation; an experienced managers seminar; and an administrative issues session. Ray reported that MAWD is putting together their legislative package. Ray stated that MAWD is redeveloping their website and is working on an inter-active page for administrators.

UPCOMING MEETINGS

- Next Board Meeting is October 22, 2008, in St. Paul.

John Jaschke stated that the Grants Program & Policy Committee will meet immediately following the Board meeting. The Wetlands Committee will meet 45 minutes later at the same location.

John encouraged board members to attend the AMC, MAWD, and MASWCD annual meetings. Registration information will be distributed when BWSR receives it.

** 08-97 Moved by Louise Smallidge, seconded by Bob Burandt, to adjourn the meeting at 12:20 p.m. Motion passed on a voice vote.

Respectfully submitted,

Mary Jo Anderson
Recorder

Dispute Resolution Report
October 10, 2008
by: Travis Germundson

There are presently **22** appeals pending. All of the appeals involve WCA except File 05-24. There have been **2** new appeals filed since the last report dated September 24th.

Format note: New appeals that have been filed since last report to the Board.
~~Appeals that have been decided since last report to the Board.~~

File 08-29 (10/3/08) This is an appeal of a replacement plan in the City of Redwood falls. The LGU approved a wetland replacement plan application for 1.06 acres of fill for the expansion of an industrial/business park. The approval required that a restrictive covenant be placed on the adjacent wetlands. No decision has been made on the appeal.

File 08-28 (9/25/08) This is an appeal of a after-the-fact replacement order in Stearns County. The LGU approved a wetland replacement plan application for an agricultural road crossing that would impact 5,000 sq ft of a Type 2 wetland. No decision has been made on the appeal.

File 08-27 (9/17/08) This is an appeal of a restoration order in Stearns County. The appeal regards the draining and filling of approximately 15.7 acres of wetland associated with a ditch cleanout/improvement project. No decision has been made on the appeal.

File 08-26 (08/27/08) This is an appeal of a restoration order in Stearns County. The appeal regards the draining and filling of approximately 4 acres of wetland associated with a ditch cleanout/improvement project. No decision has been made on the appeal.

File 08-25 (08/25/08) This is an appeal of a after-the-fact wetland replacement plan application in Benton County. The LGU denied the wetland replacement plan application based on the fact that it does not adequately replace the wetland impacts. It involves the same project and issue as File 07-27. The appeal has been remanded for further processing at the local level.

~~File 08-24 (08/11/08) This is an appeal of a restoration order in Grant County. The appeal regards drainage impacts to a 32 acre Type 3 wetland resulting from agricultural drain tile improvements~~. *The appeal has been dismissed.*

File 08-11. (04/29/08) This is an appeal of a restoration order in Hennepin County. The appeal regards the filling of 1.75 acres of a type 2/3 wetland for the construction of a pole barn and pasture area. The restoration order has been stayed until and the appeal has been placed in abeyance for submittal of a wetland replacement plan, exemption, or no-loss application.

File 08-9. (03/06/08) This is an appeal of a replacement order in Pine County. The appeal regards impacts to approximately 11.26 acres of wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-8. (04/03/08) This is an appeal of a replacement order in Pine County. The appeal regards the filling of over 18,000 square feet of Type 2 wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-4. (01/24/08) This is an appeal of no-loss and exemption decisions in Waseca County. In addition to the no-loss decision, at issue are denials of the agricultural exemption, approved development exemption, incidental wetland exemption, and claims of numerous procedural issues that were prejudicial to the applicants. Further, a Minn. Stat. § 15.99 (60-day rule) claim is pending in District Court. The appeal has been remanded for further technical work at the local level.

File 08-1. (02/04/08) This is an appeal of a restoration order in Aitkin County. The appeal involves the filling of wetland for a road in shoreland area. The restoration order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 07-37. (12/16/07) This is an appeal of a restoration and replacement order in the City of Sturgeon Lake, Pine County. The appeal involves the excavation and filling of wetland. The restoration and replacement order has been placed in abeyance to allow for the submittal of a complete replacement plan.

File 07-33. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-32. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-31. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a restoration order for unauthorized filling of wetland for a building. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-29. (10/25/07) This is an appeal of a restoration order in Crow Wing County. The appeal involves the filling of wetland along a driveway. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work.

File 07-27. (10/19/07) This is an appeal of a restoration and replacement order in Benton County. The appeal involves the excavation of an island that was in wetland and the filling of wetland along the wetland edge. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work this spring.

File 06-23. (05/19/06) This is an appeal of a replacement plan decision in Kanabec County. The LGU denied the wetland replacement plan application. A previous denial of the same replacement plan application had been appealed, the appeal was remanded for a hearing, and now the current denial has been appealed. The appeal has been placed in abeyance pending the outcome of a lawsuit between the landowner and the county. The lawsuit concerns the county's possible noncompliance with the 60-day rule. The county prevailed in district court, however the decision was appealed to the Court of Appeals where the county again prevailed. An appeal to the Minnesota Supreme Court was denied review. It is likely the appeal will soon be placed on the calendar for DRC proceedings.

File 06-17. (05/27/06) This is an appeal of a replacement plan decision in the City of Montgomery in LeSueur County. The LGU denied an after-the-fact wetland replacement plan application based on a lack of sufficient reasons why the restoration could not be completed. The appeal has been remanded for further processing at the local level.

File 06-12. (04/13/06) This is an appeal of a no-loss decision in Stearns County. It involves the same project and issues as File 06-6. After a restoration order was issued, a no-loss application was submitted by the developer and denied by the LGU. The appeal has been remanded for further technical evaluation.

File 06-6. (02/16/06) This is an appeal of a restoration order in Stearns County. At issue are numerous wetlands impacted by filling, sedimentation, reduction of hydrology and lack of Best Management Practices associated with a residential development. The appeal has been denied in part. The Restoration Order has been affirmed in part and has been stayed in part.

File 05-24. (03/04/05) This is an appeal, actually three appeals, of the Bois de Sioux Watershed District compensation to landowners related to a project. The appeal has been held in abeyance pending settlement discussions. It appears at least two of the appeals have been settled.

File 05-1. (01/13/05) This is an appeal of a replacement plan decision by the Rice Creek Watershed District. The District previously made a decision that was appealed which resulted in a remand for an expanded TEP. Now there is an appeal of the decision made under remand since the decision differed from the TEP report. At issue is a wetland delineation and the Comprehensive Wetland Protection and Management Plan that BWSR approved. After a hearing before the DRC, the board remanded the matter for a new wetland delineation and for submission on an updated, complete replacement plan application.

OLD BUSINESS

1. Clean Water Legacy (CWL) Technical Assistance Continuation Funds for FY07 Projects – Matt Drewitz. See attachment. ***DECISION ITEM***

BOARD OF WATER AND SOIL RESOURCES **MEMORANDUM**

DATE: October 10, 2008

TO: BWSR Board

FROM: Matt Drewitz, Jeff Hrubes, and Marcey Westrick – Clean Water Specialists

SUBJECT: **DECISION ITEM**: Clean Water Legacy (CWL) Technical Assistance Continuation Funds for FY07 Projects

The purpose of this memorandum is to provide the BWSR Board background information on continuation funds for FY2007 CWL implementation projects that hired staff with BWSR engineering and technical assistance funds. Additional budget detail has been provided in Attachment A for your review. BWSR staff presented this proposal to the BWSR Senior Management Team (SMT) on September 16, 2008 and the SMT approved the recommendation to go forward to the BWSR Grants Program and Policy Committee. On September 24, 2008, the BWSR Grants Program and Policy Committee recommended approval of this proposal and moved this proposal to the BWSR Board for final adoption.

The 2006 legislature provided CWL funds for BWSR Cost Share, Technical Assistance and Engineering, Lake and River Management, and Public Interest Lands (bonding) grants for State FY07. There was a caveat that these first year funds needed to be encumbered by BWSR by June 30, 2007 and needed to be completely spent by the grant recipients by June 30, 2009 (BWSRs current CWL allocation for FY08-09 allows for funds to be available until spent). Because of the later caveat, BWSR is unable to provide any extensions to FY07 grants beyond June 30, 2009. Also, our grant agreements with the Local Governmental Units (LGUs) could not go beyond that date. For LGUs that hired staff, the issue is that most projects that hired staff have just enough funds to employ those staff until June 30, 2009 (in some cases the money will run out earlier). This creates a problem of having to lay off a technical resource staff in the middle of the construction season. Also, the uncertainty of any future funding may result in staff leaving their positions early.

The short-term solution to this issue was that BWSR has put $450,000 of its current CWL Technical Assistance and Engineering allocation into a line item for continuation funds for FY07 projects that hired staff. BWSR Clean Water Specialists surveyed each LGU with staff to see how much funding they would need to keep their staff on board for an additional 6 months and 1 year. Through our analysis, the $450,000 set aside for continuations will results in providing each LGU 92% of what they requested for one-year worth of staff time. Attachment A shows the budget breakdown by each LGU and individual staff person.

These continuation funds will help the LGUs:

- Keep existing staff on to continue working towards meeting TMDL and County Water Plan goals.
- Provide a bridge for LGUs to apply for technical assistance funds for staff in FY10 in the event that additional CWL funding is made available from the legislature or from the potential 3/8 sale tax referendum.
- Provide some short-term stability for LGU management creating their calendar year 2009 budget.
- Provide incentive for staff hired through these positions to stay and not seek other employment.
- Give guidance to LGUs if they should apply for FY09 CWL technical assistance funds or not.

Therefore, we would like to obtain the BWSR Board's approval of the budget breakdown shown in Attachment A. Upon BWSR Board approval, we will work with BWSR grants staff to modify current grant agreements or develop new grant agreements for these projects. Work plans would be amended to illustrate this additional funding and subsequent work to be accomplished.

Attachment A: On-going Funding Needs for Techinical Assistance Staff Hired by LGUS with CWL Funds in FY07

Project Funded in FY 2007	Position Description	Partially Funded in FY07 CWL	FY07 TA Funds	FY08 TA Funds	FY09 TA Funds	LGU Extension Requests	Opt. A: Aribitrary Allocaiton without TSP Funds	Option B: Arbitrary Allocation with TSP Funds	Option C: Proportional to Requests	Justificaiton for Funds	Option C: Final
GBERBA	Nutrient Specialist	Fully funded with CWL	40	80	80	95	80	95	88.831	Funds for technician salary, training, oversight, and office space rental.	**$88,831**
GBERBA	Stormwater Specialist	319, PS2 Stormwater, CWL	20	40	40	50	50	50	46.753	Salary for stormwater specialist.	**$46,753**
GBERBA	Conservagtion Agronomist	U of M Extension, CWL	10	35	35	40	40	40	37.403	Partial salary for U of M Extension Agronomist.	**$37,402**
Area 11 JPB	Nutrient Specialist-Rice SWCD	Fully funded with CWL	20	45	45	25	25	25	23.377	Salary for half-time nutrient specialist.	**$23,376**
Area 11 JPB	Nutrient Specialist-Fillmore SWCD	Fully funded with CWL	20	45	45	55	55	55	51.429	Salary for full-time nutrient specialist.	**$51,428**
Root River Watershed	Grazing Specialist-Fillmore SWCD	Fully funded with CWL	20	45	45	55	55	55	51.429	Salary for full-time grazing specialist.	**$51,428**
Shell Rock WD	Nutrient/ISTS Specialist	SRWD, CWL	5	16	0	10.25	10	10.25	9.584	Parial salary for Freeborn County staff to conduct work for Shell Rock WD.	**$9,584**
Dakota SWCD	Conservation Tech	SWCD, BWSR Normal TA, CWL	4	6	6	16	0	20	14.961	Partial salary for SWCD Conservation Technician.	**$14,961**
Impack 6 JPB	Shoreland Specialist	Fully funded with CWL	20	40	40	40	40	44.75	37.403	Salary for full-time Shoreland specialist.	**$37,402**
Wilkin SWCD	Conservation Tech	Funded Through successful '08 app	20	40	0	0	0	0	0.000	Staff funds not needed.	**$0**
Wadena SWCD (protection)	Forestry Technician	Fully funded with CWL	45	45	45	45	45	45	42.078	Salary for full time Forestry Technician.	**$42,077**
Benton SWCD (protection)			60	50	50	50	50	50	46.753	Technical assistance needed to complete implement CWL protection activities.	**$46,758**
Total Funds in $1,000			284	$ 486.5	$ 431.0	$ 481.25			450		**$450,000**
Total Funds with Inflation of 5%						$ 505.31					
							450	490			

CWL TA Budgeted	$450,000
CWL TSP Funding	$40,000
Total Available	$490,000
Total Requests	$485,250

Board Resolution #_____

CLEAN WATER LEGACY PROGRAM

Continuation of Technical Assistance Funding for Staff Funded with BWSR's FY07 Allocation

WHEREAS, Governor Pawlenty signed the Clean Water Legacy Act (CWLA) into law on June 2nd, 2006; and,

WHEREAS, the BWSR endorsed an inter-agency strategy with the goal of coordinating non-point restoration and protection strategies and programs funded by the CWLA between the MN Department of Agriculture, the Department of Natural Resources, the Pollution Control Agency and the Board of Water and Soil Resources; and,

WHEREAS, an inter-agency implementation initiative was conducted to coordinate funding of restoration and protection activities; and,

WHEREAS, the 2006 legislature appropriated funds to the BWSR for Clean Water Legacy Technical Assistance and Engineering Grants in fiscal year 2007; and

WHEREAS, there is a need to continue the conservation work being accomplished with local governmental unit (LGU) staff hired with the FY07 Clean Water Legacy Technical Assistance and Engineering funding for the following reasons:

- Keep existing staff on to continue working towards meeting TMDL and County Water Plan goals,
- Provide a bridge for LGUs to apply for technical assistance funds for staff in FY10 in the event that additional CWL funding is made available from the legislature or from the potential 3/8 sale tax referendum,
- Provide some short-term stability for LGU management creating their calendar year 2009 budget,
- Provide incentive for staff hired through these positions to stay and not seek other employment, and
- Give guidance to LGUs if they should apply for FY09 CWL technical assistance funds or not.

NOW THEREFORE, the Grant Policy and Program Committee recommends BWSR approval of the proposed technical assistance allocations to further continue CWL funded technical staff.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

NEW BUSINESS

1. Cook County SWCD Request for Allocation of State Cost Share Program Rollover Funds to Facilitate Flood Response to June 6, 2008 Storm Event – Jeff Hrubes and Dan Steward. See attachment. ***DECISION ITEM***

3. Presentation "Working Together to Address Drinking Water Issues in the City of Hastings and the Vermillion River Watershed" - David Swenson and Jill Trescott, Dakota County Waters Resources Department. See attachment. ***INFORMATION ITEM***

Soil & Water Conservation District
411 W 2nd Street, Grand Marais, MN 55604
(218) 387-3647

Date: September 19, 2008
To: Wayne Zellmer, BWSR Cost Share
From: Rebecca Wiinanen, Cook SWCD

Subject: Request for Roll-Over Cost Share for Practices to Repair Damage from June 6 Storm

Hello Wayne. Thank you for your help to Cook SWCD in its assistance to landowners suffering damage in the June 6 record-breaking storm. Thanks also to Jeff Hrubes and Dan Steward for their help. The June 6 storm exceeded records for both a 12-hour and 6-hour event. The rain poured onto ground already saturated from a late spring melt.

Cook County is in the Federal disaster declaration signed by President Bush on June 25, 2008, for the State of Minnesota for FEMA public assistance. It has also been designated an agricultural disaster area by the USDA.

After twenty-two landowners stopped by the Soil & Water office asking for help, the Cook SWCD Board voted to work with the MN Conservation Corps (MCC) for labor for stream and gully repair. The Board later voted to advertise technical assistance, MCC labor, and cost share for storm damage repairs that would protect water quality. To-date SWCD staff, Tristan Beaster and Keith Anderson, CCLNS engineer, have reviewed damages on thirty-four private properties. Jeff Hrubes and Dan Steward, BWSR Board Conservationists, toured eleven of these properties on September 18.

Projects will be ranked by potential for further damage and sediment discharge into Lake Superior and inlet streams.

Cook SWCD requests $145,000 in roll-over cost share. Cook SWCD has $19,986 available to encumber to projects. This is not enough to fix damages caused by the storm.

Included with this request:

1. List of the types of practices
2. Federal disaster declaration
3. Federal agriculture disaster designation
4. Documentation from state climatology of the record-breaking event
5. Representative photos
6. Map of potential project locations

JOINT FEDERAL/STATE FIELD OFFICE
ROCHESTER, MINNESOTA
CONGRESSIONAL ADVISORY

FEMA-DR1772 MN
Joint Federal/State Field Office
Rochester, Minnesota
Congressional Advisory #05
August 11, 2008

FEMA – Ken Higginbotham Ph: 507-252-3247
Cell: 818-599-7422

State of MN: Rima Kawas Ph: 651-201-7169

PUBLIC ASSISTANCE (PA) APPLICANT BRIEFING

SCHEDULED FOR COOK COUNTY

Who: **FEMA and the Minnesota Department of Public Safety Division of Homeland Security and Emergency Management.**

What: **The Federal disaster declaration signed by President Bush on June 25, 2008, for the State of Minnesota, has been amended to include Public Assistance for Cook County. FEMA's Public Assistance (PA) program offers assistance to State and local governments, and certain private nonprofit organizations, for emergency work and the repair or replacement of disaster-damaged facilities. A PA applicant briefing is scheduled for Cook County.**

When: **8:30 a.m. Thursday, August 14, 2008**

Where: **Cook County Community Center**
317 West 5th Street
Grand Marais, MN 55604

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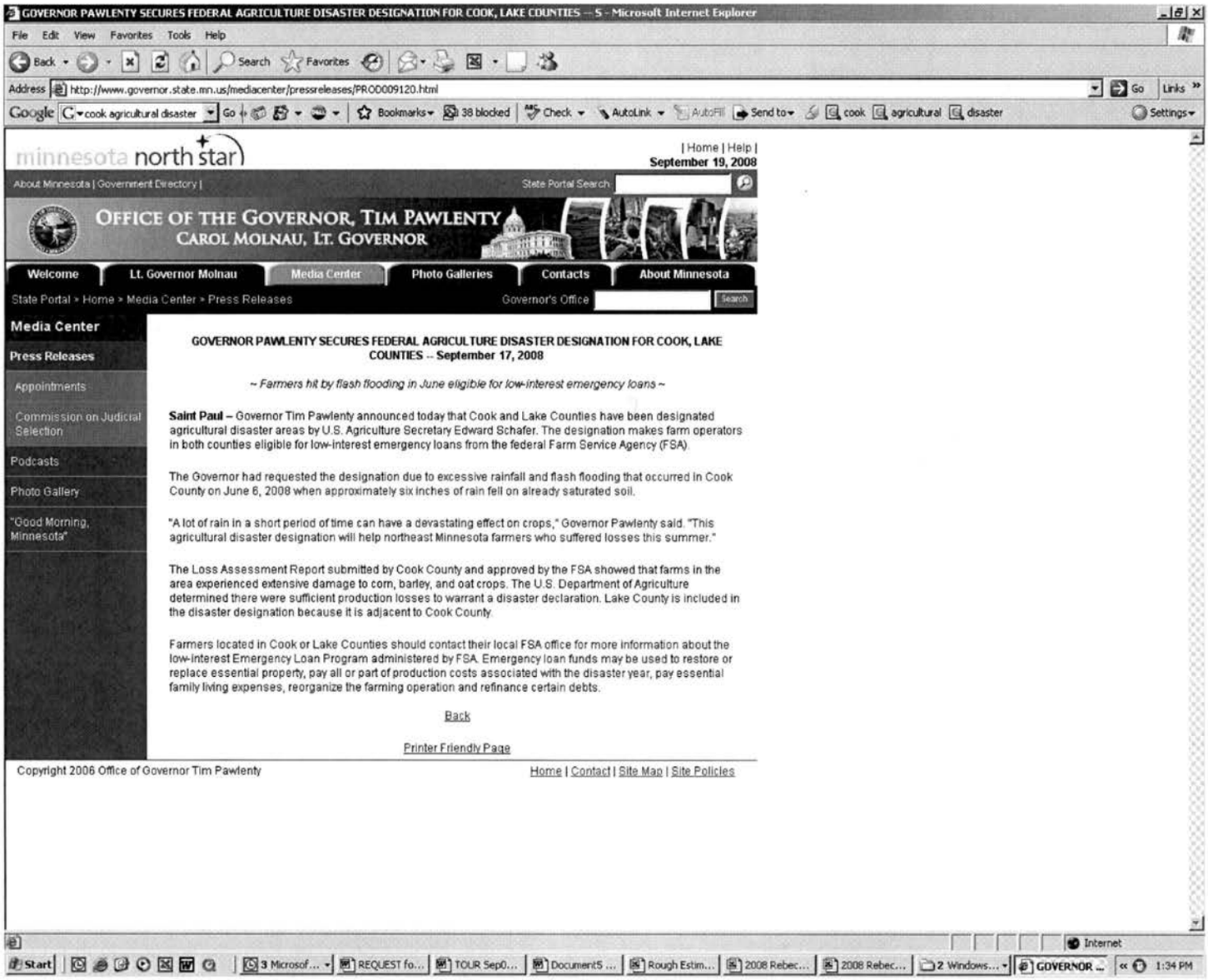
GOVERNOR PAWLENTY SECURES FEDERAL AGRICULTURE DISASTER DESIGNATION FOR COOK, LAKE COUNTIES -- S - Microsoft Internet Explorer
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GOVERNOR PAWLENTY SECURES FEDERAL AGRICULTURE DISASTER DESIGNATION FOR COOK, LAKE COUNTIES -- September 17, 2008
~ Farmers hit by flash flooding in June eligible for low-interest emergency loans ~
Saint Paul – Governor Tim Pawlenty announced today that Cook and Lake Counties have been designated agricultural disaster areas by U.S. Agriculture Secretary Edward Schafer. The designation makes farm operators in both counties eligible for low-interest emergency loans from the federal Farm Service Agency (FSA).
The Governor had requested the designation due to excessive rainfall and flash flooding that occurred in Cook County on June 6, 2008 when approximately six inches of rain fell on already saturated soil.
"A lot of rain in a short period of time can have a devastating effect on crops," Governor Pawlenty said. "This agricultural disaster designation will help northeast Minnesota farmers who suffered losses this summer."
The Loss Assessment Report submitted by Cook County and approved by the FSA showed that farms in the area experienced extensive damage to corn, barley, and oat crops. The U.S. Department of Agriculture determined there were sufficient production losses to warrant a disaster declaration. Lake County is included in the disaster designation because it is adjacent to Cook County.
Farmers located in Cook or Lake Counties should contact their local FSA office for more information about the low-interest Emergency Loan Program administered by FSA. Emergency loan funds may be used to restore or replace essential property, pay all or part of production costs associated with the disaster year, pay essential family living expenses, reorganize the farming operation and refinance certain debts.
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The June 5-6, 2008 storm event of 5.10 inches at Grand Marais harbor will rank as the 2nd highest 24-hour rainfall since 1950. It was one of only five 24-hour events since 1950 over 3 inches. The three highest 24-hour storms were in the last 12 years. The highest was in June of 1996 with 5.43 inches. Records were broken - during 6-hrs 4.81 inches and during 12 hours 5.08 inches fell.

YEARS 1950 to 2007

Precipitation from events of 2.00 inches or more

Sorted by Amount of Precipitation

Grand Marais harbor gauge station.
Precipitation > 2 inches within 24-hrs
Data from MN State Climatology
Data also available for 48-hr, 72-hr, and 10-day events

Number of events	Year	Month	Day	Precip	Temp max	Temp min	Temp avg
1	1996	6	29	**5.43**	75	49	62
2	*2008**	*6*	*5th-6th*	***5.10***	13 hour storm		
3	1999	7	5	**3.60**	70	50	60
4	1961	9	10	**3.49**	69	62	66
5	1970	7	27	**3.24**	81	61	71
6	1987	8	1	**2.93**	70	63	67
7	1950	5	5	**2.78**	54	35	45
8	1977	9	24	**2.74**	54	49	52
9	1988	8	17	**2.64**	74	62	68
10	1967	4	17	**2.62**	44	34	39
11	1970	9	21	**2.61**	69	56	63
12	1977	8	31	**2.61**	60	52	56
13	1993	7	4	**2.57**	65	50	58
14	1968	10	9	**2.55**	53	49	51
15	1989	6	13	**2.50**	50	47	49
16	2004	10	23	**2.47**	56	45	51
17	1972	9	20	**2.45**	64	56	60
18	1998	10	17	**2.40**	59	51	55
19	1973	9	1	**2.37**	71	63	67
20	1980	8	30	**2.34**	73	60	67
21	2001	7	31	**2.31**	72	55	64
22	1959	8	25	**2.28**	73	60	67
23	1964	5	23	**2.25**	64	52	58
24	1989	9	4	**2.25**	62	55	59
25	1954	7	27	**2.12**	71	60	66
26	1964	6	9	**2.12**	66	48	57
27	1961	8	25	**2.07**	69	58	64
28	1986	6	16	**2.05**	64	47	56
29	1951	7	16	**2.00**	67	44	56
30	1952	3	20	**2.00**	99	26	
31	1968	7	13	**2.00**	66	48	57
32	1974	7	2	**2.00**	63	47	55
33	2007	10	18	**2.00**	55	50	53

www.sws.uiuc.edu/

from "Rainfall Frequency atlas", 1992

Table 6. Sectional Mean Frequency Distributions for Storm Periods of 5 Minutes to 10 Days and Recurrence Intervals of 2 Months to 100 Years in Minnesota

Sectional code (see figure 1 on page 4)

01 - Northwest
02 - North Central
03 - Northeast
04 - West Central
05 - Central
06 - East Central
07 - Southwest
08 - South Central
09 - Southeast

Grand Marais Jun 08

Rainfall (inches) for given recurrence interval

Section	Duration	2-month	3-month	4-month	6-month	9-month	1-year	2-year	5-year	10-year	25-year	50-year	100-year *	
01	10-day	1.53	1.84	2.12	2.50	2.87	3.12	3.83	4.89	5.80	6.97	7.88	8.75	
01	5-day	1.27	1.53	1.73	2.00	2.30	2.50	3.11	4.11	5.01	6.12	7.05	7.94	
01	72-hr	1.11	1.30	1.47	1.70	1.96	2.13	2.70	3.61	4.43	5.55	6.41	7.27	
01	48-hr	1.03	1.20	1.34	1.55	1.78	1.94	2.42	3.25	4.05	5.13	5.91	6.70	
01	24-hr	0.94	1.09	1.20	1.39	1.57	1.71	2.16	2.94	3.69	4.57	5.41	6.11	
01	18-hr	0.89	1.03	1.13	1.30	1.48	1.61	2.03	2.76	3.47	4.30	5.09	5.74	
01	12-hr	0.82	0.95	1.04	1.21	1.37	1.49	1.88	2.56	3.21	3.98	4.71	5.32	
01	6-hr	0.70	0.82	0.90	1.04	1.18	1.28	1.62	2.20	2.77	3.43	4.06	4.58	
01	3-hr	0.60	0.70	0.76	0.88	1.00	1.09	1.38	1.88	2.36	2.92	3.46	3.91	
01	2-hr	0.54	0.63	0.69	0.80	0.91	0.99	1.25	1.71	2.14	2.65	3.14	3.54	
01	1-hr	0.44	0.51	0.56	0.65	0.74	0.80	1.02	1.38	1.73	2.15	2.54	2.87	
01	30-min	0.35	0.40	0.44	0.51	0.58	0.63	0.80	1.09	1.37	1.69	2.00	2.26	
01	15-min	0.25	0.29	0.32	0.37	0.42	0.46	0.58	0.79	1.00	1.23	1.46	1.65	
01	10-min	0.20	0.23	0.25	0.29	0.33	0.36	0.45	0.62	0.77	0.96	1.14	1.28	
01	5-min	0.12	0.13	0.15	0.17	0.19	0.21	0.26	0.35	0.44	0.55	0.65	0.73	
02	10-day	1.67	2.01	2.32	2.73	3.14	3.41	4.15	5.08	5.81	6.84	7.68	8.52	
02	5-day	1.35	1.61	1.82	2.11	2.43	2.64	3.27	4.14	4.84	5.86	6.71	7.57	
02	72-hr	1.24	1.45	1.64	1.90	2.19	2.38	2.90	3.64	4.31	5.28	6.10	6.96	
02	48-hr	1.14	1.33	1.48	1.72	1.98	2.15	2.68	3.38	3.97	4.86	5.62	6.45	
02	24-hr	1.07	1.24	1.36	1.57	1.78	1.94	2.41	3.06	3.58	4.39	5.10	5.88	
02	18-hr	1.00	1.16	1.27	1.47	1.67	1.82	2.27	2.88	3.37	4.13	4.79	5.53	
02	12-hr	0.93	1.08	1.18	1.37	1.55	1.69	2.10	2.66	3.11	3.82	4.44	5.12	
02	6-hr	0.80	0.93	1.02	1.18	1.34	1.46	1.81	2.30	2.68	3.29	3.82	4.41	
02	3-hr	0.68	0.79	0.87	1.00	1.14	1.24	1.54	1.96	2.29	2.81	3.26	3.76	
02	2-hr	0.62	0.72	0.79	0.92	1.04	1.13	1.40	1.77	2.08	2.55	2.96	3.41	
02	1-hr	0.50	0.58	0.64	0.74	0.84	0.91	1.13	1.44	1.68	2.06	2.40	2.76	
02	30-min	0.40	0.46	0.50	0.58	0.66	0.72	0.89	1.13	1.32	1.62	1.89	2.18	
02	15-min	0.29	0.33	0.36	0.42	0.48	0.52	0.65	0.83	0.97	1.19	1.38	1.59	
02	10-min	0.23	0.26	0.29	0.33	0.38	0.41	0.51	0.64	0.75	0.92	1.07	1.23	
02	5-min	0.13	0.15	0.16	0.19	0.21	0.23	0.29	0.37	0.43	0.53	0.61	0.71	
03	10-day	1.66	1.99	2.30	2.70	3.11	3.38	4.04	4.82	5.41	6.28	6.96	7.58	7.06
03	5-day	1.36	1.62	1.84	2.13	2.45	2.66	3.24	4.05	4.69	5.54	6.16	6.57	5.62
03	72-hr	1.19	1.39	1.57	1.82	2.10	2.28	2.83	3.57	4.16	4.96	5.53	6.09	5.47
03	48-hr	1.09	1.28	1.42	1.65	1.90	2.06	2.54	3.21	3.74	4.49	5.06	5.63	
03	24-hr	1.05	1.22	1.34	1.55	1.76	1.91	2.31	2.88	3.36	4.08	4.64	5.20	5.10
03	18-hr	0.99	1.15	1.26	1.46	1.66	1.80	2.17	2.71	3.16	3.84	4.36	4.89	
03	12-hr	0.91	1.06	1.16	1.34	1.53	1.66	2.01	2.51	2.92	3.55	4.04	4.52	5.08 *
03	6-hr	0.79	0.92	1.00	1.16	1.32	1.43	1.73	2.16	2.52	3.06	3.48	3.90	4.81 *
03	3-hr	0.67	0.78	0.85	0.99	1.12	1.22	1.48	1.84	2.15	2.61	2.97	3.33	3.30 *
03	2-hr	0.61	0.71	0.78	0.90	1.02	1.11	1.34	1.67	1.95	2.37	2.69	3.02	
03	1-hr	0.50	0.58	0.63	0.73	0.83	0.90	1.09	1.35	1.58	1.92	2.18	2.44	1.62
03	30-min	0.39	0.45	0.50	0.58	0.65	0.71	0.85	1.07	1.24	1.51	1.72	1.92	
03	15-min	0.29	0.33	0.36	0.42	0.48	0.52	0.62	0.78	0.91	1.10	1.25	1.40	
03	10-min	0.22	0.26	0.28	0.32	0.37	0.40	0.49	0.60	0.71	0.86	0.97	1.09	
03	5-min	0.13	0.15	0.16	0.19	0.21	0.23	0.28	0.35	0.40	0.49	0.56	0.62	

* record breaker

Rebecca

From: Greg Spoden [gspoden@umn.edu]
Sent: Friday, June 13, 2008 12:20 PM
To: rebecca.wiinanen@co.cook.mn.us
Cc: pboulay@umn.edu; jzandlo@umn.edu; mseeley@umn.edu; carol.christenson@noaa.gov; amanda.graning@noaa.gov
Subject: Grand Marais hourly rainfall totals June 5-6, 2008

Rebecca,

Here are hourly rainfall totals measured at the federally-operated automated weather station (KGNA) located on the Bay of Grand Marais.

Thursday, June 5, 2008 - hour ending 21:56 CDT - 0.03 inch
22:56 CDT - 0.05
23:56 CDT - 0.05
Friday, June 6, 2008 - hour ending 00:56 CDT - 0.02
01:56 CDT- 0.17
02:56 CDT - 1.05
03:56 CDT - 1.06
04:56 CDT - 0.62
05:56 CDT - 1.62 (four-hour subtotal 2:00 AM through 6:00 AM = 4.35 inches)
06:56 CDT - 0.29 (six-hour subtotal 1:00 AM through 7:00 AM = 4.81 inches)
07:56 CDT = 0.06
08:56 CDT = 0.06
09:56 CDT = 0.02

event total 5.10 inches

The one-percent probability six-hour rain event for the Grand Marais area is approximately 3.75 inches. See page 77 (page 84 of the PDF) of the "Rainfall Frequency Atlas of the Midwest" (http://www.sws.uiuc.edu/pubdoc/B/ISWSB-71.pdf).

Unfortunately, the state-operated automated weather station located at the Cook County airport does not transmit rainfall data.

As we discussed on the phone, viewing daily precipitation totals can be accomplished using the mapping tools available at http://climate.umn.edu/mngage .

Please feel free to phone or e-mail if you have any questions,

Greg

--

Greg Spoden
State Climatology Office
Minnesota Department of Natural Resources - Division of Waters
439 Borlaug Hall, University of Minnesota
1991 Upper Buford Circle
St. Paul, MN 55108-6028
phone: (651) 296-4214
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e-mail: gspoden@umn.edu or greg.spoden@dnr.state.mn.us
http://climate.umn.edu and http://www.dnr.state.mn.us/waters

Request for Roll-Over Cost Share
for Practices to Repair Damage from June 6 Storm
from Cook SWCD, 9/17/08

Practice	Cost Estimate
Stream Bank Stabilization/Slump	
trout stream bank stabilization; slump	2,000
trout stream bank stabilization; slump	30,000
stream crossing culvert repair and upgrade	18,000
stream bank stabilization	4,000
stream bank stabilization	4,000
Stream Bank Stabilization/Slump	*58,000*
Berm along Stream for Gully Prevention	
berm on stream; gully erosion control; water bars	3,000
berm on stream	2,000
berm on stream	2,000
Berm along Stream for Gully Prevention	*7,000*
Agricultural Erosion Control	
agricultural erosion control, grassed waterway improvements, sediment basins	80,000
Agricultural Erosion Control	*80,000*
Total	*145,000*

*The storm exceeded records for both a 12-hour and 6-hour event. The rain poured onto ground already saturated from a late spring melt.

*Cook County is a federal disaster declaration for FEMA public assistance. It has also been designated an agricultural disaster area by the USDA.

*Projects will be ranked by potential for further damage and sediment discharge into Lake Superior and inlet streams.

Board Resolution #_____

Use of State Cost Share Program Rollover Funds for Flood Response Activities in Cook County Minnesota

---

WHEREAS, On June 6th, 2008, the area around Grand Marais, Minnesota received rainfall totals of at least 5.1 inches over a 13 hour period; and,

WHEREAS, Cook County was included in the Presidential disaster declaration of June 25th 2008 for flood events occurring on June 7th, 2008 in SE Minnesota; and,

WHEREAS, FEMA assistance for Cook County was limited to public infrastructure and certain non-profit organizations: and,

WHEREAS, The US Department of Agriculture declared Cook County an agricultural disaster area on September 17, 2008; and,

WHEREAS, the Cook County Soil and Water District has requested the Board of Water and Soil Resources to consider providing additional cost-share funds that may be used to assist private landowners with projects that focus on flood damages contributing to sediment delivery and water quality concerns.

NOW THEREFORE, the Grant Policy and Program Committee recommends BWSR distribute up to $125,000 of available Cost Share Program rollover funds to the Cook SWCD to mitigate erosion and water quality damages caused by the flood event of June 6, 2008.

FURTHER, the Grant Policy and Program Committee identified the following conditions for use of the Cost Share Program rollover funds:

+ The State Cost Share Program rules and procedures must be followed
+ To the maximum extent practicable, the Cook SWCD should ensure coordination with available Federal Resources and use the rollover funds in a supporting role when possible, subject to practical considerations of timing and administrative efficiencies.
+ The Cook County SWCD should identify and implement an evaluation mechanism to determine priorities for use of the Cost Share Program rollover funds.
+ The Flood Response Rollover Funds should be tracked and reported separately from regular State Cost Share Program allocations.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

Dakota County Water Resources Department

Presentation to the Minnesota Board of Soil and Water Resources: *"Working together to address drinking water issues in the City of Hastings and the Vermillion River Watershed"*

October 22, 2008

Outline:

The City of Hastings, county seat of Dakota County, has struggled since the mid-1990s with rising nitrate levels in its public water supply. At the same time, Dakota County was finding elevated nitrate in private drinking water wells in the townships around Hastings. With a Clean Water Partnership grant from the Minnesota Pollution Control Agency, Dakota County worked with the City of Hastings, the Minnesota Department of Health, Minnesota Department of Agriculture, Soil and Water Conservation District, and Metropolitan Council to identify the extent and sources of nitrate contamination in groundwater and to develop an implementation strategy to address it.

The first phase of the Hastings Area Nitrate Study was conducted from 1999 to 2003. In it, the County found widespread nitrate contamination of drinking water in the Hastings area, with one quarter of the private drinking water wells exceeding the drinking water guideline and another quarter with elevated levels. In order to differentiate between potential sources of nitrate, a representative subset of the private wells were analyzed for certain compounds that were considered tracers, in addition to nitrate. Specifically, the samples were analyzed for agricultural herbicides, to evaluate the impacts of row-crop agriculture, and for caffeine, to evaluate the impacts of leaking septic systems. Caffeine was detected in 89% of the samples; pesticides or their breakdown products were detected in 70% of the samples. The caffeine was not correlated to the wells' nitrate results, and subsequent testing has called the caffeine detections into question.

On the other hand, pesticide levels in the wells were very highly correlated with the nitrate results, and this relationship has been repeatedly verified with ongoing testing of other private drinking water wells. Because of this, the study concluded that the major source of nitrate in this area is from row-crop agriculture, especially the corn-soybean rotation that dominates the County's agriculture. The study also found that the Vermillion River, which passes through the study area and flows into the Mississippi at Hastings, was a possible transport mechanism for nitrate contamination. The upper (trout stream) reaches of the Vermillion are fed by groundwater, whereas the lower reaches lose water back into the groundwater. Any contamination that enters the river in the upper reaches can potentially flow back to the groundwater in the lower, losing reaches.

Based on these findings, Dakota County developed an implementation plan that included outreach to the agricultural community and the general public; protection and improvement of the Vermillion River; protection of natural areas within the Watershed; septic system maintenance and upgrades; and regulation of well construction and sealing. Implementing these activities has been a collaboration between the County, the Vermillion River Watershed Joint Powers Organization, the University of Minnesota Extension, Minnesota Department of Agriculture, the City of Hastings, and other agencies. The second phase was conducted from 2005 until September 30, 2008. The third phase began on October 1, 2008. This talk will focus on the details of this ongoing collaboration.

FOR YOUR INFORMATION

October 22, 2008

- Revised listing of BWSR Committees
- BWSR Committee Schedule
- Updated listing of BWSR Staff
- Letter from Matt Kramer, Governor's Chief of Staff, regarding board members requirement to file a Statement of Economic Interest with the Minnesota Campaign Finance and Public Disclosure Act
- Letters to Warren Seykora, MAWD President, and Ray Bohn, MAWD Coordinator, regarding PRAP report.

BOARD OF WATER AND SOIL RESOURCES
COMMITTEES
October 2008

ADMINISTRATIVE ADVISORY COMMITTEE

Membership:	Randy Kramer, chair	citizen
	Paul Brutlag, vice-chair	citizen
	Louise Smallidge	soil & water conservation district
	Brian Napstad	county commissioner
	LuAnn Tolliver	watershed district/WMO
	John Jaschke	staff
	Mary Jo Anderson	staff

Responsibility:

The administrative advisory committee consists of the Board's chair and vice-chair and the chairs of the Board's standing committees. The administrative advisory committee will make evaluations and recommendations to the Board on various Board issues including ethics; expenses/per diem; bylaws; and legislation and budgets. The Administrative Advisory Committee will act as the personnel committee for personnel actions relating to the Board's executive director. The chairman may include additional members ad hoc to address special or unique topics or issues.

Meetings: The committee will meet at the call of the chair.

DISPUTE RESOLUTION COMMITTEE (DRC)

Membership:	Randy Kramer, chair	citizen
	Paul Brutlag	citizen
	LuAnn Tolliver	watershed district/WMO
	Quentin Fairbanks	county commissioner
	Louise Smallidge	soil & water conservation district
	Travis Germundson/Jim Haertel	staff lead

Responsibility:

The DRC is responsible for appeals relating to the Wetland Conservation Act rule decisions of local governments, watershed district rule and permit decision appeals, and, under MS103A.301, determinations of water law and policy. The authority of the DRC is established in statute and assigned to the DRC by the Board. Under current guidelines the DRC receives the appeals; hears the issues; and makes recommendations to the Board.

Meetings:

The Committee will meet as needed to process appeals that have been filed with the Board.

GRANTS PROGRAM AND POLICY COMMITTEE

Membership:	Louise Smallidge, chair	soil & water conservation district
	Dana Allen	citizen
	Quentin Fairbanks	county commissioner
	Brian Kletscher	county commissioner
	Bob Burandt	soil & water conservation district
	Paul Langseth	soil & water conservation district
	Gene Tiedemann	watershed district/WMO
	Joe Martin	Department of Agriculture
	Paul Eger	Pollution Control Agency
	Wayne Zellmer	staff lead
	Julie Klocker, Assistant Director	SMT staff

Responsibility:

The committee is responsible for reviewing cost-share, non-point engineering, clean water legacy, natural resources block grants, local water management challenge grants and services grants allocations, policies, and rules and making recommendations to the Board.

Meetings:

The committee will meet at least two times a year; once prior to the June allocation of cost-share (feedlots, general and special projects); non-point engineering; and services grants.

PUBLIC RELATIONS, OUTREACH AND STRATEGIC PLANNING COMMITTEE

Membership:	Brian Napstad, chair	county commissioner
	LuAnn Tolliver	watershed district/WMO
	Gordon Behm	watershed district/WMO
	Dana Allen	citizen
	Paul Langseth	soil & water conservation district
	Faye Sleeper	University of Minnesota Extension
	Jon Fure	staff lead
	Steve Woods	SMT staff

Responsibility:

The Public Relations, Outreach and Strategic Planning Committee is responsible for the development of strategic and outreach strategies and plans for the Board including identification of key outcomes, partnerships and opportunities.

Meetings: Committee will meet twice a year or at the call of the chair.

***RIM RESERVE PLANNING COMMITTEE* (April 2007)**

Membership:	Paul Brutlag, chair	citizen
	Dana Allen	citizen
	Gene Tiedemann	watershed district/WMO
	Bob Burandt	soil & water conservation district
	Paul Langseth	soil & water conservation district
	Joe Martin	Department of Agriculture
	Larry Kramka	Department of Natural Resources
	Kevin Lines	SMT staff

WATER PLANNING and COMPREHENSIVE WETLAND PLAN REVIEW COMMITTEES: NORTHERN/SOUTHERN/METRO

Membership: The committee consists of Board Members from the BWSR administration regions – metro, north, and south.

Chairs: *north – Quentin Fairbanks*
south – Brian Kletscher
metro – Bob Burandt

North (4)	**South (4)**	**Metro (3)**
Quentin Fairbanks - CC	Brian Kletscher – CC	Bob Burandt – SWCD
Paul Brutlag – CIT	Dana Allen – CIT	Louise Smallidge – SWCD
Gordon Behm - WD	Randy Kramer – CIT	LuAnn Tolliver – WD
Brian Napstad – CC	Paul Langseth – SWCD	Faye Sleeper – UM/Extension
Gene Tiedemann – WD	Joe Martin – MDA	Paul Eger – PCA
Wayne Edgerton – DNR	Dan Wilson – MDH	Jim Haertel, SMT staff
Ron Shelito, SMT staff	Jeff Nielsen, SMT staff	

Responsibility:

The committee has the responsibility to review county water plans, water management organization plans, watershed district overall plans, comprehensive wetland plans, and amendments to same and to advise the Board on the adequacy of the plans.

Meetings:

*The committee will meet as necessary to review the local plans and amendments. A **majority** of the committee members must be present. The BWSR northern, southern, and metro regional supervisors will coordinate meeting schedules with members.*

CC = county commissioner
CIT = citizen
SWCD = soil and water conservation district
WD = watershed district
WMO = watershed management organization

WETLANDS COMMITTEE

Membership:	LuAnn Tolliver, chair	watershed district/WMO
	Paul Brutlag	citizen
	Bob Burandt	soil and water conservation district
	Gordon Behm	watershed district/WMO
	Brian Kletscher	county commissioner
	Brian Napstad	county commissioner
	Gene Tiedemann	watershed district/WMO
	Larry Kramka	Department of Natural Resources
	Joe Martin	Department of Agriculture
	Paul Eger	Pollution Control Agency
	Les Lemm	WCA Coordinator, staff lead
	Dave Weirens	SMT staff

Responsibility:

The Wetlands Committee is responsible for reviewing Wetland Conservation Act (WCA) and wetland banking rules, policies, guidelines and projects and making recommendations to the Board.

Meetings: The committee will meet twice during the year or at the call of the chair.

STATUTORY COMMITTEES

Committee: Committee on Wells and Borings

Membership: Eric Mohring, staff lead; Board members assigned by Chairman as needed

Responsibility:

Interest and availability with regard to Advisory Council on Wells and Borings and Pesticide Advisory Committee. Policy issues will be brought before the Board for discussion as a new business agenda item.

Meetings: The committee will meet when necessary.

GENERAL COMMITTEE MEETING SCHEDULE

*The Board has adopted a resolution that **committees shall schedule meetings in conjunction with monthly Board meetings as much as possible.** A majority of each committee's membership should be available for a scheduled meeting. The committee chair and staff are expected to develop an agenda and staff are responsible for keeping minutes of the committee proceedings. The committee meetings are considered to be **public meetings** under the open meeting law and therefore must be noticed in the same manner as regular board meetings. All committee agendas should be e-mailed to Mary Jo Anderson for appropriate notice posting.*

Advisory members have offered to serve and may serve on BWSR committees as non-voting members and provide assistance as needed.

Advisory members:

Local Government Partners

- *Association of Minnesota Counties (AMC) – Annalee Garletz*
- *Minnesota Association of Conservation District Employees (MACDE) – Brian Watson/Rick Reimer*
- *Minnesota Association of Soil & Water Conservation Districts (MASWCD) – LeAnn Buck*
- *Minnesota Association of Townships (MAT) – Sandy Hooker*
- *Minnesota Association of Watershed Districts (MAWD) – Ray Bohn*
- *Minnesota County Planning and Zoning Administrators (MCPZA) – Norman Craig*
- *League of Minnesota Cities (LMC) - Jim Miller*

Federal Partners

- *U.S. Army Corps of Engineers (USCoE) – Bob Whiting*
- *U.S. Fish and Wildlife Service (USF&WS) – Robyn Thorson, Regional Director*
- *USDA Farm Services Agency (FSA) – Perry Aasness*
- *USDA Natural Resources Conservation Service (NRCS) – Tim Koehler*

State Agencies

- *Met Council – Peter Bell*
- *Minnesota Department of Transportation (MNDOT) – Frank Pafko*

Interest Partners

- *Allete Minnesota Power – Blake Francis*
- *Audubon Society of Minnesota – Ken Finch, Executive Director*
- *Builders Association – Nate Duer*
- *Fish and Wildlife Legislative Alliance – Lance Ness*
- *Izaak Walton League – Gary Schwartz*
- *Mining Industry Association of Minnesota – Wayne Brandt*
- *Minnesota Agricultural Water Resources Coalition – Warren Formo, Director*
- *Minnesota Agri-Growth Council – Daryn McBeth*
- *Minnesota Association of Realtors – Glen Dorfman*
- *Minnesota Barley Research & Promotion Council – Marv Zutz, Executive Director*
- *Minnesota Cattlemen's Association – Steve Brake, President*
- *Minnesota Center for Environmental Advocacy – Martha Brand*
- *Minnesota Conservation Federation – Gary Botzek*
- *Minnesota Corn Growers Association – Bruce Stockman, Executive Director*
- *Minnesota Ducks Unlimited – Ryan Heiniger*
- *Minnesota Environmental Partnership – Steve Morse, Executive Director*
- *Minnesota Farm Bureau Federation – Kevin Paap, President*
- *Minnesota Farmers Union – Doug Peterson, President*
- *Minnesota Forest Industries & Timber Producers Association – Wayne Brandt*
- *Minnesota Land Trust – Jane Prohaska, Executive Director*
- *Minnesota Milk Producers Association – Bob Lefebvre*
- *Minnesota Native Wildflowers/Grass Producers Association – Bill Olson, President*
- *Minnesota Pork Producers Association – Dave Preisler, Executive Director*
- *Minnesota Sierra Club – Judy Chucker, President*
- *Minnesota Soybean Growers Association – Jim Palmer, Executive Director*
- *Minnesota Turkey Growers Association – Steve Olson, Executive Director*
- *Minnesota Viewers Association – Ron Ringquist*
- *Minnesota Waterfowl Association – Brad Nylin, Executive Director*
- *Minnesota Waters – Marian Bender, Executive Director*
- *Minnesota Wetland Professionals Association – Andi Moffatt, Vice President*
- *Minnesota Wheat Growers Association – Dave Torgerson, Executive Director*
- *Pheasants Forever – Matt Holland, Field Supervisor*
- *Red River Valley Sugarbeet Growers, Nick Sinner, Executive Director*
- *The Nature Conservancy – Tom Landwehr, Assistant State Director*
- *Urban Wetland Management Coalition – Cliff Aichinger*
- *Wetlands for Minnesota (Bankers) – Mike Wyatt*

BWSR Committee Schedule (tentative agenda items)

October 15, 2008

(Contact Mary Jo Anderson @ 651-297-4290 if you have any questions)

October 21

- ***Wetlands Committee*** 5:00 p.m. – 9:00 p.m. @ Kelly Inn, St. Paul

October 22

- ***RIM Reserve Planning Committee*** (immediately following Board meeting)

November 20

- ***Wetlands Committee*** (time/location to be determined)

PHONE NUMBERS FOR BWSR STAFF
USE LAST FIVE DIGITS WHEN TRANSFERRING*
Main Line: 651-296-3767 – FAX: 651-297-5615 - Updated 10/21/08

Central Office

Fax #	297-5615
Anderson, Mary Jo	297-4290
Bonde, Karen	297-3998
Buckhout, Don	296-0768
Cabak, Mitchell	**(to be determined)**
DeVoe, Natasha	205-4664
Donnelly, Conor (cell 612-408-7002)	282-3815
Engineers Cell Phone	485-8466
Eisele, Bill	282-2929
Fredbo, Tim	296-0880
Fure, Jon	296-0884
Germundson, Travis	297-4958
Girolamo, Dan (cell 507-390-4005)	215-1703
Hubbell, Dianne	296-0873
Jaschke, John (cell 612-202-3815)	296-0878
Kean, Al (cell 651-245-6531)	297-2907
Keating, Kari	297-8029
Klocker, Julie (cell 651-308-8647)	297-5617
Larson, Greg (cell 612-998-1674)	297-7029
Lemm, Les (cell 651-341-4208)	296-6057
Lewis, Michelle	296-2428
Lines, Kevin	297-1894
Luniewski, Jim	297-2622
Mack, Kristie	215-9420
Mohring, Eric (cell 612-309-1173)	297-7360
Ogg, Tim (cell 651-295-5737)	297-8024
Peterson, Joel	215-9008
Remick, Polly	297-4365
Salinas, Debbie	297-8025
Shaw, Dan (cell 612-236-6291)	296-0644
Sokatch, Char	297-4016
Spence, Aaron	296-0660
Straumanis, Sarma	297-7965
Strojny, Carol (cell 612-518-5545)	297-1893
Swenson, Karli (cell 612-807-0445)	282-2600
Wenzel, Tom (cell 612-720-1412)	296-0883
Weirens, Dave (cell 763-229-4308)	297-3432
Woods, Steve (cell 651-402-6997)	297-7748
Zellmer, Wayne	297-7361
Zeug, Leon	296-0714

Metro Office

Haertel, Jim	297-2906
Lewis, Melissa (cell 612-743-8822)	297-4735
Peterson, Lynda **(cell phone only)**	(612) 201-9806
Powell, Ken (cell 651-592-9542)	296-0874
Westrick, Marcey (cell 651-276-5976)	284-4153
Wozney Brad (cell 651-233-6673)	296-6068

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Mankato

Fax #	(507) 389-6093
Hughes, Chris (cell 507-381-5040)	(507) 389-6784
Maul, Jeremy (cell 507-380-4047)	(507) 389-1967

Marshall

Fax #	(507) 537-6368
Cell Phone	(507) 829-3520
Hoek, Tabor	(507) 537-7260
Radel, Kane (cell 507-430-6211)	**(to be determined)**
Santjer, Scott (cell 612-723-0298)	(507) 537-6097
Serreyn, Roxie	(507) 537-6060
Sill, David	(507) 537-6374

New Ulm

Fax # (cell 507-276-5386)	(507) 359-6018
Drewitz, Matt (cell 507-766-5020)	(507) 359-6076
Fischer, Tom	(507) 359-6091
Hedtke, Jeff (cell 651-485-8470)	(507) 359-6092
Hiles, Mark	(507) 359-6077
Nielsen, Jeff	(507) 359-6075
Swanson-Cullen, Carla	(507) 359-6074

Rochester

Fax #	(507) 285-7144
Cell Phone	(507) 696-3617
Erickson, Dorothy	(507) 206-2889
Kells, Mary	(507) 206-2890
Lawler, Stephan	(507)206-2892
Schaefers, Michelle (cell 507-259-9350)	(507)206-2793

Northern Regional Offices

Bemidji

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Best, Bill (cell 218-556-4686)	(218) 333-8026
Dwight, Brian (cell 218-820-2335)	(218) 333-8027
Grundmeier, Brigitte	(218) 755-4235
Krystosek, Dale (cell 218-820-9381)	(218) 333-8029
Severts, Chad (cell 218-368-0736)	(218) 333-8028

Brainerd

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Conference Room	(218) 833-8607
Caughey, Donna	(218) 828-2383
Grow, Keith (cell 218-820-3655)	(218) 828-6035
Hrubes, Jeff (cell 218-368-7683)	(218) 833-8608
Overland, John (cell 218-232-4852)	(218) 825-6807
Shelito, Ron (cell 218-820-3794)	(218) 828-2604
Steward, Dan (cell 218-820-1679)	(218) 828-2598
Weinerman, Jason (cell 218-820-1688)	(218) 828-6045

Duluth

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Flemming, Mary Jo	(218) 723-4752
Lemmerman, Jim **(cell phone only)**	(218) 341-0703
Weyandt, Joan (cell 218-349-1834)	(218) 723-4607

Fergus Falls

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Hofstad, Steve	(218) 736-5445 ext 119
	cell (218) 770-2767
Waller, Pete	(218) 736-5445 ext 104
	cell (218) 770-3802

Caledonia

Larson, Jeff (cell 507-450-3924)	(507)724-5261

Lewiston

Ragan, Terry (cell 507-450-3644)	(507)523-2171

STATE OF MINNESOTA

Office of Governor Tim Pawlenty

130 State Capitol ♦ 75 Rev. Dr. Martin Luther King Jr. Boulevard ♦ Saint Paul, MN 55155

October 14, 2008

Dear Appointees:

Thank you for giving of your time and talents to serve the citizens of the State of Minnesota. We appreciate your willingness to serve.

The Executive Director of your board or commission is responsible for providing new members with appropriate education on the laws and policies for the board. It is the expectation of the Governor's Office that appointees will be prepared, attend meetings, and conduct themselves in an honest and ethical manner. To assist, we are providing an overview of the ethical and legal issues you need to be familiar with.

Ethics in Government

You are a "public official" under the Minnesota Campaign Finance and Public Disclosure Act, Minnesota Statutes Chapter 10A. The Act requires board members to file a Statement of Economic Interest. The Act also strictly prohibits any board members from receiving any gifts from registered lobbyists, lobbyist associations or principles, and provides procedures related to conflict of interest.

In addition to the statutory requirements of the Campaign Finance Act, the Governor's Office also expects that appointed board and commission members will avoid accepting gifts from *any* source in relation to their status as members, avoid situations that present an actual conflict of interest or an appearance of a conflict and ensure that their use of state property and resources are for state purposes only.

We are enclosing an Information Sheet that provides some basic information on these ethical issues, as well as, the Open Meeting Law and Data Practices Act. If you have any questions, the executive director of your board can help provide additional clarity on the ethical standards that govern members.

Sincerely,

Matt Kramer
Chief of Staff

cc: Executive Directors

10A

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ETHICAL STANDARDS FOR PUBLIC OFFICIALS:

Ban on Gifts from Lobbyists, Principles and Associations (MS §10A.071)

Public Officials may not accept gifts of any kind from: (1) any person registered as a lobbyist or (2) any business or nonprofit entity registered as an association or principal that hires lobbyists. In addition, the statute prohibits accepting a gift from anyone providing a gift at the request of a registered lobbyist, principle or association. This would include employees or officers of a registered association or principle and any other person acting act the request of a lobbyist or lobbyist association or principle.

This is a **strict** prohibition. It applies to any gift regardless of whether it is offered in connection with your responsibilities as a public official. In other words, even if the person offering a gift is a long time friend unconnected with the board, your status as a public official prevents you from accepting the gift.

> What is a Gift? "Gift" is broadly defined and includes items of any kind, money, tickets to events, payment for meals, property, services, loans, forgiveness of indebtedness, or a promise of future employment.
>
> How do I know who is a lobbyist, principle or association? Lists of the individuals and entities registered as lobbyists, principles and associations is accessible at http://www.cfboard.state.mn.us/lob_lists.html
>
> Are there any exceptions? There are a few exceptions. The most common exceptions are for gifts of less than $5 and situations where the official has, at the time the gift is accepted, paid the value of the gift. An analysis of the gift ban and advisory opinions is available at http://www.cfboard.state.mn.us/lobby/GIFTPRIM.pdf

No Gifts Related to Responsibilities: In addition to the strict gift ban related to gifts from lobbyists, associations and principals, it is the expectation of the Governor's Office that board members will not accept gifts offered from any source that are given in connection with or as a result of membership on the board.

Use of Official Position. Board members may not use or attempt to use their official position to secure benefits, privileges, exemptions, or advantages for themselves, their family or an organization with which the member is associated that are different from those available to the general public. This includes use of membership to secure preference in access to tickets or special purchase offers.

Use of State Property and Resources. Board Members may use state employees' time, state supplies, or state property and equipment only for state business. In relation to use of state provided phones, email or other electronic resources, board members must comply with the Statewide Policy on Appropriate Use of Electronic Communication and

Technology issued by the Department of Employee Relations available at: http://www.admin.state.mn.us/documents/bulletin_2006_cell-phone-policy.pdf

Confidential Information. Members may not use or disclose private or confidential information received as a board member. Disclosure of information classified by law as private or confidential violates the Minnesota Government Data Practices Act (see below).

Discrimination. Any board member found to have engaged in illegal discrimination, sexual or other harassment may be subject to removal.

Avoiding Conflicts of Interest. If an action or decision before the board would substantially affect the member's financial interests or those of an associated business (unless the effect on the official is no greater than on other members of the official's business classification, profession, or occupation), the member must abstain, if possible, in a manner prescribed by the board from influence over the action or decision in question. If the official is not permitted or is otherwise unable to abstain from action in connection with the matter, the official must file a statement describing the potential conflict and the action taken. A public official must file the statement with the board within a week of the action taken.

OPEN MEETING LAW

The Minnesota Open Meeting Law, Minnesota Statues Chapter 13D, requires that meetings of governmental boards and commissions generally be open to the public. The purpose of the OML is to ensure that decisions are made in the open and that the public has the right to be present and informed about the decisions of governmental entities. Boards are also required to give public notice of their meetings and keep official records of votes and actions.

A quorum of board members cannot "meet" outside of the public process. Purely social gatherings are not a meeting, but members need to make sure that they do not use those gatherings to discuss public business. Email cannot be used to conduct discussions of matters before the board with a quorum of members (either individually or through serial emails).

The OML allows certain kinds of meetings, or parts of meetings to be closed. The open meeting law does not apply to any state agency, board, or commission when exercising quasi-judicial functions involving disciplinary hearings. Intentional violations of the OML can subject a member to a $300 fine. Three intentional violations can result in additional fines and forfeiture of membership.

More information is available at: http://www.ipad.state.mn.us/omlinfo.html

MINNESOTA GOVERNMENTAL DATA PRACTICES

The Minnesota Governmental Data Practice Act, Minnesota Statutes Chapter 13, governs the classification and public access to government data, including the data of state boards and commissions.

All board related documents are presumed to be accessible to the public unless state or federal law classifies the data as private or confidential. The Act also applies to board related data, regardless of where it is maintained. A member's written or electronic communications related to board matters may be public data that is accessible to the public even if it is stored on a home computer.

Where the law classifies documents or information as private or confidential, members may not disclose the data. Disclosure of data classified as private or confidential violates the Act and can result in legal liability for the board. Willful violation of the Act is a misdemeanor.

More information is available at: http://www.ipad.state.mn.us/publicresources.html

Minnesota Board of Water & Soil Resources

October 14, 2008

Mr. Warren Seykora, President
MAWD
13683 390th Street
Ulen, MN 56585

Mr. Ray Bohn, Coordinator
MAWD
540 Diffley Road
St. Paul, MN 55123

Dear Mr. Seykora and Mr. Bohn:

Thank you for your September 5, 2008 letter commenting on the Performance Review and Assistance Program report that we prepared for the Middle Snake Tamarac Rivers Watershed District. Because this was the first special request application of our new Performance Review and Assistance Program (PRAP) responsibilities and we are still in the process of determining how best to assist the local governmental units of our delivery system using this process, your comments are particularly welcome. I will address each of your comments using the headings from your letter.

Watershed District Appointment Accountability

By "appointing authority" we understand that you are referring to the Marshall and Polk County boards. The performance review that we conducted was directed at the board of managers of the watershed district. The purpose of the review was to determine if the watershed managers are able to make decisions and implement planned actions effectively and efficiently.

While a review of the counties' appointment decisions was outside the scope of our report to the watershed district managers, we agree that counties do have a responsibility to appoint managers who have the necessary qualifications and the commitment to conduct the business of the watershed district in the best interests of the citizens and the resources of the district. To that end we have provided, through the Association of Minnesota Counties and on our website, specific guidance for county boards to use in their selection of watershed district managers. We are engaging the appointing counties in the Middle Snake Tamarac Rivers Watershed District to make them aware of this guidance.

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In addition, we will be meeting with the Marshall and Polk County boards to review the results of our PRAP report and to explain how we are working with the watershed managers to address the issues in the report. We also plan to address the county boards again at the end of our assistance process to report on the results of our efforts.

Data Requests

We agree with your comment about the many data request responses that the Middle Snake Tamarac Rivers Watershed District board and staff have successfully completed. Our report should have noted the extreme level of requests for data and information to which this district has been subjected and the additional workload that responding to those requests has generated.

As was suggested by Mr. Bohn at a recent meeting, we will encourage the Middle Snake Tamarac Rivers Watershed District staff to keep an account of the staff time and expense that is spent responding to citizen data and information requests. In our report, we had also suggested that district staff take advantage of training opportunities provided by the state Department of Administration that may be helpful in managing these requests as efficiently as possible.

In further response to this comment, when we meet with our PRAP Advisory Team later this year, we will propose changes to our reporting process. One possible change is to allow local governmental units that are the subjects of the review to comment on a draft report before we finalize and include the comments in the published document.

Lawsuits

The lawsuits were mentioned in our report as symptomatic of the high degree of internal conflict that exists among the members of the watershed district organization and was not being addressed. BWSR staff are working with the watershed managers to pursue options to address this conflict and establish procedures and protocols to allow managers to freely discuss the business of the watershed.

However, it is important to note that all watershed district managers have certain legal rights both as individuals and as appointed public officials, and BWSR is in no position to infringe nor judge the merits of cases that arise from the exercise of those rights. With PRAP, our focus is on the ability of the watershed district to carry out its responsibilities for water and related land resource management. And in the case of the Middle Snake

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Tamarac Rivers Watershed District we found that they are able to carry out their responsibilities to an exemplary degree, in spite of the on-going, internal conflict.

"Paper Chase Methodology"
Your comment about the methodology that we employed did not acknowledge the full extent of BWSR's engagement with this district over the last few years. The methodology we used for the performance review consisted of review of official documents (annual reports, meeting minutes, reports of other governmental units), consistency with our performance standards, as well as direct observation of board of managers meetings. Our follow-up to the report during the on-going assistance phase has consisted of BWSR staff attendance at board of manager meetings to present information and encourage manager action to address these issues.

I am confident that the Minnesota Association of Watershed Districts and your member districts will come to realize that BWSR plans to use PRAP as the legislature intended, as a means to provide oversight of, engagement with, and assistance to the local units of government that are our partners in conservation. Our PRAP advisory team, on which the Minnesota Association of Watershed Districts is well represented, has repeatedly cautioned us not to make PRAP a means for the state to impose its will on local units of government. Our emphasis in this program will continue to be to work with our partners to help them be the best they can be while protecting their autonomy. We believe we are doing that with the Middle Snake Tamarac Rivers Watershed District. We ask you to withhold judgment about our effectiveness in that regard until the process is completed.

I would welcome the opportunity to discuss these issues with you further.

Sincerely,

John Jaschke
Executive Director

cc: BWSR Board Members
Julie Klocker
Steve Woods
Ron Shelito
Don Buckhout
Brian Dwight

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Minnesota Board of Water & Soil Resources

DATE: December 5, 2008

TO: Board of Water and Soil Resources' Members, Advisors, and Staff

FROM: John Jaschke, Executive Director

SUBJECT: December 17, 2008 Board Meeting Notice

The Board of Water and Soil Resources (BWSR) will meet on Wednesday, December 17, 2008, beginning at 9:00 a.m. The meeting will be held in the second floor conference room at 520 Lafayette Road N., St. Paul. Parking is available in the lot directly in front of the building (use hooded parking areas). We have a very full agenda so please plan for the meeting to adjourn around 2:00 p.m.

The following information pertains to agenda items:

COMMITTEE RECOMMENDATIONS

Southern Water Planning Committee

1. **Lyon County Local Water Management Plan Update** – Lyon County submitted their Local Water Management Plan Update (Plan Update) to the Board for final State review on June 16, 2008. A final public hearing on the Plan Update was held on July 17, 2008; no comments pertaining to the Plan Update were received. On November 14, 2008, the Board's Southern Water Planning Committee (Committee) reviewed the recommendation of the state review agencies regarding final approval of the Lyon County Local Water Management Plan Update. The Committee recommends approval. The Findings of Fact, Conclusions and Order are drafted for the Board's consideration. See attachments. ***DECISION ITEM***

2. **Watonwan County Local Water Management Plan Update** – Watonwan County submitted their Local Water Management Plan Update, a record of the public hearing, and copies of all written comments pertaining to the Plan Update to the Board for final state review on July 31, 2008. On November 14, 2008, the Board's Southern Water Planning Committee (Committee) reviewed the recommendation of the state review agencies regarding final approval of the Watonwan County Local Water Management Plan Update. The Committee recommends approval. The Findings of Fact, Conclusions and Order are drafted for the Board's consideration. See attachments. ***DECISION ITEM***

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3. **Rice County Priority Concerns Scoping Document** - Rice County, as part of updating their Comprehensive Local Water Management Plan, submitted their Priority Concerns Scoping Document for state review and comment. The Board's Southern Water Planning Committee (Committee), chaired by Brian Kletscher, met November 14, 2008, after the state agency review period ended. The Committee's recommendation for the content of the final plan is drafted for the full Board review and action. The state's expectations for the final plan must be sent to Rice County. See attachment. ***DECISION ITEM***

4. **Rice County Request for Extension of the Rice County Comprehensive Water Management Plan** – On November 3, 2008, Rice County submitted a request for a one-year extension of the Rice County Comprehensive Water Management Plan. This request would extend the plan to January 28, 2010 and is needed in order to allow additional time to complete the Water Management Plan update process. Approval of the Rice County Priority Concerns Scoping Document is a Board agenda item for the December 17, 2008 meeting. The Board Conservationist and the Board's Southern Water Planning Committee recommend approval of Rice County's extension request. Rice County will continue its effort toward completion of the Comprehensive Local Water Plan revision and will not order or commence any projects using authorities under 103B.311 Subdivision 4 (a) (5) until completion of the Comprehensive Local Water Management Plan Revision. See attachment. ***DECISION ITEM***

NEW BUSINESS

1. **Federal Highway Administration (FHWA) Exemplary Ecosystem Initiative Award** – This award was jointly given to the Minnesota Department of Natural Resources, Minnesota Board of Water and Soil Resources, and the Minnesota Department of Transportation for the Bob Jacobson Restoration Site (previously referred to as the Vesledahl Project and/or the Wingard Wetland and Grassland Restoration Project). The Bob Jacobson Restoration Site received an FHWA Award in 2007. Cheryl Martin, Environmental Engineer, for the Federal Highway Administration will be present a plaque to each agency. See attachment. ***INFORMATION ITEM***

2. **Order Public Hearing for Boundary Change, Withdrawal of Territory and Enlargement of the Cedar River Watershed District (CRWD), the Shell Rock River Watershed District (SRRWD), and the Turtle Creek Watershed District (TCWD)** – Six petitions from Freeborn and Mower Counties and three watershed districts have been submitted requesting boundary changes, withdrawals of territory and enlargement for the CRWD, SRRWD, and TCWD. The petitions seek to have the watershed districts' boundaries more closely align to the actual watershed boundaries. One public hearing for all six petitions is recommended due to the interrelationship of the three watershed districts. Staff find the petitions valid such that a public hearing should be ordered per the attached draft Order. ***DECISION ITEM*** **-2-**

3. **RIM Reserve Vegetation Management and Enhancement of Conservation Easement Lands Policy** - The Board of Water and Soil Resources (BWSR) recognized the need to establish a policy and procedure for vegetative management and enhancement of conservation easements. This updated policy includes new legislative responsibilities provided to the BWSR in the 2008 Bonding Bill (Chapter 179, 2008 Session Law) and incorporates historical and new innovative practices into one new policy document. The RIM Reserve Management Planning Committee unanimously recommends this new policy to the Board for their adoption. See attachments. ***DECISION ITEM***

4. **Red River Valley Restoration Initiative (RRVRI) Establishment** - The BWSR received $25M from the State legislature for the RIM Reserve Program in 2008. In addition, the legislature identified that up to $8M is available to restore wetlands and reduce flooding in the Red River Valley. BWSR staff worked with the Red River Watershed Management Board to develop this pilot RRVRI. The RIM Reserve Management Planning Committee (RRMPC) unanimously recommends an allocation of up to $3M to RRVRI to acquire riparian easements and establish conservation practices on those riparian lands acquired in easements. These funds must be obligated by June 1, 2009 for the stated purposes of the RRVRI. The RRMPC is recommending the payment rate for permanent easements on cropland be 100% of Estimated Market Value (EMV) and the payment rate for non-cropland be 60% of EMV. Rates are to be calculated using township mean for tillable property value established by county assessors for the 2009 tax year. See attachments. ***DECISION ITEM***

5. **Northeast Wetland Mitigation Inventory** - The 2007 legislature appropriated $375,000 to BWSR to conduct an inventory of wetland mitigation opportunities and water quality and watershed improvement projects in the greater than 80% area of Minnesota (northeast and north central regions). The inventory component of the project was completed during in the fall of 2008 and a draft report is currently being finalized (the draft report will be sent under separate cover.) The inventory included an assessment of the wetland and water resources that have been developed on former mine lands and an analysis of the functions and values of those wetland and water resources. The legislative appropriation language "*a report on the analysis outcomes shall be given to the house and senate chairs of the environment and natural resources policy and finance committees by January 15, 2009."* The second phase of the project will begin in January and will include utilizing the findings of the inventory to conduct a region-wide wetland mitigation siting analysis for greater than 80 percent areas of the state. The results of the two elements of the project will provide detailed information on the wetland mitigation potential in this region of the state, how much and where these sites are located, and may provide recommendations on regulatory program changes in response to these wetland mitigation findings. ***INFORMATION ITEM***

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Rochester, MN 55906
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6. **Local Road Wetland Replacement Program Project** – BWSR is tasked with replacing wetland impacts associated with the repair, rehabilitation, reconstruction and replacement of currently serviceable existing state, city, county or town public roads. This agenda item requests Board approval for six development agreement projects and three easement agreement projects, where wetlands are restored privately and publically, to generate replacement credits for the program. The Board's Wetland Committee offered support for these projects at their meetings on September 24 and November 20, 2008. See attachments. ***DECISION ITEM***

7. **Wetland Banking Fee Policy: Update Calculated Wetland Credit Values** - The Board last updated the Wetland Banking Fee Policy on September 25, 2007. These calculated values are used to determine wetland bank fees and staff are recommending they be updated annually. The basis of the values are land values reported to the Department of Revenue from local property tax administrators. The Wetland Committee met on November 20, 2008 and is recommending these values be updated. See attachments. ***DECISION ITEM***

8. **Wetland Conservation Act: Adopt Draft Rule and Authorize Formal Rulemaking** - With significant stakeholder and local government input, staff have been working on Wetland Conservation Act rule amendments since Fall 2007. The permanent rule needs to be adopted before the exempt rule expires on August 5, 2009. The rule amendments incorporate changes including those made for the exempt rule, statutory amendments, provisions of the Wetland Mitigation Memorandum of Understanding, and numerous suggestions proposed by BWSR staff and stakeholders. The Wetland Committee has met four times to consider rule issues and provide direction to staff. The Summary of Changes Since 11-17-08 Rule Draft; WCA Rule 12-5-08 Draft with Strikeouts *(large document)*; and the WCA Rule 12-5-08 Draft Clean Version *(large document)* are posted on the BWSR website at this link: www.bwsr.state.mn/wetlands. If you have any questions or need additional clarification, contact Dave Weirens at 651-297-3432 or david.weirens@state.mn.us. On November 20 the Wetland Committee met and is recommending the Board adopt the draft rule and authorize formal rulemaking. An opportunity for up to three minutes of public testimony will be provided to interested persons or organizations. See attachments. ***DECISION ITEM***

9. **Grants Program & Policy Committee Recommendations** - The following grant program allocations are currently scheduled as follows:
   A. '09 Drainage Records Modernization Grant, $500K – Forty six applicants have requested $1.35 M.
   B. '09 Native Buffer Cost-Share Grants, $700K.
   C. '09 Ag-land Hydrologic Restoration Grants, $1.5M.
   D. '09 Clean Water Legacy Project Grants, $3.2 M ($1.2M BWSR, $2.0M PCA).

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Staff work teams are preparing recommendations on these items for Senior Management Team review on December 10th. The Grants Program and Policy Committee will be meeting via conference call and in person at the St. Paul office on December 12th from 10 a.m. to 1 p.m. (changed from Dec. 17th) and will have recommendations for these items for Board consideration at the December 17th meeting. A separate set of draft resolutions and supporting materials for these items will be sent to you prior to the 17th. ***DECISION ITEM***

If you have any questions regarding the agenda, please feel free to give me a call at 651-296-0878. The meeting will adjourn about 2:00 p.m.; lunch will be provided. If bad weather conditions exist in your area and you are unable to attend the meeting due to travel restrictions, please notify the Board office by noon on Tuesday, if possible. I look forward to seeing you on December 17th!

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BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD N.
ST. PAUL, MINNESOTA 55155
WEDNESDAY, DECEMBER 17, 2008

PRELIMINARY AGENDA

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF OCTOBER 22, 2008

OPEN MIKE (10-minute agenda time, two-minute limit/person)
Note: for those wishing to provide up to three minutes verbal testimony on the WCA Rule (New Business Item #8) a sign-up sheet will be provided. Written testimony will also be accepted and entered as part of the rule development record.

INTRODUCTION OF NEW BOARD MEMBER
- Rebecca Flood, MPCA

RECOGNITION OF BRIAN KLETSCHER

INTRODUCTION OF NEW EMPLOYEES
- Ryan Hughes
- Paul Senne

REPORTS
- Chair – Randy Kramer
- Executive Director – John Jaschke
- Dispute Resolution Committee – Randy Kramer
- Wetlands Committee – LuAnn Tolliver
- Grants Program & Policy Committee – Louise Smallidge
- Public Relations, Outreach & Strategic Planning Committee – Brian Napstad
- Administrative Advisory Committee – Randy Kramer

COMMITTEE RECOMMENDATIONS

Southern Water Planning Committee

1. Lyon County Local Water Management Plan Update – Brian Kletscher – ***DECISION ITEM***

2. Watonwan County Local Water Management Plan Update – Brian Kletscher – ***DECISION ITEM***

3. Rice County Priority Concerns Scoping Document – Brian Kletscher – ***DECISION ITEM***

4. Rice County Request for Extension of the Rice County Comprehensive Water Management Plan – Brian Kletscher – ***DECISION ITEM***

NEW BUSINESS

1. Federal Highway Administration (FHWA) Exemplary Ecosystem Initiative Award - Cheryl Martin, Environmental Engineer, FHWA – ***INFORMATION ITEM***

2. Order Public Hearing for Boundary Change, Withdrawal of Territory and Enlargement of the Cedar River Watershed District (CRWD), the Shell Rock River Watershed District (SRRWD), and the Turtle Creek Watershed District (TCWD) –Travis Germundson – ***DECISION ITEM***

3. RIM Reserve Vegetation Management and Enhancement of Conservation Easement Lands Policy – Kevin Lines – ***DECISION ITEM***

4. Red River Valley Restoration Initiative (RRVRI) Establishment – Kevin Lines – ***DECISION ITEM***

5. Northeast Wetland Mitigation Inventory - Dale Krystosek, BWSR Senior Wetland Specialist and Keith Hanson, Barr Engineering – ***INFORMATION ITEM***

6. Local Road Wetland Replacement Program Project – Dan Girolamo and Dave Weirens – ***DECISION ITEM***

7. Wetland Banking Fee Policy: Update Calculated Wetland Credit Values – Dave Weirens – ***DECISION ITEM***

8. Wetland Conservation Act: Adopt Draft Rule and Authorize Formal Rulemaking – Dave Weirens and Les Lemm – (testimony) ***DECISION ITEM***

9. Grants Program & Policy Committee Recommendations – Louise Smallidge
   The following grant program allocations are currently scheduled as follows:
   A. '09 Drainage Records Modernization Grant, $500K – Forty six applicants have requested $1.35M
   B. '09 Native Buffer Cost-Share Grants, $700K
   C. '09 Ag-land Hydrologic Restoration Grants, $1.5M
   D. '09 Clean Water Legacy Project Grants, $3.2M ($1.2M BWSR, $2.0M PCA)

   DECISION ITEM

AGENCY REPORTS

- Minnesota Department of Agriculture – Joe Martin
- Minnesota Department of Health – John Linc Stine
- Minnesota Department of Natural Resources – Larry Kramka
- Minnesota Extension Service – Faye Sleeper
- Minnesota Pollution Control Agency – Rebecca Flood

ADVISORY COMMENTS

- Association of Minnesota Counties (AMC) – Annalee Garletz
- Minnesota Association of Conservation District Employees (MACDE) – Rick Reimer
- Minnesota Association of Soil and Water Conservation Districts (MASWCD) – LeAnn Buck
- Minnesota Association of Townships (MAT) – Sandy Hooker
- Minnesota Association of Watershed Districts (MAWD) – Ray Bohn
- Natural Resources Conservation Service (NRCS) – Tim Koehler

UPCOMING MEETINGS

- Next BWSR Board Meeting, January 28, 2009

2:00 PM ADJOURN

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD NORTH
ST. PAUL, MINNESOTA 55155
WEDNESDAY, OCTOBER 22, 2008

BOARD MEMBERS PRESENT:
Dana Allen, Gordy Behm, Paul Brutlag, Paul Eger, MPCA; Quentin Fairbanks, , Randy Kramer, Larry Kramka, DNR; Paul Langseth, John Linc Stine, MDH; Joe Martin, MDA; Faye Sleeper, U of M Extension; Louise Smallidge, Gene Tiedemann, LuAnn Tolliver

BOARD MEMBERS ABSENT:
Bob Burandt
Brian Kletscher
Brian Napstad

STAFF PRESENT:
Mary Jo Anderson, Travis Germundson, Jim Haertel, Jeff Hrubes, John Jaschke, Al Kean, Julie Klocker, Kevin Lines, Carol Stronjy, Karli Swenson, Pete Waller, Dave Weirens

OTHERS PRESENT:
Jim Anderson
Wayne Edgerton, DNR
Jack Frost, Met Council
LeAnn Buck, MASWCD
Rick Reimer, MACDE
Susan Thornton and Shelley Shreffler, LCCMR
Jean Coleman, CR Planning
Randy Neprash, Bonestroo
Deb Schwakhamer, University of Minnesota
Marian Bender, Minnesota Waters
Jill Trescott and David Swenson, Dakota County Water Resources Department

Chair Kramer called the meeting to order at 9:02 a.m.

PLEDGE OF ALLEGIANCE

** 08-98 **ADOPTION OF AGENDA** – Moved by Louise Smallidge, seconded by Quentin Fairbanks, to adopt the agenda as presented. Motion passed on a voice vote.

** 08-99 **MINUTES OF SEPTEMBER 24, 2008** – Moved by Paul Langseth, seconded by John Linc Stine, to approve the minutes of September 24, 2008, as circulated. Motion passed on a voice vote.

RECOGNITION OF RETIREES

- John Jaschke acknowledged Jim Anderson's retirement from University of Minnesota and BWSR service. Jim has been a BWSR board member for 13 years. John recognized Jim's service by presenting a "Certificate of Retirement" to Jim from Governor Tim Pawlenty. John also presented a print to Jim from BWSR, and wished him well in his retirement. Jim thanked the Board for the recognition and stated that he appreciated the time the University of Minnesota allowed him to serve on the Board. Jim stated that he learned a lot from board members, the Board has made many conservation accomplishments and he was happy to be a part of that. Jim stated that he will be doing some consulting work for on-site sewage systems.

- John Jaschke acknowledged Greg Larson's retirement from State service. Greg Larson has been BWSR staff for 32 years. John stated that Greg's current connection with the U of M has been a good working partnership for BWSR. John recognized Greg's service by presenting a "Certificate of Retirement" to Greg from Governor Tim Pawlenty. A celebration of Greg's retirement will be held November 18 in a more informal setting. Greg stated that he takes pride in how BWSR gets important things done at the local level and he fully expects that to grow and continue.

Chair Kramer thanked Jim and Greg for their efforts, and wished them good luck in retirement!

REPORTS

Chair's Report – Randy Kramer reported that the Environmental Quality Board did not meet this month. Randy stated that a letter from Matt Kramer, Governor Pawlenty's Chief of Staff, was sent to board members regarding the statutory requirement of public officials to disclosure information under the Minnesota

Campaign Finance and Public Disclosure Act. Chair Kramer stated that the Act requires board members to file a Statement of Economic Interest on an annual basis. Chair Kramer stated that he's been busy with harvesting. Chair Kramer has worked closely with John Jaschke and communicates with him on various issues.

Executive Director' Report – John Jaschke stated that if board members have questions regarding the Minnesota Campaign Finance and Public Disclosure Act they should contact him for assistance. John reiterated the importance of submitting the information. John has been meeting with the U.S. Army Corps of Engineers and NRCS regarding state and federal alignment of WCA and the wetland banking program. John stated that they are making progress; the Wetlands Committee is involved as well. John attended the first "BWSR Training Academy". This is a new opportunity for training with local governments all at one time, over a three day period. John thanked the northern BWSR staff and program staff for making this happen. It seems to be successful and BWSR is likely to continue with this approach in the future. John and staff have been processing budget proposal documents and numbers.

Dispute Resolution Committee – Travis Germundson presented the Dispute Resolution Committee report. Chair Kramer thanked Travis for his report.

Wetlands Committee – LuAnn Tolliver reported that the Wetlands Committee met last night to discuss permanent rules. LuAnn stated that they had good discussion and provided direction for staff. LuAnn stated that the Wetlands Committee will meet all day meeting on November 20; the rules will be presented to the full Board on December 17.

Grants Program and Policy Committee – Louise Smalldige reported that the Grants Program and Policy Committee met after the last Board meeting on September 24, items will be addressed on the agenda today.

Administrative Advisory Committee (AAC) – Chair Kramer reported that the Administrative Advisory Committee met this morning and discussed the Compliance Team interim results; legislation proposals, policy and budget initiatives; and issues and activities with AMC, MASWCD, and MAWD. Chair Kramer reported that he appointed Quentin Fairbanks to the Grants Program and Policy Committee; Gordy Behm has been appointed to the Public Relations, Outreach and Strategic Planning Committee and the Northern Water Planning Committee; and Faye Sleeper has been appointed to the Public Relations, Outreach and Strategic Planning Committee and the Metro Water Planning

Committee. Board members have an updated Committee listing in their packets today.

Chair Kramer encouraged board members to attend the upcoming MAWD, MASWCD, and AMC annual meetings. John Jaschke stated that board members have information on the annual meetings of MAWD, MASWCD, and AMC in their packets today. John also encouraged board member attendance, and asked that registration forms be submitted to Mary Jo Anderson by October 29 for direct billing; after that date expenses will be reimbursed on expense reports.

OLD BUSINESS

Clean Water Legacy (CWL) Technical Assistance Continuation Funds for FY07 Projects – Jeff Hrubes provided background information on the need to continue the conservation work being accomplished with local governmental unit staff hired with the FY07 Clean Water Legacy technical assistance and engineering funding. Jeff reported that the Grants Policy and Program Committee recommends approval of the proposed technical assistance allocations. Moved by Louise Smallidge, seconded by Paul Langseth, to approve the recommendation and adopt the proposed technical assistance allocations to further continue CWL funded technical staff. Motion passed on a voice vote.

** 08-100

Cook County SWCD Request for Allocation of State Cost-Share Program Rollover Funds to Facilitate Flood Response to June 6, 2008 Storm Event – Jeff Hrubes reported that Cook County SWCD has requested additional Cost-Share funds to assist private landowners with erosion control and water quality improvement projects resulting from a flood event that occurred on June 6, 2008. Jeff reported that the Grants Policy and Program Committee recommends BWSR distribute up to $125,000 of available cost-share rollover funds to the Cook SWCD to mitigate erosion and water quality damages caused by the flood event of June 6, 2008. Moved by Louise Smallidge, seconded by Gene Tiedemann, to approve up to $125,000 of cost-share rollover funds to Cook County SWCD. Discussion followed. Faye Sleeper asked if precedence has been set; and will Lake County be included in funding assistance. Jeff stated that this was a concentrated storm near Grand Marais; Lake County will not be requesting funds. Quentin Fairbanks asked if BWSR has a policy on this as a wash-out took place in his area. John Jaschke stated that this area is different as a federal disaster has been declared in Cook County. The projects have to meet criteria of the cost-share program, it's the decision at the local level to request funding and then select projects for funding. Chair Kramer stated that this is for private landowners. FEMA is providing funding for public areas/sites. John stated that

** 08-101

Cook County will be short of funds, but this cost-share assistance will help. Motion passed on a voice vote.

Statewide Conservation and Preservation Plan - Susan Thornton, Director of LCCMR, appreciated John Jaschke's request to present the Minnesota Statewide Conservation and Preservation Plan to the Board. Susan introduced Jean Coleman, CR Planning; Randy Neprash, Bonestroo; and Deb Swackhamer, University of Minnesota. Susan stated that in 2006 the University of Minnesota Institute on the Environment was awarded a contract by the Legislative-Citizen Commission on Minnesota Resources (LCCMR) to produce a Statewide Conservation and Preservation Plan ("Plan") with funds from the Minnesota Environment and Natural Resources Trust Fund. The resulting Plan is an integrated inventory and assessment of Minnesota's environment and natural resources with recommendations to guide decision-makers on future short and long term planning, policy, and funding investments. Susan appreciated the work by everyone that participated in this effort.

Jean Coleman presented the framework for recommendations. The Final Plan provides a series of recommendations for addressing the issues and trends identified. The recommendations included in the Final Plan are useful to a wide variety of public and private entities, but in particular, they will be used to help guide expenditures from the Minnesota Environment and Natural Resources Trust Fund. Randy Neprash presented land use practices and information regarding protection of water resources in urban areas. The Project goal is to achieve a better future for Minnesota's natural resources. Deb Schawkhamer provided a brief background on the University of Minnesota's involvement with recommendations. Susan stated that the Plan consists of two parts: a Preliminary Plan released in July 2007 and a Final Plan released July 2008. She stated that a limited number of print copies of the final Plan will be available at public locations due to the large size of the document. The Preliminary and Final Plans are available at www.lccmr.leg.mn. Discussion followed. Chair Kramer thanked them for the presentation.

Chair Kramer called for a break in the meeting at 10:20 a.m. The meeting reconvened at 10:50 a.m.

Jeff Hrubes presented pictures of the Cook County flood.

Presentation "Working Together to Address Drinking Water Issues in the City of Hastings and the Vermillion River Watershed" – John Jaschke introduced David Swenson and Jill Trescott, Dakota County Water Resources

Department. Jill appreciated John's request for the presentation. Jill commended John Jaschke on his prior efforts and work in Dakota County. Jill provided an overview on working together to address drinking water issues. Jill explained that the City of Hastings has struggled since the mid-1990s with rising nitrate levels in its public water supply. Dakota County worked with the City of Hastings, the Minnesota Department of Health, Minnesota Department of Agriculture, Dakota Soil and Water Conservation District, and Metropolitan Council to identify the extent and sources of nitrate contamination in groundwater and to develop an implementation strategy to address it. Implementation included outreach to the agricultural community and the general public; protection and improvement of the Vermillion River; protection of natural areas within the Watershed; septic system maintenance and upgrades; and regulation of well construction and sealing. Implementing these activities has been a collaboration between the County, the SWCD, the Vermillion River Watershed Joint Powers Organization, the University of Minnesota Extension, Minnesota Department of Agriculture, the City of Hastings, and other agencies. Discussion followed. John Linc Stine commended the Dakota County Water Resources Department regarding their outreach program. The MDH staff worked closely with Dakota County. David Swenson appreciated the MDH's participation and collaboration in the effort. John Jaschke stated that it's important to have local involvement in order to be successful. Chair Kramer thanked Jill for the informative presentation.

Minnesota Waters Update – Julie Klocker, BWSR and President of Minnesota Waters, introduced Marian Bender, Executive Director. Marian stated that Minnesota Waters evolved from the merger of the Rivers Council of Minnesota and the Minnesota Lakes Association. Marian provided an update on the organization's programs and partnerships with BWSR clientele. Engaging citizens in watershed monitoring and stewardship is a key component to many comprehensive water plans. However, due to staff and budget considerations many local units find it difficult to provide the specialized training and assistance to build a network of active volunteers. Minnesota Waters works with many watershed districts, SWCD's and counties to fill the gap and expand citizen engagement. The organizations web site is: www.Minnesotawaters.org
Chair Kramer thanked Marian for her presentation.

Star Lakes Update – Julie Klocker reported that Legislation passed in the 2008 session called for the creation of a Star Lakes Program and the development of a non-profit corporation to oversee the program. BWSR was given the responsibility to appoint a member of the new Star Lakes board and call the first meeting. The Star Lakes Board received a one-time appropriation of $100,000

for start-up expenses. Julie provided an overview of BWSR's effort to organize the group and the progress the appointed board members made at their inaugural meeting which was held October 9. Julie distributed the listing of the Star Lakes Board appointments that have been made. Chair Kramer thanked Julie for her report.

AGENCY REPORTS

Minnesota Department of Agriculture (MDA) – Joe Martin reported that MDA has been working on review of the herbicide atrazine to see if additional restrictions are needed. A scoping document has been prepared to guide the review and has been published in the State Register.

Minnesota Department of Health (MDH) – John Linc Stine reported that a public hearing was held for health risk limits for groundwater and proposed rules revision. John reported that nitrate information is available on the MDH website.

Department of Natural Resources (DNR) – Larry Kramka stated that the hunting season is here, go out and enjoy it!

University of Minnesota Extension – Faye Sleeper invited and encouraged board member attendance at the Minnesota Water Resources Conference, October 27-28, 2008, at the St. Paul River Centre.

ADVISORY COMMENTS

Minnesota Association of Conservation District Employees (MACDE) – Rick Reimer reported that the MACDE met on September 30 in Waite Park. The MACDE will meet in December in St. Paul. Ricked thanked the Board for allowing BWSR staff to assist with the MACDE summer conference. Rick encouraged board members to attend at the MASWCD annual meeting and asked for their participation in the MACDE raffle. Rick stated that MACDE is interested in a possible collaborative effort with BWSR on a summer training session. Rick stated that MACDE provides scholarship funds for leadership training.

Minnesota Association of Soil and Water Conservation Districts (MASWCD) – Chair Kramer stated that LeAnn Buck needed to leave the meeting; however, on behalf of MASWCD, she thanked BWSR staff for assistance with their upcoming convention.

Natural Resources Conservation Service (NRCS) – Tim Koehler was excited to announce that Minnesota was selected as one of the two national sites to celebrate the 2,000,000th acre of Wetlands Reserve Program (WRP) land enrolled in the U.S. under the federal Farm Bill. The event will take place on October 29, 2008 at a farm just north of Waconia, from 10:30 a.m. to 12:30 p.m. USDA NRCS Chief Alan Lancaster will provide the keynote address. Tim encouraged board members to attend. He distributed an invitation and the agenda for the program in Waconia. Tim stated that the RIM/WRP partnership will be highlighted. Tim reported that NRCS is still working on developing rules for the new Farm Bill. Chair Kramer thanked Tim for his report.

UPCOMING MEETINGS

- MAWD Annual Meeting, December 4-6, 2008, Arrowwood, Alexandria
- MASWCD Annual Meeting, December 7-9, 2008, Crown Plaza, St. Paul
- AMC, December 8-10, 2008, DECC, Duluth
- Next BWSR Board Meeting, December 17, 2008, St. Paul
- Wetlands Committee, November 20 at 10:00 a.m.
- RIM Reserve Planning Committee, November 24, 9:00 a.m.–3:00 p.m., St. Paul

** 08-102 Moved by Dana Allen, seconded by Quentin Fairbanks, to adjourn the meeting at 12:10 p.m. Motion passed on a voice vote.

Respectfully submitted,

Mary Jo Anderson
Recorder

Dispute Resolution Report
December 2, 2008
by: Travis Germundson

There are presently **22** appeals pending. All of the appeals involve WCA except File 05-24. There have been **4** new appeals filed since the last report dated October 22th.

Format note: New appeals that have been filed since last report to the Board.
~~Appeals that have been decided since last report to the Board.~~

File 08-33 (11/24/08) This is an appeal of a after-the-fact wetland replacement plan decision in Hennepin County. The LGU deemed the after-the-fact replacement plan as incomplete. This involves the same project/wetland impacts as File 08-11. No decision had been made on the appeal.

File 08-32 (11/10/08) This is an appeal of a after-the-fact wetland replacement plan decision in Carlton County. The LGU denied the after-the-fact replacement plan application for 28,533 square feet of wetland impacts for a driveway addition. No decision has been made on the appeal.

File 08-31 (11/6/08) This is an appeal of a restoration order in Blue Earth County. The appeal regards the filling of over 6,000 square feet of a Type 1 wetland to construct a new parking surface. No decision has been made on the appeal.

~~File 08-30 (10/23/08) This is an appeal of a wetland banking plan decision in Stearns County. The appellant prematurely appealed an anticipated LGU denial of the banking plan. The banking plan was later approved by the LGU .~~ *The appeal has been withdrawn.*

~~File 08-29 (10/3/08) This is an appeal of a replacement plan in the City of Redwood falls. The LGU approved a wetland replacement plan application for 1.06 acres of fill for the expansion of an industrial/business park. The approval required that a restrictive covenant be placed on the adjacent wetlands~~. *The appeal was remanded to the Redwood County Joint Powers Appeal Board and then withdrawn by the appellant*

File 08-28 (9/25/08) This is an appeal of a after-the-fact replacement plan in Stearns County. The LGU approved a wetland replacement plan application for an agricultural road crossing that would impact 5,000 sq ft of a Type 2 wetland. *The appeal has been remanded for further processing at the local level.*

~~File 08-27 (9/17/08) This is an appeal of a restoration order in Stearns County. The appeal regards the draining and filling of approximately 15.7 acres of wetland associated with a ditch cleanout/improvement project.~~ *The appeal was dismissed.*

~~File 08-26 (08/27/08) This is an appeal of a restoration order in Stearns County. The appeal regards the draining and filling of approximately 4 acres of wetland associated with a ditch cleanout/improvement project.~~ *The appeal was dismissed.*

File 08-25 (08/25/08) This is an appeal of a after-the-fact wetland replacement plan application in Benton County. The LGU denied the wetland replacement plan application based on the fact that it does not adequately replace the wetland impacts. It involves the same project and issue as File 07-27. The appeal has been remanded for further processing at the local level.

File 08-11. (04/29/08) This is an appeal of a restoration order in Hennepin County. The appeal regards the filling of 1.75 acres of a type 2/3 wetland for the construction of a pole barn and pasture area. The restoration order has been stayed until and the appeal has been placed in abeyance for submittal of a wetland replacement plan, exemption, or no-loss application.

File 08-9. (03/06/08) This is an appeal of a replacement order in Pine County. The appeal regards impacts to approximately 11.26 acres of wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-8. (04/03/08) This is an appeal of a replacement order in Pine County. The appeal regards the filling of over 18,000 square feet of Type 2 wetland. No decision has been made on the appeal. The replacement order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 08-4. (01/24/08) This is an appeal of no-loss and exemption decisions in Waseca County. In addition to the no-loss decision, at issue are denials of the agricultural exemption, approved development exemption, incidental wetland exemption, and claims of numerous procedural issues that were prejudicial to the applicants. Further, a Minn. Stat. § 15.99 (60-day rule) claim is pending in District Court. The appeal has been remanded for further technical work at the local level.

File 08-1. (02/04/08) This is an appeal of a restoration order in Aitkin County. The appeal involves the filling of wetland for a road in shoreland area. The restoration order has been stayed and the appeal has been placed in abeyance pending further technical work.

File 07-37. (12/16/07) This is an appeal of a restoration and replacement order in the City of Sturgeon Lake, Pine County. The appeal involves the excavation and filling of wetland. The restoration and replacement order has been placed in abeyance to allow for the submittal of a complete replacement plan.

File 07-33. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-32. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a cease and desist order for unauthorized wetland impacts. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-31. (10/31/07) This is an appeal of an exemption decision in International Falls, Koochiching County. The appeal involves the approval of an exemption request that resulted from issuance of a restoration order for unauthorized filling of wetland for a building. The appeal has been accepted and copies of the record have been requested. A verbal settlement agreement is being drafted.

File 07-29. (10/25/07) This is an appeal of a restoration order in Crow Wing County. The appeal involves the filling of wetland along a driveway. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work.

File 07-27. (10/19/07) This is an appeal of a restoration and replacement order in Benton County. The appeal involves the excavation of an island that was in wetland and the filling of wetland along the wetland edge. The restoration order has been stayed and the appeal has been placed in abeyance pending the completion of further field work this spring.

File 06-23. (05/19/06) This is an appeal of a replacement plan decision in Kanabec County. The LGU denied the wetland replacement plan application. A previous denial of the same replacement plan application had been appealed, the appeal was remanded for a hearing, and now the current denial has been appealed. The appeal has been placed in abeyance pending the outcome of a lawsuit between the landowner and the county. The lawsuit concerns the county's possible noncompliance with the 60-day rule. The county prevailed in district court, however the decision was appealed to the Court of Appeals where the county again prevailed. An appeal to the Minnesota Supreme Court was denied review. It is likely the appeal will soon be placed on the calendar for DRC proceedings.

File 06-17. (05/27/06) This is an appeal of a replacement plan decision in the City of Montgomery in LeSueur County. The LGU denied an after-the-fact wetland replacement plan application based on a lack of sufficient reasons why the restoration could not be completed. The appeal has been remanded for further processing at the local level.

File 06-12. (04/13/06) This is an appeal of a no-loss decision in Stearns County. It involves the same project and issues as File 06-6. After a restoration order was issued, a no-loss application was submitted by the developer and denied by the LGU. The appeal has been remanded for further technical evaluation.

File 06-6. (02/16/06) This is an appeal of a restoration order in Stearns County. At issue are numerous wetlands impacted by filling, sedimentation, reduction of hydrology and lack of Best Management Practices associated with a residential development. The appeal has been denied in part. The Restoration Order has been affirmed in part and has been stayed in part.

File 05-24. (03/04/05) This is an appeal, actually three appeals, of the Bois de Sioux Watershed District compensation to landowners related to a project. The appeal has been held in abeyance pending settlement discussions. It appears at least two of the appeals have been settled.

File 05-1. (01/13/05) This is an appeal of a replacement plan decision by the Rice Creek Watershed District. The District previously made a decision that was appealed which resulted in a remand for an expanded TEP. Now there is an appeal of the decision made under remand since the decision differed from the TEP report. At issue is a wetland delineation and the Comprehensive Wetland Protection and Management Plan that BWSR approved. After a hearing before the DRC, the board remanded the matter for a new wetland delineation and for submission on an updated, complete replacement plan application.

COMMITTEE RECOMMENDATIONS

Southern Water Planning Committee

1. Lyon County Local Water Management Plan Update – Brian Kletscher – ***DECISION ITEM***

2. Watonwan County Local Water Management Plan Update – Brian Kletscher – ***DECISION ITEM***

3. Rice County Priority Concerns Scoping Document – Brian Kletscher – ***DECISION ITEM***

4. Rice County Request for Extension of the Rice County Comprehensive Water Management Plan – Brian Kletscher – ***DECISION ITEM***

Minnesota Board of Water & Soil Resources

DATE: September 16, 2008

TO: Jeff Nielsen, BWSR Southern Regional Supervisor

FROM: David Sill, Board Conservationist

SUBJECT: **Lyon County Local Water Management Plan Final Review**

I have completed my final review of the Lyon County Local Water Management Plan and recommend approval of this update.

The Lyon County Water Management Plan meets all requirements including:

- focuses on the priority concerns identified in the Priority Concerns Scoping Document;
- adequately assesses the priority concerns and sets forth appropriate goals and objectives;
- lays out a detailed implementation program with measurable actions, timeline and budget; and
- includes all required sections.

State agency comments were received from the Minnesota Department of Agriculture (MDA), the Minnesota Department of Health (MDH), the Minnesota Pollution Control Agency (MPCA), and the Minnesota Department of Natural Resources (DNR). These agencies recommend approval of the Plan.

I look forward to assisting Lyon County in implementing their local water management plan. With teamwork and coordination between the County, Soil and Water Conservation District, and watershed projects significant conservation activity is taking place!

Bemidji
701 Minnesota Avenue
Suite 234
Bemidji, MN 56601
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Duluth
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Fergus Falls
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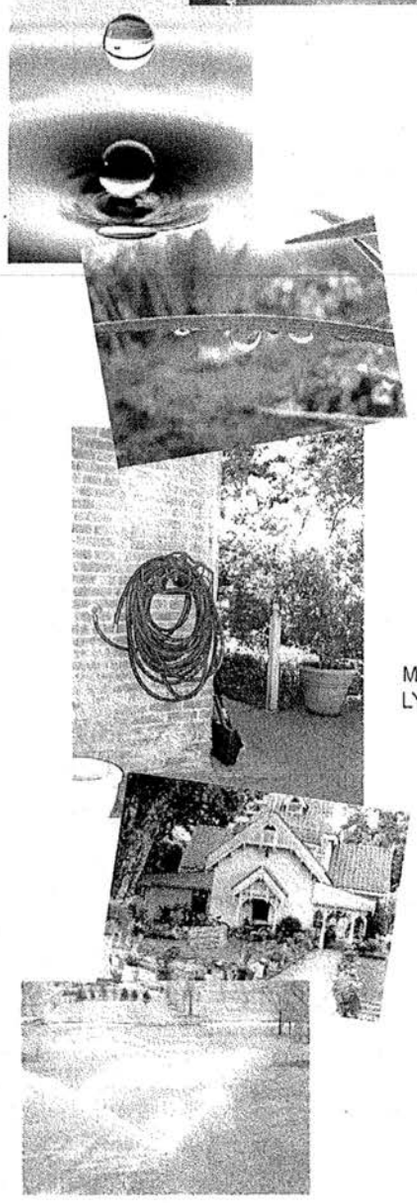
Web: www.bwsr.state.mn.us TTY: (800) 627-3529 An equal opportunity employer Printed on recycled paper

Lyon County Local Comprehensive Water Management Plan

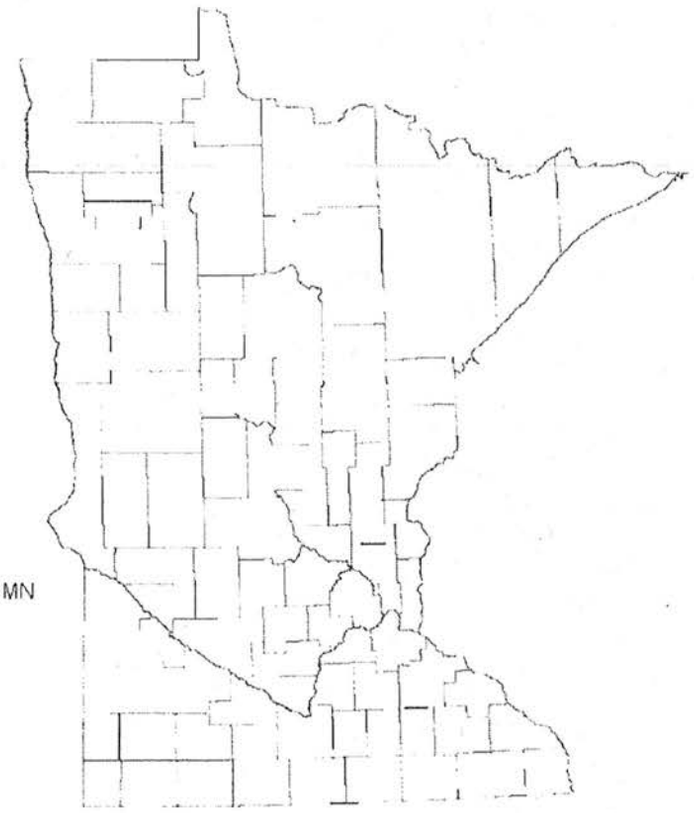
Update: to Cover the Calendar Years 2009-2018*

*updates of the Implementation Components are planned for 2012, and 2015

FINAL DRAFT VERSION



This document represents the collaborative efforts, and expressed ideas and concerns from local residents, business owners, academics, and representatives from local, state, and federal water management professionals. This document was prepared by Roger Schroeder, Lyon County Environmental Specialist. Phone (507) 532-8210



Marshall
LYON COUNTY, MN

Lyon County Water Plan Coordinator

Lyon County Environmental Office
504 Fairgrounds Road, Marshall, MN 56258
Phone: (507) 532-8210
email: paulhenriksen@co.lyon.mn.us

FINAL DRAFT VERSION

Water

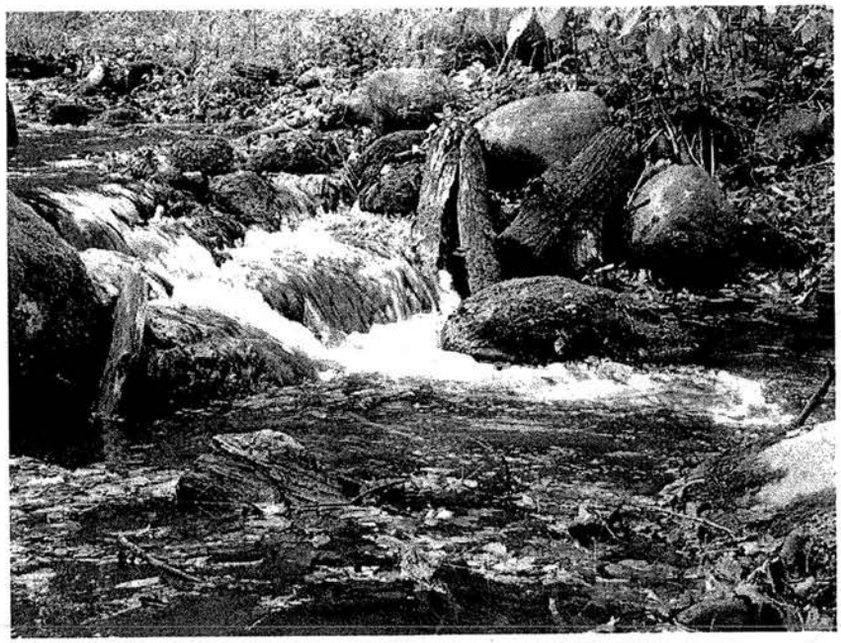
We need it. We use it. We love it. Do we value it? Respect it? Do we fully understand it?

The purpose of this section is to provide an overview of the areas of concern regarding water management issues in Lyon County. The first part of this section outlines specific topics pertaining to top water management, while the second part of this section provides an overview of the primary issues of the four major watershed areas of the county.

Local Water Management is a cooperative effort between many governmental organizations that are responsible to the people. The people—however—are the solution to overcoming the water management challenges we face. Without a healthy dialogue with the people we serve, our success at implementing the water management strategies aimed at solving existing problems will be limited.

Partners of the water plan each have their area of expertise, breadth of knowledge, and ability to leverage resources—be those resource, funding or cooperation. As partners, it is our duty to understand and acknowledge the strengths of one another in order to find the commonalities and potential collaborative efforts we can pursue to bring about success in local water management activities in Lyon County.

EXECUTIVE SUMMARY



Lyon County Local Water Management Plan Overview

This is the third revision of the original Lyon County Water Management Plan, which was adopted and enacted in 1988. This update to the water plan adapts to changes in involvement, expectations, and focus from previous plans, yet does not entirely supplant previous plans. Valuable information is contained especially in the most previous revision of the water plan; specifically **Section III**: *Description of Features Affecting Water Resources*, **Section IV**: *Description of Water Resources,* **Section V**: *Related Land Resources*, **Section VI**: *Special Land Uses and Conditions*, and the **Associated Maps**.

The existing comprehensive local water plan document for Lyon County was accepted by the Minnesota Board of Water and Soil Resources in April 2003, and will expire in December 2008. This current revision is intended to be adopted before December 31, 2008. It is a 10-year plan to cover calendar years 2009-2018, and will contain two revisions of the Implementation Sections of the plan at the end of 2011, and 2015.

In passing the Resolution to update the water plan, the Lyon County Board of Commissioners also voted unanimously to charge water plan administration to the Lyon County Environmental Office; which will continue to serve as the Local Governmental Unit (LGU) responsible for the local water management program as it has since the plan's inception. The County Board further supported a restructuring of the existing Water Plan Task Force for the purpose of this update process. The restructured Water Plan Board will provide oversight of water planning activities.

EXECUTIVE SUMMARY

Focus on Phosphorus:

The Lower Minnesota River has a dissolved oxygen impairment. During low flows, excess phosphorus generates algal blooms, which eventually die off and decompose. The decomposition process creates a shortage of the dissolved oxygen needed to sustain aquatic life.

In response to this impairment, the Minnesota Pollution Control Agency (MPCA) developed the Lower Minnesota River Dissolved Oxygen Total Maximum Daily Load (TMDL). The TMDL required the development of the Minnesota River Basin General Phosphorus Permit – Phase I (Permit) to reduce phosphorus discharged by point sources to the Minnesota River Basin (Basin).

The Permit required the 40 larger existing continuously discharging wastewater treatment facilities in the Basin to apply for coverage and receive a 5-Month Mass Phosphorus Limit. .

Water Management Plan Purpose

The Lyon County Comprehensive Local Water Plan has two purposes that focus on priority concerns as identified in coordination with other local governments and state agencies (2003 Statutory M.S. 103B.301), and an implementation plan that addresses the priority concerns.

1) To identify existing and potential problems and opportunities for the protection, management and development of water and related land resources.

2) To develop objectives and carry out a plan of action to promote sound hydrologic management of water and related land resources and effective environmental protection.

Summary of Priority Concerns

The process used to derive priority concerns for Lyon County water resources (outlined completely in the Priority Concerns Scoping Document—Section IV) resulted in four general concern areas that are detailed below.

1. **Impaired Waters:** Several specific surface waters in Lyon County have been analyzed to determine that impairments to aquatic life or human use exist. Total Maximum Daily Load (TMDL) analysis has identified that the waters listed below have been impaired as of the date of this document. TMDL is a scientific measure of how much of a certain contaminant can be present in the water without negatively impacting the overall health or usability of that water for recreation or consumption. With research completed on these waters we have solid direction for how to best support implementation activities to support recovery efforts of these surface waters. Not all surface waters in Lyon County have been thoroughly analyzed, and it is expected that during the span of this water plan update additions will be made to this list of impaired surface waters.

   - ***Coon Creek***: Index of Biotic Integrity (fish)
   - ***Cottonwood River***: Fecal Coliform Bacteria, Turbidity, Mercury
   - ***South Branch Yellow Medicine River***: Turbidity, Suspended Solids, Mercury, Fish Consumption Advisory
   - ***Redwood River***: Ammonia, Fecal Coliform Bacteria, Turbidity, Index of Biotic Integrity for fish, Mercury, Total Suspended Solids
   - ***Three Mile Creek***: Fecal Coliform Bacteria, Turbidity, Suspended Solids
   - ***Unnamed Creek (South Branch Yellow Medicine):*** Fecal Coliform
   - ***Lady Slipper Lake***: Mercury, Fish Consumption Advisory

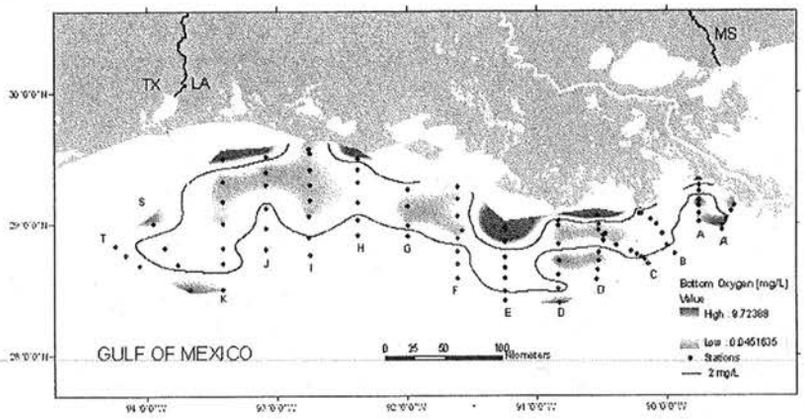
GOALS, ACTION, AND PROJECTED COST

An extensive array of activities are intended for the first three-year Implementa-

EXECUTIVE SUMMARY

tion Period to address the Impaired Waters priority concern areas. These activities include Subsurface Sewage Treatment System (SSTS) low-interest loans, crop residue and conservation Best Management Practices (BMPs), wetland replacement, tile intake replacement, and grass buffers along waterways. A complete list of intended activities is included on Page 8 of the Impaired Waters Priority Concern Section (Red). Anticipated cost (not-including landowner contributions) is $565,000, though this number includes dollars also listed in the three other Priority Concerns Sections.

"Till taught by pain, Men really know not what good water's worth"
Lord Byron



2. **Hydrologic System Management**: The altered Southwest Minnesota landscape from its native, pre-settlement state has transformed the flow, retention, and replenishment of the hydrologic cycle. Pattern tiling, ditching, wetland removal, development, stormwater drainage, excessive groundwater use, etc. have resulted in the cumulative effect of rapidly transporting a greater amount of water to major rivers and streams, and away from groundwater recharge potential. Some impacts of this human-induced activity can already be seen, such as the impaired list of waters previously discussed. Slowing this rapid export of water is in need of greater attention through comprehensive study and continual implementation of beneficial projects. Further study would provide data to more specifically target areas of need with respect to flood control, erosion and nutrient loading reductions. Another issue related to water flow management pertains to the maintenance of existing flood control structures and protection of wetlands in order to retain longevity of benefits from what is already in place. Although a targeted approach to incorporating additional flood control measures would prudent, it is generally believed that any additional wetland acres, flood control measures, and bank stabilization efforts would provide lasting cumulative benefits.

GOALS, ACTION, AND PROJECTED COST

An extensive array of activities are intended for the first three-year Implementation Period to address the Hydrologic System priority concern areas. These activities include restoring 60 acres of wetlands, repairing impoundment structures, installing small dams, and a variety of education components focusing on BMPs associated with land management. A complete list of intended activities is included on Page 4 of the Hydrologic System Management Priority Concern Section (Green). Anticipated cost (not-including landowner contributions) is $463,000.

Quick Science

Minnesota contributes its share of nutrients to Gulf of Mexico, an estimated 7%

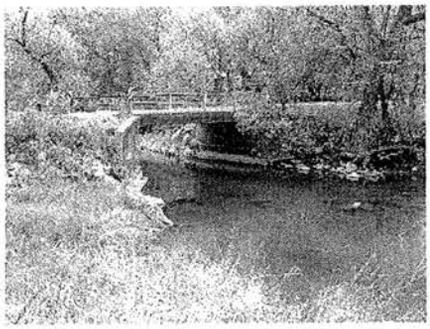
An estimated 77% of sediments from core samples in Lake Redwood (Redwood Falls) came from water erosion of stream/river banks.

The MPCA estimates that between 40-50% of Lyon County septic systems are not in compliance.

It is suspected by many water resource professionals that Mercury contamination

EXECUTIVE SUMMARY

"The formula for Water is H_2O. Is the Formula for an ice cube H_2O squared?"
- Lily Tomlin



On a 2007 Internet Survey of Lyon County residents (172 respondents) the following points were noted:

100% of the respondents agreed *Protecting drinking water quality is important for future*

96% disagreed with the statement: *It is okay for septic systems to discharge into the ditch.*

82% agreed that wetlands are an important to the landscape.

The most common water-related activities were camping/ picnicking and relaxing.

67% felt replacing failing septics systems should be high priority.

58% ranked drinking water quality protection as the Number One Priority Concern

3. **Nutrient Loading Reduction:** Nutrient loads into surface waters is a primary culprit for the degradation of water quality. Although some impaired waters have already been identified through TMDL studies, many surface waters have yet to be comprehensively evaluated to ascertain if impairments exist. For this reason, limiting excessive nutrients, such as fertilizer in cities and agricultural lands, from reaching surface waters is of primary consideration. Existing controls are already in place that are designed to address nutrient loading including Individual Septic Treatment System (ISTS) compliance inspections at the time of property transfer and nutrient management plan requirements for feedlots. However, additional controls are necessary, as is a mechanism for funding these controls such as the low-interest loan dollars for septic system upgrades.

GOALS, ACTION, AND PROJECTED COST

An extensive array of activities are intended for the first three-year Implementation Period to address the Nutrient Reduction priority concern areas. These activities include providing funding to livestock producers to upgrade their facilities, installing rain gardens, grazing management and conservation tilling assistance, and SSTS low-interest loan financing. A complete list of intended activities is included on Page 4 of the Nutrient Reduction Priority Concern Section (Beige). Anticipated cost (not-including landowner contributions) is $ 973,000.

4. **Public Drinking Water Supply Protection:** Extensive concern has been expressed with regards to drinking water quality, quantity, and availability. Wellhead protection through land use best management practices in well recharge areas has been specifically highlighted as a top priority; not only for existing well recharge areas, but also for developing additional well sites in the future. The availability of groundwater for future use is a concern that has been addressed several times throughout this water plan update process thus far. Data appears inconclusive, but it is generally felt that water resources used for consumption are easily replenished. Of greater concern than availability are the land use practices that may have future impacts on drinking water supplies.

GOALS, ACTION, AND PROJECTED COST

An extensive array of activities are intended for the first three-year Implementation Period to address the Groundwater Protection priority concern areas. These activities primarily include an education focus, especially concerning water conservation, and wellhead protection. Activities also include abandon and unused well sealing, and wellhead protection land use controls. A complete list of intended activities is included on Page 4 of the Groundwater Protection Concern Section (Blue). Anticipated cost (not-including landowner contributions) exceeds $6,000.

EXECUTIVE SUMMARY

Conflicts and References

After careful review of the numerous plans submitted for review by other local, state, and federal water resource management and protection entities, it has been determined that no conflicts exist between established plans and controls, and this Lyon County Local Water Management Plan update.

This update of the Lyon County Water Management Plan utilized the key considerations of several existing land and water management plans including (but is not limited to) the following:

- Wellhead Protection plans
- South Branch Yellow Medicine River TMDL plans
- Redwood and Cottonwood Rivers (TMDL) plans
- Lyon SWCD Annual Workplan
- Lyon County Comprehensive Land Use Plan
- Minnesota River Dissolved Oxygen TMDL
- Stormwater Management plans
- Local ordinances
-

Summary of Previous Accomplishments

Though we cannot afford to stand around and pat ourselves on the back for past work completed, it is important to summarize efforts covered in during the previous water plan document. The total dollars spent on water resource protection, reclamation, and protection is very difficult to measure since numerous local, state, and federal entities have programs affecting Lyon County.

During the previous years of water plan activities and accomplishments—as covered by the previous water management plan during the calendar years of 2003-2008—an estimated $100,000 were spent on education and implementation activities through the water plan Natural Resource Block Grant (NRBG) program.

An additional $810,000 has been funneled through the Natural Resource Conservation Service (NRCS) through their WHIP and EQIP programs to include wetland reclamation and upland wildlife habitat creation, nutrient management, grass waterways, flood control structures, and soil management among other essential conservation and protective practices.

Lyon Soil and Water Conservation District (SWCD) cost share and grant programs. Low-interest loan dollars

*These figure does not include local land owner contributions involved in cost

More Internet Survey Results:

Rank of Water Concerns:

1. Drinking Water Quality
2. Surface Water Quality
3. Habitat Protection
4. Storm Water Runoff
5. Erosion of shore land
6. Groundwater Quantity and Allocation
7. Flood Control
8. Excessive Water Use
9. Water Drainage-Ditching
10. Recreational Uses

Of all the respondents:

64% agree there are not enough native prairie acres

58% agree drained wetland acres should be restored

51% disagree that surface water quality is good enough for recreation

61% agree flood-prone land should not be farmed

61% are concerned about harmful chemicals entering drinking water

share programs.

Continual Activities Augmenting Water Plan Efforts

Several entities—by their scope of operation, and/or guiding documents—greatly contribute to water resource protection without the direct involvement, or oversight of the Lyon County Water Management plan. These entities are to be commended for their continual efforts in serving the public well-being by their dedicated persistence in reducing pollution potential, and public education. Such activities include:

- Shoreland Management
- Floodplain management through participation in the National Floodplain Insurance Program
- Household Hazardous Waste Collection
- Solid Waste Management
- Municipal Utility water conservation education and promotion
- Rural Water system land use controls
- Natural resource educational efforts
- County land use planning and ordinances
- Feedlot management

Water Plan Update Chronology

A chronological description of actions and meetings is offered here in quick format for your reference. Meetings used to facilitate the public process, and meetings at which the Water Plan Board, and Technical Advisory Committee discussed and developed this update to the Lyon County Water Plan are also listed in the Priority Concerns Scoping Document. Minutes for these meetings is available from the Lyon County Internet site: http://dev.lyonco.org.

- 20-March-2007: Lyon County Board of Commissioners Approve Resolution to update Lyon County Water Plan
- 1-May-2007: Lyon County Board of Commissioners Approve Resolution to restructure the Lyon County Water Plan Board
- 31-May-2007: Public Meeting to identify priority concerns
- 12-June-2007: Technical Committee meeting to identify and discuss priority concerns
- 21-June-2007: Water Plan Board to review and discuss Priority Concerns
- 17-July-2007: Technical Committee meeting to prioritize concerns
- 26-July-2007: Public Meeting to receive comments on Priority Concern

EXECUTIVE SUMMARY

Scoping Document

- 03-October-2007: Submitted PCSD to necessary State agencies
- 6-December-2007: Met with BWSR Citizens Board to discuss PCSD
- 17-January-2008: Water Plan Board meeting to offer final corrections on draft water plan document
- 19-February-2008: Lyon County Board of Commissioners passed a resolution to request an extension to the current Lyon County Water Management Plan
- 19-February-2008: Water Plan extension request, and resolution forwarded to BWSR
- 12-June-2008: Final draft of Lyon County Water Plan submitted to BWSR
- 17-July-2008: Final Public Hearing on draft water plan document

Minutes from several of these meetings are available upon request.

Water Plan Board Restructuring

Of particular interest for this update is the action taken by the Lyon County Board of Commissioners to restructure the composition of the Lyon County Water Plan Board in time for this update of the Local Water Plan. It was recommended that the Lyon County Park & Recreation Board be charged with the responsibilities to serve as the Lyon County Water Plan Board in addition to their existing duties as the Park & Recreation Board. The new Water Plan Advisory Committee is structured as follows: All members of the existing Lyon County Park & Recreation Board, 1 County Commissioner, 1 Lyon Soil & Water District Supervisor, 1 Yellow Medicine Watershed District Board Member, and 2 citizens at large. The existing membership is as follows: Chauncey Muedeking, Chair, Betsy Desy, Co-Chair, Otto Nyquist, Harlan Magnuson, Tim Buysse, Michelle Schultz, Bob Richards, Kevin Henkel, Nancy Dilley, Wayne Budde, Denny Alexander, and Phil Nelson, Commissioner.

Technical Assistance Committee

In addition to the public review process, and water plan board membership, the update process relied on the areas of expertise of local, state, and federal water resource professionals. These individuals and the entities they represent were a crucial part of this process. Their guidance and expertise offered significantly contributed to the content to this water management plan, and is very much appreciated.

Members of the Technical Assistance Committee include Kerry Netzke, Area II Minnesota River Basin, Jamie Thomazin, Natural Resource Conservation Service (NRCS) Rose Anderson, Lyon Soil and Water Conservation District (SWCD), Ta-

New Water

All those years—
almost a hundred—
the farm had hard water.
Hard orange. Buckets lined in orange.
Sink and tub and toilet, too,
once they got running water.
And now, in less than a lifetime,
just by changing the well's location,
in the same yard,
mind you,
the water's soft,
clear, delicious to drink.
All those years to shake your head over.
Look how sweet life has become;
you can see it in the couple who live here,
their calmness as they sit at their table,
the beauty as they offer you new water to drink.

EXECUTIVE SUMMARY

bor Hoek, and Dave Sill, Minnesota Board of Water and Soil Resources (BWSR), Rich Papasso, United States Fish and Wildlife Service (USFWS), Anita Benson, Lyon County Public Works, Emily Deaver, Southwest Minnesota State University (SMSU), Maurey Chaplin, Marshall Municipal Utilities (MMU), Steve Johnson, MMU, Emma Volz, MMU, Mark Volz, Lyon County Geographic Information Systems (GIS), Ryan Wendt, GIS, Jim Sehl, Minnesota Department of Natural Resources (DNR), Todd Hammer, Lyon County Planning and Zoning (P&Z), John Biren, P&Z, Kent Henkel, City of Balaton, Jason Overby, Lincoln-Pipestone Rural Water Systems (LPRW), Terry Renken, Yellow Medicine River Watershed District (YMRWD), Jim Doering, Redwood-Cottonwood Rivers Control Area (RCRCA), Glenn Olson, City of Marshall, Paul Henriksen, Lyon County Water Plan Coordinator, Rick Anderson, Lyon County Parks, Roger Schroeder, Lyon County Environmental.

Plan Adoption and Amendment

The Lyon County Local Comprehensive Water Plan is intended to guide water management decisions through the year 2018. The Lyon County Board of Commissioners intends to adopt this update of the plan by December 31, 2008.

The Water Plan Board will provide an review and update of the Implementation activities by December 31, 2011, and December 31, 2015 in order to better hone in on current needs and opportunities. Any plan amendments will be conducted in accordance with BWSR standards.

Closing Remarks

The environment (including water management concerns) do not rate high on the minds of residents of this state when compared to transportation, education, employment, and safe communities. Local water management efforts—in a way—are trying to assure that water quality never makes it to the top of the list of concerns for Minnesotans, for we know that if that should happen, communities in this State would be experiencing big trouble. As Water Plan Partners, we need to continue to do the good work we are to make certain that water quality and quantity never become urgent concerns. That process of good work is invigorated by updating water management plans in the manner in which we have proceeded. The challenge now is to maintain this momentum through project completion.

'Tis a little thing
To give a cup of water;
yet its draught
Of cool refreshment,
drain'd by fever'd lips,
May give a shock
of pleasure
to the frame.
More exquisite than
when nectarean juice
Renews the life of joy
in happiest hours.

- Sir Thomas Noon Talford

(*Ion*, Act I)

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Reviewing the Local Water Management Plan Update for Lyon County (Minnesota Statutes, 2003, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Lyon County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Board on June 16, 2008 pursuant to M.S. Section 103B.315, Subd. 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1. On February 28, 2008, the Minnesota Board of Water and Soil Resources received a resolution from Lyon County requesting an eight-month extension of the current water plan to December 31, 2008.

2. On March 26, 2008, the Board of Water and Soil Resources approved the Lyon County water plan extension request to December 31, 2008.

3. On September 28, 2007, the Minnesota Board of Water and Soil Resources received a Priority Concerns Scoping Document from Lyon County, pursuant to M.S. Section 103B.312.

4. On December 6, 2007, the Board's Southern Region Water Planning Committee met with representatives of Lyon County to discuss state agencies review comments, the contents of the Priority Concerns Scoping Document, and recommendations for the content of the final Plan Update.

5. On December 19, 2007, the Board of Water and Soil Resources approved official comments on the Lyon County Priority Concerns Scoping Document, which were mailed to the county on December 19, 2007.

6. The priority concerns the local water management plan addresses include:

   a. Impaired Waters;
   b. Hydrologic System Management;
   c. Nutrient Loading Reductions;
   d. Public Drinking Water Supply Protection.

7. On June 16, 2008, the BWSR received the Lyon County Plan Update for final State review pursuant to M.S. Section 103B.315, Subd. 5. A final public hearing on the Lyon County Local Water Management Plan was held on July 17, 2008; no comments pertaining to the plan were received.

8. On November 14, 2008, the southern region water planning review committee of the Board reviewed the recommendation of the state review agencies regarding final approval of the Lyon County Plan Update. Recommendations of the state review agencies were:
   a. Minnesota Department of Agriculture: recommends approval;
   b. Minnesota Department of Health: recommends approval;
   c. Minnesota Department of Natural Resources: recommends approval;
   d. Minnesota Pollution Control Agency: recommends approval;
   e. Minnesota Environmental Quality Board: no recommendation received;
   f. Minnesota Board of Water and Soil Resources regional staff: recommends approval;
   g. Board Water Planning Review Committee: recommends approval.

9. This update will be in effect until December 17, 2018.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of Lyon County pursuant to Minnesota Statutes , 103B.315, Subd. 5.

2. The Lyon County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the county; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the Lyon County Local Water Management Plan with a required update to the Implementation section (Goals, Objectives and Action) by December 31, 2011 and December 31, 2015.

Dated at St. Paul, Minnesota, this 17th day of December, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Minnesota Board of Water & Soil Resources

DATE: October 15, 2008

TO: Jeff Nielsen, BWSR Southern Regional Supervisor

FROM: Chris Hughes, Board Conservationist

SUBJECT: **Watonwan County Local Water Management Plan Final Review**

I have completed my final review of the Watonwan County Local Water Management Plan and recommend approval of this update.

The Watonwan County Local Water Management Plan meets all requirements including:

- focuses on the priority concerns identified in the Priority Concerns Scoping Document;
- adequately assesses the priority concerns and sets forth appropriate goals and objectives;
- lays out a detailed implementation program with measurable actions, timeline and budget; and
- includes all required sections.

State agency comments were received from the Minnesota Department of Health, the Minnesota Department of Agriculture, the Minnesota Department of Natural Resources, and the Minnesota Pollution Control Agency. These agencies recommend approval of the Plan.

I look forward to assisting Watonwan County in the implementation of their plan. County Water Plan Coordinator Bruce Johnson should be commended for his leadership and dedication throughout the planning process.

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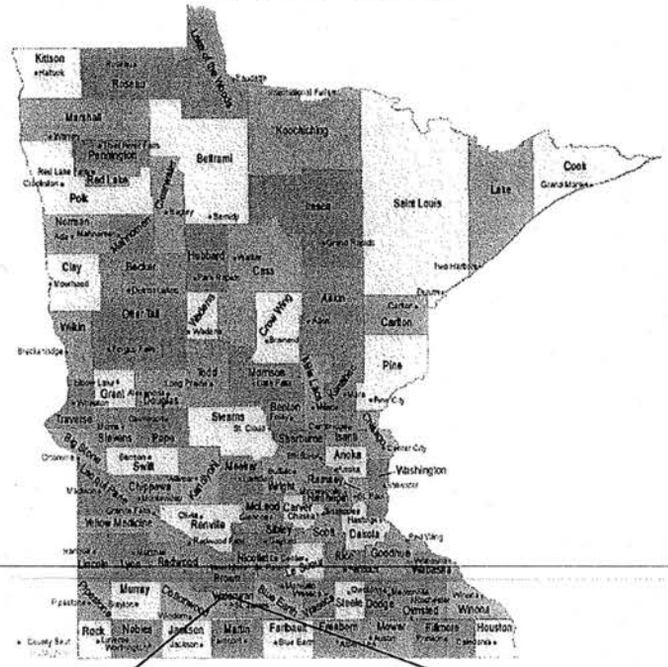
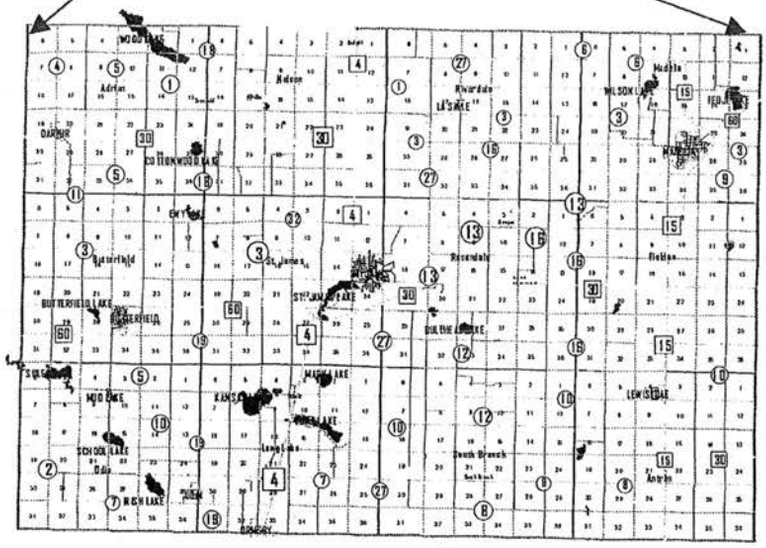
WATONWAN COUNTY
LOCAL WATER MANAGEMENT PLAN
2008-2018





Submitted by: Watonwan County Environmental Services
July 2008

A) EXECUTIVE SUMMARY

Watonwan County is a Southwestern Minnesota County surrounded by the borders of Martin, Jackson, Cottonwood, Brown and Blue Earth counties. The county seat of Watonwan County is St. James, with a population of 4,627 at the 2000 census. The 2000 census total put Watonwan County's population at 11,876.

A1) PURPOSE & INTRODUCTION

The Watonwan County Local Water Management Plan is intended to identify existing and potential water related issues in the context of watershed units and groundwater systems, informing specific implementation activities and goals for sound hydrological management of water and related resources. The Watonwan County Board of Commissioners adopted a resolution to revise the plan on August 15, 2006.

This Water Plan is a ten-year management plan with a five year implementation docket and schedule. It is the third edition of a local water management plan for Watonwan County. The original plan was adopted in 1989 and first updated in 1998.

Throughout the duration of the previous plans a Local Water Plan Task Force has met on a regular quarterly basis to discuss ongoing activities and address budget issues. Task Force members were informed at the September 11, 2006 meeting of the need for an update of the Water Plan. Survey forms were then sent out to a wide range of organizations, units of government, agencies and individuals seeking comment on priorities that should be addressed in an updated plan. Comments were submitted and compiled and were subsequently presented on December 11, 2006, upon which a discussion was held. Priority concerns were selected by staff based on those comments and discussions; and were presented to the Task Force on March 19th, 2007 for approval.

Under Watonwan County's present Water Management Plan, these accomplishments and activities have taken place:

- The replacement of 414 non-compliant septic systems from 1998-2008
- Delegated county in the state feedlot program, working with the MPCA and the Minnesota Association of County Feedlot Officers.
- Worked with local feedlot owners and developers with permitting, registration and securing manure management plans.
- Provided funds for collection of manure samples by county livestock producers.

- Provided cost share for feedlot repairs and compliance issues.
- Supported and participated in the South Central Minnesota County Comprehensive Water Planning Project, informally known as the 13 County organization.
- Through the 13 County organization, we worked with the Water Resource Center at the University of Minnesota Mankato in the development of GIS capabilities for Watonwan County and Watonwan SWCD.
- Participated in the Blue Earth River Basin Initiative joint powers organization.
- Participated, along with other counties in the Greater Blue Earth River Watershed in the creation of the Greater Blue River Basin Alliance, a joint powers of counties and Soil and Water Districts in the Greater Blue Earth River Watershed, upon the cessation of the activities of 13 County organization and of BERBI.
- Participated in the Water Implementation at the Local Level process and from 2000 through early 2008 provided administration and served as county representative for a Phase 2 Clean Water Partnership for the Watonwan River Watershed.
- Provided support to the Watonwan County Friends of the Library in the 2005 celebration of Mary Ellen Lewis Day, which entailed an environmental education field day for county residents held at the Meadowlark Learning Center near St. James.
- Provided support funds for the improvement of the Meadowlark Learning Center.
- Provided funding and staff support for highly successful Green Saturday events as they were put on by the Watonwan SWCD.
- Supported Watonwan County Townships with annual grant funding opportunities for water quality improvement projects as determined by township officials.
- Supplied county residents with drinking water testing kits.
- Provided technical support and advice to the Watonwan County Planning Commission and Watonwan County Board of Commissioners as land use projects were proposed and considered.
- Watonwan County and SWCD worked with the small communities in the county on their wastewater needs. Utilized a BWSR challenge grant to help fund the procurement of preliminary engineering reports for the four remaining unsewered small communities in Watonwan County. Out of the four, two are in the construction phase and two are in the final design phase as this plan is being written.
- Supported sealing of 168 abandoned wells.
- Utilization of Zone 10 engineers for construction projects.
- Installation of 130 rock tile intakes and intake buffers.
- Planting of shelterbelts, field windbreaks and living snow fences.
- Maintenance and upkeep of the Meadowlark Learning Center
- Administered the volunteer rain gauge reader program (SWCD)
- Citizens Stream Monitoring Program
- Annual Arbor Day Tree Program

- Bi-annual Habitat Workshops
- Bi-annual Green Saturday Program
- Conduct transect survey
- Stewardship Week program with area churches
- Environmental Poster Contest in county schools
- Environmental Awareness Day with county 6th graders.
- Reclamation and improvement of Long Lake Public Beach.
- Streambank survey conducted on North Fork of the Watonwan River and Perch Creek.
- Three wetland banking sites established
- Established one wildlife area
- Goose Lake Basin (440 acres) restored in Fieldon Township
- Ag waste lagoon closure demonstration for area engineers and state and county feedlot staff.
- Published and distributed news articles and brochures to inform public on programs.
- $1,100,497.04 were spent on EQIP projects
- Mitigation – 3 sites/10 acres
- 14 Streambank repairs were completed which included 4,137 feet

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The Watonwan County Environmental Services Department administers local water management in Watonwan County. Duties include convening of the local Task Force. The Task Force membership currently includes these individuals who have participated in this update process:

NAME	REPRESENTING
Dorothy Raney	SWCD
Bruce Johnson	Environmental Services/Water Planner
Marlin Ziemer	Planning Commission
Noren Durheim	SWCD Supervisor
John Baerg	County Commissioner
Mark Sturm	City of St. James
Mark Rentz	County Commissioner
Ron Lindeen	Adrian Township
Hank Kohn	St. James Township
Chris Hughes	BWSR/New Ulm
Roger Risser	Watonwan County Public Works
Phillis Brey	NRCS
Jack Krech	Watonwan SWCD
Julie Sulflow	Environmental Services
Paul Sawatzky	Nelson Township
Bill Yock	Nelson Township
Ruth Wiederhoeft	Antrim Township
Jerry Karau	Antrim Township
Sanford Seibert	Fieldon Township

Special thanks to Jack Krech, Phillis Brey, Dorothy Raney and Roger Risser for their direct assistance in the preparation of this plan.

PUBLIC & INTERNAL FORUM

8/15/06 County Commissioners approve resolution to update Local Water Management Plan.

8/25/06 Notice of Decision to Revise and Update the Local Water Management Plan to units of government, organization and responsible agencies.

10/1/06 Requested date for recommendations of priority concerns to be returned to Watonwan County Environmental Services.

12/11/06 Task Force meeting – Water Plan Survey Results

3/19/07 Task Force meeting – Water Plan update/priority concerns

6/11/07 Task Force meeting – Local Water Management Plan Scoping Document

11/6/07 Resolution Authorizing Extension of the Watonwan County Comprehensive Water Management Plan

11/15/07 Water Plan Special Public Meeting with Task Force

11/20/07 Resolution Authorizing Extension of the Watonwan County Comprehensive Water Management Plan

3/10/08 Task Force meeting – Scoping Document Discussion

6/9/08 Task Force meeting – Discussion of meeting with BWSR regarding Scoping Document approval

7/28/08 Public Hearing on Local Water Management Plan before the County Board of Commissioners.

Upon approval of this plan, the Minnesota Board of Water and Soil Resources (BWSR) has up to 120 days to pass an Adoption and Implementation Resolution. After final adoption, the plan may be amended in a similar process, by petitioning the BWSR Board, scheduling a public hearing and sending notice to the required parties.

A2) DESCRIPTION OF PRIORITY CONCERNS

The priority concerns listed below were selected by the Water Plan Task Force members after reviewing the comments and concerns. These concerns were selected as a result of information on implementation activities and program over time, a history of degrees of success in implementation and evaluation of a balance of need for further implementation with an assessment of what can realistically be achieved within the local economic and civic climate and culture.

- **Priority Concern 1: Surface Water Quality Protection & Improvement**

Surface water quality for all waters addressing established and discovered impairments for phosphorus, nitrogen and fecal coliform bacteria, turbidity and Biological Fish Index of Biological Integrity.

- **Priority Concern 2: Groundwater Protection**

Groundwater protection, taking into consideration availability as well as drinking quality.

- **Priority Concern 3: Drainage Management**

Drainage management with the goal of establishing wetland restoration and water retention areas. These and other drainage decisions should be aided by a refined, accurate and expanded local drainage inventory.

- **Priority Concern 4: Sediment Control & Stream Protection**

Comprehensive sediment control efforts focusing on tillage and residue practices and management, and on flooding and flows as they affect stream banks and bluffs.

A3) SUMMARY OF GOALS, ACTIONS AND PROJECTED COSTS

Goals and actions were selected to address priority concerns.

- **Priority Concern 1: Surface Water Quality Protection & Improvement**

Watonwan County lies almost exclusively within the Watonwan River Watershed and nearer to its entirety within the Greater Blue Earth River Watershed. There is a need to protect and reduce further impairment of the Watonwan River, its tributaries and the lakes in the watersheds.

Consideration will be made to any high priority water quality problems. "High priority water quality problems" means areas where sediment, nutrients, chemicals, or other pollutants discharge to Department of Natural Resources designated waters or to any high priority waters as identified in a comprehensive local water plan or the conservation districts comprehensive plan, or discharge to a sinkhole or ground water. The pollutant delivery rate to the water source is in amounts that will impair the quality or usefulness of the water resource.

Desired objectives will be a continuation of local efforts to bring individual onsite septic systems into compliance with local and state rules, to continue efforts to bring community wastewater treatment facilities within the county into compliance with state and federal regulations and continue to bring feedlot operations into full compliance with an emphasis on manure management practices.

Implementation actions include review and revision of county ordinances, promoting and educating property owners on the operation and maintenance of onsite septic systems, providing technical assistance to feedlot operators and owners in determination of needs for site improvements and provide financial assistance for the improvement of feedlots and replacement of noncompliant septic systems. Maintenance of information systems to track implementation activities is seen as an important objective.

Projected costs for implementation of the actions proposed are approximately $2,325,000 in required cost share funds and property owner costs. $115,750 and in-kind services are estimated to be required for administration, education and outreach.

(Dollar figures are estimates based on historic costs.)

- **Priority Concern 2: Groundwater Protection**

Groundwater protection will be addressed for the purpose of protecting both quality and quantity. Drinking Water Supply Management Areas and private and community wells will be a focus of implementation efforts, with the objective of protecting long-term supplies from contamination and depletion.

Implementation actions include working with municipal and rural water providers on land use activities within supply and management areas, provision of assistance to owners of abandoned wells in the sealing of those wells, maintenance of well sealing records, supporting drinking water well screening and testing programs and supporting well owner and water user education efforts.

Projected costs for the actions proposed are $43,000 for implementation actions and $8,500 and in-kind services for administration, education and outreach.

(Dollar figures are estimates based on historic costs.)

- **Priority Concern 3: Drainage Management**

This concern will be addressed through the promotion of the restoration of wetlands, the establishment of water retention areas and the continued development of an accurate inventory of drainage infrastructure within the county.

Objectives include supporting the continuation of existing development of modernized drainage information systems and encouraging landowners to consider alternatives such as controlled drainage, restoration and other retention BMP's through promotional and educational efforts. An additional objective will be to seek financial assistance for the purpose of supplementing traditional cost share sources for easements and costs that may be required to achieve meaningful implementation.

Project costs for implementation activities and actions are $225,000 and $1000 and in-kind services for technical services, outreach and administration.

(Dollar figures are estimates based on historic costs.)

- **Priority Concern 4: Sediment Control & Stream Protection**

This concern will be addressed to reduce the delivery of sediment over surface features to surface waters and to create restorations and structures that will slow delivery of precipitation waters, with emphasis on waters designated as TMDL impaired.

The Watonwan SWCD work plan indicates erosion problems as high priority. "High priority erosion problems" means areas where erosion from wind or water is occurring equal to, or in excess of, 2 x T tons per acre per year or is occurring on any area that exhibits active gully erosion or is identified as high priority in the comprehensive local water plan or the conservation district's comprehensive plan.

Implementation actions include the promotion of BMP's, providing technical assistance in the selection and design of practices, providing financial incentives for implementation of BMP's. It will also be an objective through this plan to work with state and federal agencies in the implementation of TMDL's as they continue to be set and as plans are developed.

Projected costs for implementation of the actions proposed are $105,000. $62,500 and in-kind services are estimated to be required for outreach activities and technical assistance.

(Dollar figures are estimates based on historic costs.)

A4) CONSISTENCY WITH LOCAL, STATE AND REGIONAL PLANS

Watonwan County Environmental Services and the Watonwan County Public Works Department administer the county's land use ordinances. The Watonwan County Zoning Ordinance is reviewed on an ongoing basis for reflection of the goals of this plan. The Watonwan County Board of Commissioners are open to recommendations from county staff and citizens for consideration of amendment. It is deemed at the time of the creation of this implementation plan that it is consistent with county land use requirements. The City of St. James Drinking Water Supply Management Plan was submitted for review during the preparation of this plan and is given consideration in the objectives of this plan. The Greater Blue Earth River Fecal TMDL Plan is in place and the objectives and goals of this plan are consistent with that plan. It is anticipated that a succession of additional TMDL plans will be commissioned and approved over the duration of this plan.

A5) SUMMARY OF RECOMMENDED AMENDMENTS TO OTHER PLANS AND OFFICIAL CONTROLS

The review and amendments of the Mining and Extraction section of the Watonwan County Zoning Ordinance is recommended at the completion and approval of this document. Action is also required by the State of Minnesota to amend the county's wastewater treatment rules by 2010 and this plan is consistent with Watonwan County's intentions and plans to do so.

Action 5) Direct developers and contractors to obtain NPDES construction stormwater permits for projects that meet minimum affected area requirements.
Agency: WCES, Public Works, MPCA
Timeframe: 2008-2012
Estimated Cost: Inkind

Action 6) Provide financial support to townships in continuation of self determined projects for reduction of sedimentation. Provide technical assistance and financial support for culvert end, bridge abutments, ditch bank erosion and other sediment delivery sources within the townships.
Agency: WCES, Townships, SWCD, Public Works
Timeframe: 2008-2012
Estimated Cost: $40,000

D) ONGOING ACTIVITIES

While many of the activities and actions described and proposed in this plan as responses to the priority concerns are extensions of ongoing activities, there are other efforts ongoing that serve the goals of sound water management. Among them are:

- County administration of hazardous waste and recycling programs
- Collection of pesticide containers and used electronic equipment and appliances
- Technical Assistance through the SWCD for conservation programs
- Continuation of the SWCD tree program
- Administration of the Wetland Conservation Act
- Environmental Services general permitting of land use through the Watonwan County Zoning Ordinance and the Planning and Zoning Commission
- Working with MDA and townships on the noxious weed program
- Active Citizens Stream Monitoring Program and rain gauge readers network
- Assisting with testing for commercial pesticide application certification
- Provide seed and equipment for establishing conservation acreage
- Cooperate with landowners, Watonwan County Highway Department and Minnesota Department of Transportation on living snow fence projects
- Participate in youth programs in the county
- Seeking of funds for cost share assistance for conservation and environmental efforts
- Utilization of GIS to plot conservation and land use activities and developments
- Provisions of local well water screening and testing materials

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, MN 55155

In the Matter of Reviewing the Local Water Management Plan Update for Watonwan County (Minnesota Statutes, 2003, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Watonwan County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Board on July 31, 2008 pursuant to M.S. Section 103B.315, Subd. 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1. On November 30, 2007, the Minnesota Board of Water and Soil Resources received a resolution from Watonwan County requesting a one-year extension of the current water plan to December 31, 2008.

2. On December 19, 2007, the Board of Water and Soil Resources approved the Watonwan County water plan extension request to December 31, 2008.

3. On March 17, 2008, the Minnesota Board of Water and Soil Resources received a Priority Concerns Scoping Document from Watonwan County, pursuant to M.S. Section 103B.312.

4. On May 28, 2008, the Board of Water and Soil Resources approved official comments on the Watonwan County Priority Concerns Scoping Document, which were mailed to the County on May 28, 2008.

5. The priority concerns the local water management plan addresses include:
   a. Surface Water Quality for Impaired Waters;
   b. Groundwater Quantity and Quality Protection;
   c. Drainage Management and Wetland Restoration and Water Retention;
   d. Comprehensive Sediment Control;

6. On July 31, 2008, the BWSR received the Watonwan County Plan Update, a record of the public hearing, and copies of all written comments pertaining to the plan update to the Board for final State review pursuant to M.S. Section 103B.315, Subd. 5.

7. On November 14, 2008, the Board's southern region water planning review committee (Committee) reviewed the recommendation of the state review agencies regarding final approval of the Watonwan County Plan Update. Recommendations of the state review agencies were:
    a. Minnesota Department of Agriculture: recommends approval;
    b. Minnesota Department of Health: recommends approval;
    c. Minnesota Pollution Control Agency: recommends approval;
    d. Minnesota Environmental Quality Board: no recommendation received;
    e. Minnesota Board of Water and Soil Resources regional staff: recommends approval;
    f. Board Southern Region Water Planning Review Committee: recommends approval;

8. This update will be in effect until December 31, 2018.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of Watonwan County pursuant to Minnesota Statutes, 103B.315, Subd. 5.

2. The Watonwan County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the County; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

The Board hereby approves the attached update of the Watonwan County Local Water Management Plan with a required update to the Implementation section (Goals, Objectives, and Action) by December 31, 2013.

Dated at St. Paul, Minnesota, this 17th day of December, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

Minnesota Board of Water & Soil Resources

October 17, 2008

Mr. Jeff Nielsen
Minnesota Board of Water and Soil Resources
261 Highway 15 South
New Ulm, MN 56073

Dear Jeff:

Rice County has submitted their Priority Concerns Scoping Document (PCSD) for the 2008/2009 Local Water Management Plan Update to BWSR and other state agencies. BWSR received this document on September 11, 2008.

State agency comments were received from Minnesota Department of Agriculture (MDA), Minnesota Department of Health (MDH), Minnesota Department of Natural Resources (DNR), and Minnesota Pollution Control Agency (MPCA).

MDA commented that the process to identify priority concerns was commendable and concurs with the priority concerns identified. The MDA did note, however, that MDA's priority concerns were inadvertently missing from the scoping document. The county has agreed to include MDA's priority concerns in the scoping document.

MDH commented that the process to identify priority concerns was commendable and concurs with the priority concerns identified.

DNR commented that the process to identify priority concerns was adequate and concurs with the priority concerns identified.

The MPCA concurred with the priority concerns and provided additional comments. MPCA provided the 2008-2010 list of impaired waters and asked that the list be addressed in the local water management plan (LWM). MPCA indicated mercury TMDL reports have received EPA approval and that MPCA will lead study efforts on polychlorinated biphenols (PCB). MPCA noted that although animal agriculture and wetlands have been incorporated into the erosion, stormwater, and waste disposal/management priorities, these issues should not be deemed less important because of this. MPCA asked that the LWM clarify the status of unused well sealing as this was also identified as a

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priority in the previous LWM. MPCA indicated that providing information regarding surface waters in environmentally sensitive areas is a good idea and suggested the LWM define "environmentally sensitive areas." In addition to these comments, MPCA indicated that the PCSD includes many good methods of implementing priorities -- specifically relating to waste disposal/management, agricultural buffers rule, and the evaluation of groundwater extraction in developing areas. No agency comments were received from the Environmental Quality Board during this review period.

In addition to PCSD comments the MPCA, BWSR, DNR, MDA, MDH provided comments early on in the process. Additionally a citizen survey was completed and the LWM technical committee met to provide input to the PCSD.

On behalf of the BWSR I have completed my review of the Rice County PCSD and recommend the BWSR concur with the priority concerns identified

I look forward to working with County elected officials, staff, and residents as the plan update moves forward. If you have questions or need additional information, please contact me at 507-389-6784.

Sincerely,

Chris Hughes
Board Conservationist

Rice County Water Plan Update Extension Request

On November 3, 2008 Rice County submitted an official request to extend the current County Water Management Plan to January 28, 2010. The reason for the request is to allow for additional time to complete the Water Management Plan update process in accordance with 103B.301.

I recommend that based on Rice County's progress to date that this one year extension be approved. The county water planning technical committee met yesterday to review text, goals, objectives and actions for the final draft and are making good progress toward completing the final draft update. I anticipate the completed draft update will be submitted for final agency review in early 2009 and the process completed well ahead of the requested extension end date.

Respectfully Submitted
Chris Hughes
Board Conservationist
November 14, 2009

County Commissioners

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Galen Malecha
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DISTRICT 3
Milt Plaisance
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November 3rd, 2008

Minnesota Board of Water and Soil Resources (BWSR)
261 Highway 15 South
New Ulm, MN 56073

Dear BWSR Review Agency,

The five-year Rice County Comprehensive Local Water Management Plan is effective until January 28th, 2009. Rice County is currently updating the Water Management Plan in accordance with Minnesota Statutes, Chapter 103B.301, Comprehensive Local Water Management Act. Rice County submitted a Priority Concerns Scoping Document to the Board of Water and Soil Resources on September 9th, 2008, in accordance with Minnesota Statutes, Chapter 103B.313 of the Comprehensive Local Water Management Act.

Currently, Rice County representatives are scheduled to meet with the Board of Water and Soil Resources' Southern Region Water Planning Committee on November 14th, 2008 to discuss the Priority Concerns Scoping Document and make changes as suggested.

Rice County is requesting additional time to allow for public hearings, review, and approval of the Water Management Plan by the Board of Water and Soil Resources, and official plan adoption by the County Board of Commissioners as required in accordance with Minnesota Statutes, Chapter 103B.315 of the Comprehensive Local Water Management Act.

The Board of Water and Soil Resources has 90 days following receipt of the plan to review and notify the County if the plan is approved or disapproved in accordance with the Minnesota Statutes, Chapter 103B.315, of the Comprehensive Local Water Management Act.

Rice County Board of Commissioners requests from the Board of Water and Soil Resources an extension of the effective dates of the existing County Water Management Plan until January 28th, 2010, in order to complete the Water Management Plan update process in accordance with Minnesota Statutes, Chapter 103B.301, Comprehensive Local Water Management Act.

Sincerely,

Steven R. Bauer

Steve Bauer, Chair
Rice County Board of Commissioners

Rice County does not discriminate on the basis of race, color, national origin, sex, religion, age and handicapped status in employment or the provision of services.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Extending the Comprehensive Local Water Management Plan for Rice County

ORDER EXTENDING WATER MANAGEMENT PLAN

Whereas, the Rice County Board of Commissioners has a state-approved Comprehensive Local Water Management Plan (Plan) that is effective until January 28, 2009, pursuant to Minnesota Statutes 103B.301; and

Whereas, the Minnesota Board of Water and Soil Resources (Board) has authorization to grant extensions pursuant to Minnesota Statutes 103B.311, Subdivision 4 (a) (5).

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

On September 9, 2008, Rice County's Priority Concerns Scoping Document (PCSD) was distributed for state agencies review pursuant to Minnesota Statutes 103B.305, Subdivision 8a.

On November 14, 2008, the Board's southern region water planning review committee (Committee) met with representatives of Rice County to discuss the county's PCSD and review comments that were received. The priority concerns to be addressed in the new Plan were deemed appropriate by the Committee. The Committee's decision was to present to the Board a recommendation of approval of the Rice County PCSD.

On November 3, 2008, the Board received a request from Rice County requesting a one-year extension of their Plan. The reason for the request was to allow for additional time to complete the Water Management Plan update process in accordance with 103B.301.

On November 14, 2008, the Committee reviewed and recommended approval of the extension request by Rice County.

On December 17, 2008, the Committee presented its recommendation of approval of the Rice County one-year extension to the Board. The Board adopted the Committee's recommendation.

CONCLUSIONS

All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of extending the Comprehensive Local Water Management Plan of Rice County pursuant to Minnesota Statutes 103B.311, Subdivision 4 (a) (5).

ORDER

The Board hereby approves the extension of the Rice County Comprehensive Local Water Management Plan until January 28, 2010. Rice County shall strive to complete the updating of their Comprehensive Local Water Management Plan in a timely manner.

Dated at St. Paul, Minnesota, this 17th day of December, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Randy Kramer, Chair

NEW BUSINESS

1. Federal Highway Administration (FHWA) Exemplary Ecosystem Initiative Award - Cheryl Martin, Environmental Engineer, FHWA – ***INFORMATION ITEM***

2. Order Public Hearing for Boundary Change, Withdrawal of Territory and Enlargement of the Cedar River Watershed District (CRWD), the Shell Rock River Watershed District (SRRWD), and the Turtle Creek Watershed District (TCWD) –Travis Germundson – ***DECISION ITEM***

3. RIM Reserve Vegetation Management and Enhancement of Conservation Easement Lands Policy – Kevin Lines – ***DECISION ITEM***

4. Red River Valley Restoration Initiative (RRVRI) Establishment – Kevin Lines – ***DECISION ITEM***

5. Northeast Wetland Mitigation Inventory - Dale Krystosek, BWSR Senior Wetland Specialist and Keith Hanson, Barr Engineering – ***INFORMATION ITEM***

6. Local Road Wetland Replacement Program Project – Dan Girolamo and Dave Weirens – ***DECISION ITEM***

7. Wetland Banking Fee Policy: Update Calculated Wetland Credit Values – Dave Weirens – ***DECISION ITEM***

8. Wetland Conservation Act: Adopt Draft Rule and Authorize Formal Rulemaking – Dave Weirens and Les Lemm – ***DECISION ITEM***

9. Grants Program & Policy Committee Recommendations –
   The following grant program allocations are currently scheduled as follows:
   A. '09 Drainage Records Modernization Grant, $500K – Forty six applicants have requested $1.35M
   B. '09 Native Buffer Cost-Share Grants, $700K
   C. '09 Ag-land Hydrologic Restoration Grants, $1.5M
   D. '09 Clean Water Legacy Project Grants, $3.2M ($1.2M BWSR, $2.0M PCA)

   DECISION ITEM
   (A separate set of draft resolutions and supporting materials for these items will be sent to you prior to the 17th.

FHWA Exemplary Ecosystem Initiative

Wingard Wetland and Grassland Restoration Project

Not until now have government agencies in Minnesota undertaken a wetland-restoration effort as large as the Wingard (formerly Vesledahl) project in the state's Red River Valley. The 1,900 acres of restored areas—former croplands--will one day resemble what the land looked like before it was farmed. In its restored condition the area will once again be a vast expanse of shallow wetland basins set against a mosaic of tall grass prairie on the flat expanse of historic Lake Aggasiz.

Typically, state agencies develop wetland-restoration projects by themselves. On the Wingard project, the Minnesota Department of Transportation (Mn/DOT) and the Board of Water and Soil Resources (BWSR) worked together from the very beginning. Both agencies wanted to create a wetland bank, and since both needed wetland-replacement credits to mitigate the impacts of ongoing road repair and reconstruction projects, it made sense to form a partnership. In the resulting agreement specified Mn/DOT funded the land purchase and undertook the title searches and right-of-way issues. BWSR managed the project, certifying wetland-replacement credits and providing technical assistance on seeding plans and wetland-restoration design. Two other cooperating agencies, the state Department of Natural Resources (DNR) and the U.S. Fish and Wildlife Service, provided technical assistance.

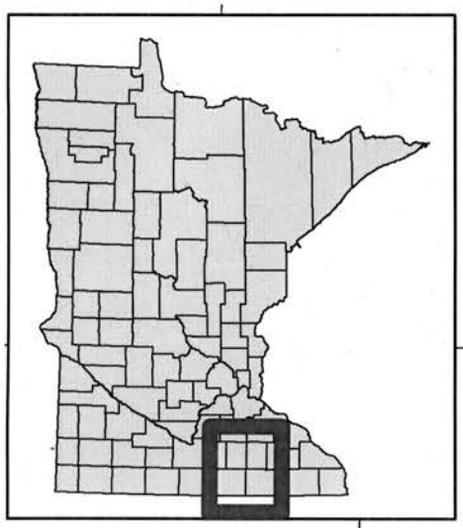
The numbers are impressive and unique. The restoration project has restored approximately *750 acres* of wetlands and *1,150 acres* of native upland vegetation. More than 130 individual basins have been restored and range in size from ½ acre to 50 acres. Construction ctrews adjusted the elevation of the water flow on the rolling terrain. Water was then taken out of an existing upstream ditch system and routed through 2 miles of basins onto the various wetlands.

The first planting phase occurred on more than 600 acres--the largest single block of native planting ever done by a Minnesota state agency. The DNR donated seed for the restoration from a nearby native prairie which had never been plowed. By using seed harvested from this source, the resulting restorations will closely parallel the species composition that existed on the site before it was drained and filled for farming. *Seventy-five* different seeds were identified in the mix used, among them blazing star, fox sedge, and purple prairie clover.

The combination of routing the water through the restored wetlands and converting cropland to native prairie will help reduce runoff, sedimentation, and flooding.
The restoration will also create badly needed habitat for waterfowl and other wildlife. Wildlife use of the restored portions of the site has already included migratory waterfowl, as well as moose, sand hill cranes, trumpeter swans and bald eagles. It will even create conditions for a future greenway connecting Department of Natural Resources and U.S. Fish and Wildlife Service lands downstream of this site.

Eventually the Wingard site will be transferred to the Department of Natural Resources to become one of the Department's Wildlife Management Areas. The site will link two existing federal waterfowl production areas and will form one contiguous public land complex more than 2,600 acres in size and open to the public. Since both the USFWS and The Nature Conservancy have large management units near the Wingard project, they'll help DNR manage the site.

Cedar River, Shell Rock River and Turtle Creek Watershed Districts



Rice

Goodhue

Wabasha

Waseca

Steele

Dodge

Olmsted

Freeborn

TURTLE CREEK

CEDAR RIVER

SHELL ROCK RIVER

Mower

Minnesota Board of Water & Soil Resources
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Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, MN 55155

In the Matter of petition for Boundary Change, Withdrawal of Territory, and Enlargement of the Cedar River Watershed District, the Shell Rock River Watershed District, and the Turtle Creek Watershed District pursuant to Minn. Stat. §§ 103D.251, 103D.255, and 103D.261.

ORDER FOR BOUNDARY CHANGE WITHDRAWAL OF TERRITORY ENLARGEMENT HEARING

Whereas, two counties and three watershed districts have submitted six petitions for boundary change, withdrawal of territory, and enlargement of the Cedar River Watershed District, the Shell Rock River Watershed District, and the Turtle Creek Watershed District pursuant to Minn. Stat. §§ 103D.251, 103D.255, and 103D.261, and;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order.

FINDINGS OF FACT

1. On November 1, 2008 the Board received six petitions from Freeborn and Mower Counties and three watershed districts for boundary change, withdrawal of territory, and enlargement of the Cedar River Watershed District, the Shell Rock River Watershed District, and the Turtle Creek Watershed District pursuant to Minn. Stat. §§103D.251, 103D.255, and 103D.261. The petitions were accompanied by supporting resolutions from the two counties and the three watershed districts.

2. Staff has determined that valid petitions exist pursuant to Minn. Stat. §§ 103D.251, 103D.255, and 103D.261.

3. Minn. Stat. §§ 103D.251, 103D.255, and 103D.261 require a public hearing to be held within thirty-five days of the Board determining a valid petition has been received.

4. One public hearing should be held due to the geographical proximity of the three watershed districts and the interdependency of the actions being petitioned.

5. The Southern Water Planning Committee should preside over the hearing and bring recommendations to the Board.

6. The Executive Director should determine the date of the hearing after coordinating with the appropriate parties.

7. The public hearing should be held at the Moscow Town Hall in Freeborn County as requested.

8. If scheduling conflicts arise the Executive Director should choose another suitable location.

CONCLUSIONS

1. The petitions for boundary change, withdrawal of territory, and enlargement are valid in accordance with Minn. Stat. §§ 103D.251, 103D.255, and 103D.261.

2. All relevant, substantive and procedural requirements of law and rule have been fulfilled.

3. The Board has proper jurisdiction in the matter of ordering a hearing to determine whether the proposed changes would be for the public welfare and public interest and the purposes of Chapter 103D would be served.

4. One public hearing shall be held within thirty-five days of the date of this order.

5. The Southern Water Planning Committee shall preside over the hearing and bring recommendations on the petitions to the Board.

6. The Executive Director shall make a decision on the date of the public hearing after coordinating with the appropriate parties.

7. The public hearing shall be held at the Moscow Town Hall in Freeborn County.

8. If scheduling conflicts arise the Executive Director shall choose another suitable location.

ORDER

The Board hereby orders a public hearing be held within 35 days of the date of this Order for boundary change, withdrawal of territory, and enlargement of the Cedar River Watershed District, the Shell Rock River Watershed District, and the Turtle Creek Watershed District presided over by the Southern Water Planning Committee at a date and location to be determined by the Executive Director.

Dated at Saint Paul, Minnesota this 17th day of December, 2008.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

By: _____
Randy Kramer, Chair

POLICY
DECEMBER 17, 2008
VEGETATIVE MANAGEMENT AND ENHANCEMENT OF CONSERVATION EASEMENT LANDS

The MN Board of Water and Soil Resources (BWSR) recognizes the need to establish a policy and procedure for vegetative management and enhancement of conservation easements. This may include the practices of mowing, haying, grazing, harvest for seed or energy, prescribed burning, establishment of native grasses, forest land and wetland management. This policy applies to conservation easements held by the BWSR and is to compliment language already stated in the easement terms and conditions. Easements held in partnership with other agencies may have limitations that prohibit some or all of the activities outlined in this policy.

A Conservation Plan exists for each easement that identifies the location and type of practices found on the site. Easements require ongoing management to assure their quality is maintained. To that end this policy supports landowner efforts to achieve the highest degree of quality from every easement. A Management Plan needs to be developed and attached to the Conservation Plan for all activities being conducted on the easement site.

In some cases financial assistance will be available for certain practices, while others will be at the owner expense, entirely or partially. Certain practices may produce an economic return to the landowner, as long as wildlife benefits are protected. Practices to be implemented are best determined by the landowner in consultation with the SWCD and BWSR staff. The Management Plan shall be signed by all three parties. Consultation will be made with other professionals as deemed necessary by this group. Activities eligible for financial assistance must be consistent with the RIM program guidelines and approved by BWSR prior to practices being implemented.

Easement vegetation can be broken into three distinct cover types:

I. Grassland Management: For purposes of species diversity, wildlife habitat, water quality and erosion control, it may be necessary to undertake practices to enhance or modify some or all of the cover of a conservation easement. Practices may include:

A. Mechanical (mowing, haying, harvest, energy)

Mechanical methods can successfully manipulate growth stages of habitat. Annual mowing and mowing of entire stands is not allowed without technical justification from the resource manager preparing the management plan. Removal of biomass can increase the vigor of desirable vegetation, remove stored nutrients for water quality and provide a seed bed for restoration or enhancement. Generally, mechanical treatment will be done no more frequently than once every third year, with no more than one third of the acreage mowed each year. In some cases it may be not be practical to manage smaller sites in stages, especially, if they are within a larger habitat complex. Mowing, haying, or harvest is not allowed during the nesting season May 15 to August 1. Minimum stubble

eights are 4-6 inches. Any modifications to these criteria should be explained and specified in the management plan.

B. Chemical/Biological

Chemical Application: Herbicides used must follow label restrictions and be conducted in a way that maintains plant diversity and wildlife habitat. Care should be taken to minimize impacts to desired vegetation while controlling target species as specified in the Management Plan.

Biological Control: Biological control agents may be used for the control of invasive plant species. Minnesota DNR and Minnesota Department of Agriculture guidelines for using biological control agents should be followed and incorporated into the Management Plan.

C. Grazing

Livestock may be used to manage health and vigor of permanent vegetative cover when done in accordance with a grazing plan. Grazing on easement lands requires very careful management to assure the site is not overgrazed. Grazing should not be recommended unless the landowner fully understands the plan and is capable of managing the system. Grazing plans are to be developed according to applicable NRCS practice standards. Generally, grazing will not be done more often than once every three years on the same acres, and only one third of the area will be grazed each year. In some cases it may be not be practical to manage smaller sites in stages, especially if they are within a larger habitat complex. Grazing shall not occur during the primary nesting season of May 15 to August 1. Minimum stubble heights are 4-6 inches. Livestock will be removed from the site when the grass on the site is grazed to these stubble heights. Any modifications to these criteria should be explained and specified in the management plan.

D. Prescribed Burning

Improvement of plant species diversity, control of brush, and recycling of nutrients can be achieved by controlled burning. Burning will be allowed on cool season as well as warm season grass stands. The Management Plan will indicate the timing of burns for the area being treated. Appropriate permits must be obtained by the landowner prior to performance of a prescribed burn. Follow appropriate NRCS practice standards for prescribed burning.

E. Native Prairie Planting.

Enhancement or re-establishment of existing native prairie or replacement of cool season vegetation shall use native grasses & forbs of local eco-type where possible or as required by statute or rule. Quality of habitat can be increased by conversion of introduced grass stands to native grass stands. Follow appropriate NRCS practice standards for habitat management and restoration of declining habitats. BWSR has suggested native grass and forbs seed mixes available as well as recommendations for inter seeding of grasslands.

II. Forest Land Management: Necessary to provide regeneration, maintenance, or conversion of species to manage forest stands for wildlife benefits and stand density.

Easement lands planted to trees need to be managed to maintain and improve preferred species that are critical to providing specific wildlife habitat. When tree cover is requested in the RIM conservation plan and established, the planting should not be considered the final product. The planting should be viewed as a component of the desired future condition to retain tree cover on the site. Harvesting can be done for a variety of purposes such as to create wildlife openings, manage browse for specific wildlife species, and for forest stand improvement. The Management Plan should outline the necessary steps to achieve this desired future condition.

III. Wetland Management:

Wetland management activities for vegetation and water level control are site specific. Wildlife habitat and nutrient reduction benefits of wetlands are affected by: vegetative quality, fish, minnows, invasive species, sedimentation, and water depth to name a few. Detailed plans exist for each restoration project that lay out the engineering of the restoration as well as any vegetative component. The BWSR is updating the MN Wetland Restoration Guide which should be consulted for further information. Any questions or requests regarding management of wetland areas should be directed to the BWSR Easement Program Manager.

Board Resolution #_____

RIM Reserve Vegetation Management and Enhancement of Conservation Easement Lands Policy

WHEREAS the MN State Legislature appropriated $25 million dollars to the RIM Reserve in the 2008 Bonding bill (Chapter 179, 2008 Session law) which governor Pawlenty signed into law on April 7, 2008;

WHEREAS, the 2008 MN State Legislature identified that up to $1.25M be used to expand the BWSR's policies on vegetation management to include energy production activities.

WHEREAS, the BWSR recognizes the need to update the August 26, 1998 policy on vegetation management options on conservation easement land to maintain the habitat and environmental quality of the State's investment.

WHEREAS, the BWSR has historically provided financial assistance to landowners on a case by case basis as RIM funding has been available to re-establish conservation practices on easement lands.

WHEREAS, the BWSR RIM Management Planning Committee has developed a new policy to incorporate historical and new innovative practices into one new policy document.

NOW THEREFORE BE IT RESOLVED, the Board of Water and Soil Resources approves and adopts the updated and attached Vegetative Management and Enhancement of Conservation Easement Lands policy and authorizes staff to proceed with implementation.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

Attachment

Red River Valley Restoration Initiative (RRVRI) Establishment

The BWSR received $25M from the Sstate legislature for the RIM Reserve Program in 2008. In addition, the legislature identified that up to $8M is available to restore wetlands and reduce flooding in the Red River Valley. BWSR staff worked with the Red River Watershed Management Board to develop this pilot RRVRI.

The goals and objectives of the RRVRI are to achieve priority river/stream restoration and flood damage reduction outcomes consistent with the Red River Mediation Agreement (RRMA) and RIM Reserve Program established in MS 103F.515.

The RIM Reserve Management Planning Committee (RRMPC) is unanimously recommending to the Board an allocation of up to $3M to RRVRI to acquire riparian easements and establish conservation practices on those riparian lands acquired in easements. These funds must be obligated by June 1, 2009 for the stated purposes of the RRVRI. The RRMPC is recommending the payment rate for permanent easements on cropland be 100% of Estimated Market Value (EMV) and the payment rate for non-cropland be 60% of EMV. Rates are to be calculated using township mean for tillable property value established by county assessors for the 2009 tax year.

Project areas will be developed through the Red River Mediation Work Group (RRMWG) and local project work teams consistent with the Red River Mediation Agreement (RRMA) and its natural resource enhancement goals and objectives. Projects recommendations will be submitted to the BWSR from the RRMWG for consideration.
DECISION

RED RIVER VALLEY RESTORATION INITIATIVE (RRVRI)
RIM Reserve Pilot Project
November 24, 2008 Revision

Approved by the RIM Reserve Management Planning Committee (RRMPC) for recommendation to the BWSR Board, December 17th, 2008.

CONTEXT

The recently passed bonding bill provided for the following:

1. To acquire conservation easements from landowners to preserve, restore, create, and enhance wetlands, restore and enhance rivers and streams, riparian lands, and associated uplands in order to protect soil and water quality, support fish and wildlife habitat, reduce flood damages, and other public benefits.

2. Up to $8,000,000 of this amount is available for use to restore wetlands and reduce flooding in the Red River Valley area.

The Red River Mediation Agreement (RRMA), representing state and federal permitting agencies including BWSR, along with landowners, counties, SWCDs, watershed districts, cities, conservation organizations and environmental organizations, is an agreement on goals and objectives for flood damage reduction and natural resources enhancement. It is an agreement regarding a process involving local project teams that assess problems and develop and select preferred alternatives for addressing those problems. The Red River Mediation Work Group (RRMWG) provides general oversight and support, assists with conflict resolution, and provides recommendations for state and federal funding consistent with the goals and objectives of the RRMA. This process is a model for cooperation, coordination and achievement of on-the-ground outcomes, without which addressing the flooding issues in the Red River Valley would still be locked in litigation and denied permits. The RRMA also advocated an integrated flood damage reduction/natural resource enhancement (FDR/NRE) project approach of 75/25 state/non-state funding relationship. The NRE components of the projects are the focus of this initiative.

OBJECTVE

The objective of the (RIM Reserve) Red River Valley RIM Restoration Initiative (RRVRI) is to achieve priority river/stream restoration and flood damage reduction outcomes consistent with the RRMA. The specific goals/outcomes of the RRMA that will be achieved are:

1. Reduced Flood Damages to cropland, roads and bridges by eliminating cross over flow and improving channel efficiency.

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2. Improved Water Quality by reducing channel and upland erosion with buffers and designed channel stabilization.
3. Restored Fish Habitat and River Fishery by reestablishing the natural stream channel meandering and creating natural channel stabilization.
4. Improved Wildlife Habitat by establishing native vegetative buffers along the river/stream.

CRITERIA for the RRVRI

1. Eligibility for RIM Reserve with a focus on riparian flood prone lands.
2. Project is consistent with the RRMA's FDR/NRE goals and objectives.
3. Project will evolve through, and be recommended by, the local project team and the Watershed District (WD).
4. Project will be recommended to BWSR by the RRMWG. The RRMWG, in addition to the above, will consider the readiness of the project to proceed and the leveraging of other resources.

PAYMENT RATES

1. Permanent Easements on Cropped Lands – The payment rate for permanent easements on cropland would be 100% of Estimated Market Value (EMV) for the township as determined by the county assessors.
2. Permanent Easements on Non-Cropped Lands – The payment rate for permanent easements on non-cropped land would the current RIM Reserve payment rate of 60% of EMV for the township as determined by the county assessors.
3. Limited duration easements would not be offered as there are other short-term program options available to landowners.

Since EMVs for townships are generally at least one year in arrears with respect to actual values, use of 100% of the township EMV would be the preferred payment rate. In any situation the WD will still need to augment the RIM payment by 10–25% to be competitive in most areas.

PRACTICE COSTS

Conservation Practice Implementation – RIM Reserve would pay costs relating to land preparation, seed costs, and seeding of the RRVRI RIM lands up to $300/acre for native plantings which is the current RIM Reserve maximum cost-share reimbursement rate.

OTHER PROJECT COSTS

1. Engineering and Design – The engineering and design costs will be the responsibility of the WD.
2. Project Administration – The administration of the project will be the responsibility of the WD.
3. River/Stream Restoration Construction – WDs will be responsible for the river/stream restoration construction cost.

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4. Conservation Plan – The maintenance of the conservation plan will be the responsibility of the WD as part of their overall project responsibilities rather than the responsibility of the individual landowner.

LEVERAGING

1. Where practical, the WD will leverage other resources. Generally CRP does not appear to be practical in many instances as CRP limits what can be done on the property while enrolled. Stream restoration would require the landowner or WD to "buy out" the contract for construction to be done. That's not a practical approach. This initiative does not fit will within the current WRP priorities, rules and regulations according to Tim Koehler, NRCS. Therefore, federal leveraging through USDA would appear to be limited for many projects, but has significant potential for some.
2. There will be leveraging available through the COE's, FEMA, NRCS and potentially other state and federal agencies as well as local conservation organizations.
3. WD leveraging through
    a. Engineering and design of the project;
    b. Project administration;
    c. Land acquisition; and
    d. Construction of river/stream restoration.

IMPLEMENTATION

Acknowledging the BWSR RIM Reserve Management Planning Committees timeframes for having the allocated funds committed, it is the intent of this initiative to commit authorized dollars to landowner sign-ups by June 1, 2009. With $3,000,000 available for this pilot initiative, committing the dollars within this timeframe should be doable.

Draft

Board Resolution #_____

Red River Valley Restoration Initiative (RRVRI) Establishment

WHEREAS the MN State Legislature appropriated $25 million dollars to the RIM Reserve Program in the 2008 Bonding bill (Chapter 179, 2008 Session law) which governor Pawlenty signed into law on April 7, 2008;

WHEREAS the MN State Legislature identified that up to $8 million is available for use to restore wetlands and reduce flooding in the Red River Valley Area;

WHEREAS the Minnesota Board of Water and Soil Resources authorized staff to work with the Red River Watershed Management Board to develop a (RIM Reserve) Red River Valley Restoration Initiative (RRVRI);

WHEREAS the role and responsibilities of the Watershed Districts in the RRVRI is project engineering and design, project administration, river/stream restoration construction, and maintenance of the conservation plan on behalf of the landowner;

WHEREAS projects will be identified through the Red River Mediation Work Group (RRMWG) and local project work teams consistent with the Red River Management Agreement (RRMA) and its natural resource enhancement (NRE) goals and objectives;

WHEREAS the objective of the RRVRI is to achieve priority river/stream restoration and flood damage reduction outcomes consistent with the Red River Mediation Agreement and RIM Reserve Program established in MS 103F.515;

WHEREAS the RIM Reserve Management Planning Committee (RRMPC) is recommending up to $3 million in 2008 RIM Reserve funds be used to acquire riparian easements and establish conservation practices on those riparian lands acquired in easements. These funds must be obligated by June 1, 2009 for the stated purposes of the RRVRI;

WHEREAS the RRMPC is recommending the payment rate for permanent easements on cropland be 100% of Estimated Market Value (EMV) and the payment rate for non-cropland be 60% of EMV for non-cropland. Rates are to be calculated using township mean for tillable property value established by county assessors for the 2009 tax year;

WHEREAS the RRVRI project recommendations will be submitted to the BWSR from the Red River Mediation Work Group for consideration;

Over

WHEREAS the RRMPC met on November 24th, 2008 and is recommending the establishment of the RRVRI beginning December 18, 2008 and ending June 1, 2009 with a payment rate of 100% EMV for cropland and 60% EMV non-cropland;

NOW, THEREFORE BE IT RESOLVED THAT, the Minnesota Board of Water and Soil Resources authorizes the establishment of, and payment rates for, the RRVRI to begin December 18, 2008 and run through June 1, 2009.

_____ _____

Randy Kramer, Chair
Minnesota Board of Water and Soil Resources

Date

Northeastern Minnesota Wetland Mitigation Inventory and Siting Study
Project Status – December 2, 2008

The Northeastern Minnesota Wetland Mitigation Inventory and Siting Study (Inventory) is a two phase project to identify potential wetland mitigation opportunities located in northeastern Minnesota and analyze those opportunities to develop goals and priorities. Phase 1 is designed to identify potential wetland mitigation sites and inventory and assess mineland wetlands and Phase 2 will provide siting recommendations based on priorities.

The purpose of Phase 1 is to gather baseline historical data to develop an initial understanding of the existing wetland resources and conduct a regional assessment of potential opportunities for wetland restoration, enhancement, preservation and creation within the 18 counties containing more than 80 percent of their historic wetlands. The Phase 1 report is intended to provide documentation of the process, methods, and results; including discussion of the project study area, the participants and outcomes of public outreach meetings, the inventory methodologies, the outcome of the study, and prioritization factors.

During Phase I of the project, a technical committee was convened to provide review and guidance over the inventory process. Wetland stakeholders were also consulted to gather feedback on the major components of the study and to provide information on local issues which could impact the success of the project.

Based on the technical committee and stakeholder feedback, four general categories of mitigation methods were evaluated: wetland restoration, preservation, enhancement, and creation. A GIS model analysis was conducted utilizing existing data sources to identify potential wetland mitigation opportunities within the project area. Potential wetland mitigation opportunities were identified throughout the study area.

Approximately one percent of the potential mitigation opportunities spread across 17 of the 18 counties will have been evaluated in the field to determine the accuracy of the modeling methods and to get a sampling of landowner interest. The field verification was performed by Soil and Water Conservation Districts and other Local Government Units. The results of the field efforts indicated that approximately 40 percent of the sites evaluated had moderate to high technical feasibility. However, landowners expressed a possible interest within only about 25 percent of the potential sites with moderate to high technical feasibility. In addition, more than 50 percent of the potential mitigation acreage identified was on sites determined to be farmed wetlands, many of which may only yield limited credit under state mitigation guidelines.

The mineland water resources inventory analysis identified nearly 2,000 wetlands and water bodies covering nearly 23,000 acres, about 20 percent of the study area. Approximately 4,000 acres of wetlands were identified that have developed on former minelands along with nearly 6,000 acres of mine pit waters and 13,000 acres of natural wetlands located adjacent to mine features. A sample of approximately 10 percent of those water features were field verified and their functions assessed using the Minnesota Routine Assessment Method for Evaluating Wetland Functions. The potential for conducting wetland mitigation on reclaimed minelands is discussed based on the inventory and assessment.

Prioritization factors were also addressed by the technical committee and the stakeholder group. Both groups concluded that it is important to have the ability to sort data by prioritization factors. The prioritization factors considered include: potential wetland mitigation types, wetland mitigation method, wetland mitigation site size, land ownership, landowner interest, area water quality, proximity to impaired waters, technical feasibility, and watershed location. The potential wetland mitigation opportunities will be analyzed in the context of these prioritization factors during Phase 2 of the project.

2008 Local Government Roads Wetland Replacement Program Funding Recommendation

This funding recommendation is for the 2008 Local Government Roads Wetland Replacement Program. Our solicitation utilized two processes including Development Agreement, where the applicant does the work and Easement Agreement, where BWSR does the work. The Development Agreement process summary and funding recommendation is provided below.

- The **Development Agreement** process generated 23 individual applications requesting in excess of 18 million dollars. To prepare this recommendation the following process was followed:

    1) BWSR Land and Water section staff collected 23 individual proposals and entered them into our 2008 RFP spreadsheet.
    2) Technical Services staff reviewed all proposals for completeness resulting in five rejections.
    3) Comments were solicited from our state and federal partners during the Interagency Bank Review Team meeting held on July 30, 2008.
    4) Proposals were scored using the following formula: Score = 10 – cost ratio (calculated value/bid price) x technical score (using technical data from the Interagency Bank Team review Meeting).
    5) BWSR wetland specialists completed an on site assessment for 5 of the 6 proposals recommended for funding. One site (Whittet - Red Wood County) will be viewed after harvest.
    6) BWSR bank staff shared their preliminary recommendation with BWSR Senior Management Team resulting in one substitution. (Schroeder –Todd County for Hasbargen – Koochiching County)
    7) Wetland Program Manager submits funding proposal to BWSR Wetland Committee for review and discussion.

The six projects recommended for funding are briefly described as follows:

Mike Reed	**Kooch. County**	**Rapid River Watershed - #75**	**BSA - NWC - #2 128.25**	**PVC- 135.00**

The Reed project consists of approximately 270 acres and is currently in crop production. The site is partially drained with strong crop history and some existing Conservation Reserve Program acres. The site is located within ½ mile of the Rainy River with artificial drainage delivering runoff from the site directly to the river. A fresh wet meadow restoration is planned.

Steve Whittet	**Redwood County**	**Redwood River Watershed #27**	**BSA - #9**	**NWC - 4800** **PVC- 10.00**

The Whittet project consists of approximately 58 acres and is currently in crop production. The site is well drained with full restoration yielding the maximum credit. The site is located within a ¼ mile of a creek. A fresh wet meadow restoration is planned.

Arnold Oldenberg	**Douglas County**	**Long Prairie Watershed #14**	**BSA - #5**	**NWC - 10.00** **PVC - 10.00**

The Oldenberg project consists of 22 small seasonally flooded basins totaling approximately 20 acres with heavy crop history. This site will serve well to demonstrate restoration of a pot hole prairie landscape. A seasonally flooded basin restoration is planned.

Carl Jaranak	**Beltrami County**	**Mississippi River Watershed #7**	**BSA - #5**	**NWC - 9.50** **PVC - 4.50**

The Jaranak project consists of approximately 14 acres and is currently unfarmed and used for grass hay. The site is partially drained with a ditch which delivers runoff to the Mississippi River which is ¾ mile downstream. A fresh meadow/shallow marsh restoration is planned.

Mike Nelson	**Ottertail County**	**Red Eye River #13**	**BSA #5**	**NWC - 40.99** **PVC - 40.99**

The Nelson project consists of approximately 100 acres with heavy crop history. The site will rely totally on vegetative restoration as no hydrologic restoration is planned. Runoff from the site flows approximately ½ mile to the Red Eye River. A variety of wetland types are proposed for restoration.

Lauren Schroeder	**Todd County**	**Long Prairie River #14**	**BSA #5**	**NWC- 21.00** **PVC- 2.00**

The Schroeder project consists of approximately 23 acres of existing Conservation Reserve Program acres. The site is drained by a ditch which delivers runoff to a public drainage ditch. A fresh wet meadow restoration is planned.

Next, the Easement Agreement process summary and funding recommendation is provided below.

- The **Easement Agreement** process generated 1 individual application. Two others proposal were needed and identified by reviewing the unfunded 2008 RIM/WRP applications and selected two that met our location criteria. To prepare this funding recommendation the following process was followed:

    1) The single Easement Agreement proposal was reviewed as submitted and all unfunded RIM/WRP applications were screen for location.
    2) Two unfunded RIM/WRP applications were selected for further consideration and field verification.
    3) Field staff completed an onsite risk assessment for all three sites
    4) The two added landowners were contacted to see if they were interested in banking.
    5) Cost estimates were prepared for each project and summarized.
    6) BWSR banking staff shared their preliminary recommendation with BWSR Senior Management Team.
    7) The SMT approved funding recommendation was presented to the BWSR Wetland Committee for review and discussion.

The three proposals recommended for funding are briefly described as follows:

Don Hansen	**Murray County**	**Cottonwood River #29**	**BSA #9**	**NWC- 40.00**	**PVC- 40.00**

The Hansen project consists of approximately 100 acres of farmland that adjoins a large CREP site. The site is drained by a large tile and laterals. The project will be enhanced if the east neighbor participates allowing for restoration of a shared basin divided by a property line. A fresh wet meadow restoration is planned.

Allen Bryce	**Pope County**	**Chippewa River #26**	**BSA #9**	**NWC- 6.00**	**PVC- 6.00**

The Bryce project consists of approximately 61 acres of marginal farmland which adjoins a DNR Wildlife Management Area. The site is drained by shallow ditches which delivers runoff to a protected water. A fresh wet meadow restoration is planned.

Bill Schmidt	**Traverse County**	**Mustinka River #55**	**BSA #4**	**NWC- 10.00**	**PVC- 10.00**

The Schmidt project consists of approximately 60 acres of existing farmland. The site is adjacent to Walls Basin, a US Fish and Wildlife property and has been degraded by a long history of row crop agriculture. This restoration will involve significant sediment removal and several shallow scrapes. This restoration will restore fresh wet meadow, shallow marsh and deep marsh communities.

2008 LGRWRP RFP Funding Recommendation

by dg 11/26/08

Development Agreements

Score*	Name	County	# of NW Credits	$/NW Credits	$ for NWC	# of PV Credits	$/PV Credit	$ for PVC	Contract Total
85.59	Mike Reed	Koochiching	110	$6,250.00	$687,500.00	110	$1,562.50	$171,875.00	$859,375.00
77.85	Steve Whittet	Redwood	29.00	$14,500.00	$420,500.00	6.00	$3,625.00	$21,750.00	$442,250.00
67.68	Arnold Oldenberg	Douglas	10.00	$16,500.00	$165,000.00	10.00	$4,125.00	$41,250.00	$206,250.00
64.89	Mike Nelson	Ottertail	40.99	$7,800.00	$319,722.00	40.99	$1,950.00	$79,930.50	$399,652.50
64.89	Carl Jaranak	Beltrami	9.50	$8,000.00	$76,000.00	4.50	$2,000.00	$9,000.00	$85,000.00
62.72	Lauren Schroeder	Todd	21.00	$11,200.00	$235,200.00	2.00	$2,800.00	$5,600.00	$240,800.00
			220.49		*$1,668,722.00*	*173.49*		*$329,405.50*	
			Ave $/NW credit	*$7,568.24*		*Ave $/PV credit*	*$1,898.70*		

* The score was calculated using the following formula: 10 - cost ratio x tech score

Easement Agreements

Name	County	WS #	Watershed Name	Easement Acres	# of NW Credits	# of PV Credits	Easement Cost	Project Costs	Total Costs
Hansen	Murray	29	Cottonwood River	100.00*	40.00	40.00	$456,200.00	$135,000.00	$591,200.00
Bryce	Pope	26	Chippewa River	61.50*	6.00	6.00	$157,271.64	$40,000.00	$197,271.64
Schmidt	Traverse	55	Mustinka River	60.00*	10.00	10.00	$173,785.61	$42,000.00	$215,785.61
				Totals	56.00	56.00	$787,257.25	$217,000.00	$1,004,257.25
					Total Ave $/cred	$8,966.58			

* All three sites will likely have paid acres included in the easement that will not generate credit.

Total Funding Recommendation

Development Agreements	$2,233,327.50
Easement Agreements	$1,004,257.25
Total	$3,237,584.75

Accum Dollars
$859,375.00
$1,301,625.00
$1,507,875.00
$1,907,527.50
$1,992,527.50
$2,233,327.50

Accum Dollars
$591,200.00
$788,471.64
$1,004,257.25

Resolution # _____

LOCAL GOVERNMENT ROADS WETLAND REPLACEMENT PROJECT APPROVAL

WHEREAS, BWSR is directed pursuant Minn. Stat. 103G.222, Subd. 1 (1) to replace wetlands drained or filled as a result of the repair, maintenance, or rehabilitation of existing public roads; and

WHEREAS, BWSR is authorized pursuant to 2005 Minn. Laws Chap. 20, Art. 1, Sec. 9 and 2006 Minn. Laws Chap. 258, Sec. 9 to enter into agreements with political subdivisions and fee owners to acquire land and restore wetlands to be used to replace wetlands lost as a result of the repair, maintenance or rehabilitation of existing public roads; and

WHEREAS, BWSR issued two solicitations, in June and July, requesting interested landowners to apply to BWSR for wetland restorations for the purposes of the Local Government Roads Wetland Replacement Program; and

WHEREAS, BWSR received 23 unique proposals, requesting $18,563,419.00 for 1,697 credits for the development agreement option and have identified three proposals, requesting $1,004,257.25 for 112 credits by the respective July 15th and August 9th deadlines; and

WHEREAS, the Interagency Wetland Banking Committee reviewed and prioritized the 23 development agreement proposals and the BWSR wetland banking staff identified three viable easement agreement proposals. This prioritization for development agreements and selection of easement agreements was further refined by BWSR Senior Management staff; and

WHEREAS, this process led to staff recommending approval of 6 development agreement proposals, projected to cost $2,233,327.50 and generate 394 credits and 3 easement agreement proposals projected to cost $1,004,257.25 and generate 112 credits; and

WHEREAS, the Wetland Committee reviewed the proposed development agreement proposals on September 24, 2008 and reviewed the proposed easement agreement proposals on November 20th, 2008 and is recommending Board approval.

NOW THEREFORE BE IT RESOLVED, that the BWSR authorize staff to proceed with steps to accept and finalize the six development agreement proposals and the three easement agreement proposals as recommended by the Wetland Committee.

_____ _____

Randy Kramer, Chair Date

Wetland Banking Fee Policy:
Update Calculated Wetland Credit Values

December 17, 2008

Background.
Minnesota Statutes 103G.2242, Subds. 14 and 15, require the Board of Water and Soil Resources to collect fees for administering the state wetland banking program.

The statute reads:
Subd. 14. Fees Established. Fees must be assessed for managing wetland bank accounts and transactions as follows:
(1) account maintenance annual fee: one percent of the value of credits not to exceed $500;
(2) account establishment, deposit, or transfer: 6.5 percent of the value of credits not to exceed $1,000 per establishment, deposit, or transfer; and
(3) withdrawal fee: 6.5 percent of the value of credits withdrawn.

Subd. 15. Fees Paid To Board. All fees established in subdivision 14 must be paid to the Board of Water and Soil Resources and credited to the general fund to be used for the purpose of administration of the wetland bank.

Description of Wetland Bank Fee Policy and determination and use of the Calculated Values.
(from the existing policy available on the BWSR website)

The fee structure and procedures described in Part III were implemented beginning Jan. 1, 2004, and are subject to annual evaluation and possible change.

III. Fee Structure and Procedures
- **A. Account Establishment and Deposit Fees.**
- **B. Account Maintenance Fee.**
- **C. Account Transfer Fee.**
- **D. Withdrawal Fee.**

The 2009 values will go into effect for wetland bank credit sales made after December 31, 2008. A signed / dated copy of the purchase agreement must accompany applications received after that date if the 2007 values are used to calculate fees. The current policy provisions on determining the value of the credits (shown below) are unchanged from the policy adopted in 2007.

E. Value of Credits. The value of wetland credits for the purpose of assessing fees will be determined as follows:

1. Credit Value ($/acre) = Avg. agricultural land value ($/acre) in the county where the bank is located (from Dept. Revenue) x Wetland Credit Value Coefficient (currently 6.0).

The Wetland Credit Value Coefficient reflects the value added to the land by the wetland credits. It is determined by BWSR based on the average ratio of credit sale price to county land value for credits that BWSR has purchased from existing bank accounts statewide. The current coefficient is based on credit sales from 1999-2007. This coefficient will be updated by BWSR Board Policy to reflect recent wetland credit market values. For the purposes of the formula above, the most

recent agricultural land values available from the Minnesota Department of Revenue will be used. Increases are limited to 75% of the previous value.

2. For determining withdrawal or transfer fees, account holders may present other evidence to BWSR demonstrating the value of credits, such as actual sales values. When using actual sales data to determine credit values, account holders will be required to submit to BWSR actual bills of sale as documentation.

The Calculated Wetland Value spreadsheet (attached) uses the tillable land value data from the UM Land Economics website. The data for a few counties is inaccurate and/or unavailable if based on tillable value. For a number of northern counties, seasonal recreational land value is used. For Hennepin and Ramsey Counties, the average of Green Acres market and taxable values is used. The policy adopted in 2007 limited the increase to 75%.

Wetland Committee Recommendation. The Wetland Committee met on November 20, 2008 and is recommending the Board update the Calculated Wetland Credit Values using the tillable land values, seasonal recreational land values, or green acres values as indicated on the attached spreadsheet. The update continues to use the policies adopted last year of applying the wetland Credit Value Coefficient of 6.0 and limiting the increase to 75% over the 2007 policy.

Proposed 2009 Calculated Wetland Bank Credit Values for Fee Pricing

(values based on Tillable Land Value except as noted)

County	2008 Base Value Per Acre (from Dept. of Revenue)	Calculated Value for 2009 (2008 Est. Value * 6)	% increase	75% over 2008 Value (2008+(2008 * 0.75))	2008 Adjusted Calc. Value	2008 Calculated Value (2006 value *6)	% increase
Aitkin* #	$4,371	$26,226	295%	**$11,631**	$6,647	$21,427	464%
Anoka*	$8,325	$49,950	117%	**$40,215**	$22,980	$22,980	13%
Becker	$1,289	**$7,734**	22%		$6,336	$6,336	30%
Beltrami	$907	**$5,442**	30%		$4,200	$4,200	75%
Benton	$2,900	**$17,400**	49%		$11,664	$11,664	15%
Big Stone	$2,157	**$12,942**	29%		$10,020	$10,020	58%
Blue Earth	$4,037	**$24,222**	23%		$19,626	$19,626	25%
Brown	$3,247	**$19,482**	16%		$16,752	$16,752	16%
Carlton* #	$2,658	$15,948	135%	**$11,876**	$6,787	$19,487	403%
Carver*	$7,370	$44,220	79%	**$43,166**	$24,666	$24,666	55%
Cass	$1,708	**$10,248**	20%		$8,526	$8,526	60%
Chippewa	$2,761	**$16,566**	14%		$14,502	$14,502	46%
Chisago*	$4,825	$28,950	117%	**$23,321**	$13,326	$13,326	20%
Clay	$1,730	**$10,380**	38%		$7,530	$7,530	26%
Clearwater	$830	**$4,980**	44%		$3,456	$3,456	23%
Cook* #	$10,049	$60,294	326%	**$24,754**	$14,145	$39,729	392%
Cottonwood	$3,157	**$18,942**	28%		$14,796	$14,796	26%
Crow Wing	$2,417	**$14,502**	38%		$10,500	$10,500	43%
Dakota*	$7,432	$44,592	126%	**$34,482**	$19,704	$19,704	36%
Dodge	$3,521	**$21,126**	23%		$17,142	$17,142	19%
Douglas	$1,996	**$11,976**	12%		$10,734	$10,734	51%
Faribault	$3,212	**$19,272**	16%		$16,668	$16,668	22%
Fillmore	$2,967	**$17,802**	16%		$15,402	$15,402	33%
Freeborn	$3,214	**$19,284**	14%		$16,866	$16,866	31%
Goodhue	$3,958	**$23,748**	8%		$22,038	$22,038	59%
Grant	$1,818	**$10,908**	19%		$9,138	$9,138	26%
Hennepin*	$42,648	$255,885	422%	**$85,796**	$49,026	$310,134	1007%
Houston	$2,545	**$15,270**	24%		$12,306	$12,306	18%
Hubbard	$1,996	**$11,976**	47%		$8,166	$8,166	14%
Isanti*	$5,290	$31,740	136%	**$23,562**	$13,464	$13,464	46%
Itasca* #	$6,329	$37,974	747%	**$7,849**	$4,485	$23,583	820%
Jackson	$3,209	**$19,254**	26%		$15,336	$15,336	21%

* Indicates that the increase was limited to 75% of last year's value.

Seasonal Recreational Land Values were used.

^ An average of Green Acres Market and Green Acres Taxable values was used.

The proposed final values are shown in BOLD.

Proposed 2009 Calculated Wetland Bank Credit Values for Fee Pricing

(values based on Tillable Land Value except as noted)

County	2008 Base Value Per Acre (from Dept. of Revenue)	Calculated Value for 2009 (2008 Est. Value * 6)	% increase	75% over 2008 Value (2008+(2008 * 0.75))	2008 Adjusted Calc. Value	2008 Calculated Value (2006 value *6)	% increase
Kanabec	$1,564	**$9,384**	14%		$8,250	$8,250	23%
Kandiyohi	$2,773	**$16,638**	8%		$15,342	$15,342	54%
Kittson	$868	**$5,208**	10%		$4,728	$4,728	51%
Koochiching* #	$2,567	$15,402	253%	**$7,634**	$4,362	$4,362	31%
Lac Qui Parle	$2,230	**$13,380**	21%		$11,016	$11,016	49%
Lake* #	$2,822	$16,932	88%	**$15,757**	$9,004	$24,273	372%
Lake of the Woods	$620	**$3,720**	39%		$2,676	$2,676	47%
Le Sueur	$4,351	**$26,106**	41%		$18,498	$18,498	15%
Lincoln	$2,054	**$12,324**	29%		$9,564	$9,564	53%
Lyon	$2,813	**$16,878**	23%		$13,770	$13,770	35%
Mahnomen	$956	**$5,736**	16%		$4,956	$4,956	34%
Marshall	$693	**$4,158**	24%		$3,360	$3,360	7%
Martin	$3,514	**$21,084**	24%		$16,980	$16,980	12%
McLeod	$3,438	**$20,628**	35%		$15,330	$15,330	18%
Meeker	$2,850	**$17,100**	16%		$14,712	$14,712	46%
Mille Lacs	$2,501	**$15,006**	67%		$8,994	$8,994	35%
Morrison	$2,346	**$14,076**	56%		$9,006	$9,006	19%
Mower	$3,342	**$20,052**	18%		$16,944	$16,944	21%
Murray	$2,821	**$16,926**	21%		$14,004	$14,004	32%
Nicollet	$4,089	**$24,534**	27%		$19,290	$19,290	10%
Nobles	$3,109	**$18,654**	25%		$14,904	$14,904	23%
Norman	$1,219	**$7,314**	49%		$4,920	$4,920	6%
Olmsted	$3,775	**$22,650**	23%		$18,360	$18,360	44%
Otter Tail	$1,569	**$9,414**	40%		$6,714	$6,714	29%
Pennington	$654	**$3,924**	33%		$2,952	$2,952	38%
Pine	$1,828	**$10,968**	25%		$8,802	$8,802	17%
Pipestone	$2,546	**$15,276**	26%		$12,150	$12,150	24%
Polk	$1,159	**$6,954**	33%		$5,214	$5,214	7%
Pope	$2,115	**$12,690**	11%		$11,388	$11,388	65%
Ramsey*	$74,767	$448,599	815%	**$85,796**	$49,026	$520,590	1758%
Red Lake	$750	**$4,500**	33%		$3,372	$3,372	40%
Redwood	$3,081	**$18,486**	24%		$14,922	$14,922	24%

* Indicates that the increase was limited to 75% of last year's value.

Seasonal Recreational Land Values were used.

^ An average of Green Acres Market and Green Acres Taxable values was used.

The proposed final values are shown in BOLD.

Proposed 2009 Calculated Wetland Bank Credit Values for Fee Pricing

(values based on Tillable Land Value except as noted)

County	2008 Base Value Per Acre (from Dept. of Revenue)	Calculated Value for 2009 (2008 Est. Value * 6)	% increase	75% over 2008 Value (2008+(2008 * 0.75))	2008 Adjusted Calc. Value	2008 Calculated Value (2006 value *6)	% increase
Renville	$3,318	**$19,908**	19%		$16,668	$16,668	30%
Rice	$6,103	**$36,618**	20%		$30,570	$30,570	68%
Rock	$3,805	**$22,830**	38%		$16,518	$16,518	26%
Roseau	$494	**$2,964**	21%		$2,442	$2,442	18%
Scott*	$10,435	$62,610	139%	**$45,833**	$26,190	$26,190	5%
Sherburne*	$5,884	$35,304	166%	**$23,205**	$13,260	$13,260	60%
Sibley	$3,456	**$20,736**	15%		$18,060	$18,060	30%
St. Louis* #	$22,389	$134,334	2708%	**$8,373**	$4,785	$18,464	575%
Stearns*	$2,924	$17,544	90%	**$16,160**	$9,234	$9,234	5%
Steele	$3,570	**$21,420**	21%		$17,634	$17,634	26%
Stevens	$2,412	**$14,472**	24%		$11,688	$11,688	49%
Swift	$2,452	**$14,712**	20%		$12,258	$12,258	51%
Todd	$1,491	**$8,946**	36%		$6,570	$6,570	28%
Traverse	$2,082	**$12,492**	10%		$11,322	$11,322	40%
Wabasha	$3,112	**$18,672**	25%		$14,880	$14,880	30%
Wadena	$1,259	**$7,554**	14%		$6,612	$6,612	35%
Waseca	$3,515	**$21,090**	25%		$16,830	$16,830	9%
Washington*	$15,009	$90,054	195%	**$53,414**	$30,522	$30,522	9%
Watonwan	$3,246	**$19,476**	15%		$16,950	$16,950	35%
Wilkin	$2,015	**$12,090**	29%		$9,342	$9,342	29%
Winona	$3,539	**$21,234**	55%		$13,656	$13,656	11%
Wright*	$8,118	$48,708	187%	**$29,673**	$16,956	$16,956	37%
Yellow Medicine	$2,423	**$14,538**	16%		$12,564	$12,564	41%
green acres market value / taxable value (lower)							

* Indicates that the increase was limited to 75% of last year's value.

Seasonal Recreational Land Values were used.

^ An average of Green Acres Market and Green Acres Taxable values was used.

The proposed final values are shown in BOLD.

Resolution # _____

Wetland Banking Fee Policy:
Update Calculated Wetland Credit Values

WHEREAS, BWSR is directed pursuant to Minn. Stat. 103G.2242, Subd. 14 and 15 to collect fees for administering the state wetland bank program;

WHEREAS, BWSR Board action 03-93 established the Wetland Banking Fee Policy, which included use of the average agricultural land values (as provided by the Minn. Dept. of Revenue) as the basis for determining credit value for purposes of assessing the fee;

WHEREAS, BWSR Board action 07-88 updated the previous policy by taking the 2006 tillable land value multiplied by the wetland credit value coefficient of 6.0, with a maximum increase of 75% over the values established in Board action 03-93; and

WHEREAS, the Wetland Committee reviewed the calculated values on November 20, 2008, and is recommending updating these values for purposes of calculating wetland banking fees.

NOW THEREFORE BE IT RESOLVED, that the BWSR update the wetland credit values by taking the 2008 tillable land values, seasonal recreational land values, or green acres values (as shown on the attached spreadsheet), multiplied by the wetland credit value coefficient of 6.0, with a maximum increase of 75% over the values established in Board action 07-88.

_____ _____

Randy Kramer, Chair Date

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Wetland Conservation Act Permanent Rulemaking
Summary of Significant Revisions

December 17, 2008

The Wetland Conservation Act (WCA) permanent rulemaking process included extensive staff involvement and public input, and resulted in substantial revisions to the rule. The resolution of each issue was based on detailed discussions, consideration of implications, and a strong rationale. This summary is intended to provide a brief overview of significant changes to the rule.

Rule organization and order.
Stakeholders and staff identified reorganization of the rule as the single most important and easiest way to simplify and clarify the rule. In the draft rule, related requirements that were previously located in different areas of the rule are consolidated under common headings. In addition, the draft rule follows a more intuitive order – the order in which an applicant or local government unit (LGU) would go through when starting or reviewing a project. The draft rule starts with Purpose and Scope, followed by LGU Duties and Procedures, and continuing through Appeals and Enforcement.

Scope, No-Loss, and Exemption Framework.
The current WCA rule does not clearly differentiate between types of activities that are identified in the scope of the rule, as a no-loss, or as an exemption. Including activities that do not result in permanent wetland impacts under an exemption and some that do under scope or no-loss is confusing, results in inaccurate data on wetland losses, and complicates policy issues such as how the rule treats road ditches through upland. The draft rule clarifies the distinctions between activities in scope versus an exemption versus a no-loss as follows:

- Scope contains those landscape features that may be wetland but are not regulated by WCA (i.e. road ditches in upland) and activities in certain wetland types that are not regulated because statute does not allow it. In essence, scope contains wetlands and activities that are "non-jurisdictional" to WCA.
- No-Losses are activities in wetlands that do not typically impact wetlands or result in a permanent loss of wetland functions, but could if conducted differently. For example, removal of debris from a wetland typically does not result in a loss, but if that removal results in fill or changes the wetland cross section, a loss could result.
- Exemptions are impacts to wetlands where replacement is not required.

The above solutions provide a consistent framework for dealing with wetlands and activities in wetlands that are not regulated or do not require replacement. The end result does not effectively change how WCA is applied or the implementation of statutory intent. It does, however, simplify and clarify the rule while improving the accuracy of data reported on jurisdictional wetlands lost due to exemptions, which is consistent with the direction from the legislature to obtain improved data on exemptions.

LGU reporting.
Currently, only those LGUs who receive funding through the Natural Resources Block Grant are required to annually report their WCA implementation activities to the Board. While this covers most WCA activities, there are gaps; specifically some cities, townships and watershed districts. The draft rule requires all LGUs to report annually to the Board. Required reporting will provide more accurate and complete data, and is consistent with the direction from the legislature to obtain improved data on exemptions.

Landowner reporting of exemptions.
The 2007 Minnesota Legislature directed the Board to develop rules that (1) address the application and implementation of WCA exemptions, and that (2) provide for estimates and reporting of exempt wetland impacts, specifically the drainage, utilities/public works, and de minimis exemptions. This directive is addressed through several provisions in the draft rule and non-rule initiatives. Landowner reporting of exemptions was an additional option discussed during the rulemaking process, with a significant amount disagreement among stakeholders. At the November 20, 2008 meeting of the Board's Wetland Committee, the Committee added to the draft rule the requirement for landowners to report information on the use of exemptions to the Board. The details of the requirement, including development of the reporting mechanism, its implementation, and potential enforcement will be developed during the implementation of the revised rule.

Replacement credit system.
A major component of the Wetland Mitigation Memorandum of Understanding (MOU) between the U.S. Army Corps of Engineers (Corps) and the Board is the use of a single credit system for allocating replacement credit. WCA currently uses both "New Wetland Credit" (NWC) and "Public Value Credit" (PVC). The draft rule eliminates the two-credit system in favor of a single credit system where all replacement actions are allocated one type of credit.

Conversion of existing credit.
Changing to a single replacement credit system requires addressing existing PVC that has been deposited in the state wetland bank or included in an approved replacement plan prior to the effective date of the revised rule. The existing PVC consists mainly of upland buffer, with a small amount of PVC derived from wetland related activities. WCA currently allows 100% PVC for upland buffer and varying amounts for eligible wetland related activities. The sale price of banked PVC versus NWC provides an indication of the use and value of PVC. An analysis of sale prices indicates that PVC has roughly 95% of the value of NWC. The draft rule requires conversion of existing PVC on the effective date of the rule according to the following:

- Up to 100% replacement credit for existing PVC derived from activities within wetlands.
- Up to 90% replacement credit for existing PVC derived from upland buffers.

Replacement.
A significant amount of stakeholder comments requested simplification of the replacement requirements, many of which are also contained in the MOU. Many of the comments requested a greater focus on requirements that are implementable and will result in improved wetland quality and function. The draft rule simplifies the table of replacement ratios and creates an incentive based system with a preference for replacement through banking.

- In-kind. The draft rule does not use in-kind to determine replacement ratios when replacement is accomplished via banking. In relation to banking, the objectives of the in-kind requirement will be achieved through the up-front prioritization of replacement sites and a greater incentive for wetland restoration over creation. For project-specific replacement, replacement must be in-kind in order to reduce the replacement ratio. However, the draft rule allows hydrology, landscape position, and watershed considerations to play a greater role in determining in-kind, while the current WCA rule only uses plant communities in this determination.
- In-place. The draft rule places a greater emphasis on replacement within the watershed or bank service area. For replacement via banking, the replacement ratio can only be reduced when the replacement is in the same bank service area. For project-specific replacement, the replacement ratio can only be reduced when the replacement is within the same watershed (in addition to in-kind).
- In-advance. For purposes of reducing the replacement ratio, the draft rule defines in-advance as banking. Therefore, the only way to achieve a reduction in the replacement ratio for being in-advance is to provide replacement via banking.

Watershed approach.
The new Federal Mitigation Rule was released in 2008 during the rulemaking process. It includes the requirement for a "watershed approach" to mitigation. The draft rule contains several provisions to provide for a greater focus on replacement sites that are ecologically suitable, sustainable, and will provide the greatest public value based on the needs of the watershed. This will allow for greater consistency with the Federal Rule and should result in improved wetland replacement.

Financial assurance.
One of the rulemaking goals was to improve accountability and outcomes. Improving the quality of replacement wetlands has also been an ongoing objective of WCA implementation. Many of our LGUs and other stakeholders identified financial assurance as an important element of achieving these goals. Currently, WCA requires financial assurance in certain situations (i.e. when created wetlands are proposed for replacement credit). The draft rule requires financial assurance for all project-specific replacement that is not in-advance, while allowing the LGU the ability to waive the requirement if it determines it is not necessary to ensure successful replacement.

Actions eligible for credit.
Various changes were made to the Actions Eligible for Credit provisions. Actions related to upland buffers, wetland creations, and preservation are the most notable proposed changes.

- Upland buffer areas. With the switch to a single credit system, the upland buffer areas action eligible for credit changed significantly. The MOU calls for buffer credit to be typically allocated at 25% (i.e. 1 acre of land results in 0.25 acres of credit), while nearly all of our stakeholders have indicated that the amount of credit needs to be significantly higher than 25%. The draft rule requires buffers around all replacement wetlands with a minimum width of 25 feet and an average width of 50 feet, with exceptions and the ability of the LGU to vary the requirement. A base credit amount is allocated at 25% with the ability to increase the credit amount up to 50% when the buffer provides significant functional benefits. The draft language intends to balance staff and stakeholder input with consistency with the Corps as outlined in the MOU. It also intends to balance the replacement of wetland acres (quantity) with the need for improved function and sustainability (quality and biological diversity) of replacement wetlands.

- Wetland creations. Water quality treatment areas and wetlands established via mineral extraction site reclamation are separate subparts in the current WCA rule. The draft rule consolidates them in the wetland creations action. Additionally, the amount of credit allowed is reduced to 75%. This credit reduction addresses concerns over the quality of created wetlands, creates an incentive for restorations, provides consistency with a watershed approach to replacement, and allows for simplification and flexibility in other parts of the rule, particularly in-kind.

- Preservation. Currently, WCA does not include a provision to allow for credit for preservation as a stand-alone replacement action. The MOU and staff support the use of preservation for replacement credit. In 2008, legislation was passed specifically allowing for the use of preservation as replacement credit, but limited it to wetlands owned by the state or a local unit of government in greater than 80 percent areas. The draft rule allows for up to 12.5% credit for preservation of high valued wetlands under threat of degradation or loss in instances of public ownership as required by statute.

Replacement wetland monitoring.
Providing for greater consistency in the implementation of monitoring requirements by both applicants and LGUs was identified as necessary to improve the quality of replacement wetlands. Current WCA requires monitoring and certification of construction, but contains very little detail. The draft rule builds on the existing requirement and clearly lays out the process, timelines, and responsibilities for replacement wetland construction certification and monitoring. The draft rule also utilizes the technical evaluation panel to a greater extent in making the technical determination of replacement wetland success.

Comprehensive wetland protection and management plans.
Three objectives relating to wetland planning were identified: clarification of the process, a greater focus on selection of replacement types and locations under a watershed approach, and plans that allow for recognition by the Corps. The draft rule provides greater detail on the plan development and approval process, including increased consistency with water planning processes and the involvement of the Corps. The draft rule also requires the inventory and prioritization of replacement sites, an increased focus on watersheds, and a provision for periodic assessment of plan effectiveness.

Enforcement.
The draft rule allows the Soil and Water Conservation District (SWCD) to request assistance from the LGU in inspecting violations and preparing a restoration plan. The draft rule also clearly differentiates between issues that are purely technical vs. those that include an enforcement component. The Technical Evaluation Panel (TEP) is utilized for making technical determinations while requirements were added for the SWCD and TEP to involve the enforcement authority early and throughout the process of developing the restoration plans and dealing with potential violations.

Appeals.
When an appeal of an LGU decision is made to the Board, the draft rule now only requires one copy of the written record be forwarded to the Board. The Board will be responsible for making copies of the record and forwarding to the parties of the appeal. This may result in an increase in Board appeal costs, but will provide consistency and a reduction in LGU workload.

WETLAND CONSERVATION ACT
Permanent Rulemaking Chronology

May 9, 2007	Statutory amendments enacted, including requirement to adopt temporary rules within 90 days.
August 6, 2007	Temporary rules published in the State Register, become effective. Request for comments on planned amendments to rules governing wetland conservation published in the State Register.
September 20, 2007	Comment period on planned amendments to rules governing wetland conservation ends.
October-December 2007	Meetings with representatives of environment, agriculture, business, and local government organizations to discuss WCA rule process and issues.
October 25, 2007	Staff rule team formed and holds first meeting.
January 2008	Local government listening sessions in Cloquet, Brainerd, Thief River Falls, Fergus Falls, Marshall, New Ulm, and Rochester.
January 7, 2008	First meeting of Technical Advisory Committee, consisting of local government staff and consultants. This Committee met 11 times through October 6, 2008.
January 31, 2008	First meeting of WCA Permanent Rule Advisory Committee, consisting of numerous stakeholder organizations and state and federal agencies. This Committee met 11 times through October 23, 2008.
March 25, 2008	Wetland Committee meets to review rule issues and provide direction to staff. The Committee met 6 times during the rule development process with another meeting scheduled for December 16, 2008.
April 12, 2008	Presentation on WCA Rulemaking at Wetlands Summit.
August-September 2008	Numerous meetings with the U.S. Army Corps of Engineers, St-Paul District to discuss WCA rule, District Guidance, and the Wetland Mitigation Memorandum of Understanding.

October-November 2008	Meetings with Wetlands for Minnesota, Builders Association of the Twin Cities, Builders Association of Minnesota, Sierra Club, Minnesota Center for Environmental Advocacy, representatives of agricultural organizations, and a presentation at the Water Resources Conference in St. Paul.
November 20, 2008	Wetland Committee meets and recommends the Board adopt the draft rule and authorize formal rulemaking.
December 17, 2008	Board meets to consider the draft WCA rule amendments and the Wetland Committee's recommendation.

December 2008	* Rule submitted to the Revisor of Statutes and Governor's Office. * Submit request to Office of Administrative Hearings to schedule a rule hearing(s).
January 2009	* Publish notice in State Register of (1) intent to adopt Rule amendments and (2) request for comments. * Legislature and interested persons are notified of the rule amendments.
February-March 2009	* Public Hearings.
March 2009	* Comment period closes, following public hearings. * Wetland Committee meets to consider rule issues.
April 2009	* Administrative Law Judge (ALJ) completes report on the proposed adoption of the rules.
May 2009	* BWSR reviews ALJ report, consider and/or make changes based on comments and/or ALJ report. * Wetland Committee considers rule issues, including adoption of the final Rule.
June 2009	* Submit rules to chief ALJ. * Board adopts final Rule.
July 2009	* Office of Administrative Hearings files approved rules with Secretary of State. * Revisor of Statutes prepares notice of adoption. * BWSR submits notice of adoption of rule amendments to the State Register.
August 2009	* Amended rule published in the State Register.

Resolution # _____

Wetland Conservation Act:
Adopt Draft Rule Amendments and Authorize Formal Rulemaking

WHEREAS, the Board of Water and Soil Resources is required by Laws of Minnesota 2007, Chapter 57, Section 166 to adopt rules amending the Wetland Conservation Act Rules (Minn. Rule Chapter 8420);

WHEREAS, the Board adopted exempt rules on August 6, 2007, which expire two years from this date, unless superseded by permanent rules prior to this date;

WHEREAS, a notice of request for comments on planned amendments to the rules governing wetland conservation (WCA-Minn. Rule Chapter 8420) was published in the State Register on August 5, 2007;

WHEREAS, a BWSR Staff WCA Rule Team was formed that has met 18 times from October 2007 through October 2008;

WHEREAS, significant stakeholder input was achieved through:
(i) series of stakeholder meetings held in October-December 2007;
(ii) a series of local government listening sessions held in January 2008;
(iii) a Technical Advisory Committee and a Permanent Rule Advisory Committee that each met 11 times from January 2008 through October 2008; and
(iv) numerous additional meetings held with individual interest groups;

WHEREAS, the proposed rule includes changes necessary to:
(i) incorporate the rule changes in the exempt rule;
(ii) incorporate statutory changes made in 2007 and 2008;
(iii) implement the BWSR-U.S. Army Corps of Engineers Wetland Mitigation Memorandum of Understanding adopted by the Board on May 23, 2007; and
(iv) incorporate suggestions identified by BWSR staff and stakeholders that will improve WCA effectiveness and efficiency;

WHEREAS, the Board's Wetland Committee met on July 23, September 24, October 21, and November 20 to review the draft rule, provide direction to staff, and develop a recommendation regarding adoption of the rule for the Board consideration; and

WHEREAS, the Wetland Committee on November 20 is recommending the Board adopt the draft rule and authorize staff to proceed with formal rulemaking.

NOW THEREFORE BE IT RESOLVED, the Board of Water and Soil Resources hereby adopts the draft Wetland Conservation Act permanent rule (Minn. Rule Chapter 8420) and authorizes staff to:
(i) complete the Statement of Need and Reasonableness associated with the rule;
(ii) seek approval from the Governor's Office to proceed with adopting the rule;

(iii) submit the rule to the Revisor of Statutes for review and approval of the form of the rule; and

(iv) complete the processes necessary to adopt the rule by August 5, 2009.

_____ _____

Randy Kramer, Chair Date

12-5-08 Draft

Wetland Conservation Act

Minnesota Rule Chapter 8420

Summary of changes from the 11-17-08 version of the draft rule.

The 12-5-08 draft rule includes the following changes since the 11-17-08 draft:

1. Changes resulting from the 12/20/08 BWSR Wetland Committee meeting.
2. Numerous edits relating to organization, grammar, punctuation, and wording clarification.
3. Minor wording changes to better clarify intent.
4. Specification of current requirements.

The following is a brief listing of substantive changes, with page references corresponding to the strikeout version of the 12-5-08 draft rule:

- **Wetland Boundary and Replacement Plan Applications** (LGU Application and Decision Procedures, subpart 2, page 13; and Wetland Boundary or Type Applications, page 16): Language was added to the 12-5-08 draft rule to clarify that a wetland boundary or type application: 1) may be submitted independently from a no-loss, exemption, replacement plan, or banking plan application; 2) after approval, may be incorporated into a subsequent no-loss, exemption, replacement plan, or banking plan application; and 3) when approved and incorporated into a subsequent application, may not serve as the basis for determining an application incomplete.
- **Landowner Reporting of Exemptions** (Exemption Applications, item C, page 17): The 11-17-08 draft rule encourages landowners to report information on exempt activities to BWSR. The 12-5-08 draft rule requires landowners to report exempt activities to BWSR.
- **Replacement Plan Applications** (Replacement Plan Applications subpart 3, page 19): A sub-item was added for replacement plan applications to include a description of how the replacement wetland meets the ecological suitability and sustainability requirements of the Replacement Standards part.
- **Replacement via Banking** (Replacement Plan Applications subpart 3 item C and subpart 4 item C, page 20): Provisions were added to identify the information required to be included with a replacement plan that utilizes bank credits for replacement, and to be clear that an approval of a replacement plan utilizing bank credits for replacement is not valid until the credits have been withdrawn.
- **Determining Replacement Ratios** (Replacement Standards subpart 3, page 36): Two tables were added to summarize replacement ratios.
- **Upland Buffers** (Replacement Standards subpart 6, pages 37 and 38): For replacement wetlands less than 2 acres in size, the required buffer width was changed from a minimum of 25 feet to an average of 25 feet. Language was also added to allow for LGU variance of the buffer requirements when it is ecologically beneficial based on a review by the TEP.
- **Wetland Banking Applications** (Establishing a Wetland Bank Site subparts 1 and 3, page 56): Language was added to clarify the wetland bank application requirements.
- **Duration of Monitoring** (Replacement Wetland Monitoring subpart 3, page 61): Language was edited to clarify intent. The monitoring period is 5 growing seasons, but applicants may request early TEP review and certification of replacement no sooner than after the 3rd full growing season.

12-5-08 DRAFT

WETLAND CONSERVATION ACT

MINNESOTA RULE CHAPTER 8420

PURPOSE AND SCOPE

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8420.XXXX, SCOPE X
8420.XXXX, PRE-SETTLEMENT WETLAND ACRES AND AREAS X

LOCAL GOVERNMENT UNIT DUTIES AND PROCEDURES

8420.XXXX, DETERMINING LOCAL GOVERNMENT UNIT; DUTIES X
8420.XXXX, OTHER LOCAL GOVERNMENT UNIT WETLAND RULES AND ORDINANCES X
8420.XXXX, TECHNICAL EVALUATION PANEL PROCEDURES X
8420.XXXX, LOCAL GOVERNMENT UNIT APPLICATION AND DECISION PROCEDURES X
8420.XXXX, PREVIOUSLY APPROVED APPLICATIONS X

APPLICATION PROCEDURES

8420.XXXX, GENERAL APPLICATION REQUIREMENTS X
8420.XXXX, WETLAND BOUNDARY OR TYPE APPLICATIONS X
8420.XXXX, NO-LOSS APPLICATIONS X
8420.XXXX, EXEMPTION APPLICATIONS X
8420.XXXX, SEQUENCING APPLICATIONS X
8420.XXXX, REPLACEMENT PLAN APPLICATIONS X
8420.XXXX, CONTRACTOR'S NOTIFICATION RESPONSIBILITY X

WETLAND BOUNDARY, NO-LOSS, AND EXEMPTION STANDARDS

8420.XXXX, WETLAND BOUNDARY OR TYPE X
8420.XXXX, NO-LOSS AND EXEMPTION CONDITIONS X
8420.XXXX, NO-LOSS CRITERIA X
8420.XXXX, EXEMPTION STANDARDS X

WETLAND REPLACEMENT

8420.XXXX, PURPOSE AND REQUIREMENT X
8420.XXXX, SPECIAL CONSIDERATIONS X

8420.XXXX, SEQUENCING X
8420.XXXX, REPLACEMENT STANDARDS X
8420.XXXX, ACTIONS ELIGIBLE FOR CREDIT X
8420.XXXX, REPLACEMENT WETLAND CONSTRUCTION STANDARDS X
8420.XXXX, REPLACEMENT FOR PUBLIC TRANSPORTATION PROJECTS X

WETLAND BANKING

8420.XXXX, PURPOSE OF WETLAND BANKING X
8420.XXXX, ESTABLISHING A WETLAND BANK SITE X
8420.XXXX, CERTIFICATION AND DEPOSIT OF CREDITS X
8420.XXXX, MONITORING AND CORRECTIVE ACTIONS X
8420.XXXX, WITHDRAWALS AND TRANSFERS X
8420.XXXX, BANK ACCOUNT ADMINISTRATION X

INSPECTION AND MONITORING OF REPLACEMENT WETLANDS

8420.XXXX, REPLACEMENT WETLAND CONSTRUCTION CERTIFICATION X
8420.XXXX, REPLACEMENT WETLAND MONITORING X

WETLAND PLANNING

8420.XXXX, COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLANS X
8420.XXXX, HIGH PRIORITY REGIONS AND AREAS X
8420.XXXX, WETLAND PRESERVATION AREAS X

APPEALS, COMPENSATION, AND ENFORCEMENT

8420.XXXX, APPEALS X
8420.XXXX, COMPENSATION CLAIMS AGAINST LOCAL GOVERNMENT UNITS X
8420.XXXX, COMPENSATION TO LANDOWNERS X
8420.XXXX, ENFORCEMENT PROCEDURES X

ACTIVITIES UNDER DEPARTMENT OF NATURAL RESOURCES AUTHORITY

8420.XXXX, MINING X
8420.XXXX, CALCAREOUS FENS X

DEFINITIONS AND REFERENCES

8420.XXXX, DEFINITIONS X
8420.XXXX, INCORPORATION BY REFERENCE X

PURPOSE AND SCOPE

8420.0100 PURPOSE.

This chapter implements the regulatory provisions of the Wetland Conservation Act of 1991, Laws 1991, chapter 354, as amended by Laws 1993, chapter 175; Laws 1994, chapter 627; Laws 1996, chapter 462; Laws 2000, chapter 382; Laws 2001, chapter 146; Laws 2002, chapter 220; Laws 2003, chapter 128; Laws 2004, chapters 221 and 255; Laws 2007, chapters 57 and 131; and Laws 2008, chapter 368. This chapter shall be interpreted to implement the purpose of the act, which is to:

A. achieve no net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands;

B. increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands;

C. avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and biological diversity of wetlands; and

D. replace wetland value where avoidance of activity is not feasible and prudent.

The regulatory provisions of the Wetland Conservation Act advance the purpose in this part by requiring persons proposing to impact a wetland to first, attempt to avoid the impact; second, attempt to minimize the impact; and finally, replace any impacted area with another wetland of at least equal function and value. As specified in greater detail in part 8420.XXXX, certain projects are exempt from the requirement for a replacement plan under the Wetland Conservation Act.

The Wetland Conservation Act is administered by local government units with oversight provided by the Board of Water and Soil Resources. Enforcement of the act is provided by Department of Natural Resources conservation officers and other peace officers. The Wetland Conservation Act became effective on January 1, 1992, and this chapter and portions of Minnesota Statutes, chapters 103A, 103B, 103E, 103F, and 103G, govern its implementation. The public is encouraged to contact their local government unit or soil and water conservation district for general information on wetlands and the interpretation of this chapter.

8420.XXXX SCOPE.

Wetlands must not be impacted unless replaced by restoring or creating wetland areas of at least equal public value. This chapter regulates the draining or filling of wetlands, wholly or partially, and excavation in the permanently and semipermanently flooded areas of type 3, 4, or 5 wetlands, and in all wetland types if the excavation results in filling, draining, or conversion to nonwetland.

This chapter does not prevent the use of the bed of wetlands for pasture or cropland during dry periods if dikes, ditches, tile lines, or buildings are not constructed or improved and the agricultural use does not impact the wetlands. This chapter does not regulate normal farming practices in a wetland. "Normal farming practices" means farming, silvicultural, grazing, and ranching activities such as plowing, seeding, cultivating, and harvesting for the production of feed, food, and fiber products, but does not include activities that impact wetlands. This chapter does not prevent control of noxious weeds if the control does not impact the wetland.

This chapter does not regulate impacts to incidental wetlands. Incidental wetlands are wetland areas that the landowner can demonstrate, to the satisfaction of the local government unit, were created in non-wetland areas solely by actions, the purpose of which was not to create the wetland. Incidental wetlands include drainage ditches, impoundments, or excavations constructed in non-wetlands solely for the purpose of effluent treatment, containment of waste material, storm water retention, drainage, soil and water conservation practices, and water quality improvements, and not as part of a wetland replacement process that may, over time, take on wetland characteristics.

This chapter does not apply to the public waters and public waters wetlands as defined in Minnesota Statutes, section 103G.005, subdivisions 15 and 15a, which have been inventoried by the commissioner of natural resources according to Minnesota Statutes, section 103G.201, except that:

A. for projects affecting public waters wetlands, and for public transportation projects affecting the wetland areas of public waters, when the commissioner waives the requirement for a public waters work permit consistent with chapter 6115, the local government unit must make replacement, banking, wetland boundary, wetland type, no-loss, public road project notification, or exemption decisions; or

B. for projects affecting both public waters and wetlands, the local government unit may, by written agreement with the commissioner, waive the requirement for a replacement plan, no-loss, or exemption

decision if a public waters work permit is required and the commissioner includes the provisions of this chapter in the public waters work permit.

This chapter is in addition to other regulations including those of the United States Army Corps of Engineers, United States Department of Agriculture, Minnesota state agencies, watershed districts, and local governments.

This chapter does not apply to peat mining as defined in Minnesota Statutes, section 93.461, which is subject to the permit to mine and reclamation requirements of Minnesota Statutes, sections 93.44 to 93.51, and the rules of the commissioner adopted under those sections.

This chapter does not require state agencies to obtain local government unit approvals. However, the state agencies must follow the procedures and standards prescribed by this chapter.

In addition to the provisions of this chapter, governmental decisions on impacting wetlands are subject to Minnesota Statutes, chapters 116B and 116D, which provide that an action which is likely to have material adverse effects on natural resources must not be allowed if there is a feasible and prudent alternative consistent with the requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its natural resources. Economic considerations alone do not justify adversely effective actions.

8420.XXXX PRESETTLEMENT WETLAND ACRES AND AREAS.

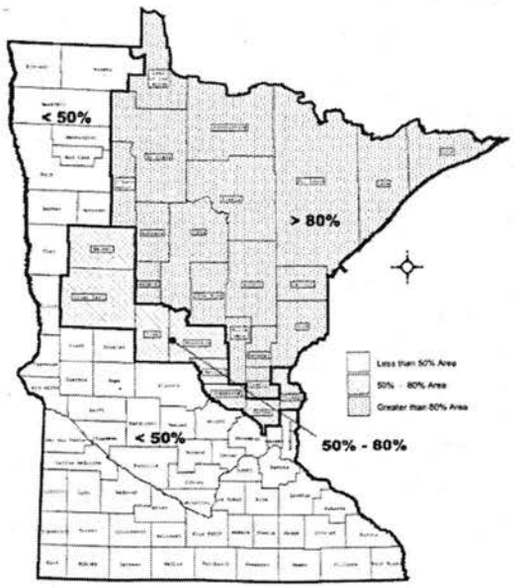
Subp. 1. **County classification.** For purposes of parts 8420.XXXX to 8420.XXXX:

A. the following counties are greater than 80 percent areas: Aitkin; Beltrami; Carlton; Cass; Clearwater; Cook; Crow Wing; Hubbard; Isanti; Itasca; Kanabec; Koochiching; Lake; Lake of the Woods; Mille Lacs; Pine; St. Louis; and Wadena.;

B. the following counties are 50 to 80 percent areas: Anoka; Becker; Benton; Chisago; Morrison; Otter Tail; Sherburne; and Todd; and

C. the following counties are less than 50 percent areas: Big Stone; Blue Earth; Brown; Carver; Chippewa; Clay; Cottonwood; Dakota; Dodge; Douglas; Faribault; Fillmore; Freeborn; Goodhue; Grant; Hennepin; Houston; Jackson; Kandiyohi; Kittson; Lac Qui Parle; Le Sueur; Lincoln; Lyon; Mahnomen; Marshall; Martin; McLeod; Meeker; Mower; Murray; Nicollet; Nobles; Norman; Olmsted; Pennington; Pipestone; Polk; Pope; Ramsey; Red Lake; Redwood; Renville; Rice; Rock; Roseau; Scott; Sibley; Stearns; Steele; Stevens; Swift; Traverse; Wabasha; Waseca; Washington; Watonwan; Wilkin; Winona; Wright; and Yellow Medicine.

Minnesota Wetland Conservation Act
Pre - Statehood Wetland Areas



Subp. 2. **County or watershed reclassification.**

A. A local government unit may request the board to reclassify a county or major watershed wholly or partly within its jurisdiction on the basis of its percentage of presettlement wetlands remaining. After receipt of satisfactory documentation from the local government, the board must change the classification of a county or major watershed. If requested by the local government unit, the board must assist in developing the documentation. Within 30 days of its action to approve a change of wetland classifications, the board must publish a notice of the change in the Environmental Quality Board Monitor.

B. One hundred citizens who reside within the jurisdiction of the local government unit may request the local government unit to reclassify a county or major watershed on the basis of its percentage of presettlement wetlands remaining. In support of their petition, the citizens must provide satisfactory documentation to the local government unit. The local government unit must consider the petition and forward the request to the board or provide a reason why the petition is denied.

LOCAL GOVERNMENT UNIT DUTIES AND PROCEDURES

8420.XXXX DETERMINING LOCAL GOVERNMENT UNIT; DUTIES.

Subpart 1. **Determining local government unit.** The local government unit responsible for making decisions must be determined according to items A to G.

A. Outside the seven-county metropolitan area, the local government unit is the county or city in which the activity is located, or its delegate.

B. In the seven-county metropolitan area, the local government unit is the city, town, or water management organization regulating surface-water-related matters in the area in which the activity is located, or its delegate. The watershed management plan adopted under Minnesota Statutes, section 103B.231, and related board rules will normally indicate the appropriate local government unit. Lacking an indication, the local government unit must be the city, town, or its delegate.

C. For activities on state land, the local government unit is the state agency, or the agency's designee, with administrative responsibility for that land. However, state agencies must coordinate with local government units that would otherwise have jurisdiction according to items A and B when conducting activities in wetlands.

D. Notwithstanding items A to I, the Department of Natural Resources is the approving authority for activities associated with projects requiring permits to mine under Minnesota Statutes, section 93.481, and for projects affecting calcareous fens.

E. Delegation of implementation of this chapter and the act from a county, city, or town, as applicable according to item A or B, to a soil and water conservation district or other governmental entity must occur by the passage of resolutions by both parties. The delegation becomes effective when resolutions have been passed by both parties, or on the date specified in the resolutions, whichever is later. Both parties must provide notice to the board, the commissioner, and the soil and water conservation district within 15 business days of adoption of the resolution. The notice must include a copy of the resolution and a description of the applicable geographic area.

F. If the activity is located in two jurisdictions, the local government unit is the one exercising zoning authority over the project or if both have zoning authority, the one in which most of the wetland impacts will occur. If no zoning permits are required, the local government unit is the one in which most of the wetland impacts will occur. If an activity will affect wetlands in more than one local government unit, the board may coordinate the project review to ensure consistency and consensus among the local government units involved. Local government units may maintain separate jurisdiction if mutually agreed upon.

G. For a replacement site located in more than one jurisdiction, the local government unit is the one in which most of the replacement wetland area occurs.

H. For replacement plans where the project-specific replacement will occur in a different local government unit than the impact, approval of all local government units involved or as specified in items A to G will constitute final approval of the replacement plan and is required before the project may proceed. The local government unit with jurisdiction for the impact site must approve all components of the replacement plan, following the procedures in parts 8420.XXXX to 8420.XXXX. The local government unit with jurisdiction for the replacement site must limit the review to evaluation of the replacement site as in parts 8420.XXXX to 8420.XXXX and make a decision accordingly.

As part of the approval of the replacement plan, the local government unit with jurisdiction for the replacement site assumes responsibility for ensuring compliance with monitoring provisions according to parts 8420.XXXX to 8420.XXXX. The local government unit with jurisdiction for the replacement site may enter into joint powers agreements with a local government unit with jurisdiction for the impact site, assess fees, or develop other procedures considered necessary to facilitate the process.

I. For instances where the activity or replacement occur in multiple jurisdictions, the local government unit with decision-making authority must coordinate with the other local government units.

J. The board will resolve all questions as to which government entity is the responsible authority, applying the guidelines in items A to H.

Subp. 2. **Local government unit duties.**

A. Local government units are responsible for making decisions on applications made under this chapter. Each local government unit of the state, except tribal lands and state agencies, must send a written acknowledgement, including a copy of the adopting resolution, to the board that it is assuming its responsibilities under this chapter and the act.

B. A local government unit must provide knowledgeable and trained staff with experience in water resource management to manage the program or secure a qualified delegate. Otherwise, the board may declare a moratorium as prescribed in part 8420.XXXX or take other appropriate legal action to assure proper implementation and compliance with this chapter. The board may establish standards and requirements for training, experience, and certification.

C. The local government unit may, through resolution, rule, or ordinance, place decision-making authority with staff according to procedures it establishes. For final decisions made by staff, the local government unit must establish a local appeal process that includes an evidentiary public hearing before appointed or elected officials.

D. As provided for in part 8420.XXXX, technical questions concerning the public value, location, size, and type of wetland must be submitted to the technical evaluation panel. The local government unit may use a technical evaluation panel to predetermine public value, location, size, or type of wetlands under its jurisdiction and use this determination in administering the act.

E. An application must not be approved unless entitlement thereto is established by a fair preponderance of the evidence. For each finding of fact and recommendation included in a written technical evaluation panel report that is not adopted by the local government unit, the local government unit must provide detailed reasons for rejecting the finding of fact or recommendation in its record of decision, otherwise the local government unit has not sufficiently considered the technical evaluation panel report.

F. The local government unit may evaluate evidence for a no-loss, an exemption, or sequencing without making a decision.

G. The local government unit must retain a record of all decisions for a minimum of 10 years after all applicable requirements and conditions pertaining to the project are fulfilled.

H. The local government unit and soil and water conservation district may charge processing fees in amounts not greater than are necessary to cover the reasonable costs of implementing this chapter and for technical and administrative assistance to landowners in processing other applications for projects affecting wetlands.

I. The local government unit must annually report information to the board regarding implementation of this chapter in a format and time period provided by the board. Failure to comply with the board's reporting requirements may subject the local government to penalty under subpart 3.

Subp. 3. **Procedures and penalty for local government unit failure to apply law.**

A. If a local government unit fails to acknowledge in writing its responsibilities under this chapter and the act as required in subpart 2, the board will impose, in the local government unit's jurisdiction, a 60-day moratorium on making decisions and implementing this chapter and the act. The board will notify the local government unit in writing of the start and end dates of the moratorium. The board must end the moratorium within the 60 days upon written agreement by the local government unit that it will assume, and is currently capable of implementing, its duties under this chapter and the act. If at the end of the initial 60-day moratorium a written agreement has not been made for the local government unit to apply the law, the board may extend the moratorium until the local government unit agrees to apply the law.

B. If the board has information that a local government unit is not following this chapter or the act in making decisions; if the local government unit does not have knowledgeable and trained staff with experience in water resource management; or if the local government unit fails to comply with the board's

reporting requirements, the board must notify the local government unit in writing of its concerns. The local government unit must respond in writing within 60 days of being notified by the board. If not satisfied with the local government unit's written response, or none is received, the board must ask the local government unit to appear at a hearing before the board to discuss the matter. The board may invite comments from other local governments or state and federal agencies. If the board determines at the hearing, that corrective action is necessary, the board must write the local government unit directing specific corrective action to occur within 60 days of receiving the board's decision. The notice must explain the reason for the action.

If, after the 60-day period, the local government unit has not corrected the problem to the satisfaction of the board, the board must declare a moratorium as prescribed in item A or take other appropriate legal action to ensure compliance.

C. When a moratorium is declared as prescribed in items A or B, a decision cannot be made on an application because a local government unit authorized to implement this chapter does not exist while the moratorium is in effect. Applications pending a local government unit decision when a moratorium is declared must be returned by the local government unit to the applicant within 15 days of the moratorium being placed in effect. Applications submitted while a moratorium is in effect must be returned by the local government unit to the applicant with an explanation and within 15 days of the local government unit's receipt of the application.

8420.XXXX OTHER LOCAL GOVERNMENT UNIT WETLAND RULES AND ORDINANCES.

This chapter and the act provide minimum standards. Local government units who choose to require landowners to submit an application and obtain approval to be eligible for an exemption or for temporary impacts that may result in a no-loss must do so through ordinance or rule. Local government units may require more procedures and more wetland protection, but not less.

8420.XXXX TECHNICAL EVALUATION PANEL PROCEDURES.

A. For each local government unit, there is a technical evaluation panel. Panel membership consists of a technical professional employee of the board, a technical professional employee of the soil and water conservation district of the county in which the activity is occurring, and a technical professional with expertise in water resource management appointed by the local government unit. For projects affecting public waters, public waters wetlands, or wetlands within the shoreland protection zone, the panel also includes a technical professional employee of the Department of Natural Resources. The local government unit must coordinate the panel.

B. Two members of the technical evaluation panel must be knowledgeable and trained in applying methodologies of the "United States Army Corps of Engineers Wetland Delineation Manual" (January 1987), "Wetlands of the United States" (United States Fish and Wildlife Service Circular 39, 1971 edition), "Wetland Plants and Plant Communities of Minnesota & Wisconsin" (S. Eggers and D. Reed 1997), and "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin, et al., 1979 edition), including updates and supplements, and any modifications or guidance provided by the board. The panel must also be knowledgeable and trained in evaluation of wetland functions and the resulting public values. The panel may seek advice and assistance from others with additional expertise to help the panel in its work.

C. The technical evaluation panel, if requested to do so by the local government unit, the landowner, or a member of the panel, must make technical findings and recommendations regarding applications, the scope of this chapter and the act, the applicability of exemption and no-loss standards, wetland functions and the resulting public value, direct and indirect impacts, possible violations of this chapter and the act, enforcement matters under 8420.XXXX, comprehensive wetland protection and management plans and implementing rules and ordinances, and other technical issues related to implementation of this chapter. The panel must review applications for replacement of public road projects as provided in 8420.XXXX, banking projects as provided in 8420.XXXX, and monitoring of replacement wetlands as provided in 8420.XXXX. The panel must provide its findings to the local government unit for consideration. For violations of this chapter that may result in the issuance of an enforcement order, the panel must consult with the enforcement authority.

D. The panel may recommend to the local government unit approval, approval with changes or conditions, or denial of an application. When a technical evaluation panel assembles findings or makes a recommendation, the local government unit must consider the findings or recommendation of the panel in

its approval or denial of an application. The panel will make no findings or recommendations without at least one member having made an on-site inspection. Panel findings and recommendations must be documented and endorsed by a majority of the members. If the local government unit does not agree with the panel's findings and recommendation, the detailed reasons for the disagreement must be part of the local government unit's record of decision.

E. Applicants must cooperate in providing local government unit staff and members of the technical evaluation panel and their designated experts with access to proposed project sites for investigation. Such investigations must be preceded by notice to the landowner or designated agent, unless prior approval has been granted. If an applicant refuses to allow access, the local government unit may deny an application.

8420.XXXX LOCAL GOVERNMENT UNIT APPLICATION AND DECISION PROCEDURES.

Subpart 1. **General.** Noticing and local government unit decisions made under this chapter must be in compliance with Minnesota Statutes, section 15.99.

Subpart 2. **Determination of Complete Application.** If, within 15 business days of receipt of an application, the local government unit finds that an application is incomplete, the local government unit must notify the applicant and list in writing what items or information is missing. Part 8420.XXXX must be the basis for determining a complete application. The local government unit may determine an application incomplete when seasonal constraints prevent on-site review and verification of the application. When an application contains a previously approved wetland boundary for which the approval remains valid, the wetland boundary may not serve as the basis for determining an application incomplete.

Subpart 3. **Notice of Application.** Within fifteen business days of receipt of a complete application, the local government unit must send a copy of the application and a notice of application on a form provided by the board to members of the technical evaluation panel; the watershed district or water management organization if there is one; the commissioner of natural resources and individual members of the public who request a copy. The notice must identify the type of application, the date the comment period ends, and where to provide comments. Individual members of the public who request a copy must be sent a summary of the application that includes information to identify the applicant and the location and scope of the project. The comment period must be at least 15 business days from the date the notice of application is sent. Revisions of an approved and valid replacement plan must be noticed according to this subpart by sending a summary of the proposed revisions if:

A. the wetland area to be impacted under the revised replacement plan is:
   (1) increased by more than ten percent;
   (2) a different type;
   (3) part of a different wetland; or
   (4) more than 500 feet from the location of the previously approved wetland impact; or

B. the replacement is:
   (1) a different type;
   (2) more than 500 feet from the location of the previously approved replacement; or
   (3) a different action eligible for credit.

Subp. 4. **Decision.** The local government unit decision must be based on the standards in parts 8420.XXXX to 8420.XXXX, and on the technical evaluation panel's findings and recommendation, if there is one. The local government unit must consider and include in their record of decision the technical evaluation panel's recommendation, if there is one, to approve, modify, or deny the application. The local government unit must also consider any comments received from those required to receive notice. The local government unit decision must be made in compliance with the time period prescribed by Minnesota Statutes, section 15.99 which, at the date of this rule, generally requires a decision in 60 days. The local government unit decision is valid for three years or as otherwise specified in the local government unit's decision. The local government unit may extend its decision with the concurrence of the technical evaluation panel.

Subp. 5. **Notice of Decision.** The local government unit decision must be mailed to the landowner within ten business days of the decision. A summary of the local government unit decision, in a format provided by the board, must be sent within ten business days of the decision to those required to receive notice of the application. The notice of decision must include information on the process and time period to appeal the decision of the local government unit.

Subp. 6. **Decisions and noticing for replacement via banking.** For replacement plan applications proposing the use of banking credits, the local government unit must verify, prior to approving the application, that the credits to be withdrawn are available and the applicant has a purchase agreement with the seller. For an approval of a replacement plan using banking credits as replacement, the local government unit must notify the board's banking administrator of the approval. The notification must be sent concurrent with the notice of decision and must include the bank account, the user of credits, and the amount of credit approved for withdrawal.

8420.XXXX PREVIOUSLY APPROVED APPLICATIONS.

Activities for which an application was approved may be completed under the laws, rules, conditions, and guidelines in effect when they were approved, provided the local government unit's approval is still valid.

APPLICATION PROCEDURES

8420.XXXX GENERAL APPLICATION REQUIREMENTS.

A. Persons requesting approval of a wetland boundary or type, no-loss, exemption, sequencing, or replacement plan application must fulfill the application requirements of this part and those applicable to the type of application submitted. Application requirements for establishment of a wetland bank are provided in part 8420.XXXX.

B. The following information must be submitted to the local government unit for all types of applications:

(1) the post office address of the applicant;

(2) for corporations, the principal officers of the corporation, any parent companies, owners, partners, and joint venturers, and a designated contact person;

(3) managing agents, subsidiaries, or consultants that are or may be involved with the activity;

(4) the type of decision requested;

(5) the location of the project by township, range, section, and quarter section;

(6) evidence of ownership of the project area or the requisite property rights to perform the activity;

(7) an accurate map, survey, or recent aerial photograph showing boundary of the project area and boundary, size, and type of each wetland relevant to the type of decision requested;

(8) if applicable to the type of decision requested, a written description of the proposed project and project area, including its areal extent, with sufficient detail to allow the local government unit to assess the amount and types of wetland to be affected; and

(9) other information considered necessary for evaluation of the application or project by the local government unit.

C. A landowner may seek advice from the local government unit regarding the applicability of a no-loss or exemption, the adequacy of sequencing arguments and alternatives, or other interpretation of this chapter without submitting an application.

8420.XXXX WETLAND BOUNDARY OR TYPE APPLICATIONS.

A landowner may apply for a wetland boundary or type decision from the local government unit. The landowner is responsible for submitting proof necessary to make the decision. Applications for approval of wetland boundary or type must include information in accordance with wetland delineation report submittal guidelines provided by the board. A wetland boundary or type application may be submitted independently or as part of a no-loss, exemption, sequencing, replacement plan, or banking application. When an independent wetland boundary or type application is approved, and the approval remains valid, it may be incorporated in a subsequent application for a no-loss, exemption, sequencing, replacement plan, or banking application.

8420.XXXX NO-LOSS APPLICATIONS.

A landowner may apply to the local government unit for a no-loss decision. A landowner who does not request a decision from the local government unit and proceeds with the activity may be subject to the enforcement provisions in part 8420.XXXX and Minnesota Statutes, section 103G.2372. The landowner applying for a no-loss is responsible for submitting the proof necessary to show qualification for the claim. The local government unit may require a wetland delineation report or functional assessment be submitted if it determines the report or assessment necessary to make a decision on the no-loss application. This part also applies to applications requesting a decision on whether an activity or wetland falls within the scope of this chapter.

8420.XXXX EXEMPTION APPLICATIONS.

A. A landowner intending to impact a wetland without replacement, claiming exemption under part 8420. XXXX, may apply to the local government unit before impacting the wetland for a decision to whether or not the impact is exempt. A landowner who does not request a decision from the local government unit and proceeds with the activity may be subject to the enforcement provisions in part 8420.XXXX and Minnesota Statutes, section 103G.2372. An exemption may apply whether or not the local government unit has made an exemption decision. If the landowner requests an exemption decision, then the local government unit must make one.

B. The landowner applying for exemption must identify the specific exemption being claimed and submit the proof necessary to show qualification for the exemption.

C. Landowners who choose not to seek local government unit approval of an exemption must, prior to impacting a wetland, report the exempt activity to the board using a website or other methods developed by the board. The report must provide information required by the board, including the name and contact information of the landowner, the location of the activity by township, range, and section, the exemption being claimed, and the amount of wetland impact in square feet. Information collected regarding exemptions serves the purpose of gathering data on the use of exemptions.

8420.XXXX SEQUENCING APPLICATIONS.

An applicant may either submit the information required for sequencing analysis as part of a replacement plan application or apply separately for a preliminary sequencing decision from the local government unit before preparing a complete replacement plan. The local government unit may request additional information needed to make a decision. The applicant must provide written documentation of the projects' compliance with the sequencing standards in 8420.XXXX, including the identification of the project purpose and a detailed description of the project and alternatives considered.

8420.XXXX REPLACEMENT PLAN APPLICATIONS.

Subp. 1. **Requirement.** Landowners proposing wetland impacts that require replacement under this chapter must apply to the local government unit and gain approval of a replacement plan prior to impacting wetlands.

Subp. 2. **Pre-application conference and site visit.** Before preparation of a replacement plan, it is recommended that the landowner meet with the local government unit for a pre-application conference and site visit. The local government unit is encouraged to inform the landowner of all sequencing requirements and the criteria used to evaluate replacement plans.

Subp. 3. **Application contents.** On an application form approved by the board in consultation with the commissioner of natural resources, provided through the local government unit, and with required attachments supplied by the applicant, the following documentation must be provided in addition to the general application requirements of part 8420.XXXX:

A. for the impacted wetland:

(1) the amount, in square feet or acres, of wetland proposed to be impacted by type;

(2) the minor watershed, major watershed, county, and bank service area;

(3) a soil survey map of the site showing soil type and identifying hydric soils, where available;

(4) a map showing the locations of any surface inlets or outlets, natural or otherwise, draining into or out of the wetlands, and if the wetland is within the shoreland wetland protection zone or floodplain, the distance and direction to the nearest watercourse;

(5) information known to the applicant or readily available concerning the special considerations criteria in part 8420.XXXX, subpart X;

(6) a list of all other known local, state, and federal permits and approvals required for the activity; and

(7) written documentation to demonstrate the projects' compliance with the sequencing standards in part 8420.XXXX, including the identification of the project purpose and a detailed description of the project and alternatives considered;

B. for the replacement wetland when the replacement is project-specific:

(1) the proposed action eligible for credit from part 8420.XXXX;

(2) the minor watershed, major watershed, county, and bank service area;

(3) evidence of ownership or property rights to the replacement areas;

(4) information known to the applicant or readily available concerning the special considerations criteria in part 8420.XXXX, subpart X;

(5) a description of how the proposed replacement meets the ecological suitability and sustainability criteria of part 8420.XXXX subpart 4;

(6) a map showing the locations of any existing surface inlets or outlets, natural or otherwise, draining into or out of the replacement wetland, and if the replacement wetland is within the shoreland wetland protection zone or floodplain, the distance and direction to the nearest watercourse;

(7) scale drawings showing plan and profile views of the replacement wetland areas;

(8) a description of how the replacement area will be constructed, for example, excavation or restoration by blocking an existing tile; the type, size, and specifications of outlet structures; elevations, relative to Mean Sea Level, of key features, for example, sill, emergency overflow, and structure height; and best management practices that will be implemented to prevent erosion or site degradation;

(9) a soil survey map of the site showing soil type and identifying hydric soils, where available, and site-specific soils information sufficient to determine the capability of the site to produce and sustain wetland characteristics and replacement goals;

(10) a timetable that clearly states how and when implementation of the replacement plan shall proceed, and when construction of the replacement area will be completed;

(11) statements signed by the applicant confirming that:

(a) the wetland will be replaced in advance of, or concurrent with, the actual impact;

(b) the replacement area was not previously restored or created under a prior approved replacement plan;

(c) the replacement area was not impacted under an exemption during the previous ten years;

(d) the replacement area was not, and will not be, restored or created with financial assistance from public conservation programs or restored or created for other unrelated regulatory purposes;

(e) the replacement area was not and will not be, restored or created using private funds other than those of the landowner unless the funds are paid back with interest to the individual or organization that funded the restoration or creation and the individual or organization notifies the local government unit in writing that the restored wetland may be considered for replacement; and

(f) monitoring will occur in accordance with parts 8420.XXXX and 8420.XXXX unless the local government unit will be conducting the monitoring of the wetland replacement area;

(12) evidence that a person proposing to create or restore a wetland within the easement of a pipeline as defined in Minnesota Statutes, section 299J.02, subdivision 11, has first notified the easement holder and the director of the Office of Pipeline Safety in writing. The person may not create or restore the wetland if, within 90 days after receiving the required notice, the easement holder or the director of the of Office of Pipeline Safety provides to the person a written notice of objection that includes the reasons for the objection;

(13) a list of all other known local, state, and federal permits and approvals required for the activity;

(14) evidence that any drainage or property rights potentially detrimental to the replacement area have been acquired, subordinated, or otherwise eliminated; and

(15) a vegetation establishment and management plan in accordance with part 8420.XXXX; and

(16) the size, type, and credits expected to result from the proposed replacement actions;

C. for the replacement wetland when the replacement consists of wetland bank credits:

(1) the wetland bank account number;

(2) the minor watershed, major watershed, county, and bank service area;

(3) the amount of credits to be withdrawn in square feet; and

(4) a completed application for withdrawal of wetland credits from the Minnesota wetland bank in a form provided by the board, or a purchase agreement signed by the applicant and bank account holder; and

D. a description of the required replacement as determined according to the replacement standards of part 8420.XXXX.

Subp. 4. **Approval conditions.** A landowner must not impact a wetland under an approved replacement plan until submittal of the following, to the satisfaction of the local government unit:

A. for project-specific replacement that is not in advance according to part 8420.XXXX, a financial assurance in accordance with part 8420.XXXX, unless waived by the local government unit;

B. for project-specific replacement, evidence that a notice in a form provided by the board has been attached to and recorded with the deed for lands containing a replacement wetland, specifying the following:

(1) the location of the replacement area;

(2) that the replacement area is subject to the act;

(3) that the fee title owner is responsible for the costs of repairs or reconstruction and management, if necessary, or for replacement costs;

(4) that reasonable access to the replacement area will be granted to the proper authorities for inspection, monitoring, and enforcement purposes;

(5) that costs of title review and document recording is the responsibility of the fee title owner; and

(6) that the local government unit or board can require necessary repairs or reconstruction and revegetation work to return the wetland to the specifications of the approved replacement plan and require reimbursement of reasonable costs from the wetland owner, or can require replacement of the wetland according to this chapter and the act; and

C. for replacement consisting of wetland bank credits, confirmation that the board has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

8420.XXXX CONTRACTOR'S NOTIFICATION RESPONSIBILITY.

For the purposes of this part, "contractor" means an individual, business, or other organization providing, to a landowner or the landowner's agent, a product or service that drains, fills, or excavates a wetland.

A. A contractor must not drain, excavate, or fill a wetland, wholly or partially, unless the contractor has, on a form provided by the board:

(1) obtained a signed statement from the landowner or landowner's agent stating that the wetland replacement plan required for the work has been obtained or that a replacement plan is not required; and

(2) sent a copy of the statement to the local government unit with jurisdiction over the wetland.

B. Work in violation of this part is a misdemeanor.

BOUNDARY OR TYPE, NO-LOSS, AND EXEMPTION STANDARDS

8420.XXXX BOUNDARY OR TYPE.

Subpart 1. **Wetland Boundary.** Wetland boundaries must be determined using the methodologies in the United States Army Corps of Engineers Wetlands Delineation Manual (January 1987), including subsequent updates and supplements, and guidance provided by the board.

Subp. 2. **Wetland Type.** Wetland type must be identified according to United States Fish and Wildlife Service Circular No. 39 (1971 edition) "Wetlands of the United States" and Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979), including modifications or guidance provided by the board. Wetland type in relation to Wetland Plants and Plant Communities of Minnesota and Wisconsin (S. Eggers and D. Reed, 1997) is shown in the following table:

Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers and Reed 1997), as modified by the Board of Water and Soil Resources-United States Army Corps of Engineers Wetland Mitigation Memorandum of Understanding (May 2007)	Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979)	Fish and Wildlife Service Circular 39 (Shaw and Fredine 1971)

Shallow, open water	Palustrine or lacustrine, littoral; aquatic bed; submergent, floating, and floating-leaved	Type 5: Inland open fresh water
Deep marsh	Palustrine or lacustrine, littoral; aquatic bed; submergent, floating, and floating-leaved; emergent; persistent and nonpersistent	Type 4: Inland deep fresh marsh
Shallow marsh	Palustrine; emergent; persistent and nonpersistent	Type 3: Inland shallow fresh marsh
Sedge meadow	Palustrine; emergent; narrow-leaved persistent	Type 2: Inland fresh meadow
Fresh (wet) meadow	Palustrine; emergent; broad- and narrow-leaved persistent	Type 1: Seasonally flooded basin or flat Type 2: Inland fresh meadow
Wet to wet-mesic prairie	Palustrine; emergent; broad- and narrow-leaved persistent	Type 1: Seasonally flooded basin or flatType 2: Inland fresh meadow
Calcareous fen	Palustrine; emergent; narrow-leaved persistent; scrub/shrub; broad-leaved deciduous	Type 2: Inland fresh meadowType 6: Shrub swamp
Open bog or coniferous bog	Palustrine; moss/lichen; scrub/shrub; broad-leaved evergreen; forested; needle-leaved evergreen and deciduous	Type 8: Bog
Shrub-carr or alder thicket	Palustrine; scrub/shrub; broad-leaved deciduous	Type 6: Shrub swamp
Hardwood swamp or coniferous swamp	Palustrine; forested; broad-leaved deciduous; needle-leaved evergreen and deciduous	Type 7: Wooded swamp
Floodplain forest	Palustrine; forested; broad-leaved deciduous	Type 1: Seasonally flooded basin or flat
Seasonally flooded basin	Palustrine; flat; emergent; persistent and nonpersistent	Type 1: Seasonally flooded basin or flat

8420.XXXX NO-LOSS AND EXEMPTION CONDITIONS.

A person conducting an activity in a wetland under a no-loss in part 8420.XXXX or an exemption in part 8420.XXXX must ensure that:

A. appropriate erosion control measures are taken to prevent sedimentation of the wetland or of any receiving waters;

B. the activity does not block fish activity in a watercourse, except when done purposely to prevent movement of undesirable fish species in accordance with a recommendation from the commissioner; and

C. the activity is conducted in compliance with all other applicable federal, state, and local requirements, including best management practices as listed in part 8420.XXXX, and water resource protection requirements established under Minnesota Statutes, chapter 103H.

8420.XXXX NO-LOSS CATEGORIES.

No-Loss means no permanent loss of, or impact to, wetlands from an activity according to the criteria in this part. Activities that do not qualify for a no-loss according to this part may be subject to replacement according to parts 8420.XXXX to 8420.XXXX. The following qualify for a no-loss:

A. an activity that will not impact a wetland;

B. excavation in wetlands when limited to removal of sediment or debris such as trees, logs, stumps, beaver dams, blockage of culverts, and trash, provided the removal does not result in alteration of the original cross-section of the wetland or watercourse. Wetland areas created solely by beaver activities may be drained by removing those materials placed by beaver. Drainage is permitted by removing or moving materials blocking installed roadway culverts and related drainage structures. Additional excavation or removal of other materials is not permitted unless it can be shown by aerial photographs that the proposed activity will not drain or fill wetland that was there before the beaver dam was built or before the culvert became plugged;

C. temporary or seasonal water level management activities, done for the purpose of performing maintenance or as part of vegetation or habitat management activities, that will not result in the conversion of a wetland to a non-wetland or conversion of a non-degraded wetland to a different type;

D. an activity conducted as part of an approved replacement or banking plan or conducted or authorized by public agencies for the purpose of wetland restoration, fish and wildlife habitat restoration or improvement using guidance in part 8420.XXXX, item X, or repair and maintenance of earthen containment structures;

E. excavation limited to the removal of deposited sediment in wetlands that are presently utilized as stormwater management basins, or excavation and removal of contaminated substrate, and the excavated area is limited to the minimum dimensions necessary for achieving the desired purpose and stabilized to prevent water quality degradation;

F. an activity associated with the operation, routine maintenance, or emergency repair of existing utilities and public works structures, including pipelines, provided the activity does not result in additional wetland intrusion or additional impacts, either wholly or partially;

G. temporarily crossing or entering a wetland to perform silvicultural activities, including timber harvest as part of a forest management activity, so long as the activity limits the impact on the hydrologic and biologic characteristics of the wetland; the activity does not result in the construction of dikes, drainage ditches, tile lines, or buildings; and the timber harvesting and other silvicultural practices do not result in the drainage of the wetland or public waters; or

H. a temporary impact that is rectified by repairing, rehabilitating, or restoring the affected wetland. A no-loss under this item only applies if all of the following conditions are met:

(1) the physical characteristics of the affected wetland, including ground elevations, contours, inlet dimensions, outlet dimensions, substrate, plant communities, and hydrologic regime, are restored to pre-project conditions sufficient to ensure that all pre-project functions are restored;

(2) the activity is completed and the physical characteristics of the wetland are restored within six months of the start of the activity, unless an extension is granted by the local government unit after consultation with the technical evaluation panel;

(3) the landowner provides sufficient financial assurance acceptable to the local government unit to cover the estimated cost to restore the wetland to pre-project conditions. The local government unit must return any remaining financial assurance to the landowner upon a determination by the local government unit that the conditions in this item have been met by the landowner; and

(4) a no-loss has not been approved under the criteria in this item for a particular site within a wetland within the previous 10 years, except that repairs to the original project may be allowed under the no-loss if the local government unit determines the request to be necessary and reasonable.

8420.XXXX EXEMPTION STANDARDS.

Subpart 1. **Scope.** Certain impacts may qualify for an exemption from replacement requirements. An impact is exempt from replacement if it qualifies for any one of the exemptions. Persons proposing to conduct an exempt activity are encouraged to contact the local government unit to verify eligibility for an exemption and to evaluate alternatives to avoid or minimize wetland impacts. If the total amount of impact exceeds the amount allowed under the applicable exemption, the impact is not exempt and the entire amount of impact must be replaced.

A. No exemptions apply to:

(1) calcareous fens as identified by the commissioner;

(2) wetlands that have been deposited in the state wetland bank;

(3) wetlands that have previously received replacement credit as a result of an approved replacement or banking plan; or

(4) wetlands that were partially impacted so that the remainder would be eligible for an exemption, when the exemption would not have been applicable before the impact.

Impacts to any such wetlands are subject to replacement according to the requirements of parts 8420.XXXX to 8420.XXXX or, for calcareous fens, part 8420.XXXX.

B. Exemptions may not be combined on a project.

C. Present and future owners of wetlands impacted without replacement under an exemption for agricultural activities in subpart X or drainage in subpart X must make no use of the wetland area after it is impacted, other than as agricultural land or other use specified in subpart X, for at least ten years after the impact, unless it is first replaced under the requirements of Minnesota Statutes, section 103G.222. Except for land in public ownership, at the time of impact, the local government unit may require the landowner to record a notice of these restrictions in the office of the county recorder for the county in which the project is located if it determines the wetland area impacted is at risk of conversion to a nonagricultural use or other use than specified in subpart X within ten years, based on the zoning classification, proximity to a municipality or full service road, or other criteria as determined by the local government unit. In making a decision under this item, the local government unit must review the applicable comprehensive plan, if one exists, when evaluating the risk of conversion to a nonagricultural use and monitor and enforce the prohibition on using the area impacted for a nonagricultural purpose for at least ten years. At a minimum, the recorded document must contain the name or names of the landowners, a legal description of the property to which the restrictions apply, a statement of the restrictions, the date on which the restrictions expire, the name of the local government that approved the exemption, if such occurred, the signatures of all owners, and an acknowledgment.

Subp. 2. **Agricultural activities.** A replacement plan is not required for:

A. impacts resulting from agricultural activities in a wetland that was planted with annually seeded crops or was in a crop rotation seeding of pasture grass or legumes in six of the last ten years prior to January 1, 1991. Documentation, such as aerial photographs, United States Department of Agriculture records, or other applicable documentation may be used as evidence for this exemption. Impacts eligible for this exemption must be to types 1 or 2 wetlands;

B. impacts resulting from agricultural activities in a type 1 wetland on agricultural pasture land that remains in the same use, except for bottomland hardwood type 1 wetlands, and impacts resulting from agricultural activities in a type 2 or type 6 wetland that is less than two acres in size and located on agricultural pasture land that remains in the same use;

C. impacts resulting from soil and water conservation projects that are certified by soil and water conservation district technical staff after review by the technical evaluation panel, provided the project minimizes the impact on the hydrologic and biologic characteristics of the wetland. For purposes of this item, examples of soil and water conservation practices include those identified in the State Cost Share Program Manual, available from the board or soil and water conservation districts, and federally funded demonstration, research, and cost share programs and projects;

D. filling a wetland to accommodate wheeled booms on irrigation devices if the fill does not impede normal drainage;

E. impacts resulting from aquaculture activities including pond excavation and construction and maintenance of associated access roads and dikes authorized under, and conducted in accordance with, a permit issued by the United States Army Corps of Engineers under section 404 of the federal Clean Water Act, United States Code, title 33, section 1344, but not including construction or expansion of buildings;

F. impacts resulting from wild rice production activities, including necessary diking and other activities authorized under a permit issued by the United States Army Corps of Engineers under section 404 of the federal Clean Water Act, United States Code, title 33, section 1344; or

G. impacts resulting from agricultural activities that are subject to federal farm program restrictions that meet minimum state standards under this chapter and Minnesota Statutes, sections 103A.202 and 103B.3355, and that have been approved by the board, the commissioners of natural resources and agriculture, and the Pollution Control Agency. This exemption is not valid until such agreement is approved. If approved, the conditions and standards will be noticed by the board to local government units and published in the State Register. The conditions and standards will take effect 30 days after

publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register. Upon taking effect, this exemption will only apply to impacts on agricultural land annually enrolled in the federal Farm Program as long as the impacts are not beyond what is:

(1) allowed under the other exemptions in this part;

(2) necessary to replace, maintain, or repair existing private drainage infrastructure with a capacity not to exceed that which was originally constructed; or

(3) replaced at a ratio of 1:1 or greater under United States Department of Agriculture provisions as supported by documentation from the United States Department of Agriculture which must be included as evidence to support this exemption.

If the impact would result in loss of eligibility, the landowner cannot qualify for the exemption.

Subp. 3. **Drainage.** For the purposes of this subpart, "public drainage system" means a drainage system as defined in Minnesota Statutes, section 103E.005, subdivision 12, and any ditch or tile lawfully connected to the drainage system.

A. Drainage maintenance or repair. A replacement plan is not required for:

(1) impacts resulting from maintenance or repair of existing public drainage systems conducted or authorized by a public drainage authority pursuant to Minnesota Statutes, chapter 103E, when the maintenance or repair does not drain type 3, 4, or 5 wetlands that have existed for more than 25 years prior to the proposed impact; or

(2) impacts resulting from maintenance or repair of existing drainage systems other than public drainage systems, when the maintenance or repair does not drain wetlands that have existed for more than 25 years prior to the proposed impact.

For projects proposed under this item, the landowner must provide documentation that the wetlands to be partially or completely drained by the maintenance or repair have not existed for more than 25 years. Documentation may include, but is not limited to: aerial photographs, climatological records, soil borings, vegetative analysis, elevation surveys, or drainage system maintenance records.

B. Drainage enhancement. A replacement plan is not required for:

(1) draining a wetland on agricultural land when the wetland was:

(a) planted with annually seeded crops prior to July 5, except for crops that are normally planted after this date, in eight out of the ten most recent years prior to the impact;

(b) in a crop rotation seeding of pasture grass, cover crop, or legumes or was fallow for a crop production purpose in eight out of the ten most recent years prior to the impact; or

(c) enrolled in a state or federal land conservation program and met the requirements of subitem (1) (a) or (1) (b) prior to enrollment.

(2) draining of type 1 wetlands, or up to five acres of type 2 or type 6 wetlands, in an unincorporated area on land that has been assessed drainage benefits for a public drainage system, provided that:

(a) during the 20-year period that ended January 1, 1992:

(*i*) there was an expenditure made from the drainage system account for the public drainage system;

(*ii*) the public drainage system was repaired or maintained as approved by the drainage authority; or

(*iii*) no repair or maintenance of the public drainage system was required under Minnesota Statutes, section 103E.705, subdivision 1, as determined by the public drainage authority; and

(b) the wetlands are not drained for conversion to:

(*i*) platted lots;

(*ii*) planned unit, commercial, or industrial developments; or

(*iii*) any development with more than one residential unit per 40 acres, except for parcels subject to local zoning standards that allow family members to establish an additional residence on the same 40 acres.

If wetlands drained under sub-item (2) are converted to prohibited uses during the ten-year period following drainage, the wetlands must be replaced under Minnesota Statutes, section 103G.222. Documentation, such as aerial photographs, United States Department of Agriculture records, or other applicable documentation may be used as evidence for the exemption under this item.

C. For projects completed under this subpart, spoil must be placed and stabilized in a manner that minimizes wetland impacts without jeopardizing the stability of the ditch or contributing to the degradation of downstream water quality.

D. The public drainage authority may, as part of the repair, install control structures, realign the ditch, construct dikes along the ditch, or make other modifications as necessary to prevent drainage of the wetland.

E. Wetlands and public waters of all types that could be drained as a part of a public drainage repair project are eligible for the permanent wetlands preserve program established under Minnesota Statutes, section 103F.516. The board must give priority to acquisition of easements on types 3, 4, and 5 wetlands that have been in existence for more than 25 years on public drainage systems and other wetlands that have the greatest risk of drainage from a public drainage repair project.

Subp. 4. **Federal approvals.** A replacement plan is not required for impacts authorized under section 404 of the federal Clean Water Act, United States Code, title 33, section 1344, or section 10 of the Rivers and Harbors Act of 1899, United States Code, title 33, section 403, and regulations that meet minimum state standards under this chapter and that have been approved by the board, the Department of Agriculture, the Department of Natural Resources, and the Pollution Control Agency. This exemption is not valid until such agreement is approved. If approved, the conditions and standards will be noticed by the board to local government units and published in the State Register. The exemption will take effect 30 days after publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register.

Subp. 5. **Restored Wetlands.** A replacement plan is not required for:

A. impacts to a wetland that was restored or created for conservation purposes under a contract or easement providing the landowner with the right to drain the restored or created wetland to pre-project hydrologic conditions. The landowner must provide a contract or easement conveyance demonstrating that the landowner or a predecessor restored or created the wetland for conservation purposes but retained the right to subsequently drain the restored or created wetland to the conditions that existed prior to restoration or creation; or

B. impacts to a wetland that was restored or created by a landowner without any assistance or financing from public agencies or private entities other than the landowner and the wetland has not been used for wetland replacement or deposited in the state wetland bank. For purposes of this item, assistance by public agencies does not include consultation on project design or advice on the project's relationship to state or federal programs. The landowner must provide a contract, billing statements, or other evidence sufficient to demonstrate that the landowner or a predecessor restored or created the wetland without any assistance or financing from public agencies or private entities other than the landowner. The landowner must also provide sufficient information to determine that the area was not wetland prior to the restoration or creation activity.

Subp. 6. **Utilities.**

A. A replacement plan is not required for impacts resulting from:

(1) the installation, maintenance, repair, or replacement of utility lines, including pipelines, provided that the impacts have been avoided and minimized to the extent possible and the proposed project significantly modifies or alters less than one-half acre of wetlands; or

(2) the repair or updating of existing subsurface sewage treatment systems as necessary to comply with local, state, and federal regulations. This exemption does not apply if the wetland impacts are a result of the treatment system being expanded to accommodate greater use.

B. For maintenance, repair, and replacement, the local government unit may issue a seasonal or annual exemption approval or the utility may proceed without local government unit approval if the utility is carrying out the work according to approved best management practices. Work of an emergency nature may proceed as necessary and any impacts must be addressed with the local government unit after the emergency work has been completed.

Subp. 7. **Forestry.** This exemption is for roads and crossings solely constructed, and primarily used, for the purpose of providing access for the conduct of silvicultural activities. A replacement plan is not required for impacts resulting from the construction of forest roads and crossings so long as the activity limits the impact on the hydrologic and biologic characteristics of the wetland; the construction activities do not include, or result in, the access becoming, a dike, drainage ditch, or tile line; impacts are avoided wherever possible; and there is no drainage of the wetland or public waters.

Subp. 8. **De minimis.**

A. Except as provided in items B and C, a replacement plan is not required for projects that impact up to the following amounts of wetlands:

(1) in a greater than 80 percent area:

(a) 10,000 square feet, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the shoreland wetland protection zone;

(b) 400 square feet, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the building setback zone, as defined in the local shoreland management ordinance, but within the shoreland wetland protection zone. This amount may be increased to 1,000 square feet by the local government unit if the wetland is isolated and determined to have no direct surficial connection to the public water;

(c) 100 square feet of type 3, 4, 5, 8, and white cedar and tamarack wetland outside of the building setback zone, as defined in the local shoreland management ordinance; or

(d) 20 square feet of any wetland inside the building setback zone, as defined in the local shoreland management ordinance;

(2) in a 50 to 80 percent area:

(a) 5,000 square feet, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the shoreland wetland protection zone and outside of the 11-county metropolitan area;

(b) 2,500 square feet, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the shoreland wetland protection zone and inside the 11-county metropolitan area;

(c) 400 square feet, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the building setback zone, as defined in the local shoreland management ordinance, but within the shoreland wetland protection zone;

(d) 100 square feet of type 3, 4, 5, 8, and white cedar and tamarack wetland outside of the building setback zone, as defined in the local shoreland management ordinance; or

(e) 20 square feet of any wetland inside the building setback zone, as defined in the local shoreland management ordinance; or

(3) in a less than 50 percent area:

(a) 2,000 square feet of type 1, 2, or 6 wetland outside of the shoreland wetland protection zone and outside the 11-county metropolitan area;

(b) 1,000 square feet of type 1, 2, or 6 wetland outside of the shoreland wetland protection zone and inside the 11-county metropolitan area;

(c) 400 square feet of type 1, 2, or 6 wetland outside of the the building setback zone, as defined in the local shoreland management ordinance, but within the shoreland wetland protection zone;

(d) 100 square feet of type 3, 4, 5, 7, and 8 wetland outside of the building setback zone, as defined in the local shoreland management ordinance; or

(e) 20 square feet of any wetland inside the building setback zone, as defined in the local shoreland management ordinance.

B. The amounts listed in item A may not be combined on a project.

C. This exemption no longer applies to a landowner's portion of a wetland when the proposed project impact area and the cumulative area of the landowner's portion drained, excavated, or filled since January 1, 1992, is the greater of:

(1) the applicable area listed in item A, if the landowner owns the entire wetland;

(2) five percent of the landowner's portion of the wetland; or

(3) 400 square feet.

D. Property may not be divided to increase the amounts listed in item A or to gain an exemption.

E. For purposes of this subpart, for wetlands greater than 40 acres, the wetland type may be determined to be the wetland type with the deepest water regime within the wetland and within 300 feet of the impact.

F. For purposes of this subpart, the 11-county metropolitan area consists of the counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.

Subp. 9. **Wildlife habitat.** A replacement plan is not required for:

A. excavation or the associated deposition of spoil within a wetland for the primary purpose of wildlife habitat improvement, if:

(1) the total area of deposition, and excavation if within the permanently and semipermanently flooded areas of type 3, 4, or 5 wetlands, does not exceed five percent of the wetland area or one-half acre, whichever is less, and the spoil is stabilized to prevent erosion and native, noninvasive vegetation is established;

(2) the project does not have an adverse effect on any species designated as endangered or threatened under state or federal law; and

(3) the project will provide wildlife habitat improvement as certified by the soil and water conservation district or technical evaluation panel using the "Wildlife Habitat Improvements in Wetlands: Guidance for Soil and Water Conservation Districts and Local Government Units in Certifying and Approving Wetland Conservation Act Exemption Proposals, Minnesota Interagency Wetlands Group, December 2000" or similar criteria approved by the board; or

B. duck blinds.

WETLAND REPLACEMENT

8420.XXXX PURPOSE AND REQUIREMENT.

Subpart 1. **Purpose**. Parts 8420.XXXX to 8420.XXXX specify the procedures and criteria for avoiding and minimizing impacts and for ensuring adequate replacement of lost public value from unavoidable impacts.

Subp. 2. **Requirement.** No person may impact a wetland, wholly or partially, without being eligible for an exemption or no-loss, or first having a wetland replacement plan approved by the local government unit. Prior to approval of a replacement plan, the local government unit must ensure that the applicant has exhausted all possibilities to avoid and minimize wetland impacts according to the sequencing requirements of part 8420.XXXX. The applicant must demonstrate to the local government unit that the replacement plan complies with this part and the replacement standards of parts 8420.XXXX and 8420.XXXX. A replacement plan that fails to meet the requirements of this chapter must be considered inadequate in replacing lost function and value and must be denied by the local government unit.

Subp. 3. **Alternative evaluation methodologies.** The local government unit may evaluate the replacement plan using a scientifically accepted methodology that evaluates all wetland functions specified in Minnesota Statutes, section 103B.3355, for both the impacted and replacement wetlands. Such alternative methodologies must be approved and listed by the board, in consultation with the commissioners of natural resources and agriculture, and local government units. When using alternative evaluation methodologies to evaluate replacement plans, the ratio of replacement credit to impacted wetland must not be less than the minimum requirements as listed in part 8420.XXXX, except as provided for in part 8420.XXXX, comprehensive wetland protection and management plans.

8420.XXXX SPECIAL CONSIDERATIONS.

Subpart 1. **Scope.** The factors in this part, when identified as being applicable to an impact site or a replacement site, must be considered by the applicant prior to submittal of a replacement plan, and by the local government unit in the review of replacement plans.

Subp. 2. **Endangered and threatened species.** A replacement plan for activities that involve taking species listed as endangered or threatened in parts 6134.XXXX to 6134.XXXX must be denied unless the commissioner issues a permit pursuant to part 6212.XXXX or Minnesota Statutes, section 84.0895, subdivision 7. Applicants may determine if there are known locations of listed species at a particular site by contacting the Department of Natural Resources' natural heritage and nongame research program.

Subp. 3. **Rare natural communities.** A replacement plan for activities that involve the modification of a rare natural community as determined by the Department of Natural Resources' natural heritage program must be denied if the local government unit determines that the proposed activities will permanently adversely affect the natural community.

Subp. 4. **Special fish and wildlife resources.** A replacement plan for activities that would have a significant adverse effect on a special or locally significant fish and wildlife resource that cannot be functionally replaced must be denied. These resources include, but are not limited to:

A. fish passage and spawning areas;

B. colonial waterbird nesting colonies;

C. migratory waterfowl concentration areas;

D. deer wintering areas; and/or

E. wildlife travel corridors.

Activities involving streams must not block fish passage unless approved by the Department of Natural Resources.

Subp. 5. **Archaeological, historic, or cultural resource sites.** A replacement plan for activities that involve the modification of known archaeological, historical, or cultural resource sites on or eligible for the

National Register of Historic Places, as designated by the state historic preservation officer, must be denied, if the local government unit, in consultation with the State Historical Preservation Office, determines that the proposed activities will have a significant adverse effect on the archaeological or historical value of the site.

Subp. 6. **Groundwater sensitivity.** A replacement plan for activities must be denied if the local government unit determines the activities would have a significant adverse effect on groundwater quality. The publication "Criteria and Guidelines for Assessing Geologic Sensitivity of Ground Water Resources in Minnesota" (MDNR, 1991) may be used as a guide in determining potential impacts.

Subp. 7. **Sensitive surface waters.** A replacement plan must be denied if the local government unit determines the activities will have a significant adverse effect on the water quality of outstanding resource value waters listed in part 7050.0180 or on trout waters designated by the commissioner.

Subp. 8. **Education or research use.** A replacement plan for impacts to wetlands known to be used for educational or research purposes must be denied if the local government unit determines that those uses will not be maintained or adequately replaced.

Subp. 9. **Waste disposal sites.** The local government unit must evaluate the type and amount of waste material found at the site. Activities involving known or potential hazardous wastes or contaminants must be conducted according to applicable federal and state standards.

Subp. 10. **Consistency with other plans.** The local government unit must consider the extent to which proposed activities are consistent with other plans, such as local water management plans, watershed management plans, land use plans, zoning, and comprehensive plans.

8420.XXXX SEQUENCING.

Subpart 1. **Requirement.** The local government unit must not approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland complies with all of the following principles in descending order or priority:

A. avoids direct or indirect impacts that may destroy or diminish the wetland under the criteria in subpart 2;

B. minimizes impacts by limiting the degree or magnitude of the wetland activity and its implementation under the criteria in subpart 3;

C. rectifies impacts by repairing, rehabilitating, or restoring the affected wetland under the criteria in subpart 4;

D. reduces or eliminates impacts over time by operating the project in a manner that preserves and maintains the remaining wetland under the criteria in subpart 5; and

E. replaces unavoidable impacts by restoring or, if wetland restoration opportunities are not reasonably available, creating replacement wetland areas having equal or greater public value as provided for in parts 8420.XXXX to 8420.XXXX. Wetlands located in cultivated fields that are subject to subpart 8 are an exception to this part.

Subp. 2. **Impact avoidance.**

A. Avoidance is required when indicated by part 8420.XXXX.

B. Wetland dependence determination:

(1) Based on information provided by the applicant, the local government unit must determine if the proposed project is wetland dependent. A project is wetland dependent if wetland features or functions are essential to fulfill the basic purpose of the project. A wetland present at the site of a proposed project does not make that project wetland dependent.

(2) A project that has been determined by the local government unit to be wetland dependent is exempt from the analysis of avoidance alternatives in item C.

C. Alternatives analysis:

(1) In addition to the proposed project, the applicant must provide the local government unit with documentation describing at least two alternatives that avoid wetland impacts, one of which may be the no-build alternative. For projects that repair or rehabilitate existing infrastructure, only one alternative is required. The alternatives may include consideration of alternate sites or alternative project configurations on the proposed site. The alternatives must be judged by the local government unit as good faith efforts, or the local government unit may require the applicant to redraft them for reconsideration.

(2) The local government unit must determine whether any proposed feasible and prudent alternatives are available that would avoid impacts to wetlands. An alternative is considered feasible and prudent if it meets all of the following requirements:

(a) it is capable of being done from an engineering point of view;

(b) it is in accordance with accepted engineering standards and practices;

(c) it is consistent with reasonable requirements of the public health, safety, and welfare;

(d) it is an environmentally preferable alternative based on a review of social, economic, and environmental impacts; and

(e) it would create no truly unusual problems.

(3) The local government unit must consider the following in evaluating avoidance alternatives as applicable:

(a) whether the basic project purpose can be reasonably accomplished using one or more other sites in the same general area that would avoid wetland impacts. An alternate site must not be excluded from consideration only because it includes or requires an area not owned by the applicant that could reasonably be obtained, used, expanded, or managed to fulfill the basic purpose of the proposed project;

(b) the general suitability of the project site and alternate sites considered by the applicant to achieve the purpose of the project;

(c) whether reasonable modification of the size, scope, configuration, or density of the project would avoid impacts to wetlands;

(d) efforts by the applicant to accommodate or remove constraints on alternatives imposed by zoning standards or infrastructure, including requests for conditional use permits, variances, or planned unit developments;

(e) the physical, economic, and demographic requirements of the project. Economic considerations alone do not make an alternative not feasible and prudent; and

(f) the amount, distribution, condition, and public value of wetlands and associated resources to be affected by the project and the potential for direct and indirect effects over time.

(4) If the local government unit determines that a feasible and prudent alternative exists that would avoid impacts to wetlands, it must deny the replacement plan. If no feasible and prudent alternative is available that would avoid impacts to wetlands, the local government unit must evaluate the replacement plan for compliance with subparts 3 to 8.

Subp. 3. **Impact minimization.**

A. The applicant shall demonstrate to the local government unit's satisfaction that the activity will minimize impacts to wetlands. In reviewing the sufficiency of the applicant's proposal to minimize wetland impacts, the local government unit must consider all of the following:

(1) the spatial requirements of the project;

(2) the location of existing structural or natural features that may dictate the placement or configuration of the project;

(3) the purpose of the project and how the purpose relates to placement, configuration, or density;

(4) the sensitivity of the site design to the natural features of the site, including topography, hydrology, and existing vegetation;

(5) the value, function, and spatial distribution of the wetlands on the site;

(6) individual and cumulative impacts; and

(7) an applicant's efforts to:

(a) modify the size, scope, configuration, or density of the project;

(b) remove or accommodate site constraints including zoning, infrastructure, access, or natural features;

(c) confine impacts to the fringe or periphery of the wetland; and

(d) otherwise minimize impacts.

Subp. 4. **Impact rectification.** Temporary impacts must be rectified by repairing, rehabilitating, or restoring the affected wetland in accordance with the no-loss provisions of part 8420.XXXX.

Subp. 5. **Reduction or elimination of impacts over time.** After an activity is completed, further impacts must be reduced or eliminated by maintaining, operating, and managing the project in a manner that preserves and maintains remaining wetland functions. The local government unit must require applicants to implement best management practices to protect wetland functions.

Subp. 6. **Unavoidable impacts**. Unavoidable impacts that remain after efforts to minimize, rectify, or reduce or eliminate them must be replaced according to parts 8420.XXXX to 8420.XXXX.

Subp. 7. **Sequencing flexibility.**

A. Flexibility in application of the sequencing steps may be requested by the applicant and allowed at the discretion of the local government unit, subject to the conditions in item B, as determined by the local government unit if:

(1) the wetland to be impacted has been degraded to the point where replacement of it would result in a certain gain in function and public value;

(2) avoidance of a wetland would result in severe degradation of the wetland's ability to function and provide public value, for example, because of surrounding land uses and the wetland's ability to function and provide public value cannot reasonably be maintained through implementation of best management practices, land use controls, or other mechanisms;

(3) the only feasible and prudent upland site available for the project or replacement has greater ecosystem function and public value than the wetland. This may be appropriate only if the applicant:

(a) demonstrates impact minimization to the wetland;

(b) agrees to perpetually preserve the designated upland site; and

(c) completely replaces the impacted wetland's function and public value; or

(4) the wetland is a site where human health and safety is a factor.

B. Flexibility in the order and application of sequencing standards cannot be implemented unless alternatives have been considered and the proposed replacement wetland is certain to provide equal or greater public value as determined based on a functional assessment reviewed by the technical evaluation panel using a methodology approved by the board. The project sponsor must provide the necessary information and the local government unit must document the application of sequencing flexibility in the replacement plan approval.

Subp. 8. **Wetlands on cultivated fields.** If the wetland is located on a cultivated field and will be replaced through restoration, then the priority order for sequencing in subpart 1 is not required. A wetland impacted under this provision must not be converted to nonagricultural land for ten years. The landowner must execute and record a notice of this requirement in the office of the county recorder for the county in which the property is located and, as a condition of the approval, provide documentation of the recording to the local government unit.

8420.XXXX REPLACEMENT STANDARDS.

Subpart 1. **General Requirement.** Wetland replacement must replace the public value of wetlands lost as a result of an impact. Replacement of wetland function and value may occur at more than one location. The public value of wetlands is based upon the functions of wetlands, including:

A. water quality, including filtering of pollutants to surface and groundwater, utilization of nutrients that would otherwise pollute public waters, trapping of sediments, shoreline protection, and utilization of the wetland as a recharge area for groundwater;

B. flood water and storm water retention, including the potential for flooding in the watershed, the value of property subject to flooding, and the reduction in potential flooding by the wetland;

C. public recreation and education, including hunting and fishing areas, wildlife viewing areas, and nature areas;

D. commercial uses, including wild rice and cranberry growing and harvesting and aquaculture;

E. fish, wildlife, and native plant habitats;

F. low-flow augmentation; and

G. other functions and public uses as identified in board-approved wetland evaluation methods.

The board will maintain a publicly available list of preapproved wetland evaluation methods.

Subp. 2. **Determining impacts of partial drainage.** In cases where wetlands will be partially drained, the amount of wetland to be replaced must be determined as follows:

The area impacted by partially draining a wetland is determined in two parts. The wetland area where the hydrology will be totally removed must be considered an impact in its entirety. The area of impact for the area that is partially drained must be at least 50 percent of the acreage of the remaining wetland area determined by an assessment acceptable to the technical evaluation panel.

Subp. 3. **Replacement Ratios.**

A. The replacement ratio is 2.5 replacement credits for each acre of wetland impacted, except in greater than 80 percent areas and on agricultural land the replacement ratio is 1.5 replacement credits for each acre of wetland impacted. The replacement ratio is reduced by 0.5:1 when the replacement consists of:

(1) withdrawal of available credits from an approved wetland bank site within the same bank service area as the impacted wetland; or

(2) project-specific replacement within the same major watershed or county as the impacted wetland, a majority of which is in-kind.

Minimum Replacement Ratios: Banking

Location of Impact	Replacement	Minimum Replacement Ratio
>80% Area or Ag Land	Outside BSA	1.5:1
	Within BSA	1:1
<50% Area, 50-80% Area, or non-Ag Land	Outside BSA	2.5:1
	Within BSA	2:1

Minimum Replacement Ratios: Project-Specific

Location of Impact	Replacement	Minimum Replacement Ratio
>80% Area or Ag Land	Outside Major Watershed or Out-of-Kind	1.5:1
	Within Major Watershed and In-Kind	1:1
<50% Area, 50-80% Area, or non-Ag Land	Outside Major Watershed or Out-of-Kind	2.5:1
	Within Major Watershed and In-Kind	2:1

B. For replacement via banking, impacts in bank service area 10 that are replaced in bank service area 9 or the Des Moines River Basin in bank service area 8, and impacts in bank service area 1 that are replaced in bank service area 2 will count as replacement within the same bank service area for the purpose of reducing the minimum required replacement ratio according to this subpart.

C. Wetland replacement must be of a size sufficient to ensure that it provides equal or greater public value than the impacted wetland it will replace. The actual replacement ratio required may be more than the ratio required in item A if the local government unit determines that a higher ratio is necessary to replace the public value of the wetland lost. In no case can the replacement ratio be less than 1:1 in greater than 80 percent areas or agricultural land, and 2:1 in all other areas.

D. Owners of wetlands impacted for use as agricultural land may make no use of the wetland area after it is impacted, other than as agricultural land, for a period of ten years unless future replacement to achieve a ratio equaling or exceeding the appropriate ratio for non-agricultural land in item A occurs. The landowner must record a notice of this restriction in the office of the county recorder in which the project is located and, as a condition of local government unit approval, provide documentation of the recording to the local government unit.

E. The board may approve special replacement ratios based on data derived from comprehensive inventories of replacement opportunities. The board must give notice of the replacement ratios to local government units and publish the ratios in the State Register. The board must provide opportunities for public input and comment prior to publishing the special replacement ratios. The conditions and standards shall take effect 30 days after publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register.

Subp. 4. **In-kind wetland replacement.** In-kind wetland replacement refers to replacement of the functions lost to an impact. The replacement wetland is in-kind if it is:

(1) the same type or plant community as the impacted wetland except, for degraded wetlands, the same type or plant community that historically occurred at the impact site;

(2) the same hydrologic conditions and landscape setting as the impacted wetland; or

(3) a type that has been significantly lost in the watershed or will provide important functional benefits to the watershed as determined by the technical evaluation panel based on a review of available evidence or according to a local plan approved by the board.

Subp. 5. **Ecological suitability and sustainability.**

A. The preferred method of replacement is that which takes advantage of naturally occurring hydrogeomorphic conditions with minimal landscape alteration and is most likely to result in a wetland area that functions wholly, perpetually, and naturally. Wetland restoration is generally preferred over creation and restoration of completely impacted wetlands is generally preferred over other methods of replacement.

B. Restoration and replacement of wetlands must be accomplished according to the ecology of the landscape area. The replacement site must be ecologically suitable for providing the desired functions and compatible with adjacent land uses. A replacement plan that would result in wetland types or characteristics that do not naturally occur in the landscape area in which the replacement will occur must be denied. Replacement must not adversely affect other habitat types or ecological communities that are important in maintaining the overall biological diversity of the area.

C. Replacement projects must be located and designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. Self-sustaining refers to the sustainability of resource functions and the ability of type and location to provide the desired functions over time in a changing landscape.

D. In addition to items A through C, when determining the location, type, function, and design of replacement, applicants and local government units must consider landscape position, habitat requirements, development and habitat loss trends, sources of watershed impairment, the protection and maintenance of upland resources and riparian areas, and providing a suite of functions.

Subp. 6. **Required upland buffer.**

A. Establishment or preservation of unmanicured vegetated upland buffer areas is required adjacent and contiguous to replacement wetlands receiving credit under part 8420.XXXX, subparts 3 to 7.

B. For replacement wetlands less than two acres in size, the buffer must be a minimum average width of 25 feet. For all other replacement wetlands, the buffer must be a minimum width of 25 feet and an average width of 50 feet.

C. The applicant may request the local government unit to vary the upland buffer standards under items A and B. The local government unit may vary the standards under A and B when it is not practicable or feasible or the variance would be ecologically beneficial based on a recommendation by the technical evaluation panel.

Subp. 7. **Siting of replacement.**

A. Siting wetland replacement must follow this priority order:

(1) in the same minor watershed as the affected wetland;

(2) in the same major watershed as the affected wetland;

(3) in the same county as the affected wetland;

(4) for replacement by wetland banking, in the same wetland bank service area as the impacted wetland, except that impacts in a 50 to 80 percent area must be replaced in a 50 to 80 percent area and impacts in a less than 50 percent area must be replaced in a less than a 50 percent area;

(5) for project-specific replacement, in an adjacent major watershed to the affected wetland or, for replacement by wetland banking, in an adjacent wetland bank service area, except that impacts in a 50 to 80 percent area must be replaced in a 50 to 80 percent area and impacts in a less than 50 percent area must be replaced in a less than 50 percent area;

B. Notwithstanding item A, siting wetland replacement in greater than 80 percent areas may follow the priority order under this subitem:

(1) by wetland banking after evaluating replacement within the minor and major watersheds;

(2) replaced in an adjacent wetland bank service area if wetland bank credits are not reasonably available in the same wetland bank service area as the affected wetland, as determined by a comprehensive inventory approved by the board; or

(3) statewide; or

C. Notwithstanding item A, siting wetland replacement in the seven-county metropolitan area must follow the priority order under this subitem:

(1) in the affected county;

(2) in another of the seven metropolitan counties; or

(3) in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area.

D. Siting wetland replacement for public transportation projects must follow the requirements of 8420.XXXX, item B.

E. When reasonable, practicable, and environmentally beneficial replacement opportunities are not available in siting priorities listed in items A through D, the applicant may seek opportunities at the next level. For the purposes of this item, "reasonable, practicable, and environmentally beneficial replacement opportunities" means opportunities that are ecologically suitable according to 8420.XXXX subpart 2 and are available and capable of being done after taking into consideration cost, existing technology, and logistics consistent with overall project purposes. The cost of replacement credits alone is not sufficient reason to conclude that reasonable, practicable, or environmentally beneficial replacement opportunities are not available.

F. Regulatory agencies, local government units, and other entities involved in wetland restoration must collaborate to identify potential replacement opportunities in watersheds within their jurisdictional areas.

Subp. 8. **Timing of Replacement.**

A. Replacement of wetland function and value must be completed in advance of or concurrent with the actual wetland impact. For replacement that is not in advance, a financial assurance is required according to subpart 9.

B. Replacement is in advance if the replacement is:

(1) approved wetland bank credits withdrawn prior to impact; or

(2) project specific replacement for which construction has been certified and the first monitoring report of the first full growing season following construction certification has been submitted according to part 8420.XXXX, and the replacement meets all goals and performance standards applicable to that development stage of the replacement site.

C. Any action being proposed for replacement credit must be specifically identified for replacement purposes and approved by the local government unit as part of a replacement or banking plan prior to initiating the actual restoration or creation activity.

Subp. 9. **Financial Assurance.** For wetland replacement that is not in advance, a financial assurance acceptable to the local government unit must be submitted to, and approved by, the local government unit to ensure successful replacement. The local government unit may waive this requirement if it determines the financial assurance is not necessary to ensure successful replacement. The financial assurance may be used to cover costs of actions necessary to bring the project into compliance with the approved replacement plan specifications and monitoring requirements. The financial assurance does not serve as an in-lieu fee and is not a substitute for enforcement, but may be used for repair, construction, vegetation establishment and management, maintenance, monitoring, or other actions necessary to ensure adequate replacement. The local government unit may release a portion of the financial assurance upon successful completion of construction, but must retain a sufficient amount to ensure successful vegetative establishment and completion of monitoring requirements. Within 60-days of certification of successful replacement and completion of the monitoring requirements of part 8420.XXXX, the local government unit must release any remaining financial assurance submitted by the applicant, provided all other conditions of the approval are met.

8420.XXXX ACTIONS ELIGIBLE FOR CREDIT.

Subpart 1. **Scope.**

A. The actions in this part are eligible for replacement credit as determined by the local government unit in parts 8420.XXXX to 8420.XXXX. Sufficient information to determine eligibility and credit must be provided to the local government unit as part of a replacement or banking plan application.

B. This part identifies the amount of credit allowed for each action, however, the actual amount may be less as determined by the local government unit. When the local government unit allows less replacement credit than the maximum amounts described in this part, the local government unit must provide justification for the lower credit allocation.

C. Subparts 3 through 7 require the incorporation of upland buffers meeting the minimum requirements described in part 8420.XXXX.

D. Modification or conversion of nondegraded wetlands from one wetland type to another by damming, diking, impounding, or excavating does not constitute replacement credit. Restoration of wetlands drained or filled in violation of this chapter are not eligible for replacement credit. Wetlands impacted under an exemption may not be restored for replacement credit for ten years after the impact.

Subp. 2. **Upland buffer areas.**

A. Replacement credit may be granted for 10 percent of the buffer area for establishment or preservation of non-native vegetation and 25 percent of the buffer area for establishment or preservation of native, non-invasive vegetation. Credit may be allowed for establishing upland buffer around existing high value wetlands adjacent to the replacement wetland when the minimum widths are maintained and the maximum buffer area is not exceeded.

B. The area of buffer for which replacement credit is granted under item A cannot exceed the area of the replacement wetland.

C. For buffer areas of native, non-invasive vegetation, the local government unit may increase the amount of credit to 50% if the technical evaluation panel finds that additional buffer will improve replacement wetland sustainability and provide significant functional benefits. Buffers add to replacement wetland sustainability and provide significant functional benefits when they:

(1) extend upstream in the watershed, provide slope and soil stability, and otherwise protect and improve water quality;

(2) protect valuable native plant communities or habitats that could otherwise be lost or degraded;

(3) provide important habitat connections; or

(4) otherwise substantially improve important wetland functions based on a functional assessment and consideration of current and future adjacent land use.

Subp. 3. **Restoration of completely drained** or filled **wetland areas.** Restoration of both the natural hydrology regime and native, noninvasive vegetation on wetlands that have been completely drained or filled may receive replacement credit in an amount up to100 percent of the wetland area hydrologically and vegetatively restored. The vegetation management plan must set a goal of restoring the historic native vegetation typical of the wetland being restored, unless determined to be not ecologically feasible by the technical evaluation panel.

Subp. 4. **Restoration of partially drained** or filled **wetland areas.** Restoration of both the natural hydrology regime and native, noninvasive vegetation of wetlands that have been degraded by prior drainage, filling, or a diversion of the natural watershed may receive credit in accordance with the following:

A. any wetland area substantially degraded by partial drainage or fill that was planted with annually seeded crops, was in a crop rotation seeded to pasture grasses or legumes, or was required to be set aside to receive price supports or equivalent payments in at least ten of the last 20 years prior to the date of application may receive credit based on the percent of the time the wetland area was annually seeded, in rotation, or set aside during the 20-year period prior to application; or

B. all other wetland areas substantially degraded by partial drainage or fill may receive wetland credit of up to 50 percent of the wetland area restored.

Subp. 5. **Vegetative restoration of farmed wetlands.** Reestablishment of permanent native, noninvasive vegetative cover on farmed wetland areas that have not been affected by prior drainage or filling may receive replacement credit for:

A. up to 50% of the area restored for wetland areas that were planted with annually seeded crops, were in a crop rotation seeded to pasture grasses or legumes, or were required to be set aside to receive price supports or equivalent payments in at least ten of the last 20 years prior to the date of application for a replacement or bank plan; or

B. up to 90% of the area restored for wetland areas in bank service areas 2, 3, and 4 based on the percent of time the wetland areas were planted with annually seeded crops, were in a crop rotation seeded to pasture grasses or legumes, or were required to be set aside to receive price supports or

equivalent payments during the 20 year period prior to the date of application for a replacement or bank plan.

Subp. 6. **Protection of wetlands previously restored via conservation easements.** Replacement credit may be granted for permanently protecting wetlands previously restored or created for conservation purposes under a contract or easement, where the contract or easement has expired and gives the landowner the right to drain or fill the wetland upon termination. The area receiving credit must meet the wetland replacement standards of 8420.XXXX. Replacement credit may be granted for up to 75% of the area created or restored under the conservation contract or easement. Alternatively, credit may be allocated according to the other subparts in this part as applied prior to initiation of the contract or easement, when the applicant can document eligible credit yield to the satisfaction of the local government unit.

Subp. 7. **Wetland creations.** Wetlands created in upland areas may receive replacement credit in an amount up to 75 percent of the total wetland area created. Created wetlands that are:

A. established due to mineral extraction activities may receive replacement credit in accordance with this subpart only for those areas actively mined within 10 years prior to the application for credit; or

B. constructed as part of water quality treatment systems may receive replacement credit in accordance with this subpart only when the wetland area receiving credit is a functioning wetland designed for a maximum 24-inch rise in water level for the ten-year critical storm event. Any portions of water quality treatment systems allowed for replacement are not eligible for the exemptions in part 8420.XXXX and are subject to parts 8420.XXXX to 8420.XXXX.

Subp. 8. **Restoration and protection of exceptional natural resource value.** Replacement credit may be granted for activities that restore and protect wetlands and adjacent areas that improve or directly contribute to the function and sustainability of exceptional natural resources. For purposes of this subpart, exceptional natural resources are:

A. habitat for state listed endangered or threatened species;

B. rare native plant communities;

C. special fish and wildlife resources such as fish passage and spawning areas, colonial water bird nesting colonies, migratory waterfowl concentration areas, deer wintering areas, and wildlife travel corridors;

D. sensitive surface waters; or

E. other resources determined to be exceptional by the technical evaluation panel based on the value relative to other resources in the watershed or a board approved plan.

Restoration and protection of calcareous fens, white cedar swamps, floodplain or riparian wetlands and upland buffers, habitat corridors with other important resources, or wetlands adjacent to designated trout waters are examples of potential qualifying activities. The allocation of credit under this subpart is determined by the local government unit with concurrence of the technical evaluation panel based on the actions proposed and the resulting contribution to the value and sustainability of the exceptional resource. Areas receiving credit must be protected by a permanent conservation easement in a format provided by the board that is granted to and accepted by the state.

Subp. 9. **Preservation of wetlands owned by the state or a local unit of government.** In greater than 80 percent areas, replacement credit may be granted for up to 12.5 percent of wetland areas and adjacent buffer owned by a state or local unit of government and protected by a permanent conservation easement. The easement must be in a format provided by the board that is granted to and accepted by the board after approval of the replacement or banking plan application. Replacement credit for wetland preservation can only be granted after considering replacement as provided under subparts 3 through 8. To be eligible for credit under this subpart, the technical evaluation panel, must determine that there is a high probability the wetland will be degraded or impacted and the wetland:

A. contains or benefits an exceptional resource identified in subpart 6;

B. is of a type or function that is rare, difficult to replace, or of high value to the watershed;

C. contains a rare or declining native plant community; or

D. is of a type that is not likely to regenerate, such as northern white cedar.

Subp. 10. **Replacement Credit Conversion.** Replacement plans and banking plans approved after the effective date of this rule must determine replacement credit according to subparts 2 to 9. Public value credit that has been deposited in the state wetland bank or approved as part of a banking plan application prior to the effective date of this rule will be converted according to the following:

A. up to 100 percent replacement credit for existing public value credit derived from activities within wetlands; and

B. up to 90 percent replacement credit for existing public value credit derived from upland buffers. Previously approved public value credit must be converted according to this subpart on the effective date of this rule for deposited credits, and at the time of deposit for future deposits resulting from a previously approved banking plan.

8420.XXXX REPLACEMENT WETLAND CONSTRUCTION STANDARDS.

Subpart 1. **General requirement.** The standards and guidelines in this part must be followed in wetland creation and restoration efforts to ensure adequate replacement of wetland functions and values. In evaluating a proposed replacement or banking plan application, the local government unit must determine that the plan will adequately replace the public value of wetlands lost. If the local government unit determines that the proposed replacement is not likely to result in adequate replacement of function and public value, the local government must either require modifications necessary to obtain adequate replacement or deny the application.

Subp. 2. **Design requirements.** The standards in this subpart must be met for all replacement wetlands unless the local government unit, with concurrence of the technical evaluation panel, determines that a standard is clearly not appropriate.

A. Water control structures must be constructed using specifications provided in the Minnesota Wetland Restoration Guide or their equivalent. Control structures may be subject to the Department of Natural Resources dam safety regulations.

B. Best management practices must be established and maintained at the replacement site as necessary to protect the replacement wetland and other waterbodies. Erosion control measures must be employed during construction and until permanent ground cover is established.

C. Native, non-invasive vegetation must be established in restored and created wetlands. Each replacement or banking plan must include a vegetation establishment and management plan that specifies provisions for vegetative establishment and includes a goal of establishing plant communities that correspond to the hydrology and landscape position of the replacement site. If the replacement wetland is seeded or planted, the seed or planting stock should be from native, noninvasive species in accordance with the Minnesota Wetland Restoration Guide. In evaluating the vegetation establishment and management plan, the local government unit must determine that implementation of the plan is likely to result in the establishment of the appropriate native, non-invasive vegetation within the monitoring period. During the monitoring period, the applicant must take reasonable steps to control invasion by any nonnative or invasive species.

D. The bottom contours of created types 3, 4, and 5 wetlands must provide a variety of water depths, comparable to natural wetlands in the vicinity of the replacement, and be consistent with part 8420.XXXX, subpart X.

E. The edge of created or graded wetlands must be comparable to other naturally occurring wetlands of similar hydrologic condition and landscape position in the major watershed. Sideslopes of created wetlands, graded portions of restored wetlands, and graded buffer strips, must not be steeper than 8:1, eight feet horizontally for every one foot vertically, or flatter unless the technical evaluation panel concurs that steeper slopes are acceptable based on the surrounding landscape and the characteristics of other natural occurring wetlands in the vicinity. Sideslopes of 10:1 to 15:1 are preferred.

F. Treatment of runoff prior to discharge to replacement areas is required to improve sustainability and minimize degradation of the wetland over time. The replacement area must be physically separated from any water quality treatment system. Treatment of runoff in this part means:

(1) any part of a stormwater treatment system needed to comply with water quality treatment requirements of state or local stormwater permits or ordinances, provided the treatment system is physically separated from the replacement wetland; or

(2) when water quality treatment is not required by state or local permits or ordinances, the installation of appropriate best management practices, to the extent practicable and feasible, to protect long term wetland function.

G. For projects that contain elements that include dams, dikes, or other impoundment features, the construction plans must be designed, overseen, and certified by a registered professional engineer.

Subp. 3. **Design Considerations.** The following replacement wetland design elements must be considered for replacement wetlands and incorporated to the extent practicable and feasible:

A. Restored wetlands should emulate the hydrology and vegetation of the pre-settlement wetland condition.

B. Expanded buffers should be incorporated into the design of replacement wetlands in areas where there is a high potential for erosion and the buffer will improve slope stability, or when necessary to provide wildlife habitat corridor connections with other wetlands or habitats.

C. Measures should be taken to manage hydraulic bounce as indicated in guidance document 8420.XXXX subpart X.

D. For all restored wetlands where the original organic substrate has been stripped away, and for all created wetlands, the organic substrate must be sufficient to establish a functioning wetland and to accomplish the goals of the replacement or banking plan. When feasible, organic soil used for backfill should be salvaged from the impacted wetland for utilization in the replacement wetland. Organic soil for backfill from wetlands dominated by non-native or invasive species should be avoided.

8420.XXXX REPLACEMENT FOR PUBLIC TRANSPORTATION PROJECTS.

A. Impacts resulting from public transportation projects must be replaced according to the requirements of this chapter, except as provided for in this part.

B. Wetlands impacted by public transportation projects:

(1) outside of the seven-county metropolitan area may be replaced statewide, except that impacts in less than 50 percent areas must be replaced in less than 50 percent areas; and

(2) in the seven-county metropolitan area must be replaced in the seven-county metropolitan area or in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area.

C. A replacement plan is required for public transportation projects that involve new roads or roads expanded solely for additional traffic capacity lanes.

D. A replacement plan is not required for individual public road projects that impact wetlands for the repair, rehabilitation, reconstruction, or replacement of a currently serviceable existing state, city, county, or town public road necessary, as determined by the public road authority, to meet state or federal design or safety standards or requirements. This item only applies to authorities for public road projects that:

(1) minimize impacts associated with the project and consider replacing important site-specific wetland functions on site; and

(2) provide project specific plans and information including project locations, wetland boundaries, amount and type of wetlands impacted, demonstration of impact minimization, and any changes or addenda to the board's bank administrator, the technical evaluation panel, the commissioner of natural resources, and members of the public requesting a copy:

(a) at least 30 days prior to construction;

(b) at an annual meeting of the parties required to receive notice convened to review projects to be commenced during the upcoming year; or

(c) within 30 days of commencing minor and emergency maintenance work impacting less than 10,000 square feet.

Public road authorities that do not follow the process required in this item for a project must submit a complete replacement plan application to the local government unit and provide for replacement of impacts associated with that project according to the requirements of this chapter.

E. For impacts associated with a new public road project, or public road projects expanded solely for additional traffic capacity, public transportation authorities may purchase credits from the board at the cost to the board to establish credits. Purchase of credits under this item is allowed only when the board has determined that sufficient credits are available for sale.

F. The technical evaluation panel must review minimization and delineation decisions made by the public road authority and provide recommendations regarding on-site replacement if requested to do so by the local government unit, a contiguous landowner, or a member of the technical evaluation panel.

G. Those required to receive notice of public road projects may appeal minimization, delineation, and on-site replacement decisions made by the public road authority to the board according to part 8420.XXXX.

H. Changes to impacts proposed by local road authorities in item D must be reported to the board within six months from the date of the change being finalized.

I. Except for state public transportation projects, for which the state Department of Transportation is responsible, and public road authority projects that do not meet the requirements of item D, the board

must replace public road project impacts to wetlands and wetland areas of public waters if authorized by the commissioner or a delegated authority, that result from local government projects on existing roads.

J. Public road authorities, at their discretion, may deviate from federal and state design standards on existing road projects when practical and reasonable to avoid impacts, provided that public safety is not unreasonably compromised. The local road authority and its officers and employees are exempt from liability for any tort claim for injury to persons or property arising from travel on the highway and related to the deviation from the design standards for construction or reconstruction under this item. This item does not preclude an action for damages arising from negligence in construction or maintenance on a highway.

WETLAND BANKING

8420.XXXX PURPOSE OF WETLAND BANKING.

The purpose of parts 8420.XXXX to 8420.XXXX is to provide standards for the establishment and administration of a state wetland banking system, including individual wetland bank sites, as authorized by Minnesota Statutes, section 103G.2242. The purpose of the state wetland banking system is to provide a market-based structure that allows for replacement of unavoidable impacts with pre-established replacement wetlands. The board or board's designee is responsible for management of the bank including the recording of all bank transactions, maintaining bank records, and ensuring that the operation of the bank complies with parts 8420.XXXX to 8420.XXXX.

8420.XXXX ESTABLISHING A WETLAND BANK SITE.

Subpart. 1. **Eligibility for wetland banking.** Replacement wetland credits that result from any of the eligible actions in part 8420.XXXX, and meet the standards of part 8420.XXXX and part 8420.XXXX, may be deposited in the state wetland bank for later use in replacing unavoidable impacts. In order to be eligible for deposit in the bank, the credits must be specifically designated for wetland banking purposes prior to undertaking the replacement actions and certified by the local government unit prior to deposit. Designation of credits for wetland banking is accomplished by approval of a wetland banking plan by a local government unit. Replacement actions completed or initiated without prior local government unit approval are not eligible for deposit in the wetland bank.

Subp. 2. **Local government unit and board authority**.

A. Based on a comprehensive local water or wetland protection and management plan approved by the board, a local government unit may, by rule or ordinance, limit the establishment of bank sites within its jurisdiction. The local government unit that approves a banking plan application is responsible for certifying the credits for deposit under part 8420.XXXX, subpart 1 and for ensuring that the monitoring provisions in part 8420.XXXX are fulfilled.

B. The board may reject or modify an application for deposit if, during its review, any part of the bank application or plan is missing, incorrect, or inconsistent with this chapter.

Subp. 3. **Application procedures.** When replacement actions are proposed for banking purposes, the applicant must submit to the local government unit a banking plan application, in a form provided by the board, containing the information identified in part 8420.XXXX, item B and part 8420.XXXX, subpart 3B, and other information required by the board. The banking plan must also contain specific performance standards and a credit release schedule based upon achievement of those standards. The local government unit is responsible for ensuring that a copy of the banking plan application is sent to the administrator of the state wetland bank, to the St. Paul District Office of the United States Army Corps of Engineers, and to those required to receive a copy of an application in part 8420.XXXX. The technical evaluation panel must review the banking plan application, and may recommend changes or additions to the performance standards and credit allocation schedule. The wetland banking plan applicant must be advised of any panel recommendations. Based on the panel's findings and recommendations and other comments received, the local government unit must determine the likelihood that the replacement actions will be successful and approve, approve with modifications, or deny the banking plan application.

Subp. 4. **Combined banking and project-specific replacement.** When a banking plan applicant wishes to use a portion of the credits generated for project-specific replacement, the banking plan must identify the project-specific impact and the amount of credits to be used according to a corresponding replacement plan. The credits must meet the requirements of part 8420.XXXX and the approved replacement plan, and be deducted prior to deposit of any credits into the state wetland bank.

Subp. 5. **Conservation and access easement.** No credits may be deposited in the state wetland bank until a perpetual conservation easement, in a format provided by the board, is granted to and accepted by the state. The easement must encompass the entire replacement area, unless the local government unit and the board approve an alternate boundary at the time of bank application approval. The easement must provide for preservation of the banked wetland's functions by the fee owner and wetland banking plan applicant. The wetland banking plan applicant must also provide a title insurance policy that is acceptable to the state naming the State of Minnesota as the insured. If the conservation easement does not abut a public road, the fee owner and wetland banking plan applicant must also grant and record an access easement in favor of the board, the local government unit, and any other state, local, or federal regulatory authority that has authorized use of credits from the site for wetland replacement. The boundary of bank areas must be clearly marked as prescribed in the conservation and access easement. This subpart does not apply to state land.

Subp. 6. **Time limits for construction.** Replacement actions under an approved banking plan must be initiated within three years of banking plan approval or the banking plan must be resubmitted to the local government for consideration. Construction certification must be gained within five years of banking plan approval.

8420.XXXX CERTIFICATION AND DEPOSIT OF CREDITS.

A. To be deposited into the state wetland bank, replacement credits must be certified for deposit by the local government unit in which they are located. Certification of credits by the local government unit is requested by the banking plan applicant and may occur at any time during the monitoring period. The certification must be based on the findings and recommendation of the technical evaluation panel and must identify the area by type, area of buffer, and credits eligible for deposit. The technical evaluation panel must ensure that sufficient time has passed for the wetland to become established, especially vegetation and hydrology, before recommending certification. The area certified must be based on a land survey or comparable method of field measurement. The person making the measurement must verify in writing as to the method and accuracy of the measurement. Failure to follow the approved construction specifications or vegetation management plan is sufficient grounds for the local government unit to deny certification of credits for deposit.

B. The certification and request for deposit of credits must be in a form provided by the board and must contain the following information:

(1) name, address, and telephone number of the banking plan applicant;

(2) a complete copy of the banking plan application and local government unit approval, supporting documents, and a legal boundary survey of the land area that will be subject to restrictions (for initial deposit only);

(3) a copy of the deed for the property containing the wetland and any easement if the banking plan applicant is not the fee owner (for initial deposit only);

(4) a copy of the recorded conservation and access easement in accordance with part 8420.XXXX subpart 5;

(5) amount of replacement credit to be deposited, to the square foot, by wetland type;

(6) technical evaluation panel recommendation and local government unit certification; and

(7) other information required by the board.

C. Up to 15 percent of the credits proposed for banking are eligible for deposit in the bank immediately after certification of construction according to part 8420.XXXX and the recording of a conservation and access easement in accordance with part 8420.XXXX, subpart 5.

D. After the initial deposit, the remaining credits proposed for banking are eligible for deposit in accordance with the credit release schedule and performance standards included in the approved banking plan, subject to review by the technical evaluation panel and certification by the local government unit. If the approved banking plan does not contain a credit release schedule and associated performance standards, remaining credits will be eligible for deposit based on the findings and recommendation of the technical evaluation panel regarding the success of the proposed replacement action.

E. After certifying the credits for deposit, the local government unit must forward the signed request for deposit form to the board. No credits will be deposited until receipt of the completed and approved request to deposit form by the board. The board must acknowledge the deposit to the banking plan

applicant and local government unit and enter the information in Paragraph B, items (1) through (7) into the wetland bank.

F. If the banking plan applicant chooses not to proceed with the initial deposit, the banking plan applicant may return the site to its preconstruction condition without replacement. If credits have been deposited but none have been withdrawn, the banking plan applicant may request the board vacate the conservation and access easement at the applicant's expense. If the board vacates the conservation and access easement, the account will be closed and the site may be returned to preconstruction condition without replacement. Replacement areas wholly or partially deposited into the bank on which withdrawals have occurred or which otherwise have been used for replacement are subject to this chapter, including replacement for any subsequent impacts.

8420.XXXX MONITORING AND CORRECTIVE ACTIONS.

Subpart. 1. **Monitoring**.

A. Monitoring of wetland bank sites must conform to the monitoring requirements of part 8420.XXXX. Failure to submit the required monitoring reports or otherwise comply with monitoring requirements will prevent the deposit of credits and may result in the freezing of the bank account by the board until compliance is attained.

B. After completion of the required monitoring period the board will periodically inspect wetlands deposited into the bank at a frequency sufficient to ensure that easement conditions are being met.

Subp. 2. **Maintenance responsibilities.** The fee owner and the banking applicant, if different from the fee owner, are jointly and severally responsible for the success of the banking project in accordance with the approved banking plan, and maintaining the banking project in accordance with the conditions of the conservation easement. The banking plan applicant, if different from the fee owner, is not responsible after monitoring for maintenance if the banking plan applicant no longer owns an easement interest in the real estate or credits associated with the banked wetland.

Subp. 3. **Corrective Actions.**

A. If, during the monitoring period, the local government unit or the technical evaluation panel determines that a bank site does not meet the specifications in the approved banking plan, the local government unit must require corrective actions and notify the board's banking administrator. The board may restrict further deposits, withdrawals, and transfers of all credits associated with the bank site until the local government unit, technical evaluation panel, or the board determines that the banking project has been brought into compliance.

B. If, after the monitoring period, the board determines that wetlands deposited in the bank are not in compliance with the conditions of the conservation easement, the board must require corrective actions to the fee owner or banking plan applicant to bring the bank site into compliance with easement conditions.

C. If satisfactory remediation does not result, the local government unit or the board may undertake reconstruction work and require reimbursement of reasonable costs from the fee owner or banking plan applicant.

E. Fee owners, banking plan applicants, or account holders may appeal restrictions on credit deposits, withdrawals and transfers, or demands for reimbursement of reconstruction costs to the board.

F. Noncompliance with easement conditions or impacts to bank sites are subject to enforcement under part 8420.XXXX.

8420.XXXX WITHDRAWALS AND TRANSFERS.

Subpart. 1. **General.** Credits from the state wetland bank may be used to replace wetland impacts authorized by local government units pursuant to this chapter or by other local, state, and federal regulatory authorities provided the impacted wetland is within the state of Minnesota and the credit withdrawal procedures of this chapter are followed. No sale, withdrawal, transfer, or use of banking credits for replacement is valid until the board debits the applicable bank account. Bank credits may be used only once to replace wetland impacts. Bank accounts must maintain a positive balance. When all credits have been withdrawn or transferred, the account is closed.

Subp. 2. **Withdrawals.** Replacement plan applicants seeking to use banking credits for replacement are responsible for contacting and arranging for acquisition of the credits from the holder of a bank account in accordance with the wetland replacement requirements of this chapter. The board will supply information on wetland bank sites according to 8420.XXXX, subpart X. Replacement plan applicants

proposing the use of bank credits for replacement must complete a credit withdrawal form provided by the board and include it as part of the replacement plan application submitted to the local government unit. If the local government unit approves the use of bank credits for replacement, the local government unit must sign the credit withdrawal form and notify the board's banking administrator in accordance with 8420.XXXX subpart X. The board will not withdraw credits from a bank account unless a regulatory entity with authority over the use of the credits has approved the use of the subject credits for replacement of a specific wetland impact. Local government unit approval of replacement plans involving the use of banking credits is conditional upon withdrawal of the credits by the board. Impacts under such replacement plans must not occur until the board has notified the replacement plan applicant that the credits have been withdrawn.

Subp. 3. **Transfers**. Wetland credits deposited in the state wetland bank may be transferred from one account to another. If the recipient of the credits does not already have an account, one must be established. To transfer credits, a credit transfer form provided by the board must be completed and submitted to the board's bank administrator. The board will notify all affected account holders upon transfer of the credits.

Subp. 4. **Reporting credit transactions.** Upon the sale, use, or transfer of credits, the owner of the account must immediately report the transaction to the board's banking administrator on withdrawal or transfer forms provided by the board and include a copy of the bill of sale when applicable. The board will complete the accounting transactions and send a notice of credit withdrawal to the local government unit, the account holder, and the applicant. Failure to report the sale, use, or transfer of credit may result in restrictions on withdrawals until the account is reconciled.

8420.XXXX BANK ACCOUNT ADMINISTRATION.

Subp. 1. **Account Information.**

A. For each wetland bank site, the board will maintain at least the following information:

(1) ownership (fee owner, address, telephone number);

(2) location (public land survey coordinates, local government unit, county, major watershed and bank service area);

(3) replacement acres by amount, type and replacement action, the restoration or creation date, and bank acceptance date;

(4) withdrawals made from the bank site, including for each impact wetland, the amount and type of wetland, ownership (fee owner, address, telephone number) and location (public land survey coordinates, local government unit, county, and watershed); and

(5) the original copy of the recorded conservation and access easement for the site and a title insurance policy naming the State as an insured party.

B. The board will provide the following information to persons inquiring about available bank credits within a local government unit, county, major watershed, or bank service area:

(1) account holder name, address, telephone number, and e-mail address if available;

(2) acres or square feet of available credit by type; and

(3) location by section, township, range, county, major watershed, and bank service area.

Subp. 2. **Administrative Fees.** The board may collect administrative fees for managing bank accounts. The following fees must be paid to the board to be used for administering and monitoring the wetland bank:

A. account maintenance annual fee: one percent of the value of credits not to exceed $500 for any year the account is active;

B. account deposit or transfer: 6.5 percent of the value of credits not to exceed $1,000 per deposit or transfer; and

C. withdrawal fee: 6.5 percent of the value of credits withdrawn.

Subp. 3. **Audit.** The board may periodically inspect wetland bank records and correspondence maintained by a local government unit to determine compliance with this part.

INSPECTION AND MONITORING OF REPLACEMENT WETLANDS

8420.XXXX REPLACEMENT WETLAND CONSTRUCTION CERTIFICATION.

Subp. 1. **Purpose.** The local government unit must certify the initial construction of replacement wetlands prior to replacement wetland monitoring. The local government unit may require a preconstruction meeting prior to initiation of replacement wetland construction and may inspect the replacement wetland at any time during construction. This part applies to both wetland banking and project specific replacement.

Subp. 2. **Construction as-built documentation.** Upon completion of initial construction or restoration activities, the landowner must provide the local government unit with as-built information that documents compliance with the approved replacement plan. As-built information includes but is not limited to:

A. surveyed elevations of slopes, contours, outlets, and dikes;

B. seed tags and contractor receipts or other documentation of seeding or planting;

C. description of site preparation activities such as mulching, seedbed preparation, seeding methods, or initial weed control activities;

D. a survey map showing relevant areas of seeding and construction activities;

E. construction photos showing relevant restoration work;

F. evidence that, for projects including dams, dikes, or other impoundment features, the construction was designed, overseen, and certified by a registered professional engineer; and

G. a comparison of the as-built documentation versus the design specifications and a description and rationale for significant changes.

Subp. 3. **Construction inspection and certification.** Upon receipt of the as-built documentation from the landowner, the local government unit must inspect the replacement wetland to determine whether the as-built conditions comply with the construction specifications of the approved replacement plan. The local government unit may inspect the replacement wetland at any time during the construction and monitoring periods to assess its long-term viability. If the local government unit determines that the construction is not in compliance with the approved plan, it must promptly notify the landowner of the deficiencies and actions required to gain compliance. For projects involving the practice of engineering, the local government unit must ensure the engineer has certified the construction. When the local government unit certifies that the construction specifications have been met, the local government unit must notify the applicant and technical evaluation panel. Upon construction certification, the local government unit may release a portion of any financial assurance the applicant had provided, while retaining a sufficient amount to ensure compliance with monitoring and replacement requirements.

8420.XXXX REPLACEMENT WETLAND MONITORING.

Subpart 1. **Purpose**. The purpose of replacement wetland monitoring is to measure replacement wetland success relative to the goals of the approved replacement plan and to identify any needed corrective actions during the monitoring period.

Subpart 2. **Responsibilities.**

A. Monitoring of replacement wetlands is the responsibility of the landowner of the property where the replacement wetland is located. Any agreement to transfer the monitoring responsibilities from the landowner to a local government unit or other party must be in writing and signed by both parties, and does not release the applicant from the responsibility to provide replacement as specified in the approved replacement plan.

B. For project-specific replacement in which the wetland impact site occurs in a different local government unit from the replacement site, the local government unit for the impact site may assume the monitoring enforcement responsibility for the replacement site upon written agreement between the local government units.

Subpart 3. **Duration of Monitoring**.

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A. Monitoring may, at the discretion of the local government unit, begin upon construction certification, but must begin no later than the first full growing season following construction certification. Monitoring must continue for five full growing seasons or until the local government unit determines, with the concurrence of the technical evaluation panel, that the replacement is successful, but in no case can this determination be made prior to the end of the third full growing season.

B. If the goals of the approved plan have not been achieved after the fifth season of monitoring but, in the written opinion of the technical evaluation panel, may be achieved with more time, the local government unit may, through written notification of the applicant, extend the monitoring period for not more than an additional five growing seasons. The local government unit's notification of extension must

specify the reasons for the extension and any corrective actions necessary to bring the replacement wetland into compliance with the approved plan.

C. For project-specific replacement plans, if the local government unit determines that, at any time during the monitoring period and based on the recommendation by the technical evaluation panel, the goals of the replacement have not been achieved and will not be achieved with more time, the local government unit must pursue one or more corrective actions identified in 8420.XXXX, local government unit monitoring responsibilities.

Subpart 4. **Monitoring reports.**

A. Requirement. Following the first full growing season after construction certification, the applicant must submit annual monitoring reports documenting the progress of the replacement wetlands during the monitoring period. The first annual monitoring report must include any monitoring required by the local government unit during the previous year. The applicant must submit the annual report to the appropriate local government unit on a date determined by the local government unit, but no later than December 31. The local government unit must ensure that copies of the monitoring report are distributed to the technical evaluation panel. For wetland banking projects, the applicant must also submit the annual report to the board's wetland banking administrator. The monitoring reports must be submitted annually, or bi-annually if the local government unit determines that, after the third full growing season, bi-annual reports are sufficient for long term monitoring, until the local government unit determines the replacement has been successful.

B. Report content. The purpose of the annual report is to describe actual wetland restoration or creation activities completed during the past year, activities planned for the upcoming year, and the success of the replacement activities in achieving identified goals and performance standards. The annual report must, at minimum, include the following information:

(1) a project location map with legal description;

(2) description of replacement wetland goals and performance standards in terms of size, replacement credit amount, wetland types, hydrology, and wetland functions and a comparison of the current replacement wetland to these goals and standards;

(3) description of activities completed during the past year;

(4) description of activities planned for the upcoming year;

(5) hydrology measurements during the growing season including water level elevations at fixed, repeatable locations representative of the replacement wetland types, or areal coverage measurements of inundation for replacement wetlands with deeper hydrologic regimes;

(6) a map of plant communities within the boundaries of the replacement site, including estimates of square footage or acreage of each and identification of areas of invasive or non-native vegetation;

(7) color photographs of all replacement areas taken during the growing season from fixed, repeatable reference locations that are representative of each plant community type;

(8) delineation and survey of the replacement wetland areas, if applicable, for the final monitoring season; and

(9) other information specified in the approved monitoring plan or subsequently requested by the local government unit;

8420.XXXX LOCAL GOVERNMENT UNIT MONITORING RESPONSIBILITIES.

Subpart 1. **Monitoring Oversight.**

A. The local government unit must evaluate all monitoring reports for compliance with report requirements and must determine if the goals of the approved plan can be met within the specified monitoring period based on the current condition of the replacement wetland and the applicant's proposed management activities for the following growing season.

B. For project-specific replacement, if the local government unit determines that the goals of the approved replacement plan will not be met, it must take one or more of the following actions:

(1) order specific corrective actions on the replacement wetlands;

(2) order the applicant to prepare and implement a new or revised replacement plan;

(3) request the enforcement authority to issue a cease and desist order on the wetland impact activity if it has not been completed;

(4) request the local soil and water conservation district and enforcement authority to order restoration of the impacted wetland;

(5) utilize any financial assurance collected from the applicant to replace the lost wetland function and value;

(6) pursue a district court order requiring the applicant to fulfill the replacement plan; or

(7) other actions that the local government unit determines necessary to achieve the goals of the replacement plan.

C. If the applicant fails to submit the annual report associated with a project-specific replacement plan in accordance with 8420.XXXX subpart 4, the local government unit responsible for monitoring oversight must either pursue enforcement actions in item B or prepare the annual report for the applicant. The local government unit may charge fees for preparing the report or utilize any financial assurance the applicant had provided to complete monitoring requirements.

Subpart 2. **Certification of successful replacement and completion of monitoring.** Upon completion of the minimum monitoring period, the applicant may request a field review by the local government unit and technical evaluation panel to evaluate the success of the replacement wetland. If the replacement is determined successful, the local government unit must provide written notification to the applicant that the replacement has been certified and the monitoring requirements have been fulfilled.

WETLAND PLANNING

8420.XXXX LOCAL COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLANS.

Subpart 1. **Purpose and eligibility.**

A. As an alternative to the rules adopted under Minnesota Statutes, section 103G.2242, subdivision 1, and the public value criteria established or approved under Minnesota Statutes, section 103B.3355, a comprehensive wetland protection and management plan may be developed by a local government unit, or one or more local government units operating under a joint powers agreement, provided that the requirements of this part are met. This part provides minimum standards. Local government units must require equivalent or greater standards and procedures for wetland conservation, but not less.

B. The ultimate goal of a plan is to maintain and improve the quality, quantity, and biological diversity of wetland resources within watersheds through the prioritization of existing wetlands and the strategic selection of replacement sites. The purpose of developing a plan is to provide a watershed and ecosystem based framework to make wetland impact and replacement decisions that meet state standards and locally identified goals, and that support the sustainability or improvement of wetland resources in watersheds while providing local flexibility as allowed under subpart 4.

C. Any local government unit opting to pursue development of a plan and incorporating this chapter into local ordinance must provide documentation to the board demonstrating local capacity to implement the plan.

Subp. 2. **Relationship to other plans.** To maximize effectiveness, the comprehensive wetland protection and management plan should be developed as part of, or in coordination with, other relevant local or regional plans and requirements. The plan should provide a mechanism for integrating local land use decisions with wetland ecosystem management goals at the watershed level.

Subp. 3. **Plan area.** To the extent practical and feasible, the plan should be based on watershed boundaries. The size of watershed addressed should not be larger than is appropriate to ensure that the wetland resources provided through replacement will effectively compensate for approved impacts. For local governments with multiple watersheds, a separate analysis should be completed for each watershed substantially within the local government's jurisdiction. Local governments should consider joint planning efforts for those watersheds that cross political boundaries.

Subp. 4. **Flexibility options under a local plan.** The comprehensive wetland protection and management component of the local water plan may:

A. vary application of the sequencing standards in part 8420.XXXX, for projects based on the classification and criteria set forth in the plan;

B. vary the replacement standards of part 8420.XXXX, based on the classification and criteria set forth in the plan provided there is no net loss of public value within the area subject to the plan, and so long as:

(1) in a 50 to 80 percent area, a minimum acreage requirement of one acre of replaced wetland for each acre of impacted wetland requiring replacement is met within the area subject to the plan; and

(2) in a less than 50 percent area, a minimum acreage requirement of two acres of replaced wetland for each acre of impacted wetland requiring replacement is met within the area subject to the plan;

C. in a greater than 80 percent area, allow replacement credit, based on the classification and criteria set forth in the plan, for any project that increases the public value of wetlands, including activities on adjacent upland acres;

D. in a greater than 80 percent area, based on the classification and criteria set forth in the plan, expand the application of the exemptions in part 8420.XXXX, subpart 2, item B, to also include nonagricultural land, provided there is no net loss of wetland value;

E. prescribe standards for size and location of replacement wetlands by establishing type requirements, size/ratio requirements, functional quality requirements, location requirements, and criteria for wetland mitigation fee in lieu of direct replacement. Requirements for replacement must have a direct relationship with wetland classification as defined in the plan and must result in no net loss of wetland quantity, quality, and biological diversity over the life of the plan; and

F. allow exemptions based on ordinance standards, eligibility criteria, and processes that are not less restrictive than the requirements in parts 8420.XXXX, 8420.XXXX, and 8420.XXXX based on wetland classifications as defined in the plan.

Subp. 5. **Plan content.**

A. Assessment of existing conditions and determination of watershed goals. The plan must be based on an analysis of the ecological conditions of the plan area and the development of corresponding goals for maintaining and improving those conditions. The ecological condition of the plan area should be based on inventories of historic and existing wetland resources, including identification of degraded wetlands, existing high quality wetlands, and immediate and long-term resource needs within the plan area. This analysis may be completed as part of the comprehensive wetland protection and management plan, or adopted from a relevant local or regional water plan if one exists.

B. Classification of existing wetlands. The plan may provide for the classification of wetlands in the plan area based on:

(1) an inventory of wetlands in the plan area;

(2) an assessment of the wetland functions listed in part 8420.XXXX, using a methodology chosen by the technical evaluation panel and based on one of the methodologies established or approved by the board;

(3) landscape position, adjacent habitats or buffers, connectivity with or between important resources, projected land use, and other watershed-scale criteria; and

(4) the resulting public value.

C. Inventory and prioritization of replacement sites. The plan must include an analysis of the types and locations of replacement projects that will provide the desired wetland functions, benefit the watershed from a landscape perspective, and best offset losses of public value caused by approved impacts. The goal of this analysis is to provide a framework from which replacement actions and locations will provide the greatest value to the public based on the ecological needs of the watershed. Priority should be given to naturally self-sustaining replacement that best achieves watershed goals and improves the ecological condition of the watershed. The plan must include strategies for the promotion and establishment of high priority replacement sites that best meet the goals of the plan.

D. High priority areas. Comprehensive wetland protection and management plans developed as part of county, watershed district, or watershed management organization plans may identify those areas that qualify as high priority areas for wetland preservation, enhancement, restoration, and establishment according to part 8420.XXXX.

E. Assessing plan effectiveness. The plan must include a provision for periodic assessment of the effectiveness of the plan, and the local government unit's implementation of it, in achieving plan goals. Updates to previously approved plans must include an analysis of the effectiveness of the previous plan, including the identification of barriers to achieving identified goals and the development of strategies to overcome them.

F. Effective date and expiration. The plan must specify the period covered by the plan, which must extend at least five years but no more than ten years from the date the board approves the plan.

Subp. 6. **Plan development and review process.**

A. A notice of intent to plan must be sent, at the beginning of the planning process, to the technical evaluation panel, the Department of Natural Resources, the Department of Agriculture, the Pollution

Control Agency, watershed management organizations within the plan area, local government units within and adjacent to the plan area, and the United States Army Corps of Engineers with an invitation to actively participate in the development of the plan. The notice should also include a general description of the planning effort, the planning area, and an anticipated timeline.

B. The technical evaluation panel must be consulted in all components of plan and ordinance development including, but not limited to, conducting wetland functional assessments, establishing wetland management classifications, prioritizing replacement sites, and identifying local reference standard wetlands.

C. The local government unit must implement a process for notifying and involving local citizens in the development of the plan and the determination of local value. Local citizen involvement can include the formation of a citizen's advisory committee or utilization of other existing citizen groups.

D. Upon completion, the local government unit must submit the draft plan and ordinance for a 60-day review and comment period to those required to receive notice in item A. The local government unit must respond in writing to any comments received during the review period within 30 days of the end of the review period.

E. The local government unit must conduct a public hearing on the plan no sooner than 30 days after the end of the 60-day review period but before submittal of the final draft plan to the board for approval.

F. After conducting the public hearing but before final adoption, the local government unit must submit the plan and ordinance, all written comments received, a record of the public hearing, and a summary of responses to comments and changes incorporated as a result of the review process to the board for review under subpart 7.

G. An organization that is invited to participate in the development of the draft local plan, but declines to do so or fails to participate or to provide written comments during the local review process, waives the right during the review under item D to submit comments, except comments concerning consistency of the plan with laws and rules administered by that agency. In determining the merit of an agency comment, the board must consider the involvement of the agency in the development of the local plan.

H. Except as otherwise provided for in this part, all other requirements relating to development of the plan must be consistent with the local water plan processes under Minnesota Statutes, section 103B.231, 103B.311, or 103D.401. A plan developed as part of a local water management plan may follow the review and approval process applicable to the local water management plan instead of items D, E, and F.

Subp. 7. **Board decision; mediation; judicial review.**

A. The board must make a decision to approve or disapprove a plan within 60 days of receipt of a complete and final draft of the plan and ordinance as required in subpart 6F. The board may disapprove all or parts of the plan if the board determines it does not meet the requirements of this part. If the board has not made a decision within 60 days of receipt of the final plan, the plan is deemed approved. The 60 day period may be extended upon mutual agreement of the board and the local government unit.

B. In its review of a plan, the board must advise the local government unit of those elements of the plan that are more restrictive than this chapter and the act.

C. If the board disagrees with the plan or any elements of the plan, the board must, in writing, notify the local government unit of the plan deficiencies and suggested changes. The board must include in the response to the local government unit the scientific justification, if applicable, for the board's concerns with the plan. Upon receipt of the board's concerns with the plan, the local government unit has 60 days to revise the plan and resubmit the plan to the board for reconsideration, or the local government unit may request a hearing before the board. The board must hold a hearing within the boundaries of the jurisdiction of the local government within 60 days of the request for hearing. After the hearing, the board must, within 60 days, prepare a report of its decision and inform the local government unit.

D. If, after the hearing, the board and local government unit disagree on the plan, the board must, within 60 days, initiate mediation through a neutral party. If the board and local government unit agree in writing not to use mediation or the mediation does not result in a resolution of the differences between the parties, then the board may commence a declaratory judgment action in the district court of the county where the local government unit is located. If the board does not commence a declaratory judgment action within the applicable 60-day period, the plan is deemed approved.

E. The declaratory judgment action must be commenced within 60 days after the date of the written agreement not to use mediation or 60 days after conclusion of the mediation. If the board commences a declaratory judgment action, the district court must review the board's record of decision and the record of decision of the local government unit. The district court must affirm the plan if it meets the requirements of this part.

Subp. 8. **Effective date and amendments.**

A. The plan becomes effective after approval by the board as provided in subpart 7 and after adoption of the plan into the official controls of the local government unit.

B. Comprehensive wetland protection and management plans remain in effect according to subpart 5F, unless revised according to subpart 6 and approved by the board. Plans that contain revision dates inconsistent with this part must comply with that date provided it is not more than 10 years beyond the date of board approval. An extension of the revision date of the plan may be granted by the board.

C. All amendments to the adopted plan and ordinance become effective upon completion of the same process required for the original plan, except when the proposed amendments constitute minor amendments and:

(1) a public hearing has been held to explain the amendments;

(2) the local government unit has sent copies of the amendments to those required to receive notice in subpart 6; and

(3) the board has either agreed that the amendments are minor or failed to act within 60 days of receipt of the amendments.

D. For the purposes of this subpart, minor amendments include clarifications, updates to wetland or replacement site inventories, and other changes that do not substantially alter the standards of the approved plan and ordinance, as determined by the board. Amendments required to bring the plan into conformance with revisions to this chapter may also be considered minor.

Subp. 9. **Implementation.**

A. The plan must be implemented by ordinance as part of the local government unit's official controls under Minnesota Statutes, chapter 394, for a county; Minnesota Statutes, chapter 462, for a city; Minnesota Statutes, chapter 366, for a town; and by rules adopted under Minnesota Statutes, chapter 103D, for a watershed district; and Minnesota Statutes, chapter 103B, for a watershed management organization.

B. After board approval and local government adoption, decisions made in implementing this chapter and the act must be made according to the plan and ordinance.

C. Noticing, appeals, and all other administrative processes under a local plan must follow the requirements of this chapter.

Subp. 10. **Reporting.** In addition to, and as part of, the reporting requirements of part 8420.XXXX, a local government unit with an approved and adopted comprehensive wetland management plan must annually provide information to the board regarding activities that vary from this chapter, this part notwithstanding, and documenting compliance with the minimum plan standards required in subpart X. Failure to provide this information on an annual basis may subject the local government unit to penalties under part 8420.XXXX.

8420.XXXX HIGH PRIORITY REGIONS AND AREAS.

Subpart 1. **High priority regions.** Parts of the state that are high priority regions for preservation, enhancement, restoration, and establishment of wetlands include all major watersheds with a majority of their land area contained within counties that have lost 50 percent or more of their presettlement wetland base, which are those listed in part 8420.XXXX. In all other major watersheds of the state, high priority regions are high priority areas approved as such by the board according to subpart 2.

Subp. 2. **High priority areas.**

A. Planning context. Water management plans prepared by water management organizations in the metropolitan area under Minnesota Statutes, section 103B.231, by counties outside the metropolitan area under Minnesota Statutes, section 103B.311, and by watershed districts outside the metropolitan area under Minnesota Statutes, sections 103D.401 and 103D.405, may identify those areas that qualify as high priority areas for wetland preservation, enhancement, restoration, and establishment. In order to designate a high priority area, the preservation, enhancement, restoration, and establishment of wetlands must have or achieve high public value based on the functions of wetlands listed in part 8420.XXXX and the goals of the water management plan.

B. Priority watersheds. High priority areas should be designated by minor or sub-watershed. Strong consideration should be given to identifying as high priority areas minor watersheds having less than 50 percent of their original wetland acreages and where restoration of previously impacted or degraded wetlands will contribute towards achieving watershed-based goals. Consideration should also be given to watersheds that contain high valued wetlands that are at risk of degradation or loss and whose protection is integral to maintaining the ecology and condition of the watershed. Identification of high priority watersheds should be consistent with 8420.XXXX subpart 5.

C. Priority wetlands. Water management plans may identify individual wetlands, or criteria to establish individual wetlands, as high priority areas. Individual wetlands identified as high priority areas should be of high local value, at risk of degradation or loss, and consistent with any existing wetland classification criteria established under part 8420.XXXX subpart 5B. Plans may also identify individual sites as high priority areas for wetland restoration and establishment. High priority restoration sites should be identified according to the criteria in part 8420.XXX subpart 5C.

D. Wetland Preservation Area Criteria. Water management plans that identify high priority areas and intend to accept applications for wetland preservation areas under part 8420.XXXX should include criteria for eligibility and prioritization of applications.

E. Board review and approval. The board will review the inclusion of high priority areas in plans as part of the standard process for plan review. High priority areas approved by the board that are not in a high priority region listed in subpart 1 become high priority regions with board approval.

8420.XXXX WETLAND PRESERVATION AREAS.

Subpart 1. **Purpose and eligibility.** The purpose of this part is to provide local governments with a tool to promote the preservation of high valued wetlands and the restoration and enhancement of wetland areas that will contribute towards meeting watershed-based goals identified in a local water management plan. Wetlands located in high priority areas as identified in part 8420.XXXX and a local water plan are eligible for enrollment as wetland preservation areas. A wetland so enrolled is exempt from property tax. Sites identified as high priority areas for wetland restoration and establishment are only eligible for wetland preservation area designation after restoration of the wetland. Wetland areas receiving replacement credit are not eligible for designation as a wetland preservation area.

Subp. 2. **Landowner application for wetland preservation area.** A landowner may apply to the county or watershed district, if the county or watershed district chooses to accept wetland preservation areas, for designation of a wetland as a wetland preservation area on forms provided by the board. The applicant must include a buffer strip that meets the requirements of part 8420.XXXX subpart X around the perimeter of the wetland. The applicant may include up to four acres of upland for each acre of wetland. The application must be accompanied by a restrictive covenant on a form provided by the board. The covenant will contain the same limitations on use that are provided in Minnesota Statutes, section 103F.515, subdivision 4, including a covenant that the enrolled upland area will be vegetated by the landowner to permanent vegetation other than noxious weeds. The covenant must be signed, acknowledged, and ready for recording.

Subp. 3. **County or watershed district review of application.** Upon receipt of a complete application, the county or watershed district must send a copy of the application to the county assessor, the board, and the soil and water conservation district where the land is located. The soil and water conservation district must prepare an advisory statement of existing and potential preservation problems or conflicts and send the statement to the owner of record and to the county or watershed district. The county or watershed district may accept the application if the wetland is in a high priority region and high priority area, if it includes the required buffer and is accompanied by the proper covenant. The county or watershed district may limit or reject additional upland proposed to be included according to criteria identified in the approved plan and standards the county may establish. The county or watershed district may reject the application if the application does not qualify, or require modification and resubmittal of the application. If the application qualifies, the county or watershed district may approve it and mark the date of approval on the application. The county or watershed district must notify the landowner of the acceptance or denial of the application within 60 days from the date of the application. Within five business days of approval of the application, the county or watershed district must forward it to the county recorder for recording of the restrictive covenant or memorialization of the application on the certificate of title. The county or watershed district must also send a copy of the approved application to the county assessor for entry in the assessor's records as a wetland preservation area. The county or watershed

district must also send copies of the approved application to the soil and water conservation district, the local government unit, and the board.

Subp. 4. **Applicable statutes.** In addition to this chapter, wetland preservation areas are subject to Minnesota Statutes, sections 103F.612 to 103F.616, and the property tax provisions of Minnesota Statutes, section 272.02, subdivision 11.

Subp. 5. **Commencement of wetland preservation area.** The wetland is a wetland preservation area commencing 30 days from the date the county notifies the landowner of acceptance of the application under subpart 3.

Subp. 6. **Fee.** The county or watershed district may require an application fee to defray administrative costs of the program.

Subp. 7. **Maps.** Counties having approved wetland preservation areas within their legal boundaries must maintain maps illustrating land covenanted as wetland preservation areas.

Subp. 8. **Reimbursement of unpaid taxes.** A county or watershed district with an approved wetland preservation area will be reimbursed for lost tax revenue according to Minnesota Statutes, section 275.295.

APPEALS, COMPENSATION, AND ENFORCEMENT

8420.XXXX APPEALS.

Subpart 1. **Appeals of replacement and restoration orders to the board.** A landowner or responsible party may appeal the terms and conditions of a restoration or replacement order issued pursuant to part 8420.XXXX to the board's executive director within 30 days of receipt of written notice by filing a written request for review and paying a nonrefundable filing fee to the board. The filing fee is $200, or an amount otherwise determined by the board not to exceed $1,000. If the written request is not submitted within 30 days, the restoration or replacement order becomes final. The executive director must review the request and supporting evidence and render a decision within 60 days of the request for review. The executive director may stay the restoration or replacement order until the appeal is resolved.

Subp. 2. **Appeal of local government unit staff decisions.** A decision made by staff becomes final if not appealed to the local government unit within 30 days after the date on which the decision is sent to those required to receive notice of the decision. Notwithstanding the time frames of Minnesota Statutes, section 15.99, or any other law to the contrary, the local government unit must make a ruling within 30 days from the date of the filing of the appeal, unless the appellant and local government unit mutually agree, in writing, to an extension of time beyond the 30 days. Appeal of a final decision made by staff may be made by the landowner, by any of those required to receive notice of the decision, or by 100 residents of the county in which a majority of the wetland is located. An appeal is effective upon mailing of a petition and payment of any applicable fees to the local government unit. A filing fee is not required for appeals petitioned by state agencies or members of the technical evaluation panel.

Subpart 3. **Appeal of local government unit decisions to the board.** The decision of a local government unit to approve, approve with conditions, or deny an application becomes final if not appealed to the board within 30 days after the date on which the decision is sent to those required to receive notice of the decision. Appeals of decisions made by local government staff must be made to the local government unit as provided for in subpart 2. This subpart also applies to decisions made under comprehensive wetland protection and management plans.

Appeal may be made by the landowner, by any of those required to receive notice of the decision, or by 100 residents of the county in which a majority of the wetland is located.

Appeal is effective upon mailing of a petition and payment of a nonrefundable filing fee of $200, or an amount otherwise determined by the board not to exceed $1,000, to the board with evidence that a copy of the petition has been mailed to the local government unit. The petition should include information to establish sufficient grounds for the appeal. The filing fee is not required for appeals petitioned by state agencies or members of the technical evaluation panel. Another filing fee is not required for appeals that have been remanded if the filing fee was paid and the same party appeals the new decision made under remand. Subsequent to receipt of a petition, the local government unit must send a copy of the petition to all those to whom it was required to send a notice of the decision.

Subp. 4. **Board appeal procedures.** Within 30 days after receiving the petition, the board or its dispute resolution committee or executive director must decide whether to grant the petition and hear the

appeal. After considering the size of the proposed impacts and the quality of the affected wetland, any patterns of similar acts by the petitioner or the local government unit in administration of this chapter and the act, and the consequences of the delay resulting from the appeal, the board, its dispute resolution committee, or its executive director will grant the petition unless the appeal is without sufficient merit, trivial, or brought solely for the purposes of delay; the petitioner has not exhausted all local administrative remedies; or the petitioner has not submitted the required filing fee.

The board, its dispute resolution committee, or its executive director may stay the local government unit decision until the appeal is resolved.

The board, its dispute resolution committee, or its executive director may remand the appealed decision back to the local government unit if the petitioner has not exhausted all local administrative remedies such as a local government unit evidentiary public hearing, if expanded technical review is needed, or if the local government unit's record is not adequate. If an appeal is remanded, a new application is not required and additional information may be submitted before a decision is made by the local government unit. The local government unit must make a decision on an appeal that has been remanded within 60 days unless the remand order, or a subsequent order, specifies a longer period. After granting the petition, the appeal must be heard by the dispute resolution committee and decided by the board within 60 days after the filing of the local government unit's written record, submittal of the written briefs for the appeal, and the hearing by the dispute resolution committee. Parties to the appeal are the appellant, the landowner, the local government unit, and those required to receive notice of the local government unit decision.

The board or its executive director may elect to combine related appeals and process as one decision, either multiple appeals on the same project or appeals of different local government unit decisions on the same project.

Within 30 days of the granting of an appeal, unless an extension of time is approved by the board, the local government unit must forward to the board the written record on which it based its decision. The board will forward one copy of the record to each of the parties to the appeal. The board will make its decision on the appeal after hearing. Thirty days' notice of the hearing will be given by the board to the parties. The board will base its review on the record and the argument presented to the board by the parties. However, if the local government unit did not consider fundamental information, such as aerial photographs, soils maps, or wetland maps, or did not make formal findings contemporaneously with its decision, if there is not accurate verbatim transcript of the proceedings, if the proceedings were not fairly conducted, or if the record is otherwise incomplete or deficient, the board may remand the matter or receive additional evidence. If, before the date set for the hearing, application is made to the board for leave to present additional evidence on the issues in the case, and it is shown to the satisfaction of the board that additional evidence is material and that there were good reasons for failure to present it in the proceeding before the local government unit, the board may order that the additional evidence be taken before the local government unit upon such conditions that the board deems proper. The local government unit may modify its findings and decision by reason of the additional evidence and must file with the board, to become a part of the record, the additional evidence, together with any modifications or new findings or decision.

The board will affirm the local government unit's decision if the local government unit's findings of fact are not clearly erroneous; if the local government unit correctly applied the law to the facts, including this chapter; and if the local government unit made no procedural errors prejudicial to a party. Otherwise, the board will reverse the decision, amend it, or remand it with instructions for further proceedings. The board will provide notice of its decision to the parties to the appeal.

Subp. 5. **Appeal of board decisions.** An appeal of a board decision is taken to the state court of appeals and must be considered an appeal from a contested case decision for purposes of judicial review under Minnesota Statutes, sections 14.63 to 14.69.

8420.XXXX COMPENSATION CLAIMS AGAINST LOCAL GOVERNMENT UNITS.

Subpart 1. **Intervention.** At the request of a local government unit against which a compensation action is brought based at least in part on the local government unit's application of Minnesota Statutes, section 103G.222, 103G.2241, 103G.2242, 103G.237, or 103G.2372, or rules adopted by the board to implement these sections, the state, through the attorney general, must intervene in the action on behalf of the local government unit and will thereafter be considered a defendant in the action. A local government unit making a request under this subpart must provide the attorney general with a copy of the

complaint as soon as possible after being served. If requested by the attorney general, the court must grant additional time to file an answer equal to the time between service of the complaint on the local government unit and receipt of the complaint by the attorney general.

Subp. 2. **Liability of state for certain costs.** The state is liable for costs, damages, fees, and compensation awarded in the action based on the local government unit's adoption or implementation of standards that are required by state law, as determined by the court. The local government unit is liable for costs, damages, fees, and compensation awarded in the action based on local standards that are more restrictive than state law and rules.

Subp. 3. **Definition.** For purposes of this part, "compensation action" means an action in which the plaintiff seeks compensation for taking private property under the state or federal constitution.

8420.XXXX COMPENSATION TO LANDOWNERS.

Replacement plan applicants who have completed the local government unit process and the board appeal process, and the replacement plan has not been approved as submitted, may apply to the board for compensation under Minnesota Statutes, section 103G.237.

The application must identify the applicant, locate the wetland, and refer the board to its appeal file in the matter. The application must include an agreement that, in exchange for compensation, the applicant will convey to the state a perpetual conservation easement in the form required by Minnesota Statutes, section 103F.516. The applicant must provide an abstract of title demonstrating the ability to convey the easement free of any prior title, lien, or encumbrance. Failure to provide marketable title negates the state's obligation to compensate. The applicant must submit official documentation from the United States Army Corps of Engineers, the Minnesota Pollution Control Agency, the watershed district or water management organization if any, the county, and the town or city, as applicable, that the proposed impact and the proposed subsequent use of the wetland are lawful under their respective legal requirements. The landowner must demonstrate that the proposed impact is a feasible and prudent project and that the replacement plan as proposed is a reasonable good faith effort to fulfill the replacement requirements of parts 8420.0500 to 8420.0630 and the act.

If the replacement plan was approved, but with conditions or modifications, the applicant must show that the conditions or modifications make the replacement unworkable or not feasible. A plan is unworkable or not feasible if the replacement must be on land that the applicant does not own, the applicant has made good faith efforts to acquire a replacement site and not succeeded, and there is not a qualifying replacement available in a wetland bank. A plan is also unworkable or not feasible if it is not possible to carry out for engineering reasons. The applicant must show that not going ahead with the proposed project will cause the applicant damages and that disallowing the proposed use will enhance the public values of the wetland.

The applicant must submit the requirements in this part in writing, by certified mail, to the board. If the applicant wants to make oral argument to the board, it must be indicated as part of the application. The board may require that the applicant appear before the board. If the board finds that the applicant has submitted a complete application and proved the requirements in this part, the board must compensate the applicant as required by law within 90 days after the board received a completed application, provided that within the same time period the applicant must convey to the board a conservation easement in the form required by Minnesota Statutes, section 103F.516. If the board does not provide the required compensation in exchange for the conservation easement, the applicant may impact the wetland in the manner proposed, without replacement.

8420.XXXX ENFORCEMENT PROCEDURES.

Subpart 1. **Enforcement authorities.** The commissioner, conservation officers, and other peace officers may issue cease and desist orders and restoration and replacement orders.

Subp. 2. **Cease and desist orders.**

A. Cease and desist orders may be issued when the enforcement authority has probable cause that an activity is being or has been conducted that impacts a wetland and does not qualify for an exemption or a no-loss under parts 8420.XXXX and 8420.XXXX and is being or has been conducted without prior approval by a local government unit under part 8420.XXXX or involving a decision stayed by the board pursuant to part 8420.XXXX. A cease and desist order must not be issued if the landowner has, and is complying with, a valid replacement plan, exemption, or no-loss approved by the local government unit, or a completed and submitted public road project notification that has not been stayed, remanded, or

reversed on appeal under provisions of part 8420.XXXX, or has sufficient evidence to support qualification for an exemption or no-loss. The enforcement authority issuing a cease and desist order must submit copies to the soil and water conservation district, local government unit, and Department of Natural Resources.

B. The enforcement authority must advise the landowner that the landowner's written application, if any, for an replacement plan, exemption, or no-loss should be made immediately to the local government unit and that any wetland that has been impacted may require restoration if the application for replacement plan, exemption, or no-loss is denied or reversed on appeal.

C. If an application for a replacement plan, exemption, or no-loss approval is triggered by a cease and desist order, the local government unit must make the decision in accordance with parts 8420.XXXX to 8420.XXXX. If the decision is that the activity is exempt or qualifies for a no loss, the decision maker must request that the enforcement authority rescind the cease and desist order, pending the outcome of any appeal, and notify the soil and water conservation district, the enforcement authority, and the landowner. If the application is denied, the decision-maker must immediately notify the soil and water conservation district, the enforcement authority, and the landowner.

D. In cases where the cease and desist order has been issued to a local government unit, the decision of exemption or no-loss must be made by the board.

Subp. 3. **Restoration and replacement orders.** The enforcement authority must issue a restoration order or replacement order when:

A. the impact has already been completed when discovered, or after a cease and desist order has been issued and the landowner does not apply for an replacement plan, exemption, or no-loss within three weeks;

B. the local government unit grants the application but it is reversed on appeal; or

C. the local government unit denies the application.

Promptly upon being informed by the enforcement authority or the local government unit of the need, the soil and water conservation district staff person must inspect the site and prepare a plan in consultation with the local government unit and the enforcement authority for restoring the site to its prealtered condition. The soil and water conservation district may request assistance from the local government unit in inspecting the site and preparing the plan. Restoration must be ordered unless the technical evaluation panel concludes that restoration is not possible or prudent. The soil and water conservation district must incorporate its plan into a restoration or replacement order and send it to the enforcement authority for service in person or by certified mail to the landowner or responsible party.

Subp. 4. **Contents of order.**

A. A restoration order must specify dates by which the landowner or responsible party must either:

(1) restore the wetland according to the soil and water conservation district plan and obtain a certificate of satisfactory restoration from the soil and water conservation district; or

(2) submit a complete replacement plan, exemption, or no loss application to the local government unit.

If an application is submitted and subsequently denied, the landowner or responsible party must restore the wetland as specified in the order. The restoration order must be rescinded if the landowner or responsible party obtains approval of an after-the-fact replacement plan, exemption, or no-loss from the local government unit that is not reversed on appeal. A replacement order must specify a date by which the landowner or responsible party must submit a complete replacement plan application to the local government unit and a subsequent date by which the landowner or responsible party must replace the wetland according to the approved replacement plan and obtain a certificate of satisfactory replacement from the soil and water conservation district. The restoration or replacement order must specify a time period of at least 30 days for submittal of a complete application under this subpart.

B. A certificate of satisfactory restoration or replacement may be issued with conditions that must be met in the future, such as but not limited to, issues with wetland vegetation, weed control, inspections, monitoring, or hydrology. Failure to fully comply with any conditions that have been specified may result in the issuance of a new restoration or replacement order.

C. Failure to submit a complete application within the time period specified in the restoration order, or as properly extended, will result in the landowner or responsible party having to comply with the order before an application under this chapter may be submitted, unless the local government unit and the enforcement authority agree otherwise or unless allowed under appeal.

Subp. 5. **Enforcement authority orders.** If the technical evaluation panel determines that restoration will not restore all the loss caused by the impact, the order may require a combination of restoration and replacement, or replacement rather than restoration. The order must direct the landowner or responsible party to obtain replacement plan approval from the local government unit. The order must specify that if replacement plan approval is not obtained, the landowner or responsible party must restore the wetland as ordered. Each cease and desist, restoration, and replacement order must state that violation of the order is a misdemeanor. If, as part of a misdemeanor proceeding, the court orders restoration or replacement, the technical evaluation panel, must determine which is appropriate, and if it is restoration, the method of restoration. If the court orders replacement, the landowner or responsible party must follow the replacement plan process in subpart 6 and parts 8420.XXXX to 8420.XXXX.

Subp. 6. **After-the-fact replacement.** If a landowner or responsible party seeks approval of a replacement plan after the proposed project has already impacted the wetland or if sufficient replacement has not been provided under an approved replacement plan, the local government unit must require the landowner or responsible party to replace the impacted wetland at a ratio twice the replacement ratio otherwise required, unless the local government unit and enforcement authority concur that an increased ratio is not required.

Subp. 7. **Misdemeanor.** A violation of an order issued under this part is a misdemeanor and must be prosecuted by the county attorney where the wetland is located or the illegal activity occurred.

ACTIVITIES UNDER DEPARTMENT OF NATURAL RESOURCES AUTHORITY

8420.XXXX MINING.

Wetlands must not be impacted as part of a project for which a permit to mine is required by Minnesota Statutes, section 93.481, except as approved by the commissioner. Impacts to wetlands created by pits, stockpiles, or tailing basins by actions whose purpose was not to create the wetland are exempt under part 8420.XXXX.

A. For new mining operations that are permitted and initiated after July 1, 1993:

(1) mining must not be conducted without first receiving a permit to mine issued under chapter 6130 for iron ore and taconite or chapter 6132 for nonferrous metallic minerals; and

(2) the mining and reclamation operating plans or annual reports submitted by the applicant as required in the permit to mine must include an approved wetland replacement plan that meets the same principles and standards for replacing wetlands under parts 8420.XXXX to 8420.XXXX.

B. For mining operations in existence before July 1, 1993, and operated on or after that date under a permit to mine issued under chapter 6130 for iron ore and taconite or chapter 6132 for nonferrous metallic minerals:

(1) wetlands for which impacts were approved but not initiated before July 1, 1993 must not be impacted until the operating plan or annual report as required in the permit to mine includes an approved wetland replacement plan for the undisturbed wetlands. The wetland replacement plan must meet the same principles and standards for replacing wetlands under parts 8420.XXXX to 8420.XXXX;

(2) for filling activities that were approved and initiated before July 1, 1993, the placement of fill atop a stockpile, roadway, or other mining-related facility that occupies a wetland filled before July 1, 1993, will be allowed to continue within the areal extent, as it existed on July 1, 1993, of the stockpile, roadway, or other mining-related facility without the requirement of a replacement plan or amendment of the permit to mine. An expansion of the areal extent of the fill in the wetland requires an approved replacement plan in the operating plan or annual report as required in the permit to mine, according to subitem (1);

(3) for draining activities that were approved and initiated before July 1, 1993, the draining of a wetland to facilitate mining, using ditches and other drainage facilities that existed on July 1, 1993, will be allowed to continue without the requirement of a replacement plan or amendment of the permit to mine. Maintenance of the ditches and structures will be allowed without the requirement of a replacement plan or amendment of the permit to mine, provided that as a result of the maintenance, wetlands are not drained beyond the extent that existed as of July 1, 1993. Otherwise, the permit to mine must be amended to provide for replacement according to subitem (1).

C. Replacement wetlands approved under this part must only be used for mining-related impacts covered under a permit to mine unless the credits are approved and deposited in the state wetland bank according to parts 8420.XXXX to 8420.XXXX.

D. Applicable procedures are those required for permits to mine.

E. This part does not apply to peat mining as defined under Minnesota Statutes, section 93.461, that is subject to the mine permit and reclamation requirements under Minnesota Statutes, sections 93.44 to 93.51, and the rules of the commissioner adopted under those sections.

8420.XXXX STANDARDS AND CRITERIA FOR IDENTIFICATION, PROTECTION, AND MANAGEMENT OF CALCAREOUS FENS.

Subpart 1. **Purpose.** The purpose of this part is to provide minimum standards and criteria for the identification, protection, and management of calcareous fens as authorized by Minnesota Statutes, section 103G.223. Calcareous fens, as identified by the commissioner, must not be impacted or otherwise altered or degraded, wholly or partially, by any action, unless the commissioner, under an approved management plan decides some alteration is necessary. The exemptions contained in part 8420.XXXX, and the sequencing provisions in part 8420.XXXX, do not apply to calcareous fens.

Subp. 2. **Identifying calcareous fens.** A calcareous fen is a peat-accumulating wetland dominated by distinct groundwater inflows having specific chemical characteristics. The water is characterized as circumneutral to alkaline, with high concentrations of calcium and low dissolved oxygen content. The chemistry provides an environment for specific and often rare hydrophytic plants.

Subp. 3. **Procedures to list calcareous fens.**

A. The commissioner must investigate wetlands to determine if the wetland is properly identified as a calcareous fen.

B. The commissioner must maintain a current list of known calcareous fens in the state and their location.

C. The commissioner must provide an updated list of calcareous fens to the board for further distribution.

Subp. 4. **Management plans.** Calcareous fens must not be impacted or otherwise altered or degraded except as provided for in a management plan approved by the commissioner. The commissioner will provide technical assistance to landowners or project sponsors in the development of management plans.

Subp. 5. **Restoration.** The commissioner may approve management plans to restore or upgrade a previously damaged calcareous fen.

Subp. 6. **Appeals.**

A. A landowner or project proposer may challenge the commissioner's determination that a wetland is a calcareous fen or the commissioner's calcareous fen management plan by demanding a hearing. The hearing will be carried out in the same manner as water permit hearings under Minnesota Statutes, chapter 103G.

B. The determination that a wetland is a calcareous fen may be appealed at any time by demanding a hearing. For a decision under a management plan, the hearing must be demanded within 30 days after mailing of the notice of the commissioner's decision to the project proposer, otherwise the decision becomes final and may not be challenged by the project proposer.

C. Appeal of the commissioner's decision after the hearing must be done in the manner provided for appeals from contested case decisions in Minnesota Statutes, chapter 14.

Subp. 7. **Enforcement procedures.** Enforcement procedures for calcareous fens must be conducted consistent with Minnesota Statutes, sections 103G.141 and 103G.2372, except that necessary restoration or replacement activities, if required, will be determined by the commissioner, in consultation with the local soil and water conservation district.

DEFINITIONS AND REFERENCES

8420.XXXX DEFINITIONS.

Subpart 1. **Scope.** The terms used in this chapter have the meanings given them in this part.

Subp. X. **Account or wetland bank account.** "Account" or "wetland bank account" means a record of wetland banking debits and credits established by an account holder within the state wetland banking system.

Subp. X. **Account holder.** "Account holder," in the state wetland banking system, is a person, corporation, government agency, or organization that is the owner of credits.

Subp. X. **Act.** "Act," when not used in reference to a specific state or federal act, means the Wetland Conservation of 1991, Laws 1991, chapter 354, as amended.

Subp. X. **Activity.** "Activity" means any work or action conducted in or near a wetland that could potentially affect a wetland. An activity may or may not result in an impact as defined at subpart X of this part.

Subp. X. **Agricultural land.** "Agricultural land," means land used for horticultural, row, close grown, pasture, and hayland crops; growing nursery stocks; animal feedlots; farmyards; associated building sites; and public and private drainage systems and field roads located on any of these lands. "Agricultural land" must be used principally for the cultivation or production of plants or farm animals and includes former agricultural land that is presently enrolled in conservation easements.

Subp. X. **Applicant.** "Applicant" is a person, corporation, government agency, or organization that submits an application.

Subp. X. **Application.** "Application" means a formal request for a decision by a local government unit, made under this chapter and the act, for an exemption, no-loss, wetland boundary, wetland type, sequencing, replacement plan, or banking plan. The application is made on a form provided by the board.

Subp. X. **Approve or Approval.** "Approve" or "Approval" means the formal authorization by a local government unit of an activity described in an application.

Subp. X. **Aquaculture.** "Aquaculture" means to cultivate plants and animals in water for harvest, including hydroponics and raising fish in fish farms.

Subp. X. **Banking credits.** "Banking credits" means replacement credits, as described in parts 8420.XXXX and 8420.XXXX, that have been deposited in the wetland bank.

Subp. X. **Best management practices.** "Best management practices" means state-approved and published practices that are capable of preventing and minimizing degradation of surface water and groundwater.

Subp. X. **Board.** "Board" means the Board of Water and Soil Resources under Minnesota Statutes, section 103B.101.

Subp. X. **City.** "City" means a home rule charter or statutory city.

Subp. X. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources.

Subp. X. **Creation.** "Creation" means construction of wetlands in an area that was not wetlands in the past.

Subp. X. **Day.** "Day" means a calendar day unless specified otherwise. The day of the event shall not be used in counting any time period.

Subp. X. **Decision.** "Decision" means a formal action by the local government unit or delegated staff to approve, approve with conditions, or deny an application.

Subp. X. **Degraded wetland.** "Degraded wetland" means a wetland that provides minimal wetland function and value due to human activities such as drainage, diversion of watershed, filling, excavating, pollutant runoff, and vegetative or adjacent upland manipulation.

Subp. X. **Determination or determine.** "Determination" or "Determine" refers to a technical finding by the technical evaluation panel or local government unit staff.

Subp. X. **Ditch.** "Ditch" means an open channel to conduct the flow of water, as defined in Minnesota Statutes, section 103E.005, subdivision 8.

Subp. X. **Drain or drainage.** "Drain" or "drainage" means any method for removing or diverting waters from wetlands. The methods shall include, but are not limited to, excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

Subp. X. **Drainage system.** "Drainage system" means a system of ditch or tile, or both, to drain property, including laterals, improvements, and improvements of outlets.

Subp. X. **Excavation.** "Excavation" means the displacement or removal of substrate, sediment, or other materials by any method.

Subp. X. **Fill.** "Fill" means any solid material added to or redeposited in a wetland that would alter its cross-section or hydrological characteristics, obstruct flow patterns, change the wetland boundary, or convert the wetland to a nonwetland. It does not include posts and pilings for linear projects such as bridges, elevated walkways, or powerline structures, or structures traditionally built on pilings such as docks and boathouses. It does include posts and pilings that result in bringing the wetland into a nonaquatic use or significantly altering the wetland's functions and values, such as the construction of office and industrial developments, parking structures, restaurants, stores, hotels, housing projects, and similar structures. It does not include slash or woody vegetation, if the slash or woody vegetation originated from vegetation growing in the wetland and does not impair the flow or circulation of water or the reach of the wetland.

Subp. X. **50 to 80 percent area.** "50 to 80 percent area" means a county or watershed with at least 50 percent but less than 80 percent of the presettlement wetland acreage intact.

Subp. X. **Greater than 80 percent area.** "Greater than 80 percent area" means a county or watershed where 80 percent or more of the presettlement wetland acreage is intact and:

A. ten percent or more of the current total land area is wetland; or

B. 50 percent or more of the current total land area is state or federal land.

Subp. X. **Hayland.** "Hayland" means an area that was mechanically harvested or that was planted with annually seeded crops in a crop rotation seeded to grasses or legumes in six of the last ten years.

Subp. X. **Hydric soils.** "Hydric soils" means soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

Subp. X. **Hydrophytic vegetation.** "Hydrophytic vegetation" means macrophytic plant life growing in water, soil, or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

Subp. X. **Impact.** "Impact" means a loss in the quantity, quality, or biological diversity of a wetland caused by draining or filling of wetlands, wholly or partially, or by excavation in the permanently and semi-permanently flooded areas of type 3, 4, or 5 wetlands, and in all wetland types if the excavation results in filling, draining, or conversion to nonwetland.

Subp. X. **Impacted wetland.** "Impacted wetland" means a wetland that has been partially or wholly subjected to an impact.

Subp. X. **Indirect impact.** "Indirect impact" means an impact that is the result of an activity that occurs outside of the wetland boundary.

Subp. X. **Infrastructure.** "Infrastructure" means public water facilities, storm water and sanitary sewer piping, outfalls, inlets, street subbase, roads, and ditches, culverts, bridges, and any other work defined specifically by a local government unit as constituting a capital improvement within the context of an approved development plan.

Subp. X. **Landowner.** "Landowner" means a person or entity having the rights necessary to drain, excavate, or fill a wetland, or to establish and maintain a replacement or banked wetland. Typically, the landowner is a fee title owner or a holder of an easement, license, lease, or rental agreement providing the necessary rights. The right must not be limited by a lien or other encumbrance that could override the obligations assumed with the replacement or banking of a wetland.

Subp. X. **Less than 50 percent area.** "Less than 50 percent area" means a county or watershed with less than 50 percent of the presettlement wetland acreage intact or any county or watershed not defined as a greater than 80 percent area or 50 to 80 percent area.

Subp. X. **Local government unit.** "Local government unit" means:

A. outside of the seven-county metropolitan area, a city council, county board of commissioners, or soil and water conservation district or their delegate;

B. in the seven-county metropolitan area, a city council, a town board, a watershed management organization under Minnesota Statutes, section 103B.205, subdivision 13, or soil and water conservation district or their delegate; and

C. in those cases where an activity or replacement will occur on state land, the agency with administrative responsibility for that land.

Subp. X. **Local water plan.** "Local water plan" means either a watershed plan pursuant to Minnesota Statutes, sections 103B.201 to 103B.255, a comprehensive local water management plan pursuant to Minnesota Statutes, sections 103B.301 to 103B.355, or a watershed management plan pursuant to Minnesota Statutes, section 103D.401.

Subp. X. **Major watershed.** "Major watershed" means the 81 major watershed units delineated by the map "State of Minnesota Watershed Boundaries - 1979" as produced by the Minnesota Department of Natural Resources.

Subp. X. **Mining.** "Mining" means the removal of peat and metallic minerals as provided in Minnesota Statutes, sections 93.461 and 93.481.

Subp. X. **Minor watershed.** "Minor watershed" means one of the 5,600 minor watersheds established by the Minnesota Department of Natural Resources for the "1979 Watershed Mapping Project" pursuant to Laws 1977, chapter 455, section 33, subdivision 7, paragraph (a).

Subp. X. **Municipal.** "Municipal" means within a municipality as defined in Minnesota Statutes, section 103G.005, subdivision 12.

Subp. X. **Native vegetation.** "Native vegetation" means plant species that are indigenous to Minnesota, or that expand their range into Minnesota without being intentionally or unintentionally introduced by human activity and are classified as native in the Minnesota Plant Database (Minnesota DNR, 2002).

Subp. X. **Noninvasive vegetation.** "Noninvasive vegetation" means plant species that do not typically invade or rapidly colonize existing, stable plant communities.

Subp. X. **Nonwetland.** "Nonwetland" means upland areas or previously converted areas that do not meet the criteria for classification as a jurisdictional wetland using the United States Army Corps of Engineers Wetland Delineation Manual (January 1987) and deepwater habitats identified using "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al., 1979 edition).

Subp. X. **On-site.** "On-site" means within or directly adjacent to a project.

Subp. X. **Ordinance.** "Ordinance" means a body of regulations developed, approved, and implemented by a county, city, or township as authorized by Minnesota Statutes, section XXXX.

Subp. X. **Pasture.** "Pasture" means an area that was grazed by domesticated livestock or that was planted with annually seeded crops in a crop rotation seeded to grasses or legumes in six of the last ten years.

Subp. X. **Peace officer.** "Peace officer" has the meaning given it in Minnesota Statutes, section 626.84.

Subp. X. **Permanently and semipermanently flooded area of a type 3, 4, or 5 wetland.** "Permanently and semipermanently flooded area of a type 3, 4, or 5 wetland" means the portion of a type 3, 4, or 5 wetland below the level where the water has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial.

Subp. X. **Plant community.** "Plant community" means a wetland plant community classified according to Wetland Plants and Plant Communities of Minnesota & Wisconsin (S. Eggers and D. Reed 1997).

Subp. X. **Presettlement wetland.** "Presettlement wetland" means a wetland or public waters wetland that existed in Minnesota at the time of statehood in 1858.

Subp. X. **Project.** "Project" means a specific plan, contiguous activity, proposal, or design necessary to accomplish a goal as defined by the local government unit. As used in this chapter, a project may not be split into components or phases for the purpose of gaining additional exemptions.

Subp. X. **Project-specific.** "Project-specific" means the applicant for the replacement plan approval provides the replacement as part of the project, rather than obtain the replacement from a wetland bank.

Subp. X. **Public transportation project.** "Public transportation project" means a project conducted by a public agency involving transportation facilities open to the public.

Subp. X. **Public value of wetlands.** "Public value of wetlands" means the importance and benefit to the public derived from the wetland functions listed in part 8420.XXXX.

Subp. X. **Public waters wetlands.** "Public waters wetlands" means public waters wetlands, as defined in chapter 6115.

Subp. X. **Public waters.** "Public waters" means public waters as defined in part 6115.XXXX.

Subp. X. **Replacement wetland.** "Replacement wetland" means a wetland restored or created or an area designated in part 8420.XXXX, or the equivalent, to replace wetland area or public value of wetland functions lost at an impacted wetland.

Subp. X. **Responsible party.** "Responsible party" means an individual, business, or other organization causing the draining, excavation, or filling of wetlands on the property of another, with or without the landowner's permission or approval.

Subp. X. **Restoration.** "Restoration" means reestablishment of an area that was historically wetlands or remains as a degraded wetland.

Subp. X. **Rule.** "Rule" means a body of regulations developed, approved, and implemented by a watershed management organization as authorized by Minnesota Statutes, section XXXX.

Subp. X. **Shoreland or Shoreland wetland protection zone.**

A. For local government units that have a shoreland management ordinance approved under Minnesota Statutes, sections 103F.201 to 103F.221, "shoreland" or "shoreland wetland protection zone" means:

(1) 1,000 feet from the ordinary high water level of a water basin that is a public water identified in the shoreland management ordinance or the shoreland area approved by the commissioner as provided in the shoreland management rules adopted under Minnesota Statutes, section 103F.211, whichever is less; or

(2) 300 feet from the ordinary high water level of a watercourse identified in the shoreland management ordinance or the shoreland area approved by the commissioner as provided in the shoreland management rules adopted under Minnesota Statutes, section 103F.211, whichever is less; and

B. For local government units that do not have a shoreland management ordinance approved under Minnesota Statutes, sections 103F.201 to 103F.221, "shoreland" or "shoreland wetland protection zone" means:

(1) 1,000 feet from the ordinary high water level of a water basin that is a public water that is at least ten acres in size within municipalities and at least 25 acres in size in unincorporated areas; or

(2) 300 feet from the ordinary high water level of a watercourse identified by the public waters inventory under Minnesota Statutes, section 103G.201.

Subp. X. **Silviculture.** "Silviculture" means the management of forest trees.

Subp. X. **Soil and water conservation district.** "Soil and water conservation district" means a legal subdivision of state government under Minnesota Statutes, chapter 103C.

Subp. X. **State wetland banking system, wetland bank, or bank.** "State wetland banking system," "wetland bank," or "bank" means a system of identifying wetlands restored or created for replacement credit, providing for, and facilitating and tracking the exchange of wetland banking credits for projects that require replacement plans or wetland mitigation required by other local, state, or federal authorities.

Subp. X. **Structure.** "Structure" means any object erected or placed in, under, over, or anchored or attached to, a wetland area.

Subp. X. **Utility.** "Utility" means a sanitary sewer, storm sewer, potable water distribution, and transmission, distribution, or furnishing, at wholesale or retail, of natural or manufactured gas, petroleum products, electricity, telephone, or radio service or communications.

Subp. X. **Watershed.** "Watershed" means a land area that drains to a common waterway, such as a stream, lake, estuary, or wetland.

Subp. X. **Watershed management organization.** "Watershed management organization" means a watershed district wholly within the metropolitan area or a joint powers entity established wholly or partly within the metropolitan area by special law or by agreement that performs some or all of the functions of a watershed district for a watershed and that has the characteristics and the authority specified under Minnesota Statutes, section 103B.211. Lake improvement or conservation districts are not watershed management organizations.

Subp. X. **Wetlands, a wetland, the wetland, or wetland area.**

A. "Wetlands" means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water.

For purposes of this subpart, wetlands must:

(1) have a predominance of hydric soils;

(2) be inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and

(3) under normal circumstances, support a prevalence of hydrophytic vegetation.

B. "A wetland" or "the wetland" means a distinct hydrologic feature with characteristics of item A, surrounded by nonwetland and including all contiguous wetland types, except those connected solely by riverine wetlands. "Wetland area" means a portion of "a wetland" or "the wetland."

C. Wetlands does not include public waters wetlands and public waters unless reclassified as wetlands by the commissioner under Minnesota Statutes, section 103G.201.

D. The wetland size is the area within its boundary. The boundary must be determined according to the United States Army Corps of Engineers Wetland Delineation Manual (January 1987). The wetland type must be determined according to United States Fish and Wildlife Service Circular No. 39 (1971 edition). The local government unit may seek the advice of the technical evaluation panel as to the wetland size and type.

Subp. X. **Wetlands in a cultivated field.** "Wetlands in a cultivated field" means a wetland where greater than 50 percent of its boundary abuts land that was in agricultural crop production in six of the ten years before January 1, 1991.

Subp. X. **Wetlands located on agricultural land.** "Wetlands located on agricultural land" means a wetland where greater than 50 percent of its boundary abuts agricultural land.

Subp. X. **Wetland type or type.** "Wetland type" or "type" means a wetland type classified according to Wetlands of the United States, United States Fish and Wildlife Service Circular 39 (1956 and 1971 editions), as summarized in this subpart. "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al., 1979 edition) is a separate, parallel wetland typing system that may be used to characterize components of a wetland.

A. "Type 1 wetlands" are seasonally flooded basins or flats in which soil is covered with water or is waterlogged during variable seasonal periods but usually is well-drained during much of the growing season. Type 1 wetlands are located in depressions and in overflow bottomlands along watercourses, and in which vegetation varies greatly according to season and duration of flooding and includes bottomland hardwoods as well as herbaceous growths.

B. "Type 2 wetlands" are inland fresh meadows in which soil is usually without standing water during most of the growing season but is waterlogged within at least a few inches of the surface. Vegetation includes grasses, sedges, rushes, and various broad-leafed plants. Meadows may fill shallow basins, sloughs, or farmland sags, or may border shallow marshes on the landward side.

C. "Type 3 wetlands" are inland shallow fresh marshes in which soil is usually waterlogged early during a growing season and often covered with as much as six inches or more of water. Vegetation includes grasses, bulrushes, spikerushes, and various other marsh plants such as cattails, arrowheads, pickerelweed, and smartweeds. These marshes may nearly fill shallow lake basins or sloughs, or may border deep marshes on the landward side and are also common as seep areas on irrigated lands.

D. "Type 4 wetlands" are inland deep fresh marshes in which soil is usually covered with six inches to three feet or more of water during the growing season. Vegetation includes cattails, reeds, bulrushes, spikerushes, and wild rice. In open areas, pondweeds, naiads, coontail, water milfoils, waterweeds, duckweeds, water lilies, or spatterdocks may occur. These deep marshes may completely fill shallow lake basins, potholes, limestone sinks, and sloughs, or may border open water in such depressions.

E. "Type 5 wetlands" are inland open fresh water, shallow ponds, and reservoirs in which water is usually less than ten feet deep and is fringed by a border of emergent vegetation similar to open areas of type 4 wetland.

F. "Type 6 wetlands" are shrub swamps in which soil is usually waterlogged during growing season and is often covered with as much as six inches of water. Vegetation includes alders, willows, buttonbush, dogwoods, and swamp privet. This type occurs mostly along sluggish streams and occasionally on floodplains.

G. "Type 7 wetlands" are wooded swamps in which soil is waterlogged at least to within a few inches of the surface during growing season and is often covered with as much as one foot of water. This type occurs mostly along sluggish streams, on floodplains, on flat uplands, and in shallow basins. Trees include tamarack, arborvitae, black spruce, balsam, red maple, and black ash. Northern evergreen swamps usually have a thick ground cover of mosses. Deciduous swamps frequently support beds of duckweeds and smartweeds.

H. "Type 8 wetlands" are bogs in which soil is usually waterlogged and supports a spongy covering of mosses. This type occurs mostly in shallow basins, on flat uplands, and along sluggish streams. Vegetation is woody or herbaceous or both. Typical plants are heath shrubs, sphagnum moss, and sedges. In the north, leatherleaf, Labrador-tea, cranberries, carex, and cottongrass are often present. Scattered, often stunted, black spruce and tamarack may occur.

8420.XXXX INCORPORATION BY REFERENCE.

This chapter incorporates by reference the following documents and any subsequent updates, addenda, or derivations related to them, as approved by the board:

A. Wetlands of the United States (United States Fish and Wildlife Service Circular No. 39, 1956 and 1971 editions).

B. United States Army Corps of Engineers Wetland Delineation Manual (January 1987).

C. Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979 edition).

D. Criteria and Guidelines for Assessing Geologic Sensitivity of Groundwater Resources in Minnesota (Minnesota Department of Natural Resources, 1991).

E. United States Geological Survey Hydrologic Unit Map for Minnesota (1974).

F. National Wetland Inventory maps (United States Fish and Wildlife Service).

G. Growing Energy Crops on Minnesota Wetlands: The Land Use Perspective, Anderson and Craig, 1984.

H. Wetland Restoration Guide, Minnesota Board of Water and Soil Resources (December 1982).

I. Vegetation in Restored and Created Wetlands, Minnesota Board of Water and Soil Resources, September 2000.

J. Wildlife Habitat Improvements in Wetlands: Guidance for Soil and Water Conservation Districts and Local Government Units in Certifying and Approving Wetland Conservation Act Exemption Proposals, Minnesota Interagency Wetlands Group, December 2000.

K. Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers. Minnesota Forest Resources Council, St. Paul, 1999.

L. Minnesota Construction Site Erosion and Sediment Control Planning Handbook. Minnesota Board of Water and Soil Resources and the Association of Metropolitan Soil and Water Conservation Districts, St. Paul, 1988.

M. Agriculture and Water Quality: Best Management Practices for Minnesota, Minnesota Pollution Control Agency, St. Paul, 1991.

N. Storm-Water and Wetlands: Planning and Evaluation Guidelines for Addressing Potential Impacts of Urban Storm-Water and Snow-Melt Runoff on Wetlands, Minnesota Storm-Water Advisory Group, 1997.

O. Minnesota Plant Database, Minnesota Department of Natural Resources, St. Paul, 2002.

P. Wetland Plants and Plant Communities of Minnesota & Wisconsin (S. Eggers and D. Reed 1997).

These documents are available through the State Law Library, except the National Wetland Inventory maps, which are available at Minnesota soil and water conservation district offices. Except for the Minnesota Plant Database in item O, none of the documents are subject to frequent change.

12-5-08 DRAFT

WETLAND CONSERVATION ACT

MINNESOTA RULE CHAPTER 8420

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PURPOSE AND ~~DEFINITIONS~~ SCOPE

8420.0100 PURPOSE.
This chapter implements the regulatory provisions of the Wetland Conservation Act of 1991, Laws 1991, chapter 354, as amended by Laws 1993, chapter 175; Laws 1994, chapter 627; Laws 1996, chapter 462; Laws 2000, chapter 382; ~~and~~ Laws 2001, chapter 146; Laws 2002, chapter 220; Laws 2003, chapter 128; Laws 2004, chapters 221 and 255; Laws 2007, chapters 57 and 131; and Laws 2008, chapter 368. This chapter shall be interpreted to implement the purpose of the act, which is to:
A. achieve no net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands;
B. increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands;
C. avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and biological diversity of wetlands; and
D. replace wetland value~~s~~ where avoidance of activity is not feasible and prudent.

~~**8420.0102 INTRODUCTION.**~~
The regulatory provisions of the Wetland Conservation Act ~~achieves~~ advance the purpose in this part ~~8420.0100~~ by requiring persons proposing to impact a wetland ~~by draining, excavating, or filling~~ to first, attempt to avoid the impact; second, attempt to minimize the impact; and finally, replace any impacted area with another wetland of at least equal function and value. As specified in greater detail in part 8420.~~0122~~XXXX, certain projects are exempt from the requirement for a replacement plan under the Wetland Conservation Act.
The Wetland Conservation Act is administered by local government units with oversight provided by the Board of Water and Soil Resources. Enforcement of the act is provided by Department of Natural Resources conservation officers and other peace officers. The Wetland Conservation Act became effective on January 1, 1992, and this chapter and portions of Minnesota Statutes, chapters 103A, 103B, 103E, 103F, and 103G, govern its implementation. The public is encouraged to contact their local government unit or soil and water conservation district for general information on wetlands and the interpretation of this chapter. ~~This part is for general introductory information only. The other parts of this chapter shall control over this part.~~

~~**8420.0103 WETLAND FUNCTIONS FOR DETERMINING PUBLIC VALUES.**~~
The entire 8420.0103 was relocated to the Replacement Standards part and edited there.

8420.~~0105~~XXXX SCOPE.
Wetlands must not be ~~drained, excavated, or filled wholly or partially~~ impacted unless replaced by restoring or creating wetland areas of at least equal public value. This chapter regulates the draining or filling of wetlands, wholly or partially, and excavation in the permanently and semipermanently flooded areas of type 3, 4, or 5 wetlands, and in all wetland types if the excavation ~~includes~~ results in filling, ~~or~~ draining, or ~~results in~~ conversion to nonwetland.
This chapter does not prevent the use of the bed of wetlands for pasture or cropland during dry periods if dikes, ditches, tile lines, or buildings are not constructed or improved and the agricultural use does not ~~result in the drainage of~~ impact the wetlands. ~~This chapter does not prevent filling a wetland to accommodate wheeled booms on irrigation devices if the fill does not impede normal drainage.~~ This chapter does not regulate normal farming practices in a wetland. "Normal farming practices" means farming, silvicultural, grazing, and ranching activities such as plowing, seeding, cultivating, and harvesting for the production of feed, food, and fiber products, but does not include activities that impact wetlands.
This chapter does not prevent control of noxious weeds if the control does not ~~drain or fill~~ impact the wetland.
This chapter does not regulate impacts to incidental wetlands. Incidental wetlands are ~~W~~wetland areas ~~may be drained, excavated, or filled if~~ that the landowner can ~~show~~ demonstrate, to the satisfaction of the local government unit, ~~that the wetland was~~ were created in non-wetland areas solely by actions, the purpose of which was not to create the wetland. Incidental wetlands include drainage ditches, ~~l~~impoundments, or excavations constructed in non-wetlands solely for the purpose of effluent treatment, containment of waste material, storm water retention, drainage, soil and water conservation practices,

and water quality improvements, and not as part of a wetland replacement process that may, over time, take on wetland characteristics~~, are also exempt~~.

This chapter does not apply to the public waters and public waters wetlands as defined in Minnesota Statutes, section 103G.005, subdivisions 15 and 15a, which have been inventoried by the commissioner of natural resources according to Minnesota Statutes, section 103G.201, except that:

A. for projects affecting public waters wetlands, and for public transportation projects affecting the wetland areas of public waters, when the commissioner waives the requirement for a public waters work permit consistent with chapter 6115, the local government unit ~~shall~~ must make replacement, banking, wetland boundary, wetland type, no-loss, public road project notification, or exemption ~~determinations~~ decisions; or

B. for projects affecting both public waters and wetlands, the local government unit may, by written agreement with the commissioner, waive the requirement for a replacement plan, no-loss, or exemption ~~determination~~ decision if a public waters work permit is required and the commissioner includes the provisions of this chapter in the public waters work permit.

This chapter is in addition to other regulations including those of the United States Army Corps of Engineers, United States Department of Agriculture, Minnesota state agencies, watershed districts, and local governments.

This chapter does not apply to peat mining as defined in Minnesota Statutes, section 93.461, which is subject to the permit to mine and reclamation requirements of Minnesota Statutes, sections 93.44 to 93.51, and the rules of the commissioner adopted under those sections.

This chapter does not require state agencies to obtain local government unit approvals. ~~However, state agencies shall coordinate with local government units when conducting activities in wetlands within the jurisdiction of the local government unit.~~ ~~The~~ However, the state agencies ~~shall~~ must follow the ~~same sequencing and replacement requirements as~~ procedures and standards prescribed by this chapter.

In addition to the provisions of this chapter, governmental decisions on ~~draining, excavating, and filling of~~ impacting wetlands are subject to Minnesota Statutes, chapters 116B and 116D, which provide that an action which is likely to have material adverse effects on natural resources must not be allowed if there is a feasible and prudent alternative consistent with the requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its natural resources. Economic considerations alone do not justify adversely effective actions.

8420.~~0545~~XXXX PRESETTLEMENT WETLAND ACRES AND AREAS.

Subp. 1. **County classification.** For purposes of parts 8420.XXXX to 8420.XXXX:

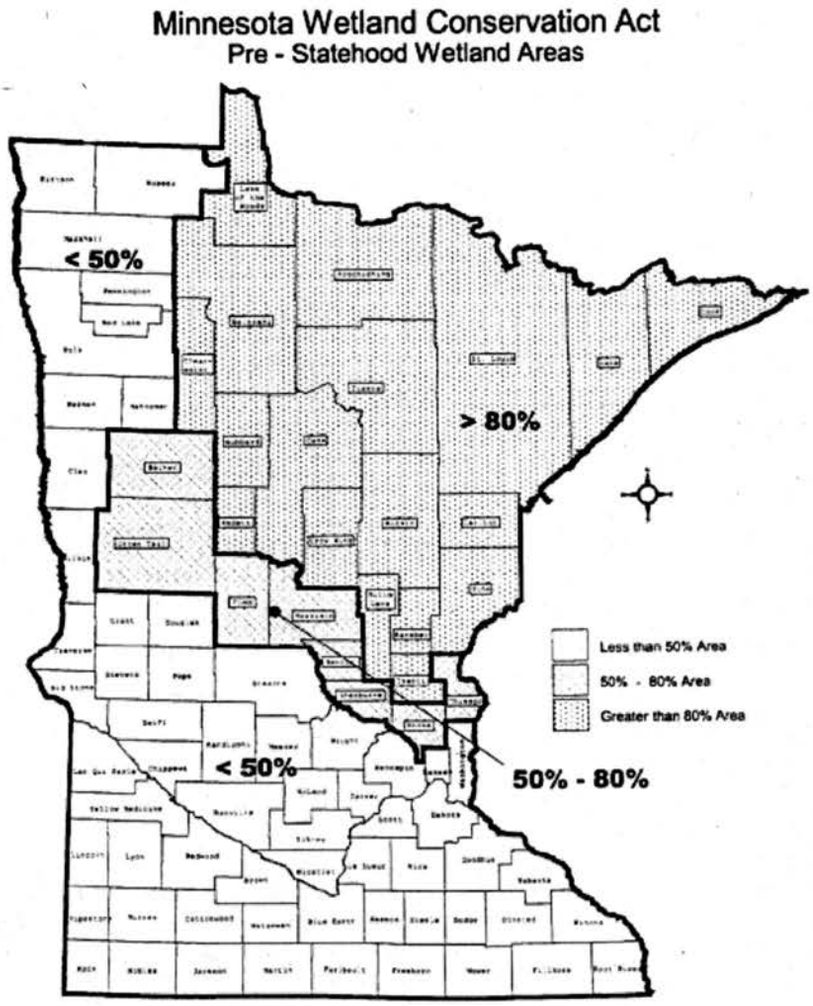
A. ~~For purposes of parts 8420.0540 to 8420.0549,~~ the following counties are greater than 80 percent areas: Aitkin; Beltrami; Carlton; Cass; Clearwater; Cook; Crow Wing; Hubbard; Isanti; Itasca; Kanabec; Koochiching; Lake; Lake of the Woods; Mille Lacs; Pine; St. Louis; and Wadena~~.~~;

B. the following counties are 50 to 80 percent areas: Anoka; Becker; Benton; Chisago; Morrison; Otter Tail; Sherburne; and Todd; and

~~B~~ C. ~~For purposes of parts 8420.0540 to 8420.0549,~~ the following counties are less than 50 percent areas: Big Stone; Blue Earth; Brown; Carver; Chippewa; Clay; Cottonwood; Dakota; Dodge; Douglas; Faribault; Fillmore; Freeborn; Goodhue; Grant; Hennepin; Houston; Jackson; Kandiyohi; Kittson; Lac Qui Parle; Le Sueur; Lincoln; Lyon; Mahnomen; Marshall; Martin; McLeod; Meeker; Mower; Murray; Nicollet; Nobles; Norman; Olmsted; Pennington; Pipestone; Polk; Pope; Ramsey; Red Lake; Redwood; Renville; Rice; Rock; Roseau; Scott; Sibley; Stearns; Steele; Stevens; Swift; Traverse; Wabasha; Waseca; Washington; Watonwan; Wilkin; Winona; Wright; and Yellow Medicine.

~~C. For purposes of parts 8420.0540 to 8420.0549, the following counties are 50 to 80 percent areas: Anoka; Becker; Benton; Chisago; Morrison; Otter Tail; Sherburne; and Todd.~~

~~WETLAND AREAS~~



Subp. 4 2. **County or watershed reclassification.**

A. A local government unit may request the board to reclassify a county or major watershed wholly or partly within its jurisdiction on the basis of its percentage of presettlement wetlands remaining. After receipt of satisfactory documentation from the local government, the board ~~shall~~ must change the classification of a county or major watershed. If requested by the local government unit, the board must assist in developing the documentation. Within 30 days of its action to approve a change of wetland classifications, the board ~~shall~~ must publish a notice of the change in the Environmental Quality Board Monitor.

B. One hundred citizens who reside within the jurisdiction of the local government unit may request the local government unit to reclassify a county or major watershed on the basis of its percentage of presettlement wetlands remaining. In support of their petition, the citizens ~~shall~~ must provide satisfactory documentation to the local government unit. The local government unit ~~shall~~ must consider the petition and forward the request to the board or provide a reason why the petition is denied.

Subpart 2, County or watershed reclassification, was relocated here from the previous 8420.0250

~~8420.0110 DEFINITIONS.~~
The entire 8420.0110 was relocated to the new Definitions and References section and edited there.

~~8420.0112 INCORPORATION BY REFERENCE.~~
The entire 8420.0112 was relocated to the new Definitions and References section and edited there.

~~8420.0115 SCOPE OF EXEMPTION STANDARDS.~~
The entire 8420.0115 was relocated to the Exemption Standards part and edited there.

~~8420.0122 EXEMPTION STANDARDS.~~
The entire 8420.0122 was relocated to the Wetland Boundary, No-Loss, and Exemption Standards section and edited there.

LOCAL GOVERNMENT UNIT DUTIES AND PROCEDURES

8420.~~0200~~XXXX DETERMINING LOCAL GOVERNMENT UNIT; DUTIES.

Subpart 1. ~~Determinations of~~ Determining **local government unit.** The local government unit responsible for making ~~exemption, wetland type, wetland boundary, and no-loss determinations and approving replacement and wetland banking plans~~ decisions ~~shall~~ must be determined according to items A to ~~D~~G.

A. Outside the seven-county metropolitan area, the local government unit is the county or city in which the ~~drain or fill~~ activity is located, or its delegate.

B. In the seven-county metropolitan area, the local government unit is the city, town, or water management organization regulating surface-water-related matters in the area in which the ~~drain or fill~~ activity is located, or its delegate. The watershed management plan adopted under Minnesota Statutes, section 103B.231, and related board rules will normally indicate the appropriate local government unit. Lacking an indication, the local government unit must be the city, town, or its delegate.

~~C. If the activity in a wetland is located in two jurisdictions, the local government unit is the one exercising zoning authority over the project or if both have zoning authority, the one in which most of the wetland loss will occur. If no zoning permits are required, the local government unit is the one in which most of the wetland loss will occur. If an activity will affect wetlands in more than one local government unit, the board will coordinate the project review to ensure consistency and consensus among the local government units involved.~~

~~D~~ C. ~~In those cases where an activity will occur~~ For activities on state land, the local government unit is the state agency, or the agency's designee, with administrative responsibility for that land. However, state agencies must coordinate with local government units that would otherwise have jurisdiction according to items A and B when conducting activities in wetlands. ~~The board will resolve all questions as to which government entity is the responsible authority, applying the guidelines in items A to D.~~

D. Notwithstanding items A to ~~D~~ I, the Department of Natural Resources ~~shall be~~ is the approving authority for activities associated with projects requiring permits to mine under Minnesota Statutes, section 93.481, and for projects affecting calcareous fens.

E. Delegation of implementation of this chapter and the act from a county, city, or town, as applicable according to item A or B, to a soil and water conservation district or other governmental entity must occur by the passage of resolutions by both parties. The delegation becomes effective when resolutions have been passed by both parties, or on the date specified in the resolutions, whichever is later. Both parties must provide notice to the board, the commissioner, and the soil and water conservation district within 15

business days of adoption of the resolution. The notice must include a copy of the resolution and a description of the applicable geographic area.

F. If the activity is located in two jurisdictions, the local government unit is the one exercising zoning authority over the project or if both have zoning authority, the one in which most of the wetland impacts will occur. If no zoning permits are required, the local government unit is the one in which most of the wetland impacts will occur. If an activity will affect wetlands in more than one local government unit, the board may coordinate the project review to ensure consistency and consensus among the local government units involved. Local government units may maintain separate jurisdiction if mutually agreed upon.

G. For a replacement site located in more than one jurisdiction, the local government unit is the one in which most of the replacement wetland area occurs.

H. For replacement plans where the project-specific replacement will occur in a different local government unit than the impact, approval of all local government units involved or as specified in items A to G will constitute final approval of the replacement plan and is required before the project may proceed. The local government unit with jurisdiction for the impact site must approve all components of the replacement plan, following the procedures in parts 8420.~~0500~~XXXX to 8420.~~0630~~XXXX. The local government unit with jurisdiction for the replacement site must limit the review to evaluation of the replacement site as in parts 8420.~~0540~~XXXX to 8420.~~0630~~XXXX and make a decision accordingly. As part of the approval of the replacement plan, the local government unit with jurisdiction for the replacement site assumes responsibility for ensuring compliance with monitoring provisions according to parts 8420.~~0600~~XXXX to 8420.~~0630~~XXXX. The local government unit with jurisdiction for the replacement site may enter into joint powers agreements with a local government unit with jurisdiction for the impact site, assess fees, or develop other procedures considered necessary to facilitate the process.

I. For instances where the activity or replacement occur in multiple jurisdictions, the local government unit with decision-making authority must coordinate with the other local government units.

J. The board will resolve all questions as to which government entity is the responsible authority, applying the guidelines in items A to H.

Subp. 2. **Local government unit duties.**
A. Local government units are responsible for making decisions on applications made under this chapter. Each local government unit of the state, except tribal lands and state agencies, must send a written acknowledgement, including a copy of the adopting resolution, to the board that it is assuming its responsibilities under this chapter and the act.

AB. A local government unit must provide knowledgeable and trained staff with experience in water resource management to manage the program or secure a qualified delegate. Otherwise, the board may declare a moratorium as prescribed in part 8420.~~0260~~XXXX or take other appropriate legal action to assure proper implementation and compliance with this chapter. The board may establish standards and requirements for training, experience, and certification.

~~B~~C. The local government unit may, through resolution, rule, or ordinance, place ~~the~~ decision-making authority ~~for exemption, no-loss, wetland boundary and type, replacement plan, and wetland banking determinations~~ with ~~local government unit~~ staff according to procedures it establishes. For final ~~determinations~~ decisions made by staff, the local government unit must establish a local appeal process that includes an evidentiary public hearing before appointed or elected officials. ~~The determination of staff becomes final if not appealed to the local government unit within 30 days after the date on which the decision is mailed to those required to receive notice of the decision. Notwithstanding the time frames of Minnesota Statutes, section 15.99, or any other law to the contrary, the local government unit must make a ruling within 30 days from the date of the filing of the appeal, unless the appellant and local government unit mutually agree, in writing, to an extension of time beyond the 30 days. Appeal of a final determination~~

~~made by staff may be made by the landowner, by any of those required to receive notice of the decision, or by 100 residents of the county in which a majority of the wetland is located.~~

~~C. The notice of decision mailed by the local government unit must include information on the process and time frames to appeal the decision of the local government unit.~~

D. As provided for in part 8420.0240XXXX, technical questions concerning the public value, location, size, and type of wetland must be submitted to the technical evaluation panel. The local government unit may use a technical evaluation panel to predetermine public value, location, size, or type of wetlands under its jurisdiction and use this determination in administering the act.

E. An application must not be approved unless entitlement thereto is established by a fair preponderance of the evidence. For each finding of fact and recommendation included in a written technical evaluation panel report that is not adopted by the local government unit, the local government unit must provide detailed reasons for rejecting the finding of fact or recommendation in its record of decision, otherwise the local government unit has not sufficiently considered the technical evaluation panel report.

F. The local government unit may evaluate evidence for a no-loss, an exemption, or sequencing without making a decision.

G. The local government unit must retain a record of all decisions for a minimum of 10 years after all applicable requirements and conditions pertaining to the project are fulfilled.

~~D~~H. The local government unit and soil and water conservation district may charge processing fees in amounts not greater than are necessary to cover the reasonable costs of implementing this chapter and for technical and administrative assistance to landowners in processing other applications for projects affecting wetlands.

I. The local government unit must annually report information to the board regarding implementation of this chapter in a format and time period provided by the board. Failure to comply with the board's reporting requirements may subject the local government to penalty under subpart 3.

~~8420.0260 PENALTY FOR LOCAL GOVERNMENT UNIT FAILURE TO APPLY LAW.~~
This entire part (now subpart 3) was relocated and edited here.
Subp. 3. **Procedures and penalty for local government unit failure to apply law.**
A. ~~Each local government unit of the state, except tribal lands, shall acknowledge, in writing, to the board that it is assuming its responsibilities under this chapter and the act. Local government units from which an affirmative response is not received shall be given written notice by the board that there is a 60-day moratorium in the local government unit's jurisdiction on exemption, wetland boundary, wetland type, no-loss, replacement plan, and banking determinations.~~ If a local government unit fails to acknowledge in writing its responsibilities under this chapter and the act as required in subpart 2, the board will impose, in the local government unit's jurisdiction, a 60-day moratorium on making decisions and implementing this chapter and the act. The board will notify the local government unit in writing of the start and end dates of the moratorium. The board ~~shall~~ must end the moratorium within the 60 days upon written agreement by the local government unit that it will assume, and is currently capable of implementing, its duties under this chapter and the act. If at the end of the initial 60-day moratorium a written agreement has not been made for the local government unit to apply the law, the board ~~can~~ may extend the moratorium until the local government unit agrees to apply the law.

B. If the board has information that a local government unit is not following this chapter or the act in making ~~exemption, no-loss, replacement plan, public road project notice reviews, wetland boundary, wetland type, or banking determinations~~ decisions;~~, or~~ if the local government unit does not have knowledgeable and trained staff with experience in ~~wetland~~ water resource management; or if the local government unit fails to comply with the board's reporting requirements, the board ~~shall~~ must notify the local government unit in writing of its concerns. The local government unit ~~shall~~ must respond in writing within 60 days of being notified by the board. If not satisfied with the local government unit's written

response, or none is received, the board ~~shall~~ must ask the local government unit to appear at a hearing before the board to discuss the matter. The board may invite comments from other local governments or state and federal agencies. If the board determines at the hearing, that corrective action is necessary, the board ~~shall~~ must write the local government unit directing specific corrective action to occur within 60 days of receiving the board's decision. The notice ~~shall~~ must explain the reason for the action.
~~C.~~ If, after the 60-day period, ~~described in this part~~ the local government unit has not corrected the problem to the satisfaction of the board, the board ~~shall~~ must declare a moratorium as prescribed in item A or take other appropriate legal action to ensure compliance.

C. When a moratorium is declared as prescribed in items A or B, a decision cannot be made on an application because a local government unit authorized to implement this chapter does not exist while the moratorium is in effect. Applications pending a local government unit decision when a moratorium is declared must be returned by the local government unit to the applicant within 15 days of the moratorium being placed in effect. Applications submitted while a moratorium is in effect must be returned by the local government unit to the applicant with an explanation and within 15 days of the local government unit's receipt of the application.

~~8420.0210 EXEMPTION DETERMINATIONS.~~
The entire 8420.0210 was relocated to the Application Procedures section and edited there.

~~8420.0220 NO-LOSS DETERMINATIONS.~~
~~A landowner unsure if proposed work will result in a loss of wetland may apply to the local government unit for a determination. A landowner who does not request a determination may be subject to the enforcement provisions in part 8420.0290 and Minnesota Statutes, section 103G.2372. The local government unit must keep on file all documentation and findings of fact concerning no-loss determinations for a period of ten years.~~
~~The landowner applying for a no-loss determination is responsible for submitting the proof necessary to show qualification for the claim, including proof of the requisite property rights to do the activity. The local government unit may evaluate evidence for a no-loss claim without making a determination.~~
~~The local government unit decision must be made in compliance with Minnesota Statutes, section 15.99.~~
~~The local government unit decision must be sent to the landowner, members of the technical evaluation panel, the watershed district or water management organization if there is one, the commissioner of natural resources, and individual members of the public who request a copy within ten working days of the decision.~~
~~The local government unit shall make a no-loss determination if the landowner requests and if either:~~
~~A. the work will not impact a wetland;~~
~~B. the excavation work is limited to removal of debris such as trees, logs, stumps, and trash, provided the removal does not alter the original cross-section of the wetland;~~
~~C. temporary or seasonal water level management activities will not result in the conversion of a wetland;~~
~~D. the activities are in a surface impoundment for containment of waste material or water treatment;~~
~~E. the activity is being conducted as part of an approved replacement or banking plan or is conducted or authorized by public agencies for the purpose of wetland restoration, fish and wildlife habitat restoration or improvement using guidance in part 8420.0112, item J, or repair and maintenance of earthen containment structures;~~
~~F. the activity is limited to excavation and removal of deposited sediment in constructed stormwater management basins or wetlands that are presently utilized as stormwater management basins, or to excavation and removal of contaminated substrate, and the excavated area is stabilized so as to prevent water quality degradation and the excavation is limited to the minimum dimensions necessary for achieving the desired purpose; or~~
~~G. the project is an impact rectification activity listed in part 8420.0520, subpart 5.~~

~~8420.0225 WETLAND BOUNDARY OR TYPE DETERMINATIONS.~~
~~A. A landowner may apply for a wetland boundary or type determination from the local government unit. The landowner applying for the determination is responsible for submitting proof necessary to make the determination, including, but not limited to, wetland delineation field data, observation well data,~~

~~topographic mapping, survey mapping, and information regarding soils, vegetation, hydrology, and groundwater both within and outside of the proposed wetland boundary.~~
~~B. A local government unit that receives an application under item A may seek the advice of the technical evaluation panel and, if necessary, expand the technical evaluation panel.~~
~~C. The local government unit decision must be made in compliance with Minnesota Statutes, section 15.99. Within ten working days of the decision, the local government unit decision must be sent to the landowner, members of the technical evaluation panel, the watershed district or watershed management organization if there is one, the commissioner of natural resources, and individual members of the public who request a copy.~~
~~D. The local government unit decision is valid for three years unless the technical evaluation panel determines that natural or artificial changes to the hydrology, vegetation, or soils of the area have been sufficient to alter the wetland boundary or type.~~

8420.~~0245~~XXXX OTHER LOCAL GOVERNMENT UNIT WETLAND RULES AND ORDINANCES.
This chapter and the act provide minimum standards. Local government units who choose to require landowners to submit an application and obtain approval to be eligible for an exemption or for temporary impacts that may result in a no-loss must do so through ordinance or rule. Local government units may require more procedures and more wetland protection, but not less.

8420.~~0240~~XXXX TECHNICAL EVALUATION PANEL PROCEDURES.
A. For each local government unit, there is a technical evaluation panel. Panel membership consists of ~~at least three persons:~~ a technical professional employee of the board, a technical professional employee of the soil and water conservation district of the county in which the activity is occurring, and a technical professional with expertise in ~~wetland~~ water resource management appointed by the local government unit. For projects affecting public waters, ~~or~~ public waters wetlands, or ~~affecting wetlands adjacent to the public waters or public waters~~ wetlands within the shoreland protection zone, the ~~technical evaluation~~ panel ~~shall~~ also includes a technical professional employee of the Department of Natural Resources. ~~For purposes of this section, "adjacent" means within the shoreland wetland protection zone or 1,000 feet, whichever is less.~~ The local government unit ~~shall~~ must coordinate the panel.

B. Two members of the technical evaluation panel must be knowledgeable and trained in applying methodologies of the "United States Army Corps of Engineers Wetland Delineation Manual" (January 1987), "Wetlands of the United States" (United States Fish and Wildlife Service Circular 39, 1971 edition), "Wetland Plants and Plant Communities of Minnesota & Wisconsin" (S. Eggers and D. Reed 1997), and "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin, et al., 1979 edition), including updates~~, supplementary guidance~~ and supplements, ~~or replacements of these methods~~ and any modifications or guidance provided by the board. The panel ~~shall~~ must also be knowledgeable and trained in evaluation of wetland functions and the resulting public values. The ~~technical evaluation~~ panel may ~~invite~~ seek advice and assistance from others with additional expertise to help the panel in its work.

C. The technical evaluation panel,~~if requested to do so by the local government unit, the landowner, or a member of the panel, shall~~ must make technical findings and recommendations regarding applications, the scope of this chapter and the act, the applicability of exemption and no-loss standards, wetland functions and the resulting public values, direct and indirect impacts, possible violations of this chapter and the act, enforcement matters under 8420.XXXX, ~~location, size, and type for replacement plans, and wetland banking plans and exemption, no-loss, wetland boundary or type, and sequencing requests, and for~~ comprehensive wetland protection and management plans and ~~wetland~~ implementing rules and ordinances, and other technical issues related to implementation of this chapter ~~if requested to do so by the local government unit, the landowner, or a member of the technical evaluation panel~~. The panel must review applications for replacement of public road projects as provided in 8420.XXXX, banking projects as provided in 8420.XXXX, and monitoring of replacement wetlands as provided in 8420.XXXX. The panel must provide its findings to the local government unit for consideration. For violations of this chapter that may result in the issuance of an enforcement order, the panel must consult with the enforcement authority.

D. The panel may ~~review replacement plans and wetland banking plans and exemption, no-loss, wetland boundary or type, and sequencing requests, and~~ recommend to the local government unit ~~either~~ approval, approval with changes or conditions, or ~~rejection~~ denial of an application. When a technical evaluation panel assembles findings or makes a recommendation, the local government unit must consider the findings or recommendation of the ~~technical evaluation~~ panel in its approval or denial of an application ~~plan or determination~~. The panel ~~shall~~ will make no findings or recommendations without at least one member having made an on-site inspection. Panel findings and recommendations must be documented and endorsed by a majority of the members. If the local government unit does not agree with the ~~technical evaluation~~ panel's findings and recommendation, the detailed reasons for the disagreement must be part of the local government unit's record of decision.

E. Applicants ~~for replacement plans, wetland banking plans and exemption, no-loss, and wetland boundary or type, and sequencing determinations~~ must cooperate in providing local government unit staff and members of the technical evaluation panel and their designated experts with access to proposed project sites for investigation. Such investigations ~~shall~~ must be preceded by notice to the landowner or designated agent, unless prior approval has been granted. If an applicant refuses to allow access, the local government unit may deny an application.

~~If the local government unit has a comprehensive wetland protection and management plan that delineates location, size, and type for all wetlands, approved by the technical evaluation panel, and subsequently incorporated into local ordinance, then the local government unit can make determinations without a recommendation from the technical evaluation panel.~~

~~If requested by the local government unit, the landowner, or a member of the technical evaluation panel, the panel shall answer technical questions or participate in the monitoring of replacement wetlands according to parts 8420.0600 to 8420.0630, and shall similarly participate in the monitoring of banked wetlands according to parts 8420.0700 to 8420.0760.~~

8420.~~0230~~XXXX ~~REPLACEMENT PLAN DETERMINATIONS~~ LOCAL GOVERNMENT UNIT APPLICATION AND DECISION PROCEDURES.

Subpart 1. General. Noticing and local government unit decisions made under this chapter must be in compliance with Minnesota Statutes, section 15.99.

Subpart 2. Determination of Complete Application. If, within 15 business days of receipt of an application, the local government unit finds that an application is incomplete, the local government unit must notify the applicant and list in writing what items or information is missing. Part 8420.XXXX must be the basis for determining a complete application. The local government unit may determine an application incomplete when seasonal constraints prevent on-site review and verification of the application. When an application contains a previously approved wetland boundary for which the approval remains valid, the wetland boundary may not serve as the basis for determining an application incomplete.

Subpart ~~1~~ 3. Notice of **Application.** ~~A landowner intending to drain, excavate, or fill a wetland who does not qualify for an exemption or no-loss determination shall obtain approval of a replacement plan from the local government unit before beginning draining or filling. A person who does not do so is subject to the enforcement provisions in this chapter and Minnesota Statutes, section 103G.2372.~~

~~Within ten days of receipt of an application for an activity affecting less than 10,000 square feet of wetland, the local government unit must send a summary of the application, which includes information to identify the applicant and the location and scope of the project, to members of the technical evaluation panel, the commissioner of natural resources, and individual members of the public who have requested a copy. The project notification must state when the comment period ends.~~

Within ~~ten working~~ fifteen business days of receipt of an complete application ~~for approval of a replacement plan for an activity affecting 10,000 square feet or more of total wetland impacts~~, the local government unit must send a copy of the application and ~~an invitation to submit comments~~ a notice of application on a form provided by the board to members of the technical evaluation panel; the watershed district or water management organization if there is one; the commissioner of natural resources and individual members of the public who request a copy. The notice must identify the type of application, the date the comment period ends, and where to provide comments. Individual members of the public who request a copy must be sent a summary of the application that includes information to identify the applicant and the location and scope of the project. The comment period must be at least 15 business days ~~or more~~ from the date the notice of application is sent. ~~The project notification must state when the comment period ends.~~

~~An application for approval of a replacement plan includes a revised application for replacement plan approval and an application for a r~~Revisions of ~~to~~ an approved and valid replacement plan must be noticed according to this subpart by sending a summary of the proposed revisions if:

A. the wetland area to be ~~drained or filled~~ impacted under the revised replacement plan is:
(1) increased by more than ten percent ~~larger than the area to be drained or filled under the original replacement plan~~; ~~or~~
(2) a different type;
(3) part of a different wetland; or
(4) ~~B. the wetland area to be drained or filled under the revised replacement plan is located~~ more than 500 feet from the location of the previously approved wetland impact ~~area to be drained or filled under the original replacement plan.~~; or

B. the replacement is:
(1) a different type;
(2) more than 500 feet from the location of the previously approved replacement; or
(3) a different action eligible for credit.

Subp. ~~2~~ 4. **Decision.** The local government unit decision ~~shall~~ must be based on the ~~replacement~~ standards in parts 8420.~~0500~~XXXX to 8420.~~0630~~XXXX, and on the technical evaluation panel's ~~determination~~ findings and recommendation, if there is one~~, concerning the wetland functions and resulting public values, location, size, and type of the wetland being altered. The local government unit decision must be made in compliance with Minnesota Statutes, section 15.99.~~ The local government unit ~~shall~~ must consider and include in their record of decision the technical evaluation panel's recommendation, if there is one, to approve, modify, or ~~reject~~ deny the ~~proposed replacement plan~~ application. The local government unit must also consider any comments received from those required to receive notice. The local government unit decision must be made in compliance with the time period prescribed by Minnesota Statutes, section 15.99 which, at the date of this rule, generally requires a decision in 60 days. The local government unit decision is valid for three years or as otherwise specified in the local government unit's decision. The local government unit may extend its decision with the concurrence of the technical evaluation panel.

Subp. 5. **Notice of Decision.** The local government unit decision must be ~~sent~~ mailed to the landowner within ten ~~working~~ business days of the decision. A summary of the local government unit decision, in a format provided by the board, must be sent within ten ~~working~~ business days of the decision to those required to receive notice of the application. The notice of decision must include information on the process and time period to appeal the decision of the local government unit.

Subp. 6. **Decisions and noticing for replacement via banking.** For replacement plan applications proposing the use of banking credits, the local government unit must verify, prior to approving the application, that the credits to be withdrawn are available and the applicant has a purchase agreement with the seller. For an approval of a replacement plan using banking credits as replacement, the local government unit must notify the board's banking administrator of the approval. The notification must be sent concurrent with the notice of decision and must include the bank account, the user of credits, and the amount of credit approved for withdrawal.

~~For wetland replacement plans involving more than one local government unit, approval of all local government units involved or as specified in part 8420.0200 shall constitute final approval of the replacement plan and is required before the project may proceed. The local government unit with jurisdiction for the impact site must approve all components of the replacement plan, following the procedures in parts 8420.0500 to 8420.0630. The local government unit with jurisdiction for the replacement site shall limit the review to evaluation of the replacement site as in parts 8420.0540 to 8420.0630 and make a decision accordingly.~~
~~As part of the approval of the replacement plan, the local government unit with jurisdiction for the replacement site assumes responsibility for ensuring compliance with monitoring provisions according to parts 8420.0600 to 8420.0630. The local government unit with jurisdiction for the replacement site may enter into joint powers agreements with a local government unit with jurisdiction for the impact site, assess fees, or develop other procedures considered necessary to facilitate the process.~~

~~8420.0235 [Repealed, 27 SR 135]~~

8420.~~0505~~XXXX PREVIOUSLY APPROVED ~~DETERMINATIONS~~ APPLICATIONS.
~~Replacement plan, banking plans exemption, public road project notification, wetland boundary, wetland type, and no-loss determinations~~ Activities for which an application was approved may be completed under the laws, rules, conditions, and guidelines in effect when they were approved, provided the local government unit's approval is still valid.

~~**8420.0240 TECHNICAL EVALUATION PANEL PROCEDURES.**~~
The entire 8420.0240 was relocated to the Local Government Unit Duties and Procedures section.

~~**8420.0245 OTHER LOCAL GOVERNMENT UNIT WETLAND RULES AND ORDINANCES.**~~
The entire 8420.0245 was relocated to the Local Government Unit Duties and Procedures section.

~~**8420.0250 APPEALS.**~~
~~Subpart 1. **Appeal of local government unit decisions.**~~
~~Subp. 2. [Repealed, 22 SR 1877]~~
~~Subp. 3. **Board appeal procedures.**~~
8420.0250 Subparts 1 and 3 were relocated to Appeals part and edited there.
~~Subp. 4. **County or watershed reclassification.**~~
8420.0250 Subpart 4 was relocated to the Presettlement Wetland Acres and Areas part and edited there.
~~Subp. 5. [Repealed, 27 SR 135]~~

~~**8420.0260 PENALTY FOR LOCAL GOVERNMENT UNIT FAILURE TO APPLY LAW.**~~
The entire 8420.0260 was relocated to the Local Government Unit Duties and Procedures section and edited there.

~~**8420.0268 COMPENSATION CLAIMS AGAINST LOCAL GOVERNMENT UNITS.**~~
The entire 8420.0268 was relocated to the Appeals, Compensation, and Enforcement section.

~~**8420.0270 COMPENSATION.**~~
The entire 8420.0270 was relocated to the Appeals, Compensation, and Enforcement section.

~~**8420.0280 APPEAL FROM BOARD DECISIONS.**~~
8420.0280 was relocated to the Appeals, Compensation, and Enforcement section.

~~**8420.0290 ENFORCEMENT PROCEDURES.**~~
~~Subpart 1. **Enforcement authorities.**~~
~~Subp. 2. **Cease and desist orders.**~~
~~Subp. 3. **Restoration and replacement orders.**~~
~~Subp. 3a. **Contents of order.**~~

~~Subp. 3b. Enforcement authority orders.~~
~~Subp. 3c. Appeals of replacement and restoration orders.~~
~~Subp. 4. After-the-fact replacement.~~
420.0280 Subparts 1 through 5 were relocated to the Appeals, Compensation, and Enforcement section. All remain in the Enforcement Procedures part except Subpart 3c, which was relocated to the Appeals part.

~~Subp. 6. Contractor's responsibility when work drains, excavates, or fills wetlands.~~
420.0280 Subpart 6 was relocated to the Application Procedures section.

~~MINING~~

~~8420.0300 MINING.~~
The entire part 8420.0300 was relocated to the Activities Under Department of Natural Resources Authority section.

~~HIGH PRIORITY REGIONS AND AREAS~~
~~8420.0350 HIGH PRIORITY REGIONS AND AREAS.~~
The entire part 8420.0350 was relocated to the Wetland Planning section.

~~WETLAND PRESERVATION AREAS~~
~~8420.0400 WETLAND PRESERVATION AREAS.~~
The entire part 8420.0400 was relocated to the Wetland Planning section.

APPLICATION PROCEDURES

8420.XXXX GENERAL APPLICATION REQUIREMENTS.
A. Persons requesting approval of a wetland boundary or type, no-loss, exemption, sequencing, or replacement plan application must fulfill the application requirements of this part and those applicable to the type of application submitted. Application requirements for establishment of a wetland bank are provided in part 8420.XXXX.

B. The following information must be submitted to the local government unit for all types of applications:
(1) the post office address of the applicant;
(2) for corporations, the principal officers of the corporation, any parent companies, owners, partners, and joint venturers, and a designated contact person;
(3) managing agents, subsidiaries, or consultants that are or may be involved with the activity;
(4) the type of decision requested;
(5) the location of the project by township, range, section, and quarter section;
(6) evidence of ownership of the project area or the requisite property rights to perform the activity;
(7) an accurate map, survey, or recent aerial photograph showing boundary of the project area and boundary, size, and type of each wetland relevant to the type of decision requested;
(8) if applicable to the type of decision requested, a written description of the proposed project and project area, including its areal extent, with sufficient detail to allow the local government unit to assess the amount and types of wetland to be affected; and
(9) other information considered necessary for evaluation of the application or project by the local government unit.

C. A landowner may seek advice from the local government unit regarding the applicability of a no-loss or exemption, the adequacy of sequencing arguments and alternatives, or other interpretation of this chapter without submitting an application.

8420.~~0225~~XXXX WETLAND BOUNDARY OR TYPE ~~DETERMINATIONS~~ APPLICATIONS.
A landowner may apply for a wetland boundary or type decision from the local government unit. The landowner is responsible for submitting proof necessary to make the decision. Applications for approval of wetland boundary or type must include information in accordance with wetland delineation report

submittal guidelines provided by the board. A wetland boundary or type application may be submitted independently or as part of a no-loss, exemption, sequencing, replacement plan, or banking application. When an independent wetland boundary or type application is approved, and the approval remains valid, it may be incorporated in a subsequent application for a no-loss, exemption, sequencing, replacement plan, or banking application.

8420.~~0220~~ XXXX NO-LOSS ~~DETERMINATIONS~~ APPLICATIONS.

A landowner ~~unsure if proposed work will result in a loss of wetland~~ may apply to the local government unit for a ~~determination~~ no-loss decision. A landowner who does not request a ~~determination~~ decision from the local government unit and proceeds with the activity may be subject to the enforcement provisions in part 8420.~~0290~~XXXX and Minnesota Statutes, section 103G.2372. ~~The local government unit must keep on file all documentation and findings of fact concerning no-loss determinations for a period of ten years.~~

The landowner applying for a no-loss ~~determination~~ is responsible for submitting the proof necessary to show qualification for the claim~~, including proof of the requisite property rights to do the activity~~. The local government unit may require a wetland delineation report or functional assessment be submitted if it determines the report or assessment necessary to make a decision on the no-loss application. This part also applies to applications requesting a decision on whether an activity or wetland falls within the scope of this chapter. ~~The local government unit may evaluate evidence for a no-loss claim without making a determination.~~

8420.~~0210~~XXXX EXEMPTION ~~DETERMINATIONS~~ APPLICATIONS.

A. A landowner intending to ~~drain or fill~~ impact a wetland without replacement, claiming exemption under part 8420.~~0122~~XXXX, may ~~contact~~ apply to the local government unit before ~~beginning draining or filling activities~~ impacting the wetland for a ~~determination~~ decision to whether or not the ~~activity~~ impact is exempt. A landowner who does not request a ~~determination~~ decision from the local government unit and proceeds with the activity may be subject to the enforcement provisions in part 8420.~~0290~~XXXX and Minnesota Statutes, section 103G.2372. ~~The local government unit must keep on file all documentation and findings of fact concerning exemption determinations for a period of ten years.~~ An exemption may apply whether or not the local government unit has made an exemption ~~determination~~ decision. If the landowner requests an exemption ~~determination~~ decision, then the local government unit must make one.

B. The landowner applying for exemption ~~is responsible for submitting~~ must identify the specific exemption being claimed and submit the proof necessary to show qualification for the ~~particular~~ exemption ~~claimed, including proof of the requisite property rights to do the activity~~. ~~The local government unit may evaluate evidence for an exemption without making a determination.~~

~~The local government unit decision shall be based on the exemptions standards in part 8420.0122. If the decision requires a finding of wetland size or type, the local government unit should seek the advice of the technical panel as described in part 8420.0240. The local government unit decision must be made in compliance with Minnesota Statutes, section 15.99. The local government unit decision must be sent to the landowner, members of the technical evaluation panel, the watershed district or water management organization if there is one, the commissioner of natural resources, and individual members of the public who request a copy within ten working days of the decision.~~

C. Landowners who choose not to seek local government unit approval of an exemption must, prior to impacting a wetland, report the exempt activity to the board using a website or other methods developed by the board. The report must provide information required by the board, including the name and contact information of the landowner, the location of the activity by township, range, and section, the exemption being claimed, and the amount of wetland impact in square feet. Information collected regarding exemptions serves the purpose of gathering data on the use of exemptions.

8420.XXXX SEQUENCING APPLICATIONS.

An applicant may either submit the information required for sequencing analysis as part of a replacement plan application or apply separately for a preliminary sequencing decision from the local government unit before preparing a complete replacement plan. The local government unit may request additional

information needed to make a decision. The applicant must provide written documentation of the projects' compliance with the sequencing standards in 8420.XXXX, including the identification of the project purpose and a detailed description of the project and alternatives considered.

8420.0530XXXX REPLACEMENT PLAN ~~COMPONENTS~~ APPLICATIONS.

Subp. 1. **Requirement.** Landowners proposing wetland impacts that require replacement under this chapter must apply to the local government unit and gain approval of a replacement plan prior to impacting wetlands.

Subp. 2. **Pre-application conference and site visit.** Before preparation of a replacement plan, it is recommended that the landowner meet with the local government unit for a pre-application conference and site visit. The local government unit is encouraged to inform the landowner of all sequencing requirements and the criteria used to evaluate replacement plans.

Subp. 3. **Application contents.** On an application form approved by the board in consultation with the commissioner of natural resources, provided through the local government unit, and with required attachments supplied by the applicant, the following documentation must be provided in addition to the general application requirements of part 8420.XXXX; ~~except that for replacement plans utilizing the wetland bank in parts 8420.0700 to 8420.0760, items B, subitem (1); and D, do not apply; instead the applicant shall submit the wetland banking credit withdrawal form prescribed in part 8420.0740, subpart 2, item E:~~

~~A. generally, organizational information, including but not limited to the following:~~

~~(1) the post office address of the applicant;~~

~~(2) for corporations, the principal officers of the corporation, any parent companies, owners, partners, and joint venturers, and a designated contact person; and~~

~~(3) managing agents, subsidiaries, or consultants that are or may be involved with the wetland draining or filling project;~~

~~B. either:~~

~~(1) a signed statement confirming that the wetland acres and values will be replaced in advance of or concurrent with the actual draining or filling of a wetland; or~~

~~(2) an irrevocable bank letter of credit, a performance bond, or other security acceptable to the local government unit in an amount sufficient to guarantee the successful completion of the wetland replacement;~~

~~C~~ A. for the impacted wetland:

~~(1) a recent aerial photograph or accurate map of the impacted wetland area;~~

~~(2) the location of the wetland;~~

~~(3) the size of the wetland;~~

~~(4) the type of the wetland;~~

~~(5) a list of the dominant vegetation in the impacted wetland area, if known;~~

(1) the amount, in square feet or acres, of wetland proposed to be impacted by type;

(2) the minor watershed, major watershed, county, and bank service area;

(6~~3~~) a soils survey map of the site showing soil type and ~~substrate~~ identifying hydric soils, where available;

(7~~4~~) a map showing the locations of any surface inlets or outlets, natural or otherwise, draining into or out of the wetlands, and if the wetland is within the shoreland wetland protection zone or floodplain ~~of a stream, river, or other watercourse~~, the distance and direction to the nearest watercourse;

~~(8) the nature of the proposed project, its areal extent, and the impact on the wetland must be described in sufficient detail to allow the local government unit to determine the amount and types of wetland to be impacted and to demonstrate compliance with the replacement sequencing criteria in part 8420.0520, if applicable;~~

~~(9) evidence of ownership or property rights to the affected areas; and~~

~~F.~~ (5) information known to the applicant or readily available concerning the special considerations criteria in part 8420.0540XXXX, subpart ~~9~~X;~~.~~

(~~10~~6) a list of all other known local, state, and federal permits and approvals required for the activity~~, if known~~; and

(7) written documentation to demonstrate the projects' compliance with the sequencing standards in part 8420.XXXX, including the identification of the project purpose and a detailed description of the project and alternatives considered;

~~D~~ B. for the replacement wetland when the replacement is project-specific, ~~item C, subitems (1) to (7), (9), and (10), and~~:
(1) the proposed action eligible for credit from part 8420.XXXX;
(2) the minor watershed, major watershed, county, and bank service area;
(3) evidence of ownership or property rights to the replacement areas;
(4) information known to the applicant or readily available concerning the special considerations criteria in part 8420.XXXX, subpart X;
(5) a description of how the proposed replacement meets the ecological suitability and sustainability criteria of part 8420.XXXX subpart 4;
(6) a map showing the locations of any existing surface inlets or outlets, natural or otherwise, draining into or out of the replacement wetland, and if the replacement wetland is within the shoreland wetland protection zone or floodplain, the distance and direction to the nearest watercourse;
~~(1) an explanation of the size and type of wetland that will result from successful completion of the replacement plan;~~
(~~2~~7) scale drawings showing plan and profile views of the replacement wetland areas;
(~~3~~8) a description of how the replacement ~~wetland shall~~ area will be constructed, for example, excavation or restoration by blocking an existing tile; the type, size, and specifications of outlet structures; elevations, relative to Mean Sea Level ~~or established bench mark~~, of key features, for example, sill, emergency overflow, and structure height; and best management practices that will be implemented to prevent erosion or site degradation;
(~~4~~9) ~~for created wetlands only, additional~~ a soil survey map of the site showing soil type and identifying hydric soils, where available, and site-specific soils information sufficient to determine the capability of the site to produce and ~~maintain~~ sustain wetland characteristics and replacement goals;
(~~5~~10) a timetable that clearly states how and when implementation of the replacement plan shall proceed, and when construction of the replacement ~~wetland shall~~ area will be ~~finalized~~ completed;
~~(6) a notice in a form provided by the board attached to and recorded with the deed for lands containing a replacement wetland, specifying the following:~~
~~(a) the location of the replacement wetland;~~
~~(b) that the wetland is subject to the act;~~
~~(c) that the fee title owner is responsible for the costs of repairs or reconstruction and management, if necessary, or for replacement costs;~~
~~(d) that reasonable access to the replacement wetland shall be granted to the proper authorities for inspection, monitoring, and enforcement purposes;~~
~~(e) that costs of title review and document recording is the responsibility of the fee title owner; and~~
~~(f) that the local government unit or board can require necessary repairs or reconstruction and revegetation work to return the wetland to the specifications of the approved replacement plan and require reimbursement of reasonable costs from the wetland owner, or can require replacement of the wetland according to the act;~~
(~~7~~11) statements signed by the applicant confirming that:
(a) the wetland will be replaced in advance of, or concurrent with, the actual impact;
(b) ~~an affidavit that~~ the replacement ~~wetland~~ area was not previously restored or created under a prior approved replacement plan;
(~~8~~c) ~~a statement that~~ the replacement ~~wetland~~ area was not ~~drained or filled~~ impacted under an exemption during the previous ten years;
(~~9~~d) ~~a statement that~~ the replacement ~~wetland~~ area was not, and will not be, restored or created with financial assistance from public conservation programs~~,~~ or ~~was not~~ restored or created for other unrelated regulatory purposes;
(~~10~~e) ~~a statement that~~ the replacement ~~wetland~~ area was not and will not be, restored or created using private funds other than those of the landowner unless the funds are paid back with interest to the individual or organization that funded the restoration or creation and the individual or organization notifies the local government unit in writing that the restored wetland may be considered for replacement; and

(~~11~~f) ~~a statement by the applicant that~~ monitoring will occur in accordance with parts 8420.~~0610~~XXXX and 8420.~~0620~~XXXX unless the local government unit will be conducting the monitoring of the wetland replacement area;
(~~12~~12) evidence that a person proposing to create or restore a wetland within the easement of a pipeline as defined in Minnesota Statutes, section 299J.02, subdivision 11, has first notified the easement holder and the director of the Office of Pipeline Safety in writing. The person may not create or restore the wetland if, within 90 days after receiving the required notice, the easement holder or the director of the of Office of Pipeline Safety provides to the person a written notice of objection that includes the reasons for the objection;
(13) a list of all other known local, state, and federal permits and approvals required for the activity;
(~~13~~ 14) evidence that any drainage or property rights potentially detrimental to the replacement ~~wetland~~ area have been acquired, subordinated, or otherwise eliminated; and
(~~14~~ 15) a ~~five-year~~ vegetation establishment and management plan~~, including seeding rates, planting methods, seed and plant mixes, herbicide treatments, and control of noxious weeds and invasive or nonnative species~~ in accordance with part 8420.XXXX; and
~~E. other information considered necessary for evaluation of the project by the local government unit; and~~
~~F. information known to the applicant or readily available concerning the special considerations criteria in part 8420.0540, subpart 9.~~
(16) the size, type, and credits expected to result from the proposed replacement actions;

C. for the replacement wetland when the replacement consists of wetland bank credits:
(1) the wetland bank account number;
(2) the minor watershed, major watershed, county, and bank service area;
(3) the amount of credits to be withdrawn in square feet; and
(4) a completed application for withdrawal of wetland credits from the Minnesota wetland bank in a form provided by the board, or a purchase agreement signed by the applicant and bank account holder; and

D. a description of the required replacement as determined according to the replacement standards of part 8420.XXXX.

Subp. 4. **Approval conditions.** A landowner must not impact a wetland under an approved replacement plan until submittal of the following, to the satisfaction of the local government unit:

A. for project-specific replacement that is not in advance according to part 8420.XXXX, a financial assurance in accordance with part 8420.XXXX, unless waived by the local government unit;

B. for project-specific replacement, evidence that a notice in a form provided by the board has been attached to and recorded with the deed for lands containing a replacement wetland, specifying the following:
(1) the location of the replacement area;
(2) that the replacement area is subject to the act;
(3) that the fee title owner is responsible for the costs of repairs or reconstruction and management, if necessary, or for replacement costs;
(4) that reasonable access to the replacement area will be granted to the proper authorities for inspection, monitoring, and enforcement purposes;
(5) that costs of title review and document recording is the responsibility of the fee title owner; and
(6) that the local government unit or board can require necessary repairs or reconstruction and revegetation work to return the wetland to the specifications of the approved replacement plan and require reimbursement of reasonable costs from the wetland owner, or can require replacement of the wetland according to this chapter and the act; and

C. for replacement consisting of wetland bank credits, confirmation that the board has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

~~Subp. 6. **Contractor's responsibility when work drains, excavates, or fills wetlands.**~~
The Contractor's Responsibility part was relocated from the previous 8420.0290 and edited here.

8420.XXXX CONTRACTOR'S NOTIFICATION RESPONSIBILITY.

For the purposes of this part, "contractor" means an individual, business, or other organization providing, to a landowner or the landowner's agent, a product or service that drains, fills, or excavates a wetland.

A. ~~An agent or employee of another may~~ A contractor must not drain, excavate, or fill a wetland, wholly or partially, unless the ~~agent or employee~~ contractor has, on a form provided by the board:
(1) obtained a signed statement from the landowner or landowner's agent stating that the wetland replacement plan required for the work has been obtained or that a replacement plan is not required; and
(2) ~~mailed~~ sent a copy of the statement to the local government unit with jurisdiction over the wetland.

B. Work in violation of this part is a misdemeanor.

~~C. The board shall develop a form to be distributed to contractor's associations, local government units, and soil and water conservation districts to comply with this part. The form must include:~~
~~(1) a listing of the activities for which a replacement plan is required;~~
~~(2) a description of the penalties for violating Minnesota Statutes, sections 103G.2212 to 103G.237;~~
~~(3) the telephone number for information on the responsible local government unit;~~
~~(4) a statement that national wetland inventory maps are on file with the soil and water conservation district office; and~~
~~(5) spaces for a description of the work and the names, mailing addresses, and telephone numbers of the person authorizing the work and the agent or employee proposing to undertake it.~~

BOUNDARY OR TYPE, NO-LOSS, AND EXEMPTION STANDARDS

8420.XXXX BOUNDARY OR TYPE.

Subpart 1. **Wetland Boundary.** Wetland boundaries must be determined using the methodologies in the United States Army Corps of Engineers Wetlands Delineation Manual (January 1987), including subsequent updates and supplements, and guidance provided by the board.

Subp. 2. **Wetland Type.** Wetland type must be identified according to United States Fish and Wildlife Service Circular No. 39 (1971 edition) "Wetlands of the United States" and Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979), including modifications or guidance provided by the board. Wetland type in relation to Wetland Plants and Plant Communities of Minnesota and Wisconsin (S. Eggers and D. Reed, 1997) is shown in the following table:

Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers and Reed 1997), as modified by the Board of Water and Soil Resources-United States Army Corps of Engineers Wetland Mitigation Memorandum of Understanding (May 2007)	Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979)	Fish and Wildlife Service Circular 39 (Shaw and Fredine 1971)
Shallow, open water	Palustrine or lacustrine, littoral; aquatic bed; submergent, floating, and floating-leaved	Type 5: Inland open fresh water
Deep marsh	Palustrine or lacustrine, littoral; aquatic bed; submergent, floating, and floating-leaved; emergent; persistent and nonpersistent	Type 4: Inland deep fresh marsh
Shallow marsh	Palustrine; emergent; persistent and nonpersistent	Type 3: Inland shallow fresh marsh
Sedge meadow	Palustrine; emergent; narrow-	Type 2: Inland fresh

	leaved persistent	meadow
Fresh (wet) meadow	Palustrine; emergent; broad- and narrow-leaved persistent	Type 1: Seasonally flooded basin or flat Type 2: Inland fresh meadow
Wet to wet-mesic prairie	Palustrine; emergent; broad- and narrow-leaved persistent	Type 1: Seasonally flooded basin or flatType 2: Inland fresh meadow
Calcareous fen	Palustrine; emergent; narrow-leaved persistent; scrub/shrub; broad-leaved deciduous	Type 2: Inland fresh meadowType 6: Shrub swamp
Open bog or coniferous bog	Palustrine; moss/lichen; scrub/shrub; broad-leaved evergreen; forested; needle-leaved evergreen and deciduous	Type 8: Bog
Shrub-carr or alder thicket	Palustrine; scrub/shrub; broad-leaved deciduous	Type 6: Shrub swamp
Hardwood swamp or coniferous swamp	Palustrine; forested; broad-leaved deciduous; needle-leaved evergreen and deciduous	Type 7: Wooded swamp
Floodplain forest	Palustrine; forested; broad-leaved deciduous	Type 1: Seasonally flooded basin or flat
Seasonally flooded basin	Palustrine; flat; emergent; persistent and nonpersistent	Type 1: Seasonally flooded basin or flat

The preceding table was relocated here from the previous part 8420.0549. The table may be updated for the final version of the rule.

8420.XXXX NO-LOSS AND EXEMPTION CONDITIONS.

A person conducting an activity in a wetland under a no-loss in part 8420.XXXX or an exemption in part 8420.~~0122~~XXXX must ensure that:

A. appropriate erosion control measures are taken to prevent sedimentation of the wetland or of any receiving waters;

B. the activity does not block fish activity in a watercourse, except when done purposely to prevent movement of undesirable fish species in accordance with a recommendation from the commissioner; and

C. the activity is conducted in compliance with all other applicable federal, state, and local requirements, including best management practices as listed in part 8420.~~0112~~XXXX, and water resource protection requirements established under Minnesota Statutes, chapter 103H.

8420.XXXX NO-LOSS CATEGORIES.

No-Loss means no permanent loss of, or impact to, wetlands from an activity according to the criteria in this part. Activities that do not qualify for a no-loss according to this part may be subject to replacement according to parts 8420.~~0530~~XXXX to 8420.~~0630~~XXXX. The following qualify for a no-loss:

A. an activity that will not impact a wetland;

B. excavation in wetlands when limited to removal of sediment or debris such as trees, logs, stumps, beaver dams, blockage of culverts, and trash, provided the removal does not result in alteration of the original cross-section of the wetland or watercourse. Wetland areas created solely by beaver activities may be drained by removing those materials placed by beaver. Drainage is permitted by removing or moving materials blocking installed roadway culverts and related drainage structures. Additional

excavation or removal of other materials is not permitted unless it can be shown by aerial photographs that the proposed activity will not drain or fill wetland that was there before the beaver dam was built or before the culvert became plugged;

C. temporary or seasonal water level management activities, done for the purpose of performing maintenance or as part of vegetation or habitat management activities, that will not result in the conversion of a wetland to a non-wetland or conversion of a non-degraded wetland to a different type;

D. an activity conducted as part of an approved replacement or banking plan or conducted or authorized by public agencies for the purpose of wetland restoration, fish and wildlife habitat restoration or improvement using guidance in part 8420.~~0112~~XXXX, item X, or repair and maintenance of earthen containment structures;

E. excavation limited to the removal of deposited sediment in wetlands that are presently utilized as stormwater management basins, or excavation and removal of contaminated substrate, and the excavated area is limited to the minimum dimensions necessary for achieving the desired purpose and stabilized to prevent water quality degradation;

F. an activity associated with the operation, routine maintenance, or emergency repair of existing utilities and public works structures, including pipelines, provided the activity does not result in additional wetland intrusion or additional impacts, either wholly or partially;

G. temporarily crossing or entering a wetland to perform silvicultural activities, including timber harvest as part of a forest management activity, so long as the activity limits the impact on the hydrologic and biologic characteristics of the wetland; the activity does not result in the construction of dikes, drainage ditches, tile lines, or buildings; and the timber harvesting and other silvicultural practices do not result in the drainage of the wetland or public waters; or

H. a temporary impact that is rectified by repairing, rehabilitating, or restoring the affected wetland. A no-loss under this item only applies if all of the following conditions are met:
(1) the physical characteristics of the affected wetland, including ground elevations, contours, inlet dimensions, outlet dimensions, substrate, plant communities, and hydrologic regime, are restored to pre-project conditions sufficient to ensure that all pre-project functions are restored;
(2) the activity is completed and the physical characteristics of the wetland are restored within six months of the start of the activity, unless an extension is granted by the local government unit after consultation with the technical evaluation panel;
(3) the landowner provides sufficient financial assurance acceptable to the local government unit to cover the estimated cost to restore the wetland to pre-project conditions. The local government unit must return any remaining financial assurance to the landowner upon a determination by the local government unit that the conditions in this item have been met by the landowner; and
(4) a no-loss has not been approved under the criteria in this item for a particular site within a wetland within the previous 10 years, except that repairs to the original project may be allowed under the no-loss if the local government unit determines the request to be necessary and reasonable.

8420.~~0115~~XXXX ~~SCOPE OF~~ EXEMPTION STANDARDS.
Subpart 1. **Scope.** Certain impacts may qualify for an exemption from replacement requirements. An impact is exempt from replacement if it qualifies for any one of the exemptions. Persons proposing to conduct an exempt activity are encouraged to contact the local government unit ~~or the local government unit's designee for advice on determining whether a proposed project is eligible~~ to verify eligibility for an exemption and to evaluate alternatives to avoid or minimize wetland impacts. If the total amount of impact exceeds the amount allowed under the applicable exemption, the impact is not exempt and the entire amount of impact must be replaced.
~~An activity is exempt if it qualifies for any one of the exemptions, even though it may be indicated as not exempt under another exemption.~~

A. ~~These~~ No exemptions ~~do not~~ apply to:

(1) calcareous fens as identified by the commissioner;~~.~~
(2) wetlands that have been deposited in the state wetland bank;
(3) ~~No exemptions apply to~~ wetlands that have ~~been~~ previously ~~restored or created~~ received replacement credit as a result of an approved replacement or banking plan; or~~.~~ ~~All such wetlands are subject to replacement on subsequent drainage, excavation, or filling.~~
(4) ~~W~~wetlands ~~may not be~~ that were partially ~~drained, excavated, or filled~~ impacted ~~in order to claim an exemption or no-loss determination on~~ so that the remainder~~. Therefore, an exemption or no-loss determination may not be applied to the remaining wetland if it~~ would be eligible for an exemption, when the exemption would not have been applicable before the impact.
Impacts to any ~~All~~ such wetlands are subject to replacement according to the requirements of parts 8420.XXXX to 8420.XXXX or, for calcareous fens, part 8420.XXXX ~~on subsequent drainage, excavation, or filling~~.

B. Exemptions may not be combined on a ~~wetland that is impacted by a~~ project.

~~A person conducting an activity in a wetland under an exemption in part 8420.0122 shall ensure that:~~
~~A. appropriate erosion control measures are taken to prevent sedimentation of the water;~~
~~B. the activity does not block fish activity in a watercourse; and~~
~~C. the activity is conducted in compliance with all other applicable federal, state, and local requirements, including best management practices as listed in part 8420.0112, and water resource protection requirements established under Minnesota Statutes, chapter 103H.~~

C. Present and future owners of wetlands impacted without replacement under an exemption for agricultural activities in subpart X or drainage in subpart X must make no use of the wetland area after it is impacted, other than as agricultural land or other use specified in subpart X, for at least ten years after the impact, unless it is first replaced under the requirements of Minnesota Statutes, section 103G.222. Except for land in public ownership, at the time of impact, the local government unit may require the landowner to record a notice of these restrictions in the office of the county recorder for the county in which the project is located if it determines the wetland area impacted is at risk of conversion to a nonagricultural use or other use than specified in subpart X within ten years, based on the zoning classification, proximity to a municipality or full service road, or other criteria as determined by the local government unit. In making a decision under this item, the local government unit must review the applicable comprehensive plan, if one exists, when evaluating the risk of conversion to a nonagricultural use and monitor and enforce the prohibition on using the area impacted for a nonagricultural purpose for at least ten years. At a minimum, the recorded document must contain the name or names of the landowners, a legal description of the property to which the restrictions apply, a statement of the restrictions, the date on which the restrictions expire, the name of the local government that approved the exemption, if such occurred, the signatures of all owners, and an acknowledgment.

~~8420.0120 [Repealed, 22 SR 1877]~~

~~**8420.0122 EXEMPTION STANDARDS.**~~

Subp.~~art 1~~ 2. **Agricultural activities.** A replacement plan ~~for wetlands~~ is not required for:
A. impacts resulting from agricultural activities in a wetland that was planted with annually seeded crops or was in a crop rotation seeding of pasture grass or legumes in six of the last ten years prior to January 1, 1991. Documentation, such as aerial photographs, United States Department of Agriculture records, or ~~affidavit of landowner must be required by the local government unit to show and use~~ other applicable documentation may be used as evidence for this exemption. ~~Land~~ Impacts eligible for this exemption must be to ~~wetland~~ types 1 ~~and~~ or 2 wetlands;

B. impacts resulting from agricultural activities in a type 1 wetland on agricultural pasture land that remains in the same use, except for bottomland hardwood type 1 wetlands, and impacts resulting from agricultural activities in a type 2 or type 6 wetland that is less than two acres in size and located on agricultural pasture land that remains in the same use;

~~C. activities in a wetland conducted as part of normal farming practices. For purposes of this item, "normal farming practices" means farming, silvicultural, grazing, and ranching activities such as plowing, seeding, cultivating, and harvesting for the production of feed, food, and fiber products, but does not include activities that result in the draining of wetlands;~~

~~D~~ C. impacts resulting from soil and water conservation ~~practices that do not permanently drain or fill a wetland and~~ projects that are ~~approved~~ certified by ~~the~~ soil and water conservation district technical staff after review by the technical evaluation panel, provided the project minimizes the impact on the hydrologic and biologic characteristics of the wetland. For purposes of this item, examples of soil and water conservation practices include those identified in the State Cost Share Program Manual, available ~~at~~ from the ~~Board of Water and Soil Resources Web site (http://www.bwsr.state.mn.us/cs/costsharemanual.pdf)~~ board or soil and water conservation districts, and federally funded demonstration, research, and cost share programs and projects;

D. filling a wetland to accommodate wheeled booms on irrigation devices if the fill does not impede normal drainage;

E. impacts resulting from aquaculture activities including pond excavation and construction and maintenance of associated access roads and dikes authorized under, and conducted in accordance with, a permit issued by the United States Army Corps of Engineers under section 404 of the federal Clean Water Act, United States Code, title 33, section 1344, but not including construction or expansion of buildings;

F. impacts resulting from wild rice production activities, including necessary diking and other activities authorized under a permit issued by the United States Army Corps of Engineers under section 404 of the federal Clean Water Act, United States Code, title 33, section 1344; ~~and~~ or

G. impacts resulting from agricultural activities that are subject to federal farm program restrictions that meet minimum state standards under this chapter and Minnesota Statutes, sections 103A.202 and 103B.3355, and that have been approved by the ~~B~~board ~~of Water and Soil Resources~~, the commissioners of natural resources and agriculture, and the Pollution Control Agency. This exemption is not valid until such agreement is approved. ~~The~~ If approved, the conditions and standards ~~shall~~ will be noticed by the board to local government units and published in the State Register. The conditions and standards ~~shall~~ will take effect 30 days after publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register. Upon taking effect, ~~T~~this exemption ~~may be applied~~ will only apply to impacts on agricultural land annually enrolled in the federal Farm Program as long as ~~wetlands~~ the impacts are not ~~drained, excavated, or filled~~ beyond what is:
(1) allowed under the other exemptions in this part;
(2) necessary to replace, maintain, or repair existing private drainage infrastructure with a capacity not to exceed that which was originally constructed; or
(3) replaced at a ratio of 1:1 or greater under United States Department of Agriculture provisions as supported by documentation from the United States Department of Agriculture which must be included as evidence to support this exemption.
If the ~~activity~~ impact would result in loss of eligibility, the landowner cannot qualify for the exemption.

Subp. ~~2~~ 3. **Drainage.** ~~A.~~ For the purposes of this subpart, "public drainage system" means a drainage system as defined in Minnesota Statutes, section 103E.005, subdivision 12, and any ditch or tile lawfully connected to the drainage system.
~~B. A replacement plan is not required for draining of type 1 wetlands, or up to five acres of type 2 or type 6 wetlands, in an unincorporated area on land that has been assessed drainage benefits for a public drainage system, provided that:~~
~~(1) during the 20-year period that ended January 1, 1992:~~
~~(a) there was an expenditure made from the drainage system account for the public drainage system;~~
~~(b) the public drainage system was repaired or maintained as approved by the drainage authority; or~~
~~(c) no repair or maintenance of the public drainage system was required under Minnesota Statutes, section 103E.705, subdivision 1, as determined by the public drainage authority; and~~

~~(2) the wetlands are not drained for conversion to:~~
~~(a) platted lots;~~
~~(b) planned unit, commercial, or industrial developments; or~~
~~(c) any development with more than one residential unit per 40 acres, except for parcels subject to local zoning standards that allow family members to establish an additional residence on the same 40 acres. If wetlands drained under this item are converted to uses prohibited under subitem (2) during the ten-year period following drainage, the wetlands must be replaced under Minnesota Statutes, section 103G.222.~~

A. Drainage maintenance or repair. A replacement plan is not required for:
~~C.~~ (1) ~~A replacement plan is not required for draining, excavating, or filling of wetlands, except for draining types 3, 4, and 5 wetlands that have been in existence for more than 25 years,~~ impacts resulting from maintenance ~~and~~ or repair of existing public drainage systems conducted or authorized by a public drainage authority pursuant to Minnesota Statutes, chapter 103E, when the maintenance or repair does not drain type 3, 4, or 5 wetlands that have existed for more than 25 years prior to the proposed impact; or~~,~~
~~D.~~ (2) ~~A replacement plan is not required for draining, excavating, or filling of wetlands, except for draining wetlands that have been in existence for more than 25 years,~~ impacts resulting from maintenance ~~and~~ or repair of existing drainage systems other than public drainage systems, when the maintenance or repair does not drain wetlands that have existed for more than 25 years prior to the proposed impact.
For ~~items C and D~~ projects proposed under this item, the landowner must provide documentation that the wetlands ~~which will~~ to be partially or completely drained by the maintenance or repair have not existed for more than 25 years. Documentation may include, but is not limited to: aerial photographs, climatological records, soil borings, vegetative analysis, elevation surveys, or drainage system maintenance records ~~sworn affidavits~~.

~~E~~ B. Drainage enhancement. A replacement plan is not required for:
(1) draining a wetland on agricultural land ~~that~~ when the wetland was:
(~~1~~a) ~~was~~ planted with annually seeded crops prior to July 5, except for crops that are normally planted after this date, in eight out of the ten most recent years prior to the impact;
(~~2~~b) ~~was~~ in a crop rotation seeding of pasture grass, cover crop, or legumes or was fallow for a crop production purpose in eight out of the ten most recent years prior to the impact; or
(~~3~~c) ~~was~~ enrolled in a state or federal land conservation program and met the requirements of subitem (1) (a) or (~~2~~1) (b) prior to enrollment.
(2) draining of type 1 wetlands, or up to five acres of type 2 or type 6 wetlands, in an unincorporated area on land that has been assessed drainage benefits for a public drainage system, provided that:
(a) during the 20-year period that ended January 1, 1992:
(*i*) there was an expenditure made from the drainage system account for the public drainage system;
(*ii*) the public drainage system was repaired or maintained as approved by the drainage authority; or
(*iii*) no repair or maintenance of the public drainage system was required under Minnesota Statutes, section 103E.705, subdivision 1, as determined by the public drainage authority; and
(b) the wetlands are not drained for conversion to:
(*i*) platted lots;
(*ii*) planned unit, commercial, or industrial developments; or
(*iii*) any development with more than one residential unit per 40 acres, except for parcels subject to local zoning standards that allow family members to establish an additional residence on the same 40 acres. If wetlands drained under sub-item (2) are converted to prohibited uses during the ten-year period following drainage, the wetlands must be replaced under Minnesota Statutes, section 103G.222.
Documentation, such as aerial photographs, United States Department of Agriculture records, or ~~an affidavit of the landowner or another landowner with knowledge of the subject agricultural land~~ other applicable documentation may be ~~required by the local government unit~~ used as evidence for the exemption under this item.

C. For projects completed under this subpart, spoil must be placed and stabilized in a manner that minimizes wetland impacts without jeopardizing the stability of the ditch or contributing to the degradation of downstream water quality.

~~F~~ D. The public drainage authority may, as part of the repair, install control structures, realign the ditch, construct dikes along the ditch, or make other modifications as necessary to prevent drainage of the wetland.

~~G~~ E. Wetlands and public waters of all types that could be drained as a part of a public drainage repair project are eligible for the permanent wetlands preserve program established under Minnesota Statutes, section 103F.516. The board ~~shall~~ must give priority to acquisition of easements on types 3, 4, and 5 wetlands that have been in existence for more than 25 years on public drainage systems and other wetlands that have the greatest risk of drainage from a public drainage repair project.

~~H. Present and future owners of wetlands drained or filled without replacement under an exemption in item B or E may make no use of the wetland area after it is drained, excavated, or filled, other than as agricultural land, for at least ten years after the draining, excavating, or filling, unless it is first replaced under the requirements of Minnesota Statutes, section 103G.222. Also, for at least ten years, the wetland may not be restored for replacement credit. Except for land in public ownership, at the time of draining, excavation, or filling, the local government unit may require the landowner to record a notice of these restrictions in the office of the county recorder for the county in which the project is located. The local government unit may require recording a notice of these restrictions if it determines the wetland area drained is at risk of conversion to a nonagricultural use within ten years based on the zoning classification, proximity to a municipality or full service road, or other criteria as determined by the local government unit. In making a determination under this item, the local government unit must review the applicable comprehensive plan when evaluating the risk of conversion to a nonagricultural use and monitor and enforce the prohibition on using the area drained, filled, or excavated for a nonagricultural purpose for at least ten years. At a minimum, the recorded document must contain the name or names of the landowners, a legal description of the property to which the restrictions apply, a statement of the restrictions, the date on which the restrictions expire, the name of the local government that certified the exemption, if such occurred, the signatures of all owners, and an acknowledgment.~~

Subp. ~~3~~ 4. **Federal approvals.** A replacement plan ~~for wetlands~~ is not required for ~~activities~~ impacts authorized under section 404 of the federal Clean Water Act, United States Code, title 33, section 1344, or section 10 of the Rivers and Harbors Act of 1899, United States Code, title 33, section 403, and regulations that meet minimum state standards under this chapter and that have been approved by the B~~b~~oard ~~of Water and Soil Resources~~, the Department of Agriculture, the Department of Natural Resources, and the Pollution Control Agency. This exemption is not valid until such agreement is approved. If approved, the conditions and standards will be noticed by the board to local government units and published in the State Register. The exemption will take effect 30 days after publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register.

Subp. 4 5. Restored **Wetlands** ~~restoration~~. A replacement plan ~~for wetlands~~ is not required for:
A. ~~activities in a~~ impacts to a wetland that was restored or created for conservation purposes under a contract or easement providing the landowner with the right to drain the restored or created wetland to pre-project hydrologic conditions. The landowner must provide a contract or easement conveyance ~~or affidavit~~ demonstrating that the landowner or a predecessor restored or created the wetland for conservation purposes but retained the right to subsequently drain the restored or created wetland to the conditions that existed prior to restoration or creation; or

B. ~~activities in a~~ impacts to a wetland that was restored or created by a landowner without any assistance or financing from public agencies or private entities other than the landowner and the wetland has not been used for wetland replacement or deposited in the state wetland bank. For purposes of this item, assistance by public agencies does not include consultation on project design or advice on the project's relationship to state or federal programs. The landowner must provide a contract, billing statements, or ~~an affidavit~~ other evidence sufficient to demonstrate~~ing~~ that the landowner or a predecessor restored or created the wetland without any assistance or financing from public agencies or private entities other than the landowner. The landowner must also provide sufficient information to determine that the area was not wetland prior to the restoration or creation activity.

~~Subp. 5. **Incidental wetlands.** A replacement plan for wetlands is not required for activities in wetland areas created solely as a result of:~~
~~A. beaver dam construction;~~
~~B. blockage of culverts through roadways maintained by a public or private entity;~~
~~C. actions by public or private entities that were taken for a purpose other than creating the wetland; or~~
~~D. any combination of items A to C.~~
~~Wetland areas created by beaver activities may be drained by removing those materials placed by beaver. Drainage is permitted by removing or moving materials blocking installed roadway culverts and related drainage structures. Additional excavation or removal of other materials is not permitted unless it can be shown by aerial photographs that the proposed activity will not drain or fill wetland that was there before the beaver dam was built or before the culvert became plugged.~~
~~Wetland areas may be drained, excavated, or filled if the landowner can show that the wetland was created solely by actions, the purpose of which was not to create the wetland.~~
~~Impoundments or excavations constructed in nonwetlands solely for the purpose of effluent treatment, storm water retention, soil and water conservation practices, and water quality improvements, and not as part of a wetland replacement process that may, over time, take on wetland characteristics, are also exempt.~~

Subp. 6. **Utilities~~; public works~~.**
A. A replacement plan ~~for wetlands~~ is not required for impacts resulting from:
(1) ~~new placement or maintenance, repair, enhancement, or replacement of existing utility or utility-type service, including pipelines, if:~~
~~(a) the direct and indirect impacts of the proposed project have been avoided and minimized to the extent possible; and~~
~~(b)~~ the installation, maintenance, repair, or replacement of utility lines, including pipelines, provided that the impacts have been avoided and minimized to the extent possible and the proposed project significantly modifies or alters less than one-half acre of wetlands; or
(2) ~~activities associated with the operation, routine maintenance, or emergency repair of existing utilities and public work structures, including pipelines, provided the activities do not result in additional wetland intrusion or additional draining or filling of a wetland either wholly or partially; or~~
~~(3)~~ the repair ~~and~~ or updating of existing ~~individual~~ subsurface sewage treatment systems as necessary to comply with local, state, and federal regulations. This exemption does not apply if the wetland impacts are a result of the treatment system being expanded to accommodate greater use.

B. For maintenance, repair, and replacement, the local government unit may issue a seasonal or annual exemption ~~certification~~ approval or the utility may proceed without local government unit ~~certification~~ approval if the utility is carrying out the work according to approved best management practices. Work of an emergency nature may proceed as necessary and any ~~drain or fill activities shall~~ impacts must be addressed with the local government unit after the emergency work has been completed.

Subp. 7. **Forestry.** This exemption is for roads and crossings solely constructed, and primarily used, for the purpose of providing access for the conduct of silvicultural activities. A replacement plan ~~for wetlands~~ is not required for~~:~~
~~A. temporarily crossing or entering a wetland to perform silvicultural activities, including timber harvest as part of a forest management activity, so long as the activity limits the impact on the hydrologic and biologic characteristics of the wetland; the activity does not result in the construction of dikes, drainage ditches, tile lines, or buildings; and the timber harvesting and other silvicultural practices do not result in the drainage of the wetland or public waters; or~~
~~B. permanent access for~~ impacts resulting from the construction of forest roads and crossings ~~across wetlands~~ so long as the activity limits the impact on the hydrologic and biologic characteristics of the wetland; the construction activities do not include, or result in, the access becoming, a dike, drainage ditch, or tile line; ~~filling is~~ impacts are avoided wherever possible; and there is no drainage of the wetland or public waters.
~~This exemption is for roads constructed for the primary purpose of providing access for the conduct of silvicultural activities.~~

~~Subp. 8. [Repealed, 32 SR 281]~~

Subp. ~~9~~ 8. **De minimis.**
A. Except as provided in items B and C, a replacement plan ~~for wetlands~~ is not required for ~~draining, excavating, or filling~~ projects that impact up to the following amounts of wetlands ~~as part of a project~~:

(1) in a greater than 80 percent area~~, including Isanti County~~:
(a) 10,000 square feet ~~of type 1, 2, 6, or 7 wetland~~, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the shoreland wetland protection zone; ~~or~~
(b) 400 square feet ~~of type 1, 2, 6, or 7 wetland~~, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the building setback zone, as defined in the local shoreland management ordinance, but within the shoreland wetland protection zone. This amount may be increased to 1,000 square feet by the local government unit if the wetland is isolated and determined to have no direct surficial connection to the public water;
(c) 100 square feet of type 3, 4, 5, 8, and white cedar and tamarack wetland outside of the building setback zone, as defined in the local shoreland management ordinance; or
(d) 20 square feet of any wetland inside the building setback zone, as defined in the local shoreland management ordinance;

(2) in a 50 to 80 percent area:
(a) 5,000 square feet ~~of type 1, 2, 6, or 7 wetland~~, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the shoreland wetland protection zone and outside of the 11-county metropolitan area;
(b) 2,500 square feet ~~of type 1, 2, 6, or 7 wetland~~, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the shoreland wetland protection zone and inside the 11-county metropolitan area; ~~or~~
(c) 400 square feet ~~of type 1, 2, 6, or 7 wetland~~, except for types 3, 4, 5, 8 and white cedar and tamarack wetland, outside of the building setback zone, as defined in the local shoreland management ordinance, but within the shoreland wetland protection zone;
(d) 100 square feet of type 3, 4, 5, 8, and white cedar and tamarack wetland outside of the building setback zone, as defined in the local shoreland management ordinance; or
(e) 20 square feet of any wetland inside the building setback zone, as defined in the local shoreland management ordinance; or

(3) in a less than 50 percent area:
(a) 2,000 square feet of type 1, 2, or 6 wetland outside of the shoreland wetland protection zone and outside the 11-county metropolitan area;
(b) 1,000 square feet of type 1, 2, or 6 wetland outside of the shoreland wetland protection zone and inside the 11-county metropolitan area;
(c) 400 square feet of type 1, 2, or 6 wetland outside of the the building setback zone, as defined in the local shoreland management ordinance, but within the shoreland wetland protection zone; ~~or~~
(d) 100 square feet of type 3, 4, 5, 7, and 8 wetland outside of the building setback zone, as defined in the local shoreland management ordinance; or
(e) 20 square feet of any wetland inside the building setback zone, as defined in the local shoreland management ordinance.
~~(4) statewide:~~
~~(a) 100 square feet of type 3, 4, 5, 8, and white cedar and tamarack wetland outside of the building setback zone, as defined in the local shoreland management ordinance; or~~
~~(b) 20 square feet of wetland, regardless of type, inside the building setback zone, as defined in the local shoreland management ordinance.~~

B. The amounts listed in item A may not be combined on a project.

C. This exemption no longer applies to a landowner's portion of a wetland when the proposed project impact area and the cumulative area of the landowner's portion drained, excavated, or filled since January 1, 1992, is the greater of:

(1) the applicable area listed in item A, if the landowner owns the entire wetland;
(2) five percent of the landowner's portion of the wetland; or
(3) 400 square feet.
~~D. This exemption may not be combined with another exemption on a project.~~

~~E~~ D. Property may not be ~~sub~~divided ~~solely~~ to increase the amounts listed in item A or to gain an exemption.

~~F~~ E. For purposes of this subpart, for wetlands greater than 40 acres, the wetland type may be determined to be the wetland type with the deepest water regime within the wetland and within 300 feet of the impact.

~~G~~ F. For purposes of this subpart, the 11-county metropolitan area consists of the counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.

Subp. ~~10~~ 9. **Wildlife habitat.** A replacement plan ~~for wetlands~~ is not required for:
A. excavation or the associated deposition of spoil within a wetland for the primary purpose of ~~a~~ wildlife habitat improvement ~~project~~, if:
(1) the total area of deposition, and excavation if within the permanently and semipermanently flooded areas of type 3, 4, or 5 wetlands, does not exceed five percent of the wetland area or one-half acre, whichever is less, and the spoil is stabilized to prevent erosion and ~~permanently seeded with~~ native, noninvasive vegetation is established ~~species to prevent erosion~~;
(2) the project does not have an adverse ~~impact~~ effect on any species designated as endangered or threatened under state or federal law; and
(3) the project will provide wildlife habitat improvement as certified by the soil and water conservation district or technical evaluation panel using the "Wildlife Habitat Improvements in Wetlands: Guidance for Soil and Water Conservation Districts and Local Government Units in Certifying and Approving Wetland Conservation Act Exemption Proposals, Minnesota Interagency Wetlands Group, December 2000" or similar criteria approved by the board; or

B. duck blinds.

~~STANDARDS AND PROCEDURES FOR EVALUATING~~ WETLAND REPLACEMENT ~~PLANS~~

8420.~~0500~~XXXX PURPOSE AND REQUIREMENT.
Subpart 1. **Purpose.** Parts 8420.~~0500~~XXXX to 8420.~~0630~~XXXX specify the procedures and criteria for avoiding and minimizing ~~wetland~~ impacts and for ensuring adequate replacement of lost public values ~~for~~ from unavoidable ~~wetland~~ impacts.

~~**8420.0505 PREVIOUSLY APPROVED DETERMINATIONS.**~~
The entire 8420.0505 was relocated to the Local Government Unit Duties and Procedures section and edited there.

~~**8420.0510 REPLACEMENT PLAN PROCEDURES.**~~
~~Subpart 1. **Generally.**~~ Subp. 2. **Requirement.** No person ~~shall drain, excavate in the permanent or semipermanently flooded areas of type 3, 4, or 5 wetlands, or fill~~ may impact a wetland, wholly or partially, ~~or otherwise impact wetlands~~ without being eligible for an exemption or no-loss, or first having a wetland replacement plan ~~or other determination~~ approved by the local government unit. Prior to approval of a replacement plan, the local government unit must ensure that the applicant has exhausted all possibilities to avoid and minimize wetland impacts according to the sequencing requirements of part 8420.~~0520~~XXXX. The applicant must demonstrate to the local government unit that the replacement plan complies with this part and the replacement standards of parts 8420.~~0550~~XXXX and 8420.XXXX. A replacement plan that fails to meet the requirements of this chapter must be considered inadequate in replacing lost function and value and must be denied by the local government unit.

~~Subp. 2. **Preapplication conference and site visit.** Before preparation of a wetland value replacement plan, it is recommended that the landowner meet with the local government unit for a preapplication conference and site visit. The local government unit is encouraged to inform the landowner of all sequencing requirements and the criteria used to evaluate replacement plans. A landowner may submit the information required in part 8420.0520 and request a determination of compliance with the sequencing requirements from the local government unit before preparing a replacement plan.~~

~~Subp. 3. **Evaluation.** As provided for in part 8420.0240, technical questions concerning the public value, location, size, and type of wetland shall be submitted to the technical evaluation panel. The local government unit may use a technical evaluation panel to predetermine public value, location, size, or type of wetlands under its jurisdiction and use this determination in administering the act. Wetland boundaries must be determined using the methodologies in the United States Army Corps of Engineers Wetland Delineation Manual (January 1987). Wetland type must be identified according to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979), United States Fish and Wildlife Service Circular No. 39 (1971 edition) "Wetlands of the United States," or Wetland Plants and Plant Communities of Minnesota and Wisconsin (S. Eggers and D. Reed, 1997), as modified by the Board of Water and Soil Resources-United States Army Corps of Engineers Wetland Mitigation Memorandum of Understanding (May 2007). The documents referenced under this subpart are incorporated by reference, are not subject to frequent change, and are available through the Minitex interlibrary loan system or on the board's Web site at http://www.bwsr.state.mn.us. The technical evaluation panel shall provide its determinations to the local government unit for consideration.~~

Subp. ~~6~~ 3. **Alternative evaluation methodologies.** The local government unit may evaluate the replacement plan using a scientifically accepted methodology that evaluates all wetland functions specified in Minnesota Statutes, section 103B.3355, for both the impacted and replacement wetlands. Such alternative methodologies must be approved and listed by the board, in consultation with the commissioners of natural resources and agriculture, and local government units. When using alternative evaluation methodologies to evaluate replacement plans, the ratio of replacement credit to impacted wetland ~~to replacement wetland~~ must not be less than the minimum ~~acreage~~ requirements as listed in part 8420.~~0546~~ XXXX, except as provided for in part 8420.~~0650~~XXXX, comprehensive wetland protection and management plans.

The preceding subpart was relocated from the previous 8420.0549 subpart 8 and edited here.

8420.~~0548~~XXXX SPECIAL CONSIDERATIONS.

Subpart 1. **Scope.** The factors in this part, when identified as being applicable to an impact site or a replacement site, must be considered by the applicant prior to submittal of a replacement plan, and by the local government unit in the review of replacement plans.

Subp. 2. **Endangered and threatened species.** A replacement plan for activities that involve taking species listed as endangered or threatened in parts 6134.~~0200~~XXXX to 6134.~~0400~~XXXX must be denied unless the commissioner issues a permit pursuant to part 6212.~~1800~~XXXX or Minnesota Statutes, section 84.0895, subdivision 7. Applicants may determine if there are known locations of listed species at a particular site by contacting the Department of Natural Resources' natural heritage and nongame research program.

Subp. 3. **Rare natural communities.** A replacement plan for activities that involve the modification of a rare natural community as determined by the Department of Natural Resources' natural heritage program must be denied if the local government unit determines that the proposed activities will permanently adversely affect the natural community.

Subp. 4. **Special fish and wildlife resources.** A replacement plan for activities that would have a significant adverse ~~impact that cannot be mitigated~~ effect on a special or locally significant fish and wildlife resource that cannot be functionally replaced must be denied. These ~~activities~~ resources include, but are not limited to:

A. fish passage and spawning areas;

B. colonial waterbird nesting colonies;

C. migratory waterfowl concentration areas;
D. deer wintering areas; and/or
E. wildlife travel corridors.
Activities involving streams must not block fish passage unless approved by the Department of Natural Resources.

Subp. 5. **Archaeological, historic, or cultural resource sites.** A replacement plan for activities that involve the modification of known archaeological, historical, or cultural resource sites on or eligible for the National Register of Historic Places, as designated by the state historic preservation officer, must be denied, if the local government unit, in consultation with the State Historical Preservation Office, determines that the proposed activities will have a significant adverse ~~impact~~ effect on the archaeological or historical value of the site.

Subp. 6. **Groundwater sensitivity.** A replacement plan for activities must be denied if the local government unit determines the activities would have a significant adverse ~~impact~~ effect on groundwater quality. The publication "Criteria and Guidelines for Assessing Geologic Sensitivity of Ground Water Resources in Minnesota" (MDNR, 1991) may be used as a guide in determining potential impacts.

Subp. 7. **Sensitive surface waters.** A replacement plan must be denied if the local government unit determines the activities will have a significant adverse ~~impact~~ effect on the water quality of outstanding resource value waters listed in part 7050.0180 or on trout waters designated by the commissioner.

Subp. 8. **Education or research use.** A replacement plan for impacts to ~~W~~wetlands known to be used for educational or research purposes must be denied if the local government unit determines that those uses will not be maintained or adequately replaced.

Subp. 9. **Waste disposal sites.** The local government unit must evaluate the type and amount of waste material found at the site. Activities involving known or potential hazardous wastes or contaminants must be conducted according to applicable federal and state standards.

Subp. 10. **Consistency with other plans.** The local government unit must consider the extent to which proposed activities are consistent with other plans, such as local water management plans, watershed management plans, land use plans, zoning, and ~~master~~ comprehensive plans.

8420.~~0520~~XXXX SEQUENCING.
Subpart 1. **Requirement.** The local government unit ~~may~~ must not ~~consider or~~ approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland ~~has complied~~ complies with all of the following principles in descending order or priority:
A. avoids direct or indirect impacts ~~to the wetland~~ that may destroy or diminish the wetland under the criteria in subpart ~~3~~ 2;
B. minimizes ~~the~~ impacts ~~to the wetland~~ by limiting the degree or magnitude of the wetland activity and its implementation under the criteria in subpart ~~4~~ 3;
C. rectifies ~~the~~ impacts by repairing, rehabilitating, or restoring the affected wetland under the criteria in subpart ~~5~~ 4;
D. reduces or eliminates ~~the~~ impacts ~~to the wetland~~ over time by operating the project in a manner that preserves~~ation~~ and ~~maintenance~~ maintains the remaining wetland ~~operations~~ under the criteria in subpart ~~6~~ 5; and
E. replaces unavoidable impacts ~~to the wetland~~ by restoring or, if wetland restoration opportunities are not reasonably available, creating ~~substitute~~ replacement wetland areas having equal or greater public value as provided for in parts 8420.~~0530~~XXXX to 8420.~~0760~~XXXX. ~~Exceptions to this part include~~ ~~w~~Wetlands located in cultivated fields that are subject to subpart 8 are an exception to this part ~~, and calcareous fens that are subject to subpart 9~~.

~~Subp. 2. Application options. An applicant may either submit the information required for sequencing analysis as part of a replacement plan application or apply for a preliminary sequencing determination~~

~~from the local government unit before preparing a replacement plan. The local government unit may request additional information needed to make a determination. For projects impacting wetland areas less than 10,000 square feet more than the de minimis amount listed in part 8420.0122, subpart 9, item A, the local government unit may provide an on-site sequencing determination without written documentation from the applicant.~~

Subp. ~~3~~ 2. ~~Determination of i~~**Impact avoidance.**
A. Avoidance ~~must be~~ is required when indicated by part 8420.~~0548~~XXXX.
B. Wetland dependence determination:
(1) Based on information provided by the applicant, the local government unit ~~shall~~ must determine if the proposed project is wetland dependent. A project is wetland dependent if wetland features~~,~~ or functions~~, or values~~ are essential to fulfill the basic purpose of the project. A wetland present at the site of a proposed project does not make that project wetland dependent.
(2) A project that has been determined by the local government unit to be wetland dependent is exempt from the analysis of avoidance alternatives in item C.
C. Alternatives analysis:
(1) In addition to the proposed project, ~~T~~the applicant ~~shall~~ must provide the local government unit with documentation describing at least two alternatives that avoid wetland impacts, ~~in addition to the proposed project to avoid wetland impacts. O~~one of which may be the no-build alternative~~, that would avoid impacts to wetlands~~. For projects that repair or rehabilitate existing infrastructure, only one alternative is required. The alternatives may include consideration of alternate sites or alternative project configurations on the proposed site. The alternatives must be judged by the local government unit as good faith efforts, or the local government unit may require the applicant to redraft them for reconsideration.
(2) The local government unit ~~shall~~ must determine whether any proposed feasible and prudent alternatives are available that would avoid impacts to wetlands. An alternative ~~shall be~~ is considered feasible and prudent if it meets all of the following requirements:
(a) it is capable of being done from an engineering point of view;
(b) it is in accordance with accepted engineering standards and practices;
(c) it is consistent with reasonable requirements of the public health, safety, and welfare;
(d) it is an environmentally preferable alternative based on a review of social, economic, and environmental impacts; and
(e) it would create no truly unusual problems.
~~(3) For projects proposing impacts to type 3, 4, or 5 wetlands, the local government unit shall also determine that there are no environmentally preferable alternatives that would avoid the impact.~~
(~~4~~ 3) The local government unit ~~shall~~ must consider the following in evaluating avoidance alternatives as applicable:
(a) whether the basic project purpose can be reasonably accomplished using one or more other sites in the same general area that would avoid wetland impacts. An alternate site ~~may~~ must not be excluded from consideration only because it includes or requires an area not owned by the applicant that could reasonably be obtained, used, expanded, or managed to fulfill the basic purpose of the proposed project;
(b) the general suitability of the project site and alternate sites considered by the applicant to achieve the purpose of the project;
(c) whether reasonable modification of the size, scope, configuration, or density of the project would avoid impacts to wetlands;
(d) efforts by the applicant to accommodate or remove constraints on alternatives imposed by zoning standards or infrastructure, including requests for conditional use permits, variances, or planned unit developments; ~~and~~
(e) the physical, economic, and demographic requirements of the project. Economic considerations alone do not make an alternative not feasible and prudent~~.~~; and
(f) the amount, distribution, condition, and public value of wetlands and associated resources to be affected by the project and the potential for direct and indirect effects over time.
(~~5~~ 4) If the local government unit determines that a feasible and prudent alternative exists that would avoid impacts to wetlands, it ~~shall~~ must deny the replacement plan. If no feasible and prudent alternative is available that would avoid impacts to wetlands, the local government unit ~~shall~~ must evaluate the replacement plan for compliance with subparts 4 3 to 8.

Subp. 4 3. ~~Determination of i~~**Impact minimization.**
A. The applicant shall demonstrate to the local government unit's satisfaction that the activity will minimize impacts to wetlands. In reviewing the sufficiency of the applicant's ~~efforts~~ proposal to minimize wetland impacts, the local government unit must consider all of the following:
(1) the spatial requirements of the project;
(2) the location of existing structural or natural features that may dictate the placement or configuration of the project;
(3) the purpose of the project and how the purpose relates to placement, configuration, or density;
(4) the sensitivity of the site design to the natural features of the site, including topography, hydrology, and existing vegetation;
(5) the value, function, and spatial distribution of the wetlands on the site;
(6) individual and cumulative impacts; and
(7) an applicant's efforts to:
(a) modify the size, scope, configuration, or density of the project;
(b) remove or accommodate site constraints including zoning, infrastructure, access, or natural features;
(c) confine impacts to the fringe or periphery of the wetland; and
(d) otherwise minimize impacts.
~~B. If the local government unit finds that an applicant has not complied with the requirements to minimize wetland impacts, the local government unit shall list, in writing, its objections to the project. If, within 30 days, the applicant does not withdraw the project proposal or indicate intent to submit an amended project proposal satisfying the local government unit's objections, the statement of objections shall constitute a denial.~~

Subp. ~~5~~ 4. ~~Determination of i~~**Impact rectification.** Temporary impacts ~~to a wetland~~ must be rectified by repairing, rehabilitating, or restoring the affected wetland in accordance with the no-loss provisions of part 8420.XXXX.
~~A. Activities may qualify for a no-loss determination in part 8420.0220 by meeting all of the following conditions:~~
~~(1) the physical characteristics of the affected wetland, including ground elevations, contours, inlet dimensions, outlet dimensions, substrate, plant communities, and hydrologic regime, are restored to preproject conditions sufficient to ensure that all preproject functions and values are restored;~~
~~(2) the activity is completed and the physical characteristics of the wetland are restored within six months of the start of the activity; and~~
~~(3) the party responsible for the activity provides a performance bond to the local government unit for an amount sufficient to cover the estimated cost to restore the wetland to preproject conditions. The local government unit shall return the performance bond to the responsible party upon a determination by the local government unit that the conditions in this item and item B have been met.~~
~~B. An applicant shall be granted a no-loss determination under the criteria in item A once in a ten-year period for a particular site within a wetland, except that repairs to the original project shall be allowed under the no-loss determination, if the local government unit determines the request to be necessary and reasonable.~~
~~C. Wetland impacts that do not qualify for a no-loss determination according to the criteria in item A are subject to replacement under the criteria in parts 8420.0530 to 8420.0630.~~

Subp. ~~6~~ 5. ~~Determination of r~~**Reduction or elimination of impacts over time.** After an activity is completed, further ~~wetland~~ impacts ~~from the draining or filling~~ must be reduced or eliminated by maintaining, operating, and managing the project in a manner that preserves and maintains remaining wetland functions ~~and values~~. The local government unit must require applicants to implement best management practices to protect wetland functions ~~and values~~.

Subp. ~~7~~ 6. **Unavoidable impacts**. Unavoidable ~~wetland~~ impacts that remain after efforts to minimize, rectify, or reduce or eliminate them must be replaced according to parts 8420.~~0530~~XXXX to 8420.~~0630~~XXXX.

Subp. 7a. **Sequencing flexibility.**

~~A. Sequencing flexibility cannot be implemented unless alternatives have been considered and unless the proposed replacement wetland is certain to provide equal or greater functions and public values as determined based on a functional assessment reviewed by the technical evaluation panel using a methodology approved by the board. The project sponsor must provide the necessary information and the local government unit must document the application of sequencing flexibility in the replacement plan approval.~~

~~B~~ A. Flexibility in application of the sequencing steps may be ~~applied~~ requested by the applicant and allowed at the discretion of the local government unit, subject to the conditions in item ~~A~~ B, as determined by the local government unit if:

(1) the wetland to be impacted has been degraded to the point where replacement of it would result in a certain gain in function and public value;

(2) ~~preservation~~ avoidance of a wetland would result in severe degradation of the wetland's ability to function and provide public values, for example, because of surrounding land uses and the wetland's ability to function and provide public values cannot reasonably be maintained through implementation of best management practices, ~~other~~ land use controls, or other mechanisms;

(3) the only feasible and prudent upland site available for the project or ~~wetland~~ replacement ~~or development~~ has greater ecosystem function and public value than the wetland. ~~Although this is a rare circumstance since there will usually be several options for siting the replacement wetland or development, it~~ This may be appropriate only if the ~~project sponsor~~ applicant:

(a) demonstrates impact minimization to the wetland;

(b) agrees to perpetually preserve the designated upland site; and

(c) completely replaces the impacted wetland's functions and public values; or

(4) the wetland is a site where human health and safety is a factor.

B. Flexibility in the order and application of sequencing standards cannot be implemented unless alternatives have been considered and the proposed replacement wetland is certain to provide equal or greater public value as determined based on a functional assessment reviewed by the technical evaluation panel using a methodology approved by the board. The project sponsor must provide the necessary information and the local government unit must document the application of sequencing flexibility in the replacement plan approval.

Subp. 8. **Wetlands on cultivated fields.** If the wetland is located on a cultivated field and will be replaced through restoration, then the priority order for sequencing in subpart 1 is not required. A wetland ~~drained or filled~~ impacted under this provision must not be converted to nonagricultural land for ten years. The landowner must execute and record a notice of this requirement in the office of the county recorder for the county in which the property is located and, as a condition of the approval, provide documentation of the recording to the local government unit.

~~Subp. 9. **Calcareous fens.** Calcareous fens, as identified by the commissioner, may not be filled, drained, or otherwise degraded, wholly or partially, by any action, unless the commissioner, under an approved management plan, decides some alteration is necessary, as provided in part 8420.1010.~~

8420.~~0103~~XXXX ~~WETLAND FUNCTIONS FOR DETERMINING PUBLIC VALUES~~ REPLACEMENT STANDARDS.

Subpart 1. **General Requirement.** Wetland replacement must replace the public value of wetlands lost as a result of an impact. Replacement of wetland function and value may occur at more than one location.

The public values of wetlands ~~must be~~ is based upon the functions of wetlands, including:

A. water quality, including filtering of pollutants to surface and groundwater, utilization of nutrients that would otherwise pollute public waters, trapping of sediments, shoreline protection, and utilization of the wetland as a recharge area for groundwater;

B. flood water and storm water retention, including the potential for flooding in the watershed, the value of property subject to flooding, and the reduction in potential flooding by the wetland;

C. public recreation and education, including hunting and fishing areas, wildlife viewing areas, and nature areas;

D. commercial uses, including wild rice and cranberry growing and harvesting and aquaculture;

E. fish, wildlife, and native plant habitats;

F. low-flow augmentation; and
G. other functions~~, values,~~ and public uses as identified in board-approved wetland evaluation methods.
The board ~~shall~~ will maintain a publicly available list of preapproved wetland evaluation methods.

Subp. ~~5~~ 2. **Determining impacts of partial drainage.** In cases where wetlands will be partially ~~or incompletely~~ drained, the amount of wetland to be replaced must be determined as follows:
The area impacted by partially draining a wetland is determined in two parts. The wetland area where the hydrology ~~is~~ will be totally removed must be ~~replaced in its entirety~~ considered an impact in its entirety. The area of impact for the area that is partially drained must be ~~replaced in an amount that is~~ at least 50 percent of the acreage of the remaining wetland area ~~or~~ determined by an assessment ~~of the wetland functions listed in part 8420.0103, using a methodology chosen by~~ acceptable to the technical evaluation panel ~~from one of the methodologies established or approved by the board~~.
The preceding subpart was relocated here from the previous 8420.0549 subpart 5 and edited here.

Subp. 3. **Replacement Ratios.**
A. The replacement ratio is 2.5 replacement credits for each acre of wetland impacted, except in greater than 80 percent areas and on agricultural land the replacement ratio is 1.5 replacement credits for each acre of wetland impacted. The replacement ratio is reduced by 0.5:1 when the replacement consists of:
(1) withdrawal of available credits from an approved wetland bank site within the same bank service area as the impacted wetland; or
(2) project-specific replacement within the same major watershed or county as the impacted wetland, a majority of which is in-kind.

Minimum Replacement Ratios: Banking

Location of Impact	Replacement	Minimum Replacement Ratio
>80% Area or Ag Land	Outside BSA	1.5:1
	Within BSA	1:1
<50% Area, 50-80% Area, or non-Ag Land	Outside BSA	2.5:1
	Within BSA	2:1

Minimum Replacement Ratios: Project-Specific

Location of Impact	Replacement	Minimum Replacement Ratio
>80% Area or Ag Land	Outside Major Watershed or Out-of-Kind	1.5:1
	Within Major Watershed and In-Kind	1:1
<50% Area, 50-80% Area, or non-Ag Land	Outside Major Watershed or Out-of-Kind	2.5:1
	Within Major Watershed and In-Kind	2:1

B. For replacement via banking, impacts in bank service area 10 that are replaced in bank service area 9 or the Des Moines River Basin in bank service area 8, and impacts in bank service area 1 that are replaced in bank service area 2 will count as replacement within the same bank service area for the purpose of reducing the minimum required replacement ratio according to this subpart.

C. Wetland replacement must be of a size sufficient to ensure that it provides equal or greater public value than the impacted wetland it will replace. The actual replacement ratio required may be more than the ratio required in item A if the local government unit determines that a higher ratio is necessary to

replace the public value of the wetland lost. In no case can the replacement ratio be less than 1:1 in greater than 80 percent areas or agricultural land, and 2:1 in all other areas.

D. Owners of wetlands impacted for use as agricultural land may make no use of the wetland area after it is impacted, other than as agricultural land, for a period of ten years unless future replacement to achieve a ratio equaling or exceeding the appropriate ratio for non-agricultural land in item A occurs. The landowner must record a notice of this restriction in the office of the county recorder in which the project is located and, as a condition of local government unit approval, provide documentation of the recording to the local government unit.

E. The board may approve special replacement ratios based on data derived from comprehensive inventories of replacement opportunities. The board must give notice of the replacement ratios to local government units and publish the ratios in the State Register. The board must provide opportunities for public input and comment prior to publishing the special replacement ratios. The conditions and standards shall take effect 30 days after publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register.

Subp. 4. **In-kind wetland replacement.** In-kind wetland replacement refers to replacement of the functions lost to an impact. The replacement wetland is in-kind if it is:
(1) the same type or plant community as the impacted wetland except, for degraded wetlands, the same type or plant community that historically occurred at the impact site;
(2) the same hydrologic conditions and landscape setting as the impacted wetland; or
(3) a type that has been significantly lost in the watershed or will provide important functional benefits to the watershed as determined by the technical evaluation panel based on a review of available evidence or according to a local plan approved by the board.

Subp. 5. **Ecological suitability and sustainability.**
A. The preferred method of replacement is that which takes advantage of naturally occurring hydrogeomorphic conditions with minimal landscape alteration and is most likely to result in a wetland area that functions wholly, perpetually, and naturally. Wetland restoration is generally preferred over creation and restoration of completely impacted wetlands is generally preferred over other methods of replacement.

B. Restoration and replacement of wetlands must be accomplished according to the ecology of the landscape area. The replacement site must be ecologically suitable for providing the desired functions and compatible with adjacent land uses. A replacement plan that would result in wetland types or characteristics that do not naturally occur in the landscape area in which the replacement will occur must be denied. Replacement must not adversely affect other habitat types or ecological communities that are important in maintaining the overall biological diversity of the area.

C. Replacement projects must be located and designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. Self-sustaining refers to the sustainability of resource functions and the ability of type and location to provide the desired functions over time in a changing landscape.

D. In addition to items A through C, when determining the location, type, function, and design of replacement, applicants and local government units must consider landscape position, habitat requirements, development and habitat loss trends, sources of watershed impairment, the protection and maintenance of upland resources and riparian areas, and providing a suite of functions.

Subp. 6. **Required upland buffer.**
A. Establishment or preservation of unmanicured vegetated upland buffer areas is required adjacent and contiguous to replacement wetlands receiving credit under part 8420.XXXX, subparts 3 to 7.
B. For replacement wetlands less than two acres in size, the buffer must be a minimum average width of 25 feet. For all other replacement wetlands, the buffer must be a minimum width of 25 feet and an average width of 50 feet.

C. The applicant may request the local government unit to vary the upland buffer standards under items A and B. The local government unit may vary the standards under A and B when it is not practicable or feasible or the variance would be ecologically beneficial based on a recommendation by the technical evaluation panel.

Subp. 7. **Siting of replacement.**
A. Siting wetland replacement must follow this priority order:
(1) ~~on-site or~~ in the same minor watershed as the affected wetland;
(2) in the same major watershed as the affected wetland;
(3) in the same county as the affected wetland;
(4) for replacement by wetland banking, in the same wetland bank service area as the impacted wetland, except that impacts in a 50 to 80 percent area must be replaced in a 50 to 80 percent area and impacts in a less than 50 percent area must be replaced in a less than a 50 percent area;
(5) for project-specific replacement, in an adjacent major watershed to the affected wetland or, for replacement by wetland banking, in an adjacent wetland bank service area, except that impacts in a 50 to 80 percent area must be replaced in a 50 to 80 percent area and impacts in a less than 50 percent area must be replaced in a less than 50 percent area;

~~(6) notwithstanding subitems (1) to (5), public transportation projects may be replaced statewide, except that wetlands affected in less than 50 percent areas must be replaced in less than 50 percent areas, and wetlands affected in the seven-county metropolitan area must be replaced at a ratio of two-to-one in:~~
~~(a) the affected county;~~
~~(b) if no restoration opportunities exist in the affected county, in another seven-county metropolitan area county; or~~
~~(c) in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area;~~

~~(7)~~ B. ~~n~~Notwithstanding ~~subitems (1) to (5)~~ item A, siting wetland replacement in greater than 80 percent areas may follow the priority order under this subitem:
(a1) by wetland banking after evaluating ~~on-site replacement and~~ replacement within the minor and major watersheds;
(~~b~~2) replaced in an adjacent wetland bank service area if wetland bank credits are not reasonably available in the same wetland bank service area as the affected wetland, as determined by a comprehensive inventory approved by the board; or
(~~c~~3) statewide; or

~~(8)~~ C. ~~n~~Notwithstanding ~~subitems (1) to (5)~~ item A, siting wetland replacement in the seven-county metropolitan area must follow the priority order under this subitem:
(a1) in the affected county;
(~~b~~2) in another of the seven metropolitan counties; or
(~~c~~3) in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area.

D. Siting wetland replacement for public transportation projects must follow the requirements of 8420.XXXX, item B.

~~B. Until December 31, 2012, existing wetland bank account holders outside of the seven-county metropolitan area, but within a major watershed that is wholly or partially within the seven-county metropolitan area, may withdraw wetland credits according to part 8420.0541 that was in effect at the time of the deposit of the public value credit or new wetland credits.~~

~~C. Until December 31, 2012, local government units may approve wetland replacement plans that propose replacement via wetland banking, using credits established according to the replacement siting rule in effect on August 5, 2007.~~

~~D~~ E. When reasonable, practicable, and environmentally beneficial replacement opportunities are not available in siting priorities listed in items A through D, the applicant may seek opportunities at the next level. ~~E.~~ For the purposes of this item ~~D~~, "reasonable, practicable, and environmentally beneficial replacement opportunities" means opportunities that~~:~~ are ecologically suitable according to 8420.XXXX subpart 2
~~(1) take advantage of naturally occurring hydrogeomorphological conditions and require minimal landscape alteration;~~
~~(2) have a high likelihood of becoming a functional wetland that will continue in perpetuity;~~
~~(3) do not adversely affect other habitat types or ecological communities that are important in maintaining the overall biological diversity of the area;~~ and
~~(4)~~ are available and capable of being done after taking into consideration cost, existing technology, and logistics consistent with overall project purposes. The cost of replacement credits alone is not sufficient reason to conclude that reasonable, practicable, or environmentally beneficial replacement opportunities are not available.

F. Regulatory agencies, local government units, and other entities involved in wetland restoration ~~shall~~ must collaborate to identify potential replacement opportunities in watersheds within their jurisdictional areas.
The replacement siting subpart above was relocated from the previous 8420.0543 and edited here.

Subp. 8. **Timing of Replacement.**
A. Replacement of wetland function and value must be completed in advance of or concurrent with the actual wetland impact. For replacement that is not in advance, a financial assurance is required according to subpart 9.

B. Replacement is in advance if the replacement is:
(1) approved wetland bank credits withdrawn prior to impact; or
(2) project specific replacement for which construction has been certified and the first monitoring report of the first full growing season following construction certification has been submitted according to part 8420.XXXX, and the replacement meets all goals and performance standards applicable to that development stage of the replacement site.

C. Any action being proposed for replacement credit must be specifically identified for replacement purposes and approved by the local government unit as part of a replacement or banking plan prior to initiating the actual restoration or creation activity.

Subp. 9. **Financial Assurance.** For wetland replacement that is not in advance, a financial assurance acceptable to the local government unit must be submitted to, and approved by, the local government unit to ensure successful replacement. The local government unit may waive this requirement if it determines the financial assurance is not necessary to ensure successful replacement. The financial assurance may be used to cover costs of actions necessary to bring the project into compliance with the approved replacement plan specifications and monitoring requirements. The financial assurance does not serve as an in-lieu fee and is not a substitute for enforcement, but may be used for repair, construction, vegetation establishment and management, maintenance, monitoring, or other actions necessary to ensure adequate replacement. The local government unit may release a portion of the financial assurance upon successful completion of construction, but must retain a sufficient amount to ensure successful vegetative establishment and completion of monitoring requirements. Within 60-days of certification of successful replacement and completion of the monitoring requirements of part 8420.XXXX, the local government unit must release any remaining financial assurance submitted by the applicant, provided all other conditions of the approval are met.

~~8420.0530 REPLACEMENT PLAN COMPONENTS.~~
The entire 8420.0530 was relocated to the Application Procedures section and edited there.

~~8420.0540 REPLACEMENT PLAN EVALUATION CRITERIA.~~
~~Subpart 1. **Sequencing.** Before consideration or approval of a replacement plan, the local government unit must ensure that the applicant has exhausted all possibilities to avoid and minimize adverse wetland impacts according to sequencing in part 8420.0520. The applicant must demonstrate to the local government unit that the replacement plan complies with this part and part 8420.0550.~~

~~Subp. 2. **Type of replacement.**~~
~~A. The preference for the method of replacement is that which is most likely to result in a wetland area that functions wholly, perpetually, and naturally. Wetland restoration is generally preferred over creation and restoration of completely impacted wetlands is generally preferred over other methods of replacement.~~
~~B. Modification or conversion of nondegraded wetlands from one wetland type to another by damming, diking, impounding, or excavating does not constitute replacement credit.~~
~~C. Wetlands drained or filled under an exemption may not be restored for replacement credit for ten years after draining or filling.~~
~~D. [Renumbered, 8420.0541, subps 1,6,7]~~
~~E. [Repealed by amendment, 27 SR 135]~~
~~Subp. 3. [Renumbered 8420.0542]~~
~~Subp. 4. [Renumbered 8420.0543]~~
~~Subp. 5. [Renumbered 8420.0544]~~
~~Subp. 5a. [Renumbered 8420.0545]~~
~~Subp. 6. [Renumbered 8420.0546]~~
~~Subp. 7. [Renumbered 8420.0547, subpart 1]~~
~~Subp. 8. [Renumbered 8420.0547, subp 2]~~
~~Subp. 9. [Renumbered 8420.0548, subps 1 to 10]~~
~~Subp. 10. [Renumbered 8420.0549, subps 1 to 8]~~

~~8420.0541 ACTIONS ELIGIBLE FOR CREDIT.~~ ***The entire 8420.0541 was relocated to the new Wetland Replacement section and edited there.***

~~8420.0542 TIMING OF REPLACEMENT.~~
~~Replacement of wetland functions and values must be completed in advance of or concurrent with the actual draining, excavation, or filling of a wetland, unless an irrevocable bank letter of credit or other security acceptable to the local government unit is submitted to the local government unit to guarantee successful completion of the replacement. Local government units may require performance bonds or similar instruments to assure that the replacement wetland is successfully established.~~
~~All wetlands to be restored or created for replacement must be designated for replacement before restoration or creation. Submission to the local government unit of the information required in part 8420.0530 and subsequent approval, shall be considered evidence of designation for replacement, provided the information is submitted before the actual restoration or creation. The exceptions contained in part 8420.0544 do not apply to replacement completed using wetland banking credits established by a person who submitted a complete wetland banking application to a local government unit by April 1, 1996.~~

~~8420.0543 WETLAND REPLACEMENT SITING.~~
The entire 8420.0543 was relocated to the Replacement Standards part and edited there.

~~8420.0544 REPLACEMENT FOR PUBLIC TRANSPORTATION PROJECTS.~~
The entire 8420.0544 was relocated to the end of the new Wetland Replacement section and edited there.

~~8420.0545 PRESETTLEMENT WETLAND ACRES AND AREAS.~~
The entire 8420.0545 was relocated to the Purpose and Scope part and edited there.

~~8420.0546 SIZE OF REPLACEMENT WETLANDS.~~
~~Replacement wetlands must be of a size sufficient to ensure that they provide equal or greater public value than the wetland that was drained or filled. The minimum amount of replacement wetland that must be provided is shown in part 8420.0549, subpart 4c.~~
~~For a wetland located on nonagricultural land in a 50 to 80 percent area or a less than 50 percent area, the minimum size of the replacement wetland must be in the ratio of two acres of replaced wetland for each acre of drained or filled wetland. For a wetland located on agricultural land, or in greater than 80 percent areas, the minimum size of the replacement wetland must be in the ratio of one acre of replaced wetland for each acre of drained or filled wetland.~~
~~The actual replacement ratios required for a replacement wetland may be more than the minimum, subject to the evaluation of wetland functions and values in part 8420.0549.~~
~~For wetlands located in a 50 to 80 percent area or a less than 50 percent area, future owners may make no use of the wetland after it is altered, other than as agricultural land for a period of ten years unless future replacement to achieve a ratio equaling or exceeding the appropriate ratio in part 8420.0549, subpart 4c, occurs. The landowner shall record a notice of this restriction in the office of the county recorder in which the project is located.~~

~~8420.0547 OTHER REQUIREMENTS.~~
~~Subpart 1. **Carbon balance.** When it is necessary to replace a drained or filled peatland, the replacement wetland must be revegetated with planted or naturally pioneering native vegetation established within three growing seasons.~~
~~Subp. 2. **Ecological consistency.** Restoration and replacement of wetlands must be accomplished according to the ecology of the landscape area affected. A replacement plan that would result in wetlands or wetland characteristics that do not naturally occur in the landscape area in which the replacement will occur will not be approved.~~

~~8420.0548 SPECIAL CONSIDERATIONS.~~ ***The entire 8420.0548 was relocated within the new Wetland Replacement section and edited there.***

~~8420.0549 EVALUATION OF WETLAND FUNCTIONS AND VALUES.~~
~~Subpart 1. **Evaluation options.** Replacement wetlands must replace the functions and values that are lost from a wetland that is drained or filled. When environmentally preferable, a replacement wetland should replace the same combination of functions and values provided by the impacted wetland. Replacement of wetland functions and values may occur at more than one location. The local government unit may allow the evaluation of wetlands by measuring and comparing public values specified in Minnesota Statutes, section 103B.3355, with a scientifically accepted methodology in subparts 7 and 8.~~

~~Subp. 2. **Wetland types.** For wetland replacement ratio determinations, wetland type shall be based on the 12 wetland plant community types as listed in this subpart.~~

The Wetland Type table was relocated to the Wetland Boundary or Type part of the Wetland Boundary or Type, No Loss, and Exemption Standards section.

~~STATE OF MINNESOTA WATERSHED BOUNDARIES - 1979~~
~~(81 MAJOR WATERSHED UNITS)~~
The watershed list and map will be relocated after a new map is developed.

~~Subp. 3. **In-kind wetland replacement.** Wetland replacement for drainage, excavation, or fill shall be considered in-kind if the replacement wetland is of the same type as the impacted wetland.~~

~~Subp. 4. **Out-of-kind wetland replacement.** Out-of-kind replacement is any replacement that is not in-kind in subpart 3.~~
~~If a wetland to be drained or filled exhibits more than one wetland type as determined by the technical evaluation panel, and more than one wetland type is proposed to be drained or filled, the local government unit shall use the following procedure to determine needed replacement. The acreage of~~

each wetland type to be impacted shall be determined. The sum of the replacement for each wetland type shall be the resultant acreage requirement.

Subp. 4a. **In advance replacement.** Replacement is in advance if the replacement is:
A. approved wetland bank credits; or
B. a replacement site that has established wetland hydrology and vegetation, but the vegetation may not be mature.
At a minimum, the replacement site must have wetland hydrology and hydrophytic vegetation established one full growing season (April-October) prior to the impact. Further, the site must meet all performance standards applicable to that development stage of the replacement site.

Subp. 4b. **In-place replacement.** Replacement is in-place if the mitigation occurs within the same watershed as the permitted activity or, if wetland credits are withdrawn from an approved wetland bank site, in the same bank service area as that where the permitted impact occurred, according to the map in this subpart. The following exceptions apply to this definition:
A. replacement for impacts in bank service area 10 can be accomplished in bank service area 9 or the Des Moines River Basin in bank service area 8 with no increase in the replacement ratio;
B. replacement for impacts in bank service area 1 can be accomplished in bank service area 2 with no increase in the replacement ratio; and
C. the board may approve special replacement ratios based on data derived from comprehensive inventories of replacement opportunities. The board shall give notice of the replacement ratios to local government units and shall publish the ratios in the State Register. The board shall provide opportunities for public input and comment prior to publishing the special replacement ratios. The conditions and standards shall take effect 30 days after publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register.

Subp. 4c. **Minimum wetland replacement ratios.** The minimum wetland replacement ratios are based on the location of the impact and replacement, and the wetland type, and the timing of replacement, as determined by the table below.

Impact Location	Replacement Location (in-place)	Type of Replacement Wetland (in type)	Replacement Process (in time)	Minimum Replacement Ratio
> 80% area (or agricultural land)	In-place	Same type as impact wetland	In advanceNot in advance	1:11.25:1
		Different type	In advanceNot in advance	1.25:11.5:1
	Not in-place	Same type as impact wetland	In advanceNot in advance	1.25:11.5:1
		Different type	In advanceNot in advance	1.5:11.5:1
< 80% area (and non-agricultural land)	In-place	Same type as impact wetland	In advanceNot in advance	2:12.25:1
		Different type	In advanceNot in advance	2.25:12.5:1
	Not in-place	Same type as impact wetland	In advanceNot in advance	2.25:12.5:1
		Different type	In advanceNot in advance	2.5:12.5:1

Subp. 5. **Determining impacts of partial drainage.** ***The entire subpart 5 was relocated to the Replacement Standards part and edited there.***

~~Subp. 6. **Alternative evaluation methodologies.**~~
The entire subpart 6 was relocated to the Purpose and Requirement part in the Wetland Replacement section and edited there.

~~Subp. 7. **Special cases or appeals.** For projects of unusual complexity, or replacement plans that have been denied and are being appealed, and for which the local government unit believes an alternative evaluation process may produce a substantially different replacement requirement, the local government unit may evaluate the replacement plan using the current version of the Minnesota wetland evaluation methodology or another scientifically accepted methodology approved by the board, in consultation with the commissioner, that evaluates all wetland functions and values for both the impacted and replacement wetlands.~~
~~When using a board-approved methodology to evaluate replacement plans, the ratio of impact wetland to replacement wetland must not be less than the minimum acreage requirements as listed in part 8420.0546. Further, the topographic setting ratio in subpart 4 and the local public value ratio, if any, in subpart 4 must also be considered when using a board-approved methodology.~~

~~Subp. 8. **Adequacy decision.** A replacement plan that fails to meet the requirements in this part must be considered inadequate in replacing lost functions and values and must be denied by the local government unit. A replacement plan that has been considered by the local government unit and not approved may be revised and resubmitted for consideration by the local government unit. As required by part 8420.0250, the decision of a local government unit to approve, approve with conditions, or deny a replacement plan becomes final if not appealed to the board within 30 days after the date on which the decision is mailed to those required to receive notice of the decision. Within 30 days of completing construction of a replacement wetland, the notice specified in part 8420.0530, item D, subitem (6), must be recorded and proof of recording provided to the local government unit.~~

8420.~~0541~~XXXX ACTIONS ELIGIBLE FOR CREDIT.
Subpart 1. **Scope.**
A. The actions in this part are eligible for replacement credit ~~or wetland banking credit~~ as determined by the local government unit in parts 8420.~~0500~~XXXX to 8420.~~0760~~XXXX. Sufficient information to determine eligibility and credit must be provided to the local government unit as part of a replacement or banking plan application.

B. This part identifies the amount of credit allowed for each action, however, the actual amount may be less as determined by the local government unit. When the local government unit allows less replacement credit than the maximum amounts described in this part, the local government unit must provide justification for the lower credit allocation.

C. Subparts 3 through 7 require the incorporation of upland buffers meeting the minimum requirements described in part 8420.XXXX.

D. Modification or conversion of nondegraded wetlands from one wetland type to another by damming, diking, impounding, or excavating does not constitute replacement credit. Restoration of wetlands drained or filled in violation of this chapter are not eligible for replacement credit. Wetlands impacted under an exemption may not be restored for replacement credit for ten years after the impact.

Subp. 2. **Upland buffer areas.**
A. Replacement credit may be granted for 10 percent of the buffer area for establishment or preservation of non-native vegetation and 25 percent of the buffer area for establishment or preservation of native, non-invasive vegetation. Credit may be allowed for establishing upland buffer around existing high value wetlands adjacent to the replacement wetland when the minimum widths are maintained and the maximum buffer area is not exceeded.

B. The area of buffer for which replacement credit is granted under item A cannot exceed the area of the replacement wetland.

C. For buffer areas of native, non-invasive vegetation, the local government unit may increase the amount of credit to 50% if the technical evaluation panel finds that additional buffer will improve replacement wetland sustainability and provide significant functional benefits. Buffers add to replacement wetland sustainability and provide significant functional benefits when they:
(1) extend upstream in the watershed, provide slope and soil stability, and otherwise protect and improve water quality;
(2) protect valuable native plant communities or habitats that could otherwise be lost or degraded;
(3) provide important habitat connections; or
(4) otherwise substantially improve important wetland functions based on a functional assessment and consideration of current and future adjacent land use.

Subp. ~~2~~3. **Restoration of completely drained** or filled **wetland areas.** Restoration of both the natural hydrology regime and native, noninvasive vegetation on wetlands that have been completely drained or filled ~~wetlands~~ may receive ~~new wetland~~ replacement credit in an amount ~~not~~ up to ~~exceed~~ 100 percent of the ~~total~~ wetland area hydrologically and vegetatively restored. The vegetation management plan must set a goal of restoring the historic native vegetation typical of the wetland being restored, unless determined to be not ecologically feasible by the technical evaluation panel.

Subp. ~~3~~4. **Restoration of partially drained** or filled **wetland areas.** Restoration of both the natural hydrology regime and native, noninvasive vegetation of ~~jurisdictional~~ wetlands that have been degraded by prior drainage, filling, or a diversion of the natural watershed~~, or filling~~ may receive credit in accordance with the following:

A. ~~in a less than 80 percent area, receive public value credit in an amount up to 50 percent of the degraded wetland area or receive new wetland credit in an amount not to exceed 25 percent of the total wetland area hydrologically restored, provided that permanent native, noninvasive vegetation is established within the restored wetland area and on an upland buffer, which may receive replacement credit according to subpart 6; and~~ any wetland area substantially degraded by partial drainage or fill that was planted with annually seeded crops, was in a crop rotation seeded to pasture grasses or legumes, or was required to be set aside to receive price supports or equivalent payments in at least ten of the last 20 years prior to the date of application may receive credit based on the percent of the time the wetland area was annually seeded, in rotation, or set aside during the 20-year period prior to application; or

B. ~~in a greater than 80 percent area, receive new wetland credit in an amount not to exceed 25 percent of the total wetland area hydrologically restored.~~ all other wetland areas substantially degraded by partial drainage or fill may receive wetland credit of up to 50 percent of the wetland area restored.

~~Subp. 4. **Exceptional natural resource value projects.** Projects that restore exceptional natural resource values of wetlands may receive either public value or new wetland replacement credit solely or in combination as determined by the local government unit with concurrence of the technical evaluation panel. The amount and type of credit allowed shall be based on a functional assessment that documents the restoration of these values.~~

Subp. 5. ~~Restoration~~ Vegetative restoration **of farmed wetlands.** Reestablishment of permanent native, noninvasive vegetative cover on a farmed wetland areas that ~~was~~ have not been affected by prior drainage or filling may receive replacement credit for:

A. up to 50% of the area restored for wetland areas that were planted with annually seeded crops, ~~was~~ were in a crop rotation seeded to pasture grasses or legumes, or ~~was~~ were required to be set aside to receive price supports or equivalent payments in ~~six~~ at least ten of the last 20 years prior to the date of application for a replacement ~~plan~~ or bank plan ~~may receive credit in accordance with one of the following considerations~~; or

B. up to 90% of the area restored for wetland areas in bank service areas 2, 3, and 4 based on the percent of time the wetland areas were planted with annually seeded crops, were in a crop rotation seeded to pasture grasses or legumes, or were required to be set aside to receive price supports or

equivalent payments during the 20 year period prior to the date of application for a replacement or bank plan.

~~A. if the wetland was annually seeded, in rotation, or set aside for six or more of the last 20 years, the wetland is eligible for public value credit not to exceed 50 percent of the wetland area; or~~
~~B. if the wetland was annually seeded, in rotation, or set aside for ten or more of the last 20 years, the wetland is eligible for new wetland credit based on the percent of the time the wetland area was annually seeded, in rotation, or set aside during the prior 20-year period.~~

~~Subp. 6. **Upland buffer areas.** Buffer areas of permanent native and noninvasive dominated vegetative cover established or preserved on upland adjacent and contiguous to replacement wetlands may receive credit, provided that the upland buffer must have an average width of at least 50 feet for wetlands in nonmunicipal areas and an average width of at least 25 feet for wetlands in a municipal area and the buffer vegetative establishment or preservation plan must be approved by the technical evaluation panel. Replacement credit for the buffer may not exceed 100 percent of the replacement wetland area and may only be used as public value credits for replacement above a 1:1 ratio.~~

Subp. ~~7~~ 6. **Protection of W~~w~~etlands previously restored via conservation easements.** ~~Wetland areas previously restored for conservation purposes under terminated easements or contracts are eligible for up to 75 percent new wetland credit and adjacent upland buffer areas reestablished to permanent native, noninvasive vegetative cover are eligible for public value credit above a 1:1 ratio in an amount not to exceed 25 percent of the restored wetland area.~~

Replacement credit may be granted for permanently protecting wetlands previously restored or created for conservation purposes under a contract or easement, where the contract or easement has expired and gives the landowner the right to drain or fill the wetland upon termination. The area receiving credit must meet the wetland replacement standards of 8420.XXXX. Replacement credit may be granted for up to 75% of the area created or restored under the conservation contract or easement. Alternatively, credit may be allocated according to the other subparts in this part as applied prior to initiation of the contract or easement, when the applicant can document eligible credit yield to the satisfaction of the local government unit.

~~Subp. 8. **Restoration of wetland vegetation.** Reestablishment and maintenance of permanent native, noninvasive vegetation cover on a wetland that is dominated by invasive or exotic species may receive public value credit. Replacement credit may not exceed 25 percent of the total wetland area vegetatively restored and the vegetative restoration and maintenance plan must be approved by the technical evaluation panel. The technical evaluation panel may require a monitoring period in excess of 12 months after the vegetative restoration is completed before approving the site for replacement credit.~~

~~Subp. 9. **Wetlands established via mineral extraction site reclamation.** Wetland areas established in nonwetland areas due to mineral extraction activities may receive new wetland credits if all of the following criteria are met:~~
~~A. application for replacement credit is made within ten years after the last day that extraction activities have taken place;~~
~~B. a wetland establishment and management plan has been approved by the technical evaluation panel and implemented by the landowner or authorized agent;~~
~~C. the wetland area meets the criteria in part 8420.0550; and~~
~~D. if the land is not state-owned, a conservation easement in favor of the state has been accepted by the state and recorded in the county recorder's office, or if the land is state-owned, covenants and restrictions are recorded that identify that the wetland area is a replacement wetland subject to this chapter.~~

~~Subp. 10. **Water quality treatment areas.**~~
~~A. New wetland credit of up to 100 percent for wetland areas constructed as part of water quality treatment systems may be granted by the local government unit with the concurrence of the technical evaluation panel, provided that:~~
~~(1) the local government unit has an approved and active stormwater management plan;~~

~~(2) the water quality treatment system design includes pretreatment of runoff before discharge to the wetland area receiving credit;~~
~~(3) the wetland area receiving credit is constructed in nonwetland areas;~~
~~(4) the water quality treatment system is associated with an ongoing or proposed project that will impact a wetland or public waters;~~
~~(5) the wetland area receiving credit is separated from the water quality treatment system that pretreats runoff before discharge to the wetland area receiving credit;~~
~~(6) the wetland area receiving credit is designed for a maximum 24-inch rise in water level for the ten-year critical storm event;~~
~~(7) the standards in part 8420.0550 are followed; and~~
~~(8) the wetland area receiving credit is a functioning wetland.~~
~~B. Stormwater detention basins allowed for replacement are not eligible for the exemptions in part 8420.0122 and are subject to parts 8420.0500 to 8420.0630.~~

Subp. ~~11~~ 7. **Wetland creations.** ~~All other w~~Wetlands ~~creation sites~~ created in upland areas may receive ~~new wetland~~ replacement credit in an amount ~~not to exceed 100~~ up to 75 percent of the total wetland area created. ~~Except for public projects, a performance bond or other surety shall be secured and held until the local government unit has determined that the design goal for the wetland replacement site, as approved in the replacement plan, is fully achieved.~~ Created wetlands that are:
A. established due to mineral extraction activities may receive replacement credit in accordance with this subpart only for those areas actively mined within 10 years prior to the application for credit; or
B. constructed as part of water quality treatment systems may receive replacement credit in accordance with this subpart only when the wetland area receiving credit is a functioning wetland designed for a maximum 24-inch rise in water level for the ten-year critical storm event. Any portions of water quality treatment systems allowed for replacement are not eligible for the exemptions in part 8420.~~0122~~XXXX and are subject to parts 8420.~~0500~~XXXX to 8420.~~0630~~XXXX.

Subp. 8. **Restoration and protection of exceptional natural resource value.** Replacement credit may be granted for activities that restore and protect wetlands and adjacent areas that improve or directly contribute to the function and sustainability of exceptional natural resources. For purposes of this subpart, exceptional natural resources are:
A. habitat for state listed endangered or threatened species;
B. rare native plant communities;
C. special fish and wildlife resources such as fish passage and spawning areas, colonial water bird nesting colonies, migratory waterfowl concentration areas, deer wintering areas, and wildlife travel corridors;
D. sensitive surface waters; or
E. other resources determined to be exceptional by the technical evaluation panel based on the value relative to other resources in the watershed or a board approved plan.

Restoration and protection of calcareous fens, white cedar swamps, floodplain or riparian wetlands and upland buffers, habitat corridors with other important resources, or wetlands adjacent to designated trout waters are examples of potential qualifying activities. The allocation of credit under this subpart is determined by the local government unit with concurrence of the technical evaluation panel based on the actions proposed and the resulting contribution to the value and sustainability of the exceptional resource. Areas receiving credit must be protected by a permanent conservation easement in a format provided by the board that is granted to and accepted by the state.

Subp. 9. **Preservation of wetlands owned by the state or a local unit of government.** In greater than 80 percent areas, replacement credit may be granted for up to 12.5 percent of wetland areas and adjacent buffer owned by a state or local unit of government and protected by a permanent conservation easement. The easement must be in a format provided by the board that is granted to and accepted by the board after approval of the replacement or banking plan application. Replacement credit for wetland preservation can only be granted after considering replacement as provided under subparts 3 through 8. To be eligible for credit under this subpart, the technical evaluation panel, must determine that there is a high probability the wetland will be degraded or impacted and the wetland:

A. contains or benefits an exceptional resource identified in subpart 6;
B. is of a type or function that is rare, difficult to replace, or of high value to the watershed;
C. contains a rare or declining native plant community; or
D. is of a type that is not likely to regenerate, such as northern white cedar.

Subp. 10. **Replacement Credit Conversion.** Replacement plans and banking plans approved after the effective date of this rule must determine replacement credit according to subparts 2 to 9. Public value credit that has been deposited in the state wetland bank or approved as part of a banking plan application prior to the effective date of this rule will be converted according to the following:
A. up to 100 percent replacement credit for existing public value credit derived from activities within wetlands; and
B. up to 90 percent replacement credit for existing public value credit derived from upland buffers.
Previously approved public value credit must be converted according to this subpart on the effective date of this rule for deposited credits, and at the time of deposit for future deposits resulting from a previously approved banking plan.

8420.~~0550~~XXXX ~~WETLAND~~ REPLACEMENT WETLAND CONSTRUCTION STANDARDS.
Subpart 1. **General requirements.** The standards and guidelines in this part ~~shall~~ must be ~~used~~ followed in wetland creation and restoration efforts to ensure adequate replacement of wetland functions and value~~s~~.
In evaluating a ~~wetland~~ proposed replacement or banking plan application, ~~the local government unit must determine whether the wetland type stated as the replacement plan goal will result from the replacement plan specifications. If a wetland type other than the replacement plan goal is likely to result, the local government unit must evaluate the plan based on this determination.~~ T~~t~~he local government unit must ~~also~~ determine that the ~~proposed replacement~~ plan will adequately replace ~~functions and~~ the public value~~s~~ of wetlands lost. If the local government unit determines that the proposed replacement is not likely to result in adequate replacement of function and public value ~~is not likely to result~~, the local government must ~~determine what further measures are~~ either require modifications necessary to obtain adequate replacement or deny the ~~replacement plan~~ application.

Subp. 2. ~~Specific~~ Design **requirements.** The standards in ~~items A to H shall~~ this subpart must be ~~followed in~~ met for all replacement wetlands ~~replacements~~ unless the local government unit, with concurrence of the technical evaluation panel, determines that a standard is clearly not appropriate.

A. Water control structures must be constructed using specifications provided in the Minnesota Wetland Restoration Guide or their equivalent. Control structures may be subject to the Department of Natural Resources dam safety regulations.

B. Best management practices must be established and maintained ~~adjacent to the entire perimeter of all replacement wetlands~~ at the replacement site as necessary to protect the replacement wetland and other waterbodies. Erosion control measures must be employed during construction and until permanent ground cover is established.

C. ~~For replacement wetlands where native, noninvasive vegetation that is characteristic of the wetland type identified as the replacement goal in part 8420.0530, item D, is not likely to become dominant naturally in a five-year period, the replacement wetland shall be seeded or planted with appropriate native, noninvasive species, as determined by the technical evaluation panel.~~ Native, non-invasive vegetation must be established in restored and created wetlands. Each replacement or banking plan must include a vegetation establishment and management plan that specifies provisions for vegetative establishment and includes a goal of establishing plant communities that correspond to the hydrology and landscape position of the replacement site. If the replacement wetland is seeded or planted, the seed or planting stock should be from native, noninvasive species ~~of regional wetland origin~~ in accordance with the Minnesota Wetland Restoration Guide. In evaluating the vegetation establishment and management plan, the local government unit must determine that implementation of the plan is likely to result in the establishment of the appropriate native, non-invasive vegetation within the monitoring period. During the monitoring period, the applicant must take reasonable steps to control invasion by any nonnative or

invasive species~~, for example, reed canary grass, Canada thistle, common buckthorn, spotted knapweed, leafy spurge, purple loosestrife, and Eurasian water milfoil, that would defeat the revegetation goal of the replacement plan.~~

~~D. Erosion control measures as determined by the soil and water conservation district must be employed during construction and until permanent ground cover is established to prevent siltation of the replacement wetland or nearby water bodies.~~

~~E. For all restored wetlands where the original organic substrate has been stripped away and for all created wetlands, provisions must be made for providing an organic substrate unless the technical evaluation panel recommends otherwise. When feasible, the organic soil used for backfill should be taken from the drained or filled wetland dominated by native, noninvasive species. Organic soil for backfill from wetlands dominated by nonnative, invasive species should be avoided.~~

~~F~~ D. The bottom contours of created types 3, 4, and 5 wetlands ~~should~~ must ~~be undulating, rather than flat, to~~ provide a variety of water depths, comparable to natural wetlands in the vicinity of the replacement, and be consistent with part 8420.~~0547~~ XXXX, subpart ~~2~~ X.

~~G~~ E. The edge of created or graded wetlands must be comparable to other naturally occurring wetlands of similar hydrologic condition and landscape position in the major watershed. Sideslopes of created wetlands, graded portions of restored wetlands, and graded buffer strips, must not be steeper than ~~5:1~~ 8:1, ~~five~~ eight feet horizontally for every one foot vertically, or flatter ~~as averaged around the wetland. Sideslopes of 10:1 to 15:1 are preferred. More than half of the slopes of graded areas inside the exterior boundaries of restored, created, or enhanced wetlands must be no steeper than 10:1~~ unless the technical evaluation panel concurs that steeper slopes are acceptable based on the surrounding landscape and the characteristics of other natural occurring wetlands in the vicinity. Sideslopes of 10:1 to 15:1 are preferred.

F. ~~(2) the water quality treatment system design includes pret~~Treatment of runoff ~~before~~ prior to discharge to ~~the~~ replacement ~~wetland~~ areas ~~receiving credit;~~ is required to improve sustainability and minimize degradation of the wetland over time. ~~(5)~~ tThe ~~wetland~~ replacement area ~~receiving credit~~ must be physically ~~is~~ separated from ~~the~~ any water quality treatment system ~~that pretreats runoff before discharge to the wetland area receiving credit~~. Treatment of runoff in this part means:
(1) any part of a stormwater treatment system needed to comply with water quality treatment requirements of state or local stormwater permits or ordinances, provided the treatment system is physically separated from the replacement wetland; or
(2) when water quality treatment is not required by state or local permits or ordinances, the installation of appropriate best management practices, to the extent practicable and feasible, to protect long term wetland function.

G. For projects that contain elements that include dams, dikes, or other impoundment features, the construction plans must be designed, overseen, and certified by a registered professional engineer.

~~H. Created wetlands should have an irregular edge to create points and bays, consistent with part 8420.0547, subpart 2.~~

~~Subp. 3. [Repealed, 27 SR 135]~~

Subp. 3. **Design Considerations.** The following replacement wetland design elements must be considered for replacement wetlands and incorporated to the extent practicable and feasible:
A. Restored wetlands should emulate the hydrology and vegetation of the pre-settlement wetland condition.
B. Expanded buffers should be incorporated into the design of replacement wetlands in areas where there is a high potential for erosion and the buffer will improve slope stability, or when necessary to provide wildlife habitat corridor connections with other wetlands or habitats.
C. Measures should be taken to manage hydraulic bounce as indicated in guidance document 8420.~~0112~~XXXX subpart ~~N~~X.

D. For all restored wetlands where the original organic substrate has been stripped away, and for all created wetlands, the organic substrate must be sufficient to establish a functioning wetland and to accomplish the goals of the replacement or banking plan. When feasible, organic soil used for backfill should be salvaged from the impacted wetland for utilization in the replacement wetland. Organic soil for backfill from wetlands dominated by non-native or invasive species should be avoided.

8420.~~0544~~XXXX REPLACEMENT FOR PUBLIC TRANSPORTATION PROJECTS.

A. Impacts resulting from public transportation projects must be replaced according to the requirements of this chapter, except as provided for in this part.

AB. Wetlands impacted by public transportation projects~~: may be replaced statewide, only for wetlands affected in greater than 80 percent areas and for public transportation projects, except that wetlands affected in less than 50 percent areas must be replaced in less than 50 percent areas, and wetlands affected in the seven-county metropolitan area must be replaced at a ratio of two-to-one in:~~

~~(1) the affected county;~~

~~(2) in another of the seven metropolitan counties; or~~

(1) outside of the seven-county metropolitan area may be replaced statewide, except that impacts in less than 50 percent areas must be replaced in less than 50 percent areas; and

(2) in the seven-county metropolitan area must be replaced in the seven-county metropolitan area or

~~(3)~~ in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area.

~~Part 8420.0543, item A, subitem (6), does not apply to replacement completed using wetlands banking credits established by an applicant who submitted a complete wetland banking application to a local government unit by April 1, 1996.~~

~~B. Replacement of wetlands may be accomplished under the rules for wetland banking as provided for in parts 8420.0700 to 8420.0760.~~

~~C. For projects involving draining or filling of wetlands associated with a new public transportation project, and for projects expanded solely for additional traffic capacity, public transportation authorities may purchase credits from the board at the cost to the board to establish credits.~~

C. A replacement plan is required for public transportation projects that involve new roads or roads expanded solely for additional traffic capacity lanes.

D. A replacement plan ~~for wetlands~~ is not required for individual public road projects that ~~result in the draining, excavating, or filling of~~ impact wetlands for the repair, rehabilitation, reconstruction, or replacement of a currently serviceable existing state, city, county, or town public road necessary, as determined by the public road authority, to meet state or federal design or safety standards or requirements~~, excluding new roads or roads expanded solely for additional traffic capacity lanes~~. This item only applies to authorities for public road projects that:

(1) minimize ~~the amount of wetland draining, excavating, or filling~~ impacts associated with the project and consider ~~mitigating~~ replacing important site-specific wetland functions on site; and

(2) provide project specific plans and information including project locations, wetland boundaries, amount and type of wetlands impacted, demonstration of impact minimization, and any changes or addenda to the board's bank administrator, the technical evaluation panel, the commissioner of natural resources, and members of the public requesting a copy:

(a) ~~submit,~~ at least 30 days prior to construction~~, project-specific reports, and any changes or addenda, to the board, the technical evaluation panel, the commissioner of natural resources, and members of the public requesting a copy that indicate the location, amount, and type of wetlands drained, excavated, or filled by the project~~;

(b) ~~convene~~ at an annual meeting of the parties required to receive notice convened to review projects to be commenced during the upcoming year; or

(c) within 30 days of commencing ~~for~~ minor and emergency maintenance work impacting less than 10,000 square feet~~, the public road authority may submit project-specific reports, within 30 days of~~

~~commencing the activity, to the board and the technical evaluation panel that indicate the location, amount, and type of wetlands that have been drained, excavated, or filled.~~
Public road authorities that do not follow the process required in this item for a project must submit a complete replacement plan application to the local government unit and provide for replacement of impacts associated with that project according to the requirements of this chapter.

E. For impacts associated with a new public road project, or public road projects expanded solely for additional traffic capacity, public transportation authorities may purchase credits from the board at the cost to the board to establish credits. Purchase of credits under this item is allowed only when the board has determined that sufficient credits are available for sale.

~~E~~ F. The technical evaluation panel ~~shall~~ must review minimization and delineation decisions made by the public road authority and provide recommendations regarding on-site ~~mitigation~~ replacement if requested to do so by the local government unit, a contiguous landowner, or a member of the technical evaluation panel.

~~F~~ G. Those required to receive notice of public road projects may appeal minimization, delineation, and on-site ~~mitigation~~ replacement decisions made by the public road authority to the board according to part 8420.~~0250~~XXXX.

~~G~~ H. Changes to ~~wetland~~ impacts proposed by local road authorities in item D ~~shall~~ must be reported to the board within six months from the date of the change being finalized.

~~H~~ I. Except for state public transportation projects, for which the state Department of Transportation is responsible, and public road authority projects that do not meet the requirements of item D, the board must replace public road project impacts to wetlands and wetland areas of public waters if authorized by the commissioner or a delegated authority, that ~~are drained, excavated, or filled by~~ result from local government projects on existing roads. ~~Replacement of the wetlands must occur in critical watersheds.~~

~~I~~ J. Public road authorities, at their discretion, may deviate from federal and state design standards on existing road projects when practical and reasonable to avoid ~~wetland filling or draining~~ impacts, provided that public safety is not unreasonably compromised. The local road authority and its officers and employees are exempt from liability for any tort claim for injury to persons or property arising from travel on the highway and related to the deviation from the design standards for construction or reconstruction under this item. This item does not preclude an action for damages arising from negligence in construction or maintenance on a highway.

~~8420.0600 MONITORING.~~

~~8420.0610 DURATION OF MONITORING.~~
~~Monitoring shall be by means of an annual report as specified in part 8420.0620 and shall continue for five years following completion of the wetland replacement project, or until the technical evaluation panel deems the replacement wetland to be fully functional. Through written notification to the applicant, the local government unit may extend the required monitoring period for not more than an additional five-year period if the goal of the replacement plan not been achieved, but may be achieved with more time.~~

~~8420.0620 MONITORING ANNUAL REPORT.~~
8420.0620 was relocated to the Inspection and Monitoring of Replacement Wetlands Section and edited there.

~~8420.0630 MONITORING DETERMINATIONS BY THE LOCAL GOVERNMENT UNIT.~~
8420.0620 was relocated to the Inspection and Monitoring of Replacement Wetlands Section and edited there.

~~8420.0650 LOCAL COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLANS.~~
The entire 8420.0650 was relocated to the Wetland Planning section and edited there.

~~STANDARDS AND CRITERIA FOR STATE~~ WETLAND BANKING

8420.~~0700~~XXXX PURPOSE OF WETLAND BANKING.
The purpose of parts 8420.~~0700~~XXXX to 8420.~~0760~~XXXX is to provide standards for the establishment and administration of a state wetland banking system, including individual wetland bank sites, as authorized by Minnesota Statutes, section 103G.2242. The purpose of the state wetland banking system is to provide a market-based structure that allows for replacement of unavoidable impacts with pre-established replacement wetlands. The board or board's designee is responsible for management of the bank including the recording of all bank transactions, maintaining bank records, and ensuring that the operation of the bank complies with parts 8420.~~0700~~XXXX to 8420.~~0769~~XXXX.

~~**8420.0720 PRINCIPLES OF WETLAND BANKING.**~~
~~Subpart 1. **Goal.** Implementation of a wetland banking system must comply with the purposes and goals of the act by achieving a no-net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands.~~
~~Subp. 2. **Sequencing prerequisite.** The state wetland banking system may only be used for replacement of drained or filled wetlands when the local government unit determines that the applicant has complied with all of the sequencing requirements of part 8420.0520 and that the owner of the account agrees to the withdrawal of wetland banking credits from the account.~~
~~Subp. 3. **Geographic limitations.** Wetland banking is allowed for any impact subject to the requirements of part 8420.0543.~~
~~Subp. 4. **Eligible wetlands.** Only wetland and buffer areas eligible for replacement credit under parts 8420.0540 to 8420.0549 are eligible for deposit in the state wetland bank.~~
~~Subp. 5. **Ineligible wetlands.** Wetlands that are drained or filled under an exemption in part 8420.0122 and subsequently restored are not eligible for deposit in the wetland bank. Modification or conversion of nondegraded naturally occurring wetlands from one type to another are not eligible for enrollment in a statewide wetlands bank.~~
~~Subp. 6. **Account balance.** Accounts must maintain a positive balance. A wetland bank account shall specify acreage by wetland type deposited by the account holder minus subsequent withdrawals.~~
~~Subp. 7. **Wetland banking credit withdrawals and transfers.** Wetland banking credits may be withdrawn to provide replacement pursuant to an approved replacement plan or equivalent. Wetland banking credits may also be transferred to another account holder for future use or resale if a conservation and access easement has been recorded as required in subpart 8. Wetland banking credits may be withdrawn from an account or transferred to another account by submittal of such requests on forms provided by the board along with any authorized fees. No sale, withdrawal, or transfer of credits is final until the board approves and debits the account of origin.~~
~~Subp. 8. **Conservation and access easement.** No credits may be deposited in the state wetland bank until a perpetual conservation easement, in a format provided by the board, is granted to and accepted by the state. The easement shall provide for preservation of the banked wetland's functions by the fee owner and wetland banking plan applicant. The wetland banking plan applicant must also provide a title insurance policy that is acceptable to the state naming the state of Minnesota as the insured. If the conservation easement does not abut a public road, the fee owner and wetland banking plan applicant must also grant and record an access easement in favor of the board, the local government unit, and any other state, local, or federal regulatory authority that has authorized use of credits from the site for mitigation. This subpart does not apply to state land.~~
~~Subp. 8a. **Reporting of sale of credits.** The owner of an account in the state wetland bank must report the sale of credits to the board on withdrawal or transfer forms prescribed by the board and include a copy of the bill of sale. Proposed withdrawals are not complete until at least one regulatory authority has approved the use of the subject credits for a specific purpose. Failure to report credit sales may result in restrictions on withdrawals until the account is reconciled.~~
~~Subp. 9. **[Repealed, 27 SR 135]**~~
~~Subp. 10. **Marking of boundaries of bank areas.** The boundary of bank areas must be clearly marked as prescribed in the conservation and access easement.~~

Subp. 11. **Administrative fees.** The board and local government units may collect administrative fees for managing wetland banking accounts.
Subp. 12. **Wetland banking appeals.** Appeals of the local government unit banking determinations are taken according to part 8420.0250.
Subp. 13. **Fees established.** Fees must be assessed for managing wetland bank accounts and transactions as follows:
A. account maintenance annual fee: one percent of the value of credits not to exceed $500;
B. account establishment, deposit, or transfer: 6.5 percent of the value of credits not to exceed $1,000 per establishment, deposit, or transfer; and
C. withdrawal fee: 6.5 percent of the value of credits withdrawn.
Subp. 14. **Fees paid to board.** All fees established in subpart 13 must be paid to the Board of Water and Soil Resources and credited to the general fund to be used for the purpose of administration of the wetland bank.

8420.0730 ADMINISTRATION AND MANAGEMENT AUTHORITY.
Subpart 1. **Establishment.** The board shall establish a state wetland bank. The board or the board's assignee is responsible for management of the bank including recording all bank transactions, maintaining bank records, and ensuring that the operation of the bank complies with parts 8420.0700 to 8420.0760. The board shall notify all local government units upon establishment of the bank. Any separate banking system including those established by local governments must comply with parts 8420.0700 to 8420.0760 and must be approved by the board and the commissioner.
Subp. 2. **Deposit prerequisites.** To be deposited into the state wetland bank, a wetland must be certified as eligible for deposit by the local government unit in which it is located, according to part 8420.0740, subpart 1. If a local government unit elects to certify wetlands for deposit in the wetland bank, the local government unit is also responsible for ensuring that the monitoring provisions in part 8420.0750 are fulfilled. A local government unit may decline to certify all wetlands within its jurisdiction or, based on a comprehensive local water or wetland protection and management plan, a local government unit may elect to certify wetlands for deposit into the wetland bank only in selected areas, for example, high priority regions and areas. If the local government unit elects to reject or limit banking, it must do so by rule or ordinance, as applicable. The board may reject or modify an application for deposit if, during its review, any part of the bank application or plan is missing, incorrect, or inconsistent with this chapter.
Subp. 3. **[Repealed, 27 SR 135]**

8420.0740 PROCEDURES.
Subpart 1. **Deposits and credits.**
A. Wetland replacement credits approved before July 1, 1993, are eligible for deposit into the state wetland banking system if the wetland replacement credit was authorized by a public agency specifically for a wetland bank that has been approved by the commissioner. Also, wetland replacement credits that have been deposited in a local government unit bank before July 1, 1993, and after January 1, 1992, are eligible for deposit into the state wetland banking system if the deposit meets all the criteria in parts 8420.0700 to 8420.0760 based on a site inspection and review by the board and the commissioner.
B. After July 1, 1993, wetlands restored or created without prior local government unit approval as specified in this part are not eligible for deposit into the wetland bank.
C. There is no maximum or minimum wetland acreage eligible for deposit in the wetland bank. Based on the recommendation of the technical evaluation panel, the local government unit must identify the acreage that will receive credit. The acreage must be based on a land survey or comparable method of field measurement of the credit areas recommended for deposit. The person making the measurement must certify in writing as to the method and accuracy of the measurement.
D. The initial deposit of wetland banking credits must be done by the fee title owner or easement holder of the wetland bank area.
E. Except as provided for in item A, in order to deposit wetland acres into the wetland bank, the wetland banking plan applicant must notify the local government unit in writing, before restoration or creation, that the proposed wetland is specifically designated for deposit into the wetland bank. This notification may be part of the documentation requested in item F. In cases where excess wetland acreage is expected to result from a specific replacement plan according to parts 8420.0530 to 8420.0550, the owner must indicate on the replacement plan that the excess acreage is to be considered available for wetland

banking or lose the opportunity to use the excess credits for future projects. If the excess credit is less than 1.0 acre, an account may be established without the need to grant a perpetual conservation easement to the state of Minnesota.

F. In cases where a wetland is proposed to be restored or created solely for wetland banking purposes, that is, the wetland is not part of a project-specific wetland replacement plan, the wetland banking plan applicant must submit to the local government unit a bank plan containing the information required in part 8420.0530, items A and D. The bank plan must include design plans that show structural, earthmoving, and vegetative management components. The plan must clearly show existing jurisdictional wetlands and areas proposed to receive credit, and be signed, dated, and consistent with part 8420.0550.

A copy of the bank plan shall be mailed to members of the technical evaluation panel, the administrator of the state wetland bank, members of the public who have requested a copy, the commissioner of natural resources, the district office of the United States Army Corps of Engineers, and the watershed district or watershed management organization if there is one. Based on input from the technical evaluation panel and other comments received, the local government unit must determine the likelihood that the restoration or creation will be successful and approve, modify, or reject the banking plan. The local government unit decision must be made in compliance with Minnesota Statutes, section 15.99, which generally requires a decision to be made within 60 days of receipt of a complete application. The local government unit decision must be mailed to the wetland banking plan applicant within ten working days of the decision. A summary of the government unit decision must be mailed within ten working days of the decision to those required to receive notice of the application.

G. In cases where a wetland is to be restored or created by an agency, department, or subdivision of the local government unit for deposit into the wetland bank, the local government unit must prepare the information required in part 8420.0530, items A and D, and notice this information according to item F.

H. The proposed wetland must be restored or created within two years of approval or the bank plan must be resubmitted for consideration. Upon approval, the wetland banking plan applicant shall restore or create the wetland and notify the local government unit when construction has been completed. The technical evaluation panel shall inspect the site when construction is completed to ensure that construction specifications and the vegetation management plan have been followed. Failure to follow approved construction specifications and the vegetation management plan is sufficient grounds for the local government unit to deny consideration of the wetland for banking.

I. Up to 15 percent of the proposed credits are eligible for deposit in the bank immediately after completion of construction and vegetative planting if all of the following subitems apply:

(1) For projects that contain elements that include dams, dikes, or other impoundment features, the construction plans were designed, overseen, and certified by a registered professional engineer.

(2) The technical evaluation panel certifies that the initial planting has been completed in accordance with the vegetation management plan.

(3) The provisions of part 8420.0720, subpart 8, have been complied with.

The remaining proposed credits may be eligible for deposit no sooner than six months after construction has been completed and approved for restored wetlands, and no sooner than one year after construction has been completed and approved for created wetlands. The wetland banking plan applicant shall contact the local government unit to request a determination of wetland bank acceptability and approved quantities of wetland banking credits for initial and subsequent deposits. The technical evaluation panel shall ensure that sufficient time has been allowed for the wetland to become established, especially vegetation and hydrology, before making this determination. If the technical evaluation panel has reason to believe that the wetland characteristics may change substantially, the panel must postpone its recommendation to the local government unit until the wetland has stabilized. As part of its initial review and comment on the bank plan, the panel may recommend specific performance standards that are linked to a credit allocation schedule. The wetland banking plan applicant must be advised of any performance standards and credit allocation schedule recommended by the panel.

Based on a site visit, the technical evaluation panel will determine the size and type of wetland as well as topographic setting characteristics and, if applicable, the new wetland credits and public value credits resulting from the to be deposited wetland. The technical evaluation panel will provide the information to the local government unit.

J. The local government unit shall consider the recommendations of the technical evaluation panel and comments from those required to receive a copy of the banking plan prior to developing findings. The local government unit shall review and approve wetland banking credits and submit the complete wetland

bank application for deposit, wetland bank project application, and plans to the board. If the wetland banking plan applicant chooses not to proceed with the deposit, the wetland banking plan applicant may return the wetland to its preconstruction condition without replacement within five years. At any time within the five-year period, the wetland banking plan applicant may request the board to deposit any or all eligible and approved credits into the bank or may amend the bank plan and resubmit the plan to the local government unit for board certification. After five years, any activity in the wetland is subject to this chapter.

K. To be deposited into the bank, the following information concerning the wetland must be submitted to the board by the wetland banking plan applicant or by local government unit in which the wetland is located:

(1) name, address, and telephone number of the wetland banking plan applicant;

(2) a complete copy of the wetland banking plan application, supporting documents, and a survey of the land area that will be subject to restrictions;

(3) a copy of the deed for the property containing the wetland and any easement if the wetland banking plan applicant is not the fee owner;

(4) size of the wetland acreage to be deposited, to the 0.1 acre, by wetland type and topographic setting characteristics and, if applicable, the new wetland credits and public value credits; and

(5) local government unit certification that the wetland is approved for deposit into the bank.

L. The board shall acknowledge the deposit to the wetland banking plan applicant and local government unit and officially enter the information in item K into the wetland bank. Information on deposited wetlands shall be available from the board on request according to subpart 2, item D.

M. Wetlands deposited into the wetland bank, on which withdrawals have occurred, are subject to replacement for any subsequent drainage or filling.

N. Wetlands deposited into the wetland bank are subject to the monitoring provisions in part 8420.0750.

Subp. 2. **Withdrawals.**

A. Before consideration of use of the wetland bank, replacement plan applicants must satisfy the requirements of part 8420.0520 or equivalent.

B. Credits from the state wetland bank may be used to mitigate wetland losses authorized by local government units or other local, state, and federal regulatory authorities provided the impacted wetland is within the state of Minnesota and the credit withdrawal procedures of this chapter are followed.

C. When using the wetland bank to replace drained or filled wetlands, the replacement must comply with parts 8420.0540 to 8420.0549.

D. The board, on request, will provide the following information to persons making inquiries concerning available wetland bank deposits with a local government unit jurisdiction, county, or watershed:

(1) account holder: name, address, and telephone number;

(2) available wetlands: wetland acres by type and topographic setting characteristics, and, if applicable, the new wetland credits and public value credits;

(3) location: section, township, range, county, and watershed.

E. The applicant may contact, negotiate, and purchase the required wetland banking credits from the account holder. When the account holder and applicant come to agreement, the applicant will provide requested information on a wetland banking credit withdrawal form developed by the board, and include the wetland banking credit withdrawal form as part of the wetland replacement plan transmitted to the local government unit. The wetland banking credit withdrawal form will include information indicating the wetland type by acres for withdrawal, location of banked wetland, and the topographic setting characteristics and, if applicable, the new wetland credits and public value credits of the banked wetland.

F. The local government unit must circulate the applicant's wetland replacement plan and the wetland banking credit withdrawal form to identify specific wetland banking credits as the applicable replacement wetland, using the public comment and review process in part 8420.0230 and to the local government unit whose jurisdiction covers the location of the wetland banking credits. The local government unit must contact the board to verify that replacement credits indicated on the wetland banking credit withdrawal form are available before final approval of wetland bank withdrawals.

G. On approval of the applicant's wetland replacement plan using wetland banking credits as wetland replacement, the local government unit shall notify the board to debit the appropriate account by type and amount. The board will complete the accounting transactions and send a notice of wetland banking credit withdrawal to the account holder and the applicant. No sale, withdrawal, transfer, or use of wetland credits is valid until the board debits a wetland bank account. Wetland credits may be only used once.

H. The applicant shall not be allowed to begin proposed drain or fill activities until the local government unit formally approves the wetland replacement plan using the acknowledged wetland banking credits as replacement and the applicant has received notice of withdrawal of the wetland banking credits from the board or local government unit.

I. An individual, corporation, local government unit, state or federal agency, or other organization may buy and hold wetland banking credits from account holders in the bank for later use or resale. Transfer of wetland banking credits must be accomplished through use of a board wetland banking credit transfer form, and must be maintained in an account in the state wetland banking system. An account will be established for the individual or organization on presentation to the board of a wetland banking credit transfer form, and evidence that the perpetual conservation easement required by part 8420.0720, subpart 8, has been recorded. The board will notify both account holders on transfer of the wetland banking credits.

8420.0750 AUDITING AND MONITORING.

Subpart 1. **Annual report and audit.**

A. The board will develop wetland bank deposit, withdrawal, and credit transfer and withdrawal forms and distribute them to local government units indicating a desire to certify restored wetland banking credits for deposit in the wetland bank.

B. The wetland bank data file maintained by the board will contain at least the following information:

(1) wetland acres by type, topographic setting characteristics, restoration or creation date, and bank acceptance date, fee owner, location by (public land survey coordinates, local government unit, county, and watershed of the banked wetland); and

(2) previous withdrawals against each banked wetland by impact wetland (wetland acres by type, topographic setting characteristics, and, if applicable, the new wetland credits and public value credits, date of wetland impact), ownership (fee owner, address, telephone number) and location (public land survey coordinates, local government unit, county, and watershed of the impacted wetland).

C. The board may periodically inspect wetland bank records and correspondence maintained by a local government unit to determine compliance with this part.

D. A wetland bank status report shall be prepared as part of the report required by Minnesota Statutes, section 103G.2373, and distributed by the board to applicable local government units, soil and water conservation districts, watershed districts, watershed management organizations, the departments of natural resources and agriculture, and on request.

Subp. 2. **Monitoring.**

A. After the wetland is entered into the bank, the local government unit responsible for monitoring under part 8420.0230 and the wetland banking plan applicant shall continue monitoring according to parts 8420.0600 to 8420.0630. A copy of each monitoring report must be submitted to the local government unit and the board.

B. The board shall inspect wetlands deposited into the wetland bank at least once each five years to ensure that the wetlands conform to conditions specified in the approved bank plan, and to make a determination of needed corrective action.

8420.0760 ENFORCEMENT AND CORRECTIVE ACTIONS.

A. The fee owner and the wetland banking applicant, if different from the fee owner, are jointly and severally responsible for the success of the wetland banking project and maintaining the wetland banking project in accordance with the approved wetland banking plan both during and after monitoring. The wetland banking plan applicant, if different from the fee owner, is not responsible after monitoring if the wetland banking plan applicant no longer owns an easement interest in the real estate or credits associated with the banked wetland.

B. If, on inspection, the board determines that wetlands deposited in the wetland bank are not in compliance with this chapter, the board must prescribe corrective measures to the local government unit and fee owner or wetland banking plan applicant to bring the wetland into compliance.

C. If satisfactory remediation does not result, the board may refuse future wetland bank certifications by the local government unit and future deposits from the fee owner or wetland banking plan applicant.

D. If, whether during or after the completion of the monitoring, a local government unit or the technical evaluation panel determines that a banked wetland does not substantially meet the specifications in the approved bank plan, the local government unit or technical evaluation panel must notify the board. The

~~board shall restrict further withdrawals and transfers of all credits associated with the wetland, whether held by the wetland banking plan applicant or a subsequent account holder, until the local government unit or technical evaluation panel notifies the board, or the board otherwise determines, that the wetland banking project has been brought into compliance.~~
~~E. The local government unit or the board may undertake reconstruction work and require reimbursement of reasonable costs from the fee owner or wetland banking plan applicant.~~
~~F. Fee owners, wetland banking plan applicants, or account holders may appeal restrictions on credit withdrawals and transfers or demands for reimbursement of reconstruction costs to the dispute resolution committee of the board which shall make a recommendation to the full board.~~
~~G. Noncompliance with or impacts to, wetland banking projects are subject to enforcement under part 8420.0290.~~

8420.XXXX ESTABLISHING A WETLAND BANK SITE.

Subpart. 1. **Eligibility for wetland banking.** Replacement wetland credits that result from any of the eligible actions in part 8420.XXXX, and meet the standards of part 8420.XXXX and part 8420.XXXX, may be deposited in the state wetland bank for later use in replacing unavoidable impacts. In order to be eligible for deposit in the bank, the credits must be specifically designated for wetland banking purposes prior to undertaking the replacement actions and certified by the local government unit prior to deposit. Designation of credits for wetland banking is accomplished by approval of a wetland banking plan by a local government unit. Replacement actions completed or initiated without prior local government unit approval are not eligible for deposit in the wetland bank.

Subp. 2. **Local government unit and board authority.**
A. Based on a comprehensive local water or wetland protection and management plan approved by the board, a local government unit may, by rule or ordinance, limit the establishment of bank sites within its jurisdiction. The local government unit that approves a banking plan application is responsible for certifying the credits for deposit under part 8420.XXXX, subpart 1 and for ensuring that the monitoring provisions in part 8420.0750XXXX are fulfilled.
B. The board may reject or modify an application for deposit if, during its review, any part of the bank application or plan is missing, incorrect, or inconsistent with this chapter.

Subp. 3. **Application procedures.** When replacement actions are proposed for banking purposes, the applicant must submit to the local government unit a banking plan application, in a form provided by the board, containing the information identified in part 8420.XXXX, item B and part 8420.XXXX, subpart 3B, and other information required by the board. The banking plan must also contain specific performance standards and a credit release schedule based upon achievement of those standards. The local government unit is responsible for ensuring that a copy of the banking plan application is sent to the administrator of the state wetland bank, to the St. Paul District Office of the United States Army Corps of Engineers, and to those required to receive a copy of an application in part 8420.XXXX. The technical evaluation panel must review the banking plan application, and may recommend changes or additions to the performance standards and credit allocation schedule. The wetland banking plan applicant must be advised of any panel recommendations. Based on the panel's findings and recommendations and other comments received, the local government unit must determine the likelihood that the replacement actions will be successful and approve, approve with modifications, or deny the banking plan application.

Subp. 4. **Combined banking and project-specific replacement.** When a banking plan applicant wishes to use a portion of the credits generated for project-specific replacement, the banking plan must identify the project-specific impact and the amount of credits to be used according to a corresponding replacement plan. The credits must meet the requirements of part 8420.XXXX and the approved replacement plan, and be deducted prior to deposit of any credits into the state wetland bank.

Subp. 5. **Conservation and access easement.** No credits may be deposited in the state wetland bank until a perpetual conservation easement, in a format provided by the board, is granted to and accepted by the state. The easement must encompass the entire replacement area, unless the local government unit and the board approve an alternate boundary at the time of bank application approval. The easement

must provide for preservation of the banked wetland's functions by the fee owner and wetland banking plan applicant. The wetland banking plan applicant must also provide a title insurance policy that is acceptable to the state naming the State of Minnesota as the insured. If the conservation easement does not abut a public road, the fee owner and wetland banking plan applicant must also grant and record an access easement in favor of the board, the local government unit, and any other state, local, or federal regulatory authority that has authorized use of credits from the site for wetland replacement. The boundary of bank areas must be clearly marked as prescribed in the conservation and access easement. This subpart does not apply to state land.

Subp. 6. **Time limits for construction.** Replacement actions under an approved banking plan must be initiated within three years of banking plan approval or the banking plan must be resubmitted to the local government for consideration. Construction certification must be gained within five years of banking plan approval.

8420.XXXX CERTIFICATION AND DEPOSIT OF CREDITS.

A. To be deposited into the state wetland bank, replacement credits must be certified for deposit by the local government unit in which they are located. Certification of credits by the local government unit is requested by the banking plan applicant and may occur at any time during the monitoring period. The certification must be based on the findings and recommendation of the technical evaluation panel and must identify the area by type, area of buffer, and credits eligible for deposit. The technical evaluation panel must ensure that sufficient time has passed for the wetland to become established, especially vegetation and hydrology, before recommending certification. The area certified must be based on a land survey or comparable method of field measurement. The person making the measurement must verify in writing as to the method and accuracy of the measurement. Failure to follow the approved construction specifications or vegetation management plan is sufficient grounds for the local government unit to deny certification of credits for deposit.

B. The certification and request for deposit of credits must be in a form provided by the board and must contain the following information:
(1) name, address, and telephone number of the banking plan applicant;
(2) a complete copy of the banking plan application and local government unit approval, supporting documents, and a legal boundary survey of the land area that will be subject to restrictions (for initial deposit only);
(3) a copy of the deed for the property containing the wetland and any easement if the banking plan applicant is not the fee owner (for initial deposit only);
(4) a copy of the recorded conservation and access easement in accordance with part 8420.XXXX subpart 5;
(5) amount of replacement credit to be deposited, to the square foot, by wetland type;
(6) technical evaluation panel recommendation and local government unit certification; and
(7) other information required by the board.

C. Up to 15 percent of the credits proposed for banking are eligible for deposit in the bank immediately after certification of construction according to part 8420.XXXX and the recording of a conservation and access easement in accordance with part 8420.XXXX, subpart 5.

D. After the initial deposit, the remaining credits proposed for banking are eligible for deposit in accordance with the credit release schedule and performance standards included in the approved banking plan, subject to review by the technical evaluation panel and certification by the local government unit. If the approved banking plan does not contain a credit release schedule and associated performance standards, remaining credits will be eligible for deposit based on the findings and recommendation of the technical evaluation panel regarding the success of the proposed replacement action.

E. After certifying the credits for deposit, the local government unit must forward the signed request for deposit form to the board. No credits will be deposited until receipt of the completed and approved request to deposit form by the board. The board must acknowledge the deposit to the banking plan

applicant and local government unit and enter the information in Paragraph B, items (1) through (7) into the wetland bank.

F. If the banking plan applicant chooses not to proceed with the initial deposit, the banking plan applicant may return the site to its preconstruction condition without replacement. If credits have been deposited but none have been withdrawn, the banking plan applicant may request the board vacate the conservation and access easement at the applicant's expense. If the board vacates the conservation and access easement, the account will be closed and the site may be returned to preconstruction condition without replacement. Replacement areas wholly or partially deposited into the bank on which withdrawals have occurred or which otherwise have been used for replacement are subject to this chapter, including replacement for any subsequent impacts.

8420.XXXX MONITORING AND CORRECTIVE ACTIONS.

Subpart. 1. **Monitoring.**
A. Monitoring of wetland bank sites must conform to the monitoring requirements of part 8420.XXXX. Failure to submit the required monitoring reports or otherwise comply with monitoring requirements will prevent the deposit of credits and may result in the freezing of the bank account by the board until compliance is attained.

B. After completion of the required monitoring period the board will periodically inspect wetlands deposited into the bank at a frequency sufficient to ensure that easement conditions are being met.

Subp. 2. **Maintenance responsibilities.** The fee owner and the banking applicant, if different from the fee owner, are jointly and severally responsible for the success of the banking project in accordance with the approved banking plan, and maintaining the banking project in accordance with the conditions of the conservation easement. The banking plan applicant, if different from the fee owner, is not responsible after monitoring for maintenance if the banking plan applicant no longer owns an easement interest in the real estate or credits associated with the banked wetland.

Subp. 3. **Corrective Actions.**
A. If, during the monitoring period, the local government unit or the technical evaluation panel determines that a bank site does not meet the specifications in the approved banking plan, the local government unit must require corrective actions and notify the board's banking administrator. The board may restrict further deposits, withdrawals, and transfers of all credits associated with the bank site until the local government unit, technical evaluation panel, or the board determines that the banking project has been brought into compliance.

B. If, after the monitoring period, the board determines that wetlands deposited in the bank are not in compliance with the conditions of the conservation easement, the board must require corrective actions to the fee owner or banking plan applicant to bring the bank site into compliance with easement conditions.

C. If satisfactory remediation does not result, the local government unit or the board may undertake reconstruction work and require reimbursement of reasonable costs from the fee owner or banking plan applicant.

E. Fee owners, banking plan applicants, or account holders may appeal restrictions on credit deposits, withdrawals and transfers, or demands for reimbursement of reconstruction costs to the board.

F. Noncompliance with easement conditions or impacts to bank sites are subject to enforcement under part 8420.XXXX.

8420.XXXX. WITHDRAWALS AND TRANSFERS.

Subpart. 1. **General.** Credits from the state wetland bank may be used to replace wetland impacts authorized by local government units pursuant to this chapter or by other local, state, and federal

regulatory authorities provided the impacted wetland is within the state of Minnesota and the credit withdrawal procedures of this chapter are followed. No sale, withdrawal, transfer, or use of banking credits for replacement is valid until the board debits the applicable bank account. Bank credits may be used only once to replace wetland impacts. Bank accounts must maintain a positive balance. When all credits have been withdrawn or transferred, the account is closed.

Subp. 2. **Withdrawals.** Replacement plan applicants seeking to use banking credits for replacement are responsible for contacting and arranging for acquisition of the credits from the holder of a bank account in accordance with the wetland replacement requirements of this chapter. The board will supply information on wetland bank sites according to 8420.XXXX, subpart X. Replacement plan applicants proposing the use of bank credits for replacement must complete a credit withdrawal form provided by the board and include it as part of the replacement plan application submitted to the local government unit. If the local government unit approves the use of bank credits for replacement, the local government unit must sign the credit withdrawal form and notify the board's banking administrator in accordance with 8420.XXXX subpart X. The board will not withdraw credits from a bank account unless a regulatory entity with authority over the use of the credits has approved the use of the subject credits for replacement of a specific wetland impact. Local government unit approval of replacement plans involving the use of banking credits is conditional upon withdrawal of the credits by the board. Impacts under such replacement plans must not occur until the board has notified the replacement plan applicant that the credits have been withdrawn.

Subp. 3. **Transfers**. Wetland credits deposited in the state wetland bank may be transferred from one account to another. If the recipient of the credits does not already have an account, one must be established. To transfer credits, a credit transfer form provided by the board must be completed and submitted to the board's bank administrator. The board will notify all affected account holders upon transfer of the credits.

Subp. 4. **Reporting credit transactions.** Upon the sale, use, or transfer of credits, the owner of the account must immediately report the transaction to the board's banking administrator on withdrawal or transfer forms provided by the board and include a copy of the bill of sale when applicable. The board will complete the accounting transactions and send a notice of credit withdrawal to the local government unit, the account holder, and the applicant. Failure to report the sale, use, or transfer of credit may result in restrictions on withdrawals until the account is reconciled.

8420.XXXX BANK ACCOUNT ADMINISTRATION.

Subp. 1. **Account Information.**
A. For each wetland bank site, the board will maintain at least the following information:
(1) ownership (fee owner, address, telephone number);
(2) location (public land survey coordinates, local government unit, county, major watershed and bank service area);
(3) replacement acres by amount, type and replacement action, the restoration or creation date, and bank acceptance date;
(4) withdrawals made from the bank site, including for each impact wetland, the amount and type of wetland, ownership (fee owner, address, telephone number) and location (public land survey coordinates, local government unit, county, and watershed); and
(5) the original copy of the recorded conservation and access easement for the site and a title insurance policy naming the State as an insured party.

B. The board will provide the following information to persons inquiring about available bank credits within a local government unit, county, major watershed, or bank service area:
(1) account holder name, address, telephone number, and e-mail address if available;
(2) acres or square feet of available credit by type; and
(3) location by section, township, range, county, major watershed, and bank service area.

Subp. 2. **Administrative Fees.** The board may collect administrative fees for managing bank accounts. The following fees must be paid to the board to be used for administering and monitoring the wetland bank:
A. account maintenance annual fee: one percent of the value of credits not to exceed $500 for any year the account is active;
B. account deposit or transfer: 6.5 percent of the value of credits not to exceed $1,000 per deposit or transfer; and
C. withdrawal fee: 6.5 percent of the value of credits withdrawn.

Subp. 3. **Audit.** The board may periodically inspect wetland bank records and correspondence maintained by a local government unit to determine compliance with this part.

INSPECTION AND MONITORING OF REPLACEMENT WETLANDS

8420.XXXX REPLACEMENT WETLAND CONSTRUCTION CERTIFICATION

Subp. 1. **Purpose.** The local government unit must certify the initial construction of replacement wetlands prior to replacement wetland monitoring. The local government unit may require a preconstruction meeting prior to initiation of replacement wetland construction and may inspect the replacement wetland at any time during construction. This part applies to both wetland banking and project specific replacement.

Subp. 2. **Construction as-built documentation.** Upon completion of initial construction or restoration activities, the landowner must provide the local government unit with as-built information that documents compliance with the approved replacement plan. As-built information includes but is not limited to:
A. surveyed elevations of slopes, contours, outlets, and dikes;
B. seed tags and contractor receipts or other documentation of seeding or planting;
C. description of site preparation activities such as mulching, seedbed preparation, seeding methods, or initial weed control activities;
D. a survey map showing relevant areas of seeding and construction activities;
E. construction photos showing relevant restoration work;
F. evidence that, for projects including dams, dikes, or other impoundment features, the construction was designed, overseen, and certified by a registered professional engineer; and
G. a comparison of the as-built documentation versus the design specifications and a description and rationale for significant changes.

Subp. 3. **Construction inspection and certification.** Upon receipt of the as-built documentation from the landowner, the local government unit must inspect the replacement wetland to determine whether the as-built conditions comply with the construction specifications of the approved replacement plan. The local government unit may inspect the replacement wetland at any time during the construction and monitoring periods to assess its long-term viability. If the local government unit determines that the construction is not in compliance with the approved plan, it must promptly notify the landowner of the deficiencies and actions required to gain compliance. For projects involving the practice of engineering, the local government unit must ensure the engineer has certified the construction. When the local government unit certifies that the construction specifications have been met, the local government unit must notify the applicant and technical evaluation panel. Upon construction certification, the local government unit may release a portion of any financial assurance the applicant had provided, while retaining a sufficient amount to ensure compliance with monitoring and replacement requirements.

8420.0XXXX REPLACEMENT WETLAND MONITORING.

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Subpart 1. **Purpose.** The purpose of replacement wetland ~~replacement~~ monitoring is to measure replacement wetland success relative to the goals of the approved replacement plan and to identify any needed corrective actions during the monitoring period. ~~ensure that the replacement wetland achieves the goal of replacing lost functions~~,

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Subpart 2. **Responsibilities.**
A. Monitoring of replacement wetlands is the responsibility of the landowner of the property where the replacement wetland is located. Any agreement to transfer the monitoring responsibilities from the landowner to a local government unit or other party must be in writing and signed by both parties, and does not release the applicant from the responsibility to provide replacement as specified in the approved replacement plan.

B. For project-specific replacement in which the wetland impact site occurs in a different local government unit from the replacement site, the local government unit for the impact site may assume the monitoring enforcement responsibility for the replacement site upon written agreement between the local government units.

Subpart 3. **Duration of Monitoring.**
A. Monitoring may, at the discretion of the local government unit, begin upon construction certification, but must begin no later than the first full growing season following construction certification. Monitoring must continue for five full growing seasons or until the local government unit determines, with the concurrence of the technical evaluation panel, that the replacement is successful, but in no case can this determination be made prior to the end of the third full growing season.

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B. If the goals of the approved plan have not been achieved after the fifth season of monitoring but, in the written opinion of the technical evaluation panel, may be achieved with more time, the local government unit may, through written notification of the applicant, extend the monitoring period for not more than an additional five growing seasons. The local government unit's notification of extension must specify the reasons for the extension and any corrective actions necessary to bring the replacement wetland into compliance with the approved plan.

C. For project-specific replacement plans, if the local government unit determines that, at any time during the monitoring period and based on the recommendation by the technical evaluation panel, the goals of the replacement have not been achieved and will not be achieved with more time, the local government unit must pursue one or more corrective actions identified in 8420.XXXX, local government unit monitoring responsibilities.

~~**8420.0620 MONITORING ANNUAL REPORT.**~~
Subpart ~~1~~4. ~~**Purpose**~~ **Monitoring reports.**
A. Requirement. Following the first full growing season after construction certification, the applicant must submit annual monitoring reports documenting the progress of the replacement wetlands during the monitoring period. The first annual monitoring report must include any monitoring required by the local government unit during the previous year. The applicant ~~shall~~ must submit the annual report to the appropriate local government unit ~~where the replacement wetland is located~~ on a date determined by the local government unit, but no later than December 31 ~~until the applicant has fulfilled all of the requirements of the local government unit. The local government unit, at its discretion, may prepare the annual report for the applicant.~~ The local government unit must ensure that copies of the monitoring report are distributed to the technical evaluation panel. For wetland banking projects, the applicant must also submit the annual report to the board's wetland banking administrator. The monitoring reports must be submitted annually, or bi-annually if the local government unit determines that, after the third full growing season, bi-annual reports are sufficient for long term monitoring, until the local government unit determines the replacement has been successful.

~~Subp. 2.~~ B. Report content. The purpose of the annual report is to describe actual wetland restoration or creation activities completed during the past year, activities planned for the upcoming year, and the success of the replacement activities in achieving identified goals and performance standards ~~information in subpart 2~~. The annual report ~~shall~~ must, at minimum, include the following information ~~and other site-specific information identified by the local government unit~~:
A.(1) a ~~description of the~~ project location map with legal description~~, size, current wetland type (Cowardin classification), and desired wetland type (goal)~~;

~~B.~~(2) ~~a comparison of the as-built specifications versus the design specifications (first annual plan only) and a rationale for significant changes~~ description of replacement wetland goals and performance standards in terms of size, replacement credit amount, wetland types, hydrology, and wetland functions and a comparison of the current replacement wetland to these goals and standards;
(3) description of activities completed during the past year;
(4) description of activities planned for the upcoming year;
~~C.~~(5) hydrology measurements during the growing season; ~~seasonal~~ including water level elevations at fixed, repeatable locations representative of the replacement wetland types, or areal coverage measurements ~~during the period April through October~~ of inundation for replacement wetlands with deeper hydrologic regimes;
~~D.~~(6) a map of plant communities within the boundaries of the replacement site, ~~hydrologic indicators observed~~ including estimates of square footage or acreage of each and identification of areas of invasive or non-native vegetation; ~~and~~
~~E.~~(7) color photographs of all replacement areas ~~the project area~~ taken ~~anytime~~ during the growing season from fixed, repeatable reference locations that are representative of each plant community type;
(8) delineation and survey of the replacement wetland areas, if applicable, for the final monitoring season; and
(9) other information specified in the approved monitoring plan or subsequently requested by the local government unit;

8420.0630XXXX ~~MONITORING DETERMINATIONS BY THE~~ LOCAL GOVERNMENT UNIT MONITORING RESPONSIBILITIES.
~~The local government unit responsible for monitoring as determined under part 8420.0230:~~
~~A. must inspect the project when construction is complete and certify compliance with construction specifications, and may inspect the project at any time during the construction and monitoring period, and any time after that to assess the long-term viability of the replaced wetland. When the local government unit certifies that the construction specifications have been met, the local government unit shall so advise the applicant and return any construction bond or other construction security that the applicant had provided;~~

Subpart 1. **Monitoring Oversight.**
A. The local government unit must evaluate all monitoring reports for compliance with report requirements and must determine if the goals of the approved plan can be met within the specified monitoring period based on the current condition of the replacement wetland and the applicant's proposed management activities for the following growing season.

B. ~~may order corrective action at any time during the required monitoring period if it~~ For project-specific replacement, if the local government unit determines that the goals of the approved replacement plan will not be met, it ~~and may require the applicant to prepare an amended wetland value replacement plan for review and approval by the local government unit, which describes in detail the corrective measures to be taken to achieve the goal of replacing lost wetland functions and values;~~
~~C. shall make a finding based on a site visit at the end of the monitoring period as to whether the goal of the replacement plan has been met. If the goal of the replacement plan has not been met, the local government unit shall order corrective action and extend the monitoring period; and~~
~~D. shall require~~ must take one or more of the following actions ~~if during the monitoring period the local government unit finds that the goal of the replacement plan will not be met~~:
(1) order specific corrective actions on the replacement wetlands;
(2) order the applicant to prepare and implement a new or revised replacement plan;
(~~2~~3) request the enforcement authority to issue a cease and desist order on the ~~draining and filling~~ wetland impact activity if it has not been completed;
(~~3~~4) request the local soil and water conservation district and enforcement authority to order restoration of the impacted wetland;
(~~4~~5) ~~obtain forfeiture of a bond or other security and use the proceeds~~ utilize any financial assurance collected from the applicant to replace the lost wetland functions and values;
(~~5~~6) ~~ask the~~ pursue a district court ~~to~~ order requiring the applicant to fulfill the replacement plan; or

(~~6~~7) other actions that the local government unit determines necessary to achieve the goals of the replacement plan.

C. If the applicant fails to submit the annual report associated with a project-specific replacement plan in accordance with 8420.XXXX subpart 4, the local government unit responsible for monitoring oversight must either pursue enforcement actions in item B or prepare the annual report for the applicant. The local government unit may charge fees for preparing the report or utilize any financial assurance the applicant had provided to complete monitoring requirements.

Subpart 2. **Certification of successful replacement and completion of monitoring.** Upon completion of the minimum monitoring period, the applicant may request a field review by the local government unit and technical evaluation panel to evaluate the success of the replacement wetland. If the replacement is determined successful, the local government unit must provide written notification to the applicant that the replacement has been certified and the monitoring requirements have been fulfilled.

WETLAND PLANNING

8420.~~0650~~XXXX LOCAL COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLANS.

Subpart 1. ~~**General requirements and participation**~~ **Purpose and eligibility.**

A. As an alternative to the rules adopted under Minnesota Statutes, section 103G.2242, subdivision 1, and the public value criteria established or approved under Minnesota Statutes, section 103B.3355, a comprehensive wetland protection and management plan may be developed by a local government unit, or one or more local government units operating under a joint powers agreement, provided that: the requirements of this part are met.

~~(1) a notice is made at the beginning of the planning process to the board, the commissioner of natural resources, the Pollution Control Agency, local government units, and local citizens to actively participate in the development of the plan; and~~
~~(2) the plan is implemented by ordinance as part of the local government unit's official controls under Minnesota Statutes, chapter 394, for a county; Minnesota Statutes, chapter 462, for a city; Minnesota Statutes, chapter 366, for a town; and by rules adopted under Minnesota Statutes, chapter 103D, for a watershed district; and Minnesota Statutes, chapter 103B, for a watershed management organization.~~

~~B. An organization that is invited to participate in the development of the local plan, but declines to do so and fails to participate or to provide written comments during the local review process, waives the right during board review to submit comments, except comments concerning consistency of the plan with laws and rules administered by that agency. In determining the merit of an agency comment, the board shall consider the involvement of the agency in the development of the local plan. The technical evaluation panel must be consulted in all components of plan and ordinance development including, but not limited to, conducting wetland functional assessments, establishing wetland management classifications, and identifying local reference standard wetlands.~~

~~C. After board approval and local government adoption, replacement plan, exemption, and no-loss determinations are made according to the plan and ordinance.~~ This part provides minimum standards. Local government units must require equivalent or greater standards and procedures for wetland conservation, but not less.

B. The ultimate goal of a plan is to maintain and improve the quality, quantity, and biological diversity of wetland resources within watersheds through the prioritization of existing wetlands and the strategic selection of replacement sites. The purpose of developing a plan is to provide a watershed and ecosystem based framework to make wetland impact and replacement decisions that meet state standards and locally identified goals, and that support the sustainability or improvement of wetland resources in watersheds while providing local flexibility as allowed under subpart 4.

C. Any local government unit opting to pursue development of a plan and incorporating this chapter into local ordinance must provide documentation to the board demonstrating local capacity to implement the plan.

Subp. 2. **Relationship to other plans.** To maximize effectiveness, the comprehensive wetland protection and management plan should be developed as part of, or in coordination with, other relevant local or regional plans and requirements. The plan should provide a mechanism for integrating local land use decisions with wetland ecosystem management goals at the watershed level.

Subp. 3. **Plan area.** To the extent practical and feasible, the plan should be based on watershed boundaries. The size of watershed addressed should not be larger than is appropriate to ensure that the wetland resources provided through replacement will effectively compensate for approved impacts. For local governments with multiple watersheds, a separate analysis should be completed for each watershed substantially within the local government's jurisdiction. Local governments should consider joint planning efforts for those watersheds that cross political boundaries.

Subp. ~~2~~4. ~~**Plan contents**~~ **Flexibility options under a local plan.** The comprehensive wetland protection and management component of the local water plan may:
~~A. provide for classification of wetlands in the plan area based on:~~
~~(1) an inventory of wetlands in the plan area;~~
~~(2) an assessment of the wetland functions listed in part 8420.0103, using a methodology chosen by the technical evaluation panel from one of the methodologies established or approved by the board; and~~
~~(3) the resulting public values;~~

~~B~~A. vary application of the sequencing standards in part 8420.~~0520~~XXXX, for projects based on the classification and criteria set forth in the plan;

~~C~~B. vary the replacement standards of part 8420.~~0540~~XXXX, based on the classification and criteria set forth in the plan~~, for specific wetland impacts~~ provided there is no net loss of public values within the area subject to the plan, and so long as:
(1) in a 50 to 80 percent area, a minimum acreage requirement of one acre of replaced wetland for each acre of ~~drained or filled~~ impacted wetland requiring replacement is met within the area subject to the plan; and
(2) in a less than 50 percent area, a minimum acreage requirement of two acres of replaced wetland for each acre of ~~drained or filled~~ impacted wetland requiring replacement is met within the area subject to the plan~~, except that replacement for the amount above a 1:1 ratio can be accomplished as described in part 8420.0540, subpart 2~~;

~~D~~C. in a greater than 80 percent area, allow replacement credit, based on the classification and criteria set forth in the plan, for any project that increases the public value of wetlands, including activities on adjacent upland acres;

~~E~~D. in a greater than 80 percent area, based on the classification and criteria set forth in the plan, expand the application of the exemptions in part 8420.~~0122~~XXXX, subpart ~~1~~2, item B, to also include nonagricultural land, provided there is no net loss of wetland values;

~~F~~E. prescribe standards for size and location of replacement wetlands by establishing type requirements, size/ratio requirements, functional quality requirements, location requirements, and criteria for wetland mitigation fee in lieu of direct replacement ~~criteria~~. Requirements for replacement must have a direct relationship with wetland classification as defined in the plan and must result in no net loss of wetland quantity, quality, and biological diversity over the life of the plan ~~which cannot exceed ten years~~; and

~~G~~F. allow exemptions based on ordinance standards, eligibility criteria, and processes that are not less restrictive than the requirements in parts 8420.~~0115~~XXXX, 8420.~~0122~~XXXX, and 8420.~~0210~~XXXX based on wetland classifications as defined in the plan~~; and~~

~~H. define and establish high priority wetland areas pursuant to parts 8420.0350 and 8420.0400.~~

~~Subp. 2a. **Project notice and appeal under local ordinance.**~~
~~A. The local government unit shall submit to the commissioner of natural resources, the watershed district if there is one, local government units, members of the technical evaluation panel, and local citizens who request it, a copy of the application and provide at least 15 days' notice for comments and a schedule for a hearing if one is to be held. A copy of all decisions shall be forwarded to those mentioned above within ten days of the action.~~
~~B. Appeals of ordinance decisions. Persons may appeal replacement plan, no-loss and exemption determinations made pursuant to an approved wetland ordinance according to the procedures defined in part 8420.0250.~~

Subp. 5. **Plan content.**
A. **Assessment of existing conditions and determination of watershed goals.** The plan must be based on an analysis of the ecological conditions of the plan area and the development of corresponding goals for maintaining and improving those conditions. The ecological condition of the plan area should be based on inventories of historic and existing wetland resources, including identification of degraded wetlands, existing high quality wetlands, and immediate and long-term resource needs within the plan area. This analysis may be completed as part of the comprehensive wetland protection and management plan, or adopted from a relevant local or regional water plan if one exists.

B. **Classification of existing wetlands.** The plan may provide for the classification of wetlands in the plan area based on:
(1) an inventory of wetlands in the plan area;
(2) an assessment of the wetland functions listed in part 8420.~~0103~~XXXX, using a methodology chosen by the technical evaluation panel and based on one of the methodologies established or approved by the board;
(3) landscape position, adjacent habitats or buffers, connectivity with or between important resources, projected land use, and other watershed-scale criteria; and
(4) the resulting public value.

C. **Inventory and prioritization of replacement sites.** The plan must include an analysis of the types and locations of replacement projects that will provide the desired wetland functions, benefit the watershed from a landscape perspective, and best offset losses of public value caused by approved impacts. The goal of this analysis is to provide a framework from which replacement actions and locations will provide the greatest value to the public based on the ecological needs of the watershed. Priority should be given to naturally self-sustaining replacement that best achieves watershed goals and improves the ecological condition of the watershed. The plan must include strategies for the promotion and establishment of high priority replacement sites that best meet the goals of the plan.

D. **High priority areas.** Comprehensive wetland protection and management plans developed as part of county, watershed district, or watershed management organization plans may identify those areas that qualify as high priority areas for wetland preservation, enhancement, restoration, and establishment according to part 8420.XXXX.

E. **Assessing plan effectiveness.** The plan must include a provision for periodic assessment of the effectiveness of the plan, and the local government unit's implementation of it, in achieving plan goals. Updates to previously approved plans must include an analysis of the effectiveness of the previous plan, including the identification of barriers to achieving identified goals and the development of strategies to overcome them.

F. **Effective date and expiration.** The plan must specify the period covered by the plan, which must extend at least five years but no more than ten years from the date the board approves the plan.

Subp. 6. **Plan development and review process.**

A. A notice of intent to plan must be sent, at the beginning of the planning process, to the technical evaluation panel, the Department of Natural Resources, the Department of Agriculture, the Pollution Control Agency, watershed management organizations within the plan area, local government units within and adjacent to the plan area, and the United States Army Corps of Engineers with an invitation to actively participate in the development of the plan. The notice should also include a general description of the planning effort, the planning area, and an anticipated timeline.

B. The technical evaluation panel must be consulted in all components of plan and ordinance development including, but not limited to, conducting wetland functional assessments, establishing wetland management classifications, prioritizing replacement sites, and identifying local reference standard wetlands.

C. The local government unit must implement a process for notifying and involving local citizens in the development of the plan and the determination of local value. Local citizen involvement can include the formation of a citizen's advisory committee or utilization of other existing citizen groups.

D. Upon completion, the local government unit must submit the draft plan and ordinance for a 60-day review and comment period to those required to receive notice in item A. The local government unit must respond in writing to any comments received during the review period within 30 days of the end of the review period.

E. The local government unit must conduct a public hearing on the plan no sooner than 30 days after the end of the 60-day review period but before submittal of the final draft plan to the board for approval.

F. After conducting the public hearing but before final adoption, the local government unit must submit the plan and ordinance, all written comments received, a record of the public hearing, and a summary of responses to comments and changes incorporated as a result of the review process to the board for review under subpart 7.

G. An organization that is invited to participate in the development of the draft local plan, but declines to do so or fails to participate or to provide written comments during the local review process, waives the right during the review under item D to submit comments, except comments concerning consistency of the plan with laws and rules administered by that agency. In determining the merit of an agency comment, the board must consider the involvement of the agency in the development of the local plan.

H. Except as otherwise provided for in this part, all other requirements relating to development of the plan must be consistent with the local water plan processes under Minnesota Statutes, section 103B.231, 103B.311, or 103D.401. A plan developed as part of a local water management plan may follow the review and approval process applicable to the local water management plan instead of items D, E, and F.

Subp. ~~3~~7. **Board ~~review and approval~~ decision; mediation; judicial review.**
A. The board must make a decision to approve or disapprove a plan within 60 days of receipt of a complete and final draft of the plan and ordinance as required in subpart 6F. The board may disapprove all or parts of the plan if the board determines it does not meet the requirements of this part. If the board has not made a decision within 60 days of receipt of the final plan, ~~T~~the plan is deemed approved ~~60 days after the local government unit submits the final plan to the board, unless the board disagrees with the plan as provided in item D~~. The 60 day period may be extended upon mutual agreement of the board and the local government unit.

~~B. The board may not disapprove a plan if the board determines the plan meets the requirements of this part.~~

~~C~~B. In its review of a plan, the board ~~shall~~ must advise the local government unit of those elements of the plan that are more restrictive than ~~state law and rules~~ this chapter and the act.

~~D~~C. If the board disagrees with the plan or any elements of the plan, the board ~~shall~~ must, in writing, notify the local government unit of the plan deficiencies and suggested changes. The board ~~shall~~ must include in the response to the local government unit the scientific justification, if applicable, for the board's concerns with the plan. Upon receipt of the board's concerns with the plan, the local government unit has 60 days to revise the plan and resubmit the plan to the board for reconsideration, or the local government unit may request a hearing before the board. The board ~~shall~~ must hold a hearing within the boundaries of the jurisdiction of the local government within 60 days of the request for hearing. After the hearing, the board ~~shall~~ must, within 60 days, prepare a report of its decision and inform the local government unit.

~~E~~D. If, after the hearing, the board and local government unit disagree on the plan, the board ~~shall~~ must, within 60 days, initiate mediation through a neutral party. If the board and local government unit agree in writing not to use mediation or the mediation does not result in a resolution of the differences between the parties, then the board may commence a declaratory judgment action in the district court of the county where the local government unit is located. If the board does not commence a declaratory judgment action within the applicable 60-day period, the plan is deemed approved.

~~F~~E. The declaratory judgment action must be commenced within 60 days after the date of the written agreement not to use mediation or 60 days after conclusion of the mediation. If the board commences a declaratory judgment action, the district court ~~shall~~ must review the board's record of decision and the record of decision of the local government unit. The district court ~~shall~~ must affirm the plan if it meets the requirements of this part.

~~G. The comprehensive wetland protection and management plan may be developed as part of, or in conjunction with, a local water plan. Except as otherwise provided for in this part, all other requirements relating to development of the plan must be consistent with the local water plan processes under Minnesota Statutes, section 103B.231, 103B.311, or 103D.401.~~

Subp. 4~~8~~. **Effective date and amendments.**
A. The plan becomes effective after approval by the board as provided in subpart 3~~7~~ and after adoption of the plan into the official controls of the local government unit.

B. Comprehensive wetland protection and management plans remain in effect according to subpart 5F, unless revised according to subpart 6 and approved by the board. Plans that contain revision dates inconsistent with this part must comply with that date provided it is not more than 10 years beyond the date of board approval. An extension of the revision date of the plan may be granted by the board.

C. All amendments to the adopted plan and ordinance become effective upon completion of the same process required for the original plan, except when the proposed amendments constitute minor amendments and: ~~must be approved by the board.~~
(1) a public hearing has been held to explain the amendments;
(2) the local government unit has sent copies of the amendments to those required to receive notice in subpart 6; and
(3) the board has either agreed that the amendments are minor or failed to act within 60 days of receipt of the amendments.
~~C. After the effective date of the plan, a local government unit shall make replacement, exemption, no-loss, and other determinations consistent with the plan.~~

D. For the purposes of this subpart, minor amendments include clarifications, updates to wetland or replacement site inventories, and other changes that do not substantially alter the standards of the approved plan and ordinance, as determined by the board. Amendments required to bring the plan into conformance with revisions to this chapter may also be considered minor.

~~Subp. 5. **[Repealed, 27 SR 135]**~~
~~Subp. 6. **[Repealed, 27 SR 135]**~~
~~Subp. 7. **Local program capacity requirements.** Any local government unit opting to pursue incorporating this chapter into local ordinance must provide documentation to the board demonstrating~~

~~local capacity to implement the program consistent with requirements prescribed in part 8420.0200, subpart 2, item A.~~

Subp. 9. **Implementation.**
~~(2)~~ A. The plan ~~is~~ must be implemented by ordinance as part of the local government unit's official controls under Minnesota Statutes, chapter 394, for a county; Minnesota Statutes, chapter 462, for a city; Minnesota Statutes, chapter 366, for a town; and by rules adopted under Minnesota Statutes, chapter 103D, for a watershed district; and Minnesota Statutes, chapter 103B, for a watershed management organization.

B. After board approval and local government adoption, decisions made in implementing this chapter and the act must be made according to the plan and ordinance.

C. Noticing, appeals, and all other administrative processes under a local plan must follow the requirements of this chapter.

Subp. ~~8~~10. **Reporting ~~and oversight.~~** ~~An annual activity report must be provided to the board which documents compliance with plan standards as required in subpart 2. The annual report shall include such items as the number and type of permits and exemptions issued, including documentation of the area of wetlands impacted and replaced, complaints received, plan and ordinance violations including number of cease and desist orders, projects constructed, variances granted, and local appeal proceedings.~~ In addition to, and as part of, the reporting requirements of part 8420.XXXX, a local government unit with an approved and adopted comprehensive wetland management plan must annually provide information to the board regarding activities that vary from this chapter, this part notwithstanding, and documenting compliance with the minimum plan standards required in subpart X. Failure to provide this information on an annual basis may subject the local government unit to penalties under part 8420.XXXX.

8420.~~0350~~ XXXX HIGH PRIORITY REGIONS AND AREAS.

Subpart 1. **High priority regions.** Parts of the state that are high priority regions for preservation, enhancement, restoration, and establishment of wetlands include all major watersheds with a majority of their land area contained within counties that have lost 50 percent or more of their presettlement wetland base, which are those listed in part 8420.~~0540, subpart 5, item B~~XXXX. In all other ~~counties~~ major watersheds of the state, high priority regions are high priority areas approved as such by the board according to subpart 2.

Subp. 2. **High priority areas.**
A. Planning context. Water management plans prepared by water management organizations in the metropolitan area under Minnesota Statutes, section 103B.231, by counties outside the metropolitan area under Minnesota Statutes, section 103B.311, and by watershed districts outside the metropolitan area under Minnesota Statutes, sections 103D.401 and 103D.405, ~~must~~ may identify those areas that qualify as high priority areas for wetland preservation, enhancement, restoration, and establishment. ~~These priority areas shall be included in the next scheduled water management plan update.~~ In order to designate a high priority area, the preservation, enhancement, restoration, and establishment of wetlands must have or achieve high public value based on the functions of wetlands listed in part 8420.~~0103~~XXXX and the goals of the water management plan.

B. **Priority watersheds.** High priority areas should be designated by minor or sub-watershed. ~~Plans should give s~~Strong consideration should be given to identifying as high priority areas minor watersheds having less than 50 percent of their original wetland acreages and where restoration of previously impacted or degraded wetlands will contribute towards achieving watershed-based goals. Consideration should also be given to watersheds that contain high valued wetlands that are at risk of degradation or loss and whose protection is integral to maintaining the ecology and condition of the watershed. Identification of high priority watersheds should be consistent with 8420.XXXX subpart 5.

~~and intact wetlands, diminished wetlands, and the areas once occupied by wetlands that have been diminished or eliminated and could feasibly be restored taking into account the present hydrology and use of the area. Plans should give strong consideration to identifying as high priority areas all type 1 or 2 wetlands, and other wetlands at risk of being lost by permanent conversion to other uses. When individual wetlands are identified as high priority for preservation and restoration, the high priority area shall include the wetland and an adjacent buffer strip not less than 16.5 feet wide around the perimeter of the wetland and may include up to four acres of upland for each wetland acre.~~

C. **Priority wetlands.** Water management plans may identify individual wetlands, or criteria to establish individual wetlands, as high priority areas. Individual wetlands identified as high priority areas should be of high local value, at risk of degradation or loss, and consistent with any existing wetland classification criteria established under part 8420.XXXX subpart 5B. Plans may also identify individual sites as high priority areas for wetland restoration and establishment. High priority restoration sites should be identified according to the criteria in part 8420.XXX subpart 5C.

D. **Wetland Preservation Area Criteria.** Water management plans that identify high priority areas and intend to accept applications for wetland preservation areas under part 8420.XXXX should include criteria for eligibility and prioritization of applications.

~~C. In all counties, plans may identify additional high priority areas where preservation, enhancement, restoration, and establishment of wetlands would have high public value by providing benefits for water quality, flood water retention, public recreation, commercial use, and other public uses. High priority areas should be delineated by minor or major watershed. For the purposes of this part, "watershed" means major or minor watershed or subwatershed. To identify high priority areas, the local government unit shall consider at a minimum those items listed in part 8420.0103.~~

~~D~~E. **Board review and approval.** The board ~~shall~~ will review the inclusion of high priority areas in plans as part of the standard process for plan review ~~established in statute~~. High priority areas approved by the board that are not in a high priority region listed in subpart 1 become high priority regions with board approval.

8420.~~0400~~ XXXX WETLAND PRESERVATION AREAS.

Subpart 1. **Purpose and eligibility.** The purpose of this part is to provide local governments with a tool to promote the preservation of high valued wetlands and the restoration and enhancement of wetland areas that will contribute towards meeting watershed-based goals identified in a local water management plan. Wetlands located in ~~areas that are both high priority regions and~~ high priority areas as identified in part 8420.~~0350~~XXXX and a local water plan are eligible for enrollment as wetland preservation areas. A wetland so enrolled is exempt from property tax. Sites identified as high priority areas for wetland restoration and establishment are only eligible for wetland preservation area designation after restoration of the wetland. Wetland areas receiving replacement credit are not eligible for designation as a wetland preservation area.

Subp. 2. **Landowner application for wetland preservation area.** A landowner may apply to the county or watershed district, if the county or watershed district chooses to accept wetland preservation areas, for designation of a wetland as a wetland preservation area on forms provided by the board. The applicant must include a buffer strip ~~of upland 16.5 feet wide~~ that meets the requirements of part 8420.XXXX subpart X around the perimeter of the wetland. The applicant may include up to four acres of upland for each acre of wetland. The application must be accompanied by a restrictive covenant on a form provided by the board. The covenant will contain the same limitations on use that are provided in Minnesota Statutes, section 103F.515, subdivision 4, including a covenant that the enrolled upland area will be vegetated by the landowner to permanent vegetation other than noxious weeds. The covenant must be signed, acknowledged, and ready for recording.

Subp. 3. **County or watershed district review of application.** Upon receipt of a complete application, the county or watershed district must send a copy of the application to the county assessor, the board,

and the soil and water conservation district where the land is located. The soil and water conservation district must prepare an advisory statement of existing and potential preservation problems or conflicts and send the statement to the owner of record and to the county or watershed district. The county or watershed district may accept the application if the wetland is in a high priority region and high priority area, if it includes the required buffer ~~16.5 foot strip,~~ and is accompanied by the proper covenant. The county or watershed district may limit or reject additional upland proposed to be included according to criteria identified in the approved plan and standards the county may establish~~es~~. The county or watershed district may reject the application if the application does not qualify, or require ~~send it back for~~ modification and resubmittal ~~if that is appropriate~~ of the application. If the application qualifies, the county or watershed district may approve it and mark the date of approval on the application. The county or watershed district ~~shall~~ must notify the landowner of the acceptance or denial of the application within 60 days from the date of the application. Within five ~~working~~ business days of approval of the application, the county or watershed district ~~shall~~ must forward it to the county recorder for recording of the restrictive covenant or memorialization of the application on the certificate of title. The county or watershed district ~~shall~~ must also send a copy of the approved application to the county assessor for entry in the assessor's records as a wetland preservation area. The county or watershed district ~~shall~~ must also send copies of the approved application to the soil and water conservation district, the local government unit, and the board.

Subp. 4. **Applicable statutes.** In addition to this chapter, wetland preservation areas are subject to Minnesota Statutes, sections 103F.612 to 103F.616, and the property tax provisions of Minnesota Statutes, section 272.02, subdivision 11.

Subp. 5. **Commencement of wetland preservation area.** The wetland is a wetland preservation area commencing 30 days from the date the county notifies the landowner of acceptance of the application under subpart 3.

Subp. 6. **Fee.** The county or watershed district may require an application fee to defray administrative costs of the program.

Subp. 7. **Maps.** ~~The c~~Counties having approved wetland preservation areas within their legal boundaries ~~shall~~ must maintain ~~wetland preservation area~~ maps illustrating land covenanted as wetland preservation areas.

Subp. 8. **Reimbursement of unpaid taxes.** A county or watershed district with an approved wetland preservation area will be reimbursed for lost tax revenue according to Minnesota Statutes, section 275.295.

APPEALS, COMPENSATION, AND ENFORCEMENT

8420.~~0250~~XXXX APPEALS.

Subpart ~~3c~~1. **Appeals of replacement and restoration orders to the board.** A landowner or responsible party may appeal the terms and conditions of a restoration or replacement order issued pursuant to ~~subpart 3~~ part 8420.XXXX to the board's executive director within 30 days of receipt of written notice by filing a written request for review and paying a nonrefundable filing fee to the board. The filing fee is $200, or an amount otherwise determined by the board not to exceed $1,000. If the written request is not submitted within 30 days, the restoration or replacement order becomes final. The executive director ~~shall~~ must review the request and supporting evidence and render a decision within 60 days of the request for review. The executive director may stay the restoration or replacement order until the appeal is resolved.
The preceding subpart was relocated from 8420.0290 Enforcement Procedures, subp. 3c.

~~Subp. 2. [Repealed, 22 SR 1877]~~

Subp. 2. **Appeal of local government unit staff decisions.** A decision made by staff becomes final if not appealed to the local government unit within 30 days after the date on which the decision is sent to those required to receive notice of the decision. Notwithstanding the time frames of Minnesota Statutes, section 15.99, or any other law to the contrary, the local government unit must make a ruling within 30 days from the date of the filing of the appeal, unless the appellant and local government unit mutually agree, in writing, to an extension of time beyond the 30 days. Appeal of a final decision made by staff may be made by the landowner, by any of those required to receive notice of the decision, or by 100 residents of the county in which a majority of the wetland is located. An appeal is effective upon mailing of a petition and payment of any applicable fees to the local government unit. A filing fee is not required for appeals petitioned by state agencies or members of the technical evaluation panel.

Subpart ~~1~~ 3. **Appeal of local government unit decisions to the board.** The decision of a local government unit to approve, approve with conditions, or ~~reject a replacement plan, banking plan, public road project notice, exemption, no-loss, or wetland boundary or type request~~ deny an application becomes final if not appealed to the board within 30 days after the date on which the decision is ~~mailed~~ sent to those required to receive notice of the decision. Appeals of decisions made by local government staff must be made to the local government unit as provided for in ~~part 8420.0200,~~ subpart 2~~, item B~~. This subpart also applies to ~~those determinations which are~~ decisions made under comprehensive wetland protection and management plans.
Appeal may be made by the landowner, by any of those required to receive notice of the decision, or by 100 residents of the county in which a majority of the wetland is located.
Appeal is effective upon mailing of ~~the~~ a petition and payment of a nonrefundable filing fee of $200, or an amount otherwise determined by the board not to exceed $1,000, to the board with evidence that a copy of the petition has been mailed to the local government unit. The petition should include information to establish sufficient grounds for the appeal. The filing fee is not required for appeals petitioned by state agencies or members of the technical evaluation panel. Another filing fee is not required for appeals that have been remanded if the filing fee was paid and the same party appeals the new decision made under remand. Subsequent to receipt of a petition, the local government unit must send a copy of the petition to all those to whom it was required to send a notice of the decision.

Subp. ~~3~~ 4. **Board appeal procedures.** Within 30 days after receiving the petition, the board or its dispute resolution committee or executive director ~~shall~~ must decide whether to grant the petition and hear the appeal. After considering the size of the proposed impacts and the quality of the affected wetland, any patterns of similar acts by the petitioner or the local government unit in administration of this chapter and the act, and the consequences of the delay resulting from the appeal, ~~T~~the board, its dispute resolution committee, or its executive director ~~shall~~ will grant the petition unless the appeal is ~~deemed meritless~~ without sufficient merit, trivial, or brought solely for the purposes of delay; ~~that~~ the petitioner has not exhausted all local administrative remedies; or ~~that~~ the petitioner has not ~~posted a letter of credit, cashier's check, or cash if required by the local government unit~~ submitted the required filing fee.
The board, its dispute resolution committee, or its executive director may stay the local government unit decision until the appeal is resolved.
The board, its dispute resolution committee, or its executive director may remand the appealed decision back to the local government unit if the petitioner has not exhausted all local administrative remedies such as a local government unit evidentiary public hearing, if expanded technical review is needed, or if the local government unit's record is not adequate. If an appeal is remanded, a new application is not required and additional information may be submitted before a decision is made by the local government unit. ~~If an appeal is remanded, t~~The local government unit must make a decision on an appeal that has been remanded within 60 days unless the remand order, or a subsequent order, specifies a longer period.
After granting the petition, the appeal ~~shall~~ must be heard by the dispute resolution committee and decided by the board within 60 days after the filing of the local government unit's written record, submittal of the written briefs for the appeal, and the hearing by the dispute resolution committee. Parties to the appeal are the appellant, the landowner, the local government unit, and those required to receive notice of the local government unit decision.
The board or its executive director may elect to combine related appeals and process as one decision, either multiple appeals on the same project or appeals of different local government unit decisions on the same project.

~~Upon~~ Within 30 days of the granting of an appeal, unless an extension of time is approved by the board, the local government unit ~~shall~~ must forward to the board the written record on which it based its decision. The board will forward one copy of the record to each of the parties to the appeal. The board will make its decision on the appeal after hearing. Thirty days' notice of the hearing ~~shall~~ will be given by the board to the parties. ~~The parties may present written and oral argument. When the local government unit has made formal findings contemporaneously with its decision and there is an accurate verbatim transcript of the proceedings and the proceedings were fairly conducted, the board will base its review on the record. Otherwise it may take additional evidence, or remand the matter.~~ The board will base its review on the record and the argument presented to the board by the parties. However, if the local government unit did not consider fundamental information, such as aerial photographs, soils maps, or wetland maps, or did not make formal findings contemporaneously with its decision, if there is not accurate verbatim transcript of the proceedings, if the proceedings were not fairly conducted, or if the record is otherwise incomplete or deficient, the board may remand the matter or receive additional evidence. If, before the date set for the hearing, application is made to the board for leave to present additional evidence on the issues in the case, and it is shown to the satisfaction of the board that additional evidence is material and that there were good reasons for failure to present it in the proceeding before the local government unit, the board may order that the additional evidence be taken before the local government unit upon such conditions that the board deems proper. The local government unit may modify its findings and decision by reason of the additional evidence and must file with the board, to become a part of the record, the additional evidence, together with any modifications or new findings or decision.

The board will affirm the local government unit's decision if the local government unit's findings of fact are not clearly erroneous; if the local government unit correctly applied the law to the facts, including this chapter; and if the local government unit made no procedural errors prejudicial to a party. Otherwise, the board will reverse the decision, amend it, or remand it with instructions for further proceedings. The board will provide notice of its decision to the parties to the appeal.

~~8420.0280 APPEAL FROM BOARD DECISIONS.~~
Subp. 5. Appeal of board decisions. An appeal of a board decision is taken to the state court of appeals and must be considered an appeal from a contested case decision for purposes of judicial review under Minnesota Statutes, sections 14.63 to 14.69.

8420.~~0268~~XXXX COMPENSATION CLAIMS AGAINST LOCAL GOVERNMENT UNITS.

Subpart 1. **Intervention.** At the request of a local government unit against which a compensation action is brought based at least in part on the local government unit's application of Minnesota Statutes, section 103G.222, 103G.2241, 103G.2242, 103G.237, or 103G.2372, or rules adopted by the board to implement these sections, the state, through the attorney general, ~~shall~~ must intervene in the action on behalf of the local government unit and ~~shall~~ will thereafter be considered a defendant in the action. A local government unit making a request under this subpart ~~shall~~ must provide the attorney general with a copy of the complaint as soon as possible after being served. If requested by the attorney general, the court ~~shall~~ must grant additional time to file an answer equal to the time between service of the complaint on the local government unit and receipt of the complaint by the attorney general.

Subp. 2. **Liability of state for certain costs.** The state is liable for costs, damages, fees, and compensation awarded in the action based on the local government unit's adoption or implementation of standards that are required by state law, as determined by the court. The local government unit is liable for costs, damages, fees, and compensation awarded in the action based on local standards that are more restrictive than state law and rules.

Subp. 3. **Definition.** For purposes of this part, "compensation action" means an action in which the plaintiff seeks compensation for taking private property under the state or federal constitution.

8420.~~0270~~XXXX COMPENSATION TO LANDOWNERS.

Replacement plan applicants who have completed the local government unit process and the board appeal process, and the replacement plan has not been approved as submitted, may apply to the board for compensation under Minnesota Statutes, section 103G.237.

The application must identify the applicant, locate the wetland, and refer the board to its appeal file in the matter. The application must include an agreement that, in exchange for compensation, the applicant will convey to the state a perpetual conservation easement in the form required by Minnesota Statutes, section 103F.516. The applicant must provide an abstract of title demonstrating the ability to convey the easement free of any prior title, lien, or encumbrance. Failure to provide marketable title negates the state's obligation to compensate. The applicant must submit official documentation from the United States Army Corps of Engineers, the Minnesota Pollution Control Agency, the watershed district or water management organization if any, the county, and the town or city, as applicable, that the proposed ~~drain or fill activity~~ impact and the proposed subsequent use of the wetland are lawful under their respective legal requirements.

The landowner must demonstrate that the proposed ~~drain or fill~~ impact is a feasible and prudent project and that the replacement plan as proposed is a reasonable good faith effort to fulfill the replacement requirements of parts 8420.0500 to 8420.0630 and the act.

If the replacement plan was approved, but with conditions or modifications, the applicant must show that the conditions or modifications make the replacement unworkable or not feasible. A plan is unworkable or not feasible if the replacement must be on land that the applicant does not own, the applicant has made good faith efforts to acquire a replacement site and not succeeded, and there is not a qualifying replacement available in a wetland bank. A plan is also unworkable or not feasible if it is not possible to carry out for engineering reasons. The applicant must show that not going ahead with the proposed project will cause the applicant damages and that disallowing the proposed use will enhance the public values of the wetland.

The applicant must submit the requirements in this part in writing, by certified mail, to the board. If the applicant wants to make oral argument to the board, it must be indicated as part of the application. The board may require that the applicant appear before the board. If the board finds that the applicant has submitted a complete application and proved the requirements in this part, the board ~~shall~~ must compensate the applicant as required by law within 90 days after the board received a completed application, provided that within the same time period the applicant must convey to the board a conservation easement in the form required by Minnesota Statutes, section 103F.516. If the board does not provide the required compensation in exchange for the conservation easement, the applicant may ~~drain or fill~~ impact the wetland in the manner proposed, without replacement.

8420.~~0290~~XXXX ENFORCEMENT PROCEDURES.

Subpart 1. **Enforcement authorities.** The commissioner, conservation officers, and other peace officers may issue cease and desist orders and restoration and replacement orders.

Subp. 2. **Cease and desist orders.**

A. Cease and desist orders may be issued when the enforcement authority has probable cause that an ~~drain, excavation, or fill~~ activity is being or has been conducted ~~in~~ that impacts a wetland and does not qualify for an exemption or a no-loss ~~determination~~ under parts 8420.~~0210~~XXXX and 8420.~~0220~~XXXX and is being or has been conducted without prior approval ~~of a replacement plan~~ by a local government unit under part 8420.~~0230~~XXXX or involving a ~~determination~~ decision stayed by the board pursuant to part 8420.~~0250~~XXXX. A cease and desist order must not be issued if the landowner has, and is complying with, a valid replacement plan, exemption, or no-loss~~, or replacement plan determination from~~ approved by the local government unit, or a completed and submitted public road project notification that has not been stayed, remanded, or reversed on appeal under provisions of part 8420.~~0250~~XXXX, or has sufficient evidence to support qualification for an exemption or no-loss ~~determination~~. The enforcement authority issuing a cease and desist order must submit copies to the soil and water conservation district, local government unit, and Department of Natural Resources.

B. The enforcement authority ~~shall~~ must advise the landowner that the landowner's written application, if any, for an replacement plan, exemption, or no-loss~~, or replacement plan determination,~~ should be made immediately to the local government unit and that ~~whatever drain, excavation, or fill work~~ any wetland that

has been ~~done~~ impacted may require restoration if the application for replacement plan, exemption, or no-loss~~, or replacement plan determination~~ is denied or reversed on appeal.

~~The enforcement authority issuing a cease and desist order shall promptly submit copies to the soil and water conservation district, local government unit, and Department of Natural Resources.~~

C. If an application for a~~n~~ replacement plan, exemption, or no-loss~~, or replacement plan determination~~ approval is triggered by a cease and desist order, the local government unit ~~shall~~ must make the ~~determination~~ decision in accordance with parts 8420.~~0210~~XXXX to 8420.~~0230~~XXXX.
~~In cases where the cease and desist order has been issued to a local government unit, the determination of exemption or no-loss shall be made by the board.~~
If the ~~determination~~ decision is that the activity is exempt or ~~results in~~ qualifies for a no loss ~~of wetland~~, the decision maker ~~shall~~ must request that the enforcement authority rescind the cease and desist order, pending the outcome of any appeal, and notify the soil and water conservation district, the enforcement authority, and the landowner. If the application is denied, the decision-maker ~~shall~~ must immediately notify the soil and water conservation district, the enforcement authority, and the landowner.

D. In cases where the cease and desist order has been issued to a local government unit, the decision of exemption or no-loss must be made by the board.

Subp. 3. **Restoration and replacement orders.** The enforcement authority ~~shall~~ must issue a restoration order or replacement order when:

A. the ~~drain, excavation, or fill~~ impact has already been completed when discovered, or after a cease and desist order has been issued and the landowner does not apply for a~~n~~ replacement plan, exemption, ~~replacement plan,~~ or no-loss ~~determination~~ within three weeks;

B. the local government unit grants the application but it is reversed on appeal; or

C. the local government unit denies the application.

Promptly upon being informed by the enforcement authority or the local government unit of the need, the soil and water conservation district staff person ~~shall~~ must inspect the site and prepare a plan in consultation with the local government unit and the enforcement authority for restoring the site to its prealtered condition. The soil and water conservation district may request assistance from the local government unit in inspecting the site and preparing the plan. Restoration ~~shall~~ must be ordered unless the ~~soil and water conservation district, with the concurrence of the~~ technical evaluation panel ~~and the enforcement authority,~~ concludes that restoration is not possible or prudent. The soil and water conservation district ~~shall~~ must incorporate its plan into a restoration or replacement order and send it to the enforcement authority for service in person or by certified mail to the landowner or responsible party.

Subp. ~~3a~~ 4. **Contents of order.**

A. A restoration order must specify dates by which the landowner or responsible party must either:
~~A.~~ (1) restore the wetland according to the soil and water conservation district plan and obtain a certificate of satisfactory restoration from the soil and water conservation district; or
~~B.~~ (2) submit a complete replacement plan, exemption, or no loss application to the local government unit.
If ~~the replacement plan~~ an application is submitted and subsequently denied, the landowner or responsible party ~~shall~~ must restore the wetland as specified in the order. The restoration order ~~shall~~ must be rescinded if the landowner or responsible party obtains approval of an after-the-fact replacement plan, exemption, or no-loss ~~determination~~ from the local government unit that is not reversed on appeal.
A replacement order must specify a date by which the landowner or responsible party must submit a complete replacement plan application to the local government unit and a subsequent date by which the landowner or responsible party must replace the wetland according to the approved replacement plan and obtain a certificate of satisfactory replacement from the soil and water conservation district. The

restoration or replacement order must specify a time period of at least 30 days for submittal of a complete application under this subpart.

B. A certificate of satisfactory restoration or replacement may be issued with conditions that must be met in the future, such as but not limited to, issues with wetland vegetation, weed control, inspections, monitoring, or hydrology. Failure to fully comply with any conditions that have been specified may result in the issuance of a new restoration or replacement order.

C. Failure to submit a complete application within the time period specified in the restoration order, or as properly extended, will result in the landowner or responsible party having to comply with the order before an application under this chapter may be submitted, unless the local government unit and the enforcement authority agree otherwise or unless allowed under appeal.

Subp. ~~3b~~ 5. **Enforcement authority orders.** If the ~~soil and water conservation district, with the concurrence of the~~ technical evaluation panel ~~and the enforcement authority,~~ determines that restoration will not restore all the loss caused by the ~~drain, excavation, or fill activity~~ impact, the ~~enforcement authority~~ order may ~~order~~ require a combination of restoration and replacement, or ~~may order~~ replacement rather than restoration. The order must direct the landowner or responsible party to obtain replacement plan approval from the local government unit. The order must specify that if replacement plan approval is not obtained, the landowner or responsible party must restore the wetland as ordered. Each cease and desist, restoration, and replacement order ~~shall~~ must state that violation of the order is a misdemeanor. If, as part of a misdemeanor proceeding, the court orders restoration or replacement, ~~the soil and water conservation district, with the concurrence of~~ the technical evaluation panel ~~and the enforcement authority~~, ~~shall~~ must determine which is appropriate, and if it is restoration, the method of restoration. If the court orders replacement, the landowner or responsible party must follow the replacement plan process in subpart ~~4~~ 6 and parts 8420.~~0500~~XXXX to 8420.~~0630~~XXXX.

~~Subp. 3c. Appeals of replacement and restoration orders.~~ ***The entire subpart 3c was relocated to the subpart 1 of the Appeals part.***

Subp. ~~4~~ 6. **After-the-fact replacement.** If a landowner or responsible party seeks approval of a replacement plan after the proposed project has already impacted the wetland or if sufficient replacement has not been provided under an approved replacement plan, the local government unit ~~shall~~ must require the landowner or responsible party to replace the impacted wetland at a ratio twice the replacement ratio otherwise required, unless the local government unit and enforcement authority concur that an increased ratio is not required.

Subp. ~~5~~ 7. **Misdemeanor.** A violation of an order issued under this part is a misdemeanor and must be prosecuted by the county attorney where the wetland is located or the illegal activity occurred.

ACTIVITIES UNDER DEPARTMENT OF NATURAL RESOURCES AUTHORITY

8420.~~0300~~XXXX MINING.
Wetlands ~~may~~ must not be ~~drained, excavated, or filled~~ impacted as part of a project for which a permit to mine is required by Minnesota Statutes, section 93.481, except as approved by the commissioner. ~~Draining, excavating, or filling of~~ Impacts to wetlands created by pits, stockpiles, or tailing basins by actions whose purpose was not to create the wetland are exempt under part 8420.~~0122~~XXXX.

A. For new mining operations that are permitted and initiated after July 1, 1993:
(1) mining ~~shall~~ must not be conducted without first receiving a permit to mine issued under chapter 6130 for iron ore and taconite or chapter 6132 for nonferrous metallic minerals; and
(2) the mining and reclamation operating plans or annual reports submitted by the applicant as required in the permit to mine ~~shall~~ must include an approved wetland replacement plan that meets the same principles and standards for replacing wetlands under parts 8420.~~0500~~XXXX to 8420.~~0630~~XXXX.

B. For mining operations in existence before July 1, 1993, and operated on or after that date under a permit to mine issued under chapter 6130 for iron ore and taconite or chapter 6132 for nonferrous metallic minerals:
(1) ~~no draining, excavating, or filling activities shall be conducted within~~ wetlands for which ~~these activities~~ impacts were approved but not initiated before July 1, 1993~~,~~ must not be impacted until the operating plan or annual report as required in the permit to mine includes an approved wetland replacement plan for the undisturbed wetlands. The wetland replacement plan ~~shall~~ must meet the same principles and standards for replacing wetlands under parts 8420.~~0500~~XXXX to 8420.~~0630~~XXXX;
(2) for filling activities that were approved and initiated before July 1, 1993, the placement of fill atop a stockpile, roadway, or other mining-related facility that occupies a wetland filled before July 1, 1993, ~~shall~~ will be allowed to continue within the areal extent, as it existed on July 1, 1993, of the stockpile, roadway, or other mining-related facility without the requirement of a replacement plan or amendment of the permit to mine. An expansion of the areal extent of the fill in the wetland requires an approved replacement plan in the operating plan or annual report as required in the permit to mine, according to subitem (1);
(3) for draining activities that were approved and initiated before July 1, 1993, the draining of a wetland to facilitate mining, using ditches and other drainage facilities that existed on July 1, 1993, ~~shall~~ will be allowed to continue without the requirement of a replacement plan or amendment of the permit to mine. Maintenance of the ditches and structures ~~shall~~ will be allowed without the requirement of a replacement plan or amendment of the permit to mine, provided that as a result of the maintenance, wetlands are not drained beyond the extent that existed as of July 1, 1993. Otherwise, the permit to mine must be amended to provide for replacement according to subitem (1).

C. Replacement wetlands approved under this part must only be used for mining-related impacts covered under a permit to mine unless the credits are approved and deposited in the state wetland bank according to parts 8420.~~0700~~XXXX to 8420.~~0760~~XXXX.

~~C~~D. Applicable procedures are those required for permits to mine.

~~D~~E. This part ~~shall~~ does not apply to peat mining as defined under Minnesota Statutes, section 93.461, that is subject to the mine permit and reclamation requirements under Minnesota Statutes, sections 93.44 to 93.51, and the rules of the commissioner adopted under those sections.

8420.XXXX STANDARDS AND CRITERIA FOR IDENTIFICATION, PROTECTION, AND MANAGEMENT OF CALCAREOUS FENS.

~~8420.1010 PURPOSE.~~ Subpart 1. **Purpose.** The purpose of this part~~s 8420.1010 to 8420.1070~~ is to provide minimum standards and criteria for the identification, protection, and management of calcareous fens as authorized by Minnesota Statutes, section 103G.223. Calcareous fens, as identified by the commissioner, ~~may~~ must not be ~~drained or filled~~ impacted or otherwise altered or degraded, wholly or partially, by any action, unless the commissioner, under an approved ~~except as provided for in a~~ management plan decides some alteration is necessary ~~approved by the commissioner~~.
The exemptions contained in ~~P~~part 8420.~~0122~~XXXX, and the sequencing provisions in part 8420.XXXX, does not apply to calcareous fens.

~~8420.1020 IDENTIFYING CALCAREOUS FENS.~~ Subp. 2. **Identifying calcareous fens.** A calcareous fen is a peat-accumulating wetland dominated by distinct groundwater inflows having specific chemical characteristics. The water is characterized as circumneutral to alkaline, with high concentrations of calcium and low dissolved oxygen content. The chemistry provides an environment for specific and often rare hydrophytic plants.

~~8420.1030 PROCEDURES TO LIST CALCAREOUS FENS.~~ Subp. 3. **Procedures to list calcareous fens.**
A. The commissioner ~~shall~~ must investigate wetlands to determine if the wetland is properly identified as a calcareous fen.
B. The commissioner ~~shall~~ must maintain a current list of known calcareous fens in the state and their location.

C. The commissioner ~~shall~~ must provide an updated list of calcareous fens to the board for further distribution.

~~8420.1040 MANAGEMENT PLANS.~~ Subp. 4. **Management plans.** Calcareous fens ~~may~~ must not be ~~drained or filled~~ impacted or otherwise altered or degraded except as provided for in a management plan approved by the commissioner. The commissioner will provide technical assistance to landowners or project sponsors in the development of management plans.

~~8420.1050 RESTORATION.~~ Subp. 5. **Restoration.** The commissioner may approve management plans to restore or upgrade a previously damaged calcareous fen.

~~8420.1060 APPEALS.~~ Subp. 6. **Appeals.**
A. A landowner or project proposer may challenge the commissioner's determination that a wetland is a calcareous fen or the commissioner's calcareous fen management plan by demanding a hearing. The hearing will be carried out in the same manner as water permit hearings under Minnesota Statutes, chapter 103G.
B. ~~The hearing must be demanded within 30 days after mailed notice of the commissioner's decision to the project proposer, otherwise the decision becomes final and may not be challenged by the project proposer.~~ The determination that a wetland is a calcareous fen may be appealed at any time by demanding a hearing. For a decision under a management plan, the hearing must be demanded within 30 days after mailing of the notice of the commissioner's decision to the project proposer, otherwise the decision becomes final and may not be challenged by the project proposer.
C. Appeal of the commissioner's decision after the hearing must be done in the manner provided for appeals from contested case decisions in Minnesota Statutes, chapter 14.

~~8420.1070 ENFORCEMENT PROCEDURES.~~ Subp. 7. **Enforcement procedures.** Enforcement procedures for calcareous fens ~~shall~~ must be conducted consistent with Minnesota Statutes, sections 103G.141 and 103G.2372, except that necessary restoration or replacement activities, if required, will be determined by the commissioner, in consultation with the local soil and water conservation district.

DEFINITIONS AND REFERENCES

8420.~~0110~~XXXX DEFINITIONS.
Subpart 1. **Scope.** The terms used in this chapter have the meanings given them in this part.
Subp. ~~1a~~X. **Account or wetland bank account.** "Account" or "wetland bank account" means a record of wetland banking debits and credits established by an account holder within the state wetland banking system.
Subp. ~~1b~~X. **Account holder.** "Account holder," in the state wetland banking system, is a person, corporation, government agency, or organization that is the owner of credits.
Subp. ~~2~~X. **Act.** "Act," when not used in reference to a specific state or federal act, means the Wetland Conservation of 1991, Laws 1991, chapter 354, as amended.
Subp. ~~3~~X. **Activity.** "Activity" means ~~draining or filling a wetland, wholly or partially, or excavating in permanently and semipermanently flooded areas of type 3, 4, or 5 wetlands.~~ any work or action conducted in or near a wetland that could potentially affect a wetland. An activity may or may not result in an impact as defined at subpart X of this part.
Subp. ~~4~~X. **Agricultural land.** "Agricultural land," means land used for horticultural, row, close grown, pasture, and hayland crops; growing nursery stocks; animal feedlots; farmyards; associated building sites; and public and private drainage systems and field roads located on any of these lands. "Agricultural land" must be used principally for the cultivation or production of plants or farm animals and includes former agricultural land that is presently enrolled in conservation easements.
~~Subp. 5. [Repealed, 22 SR 1877]~~
Subp. ~~5a~~X. **Applicant.** "Applicant" is a person, corporation, government agency, or organization that submits an application ~~applies for an exemption, no-loss, wetland boundary, wetland type, replacement plan, or banking plan determination or equivalent, or someone who makes an application to withdraw wetland banking credits from the wetland bank~~.

Subp. X. **Application.** "Application" means a formal request for a decision by a local government unit, made under this chapter and the act, for an exemption, no-loss, wetland boundary, wetland type, sequencing, replacement plan, or banking plan. The application is made on a form provided by the board.

Subp. X. **Approve or Approval.** "Approve" or "Approval" means the formal authorization by a local government unit of an activity described in an application.

Subp. ~~6~~X. **Aquaculture.** "Aquaculture" means to cultivate plants and animals in water for harvest, including hydroponics and raising fish in fish farms.

Subp. X. **Banking credits.** "Banking credits" means replacement credits, as described in parts 8420.XXXX and 8420.XXXX, that have been deposited in the wetland bank.

Subp. ~~7~~X. **Best management practices.** "Best management practices" means state-approved and published practices ~~associated with draining, filling, or replacing wetlands~~ that are capable of preventing and minimizing degradation of surface water and groundwater.

Subp. ~~8~~X. **Board.** "Board" means the Board of Water and Soil Resources under Minnesota Statutes, section 103B.101.

Subp. ~~9~~X. **City.** "City" means a home rule charter or statutory city.

Subp. ~~10~~X. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources.

~~Subp. 10a. **Contractor.** "Contractor" means an individual, business, or other organization providing a product or service to a landowner or the landowner's agent.~~

Subp. ~~11~~X. **Creation.** "Creation" means construction of wetlands in an area that was not wetlands in the past.

Subp. ~~12~~X. **Day.** "Day" means a calendar day unless specified otherwise. The day of the event shall not be used in counting any time period.

~~Subp. 13. [Repealed, 22 SR 1877]~~

Subp. X. **Decision.** "Decision" means a formal action by the local government unit or delegated staff to approve, approve with conditions, or deny an application.

Subp. ~~13a~~X. **Degraded wetland.** "Degraded wetland" means a wetland that provides minimal wetland function and value due to human activities such as drainage, diversion of watershed, filling, excavating, pollutant runoff, and vegetative or adjacent upland manipulation.

Subp. X. **Determination or determine.** "Determination" or "Determine" refers to a technical finding by the technical evaluation panel or local government unit staff.

Subp. ~~14~~X. **Ditch.** "Ditch" means an open channel to conduct the flow of water, as defined in Minnesota Statutes, section 103E.005, subdivision 8.

Subp. ~~15~~X. **Drain or drainage.** "Drain" or "drainage" means any method for removing or diverting waters from wetlands. The methods shall include, but are not limited to, excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

Subp. ~~16~~X. **Drainage system.** "Drainage system" means a system of ditch or tile, or both, to drain property, including laterals, improvements, and improvements of outlets.

Subp. ~~17~~X. **Excavation.** "Excavation" means the displacement or removal of substrate, sediment, or other materials by any method.

Subp. ~~18~~X. **Fill.** "Fill" means any solid material added to or redeposited in a wetland that would alter its cross-section or hydrological characteristics, obstruct flow patterns, change the wetland boundary, or convert the wetland to a nonwetland. It does not include posts and pilings for linear projects such as bridges, elevated walkways, or powerline structures, or structures traditionally built on pilings such as docks and boathouses. It does include posts and pilings that result in bringing the wetland into a nonaquatic use or significantly altering the wetland's functions and values, such as the construction of office and industrial developments, parking structures, restaurants, stores, hotels, housing projects, and similar structures. It does not include slash or woody vegetation, if the slash or woody vegetation originated from vegetation growing in the wetland and does not impair the flow or circulation of water or the reach of the wetland.

Subp. ~~18a~~X. **50 to 80 percent area.** "50 to 80 percent area" means a county or watershed with at least 50 percent but less than 80 percent of the presettlement wetland acreage intact.

~~Subp. 19. **Floodplain wetland.** "Floodplain wetland" means a wetland located in the floodplain of a watercourse, with no well defined inlets or outlets, including tile systems, ditches, or natural watercourses. This may include the floodplain itself when it exhibits wetland characteristics.~~

~~Subp. 20. **Flow-through wetland.** "Flow-through wetland" means a wetland with both a well defined outlet and one or more well defined inlets, including tile systems, ditches, or natural watercourses.~~

Subp. ~~20a~~X. **Greater than 80 percent area.** "Greater than 80 percent area" means a county or watershed where 80 percent or more of the presettlement wetland acreage is intact and:

A. ten percent or more of the current total land area is wetland; or

B. 50 percent or more of the current total land area is state or federal land.

Subp. ~~20b~~X. **Hayland.** "Hayland" means an area that was mechanically harvested or that was planted with annually seeded crops in a crop rotation seeded to grasses or legumes in six of the last ten years.

Subp. ~~21~~X. **Hydric soils.** "Hydric soils" means soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

Subp. ~~22~~X. **Hydrophytic vegetation.** "Hydrophytic vegetation" means macrophytic plant life growing in water, soil, or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

Subp. ~~23~~X. **Impact.** "Impact" means a loss in the quantity, quality, or biological diversity of a wetland caused by draining~~,~~ or filling of wetlands, wholly or partially, or ~~excavating, as described in part 8420.0105~~ by excavation in the permanently and semi-permanently flooded areas of type 3, 4, or 5 wetlands, and in all wetland types if the excavation results in filling, draining, or conversion to nonwetland.

Subp. ~~24~~X. **Impacted wetland.** "Impacted wetland" means a wetland that has been partially or wholly subjected to an impact.

Subp. X. **Indirect impact.** "Indirect impact" means an impact that is the result of an activity that occurs outside of the wetland boundary.

Subp. ~~25~~X. **Infrastructure.** "Infrastructure" means public water facilities, storm water and sanitary sewer piping, outfalls, inlets, street subbase, roads, and ditches, culverts, bridges, and any other work defined specifically by a local government unit as constituting a capital improvement within the context of an approved development plan.

~~Subp. 26. [Repealed, 22 SR 1877]~~

~~Subp. 27. [Repealed, 22 SR 1877]~~

~~Subp. 28. **Isolated wetland.** "Isolated wetland" means a wetland without well defined inlets or outlets, including tile systems, ditches, or natural watercourses.~~

Subp. ~~29~~X. **Landowner.** "Landowner" means a person or entity having the rights necessary to drain, excavate, or fill a wetland, or to establish and maintain a replacement or banked wetland. Typically, the landowner is a fee title owner or a holder of an easement, license, lease, or rental agreement providing the necessary rights. The right must not be limited by a lien or other encumbrance that could override the obligations assumed with the replacement or banking of a wetland.

Subp. ~~29a~~X. **Less than 50 percent area.** "Less than 50 percent area" means a county or watershed with less than 50 percent of the presettlement wetland acreage intact or any county or watershed not defined as a greater than 80 percent area or 50 to 80 percent area.

Subp. ~~30~~X. **Local government unit.** "Local government unit" means:

A. outside of the seven-county metropolitan area, a city council, county board of commissioners, or soil and water conservation district or their delegate;

B. in the seven-county metropolitan area, a city council, a town board, a watershed management organization under Minnesota Statutes, section 103B.205, subdivision 13, or soil and water conservation district or their delegate; and

C. in those cases where an activity or replacement will occur on state land, the agency with administrative responsibility for that land.

Subp. ~~30a~~X. **Local water plan.** "Local water plan" means either a watershed plan pursuant to Minnesota Statutes, sections 103B.201 to 103B.255, a comprehensive local water management plan pursuant to Minnesota Statutes, sections 103B.301 to 103B.355, or a watershed management plan pursuant to Minnesota Statutes, section 103D.401.

Subp. X. **Major watershed.** "Major watershed" means the 81 major watershed units delineated by the map "State of Minnesota Watershed Boundaries - 1979" as produced by the Minnesota Department of Natural Resources.

Subp. ~~31~~X. **Mining.** "Mining" means the removal of peat and metallic minerals as provided in Minnesota Statutes, sections 93.461 and 93.481.

Subp. ~~31a~~X. **Minor watershed.** "Minor watershed" means one of the 5,600 minor watersheds established by the Minnesota Department of Natural Resources for the "1979 Watershed Mapping Project" pursuant to Laws 1977, chapter 455, section 33, subdivision 7, paragraph (a).
Subp. ~~31b~~X. **Municipal.** "Municipal" means within a municipality as defined in Minnesota Statutes, section 103G.005, subdivision 12.
~~Subp. 31c. New wetland credit or NWC. "New wetland credit" or "NWC" means wetland replacement credit that can be used for any portion of wetland replacement.~~
Subp. ~~31d~~X. **Native vegetation.** "Native vegetation" means plant species that are indigenous to Minnesota, or that expand their range into Minnesota without being intentionally or unintentionally introduced by human activity and are classified as native in the Minnesota Plant Database (Minnesota DNR, 2002).
~~Subp. 32. Nondegraded wetland. "Nondegraded wetland" means a wetland that has not been degraded by human activities.~~
Subp. ~~32a~~X. **Noninvasive vegetation.** "Noninvasive vegetation" means plant species that do not typically invade or rapidly colonize existing, stable plant communities.
Subp. ~~32b~~X. **Nonwetland.** "Nonwetland" means upland areas or previously converted areas that do not meet the criteria for classification as a jurisdictional wetland using the United States Army Corps of Engineers Wetland Delineation Manual (January 1987) and deepwater habitats identified using "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al., 1979 edition).
Subp. ~~32c~~X. **On-site.** "On-site" means within or directly adjacent to a project.
Subp. X. **Ordinance.** "Ordinance" means a body of regulations developed, approved, and implemented by a county, city, or township as authorized by Minnesota Statutes, section XXXX.
Subp. ~~33~~X. **Pasture.** "Pasture" means an area that was grazed by domesticated livestock or that was planted with annually seeded crops in a crop rotation seeded to grasses or legumes in six of the last ten years.
Subp. ~~34~~X. **Peace officer.** "Peace officer" has the meaning given it in Minnesota Statutes, section 626.84.
Subp. ~~34a~~X. **Permanently and semipermanently flooded area of a type 3, 4, or 5 wetland.** "Permanently and semipermanently flooded area of a type 3, 4, or 5 wetland" means the portion of a type 3, 4, or 5 wetland below the level where the water has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial.
Subp. X. **Plant community.** "Plant community" means a wetland plant community classified according to Wetland Plants and Plant Communities of Minnesota & Wisconsin (S. Eggers and D. Reed 1997).
Subp. ~~34b~~X. **Presettlement wetland.** "Presettlement wetland" means a wetland or public waters wetland that existed in Minnesota at the time of statehood in 1858.
Subp. ~~35~~X. **Project.** "Project" means a specific plan, contiguous activity, proposal, or design necessary to accomplish a goal as defined by the local government unit. As used in this chapter, a project may not be split into components or phases for the ~~sole~~ purpose of gaining additional exemptions.
Subp. ~~36~~X. **Project-specific.** "Project-specific" means the applicant for the replacement plan approval ~~will construct~~ provides the replacement as part of the project, rather than obtain the replacement from a wetland bank.
Subp. ~~37~~X. **Public transportation project.** "Public transportation project" means a project conducted by a public agency involving transportation facilities open to the public.
~~Subp. 37a. Public value credit or PVC. "Public value credit" or "PVC" means wetland replacement credit that can only be used for the portion of wetland replacement required above a 1:1 ratio.~~
Subp. ~~38~~X. **Public value of wetlands.** "Public value of wetlands" means the ~~public~~ importance and benefit to the public ~~and use of wetlands as determined based upon an assessment of~~ derived from the wetland functions listed in part 8420.~~0103~~XXXX.
Subp. ~~39~~X. **Public waters wetlands.** "Public waters wetlands" means public waters wetlands, as defined in chapter 6115.
Subp. ~~39a~~X. **Public waters.** "Public waters" means public waters as defined in part 6115.~~0170~~XXXX.
Subp. ~~40~~X. **Replacement wetland.** "Replacement wetland" means a wetland restored or created or an area designated in part 8420.~~0541~~XXXX, or the equivalent, to replace wetland area or public value~~s~~ of wetland functions lost at an impacted wetland.

Subp. ~~40a~~X. **Responsible party.** "Responsible party" means an individual, business, or other organization causing the draining, excavation, or filling of wetlands on the property of another, with or without the landowner's permission or approval.
Subp. ~~41~~X. **Restoration.** "Restoration" means reestablishment of an area that was historically wetlands or remains as a degraded wetland.
~~Subp. 42. **Right-of-way acreage.** "Right-of-way acreage" has the meaning given it in Minnesota Statutes, section 103E.285, subdivision 6.~~
~~Subp. 43. **Riverine wetland.** "Riverine wetland" means a wetland contained within the banks of a channel that may contain moving water or that forms a connecting link between two bodies of standing water.~~
~~Subp. 44. [Repealed, 27 SR 135]~~
Subp. X. **Rule.** "Rule" means a body of regulations developed, approved, and implemented by a watershed management organization as authorized by Minnesota Statutes, section XXXX.
~~Subp. 44a. **Shoreland wetland.** "Shoreland wetland" means a wetland located in the shoreland wetland protection zone.~~
Subp. ~~44b~~X. Shoreland or **Shoreland wetland protection zone.**
A. For local government units that have a shoreland management ordinance approved under Minnesota Statutes, sections 103F.201 to 103F.221, "shoreland" or "shoreland wetland protection zone" means:
(1) 1,000 feet from the ordinary high water level of a water basin that is a public water identified in the shoreland management ordinance or the shoreland area approved by the commissioner as provided in the shoreland management rules adopted under Minnesota Statutes, section 103F.211, whichever is less; or
(2) 300 feet from the ordinary high water level of a watercourse identified in the shoreland management ordinance or the shoreland area approved by the commissioner as provided in the shoreland management rules adopted under Minnesota Statutes, section 103F.211, whichever is less; and
B. For local government units that do not have a shoreland management ordinance approved under Minnesota Statutes, sections 103F.201 to 103F.221, "shoreland" or "shoreland wetland protection zone" means:
(1) 1,000 feet from the ordinary high water level of a water basin that is a public water that is at least ten acres in size within municipalities and at least 25 acres in size in unincorporated areas; or
(2) 300 feet from the ordinary high water level of a watercourse identified by the public waters inventory under Minnesota Statutes, section 103G.201.
Subp. ~~45~~X. **Silviculture.** "Silviculture" means the management of forest trees.
Subp. ~~46~~X. **Soil and water conservation district.** "Soil and water conservation district" means a legal subdivision of state government under Minnesota Statutes, chapter 103C.
~~Subp. 47. [Repealed, 22 SR 1877]~~
Subp. ~~47a~~X. **State wetland banking system, wetland bank, or bank.** "State wetland banking system," "wetland bank," or "bank" means a system of identifying wetlands restored or created for replacement credit, providing for, and facilitating and tracking the exchange of wetland banking credits for projects that require replacement plans or wetland mitigation required by other local, state, or federal authorities.
Subp. ~~47b~~X. **Structure.** "Structure" means any object erected or placed in, under, over, or anchored or attached to, a wetland area.
~~Subp. 48. **Tributary wetland.** "Tributary wetland" means a wetland with a well defined outlet, including tile systems, ditches, or natural watercourses, but without a well defined inlet.~~
Subp. ~~49~~X. **Utility.** "Utility" means a sanitary sewer, storm sewer, potable water distribution, and transmission, distribution, or furnishing, at wholesale or retail, of natural or manufactured gas, petroleum products, electricity, telephone, or radio service or communications.
Subp. ~~50~~X. **Watershed.** "Watershed" means ~~the 81 major watershed units delineated by the map "State of Minnesota Watershed Boundaries - 1979" as produced by the Minnesota Department of Natural Resources, Office of Planning and Research, Water Policy Planning Program, with funding from the Legislative-Citizen Commission on Minnesota Resources~~ a land area that drains to a common waterway, such as a stream, lake, estuary, or wetland.
Subp. ~~51~~X. **Watershed management organization.** "Watershed management organization" means a watershed district wholly within the metropolitan area or a joint powers entity established wholly or partly within the metropolitan area by special law or by agreement that performs some or all of the functions of a watershed district for a watershed and that has the characteristics and the authority specified under

Minnesota Statutes, section 103B.211. Lake improvement or conservation districts are not watershed management organizations.

~~Subp. 51a. **Wetland banking credits.** "Wetland banking credits" means acres or parts of acres of restored or created wetland or adjacent upland buffer described by type and topographic setting, or areas as described in parts 8420.0540 and 8420.0541, that have been approved for deposit in the wetland bank.~~

Subp. ~~52~~X. **Wetlands, a wetland, the wetland, or wetland area.**

A. "Wetlands" means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water.

For purposes of this subpart, wetlands must:

(1) have a predominance of hydric soils;

(2) be inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and

(3) under normal circumstances, support a prevalence of hydrophytic vegetation.

B. "A wetland" or "the wetland" means a distinct hydrologic feature with characteristics of item A, surrounded by nonwetland and including all contiguous wetland types, except those connected solely by riverine wetlands. "Wetland area" means a portion of "a wetland" or "the wetland."

C. Wetlands does not include public waters wetlands and public waters unless reclassified as wetlands by the commissioner under Minnesota Statutes, section 103G.201.

D. The wetland size is the area within its boundary. The boundary must be determined according to the United States Army Corps of Engineers Wetland Delineation Manual (January 1987). The wetland type must be determined according to United States Fish and Wildlife Service Circular No. 39 (1971 edition). The local government unit may seek the advice of the technical evaluation panel as to the wetland size and type.

Subp. ~~53~~X. **Wetlands in a cultivated field.** "Wetlands in a cultivated field" means a wetland where greater than 50 percent of its boundary abuts land that was in agricultural crop production in six of the ten years before January 1, 1991.

Subp. ~~54~~X. **Wetlands located on agricultural land.** "Wetlands located on agricultural land" means a wetland where greater than 50 percent of its boundary abuts agricultural land.

Subp. ~~54a~~X. **Wetland type** or type. "Wetland type" or "type" means a wetland type classified according to Wetlands of the United States, United States Fish and Wildlife Service Circular 39 (1956 and 1971 editions), as summarized in this subpart. "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al., 1979 edition) is a separate, parallel wetland typing system that may be used to characterize components of a wetland.

A. "Type 1 wetlands" are seasonally flooded basins or flats in which soil is covered with water or is waterlogged during variable seasonal periods but usually is well-drained during much of the growing season. Type 1 wetlands are located in depressions and in overflow bottomlands along watercourses, and in which vegetation varies greatly according to season and duration of flooding and includes bottomland hardwoods as well as herbaceous growths.

B. "Type 2 wetlands" are inland fresh meadows in which soil is usually without standing water during most of the growing season but is waterlogged within at least a few inches of the surface. Vegetation includes grasses, sedges, rushes, and various broad-leafed plants. Meadows may fill shallow basins, sloughs, or farmland sags, or may border shallow marshes on the landward side.

C. "Type 3 wetlands" are inland shallow fresh marshes in which soil is usually waterlogged early during a growing season and often covered with as much as six inches or more of water. Vegetation includes grasses, bulrushes, spikerushes, and various other marsh plants such as cattails, arrowheads, pickerelweed, and smartweeds. These marshes may nearly fill shallow lake basins or sloughs, or may border deep marshes on the landward side and are also common as seep areas on irrigated lands.

D. "Type 4 wetlands" are inland deep fresh marshes in which soil is usually covered with six inches to three feet or more of water during the growing season. Vegetation includes cattails, reeds, bulrushes, spikerushes, and wild rice. In open areas, pondweeds, naiads, coontail, water milfoils, waterweeds, duckweeds, water lilies, or spatterdocks may occur. These deep marshes may completely fill shallow lake basins, potholes, limestone sinks, and sloughs, or may border open water in such depressions.

E. "Type 5 wetlands" are inland open fresh water, shallow ponds, and reservoirs in which water is usually less than ten feet deep and is fringed by a border of emergent vegetation similar to open areas of type 4 wetland.

F. "Type 6 wetlands" are shrub swamps in which soil is usually waterlogged during growing season and is often covered with as much as six inches of water. Vegetation includes alders, willows, buttonbush, dogwoods, and swamp privet. This type occurs mostly along sluggish streams and occasionally on floodplains.
G. "Type 7 wetlands" are wooded swamps in which soil is waterlogged at least to within a few inches of the surface during growing season and is often covered with as much as one foot of water. This type occurs mostly along sluggish streams, on floodplains, on flat uplands, and in shallow basins. Trees include tamarack, arborvitae, black spruce, balsam, red maple, and black ash. Northern evergreen swamps usually have a thick ground cover of mosses. Deciduous swamps frequently support beds of duckweeds and smartweeds.
H. "Type 8 wetlands" are bogs in which soil is usually waterlogged and supports a spongy covering of mosses. This type occurs mostly in shallow basins, on flat uplands, and along sluggish streams. Vegetation is woody or herbaceous or both. Typical plants are heath shrubs, sphagnum moss, and sedges. In the north, leatherleaf, Labrador-tea, cranberries, carex, and cottongrass are often present. Scattered, often stunted, black spruce and tamarack may occur.

8420.~~0112~~XXXX INCORPORATION BY REFERENCE.
This chapter incorporates by reference the following documents and any subsequent updates, addenda, or derivations related to them, as approved by the board:
A. Wetlands of the United States (United States Fish and Wildlife Service Circular No. 39, 1956 and 1971 editions).
B. United States Army Corps of Engineers Wetland Delineation Manual (January 1987).
C. Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979 edition).
D. Criteria and Guidelines for Assessing Geologic Sensitivity of Groundwater Resources in Minnesota (Minnesota Department of Natural Resources, 1991).
E. United States Geological Survey Hydrologic Unit Map for Minnesota (1974).
F. National Wetland Inventory maps (United States Fish and Wildlife Service).
G. Growing Energy Crops on Minnesota Wetlands: The Land Use Perspective, Anderson and Craig, 1984.
H. Wetland Restoration Guide, Minnesota Board of Water and Soil Resources (December 1982).
I. Vegetation in Restored and Created Wetlands, Minnesota Board of Water and Soil Resources, September 2000.
J. Wildlife Habitat Improvements in Wetlands: Guidance for Soil and Water Conservation Districts and Local Government Units in Certifying and Approving Wetland Conservation Act Exemption Proposals, Minnesota Interagency Wetlands Group, December 2000.
K. Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers. Minnesota Forest Resources Council, St. Paul, 1999.
L. Minnesota Construction Site Erosion and Sediment Control Planning Handbook. Minnesota Board of Water and Soil Resources and the Association of Metropolitan Soil and Water Conservation Districts, St. Paul, 1988.
M. Agriculture and Water Quality: Best Management Practices for Minnesota, Minnesota Pollution Control Agency, St. Paul, 1991.
N. Storm-Water and Wetlands: Planning and Evaluation Guidelines for Addressing Potential Impacts of Urban Storm-Water and Snow-Melt Runoff on Wetlands, Minnesota Storm-Water Advisory Group, 1997.
O. Minnesota Plant Database, Minnesota Department of Natural Resources, St. Paul, 2002.
P. Wetland Plants and Plant Communities of Minnesota & Wisconsin (S. Eggers and D. Reed 1997).
These documents are available through the State Law Library, except the National Wetland Inventory maps, which are available at Minnesota soil and water conservation district offices. Except for the Minnesota Plant Database in item O, none of the documents are subject to frequent change.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Wetland Conservation Act Permanent Rulemaking
Summary of Significant Revisions

December 17, 2008

The Wetland Conservation Act (WCA) permanent rulemaking process included extensive staff involvement and public input, and resulted in substantial revisions to the rule. The resolution of each issue was based on detailed discussions, consideration of implications, and a strong rationale. This summary is intended to provide a brief overview of significant changes to the rule.

Rule organization and order.
Stakeholders and staff identified reorganization of the rule as the single most important and easiest way to simplify and clarify the rule. In the draft rule, related requirements that were previously located in different areas of the rule are consolidated under common headings. In addition, the draft rule follows a more intuitive order – the order in which an applicant or local government unit (LGU) would go through when starting or reviewing a project. The draft rule starts with Purpose and Scope, followed by LGU Duties and Procedures, and continuing through Appeals and Enforcement.

Scope, No-Loss, and Exemption Framework.
The current WCA rule does not clearly differentiate between types of activities that are identified in the scope of the rule, as a no-loss, or as an exemption. Including activities that do not result in permanent wetland impacts under an exemption and some that do under scope or no-loss is confusing, results in inaccurate data on wetland losses, and complicates policy issues such as how the rule treats road ditches through upland. The draft rule clarifies the distinctions between activities in scope versus an exemption versus a no-loss as follows:

- Scope contains those landscape features that may be wetland but are not regulated by WCA (i.e. road ditches in upland) and activities in certain wetland types that are not regulated because statute does not allow it. In essence, scope contains wetlands and activities that are "non-jurisdictional" to WCA.
- No-Losses are activities in wetlands that do not typically impact wetlands or result in a permanent loss of wetland functions, but could if conducted differently. For example, removal of debris from a wetland typically does not result in a loss, but if that removal results in fill or changes the wetland cross section, a loss could result.
- Exemptions are impacts to wetlands where replacement is not required.

The above solutions provide a consistent framework for dealing with wetlands and activities in wetlands that are not regulated or do not require replacement. The end result does not effectively change how WCA is applied or the implementation of statutory intent. It does, however, simplify and clarify the rule while improving the accuracy of data reported on jurisdictional wetlands lost due to exemptions, which is consistent with the direction from the legislature to obtain improved data on exemptions.

LGU reporting.
Currently, only those LGUs who receive funding through the Natural Resources Block Grant are required to annually report their WCA implementation activities to the Board. While this covers most WCA activities, there are gaps; specifically some cities, townships and watershed districts. The draft rule requires all LGUs to report annually to the Board. Required reporting will provide more accurate and complete data, and is consistent with the direction from the legislature to obtain improved data on exemptions.

Landowner reporting of exemptions.
The 2007 Minnesota Legislature directed the Board to develop rules that (1) address the application and implementation of WCA exemptions, and that (2) provide for estimates and reporting of exempt wetland impacts, specifically the drainage, utilities/public works, and de minimis exemptions. This directive is addressed through several provisions in the draft rule and non-rule initiatives. Landowner reporting of exemptions was an additional option discussed during the rulemaking process, with a significant amount disagreement among stakeholders. At the November 20, 2008 meeting of the Board's Wetland Committee, the Committee added to the draft rule the requirement for landowners to report information on the use of exemptions to the Board. The details of the requirement, including development of the reporting mechanism, its implementation, and potential enforcement will be developed during the implementation of the revised rule.

Replacement credit system.
A major component of the Wetland Mitigation Memorandum of Understanding (MOU) between the U.S. Army Corps of Engineers (Corps) and the Board is the use of a single credit system for allocating replacement credit. WCA currently uses both "New Wetland Credit" (NWC) and "Public Value Credit" (PVC). The draft rule eliminates the two-credit system in favor of a single credit system where all replacement actions are allocated one type of credit.

Conversion of existing credit.
Changing to a single replacement credit system requires addressing existing PVC that has been deposited in the state wetland bank or included in an approved replacement plan prior to the effective date of the revised rule. The existing PVC consists mainly of upland buffer, with a small amount of PVC derived from wetland related activities. WCA currently allows 100% PVC for upland buffer and varying amounts for eligible wetland related activities. The sale price of banked PVC versus NWC provides an indication of the use and value of PVC. An analysis of sale prices indicates that PVC has roughly 95% of the value of NWC. The draft rule requires conversion of existing PVC on the effective date of the rule according to the following:

- Up to 100% replacement credit for existing PVC derived from activities within wetlands.
- Up to 90% replacement credit for existing PVC derived from upland buffers.

Replacement.
A significant amount of stakeholder comments requested simplification of the replacement requirements, many of which are also contained in the MOU. Many of the comments requested a greater focus on requirements that are implementable and will result in improved wetland quality and function. The draft rule simplifies the table of replacement ratios and creates an incentive based system with a preference for replacement through banking.

- In-kind. The draft rule does not use in-kind to determine replacement ratios when replacement is accomplished via banking. In relation to banking, the objectives of the in-kind requirement will be achieved through the up-front prioritization of replacement sites and a greater incentive for wetland restoration over creation. For project-specific replacement, replacement must be in-kind in order to reduce the replacement ratio. However, the draft rule allows hydrology, landscape position, and watershed considerations to play a greater role in determining in-kind, while the current WCA rule only uses plant communities in this determination.
- In-place. The draft rule places a greater emphasis on replacement within the watershed or bank service area. For replacement via banking, the replacement ratio can only be reduced when the replacement is in the same bank service area. For project-specific replacement, the replacement ratio can only be reduced when the replacement is within the same watershed (in addition to in-kind).
- In-advance. For purposes of reducing the replacement ratio, the draft rule defines in-advance as banking. Therefore, the only way to achieve a reduction in the replacement ratio for being in-advance is to provide replacement via banking.

Watershed approach.
The new Federal Mitigation Rule was released in 2008 during the rulemaking process. It includes the requirement for a "watershed approach" to mitigation. The draft rule contains several provisions to provide for a greater focus on replacement sites that are ecologically suitable, sustainable, and will provide the greatest public value based on the needs of the watershed. This will allow for greater consistency with the Federal Rule and should result in improved wetland replacement.

Financial assurance.
One of the rulemaking goals was to improve accountability and outcomes. Improving the quality of replacement wetlands has also been an ongoing objective of WCA implementation. Many of our LGUs and other stakeholders identified financial assurance as an important element of achieving these goals. Currently, WCA requires financial assurance in certain situations (i.e. when created wetlands are proposed for replacement credit). The draft rule requires financial assurance for all project-specific replacement that is not in-advance, while allowing the LGU the ability to waive the requirement if it determines it is not necessary to ensure successful replacement.

Actions eligible for credit.
Various changes were made to the Actions Eligible for Credit provisions. Actions related to upland buffers, wetland creations, and preservation are the most notable proposed changes.

- Upland buffer areas. With the switch to a single credit system, the upland buffer areas action eligible for credit changed significantly. The MOU calls for buffer credit to be typically allocated at 25% (i.e. 1 acre of land results in 0.25 acres of credit), while nearly all of our stakeholders have indicated that the amount of credit needs to be significantly higher than 25%. The draft rule requires buffers around all replacement wetlands with a minimum width of 25 feet and an average width of 50 feet, with exceptions and the ability of the LGU to vary the requirement. A base credit amount is allocated at 25% with the ability to increase the credit amount up to 50% when the buffer provides significant functional benefits. The draft language intends to balance staff and stakeholder input with consistency with the Corps as outlined in the MOU. It also intends to balance the replacement of wetland acres (quantity) with the need for improved function and sustainability (quality and biological diversity) of replacement wetlands.

- Wetland creations. Water quality treatment areas and wetlands established via mineral extraction site reclamation are separate subparts in the current WCA rule. The draft rule consolidates them in the wetland creations action. Additionally, the amount of credit allowed is reduced to 75%. This credit reduction addresses concerns over the quality of created wetlands, creates an incentive for restorations, provides consistency with a watershed approach to replacement, and allows for simplification and flexibility in other parts of the rule, particularly in-kind.

- Preservation. Currently, WCA does not include a provision to allow for credit for preservation as a stand-alone replacement action. The MOU and staff support the use of preservation for replacement credit. In 2008, legislation was passed specifically allowing for the use of preservation as replacement credit, but limited it to wetlands owned by the state or a local unit of government in greater than 80 percent areas. The draft rule allows for up to 12.5% credit for preservation of high valued wetlands under threat of degradation or loss in instances of public ownership as required by statute.

Replacement wetland monitoring.
Providing for greater consistency in the implementation of monitoring requirements by both applicants and LGUs was identified as necessary to improve the quality of replacement wetlands. Current WCA requires monitoring and certification of construction, but contains very little detail. The draft rule builds on the existing requirement and clearly lays out the process, timelines, and responsibilities for replacement wetland construction certification and monitoring. The draft rule also utilizes the technical evaluation panel to a greater extent in making the technical determination of replacement wetland success.

Comprehensive wetland protection and management plans.
Three objectives relating to wetland planning were identified: clarification of the process, a greater focus on selection of replacement types and locations under a watershed approach, and plans that allow for recognition by the Corps. The draft rule provides greater detail on the plan development and approval process, including increased consistency with water planning processes and the involvement of the Corps. The draft rule also requires the inventory and prioritization of replacement sites, an increased focus on watersheds, and a provision for periodic assessment of plan effectiveness.

Enforcement.
The draft rule allows the Soil and Water Conservation District (SWCD) to request assistance from the LGU in inspecting violations and preparing a restoration plan. The draft rule also clearly differentiates between issues that are purely technical vs. those that include an enforcement component. The Technical Evaluation Panel (TEP) is utilized for making technical determinations while requirements were added for the SWCD and TEP to involve the enforcement authority early and throughout the process of developing the restoration plans and dealing with potential violations.

Appeals.
When an appeal of an LGU decision is made to the Board, the draft rule now only requires one copy of the written record be forwarded to the Board. The Board will be responsible for making copies of the record and forwarding to the parties of the appeal. This may result in an increase in Board appeal costs, but will provide consistency and a reduction in LGU workload.

WETLAND CONSERVATION ACT
Permanent Rulemaking Chronology

May 9, 2007	Statutory amendments enacted, including requirement to adopt temporary rules within 90 days.
August 6, 2007	Temporary rules published in the State Register, become effective. Request for comments on planned amendments to rules governing wetland conservation published in the State Register.
September 20, 2007	Comment period on planned amendments to rules governing wetland conservation ends.
October-December 2007	Meetings with representatives of environment, agriculture, business, and local government organizations to discuss WCA rule process and issues.
October 25, 2007	Staff rule team formed and holds first meeting.
January 2008	Local government listening sessions in Cloquet, Brainerd, Thief River Falls, Fergus Falls, Marshall, New Ulm, and Rochester.
January 7, 2008	First meeting of Technical Advisory Committee, consisting of local government staff and consultants. This Committee met 11 times through October 6, 2008.
January 31, 2008	First meeting of WCA Permanent Rule Advisory Committee, consisting of numerous stakeholder organizations and state and federal agencies. This Committee met 11 times through October 23, 2008.
March 25, 2008	Wetland Committee meets to review rule issues and provide direction to staff. The Committee met 6 times during the rule development process with another meeting scheduled for December 16, 2008.
April 12, 2008	Presentation on WCA Rulemaking at Wetlands Summit.
August-September 2008	Numerous meetings with the U.S. Army Corps of Engineers, St-Paul District to discuss WCA rule, District Guidance, and the Wetland Mitigation Memorandum of Understanding.

October-November 2008	Meetings with Wetlands for Minnesota, Builders Association of the Twin Cities, Builders Association of Minnesota, Sierra Club, Minnesota Center for Environmental Advocacy, representatives of agricultural organizations, and a presentation at the Water Resources Conference in St. Paul.
November 20, 2008	Wetland Committee meets and recommends the Board adopt the draft rule and authorize formal rulemaking.
December 17, 2008	Board meets to consider the draft WCA rule amendments and the Wetland Committee's recommendation.

December 2008	* Rule submitted to the Revisor of Statutes and Governor's Office. * Submit request to Office of Administrative Hearings to schedule a rule hearing(s).
January 2009	* Publish notice in State Register of (1) intent to adopt Rule amendments and (2) request for comments. * Legislature and interested persons are notified of the rule amendments.
February-March 2009	* Public Hearings.
March 2009	* Comment period closes, following public hearings. * Wetland Committee meets to consider rule issues.
April 2009	* Administrative Law Judge (ALJ) completes report on the proposed adoption of the rules.
May 2009	* BWSR reviews ALJ report, consider and/or make changes based on comments and/or ALJ report. * Wetland Committee considers rule issues, including adoption of the final Rule.
June 2009	* Submit rules to chief ALJ. * Board adopts final Rule.
July 2009	* Office of Administrative Hearings files approved rules with Secretary of State. * Revisor of Statutes prepares notice of adoption. * BWSR submits notice of adoption of rule amendments to the State Register.
August 2009	* Amended rule published in the State Register.

Resolution # _____

Wetland Conservation Act:
Adopt Draft Rule Amendments and Authorize Formal Rulemaking

WHEREAS, the Board of Water and Soil Resources is required by Laws of Minnesota 2007, Chapter 57, Section 166 to adopt rules amending the Wetland Conservation Act Rules (Minn. Rule Chapter 8420);

WHEREAS, the Board adopted exempt rules on August 6, 2007, which expire two years from this date, unless superseded by permanent rules prior to this date;

WHEREAS, a notice of request for comments on planned amendments to the rules governing wetland conservation (WCA-Minn. Rule Chapter 8420) was published in the State Register on August 5, 2007;

WHEREAS, a BWSR Staff WCA Rule Team was formed that has met 18 times from October 2007 through October 2008;

WHEREAS, significant stakeholder input was achieved through:
(i) series of stakeholder meetings held in October-December 2007;
(ii) a series of local government listening sessions held in January 2008;
(iii) a Technical Advisory Committee and a Permanent Rule Advisory Committee that each met 11 times from January 2008 through October 2008; and
(iv) numerous additional meetings held with individual interest groups;

WHEREAS, the proposed rule includes changes necessary to:
(i) incorporate the rule changes in the exempt rule;
(ii) incorporate statutory changes made in 2007 and 2008;
(iii) implement the BWSR-U.S. Army Corps of Engineers Wetland Mitigation Memorandum of Understanding adopted by the Board on May 23, 2007; and
(iv) incorporate suggestions identified by BWSR staff and stakeholders that will improve WCA effectiveness and efficiency;

WHEREAS, the Board's Wetland Committee met on July 23, September 24, October 21, and November 20 to review the draft rule, provide direction to staff, and develop a recommendation regarding adoption of the rule for the Board consideration; and

WHEREAS, the Wetland Committee on November 20 is recommending the Board adopt the draft rule and authorize staff to proceed with formal rulemaking.

NOW THEREFORE BE IT RESOLVED, the Board of Water and Soil Resources hereby adopts the draft Wetland Conservation Act permanent rule (Minn. Rule Chapter 8420) and authorizes staff to:
(i) complete the Statement of Need and Reasonableness associated with the rule;
(ii) seek approval from the Governor's Office to proceed with adopting the rule;

(iii) submit the rule to the Revisor of Statutes for review and approval of the form of the rule; and
(iv) complete the processes necessary to adopt the rule by August 5, 2009.

_____ _____

Randy Kramer, Chair Date

Minnesota Board of Water & Soil Resources

DATE: December 12, 2008

TO: Board of Water and Soil Resources' Members, Advisors, and Staff

FROM: John Jaschke, Executive Director

SUBJECT: Supplemental Information for December 17, 2008 Board Meeting

Attached is the R*evised* Preliminary Agenda and additional materials and information that pertain to the Board meeting agenda.

NEW BUSINESS

4. **Red River Valley Restoration Initiative (RRVRI) Establishment** – The attached revised resolution has two provisions that were added:

   WHEREAS *the Minnesota Board of Water and Soil Resources will select and approve project areas for the RRVRI submitted for consideration by the RRMWG;*

   WHEREAS *the Minnesota Board of Water and Soil Resources will acquire RIM Reserve easements and establish conservation practices through the Soil and Water Conservation Districts who are members of the local project work teams, unless otherwise determined locally;*
   DECISION ITEM

9. **Grants Program & Policy Committee Recommendations** – The Grants Program & Policy Committee met this morning to discuss and make recommendations on the following items: The following grant program allocations are being recommended as follows:
   A. '09 Drainage Records Modernization Grant, $500K – Forty six applicants have requested $1.35M
   B. '09 Native Buffer Cost-Share Grants, *$753,000*
   C. '09 Ag-land Hydrologic Restoration Grants, *$532K*
   D. '09 Clean Water Legacy Project Grants, *$2.64M ($1.03M BWSR, $1.61M PCA)*
   E. '09 Red River Basin Commission Annual Plan and $100,000 Allocation Approval
   DECISION ITEMS

10. ***Adoption of 2009 Board Meeting Schedule*** – The attached BWSR Meeting Schedule is proposed for 2009. ***DECISION ITEM***

Please contact me if you have any questions.

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BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD N.
ST. PAUL, MINNESOTA 55155
WEDNESDAY, DECEMBER 17, 2008

PRELIMINARY AGENDA

******REVISED 12/12/08******

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF OCTOBER 22, 2008

OPEN MIKE (10-minute agenda time, two-minute limit/person)
Note: for those wishing to provide up to three minutes verbal testimony on the WCA Rule (New Business Item #8) a sign-up sheet will be provided. Written testimony will also be accepted and entered as part of the rule development record.

INTRODUCTION OF NEW BOARD MEMBER
- Rebecca Flood, MPCA

RECOGNITION OF BRIAN KLETSCHER

INTRODUCTION OF NEW EMPLOYEES
- Ryan Hughes

REPORTS
- Chair – Randy Kramer
- Executive Director – John Jaschke
- Dispute Resolution Committee – Randy Kramer
- Wetlands Committee – LuAnn Tolliver
- Grants Program & Policy Committee – Louise Smallidge
- Public Relations, Outreach & Strategic Planning Committee – Brian Napstad
- Administrative Advisory Committee – Randy Kramer

COMMITTEE RECOMMENDATIONS

Southern Water Planning Committee

1. Lyon County Local Water Management Plan Update – Brian Kletscher – ***DECISION ITEM***

2. Watonwan County Local Water Management Plan Update – Brian Kletscher – ***DECISION ITEM***

3. Rice County Priority Concerns Scoping Document – Brian Kletscher – ***DECISION ITEM***

4. Rice County Request for Extension of the Rice County Comprehensive Water Management Plan – Brian Kletscher – ***DECISION ITEM***

NEW BUSINESS

1. Federal Highway Administration (FHWA) Exemplary Ecosystem Initiative Award - Cheryl Martin, Environmental Engineer, FHWA – ***INFORMATION ITEM***

2. Order Public Hearing for Boundary Change, Withdrawal of Territory and Enlargement of the Cedar River Watershed District (CRWD), the Shell Rock River Watershed District (SRRWD), and the Turtle Creek Watershed District (TCWD) –Travis Germundson – ***DECISION ITEM***

3. RIM Reserve Vegetation Management and Enhancement of Conservation Easement Lands Policy – Kevin Lines – ***DECISION ITEM***

4. Red River Valley Restoration Initiative (RRVRI) Establishment – Kevin Lines – ***DECISION ITEM***

5. Northeast Wetland Mitigation Inventory - Dale Krystosek, BWSR Senior Wetland Specialist and Keith Hanson, Barr Engineering – ***INFORMATION ITEM***

6. Local Road Wetland Replacement Program Project – Dan Girolamo and Dave Weirens – ***DECISION ITEM***

7. Wetland Banking Fee Policy: Update Calculated Wetland Credit Values – Dave Weirens – ***DECISION ITEM***

8. Wetland Conservation Act: Adopt Draft Rule and Authorize Formal Rulemaking – Dave Weirens and Les Lemm – (testimony) ***DECISION ITEM***

9. Grants Program & Policy Committee Recommendations – Louise Smallidge and Wayne Zellmer - The following grant program allocations are being recommended as follows:
   A. '09 Drainage Records Modernization Grant, $500K – Forty six applicants have requested $1.35M

   B. '09 Native Buffer Cost-Share Grants, $753,000

   C. '09 Ag-land Hydrologic Restoration Grants, $532K

   D. '09 Clean Water Legacy Project Grants, $2.64M ($1.03M BWSR, $1.61M PCA)

   E. '09 Red River Basin Commission Annual Plan and $100,000 Allocation Approval

DECISION ITEMS

10. Adoption of 2009 Board Meeting Schedule – John Jaschke – ***DECISION ITEM***

AGENCY REPORTS

- Minnesota Department of Agriculture – Joe Martin
- Minnesota Department of Health – John Linc Stine
- Minnesota Department of Natural Resources – Larry Kramka
- Minnesota Extension Service – Faye Sleeper
- Minnesota Pollution Control Agency – Rebecca Flood

ADVISORY COMMENTS

- Association of Minnesota Counties – Annalee Garletz
- Minnesota Association of Conservation District Employees – Rick Reimer
- Minnesota Association of Soil and Water Conservation Districts – LeAnn Buck
- Minnesota Association of Townships – Sandy Hooker
- Minnesota Association of Watershed Districts – Ray Bohn
- Natural Resources Conservation Service – Tim Koehler

UPCOMING MEETINGS

- Next BWSR Board Meeting, January 28, 2009

2:00 PM ADJOURN

RED RIVER BASIN COMMISSION
ACTIVITY REPORT

www.redriverbasincommission.org

6 November 2008

The Red River Basin Commission is a group of people from the Red River basin working together to achieve common goals for water protection and management. It is organized as a 501(c)(3) tax-exempt corporation in the United States and a registered charity in Canada.

RRBC Vision: A Red River Basin where residents, organizations and governments work together to achieve basin-wide commitment to comprehensive integrated watershed stewardship and management.

RRBC Mission: To develop a Red River Basin integrated natural resources framework plan (NRFP), to achieve commitment to implement the framework plan, and to work toward a unified voice for the Red River Basin.

CURRENT ACTIVITIES:

Red River Basin Commission activities are focused around four centers:

I. Leadership
II. Partnership
III. Communications
IV. Technical Resource

The numbers in parenthesis following each section relate to the NRFP goals and objectives.

I. LEADERSHIP CENTER

The activities in this center focus on RRBC activities related to leadership in promoting a basin wide vision for the future through the Natural Resource Framework Plan (NRFP).

A. Plan Implementation Committee: This committee meets four times a year to guide the implementation of the Natural Resources Framework Plan (NRFP). The next meeting is 5 November 2008 and will discuss all WG activities, the IISD project, & data entry on the NRFP Objectives/Actions.

- **Natural Resources Framework Plan (NRFP):** RRBC developed, promotes, and regularly updates the NRFP and is seeking support from others around the basin to do their part to realize the 13 NRFP basin goals and related objectives by their actions. We have received 47 signed "Resolutions of Support" from local governments around the basin who are interested in doing their part to realize the NRFP goals. (1.1.1, 1.1.2)

- Working Groups (WG): RRBC has established working groups assist in implementing the NRFP goals, assisting with annual "Updates" on progress, and providing input to the annual conferences as needed. The following WG have been established:
  1. **Watershed WG: Goal # 1:** Will work on the 1st Update for the 2009 conference.
  2. **Integration WG: Goal # 2:** Will work on the 1st Update for the 2009 conference.
  3. **Data and Technical: Goal # 3:** Will work on the 1st Update for the 2009 conference.
  4. **Education and Information: Goal # 4:** Will work on the 1st Update for the 2009 conference.
  5. **FDR: Forecasting: Goal # 5:** The precipitation group is working to identify better and timely communication of precipitation data. Will work on the 1st Update on this goal alone for the 2009 conference.
  6. **FDR: Mitigation: Goal # 6:** Will work on the 3rd Update for the 2009 conference and work with PIC on objectives and action agenda items in the NRFP.
  7. **FDR: Response and Recovery: Goal # 7:** Will work on the 1st Update on this goal alone for the 2009 conference.

8. **Drainage: Goal # 8: Water Quality: Goal # 9:** Will work on the 1st Update for the 2009 conference.
9. **Water Quality:** Goal # 9: Will work on the 3rd Update for the 2009 conference and assist with the annual summit conference agenda.
10. **Water Supply WG: Goal # 10:** Will work on the 2nd Update for the 2009 conference and assist with the annual summit conference agenda. The contract for the Drought Process in complete and the first draft is ready for review. The Drought Conservation/Soft Path project is underway.
11. **Conservation: Goal # 11:** Will work on finalizing the 2008 Update and the 2nd Update for the 2009 conference and assist with the annual summit conference agenda. This WG will also meet to solidify its basin network.
12. **Fish and Wildlife: Goal # 12:** Will work on the 1st Update for the 2009 conference and provide input for the annual summit conference. They have met and began their efforts.
13. **Outdoor Recreation: Goal # 13:** Will work on the 1st Update for the 2009 conference and provide input for the annual summit conference. They have met and began their efforts.

- Task Forces (TF): RRBC establishes task forces as needed to focus on specific strategies or needs for targeted outcomes.
    1. **Agriculture Commodity TF:** RRBC facilitated a meeting of representatives from Agricultural Commodity groups from around the basin to strategize on agricultural issues and the NRFP. Jurisdictional follow up meetings will be held over the winter followed by a basin meeting to explore opportunities for NRFP implementation.

B. Legislative Committee: This committee meets as needed to carry out communication and education for provincial, state, and federal elected officials and their staff to update them on Red River Basin activities, projects, and needs.

- Legislative Meetings: These bring together basin Legislators within each jurisdiction to learn about and discuss water and land resource issues in their portion of the basin. A 2004 meeting for MN State Senators and Representatives was held for dialogue, presentations on current activities and needs hosted jointly by RRBC, the Red River Watershed Management Board, and the MN Flood Damage Reduction Work Group. The RRWMB has continued these meetings since. Similar meetings in MB, ND, and SD will be held in the future, as needed. A recent meeting with MN legislators was held January 2008 for the upcoming session, again hosted by the RRWMB. RRBC participated. (4.2.12) Legislative briefing meetings for ND and MN upcoming 2009 sessions will be explored.

C. Facilitation/Mediation Strategy: RRBC uses this strategy to assist in promoting dialogue and consensus-building from a broader perspective (regional or basin) in a manner appropriate to the issue.

- Jurisdictional Committee: RRBC assists a jurisdictional (MB, MN, ND, & SD) committee to create dialogue at the highest levels on identified needs. (1.3.1)

- Basin Drought Process Project: A review of the scope of work by a jurisdictional committee has clarified y the project and HDR Engineering has been engaged to carry it out, using funds already secured. A draft is ready for review by the Water Supply WG. (10.1.4)

- Basin Conservation/Soft Path Project: A review of the scope of work by a jurisdictional committee will clarify the project and HDR Engineering will be engaged to carry it out, using funds already secured. The initial scoping is complete and work on the document has begun. (10.1.4)

II. COMMUNICATION CENTER

The activities in this center focus on RRBC activities related to communication and education. RRBC presents information on current projects and Red River Basin land and water issues to groups, leaders and conferences. The RRBC website is www.redriverbasincommission.org.

A. Annual Conference Committee: RRBC holds an annual basin-wide land and water international summit conference begun by TIC in 1983. The 26th Conference will be January 20-22, 2009, at the Ft. Garry Hotel in Winnipeg, Manitoba: Theme: "Shaping the Basin's Future Together" Plans are moving along, speakers & sponsors are being finalized. The conference brochure will be out the first part of November. (4.2.9)

B. Communication Committee: This committee meets in conjunction with the annual conference committee and provides guidance to and ideas for RRBC communication strategies.

- **Newsletter:** RRBC produces a newsletter, "Around the Basin," as needed to keep over 3,800 leaders and stakeholders in the basin informed of water issues and projects around the basin and to use as an outreach tool. This is sent out electronically and is also available in hard copy. The 2008 edition is now available. (4.2.13)

- **Water Minutes**: A series of radio spots called "Water Minutes" are produced by RRBC to help educate the public on water issues in the Basin. The Water Minutes air daily on KFGO radio. They began in 2006. Strategies for the northern part of the basin are being added to the 2009 budget. (4.2.14)

- **Ripple Effect:** RRBC regularly produces short articles for local newspapers under the heading "*The Ripple Effect.*" Columns focus on topics related to the NRFP goals. Ripple Effect is now produced twice a month. **(4.2.15)**

III. PARTNERSHIP CENTER:

Activities in this center relate to partnerships between RRBC and others to create opportunities for dialogue, planning, and education. Partnership activities usually involve working across boundaries, such as country to country, state to state, county to RM, RM to RM, county to county, organization to organization, etc. RRBC continues to facilitate these cross-boundary efforts on a regular basis.

- **RRIW:** The Roseau River International Watershed Board (RRIW) consists of local leaders from MB and MN who have appointed members, elected officers and regularly meet to work together on land and water issues affecting the Roseau River. RRBC (and its predecessors) helped form this group and continues to assist by facilitating their meetings. The last meeting was held in October to develop a strategy for future meetings and activities that can be worked on across the border will comprise the agenda. The next meeting will be in early 2009. (1.2.19)

- **PRBAB:** The Pembina River Basin Advisory Board (PRBAB) consists of local leaders from MB and ND who have appointed members, elected officers and meet 3-4 times a year to work together on land and water issues affecting the Pembina River Basin. RRBC (and its predecessors) helped form this group and continues to assist them by facilitating their meetings. The PRBAB met on the border for a meeting and tour of the Pembina River in late July. The next meeting will be at the RRB Annual Summit Conference in January 2009. (1.2.3)

- **SVI**: The South Valley Initiative (SVI) consists of local leaders in MN, ND and SD who meet 3-4 times a year to work together on land and water issues affecting the southern end of the basin. RRBC helped form this group and continues to assist them by facilitating their meetings. The SVI was held in July with a presentation on the Fargo South Side Project and group discussion of retention potential using a large scale watershed map. The next meeting was to be in

October/November, but heavy rains and delayed harvest have prompted a move to the next meeting in early 2009. (1.2.4)

- **MB Chapters**: RRBC (and its predecessors) established a north of Winnipeg chapter, with officers and nine regularly scheduled meetings each year. Education and dialogue are the main focus of these chapter meetings. The North Chapter meets monthly. They met in September with a presentation on Devils Lake. They have begun to plan and implement activities to do Phase II of the Dredging Study. A South Chapter formation is being discussed. (4.2.6)

- **MN Joint Powers Board**: RRBC coordinates and facilitates a quarterly meeting for education and discussion between 15 counties in MN on issues related to natural resources. The JPB will meet in November and select/elect 2 MN County delegates to the RRBC Board. (4.2.5)

IV. TECHNICAL RESOURCE CENTER

The activities in this center focus on developing, producing, and sharing projects and information that promote basin approaches that address NRFP goals where gaps have been identified. RRBC supports, facilitates, or participates in the following activities:

- **Assiniboine River Project**: Funding has been received. East MB Development Corp will assist in the management and Duncan Steward (Reeve of Brenda) is doing the local outreach. Outreach has been ongoing through summer and early fall. A one day workshop on October 30, 2008 in Portage La Prairie, MB result in a final report for RRBC Board consideration at their November board meeting and also will be submitted to the funder (MBWS).. (1.1.1)

- **University of Manitoba Governance for Watershed Based Source Water Protection in Canada: A National Evaluation**: This national project, previously supported by RRBC in resolution, has now been funded by the Canadian Water Network ($800,000 over four years). RRBC will be providing in-kind support working with U of MB to provide input into the design of the national assessment and review reports to undertake a comprehensive national evaluation of governance for source water protection in Canada that provides quality direction and innovative strategies. Official start date is April 1. No committee activity has required RRBC input to date. (2.1)

- **IISD: Red River Basin Land Use Study**: RRBC is supporting the concept, working with the conceptualization, and will assist in seeking funding. The prime objective of the proposed research is to explore various land use scenarios which will improve the resilience of the ecological and socio-economic systems within the Lake Winnipeg watershed. Funding options in Canada and the United States are being explored. The project was presented to the RRBC PIC on 18 September 2008 to receive comments and feedback regarding approach and content. PIC will discuss it further on 5 November 2008. (1.1.1)

- **MB Southeast Regional Groundwater Management Plan**: RRBC is assisting on the planning committee. There has been a tour and regular meetings over the summer and early fall. (9.1.1)

- **Leadership Summit on Lake Winnipeg (LSLW)**: RRBC assisted with the summit planning, address information gathering, and fiscal management of the Winnipeg Foundation grant. The summit was held on 28 May 2008. The final report to the Foundation is being prepared for submittal. (1.1.1)

- **Mainstem Modeling of Scenarios Run #2**: This draws upon the expertise and experience of basin modelers/hydrologists to establish tributary and ungaged % flow reduction goals for the mainstem locations in the model. The initial targeted % flow reduction that was modeled is 20%. This effort was successful through Grand Forks on the mainstem when flow errors at the international boundary became evident and re-calibration of the model became necessary at which time the 20% flow reduction modeling will be completed. This project will commence once the re-calibration of Mike II at the border is completed. (6.2.1)

- **Mainstem Modeling Calibration IV:** UMA Engineering has been hired to complete a recalibration of Mike II from the International Boundary upstream to south of Grand Forks. This effort will incorporate the Pembina River modeling data that has now been completed into the border flows for Mike II mainstem. This effort is waiting for the new LiDAR information for the north end of the basin before proceeding. The data is due out shortly. (6.2.1)

- **Dredging Study Phase II:** This project is being initiated by the RRBC North Chapter and is gathering support for the effort from local government, First Nations, and other groups. The study will look at economic, environmental, and social impacts from dredging. (4.3.1)

PAST ACTIVITIES:

I. LEADERSHIP CENTER

A. Plan Implementation Committee:

- **NRFP Outreach Document:** A basin NRPF Outreach Document provides guidance to RRBC for NRFP outreach. There are 7 sections: overview; a foundation for stewardship; desired outcome; relationship management; knowledge management; outreach mechanisms and tools; and monitoring, evaluation, and improvement.

- **Nutrient and NRFP Workshops:** RRBC held a series of pilot workshops throughout the basin in 2005 to educate citizens and local leaders on water quality nutrient load affecting Lake Winnipeg and to gather feedback the NRFP. RRBC then held a large workshop in April 2006, bringing together citizens and local leaders from around the basin to inform them about nutrient problems in the basin, the impact of nutrients on Lake Winnipeg, and the NRFP. RRBC also gathered feedback related to nutrients and the NRFP from participants' jurisdictional viewpoints based on their operational mandates. This workshop was very successful and RRBC will hold similar workshops in the future. (9.4.1, 9.5.1)

B. Legislative Committee:

- **Legislators' Forum:** Legislators from MB, MN, ND, and SD meet annually, rotating between jurisdictions, to discuss issues of common interest. This group has been meeting since after the 1997 flood, with support from the ND Consensus Council. RRBC has assisted in some of the meetings with the water related portions of the discussion. (4.2.11)

C. Facilitation/Mediation Strategy:

- **Out of Basin Supply Discussions:** RRBC facilitated discussions between the jurisdictions regarding out of basin water supply options. This group met and established a technical committee that explored various treatment options to establish common ground in the discussions between the jurisdictions. This effort resulted in the MB and MN concerns being expressed and addressed, in the RRV Water Supply Project Supplemental Draft EIS. A comment letter from RRBC has been developed and was submitted to the BOR. (10.1.5)

- **Water Use and Allocation:** RRBC convened key water law experts from each jurisdiction appointed by the Jurisdictional Committee to assist in developing a 2006 report (available on RRBC's web site) intended to clarify jurisdictional water law differences between Manitoba, Minnesota, North Dakota, and South Dakota. Particular attention was given to the use and allocation differences between the jurisdictions during low flow and drought conditions. The report will guide future decisions regarding policy strategies for the committee. RRBC received funding from IJC for this project. (10.1.3, 10.4.1)

- **Comprehensive Flood Mitigation Plan-Framework (CFMP-F):** The CFMP-F is an IJC document developed through a collaborative effort of IJC, IRRB, and RRBC that follows up on one of the 1997 flood recommendations. It identifies three areas of activity that the Province of Manitoba and States of Minnesota and North Dakota could work together on related to basin flood work: 1) forecasting, 2) mitigation, and 3) response. RRBC drafted a revised CFMP-F, "Flood Mitigation Strategies," that was forwarded to the IRRB Hydrology Committee co-chairs for further refinement. (7.2.1)

- **CFMP:** This is the actual effort that might emerge from the CFMP-F. The Province of Manitoba and the States of Minnesota and North Dakota are currently exploring a joint effort in the Mitigation portion of the framework document. The project would use the recently developed Mike 11 Mainstem Model to develop goals for each of the tributaries that would collectively produce a targeted percentage reduction at various points on the mainstem and to relate the last point on the mainstem (Winnipeg floodway entrance) to the 100, 500, and 700 year flood flows. The RRBC board has authorized staff time to assist with any CFMP strategy that emerges. (7.7.1)

- **Basin Drought Scoping Document:** This document was prepared by HDR Engineering with jurisdictional input and guidance and was approved by the Board in January 2008. (10.1.4)

II. COMMUNICATION CENTER

A. Communication Committee:

- **Red River of Expression:** This 2003-06 project encouraged youth in grades K-12 to become more aware of and involved in basin land and water issues. Prizes were offered for poetry, artwork and photography, with winners having an opportunity for their entry to be displayed on billboards around the basin. The RRBC is working with the River Watch program director to partner and implement this project in 2008-2009. (4.2.3)

- **Science Fair Contest:** RRBC provided financial awards to students in 2004-05 for science fair projects related to land and water. These science fairs are organized through local high schools. (4.2.3)

- **Social Based Marketing:** RRBC worked with MPCA in 2004-2007 to provide the opportunity to learn about new methods to reach people regarding land and water issues. Public outreach through radio public service announcements (Water Minutes, etc.) and community focus groups and workshops continues to be effective communication tools. (4.2.4)

III.PARTNERSHIP CENTER

- **Barnes County Water Management Team:** RRBC helped Barnes County, ND, gather entities in the county together in 2002-04 to initiate a process of regular sharing and updating of water related activities within the county. The effort was discontinued as new local leadership changed. (4.2.10)

- **Canadian Heritage Rivers Conference:** This conference was held June 10-14, 2007, in Winnipeg. RRBC supported the conference with funds and staff on the planning level. RRBC had three presentations: Trans-Boundary Panel, the NRFP and Mainstem Modeling. (4.2).

- **Lake Winnipeg Implementation Strategy (LWIS):** RRBC provided input and fiscal assistance for a Canada Provincial and Federal team to develop a report "Restoring the Health of Lake Winnipeg" Canada's Sixth Great Lake, recommending a Lake Winnipeg Strategy for the future. (4.2.16)

- **Lake Winnipeg Implementation Committee Forum (LWIC):** RRBC provided fiscal management and assisted in planning and implementing a Lake Winnipeg forum held February 15, 2007, to

bring together Provincial, Federal, local and other stakeholders to react to the LWIS Report and Recommendations and chart a future course to address Lake Winnipeg. (4.2.16)

- **We Are Upstream Lake Winnipeg Conference**: RRBC partnered with Partners FOR the Saskatchewan River Basin (PFSRB) to co-sponsor a conference November 5-7, 2007, to bring major Lake Winnipeg tributary stakeholders together.

IV. TECHNICAL RESOURCE CENTER

- **Watershed Information Network (WIN)**: RRBC prepared a report on water quality needs in the basin related to networking and gaps. This report is available on the RRBC web-site. (9.1.1)

- **CREP**: The Conservation Reserve Enhancement Program (CREP) is a program funded by the US Department of Agriculture and leverages federal and state funds to pay farmers to establish riparian areas benefiting water quality, flooding and habitat. RRBC wrote proposals with public input for both MN and ND in 2004. MN is moving forward to establish 52,500 acres in the Red River Basin as part of CREP under the Board of Water and Soil Resources, ND did not move the idea forward. The MN CREP was partially successful but limited by farmer interest because of the payment schedule. (11.1.2)

- **RRBDIN**: RRBC was a cooperating partner with NDSU and IWI to bring the Red River Basin Decision Information Network, a web-based site for accessing data for decision-making, into the basin and working to keep it useful and relevant. (3.1.2)

- **Dredging Study Phase I**: This project was completed by RRBC predecessor organization in 2001 and provided insight into the need for a more thorough study of Dredging on the Red and the mouth of Lake Winnipeg.

- **Buffer Strip Project**: RRBC worked MPCA in 2004-2007 as well as local MN Soil and Water Districts and local landowners in three targeted sub-watersheds to increase participation in currently available buffer strip and riparian programs. The project was extended to coincide with MN CREP. The final report is available on the RRBC web-site. (9.3.3)

- **Fargo/Moorhead Upstream Feasibility Study**: The USCOE completed a feasibility study of potential flood damage reduction and natural resource enhancement projects in the Fargo/Moorhead upstream area of the Red River Basin Watershed. RRBC participated on several committees and assisted with the public meetings, providing in-kind dollar contributions for the local project sponsors. The USCOE is now exploring a Phase II effort. (2.1.1, 6.1.7)

- **Ground Water Modeling**: RRBC was a catalyst by facilitating meetings between the MN Geological Survey and the US Bureau of Reclamation (BOR) to model ground water resources to assist in the BOR Red River Valley Water Supply study. (3.3.4)

- **RRWP**: RRBC assisted the Rural Municipalities of Franklin, Montcalm, Piney, and Stuartburn, Roseau River First Nation in the development of a plan in 2004-2007 for the MB portion of the Roseau River that is compatible with the plan developed for the river's MN portion. The Roseau River Watershed Plan is complete and available on the RRBC web-site. (1.2.2)

- **Roseau River Hydrology**: RRBC (and its predecessors) worked with a consultant (Water Management Associates) in 2001-2002 to model the MB portion of the Roseau River and produce a report that is available on the RRBC web-site. (1.2.1)

- **F/M TMDL**: The Total Maximum Daily Load project was an analysis of the Fargo-Moorhead reach of the Red River to model and report on the TMDL related to nutrients and fecal coliforms. NDSU, MPCA, NDDH and RRBC are jointly working on this project. The results are available on the RRBC web-site. (9.3.2)

- **International Institute for Sustainable Development (IISD) Prairie Water Policy Project:** RRBC prepared and presented reports on ND, MN, and trans-boundary efforts at IISD's Prairie Water Policy Symposium. The symposium examined unique and common challenges to development, implementation, and adaptive evolution of water strategies; innovative and successful approaches to water strategies, and will assess how well existing strategies are able to respond to threats facing prairie watersheds. The reports are available on the RRBC web site. (1.2.20)

- **Lake Winnipeg Research Consortium:** RRBC participates in and supports the Consortium and has assisted in obtaining funding for the research vessel *Namao*. (3.2.2)

- **Lower Pembina Modeling:** RRBC has received funding from IJC-US and has subcontracted with Water Management Consultants, Inc., for a modeling effort on the Lower Pembina River, modeling river flows and looking at the impacts of bridges, dikes, etc., to better understand the choke point at Pembina and Emerson. This modeling effort was terminated before completion and a new modeling effort (IJC- CN) report began to incorporate the new culvert inventory and LiDAR data. (3.3.3, 6.1.8)

- **Mainstem Model - Mike 11 - Phase I:** RRBC worked with modelers from MB, MN and ND water agencies, USACE, private engineering firms and a consultant, and has developed a Phase I mainstem model for the Red River. This project developed Red River mainstem models: Mike 11 from Lake Traverse to the International Boundary and then to Lake Winnipeg, and HEC/RAS from Lake Traverse to the International Boundary. The model was calibrated using the 1997 flood and verified using the 1989, 1996, and 2001 floods. The Phase I report is available on the RRBC web-site. (3.3.1, 3.3.2)

- **Mainstem Model Workshop #1:** A 2004 stakeholders' workshop shared the report on Mike 11 Phase 1 and to discuss future needs. From the workshop, it was determined to provide additional information to the Mike 11 model and recalibrate the model before doing actual modeling (3.3.1)

- **Mainstem Modeling - Mike 11 - Phase II:** This project added additional information on bridges, the international boundary, MB stream bed configuration, the Maple/Sheyenne River overflow areas, and tributaries to improve and recalibrate the Mike 11 model. The model has been recalibrated and is now seamless from Lake Traverse to Lake Winnipeg. (3.3.1)

- **Mainstem Modeling Calibration III:** UMA Engineering has completed a re-calibration of Mike II from the International Boundary to the Winnipeg Floodway Inlet. The next step will be to incorporate the Pembina River modeling data that is now underway into the border flows for Mike II mainstem. (6.2.1)

- **Modeling Scenario Identification Report:** This IJC-funded report identifies numerous tributary and mainstem scenarios that could be modeled (using the Mike 11 model) to determine tributary inflows to the Red River, 10% and 20% continuous flow reductions and 25% and 50% peak flow reductions to develop Red River flood damage reduction (FDR) strategies. This report was used to develop a mainstem modeling project. The final report has been approved by IJC. (6.2.1)

- **Mainstem Modeling of Scenarios Run #1:** This IJC-funded project accomplished modeling runs for the 1989, 1996, and 1997 floods, producing hydrographs for each tributary at seven mainstem locations: Wahpeton, Fargo, Grand Forks, and Drayton, ND; and Emerson, Morris, and the entrance of the Winnipeg floodway in MB, showing the mainstem points with and without the tributary flows upstream of the mainstem point. Modeling runs showing a 20% and a 40% across the hydrograph spring flow reductions for each tributary for each flood was accomplished. This portion of the modeling is now at IJC for review. The remainder of the project calls for peak flow reductions of 25% and 50% and then modeling runs and a ½ foot reduction at Grand Forks, ND, and then a modeling run. The final report and recommendation has been approved by IJC. (6.2.1)

- **Nutrient Ion Inventory Data Base:** RRBC gathered water quality data for the Red River Basin for nitrogen and phosphorous as they relate to stream flow data. The information was compiled in a database for use and analysis in a Category I (most complete data available) and a Category II (less complete data) database. This project was IJC-US funded and developed from the IRRB Aquatic Ecosystem Health (AEH) Committee. This information was provided to the IJC and the IWI where it was used to analyze trends in the basin. (9.1.2, 9.5.2)

- **Pembina Structure Survey:** RRBC received funding from IJC-US for this project and subcontracted with Houston Engineering for a field survey effort that identified culvert and dike parameters for a 30+ mile stretch of road/dykes along the north side of the Pembina River, as well as some information for the township road and County Road 55 that parallel the road/dyke on the south side in Pembina County. The final report has been submitted to the IJC and is now available to the jurisdictions. (6.1.8)

- **Pembina LiDAR:** A LiDAR mapping effort the North Dakota side of the Pembina River, with Manitoba and Minnesota overlap, began Oct. 25, 2006. Agriculture Canada (PFRA) is funding the project; RRBC is fiscal agent and manager. LiDAR Services International, Inc., is the contractor and ND SWC provided the ground truthing GPS sites and the quality control cover types. The data has been processed and the project is now complete.

* * * * *

ORGANIZATIONAL BACKGROUND: The RRBC was formed in July 2002 when the following organizations merged:

- **The International Coalition for Land and Water Stewardship (TIC):** As a public response to the spring flood of 1979, this organization was formed to involve grass-roots citizens and local leaders in the process of finding answers to the flooding problems. TIC became a place for dialogue, information exchange, education and a network for people to get to know each other and begin to build trust.

- **Red River Basin Board (RRBB):** This organization was formed in 1996 to assist the province and states on issues related to the licensing and permitting process. This organization was formed to link local and provincial and state in a stronger manner.

- **Red River Water Resources Council (RRWRC):** This organization was formed at the conclusion of the US federal basin studies (Red, Souris, Rainey Study) that began in the 1960s. The studies formally ended in the 1970s, and the RRWRC continued the dialogue and exchange of information between the states and federal agencies. Manitoba was invited to the table during the study and as part of the RRWRC. The RRWRC has re-formed to allow for more specific and direct discussion between jurisdictional agency heads.

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BOARD MEMBERSHIP: The RRBC is made up of 41 members (each chooses their own alternate).

New Board members either selected by their respective groups or elected at the Annual Meeting began their two year terms on January 25, 2007 at the first Board meeting of 2007.

A. **Manitoba Board Membership:**
   i. 3 appointed by Premier (Dwight Williamson, Muriel Smith, Steven Topping)
   ii. 4 elected by Rural Municipalities (N—Kurtiss Krasnesky, Marvin Magnusson; S—John Falk, Herm Martens—of Winnipeg)
   iii. 1 appointed by City of Winnipeg (Mike Shkolny)
   iv. 1 appointed by City of Selkirk (R. S. "Bud" Oliver)
   v. 1 appointed by environmental community (Karen Scott)

vi. 1 appointed by Pembina Valley Water Cooperative (Sam Schellenberg)
vii. 1 elected at-large by annual conference attendees (Bill Paulishyn)

B. **Minnesota and North Dakota Board Membership**: (each state representation is the same)
   i. 3 appointed by Governor (MN—John Jaschke, Mark Holsten, Brad Moore ND—Dale Frink, Dave Glatt, Terry Steinwand)
   ii. 2 elected by Counties (MN—Jerry Dahl, Jon Evert; ND—Joe Belford, Hetty Walker)
   iii. 2 elected by Watershed Districts (MN—John Finney, Dan Wilkens; ND—Tom Fischer, Ben Varnson)
   iv. 3 elected by Cities (MN—Mark Voxland, Hank Ludtke, Steve Nordhagen ND—Dennis Walaker, Curt Kruen, Fred Bott)
   v. 1 appointed by environmental community (MN—Henry Van Offelen; ND—Genevieve Thompson)
   vi. 1 elected at-large by annual conference attendees (MN—Warren Seykora; ND—Jake Gust)

C. **South Dakota Board Membership**:
   i. 1 appointed by Governor (Vacant)
   ii. 1 elected by local government (as their at-large— Roger Navratil)

D. **Tribal Membership:**
   i. 3 appointed by Tribal/First Nations (Canada—Melissa Hotain; US—Allen Pemberton; 1 vacant)

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BOARD MEETINGS:

4 -- Board Meetings for 2008 are as follow:

- January 24, 2008 — Organizational for the year
- March 6, 2008 — Moorhead, MN
- June 4-5, 2008 — Winnipeg, MB - Tour on 4th - Board Meeting on 5th
- September 4, 2008 — Fargo, ND - Federal Ex- Officio and Board Meeting
- November 5-6, 2008 — Grand Forks, ND - Board Retreat begins 5th - Board Meeting 6th

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2009 RRBC WORK PLAN

NRFP GOAL & ISSU	RRBC ACTION	FTE's	NRFP ACTION	TIMELINE	STAFF
				MT Management Team: ly, jg, nbm	
	CODES:			ly - Lance	js-Jennifer
	Yellow = RRBC Lead Current Project			jg - Julie	jr-Jacque 3/4
	Orange = RRBC Lead Planned Project			nm-north bas	jst - Janeen
	Lt Green = RRBC Support Current Project			con- Consults	ks - Kathy 1/2
	Green = RRBC Support Planned Project			JPB- Arneson	db- Donna 3/4
				Outreach - En	lt- Leah
				Grant Writer-	all - all staff
				Com Consultant	
	ADMINISTRATION				
	Board Meetings				
	Board Meetings in 2008-Jan, Mar, Sept	304		Jan, Mar,Sep	MT,js, lt, jst (ks,jr,db)
	1 Board Meeting & Tours -- June	136		June	MT,js, lt, jst (ks,jr,db)
	1 Board Meetin & Retreat--Nov	112		Nov	MT,js, lt, jst (ks,jr,db)
	Executive Committee Meetings				
	12 Executive Committee Meetings --3rd Thursday	108		3rd Th -- Mo	ly,jg,nm
	Executive Director Evaluation	12		2/1/2008	ly
	Human Resource Committee Meetings	12		as Needed	ly
	General				
	All Staff Evaluations,	64		Dec 2007-Jan	MT
	Documentation, Records	1991			all
	Work Plans--Annual	24			ly
	Weekly Staff Meetings	250		Monday	all
	Face to Face Staff Meetings (2)--Retreat (2)	252		Friday 2x yea	all
	Management Team Meetings (12)	42		monthly phon	MT
	Update Governing Documents	52		as needed	ly,db
	FIANANCE				
	Finance Committee Meetings				
	12 Finance Committee Meetings -- as needed	12		as needed	ly
	General				
	Monthly Finances	1187		ongoing	jr,db,ly,
	Base Funding --Local, Provincial, State	176			ks,jr,db,ly
	Base Funding -- Federal	144			ly,jg,nm
	Project Funding--as needed	384		2007	ly,jg,nm,grant con
	Prepare 2009 Budget	80		6/1/08 to 12/3	MT
	2007 Audit	128		1/1/08 to 6/3	ly,nm,jr,db
	LEADERSHIP				
	Plan Implementation Committee (4)	268		4 mtg year	jg,ly
	WG # 1 - Watersheds--snapshot, conf	68		phone calls, n	ly,jg,lt, nm, jst, js
	WG # 2- Integration--snapshot, conf	90		phone calls, n	ly,js,jst
	WG # 3 - Data-Tools for Decision Making--snapshot, conf	104		phone calls, n	jg, jst
	WG # 4- Education-Information--snapshot, conf	68		phone calls, n	js,lt,
	WG # 5 - Flood Forecasting	84			js,lt,ly
	WG # 6 - Flood Mitigation	84			ly,lt
	WG # 7 - Flood Response & Recovery — snapshot;obj, act ag; conf	84		phone calls, n	ly,lt
	WG # 8 - Drainage	88			jst,ly
	WG # 9 - Water Quality--snapshot;obj, act ag; conf	104		phone calls, n	nm,ly,js
	WG # 10 - Water Supply--snapshot; obj, act ag; conf	84		phone calls, n	js
	WG # 11 - Conservation--snapshot;obj, act ag; conf	88		phone calls, n	js
	WG # 12 - Fish & Wildlife	88			lt,jst
	WG # 13 - Outdoor Recreation	68			
	Precipitation Committee	40		1-2 Mtgs	js,lt,ly
	Ag Commodity Committee	40		Mtg a year	lt, nm
	Facilitation				
	Drought Process	248			MT
	Drought Conservation/Soft Path	256			MT
	Forum for Basin Issues	144		If Board Dec	all
	Forum Water Quality	104		If Board Dec	all
	Legislative Committee	104		as needed	MT

	COMMUNICATIONS							
	Communication Committee	288		10 mtgs a yea	jg,lt,ly,js			
	Web Site	104		weekly updat	jg,			
	Newsletter- 2	208		2 x year for c	jg, grant con			
	Ripple Effect - 24	252		twice a montl	jg,			
	Water Minutes- 2x mo	106		2-4 a week	jg,			
	Monthly Activity Update	32						
	State of Basin--Snapshot Updates	102		8 next year	all			
	Annual Report	88		yearly	ly,jg			
	Other Flyers/Information/PR materials --projects and activies	88		as needed pr	jg,			
	Press Releases	288		as appropria	jg,cc,jst,js			
	Power Point Presentations--conferences, speaking engagements, etc	112		conf, speak e	jg,ly,js,lt,nbm			
	River Center	180		if needed	MT			
	Annual Summit Conference	746		2009 Winnipe	all			
	Speaker Contacts	756		2010 Winnipe	lt,jgnbm,ly			
	Sponsorship, ads, booths	632		2011 Winnipe	lt,jg,ly,nbm			
	Annual Summit Conference - Flyer, Brochure, Conf Booklet	436		2012 Winnipe	lt,j,ksp			
	Other Conference							
	FDR Goals Conference	208		Late Winter,	all			
	Conservation Conference	104		summer	js			
	Lake Winnipeg Conf	60						
	PARTNERSHIPS							
	Partnerhsip Committee							
	IRRB	32		July	ly			
	IRRB-AEH	64		2 x a year	nbm			
	IRRB-Hydrology	32		2 x a year	ly			
	Pembina River Basin Advisory Board (PRBAB) Meetings	72		4 a year	js,nbm,ly			
	PRBAB Activities	160		as needed	js,nbm,ly			
	Roseau River International Watershed (RRIW) Meetings	72		4 a year	jst,nbm,ly			
	RRIW Activities	208		as needed	jst,nbm,ly			
	South Valley Initiative (SVI) Meetings	72		4 a year	lt,ly,jg			
	SVI Activities	160		as needed	lt,ly,jg			
	MN Joint Powers Board (JPB)	96		4 a year	jg			
	MB North/South Chapters	192		10 x year	js,db,nmb			
	Outreach SD, MB, First Nation	72		ongoing	lt,nbm,ly,jst			
	Outreach Provincail, State, Federal	136		ongoing	ly,jg,nbm			
	Reg mtgs---NDJWRB, MNRRWMB, MBCDA,UPP Shey, Dev Lake,	240		regualarly sc	jg,ly,jst,lt			
	annual mtgs- MBCDA, MBAMM, NDJWater, MAWD, NDAC,	168		annually	jg,ly,js,lt,jst			
	TECHINICAL RESOURCE--PROJECTS							
	Technical Resource Committee	0		if it is set up	ly			
	Mainstem Modeling Calibration IV	160		as needed	ly,nbm,lt			
	Bush Outreach Project	3364		as needed	all			
	Mainstem Modeling Run # 2	188		as needed	ly,nbm,lt			
	Dredging Study II	16		as needed	ly,nbm,js			
	Dredging Study II--fin and workshop roles	136		If it goes forv	ly,nbm,js,db,			
	TOTALS	18206						

	2006 - BOARD RETREAT PRIORITIES							
GOAL # 1								
Increase Coor & Comp Wat Plan								
1 - S 24 - L	Provide Forum for identifying, developing & implementing solns to cross bndry issues	0	1.2.18					
8 - L	Educ & Adoption of NRFP by member jurisdictions	0	1.1.1					
6 - L	Continue to refine bsin goals & processes for NRFP implementation	0	1.1.2					
7 - S 5 - L	RRBC briefing / marketing documents -- accomplishments, gen info, SI, LT goals 1x yr	0	1.1.3					
3 - S 1 - L	Roseau River International Watershed planning - MB	0	1.2.2					
4 - S 1 - L	South Valley Initiative (ND &SD Wild Rice effort)	0	1.2.4					
11 - S 1 - L	Pembina River Basin Advisory Board activities - ND & MB	0	1.2.3					
1 - S	Brokenhead River Restoration Project - MB	0	1.2.10					
Goal # 2								
Integrate Natural Resource Mangt								
1 - S 1 - L	Increase planners' awareness of conservation principles	0	2.2.1					
Goal # 3								
Increase Appld Res & Data Mngt								
5 - L	Run Mike 11 mainstem from L Trav to L Winnipeg run # 2	0	3.3.1					
1 - L	Lower Pembina area modeling - link with MIKE-11 above	0	3.3.3					
5 - S 1 - L	Dev of 3-D gw models for the basin similar to that of the MN Geological Survey/BOR	0	3.3.4					
1 - S	Coor above with the devel of HEC/RAS unsteady flow model from L Traverse to the Can border	0	3.3.2					
3 - S	Support continued devel, fund, & use of (RRBDIN) for data access and sharing	0	3.1.2					
4 - S	Identify and share research needs and gaps.	0	3.1.1					
Goal # 4								
Develop Stake Part & Awareness								
4 - S 11 - L	Use RRBC annual Summ Conf to provide education & outreach	0	4.2.9					
2 - S 5 - L	Provide annual rept card on compr, integrated, watershed stewad & management	0	4.2.1					
6 - S 2 - L	Define and adopt a stewardship ethic for RRBC members	0	4.1.1					
3 - S 1 - L	Continue to convene MB North and South RRBC Chapters & conduct workshops	0	4.2.6					
2 - S	Use Community Based Social Marketing to increase awareness of conservation programs	0	4.2.4					
5 - S	Continue to convene the MN Joint Powers Board	0	4.2.5					
1 - S	Revision of Lake Winnipeg Shoreline Management Handbook	0	4.2.8					
Goal # 5								
Maintain Flood Forecast Tools								
1 - L	MIKE-11 Mainstem hydrology model (line 3.3.1 above)	0	5.1.1					
Goal # 6								
Red Risk of fdr main & trib								
10 - L	Est collective benefits fo projects using Mike 11 mainstem model	0	6.2.1					
2 - S 3 - L	Define fdr needs in the upper basin that are not being met	0	6.2.2					
1 - L	North Ottawa Dam (line 2.1.5 above)	0	6.1.6					
2 - S	Maple River Dam (ND)	0	6.1.5					
2 - S	Fargo-Moorhead Upstream Feasibility Study (line 2.1.1 above)	0	6.1.7					
3 - S	Lake Roseau Flood protection	0	6.1.4					

Goal # 7								
Ensure Resp & Rec address needs		0						
6 - S	Documentd programs availability, identify gaps	0	7.1.1					
		0						
		0						
		0						
Gaol # 8		0						
Mang Drain Syst Prod & Min Dam		0						
4 - S 3 - L	Promote stream restoration concepts as FDR measures	0						
3 - S 2 - L	Continue projects (MN Buffer Initiative and CREP) that minimize environmental impacts (lines 9.3.3 & 11.1.2 below)	0						
		0						
		0						
Goal # 9		0						
Main Prot & Res SW & GW Qty		0						
2 - L	Ensure jurisd interp wat qly dat undertaken with basin wide perspective.	0	9.1.3					
2 - S 2 - L	RRB Buffer Initiative (MN) example F-M TMDL study (turbidity & Fecal Colif)	0	9.3.3					
2 - S 1 - L	Basin-wide analysis of nutrient concentrations and loads	0	9.1.2					
3 - S	Basin-wide analysis of nutrient concentrations and loads (line 9.1.2 above)	0	9.5.2					
1 - S 4 - L	Provide forum for each juris to discuss issues rel to implem basin appr ot wat qly mang	0	9.1.1					
1 - S 3 - L	Provide forum for each juris to discuss issues rel to cont & mang of exot species	0	9.6.1					
4 - S 3 - L	Lake Winnipeg Dredging Study II	0	9.4.3					
5 - S 3 - L	Provide a forum juris to discuss issues rel to devel strat to reduce nut load L. Winpg	0	9.4.1					
2 - S 2 - L	Provide basin-wide perspective to jurisdictional interpretation of exotic species statin.	0	9.6.3					
1 - L	Provide basin-wide persp to each jurisd's prog (e.g., ND Aq Nuis Spec plan, devel 2005)	0						
7 - S 1 - L	Water Quality Forum (line 9.1.1 above)	0	9.5.1					
3 - S	Provide a forum for jurisd to discuss issues related to developing restoration goals	0	9.2.1					
		0						
Goal # 10								
Ensure App Use & Sust of SW & GW								
		0						
Goal # 11								
Increse Soil Conservation								
4 - S 3 - L	Provide a forum for mangrs and soil cons staff to strategize how to implement this recommendation.	0	11.2.1					
1 -S 2 - L	CREP II - Red River Basin (MN)	0	11.2.1					
9 - S	MN Buffer Initiative (line 9.3.3 above)	0	11.1.3					
		0						
Goal # 12								
Cons Mang & Res fish, wild & habit								
2 - S 3 - L	Provide a forum for agency staff to strategize how to implement this recommendation.	0	12.2.1					
1 - S 1 - L	Provide a forum for agency staff to strategize how to implement this recommendation.	0	12.1.1					
1 - S 1 - L	Provide a forum for agency staff to strategize how to implement this recommendation.	0	12.4.1					
1 - S	Provide a forum for agency staff to strategize how to implement this recommendation.	0	12.3.1					
Goal # 13								
Enh & Dev Rec Infa & Acess								
5 - S 2 - L	Provide a forum for agency staff to strategize how to implement this recommendation.	0	13.1.1					
1 - S 1 - L	Provide a forum for agency staff to strategize how to implement this recommendation.	0	13.2.1					
2 - S 1 - L	Inventory public lands	0	13.1.2					
0-S 16 - L	Conflict resolution mechanism for the board to use externally for inter-jurisdictional issues	0						
3 - S 14 - L	Bring together scientific data app Dev Lake and other contentious issues comn coord data & usage	0						
2 - S 12 - L	Basin-wide drought response planning	0						
4 - S 11 - L	Coordinate River Watch expansion basin-wide	0						
9 - S	Study Red River mainstem capacity for industrial development	0						
	Plan of action for succession: Board members, Elected officials, agency officials	0						

RRBC 2009 BUDGET

	2008 Budget US	2009 BUDGET -US	2008 Budget Can	2009 BUDGET-CN
2008 Carry Over General		$ 287,169.05	$ 99,402.18	
2008 Carry Over Projects		$ 34,140.00	$ 9,500.00	
2008 Carry Over Total		$ 321,309.05	$ 99,402.18	
Income			$ 100,000.00	$ 100,000.00
4001 · Manitoba	$ 100,000.00	$ 100,000.00		
4002 · Minnesota	$ 100,000.00	$ 100,000.00		
4003 · North Dakota	$ 6,000.00		$ 100,000.00	$ 100,000.00
4004 · South Dakota				
4005 · LGUs - Manitoba	$ 100,000.00	$ 100,000.00		
4006 · LGUs - Minnesota	$ 100,000.00	$ 100,000.00		
4007 · LGUs - North Dakota				
4008 · LGUs - Sorth Dakota				
4009 · Federal - Canada				$ 2,000.00
4010 · Federal - US				
4011 · Refunds GST/PST				
4012 · Interest Income	$ 5,000.00	$ 5,000.00		
4013 · Joint Powers Bd				
4014 · Endowments				
4015 · Bremer				
4016 · Rent	$ 25,000.00	$ 45,000.00	$ 40,000.00	$ 30,000.00
4062 · Annual Summit Conference				
4020 · Con/F/W/OR Division				
4021 · Buffer Strip				
4022 · CREP				
4030 · Qly/Qnty Division				
4031· TMDL				
4032· IJC Ion & Nut Data Base				
4033· IJC Nut & NRFP Out & Cons				
4034· Drought Scoping Document	$ 15,000.00			
4035· Drought Process	$ 30,000.00			
4035· Drought Cons/Soft Path				
14000 · FDR/Hydrology Division				
4041 · Mainstem Modeling--Phase II	$ 9,890.00			
4042 · IJC Mainstem Modeling Scen Rept	$ 28,725.65			
4043 · IJC MM-Run # 1	$ 26,000.00			
4044 · IJC Pembina Modeling				
4045 · IJC Pembina Structure Survey	$ 11,270.12	$ 11,270.00		
4046 · MM Run # 2	$ 13,632.85		$ 9,500.00	$ 9,500.00
4048 · MM Cal III		$ 3,000.00		
4049 · Map Project				
14010 · MM Cal IV				
14020 · MM Cal V				
4050 · Partnerships				
4051 · RRWP				
4053 · IISD Jurisd Rept				
4054 · LWIS				
4055 · Sask L Winpg Conf				
4056 · Flood 2008 Intl Conf	$ 15,700.00		$ 50,000.00	
4057 · Network Project				
4058 · LSLW				
4060 · Comm/Education				
4061 · Red River of Expression				
4063 · Soc Based Mark				
4064 · IJC Water Law				
4065 ·River Center- MB	$ 43,706.33	$ -		
4066 ·Bush Outreach-2007/2008	$ 64,280.00	$ 25,000.00		
4067 ·Bush Outreach-2008/2009		$ 64,280.00		
4068 ·Bush Outreach-2009/2010	$ 3,481.24			
4069 ·History Project				
4070 · Bremer				
4071 · Bremer I	$ 5,000.00			
4072 · Bremer II-2006/2007	$ 20,000.00			
4073 · Bremer II-2007/2008	$ 15,000.00	$ 15,000.00		
4074 · Bremer II-2008/2009				
4000 Total Income without Projects or Carry Over	$ 436,000.00	$ 450,000.00	$ 240,000.00	$ 232,000.00
Canadian Income Adjusted to US dollars	$ 240,000.00	$ 232,000.00		
Total Without Projects	$ 676,000.00	$ 682,000.00	$ 240,000.00	$ 232,000.00
4000 Total Income with Projects & Carryover	$ 737,686.19	$ 889,859.05	$ 398,902.18	$ 241,500.00
Canadian Income Adjusted to US dollars	$ 398,902.18	$ 241,500.00	$ 398,902.18	$ 241,500.00
Total With Projects and Carryover	$ 1,136,588.37	$ 1,131,359.05		

RRBC 2009 BUDGET

Expense					
5000 · BOARD OF DIRECTORS					
5021 · Board Meetings	$ 8,000.00	$ 8,000.00	$ 4,000.00	$ 4,000.00	
5022 · Board Expenses	$ 14,000.00	$ 14,000.00	$ 6,000.00	$ 6,000.00	
5023 · RRBC Retreat	$ 4,000.00	$ 3,000.00		$ 1,000.00	
5024 · Internal Commitees	$ 4,000.00	$ 4,000.00	$ 2,000.00	$ 2,000.00	
5098 · Expenses	$ 1,500.00	$ 1,000.00	$ 2,500.00	$ 750.00	
5099 · Board Of Directors - Other		$ 100.00		$ 100.00	
Total 5000 · BOARD OF DIRECTORS	$ 31,500.00	$ 30,100.00	$ 14,500.00	$ 13,850.00	
5100 · ADMINISTRATION					
5101 · Executive Director 35%	$ 29,524.95	$ 30,410.70			
5102 · Deputy Director 15%					
5103 · South Basin Mngr/Com 15%	$ 8,586.50	$ 8,844.10			
5104 · North Basin Mangr/Qly 15%			$ 7,340.10	$ 7,340.10	
5106 · Ad Asst 3/4-Mrd 50%	$ 9,360.00	$ 9,640.80			
5107 · Ad Asst 3/4-Wnpg 60%			$ 11,587.48	$ 11,935.10	
5116 · Conf Asst pt					
5114 · Ad Asst 1/2-Mrd 40%	$ 7,300.01	$ 7,519.01			
5115 · Staff - Temporary					
5121 · Staff Training	$ 1,600.00	$ 2,400.00	$ 800.00	$ 1,200.00	
5122 · Staff Retreat	$ 1,000.00	$ 1,000.00	$ 500.00	$ 500.00	
5123 · River Center EOI					
5124 · River Center Business Plan		$ 20,000.00	$ 25,000.00	$ 20,000.00	
5196· Project Staff	$ 9,890.00	$ 5,000.00			
5197· Project Related	$ 15,000.00				
5198 · Expenses	$ 5,000.00	$ 5,000.00	$ 2,500.00	$ 2,500.00	
5199 · Administration - Other					
Total 5100 · ADMINISTRATION	$ 62,371.46	$ 84,814.61	$ 47,727.58	$ 43,475.20	
5200 · BENEFITS					
5221 · Flex Plan Fee	$ 1,000.00	$ 1,000.00			
5222 · Health & Dental Insurance	$ 37,851.00	$ 45,802.50	$ 4,297.80	$ 4,297.80	
5223 · Long Term Disability	$ 283.55	$ 322.12	$ 718.20	$ 718.20	
5224 · Short Term Disability	$ 5,000.00	$ 1,443.60	$ 313.20	$ 313.20	
5225 · Accidental Death			$ 197.76	$ 197.76	
5226 · RRBC Pension	$ 6,438.61	$ 8,048.49	$ 3,190.50	$ 3,190.50	
5227 · Retirement--SS/CPP	$ 12,311.36	$ 16,633.55	$ 6,147.90	$ 6,147.90	
5228 · Medicare--MB Supp	$ 2,879.27	$ 3,890.10			
5229 · Unemployment--MN-Fed	$ 1,075.20	$ 336.00			
5230 · MN Workers compensation	$ 1,609.65	$ 2,012.12			
5231 · Manitoba Employment Taxes-EI			$ 2,986.32	$ 2,986.32	
5232 · Life Insurance				$ 485.76	
5296· Project Staff Benefits					
5297· Project Related			$ 700.00	$ 700.00	
5299 · Benefits - Other					
Total 5200 · BENEFITS	$ 68,448.65	$ 79,488.49	$ 18,551.68	$ 19,037.44	
5300 Office					
5321 · Computer	$ 3,000.00	$ 3,000.00	$ 1,500.00	$ 2,000.00	
5322 · Corporation Filing Fees	$ 500.00	$ 500.00	$ 900.00	$ 900.00	
5323 · Insurance (Surety Bonds)	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	
5224 · Internet	$ 500.00	$ 500.00	$ 1,500.00	$ 1,500.00	
5325 · Legal Fees	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	
5326 · Office Equipment	$ 4,000.00	$ 4,000.00	$ 1,500.00	$ 1,500.00	
5327 · Petty Cash	$ 500.00	$ 500.00	$ 500.00	$ 500.00	
5328 · PO Box Rent & Bulk Mail Permit	$ 250.00	$ 250.00	$ 250.00	$ 250.00	
5329 · Recycling	$ 100.00	$ 100.00	$ 100.00	$ 200.00	
5330 · Rent	$ 19,000.00	$ 19,000.00	$ 22,000.00	$ 22,000.00	
5331 · Repairs & Maint.	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	
5332 · Subscriptions/Ads	$ 2,000.00	$ 2,000.00	$ 1,000.00	$ 1,000.00	
5333 · Supplies	$ 6,000.00	$ 6,000.00	$ 5,000.00	$ 5,000.00	
5334 · Telephone	$ 18,000.00	$ 15,000.00	$ 5,000.00	$ 5,000.00	
5335 · Copies	$ 8,000.00	$ 10,000.00	$ 3,000.00	$ 3,000.00	
5336 · Postage	$ 2,000.00	$ 2,000.00	$ 1,000.00	$ 1,000.00	
5337 · Bank Fees, Finance Charges	$ 200.00	$ 200.00	$ 200.00	$ 200.00	
5338· Auto	$ 6,000.00	$ 6,000.00	$ 6,000.00	$ 6,000.00	
5396· Project Staff					
5397· Project Related					
5398 · Expenses	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	
5399 · Office - Other	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	
Total 5300 · OFFICE	$ 78,050.00	$ 77,050.00	$ 57,450.00	$ 58,050.00	

RRBC 2009 BUDGET

5400 · FUNDING/FINANCE					
5401 · Executive Director 35%	$ 29,524.95	$ 30,410.70			
5403 ·South Basin Mngr/Com 15%	$ 8,586.50	$ 8,844.10			
5404 · North Basin Mngr/Qly 15%			$ 7,340.10	$ 7,340.10	
5406 · Ad Asst 3/4-Mrd 10%	$ 936.00	$ 1,928.16			
5407 · Ad Asst 1/2-Wnpg 20%			$ 3,862.49	$ 3,978.37	
5410 · Outreach Coordinator 20%			$ 9,000.02	$ 9,270.02	
5413 · Accounting Consultant	$ -				
5414 · Ad Asst 1/2-Mrd 30%	$ 5,475.01	$ 5,639.26			
5415 · Grant Writer Consultant	$ 6,000.00	$ 6,180.00			
5416 · Grant Writer Consultant			$ 4,500.00	$ 4,500.00	
5421 · Audit	$ 5,000.00	$ 5,000.00	$ 200.00	$ 500.00	
5422 · MB Bank Charges			$ 1,200.00	$ 1,200.00	
5423 · MB Payroll Accounting		$ 5,000.00			
5496 · Project Staff					
5497 · Project Related	$ 6,000.00	$ 6,000.00	$ 4,000.00	$ 4,000.00	
5498 · Expenses					
5499 · Funding/Finance - Other					
Total 5400 · FUNDING/FINANCE	$ 61,522.46	$ 64,002.21	$ 30,102.61	$ 30,788.49	
6000 · LEADERSHIP					
6000 Plan Management					
6001 · Exec Director 5%	$ 4,217.85	$ 4,344.39			
6003 · South Basin Mngr/Com 5%	$ 2,862.17	$ 2,948.03			
6004 · North Basin Mngr/Qly 5%			$ 2,446.70	$ 2,446.70	
6005 · Basin Coordination	$ -	$ 21,630.00			
6010 · Outreach Coordinator 15%			$ 6,750.02	$ 6,952.52	
6021 · NRFP Chair Meeting					
6022 · NRFP Buy-In Out Reach					
6023 · NRFP INV Teams					
6024 · NRFP Reports					
6025 · PI Mang Activities	$ 500.00	$ 500.00	$ 250.00	$ 250.00	
6026 · State of Basin Report	$ 250.00	$ 100.00	$ 200.00		
6027 · Div Act: G 1 Watershed	$ 250.00				
6028 · Div Act: G 2 Integration	$ 250.00	$ 250.00			
6029 · Drought Scoping Document		$ 20,000.00			
6096 · Project Staff					
6097 · Project Related	$ 1,500.00	$ 1,500.00	$ 1,500.00	$ 1,500.00	
6098 · Expenses					
6099 · Plan Management - Other					
Total 6000 · Plan Management	$ 9,830.02	$ 31,272.42	$ 11,146.72	$ 11,149.22	
6100 Legislative					
6101 · Executive Director 10%	$ 8,435.70	$ 8,688.77			
6102 · Deputy Director 10%					
6103 · South Basin Mngr/Com 5%	$ 2,862.17	$ 2,948.03	$ 2,446.70	$ 2,446.70	
6104 · North Basin Mngr/Qly 5%			$ 6,750.02	$ 6,952.52	
6110 · Outreach Coordinator 15%					
6005 · Basin Coordination			$ 100.00	$ 250.00	
6121 · Committee Activities	$ 500.00	$ 500.00	$ 100.00	$ 100.00	
6122 · Legislative Outreach	$ 250.00	$ 250.00	$ 250.00	$ 100.00	
6123 · Legislative Meetings	$ 500.00	$ 100.00			
6196 · Project Staff					
6197 · Project Related	$ 4,000.00	$ 4,000.00	$ 3,000.00	$ 3,000.00	
6198 · Expenses					
6199 · Legislative - Other					
Total 6100 · Legislative	$ 16,547.87	$ 16,486.80	$ 12,646.72	$ 12,849.22	
6200 Water Quility/Supply Division			$ 22,020.31	$ 22,020.31	
6204 · North Basin Mngr/Qly 45%					
6209 · Hydrologist Consultant			$ 100.00	$ 250.00	
6225 · Division Activities	$ 500.00	$ 250.00	$ 200.00		
6226 · State of Basin Reports	$ 500.00	$ 200.00		$ 250.00	
6227 · Div Act: G 9 Qly	$ 500.00				
6228 · Div Act: G 10 Qnty	$ 500.00	$ 250.00			
6229 · Drought Scoping Doc - RRBC					
6296 · Project Staff					
6297 · Project Related	$ 250.00	$ 250.00	$ 500.00	$ 500.00	
6298 · Expenses					
6299 · Other					
Total 7300 · WQ/S Division	$ 2,250.00	$ 950.00	$ 22,820.31	$ 23,020.31	

RRBC 2009 BUDGET

6300 · Con/FishWildOutRec Division			$ 4,500.01	$ 6,952.52	
6010 · Outreach Coordinator 10%					
6325 · Division Activities	$ 500.00	$ 250.00	$ 100.00	$ 500.00	
6326 · State of Basin Reports	$ 500.00	$ 300.00	$ 200.00		
6327 · Div Act: G 11 Conservation	$ 500.00			$ 250.00	
6328 · Div Act: G 12 F & W	$ 500.00			$ 250.00	
6329 · Div Act: G 13 OR					
6396 · Project Staff					
6397 · Project Related					
6398 · Expenses	$ 500.00	$ 250.00	$ 250.00	$ 500.00	
6399 · Other					
Total 6300 · C/F/W/OR Division	$ 2,500.00	$ 800.00	$ 5,050.01	$ 8,452.52	
6400 · Hydro/FDR/Drainage Division			$ 2,250.01	$ 2,317.51	
6410 · Outreach Coordinator 5%					
6421 · Modeling Meetings	$ 1,000.00				
6425 · Division Activites	$ 500.00	$ 1,000.00	$ 100.00		
6426 · State of Basin Reports	$ 500.00	$ 400.00	$ 100.00		
6427 · Div Act: G 5, 6, & 7 FDR	$ 500.00	$ 750.00			
6428 · Div Act: G 8 Drainage	$ 500.00	$ 250.00			
6429 · Mainstem Modeling RRBC			$ 3,000.00		
6430 · Basin Maps RRBC					
6496 · Project Staff					
6497 · Project Related					
6498 · Expenses	$ 250.00	$ 500.00	$ 500.00	$ 250.00	
6499 · Other					
Total 6400 · H/FDR/D Division	$ 3,250.00	$ 2,900.00	$ 5,950.01	$ 2,567.51	
6500 Watershed/Fac/Med		$ 4,344.39			
6001 · Exec Director 5%		$ 2,948.03			
6003 · South Basin Mngr/Com 5%			$ 2,250.01	$ -	
6510 · Outreach Coordinator 5%		$ 500.00	$ 100.00	$ 250.00	
6525 · Div Act: G 1 Watersheds		$ 100.00	$ 100.00		
6526 · State of Basin Report	$ 500.00				
6596 · Project Staff					
6597 · Project Related					
6598 · Expenses	$ 500.00	$ 500.00	$ 500.00	$ 250.00	
6599 · Other					
Total 6500 · I/L/F/M Division	$ 1,000.00	$ 1,100.00	$ 2,950.01	$ 500.00	
Total 6000-6500 · LEADERSHIP	$ 35,377.88	$ 53,509.22	$ 60,563.76	$ 58,538.76	
6600 · COMMUNICATIONS					
6600 · Conferencing					
6603 · South Basin Mngr/Com 5%	$ 2,862.17	$ 2,948.03			
6606 · Ad Asst 3/4-Mrd 30%	$ 5,616.00	$ 5,784.48			
6607 · Ad Asst 1/2-Wnpg 20%			$ 3,862.49	$ 3,978.37	
6608 · Conf Coor/Out Spec 50%	$ 18,025.00	$ 20,065.75			
6614 · Ad Asst 1/2-Mrd 30%	$ 5,475.01	$ 5,639.26			
6616 · Conf Assistant pt	$ 5,000.00				
6621 · Conference Start-Up					
6622 · Conference Expenses	$ 25,000.00	$ 45,000.00	$ 40,000.00	$ 35,000.00	
6623 · Assist other Conferences	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	
6696 · Project Staff		$ 8,000.00		$ 1,000.00	
6697 · Project Related					
6698 · Expenses		$ 1,500.00	$ 1,500.00		
6699 · Annual Conference - Other					
Total 6600 · Conferencing	$ 64,978.18	$ 75,937.52	$ 48,362.49	$ 40,978.37	
6700 · Education/Information					
6701 · Executive Director 5%	$ 4,217.85	$ -			
6703 · South Basin Mngr/Com 30%	$ 20,035.17	$ 17,688.20			
6704 · North Basin Mngr/Qly 5%			$ 2,446.70	$ 2,446.70	
6005 · Basin Coordination	$ -	$ 10,815.00			
6710 · Outreach Coordinator 5%			$ 2,250.01	$ 2,317.51	
6717 · Communication Consultant	$ 20,000.00	$ 20,000.00			
6718 · Education Consultant					
6721 · Newsletter					
6722 · Media Promotion	$ 4,000.00	$ 4,000.00	$ 2,000.00	$ 5,000.00	
6723 · Meeting Expense					
6724 · Website	$ 500.00	$ 500.00			
6725 · RRBC Tours	$ 4,000.00	$ 2,000.00	$ 2,000.00		
6726 · State of Basin	$ 500.00	$ 100.00	$ 100.00		
6727 · Div Act: G 4 Ed Infor	$ 500.00	$ 250.00	$ 100.00		
6731 · Advertising Promotion	$ 4,500.00	$ 5,000.00	$ 1,000.00	$ 5,000.00	
6732 · Conferences/Booths/Displays	$ 1,000.00	$ 1,000.00	$ 1,500.00	$ 1,500.00	
6733 · Comm Activities	$ 750.00	$ 500.00	$ 250.00		
6734 · Display	$ 12,500.00	$ 12,500.00	$ 12,500.00	$ 12,500.00	
6796 · Project Staff		$ 10,000.00			
6797 · Project Related					
6798 · Expenses	$ 5,000.00		$ 1,500.00		
6799 · Education/Information - Other	$ 1,500.00		$ 1,000.00		
Total 6600-6700 · Education/Information	$ 79,003.02	$ 74,353.20	$ 26,646.71	$ 28,764.21	
Total 6600-6700 · COMMUNICATIONS	$ 143,981.20	$ 150,290.72	$ 75,009.20	$ 69,742.57	

RRBC 2009 BUDGET

6800 · PARTNERSHIP					
6801 · Executive Director 5%	$ 4,217.85	$ 4,344.39			
6803 · South Basin Mngr/Com 15%	$ 8,586.50	$ 8,844.10			
6804 · North Basin Mngr/Qly 5%			$ 2,446.70	$ 2,446.70	
6005 · Basin Coordination 25%	$ -				
6806 · Ad Asst 3/4-Mrd 10%	$ 1,872.00	$ 1,928.16			
6808 · Conf Coor/Out Spec 50%	$ 18,025.00	$ 20,065.75			
6810 · Outreach Coordinator 35%		$ 10,815.00	$ 11,250.03		
6811 · Outreach Consultant-MB				$ 11,587.53	
6812 · JPB Consultant	$ 2,000.00	$ 2,000.00			
6819 · Outreach Consultant-MN					
6820 · Outreach Consultant -ND			$ 500.00		
6823 · Meeting Expense	$ 500.00			$ 250.00	
6825 · Partneeship Activities	$ 500.00	$ 500.00	$ 100.00		
6826 · State of Basin Rept	$ 500.00				
6827 · JPB Expenses	$ 1,000.00	$ 1,000.00			
6828 · Chapters			$ 500.00	$ 500.00	
6833 · PRBAB	$ 500.00		$ 500.00	$ 1,000.00	
6834 · RRIW	$ 500.00	$ 1,000.00	$ 500.00		
6835 · Wild Rice-South Basin	$ 1,000.00	$ 1,000.00			
6896 · Project Staff		$ 10,000.00	$ -	$ 9,500.00	
6897 · Project Related					
6898 · Expenses	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	
6899 · Partnership - Other					
Total 6800 · PARTNERSHIP	$ 44,201.35	$ 56,497.39	$ 20,796.73	$ 20,784.23	
6900 · TECHNICAL RESOURCE					
6901 · Executive Director 5%	$ 4,217.85	$ 4,344.39			
6903 · South Basin Mngr/Com 5%	$ 2,862.17	$ 2,948.03			
6904 · North Basin Mngr/Qly 5%			$ 2,446.70	$ 2,446.70	
6910 · Outreach Coordinator 5%			$ -		
6918 · Data Consultant	$ -				
6921 · ESRI Maintenance	$ 400.00	$ 400.00	$ 400.00		
6923 · Research Meetings					
6925 · Division Activities	$ 250.00		$ 100.00		
6926 · State of Basin Report	$ 250.00	$ 100.00	$ 100.00		
6927 · Div Act: G 3 Res & Data	$ 250.00	$ 500.00	$ 100.00		
6996 · Project Staff					
6997 · Project Related			$ 500.00		
6998 · Expenses	$ 500.00				
6999 · Technical Resource - Other					
Total 6900 · TECHNICAL RESOURCE	$ 8,730.02	$ 8,292.42	$ 3,646.70	$ 2,446.70	
OPERATIONAL SUB-TOTAL	$ 534,183.03	$ 604,045.06	$ 328,348.26	$ 316,713.39	
Canadian Operational in US dollars	$ 328,348.26		$ 328,348.26	$ 316,713.39	
Total US Operational dollars--2009		$ 604,045.06			
Total CN Operational dollars--2009	$ 534,183.03	$ 316,713.39			
Total Combined wo Projects--2009	$ 862,531.28	$ 920,758.45			
PROJECTS					
8100 · Bremer Grant I					
Total 8100 · Bremer Grant I	$ -				
8200 · Bremer Grant II - 2006/2007					
· Water Minutes	$ 15,000.00				
· Other					
Total 8200 · Bremer Grant II - 2006/2007	$ 15,000.00				
8300 · Bremer Grant II - 2007/2008					
· Water Minutes	$ 15,000.00	$ 15,000.00			
· Other	$ 5,000.00				
Total 8300 · Bremer Grant II 2007/2008	$ 20,000.00				
8400 · Bremer Grant II - 2008/2009		$ 15,000.00			
· Water Minutes	$ 1,000.00				
· Other					
Total 8400 · Bremer Grant II 2008/2009	$ 1,000.00				

RRBC 2009 BUDGET

9000 · Buffer Strip			
Total 9000 · Buffer Strip	$ -		
9100 · CREP			
Total 9100 · CREP	$ -		
9200 ·TMDL			
Total 9200 · TMDL	$ -		
9300 · Mainstem Hydrology--Phase II			
Total 9300 · Mainstem Hydorology--Phase II	$ -		
9400 · RRWP			
940011 · Basin Planner			
Total 9400 · RRWP	$ -		
9500 ·Social Based Marketing Project			
Total 9500 · Social Based Marketing Project	$ -		
9600 ·Lake Winnipeg Implementation Strategy - LWIS			
9600-01 · Exec Dir			
9600-07 · Ad Asst/Conf			
9600-21 · Consultants			
Total 9600 · LWIS	$ -		
9700 ·IISD Jurisdictional Rept			
Total 9700 · IISD Jurisdictional Rept	$ -		
9800 ·IJC Modeling Scenario Rept			
9800-01 · Exec Dir	$ 9,890.00		
Total 9800 · IJC Modeling Scenario Rept	$ 9,890.00		
9900 ·IJC MM-Run # 1			
9900-21 · Consultant	$ 13,725.65		
9900-23 · Other	$ 15,000.00		
Total 9900 · IJC Mainstem Scenario Modeling	$ 28,725.65		
10000 ·IJC Pembina Structural Survey			
Total 10000 · IJC Pembina Structural Survey	$ -		
10100 ·IJC Pembina Modeling			
10100-21 · WMC Inc.	$ 26,000.00		
Total 10100 · IJC Pembina Modeling	$ 26,000.00		
10200 ·IJC Ion & Nutrient Data Base			
Total 10200 · IJC Ion & Nutrient Data Base	$ -		
10300 ·IJC Nutrient & NRFP Out & Cons			
Total 10300 · IJC Nut & NRFP Out & Cons	$ -		
10400 ·IJC Water Law			
10400 ·IJC Water Law	$ -		
10700 ·Bush Outreach-2007/2008			
Outreach Consultants--MN-ND	$ 30,000.00		
Data Consultant			
Outreach Expenses	$ 11,696.33		
Materials	$ 2,010.00		
Total 10700 ·Bush Outreach	$ 43,706.33		
10730 ·Bush Outreach-2008/2009			
Outreach Consultants--MN-ND	$ 20,600.00	$ 10,000.00	
Data Consultant	$ 5,150.00	$ 5,000.00	
Outreach Expenses	$ 5,385.00	$ 10,000.00	
Materials	$ 1,005.00		
Total 10730 ·Bush Outreach	$ 32,140.00	$ 25,000.00	
10760 ·Bush Outreach-2009/2010			
Outreach Consultants--MN-ND		$ 30,000.00	
Data Consultant		$ 5,000.00	
Outreach Expenses		$ 7,000.00	
Total 10760 ·Bush Outreach	$ -	$ 42,000.00	

RRBC 2009 BUDGET

10500 ·MM Run # 2					
Consultants	$ 1,270.12	$ 1,270.12			
Other	$ 10,000.00	$ 10,000.00			
Total 10500 ·MM Run # 2	$ 11,270.12	$ 11,270.12			
10800 ·Drought Scoping Project					
Consultants	$ 1,000.00				
Other	$ 1,000.00				
Total 10800 ·Drought Scoping Project	$ 2,000.00				
10900 ·Map Project			$ 9,500.00	$ 9,500.00	
Consultants			$ 9,500.00		
Total 10900 ·Map Project	$ -				
11000 ·Drought Process Project					
Consultant	$ 15,000.00				
Total 11000 ·MM Cal III	$ 15,000.00				
11100 ·Drought Cons/Soft Path					
Consultant	$ 30,000.00				
Total 11100 ·Drought Cons/Soft Path	$ 30,000.00				
11300 ·MM Cal III					
Consultant	$ 13,632.85				
Total 11300 ·MM Cal III	$ 13,632.85				
11400 ·3-D Display					
Consultant					
Total 11400 ·3-D Display	$ -				
11500 River Center Business Plan					
Consultant			$ -		
Total 11500 ·River Center Business Plan	$ -				
13100 ·Network Project					
Consultant	$ 15,700.00				
Total 11300 ·Network Project	$ 15,700.00				
13200 ·History Project-30 Yrs					
Consultant	$ 3,481.24				
Total 11300 ·History Project- 30 Yrs	$ 3,481.24				
13300 ·LSLW					
Consultants			$ 35,000.00		
Other			$ 15,000.00		
Total 13300 ·LSLW	$ -		$ 50,000.00		
24010 · Cal IV					
Consultants		$ 3,000.00			
24010 · Cal IV		$ 3,000.00			
Total 9200 · Special Project Expenses	$ 267,546.19	$ 96,270.12	$ 59,500.00	$ 9,500.00	
Total Revenue Without Proects	$ 676,000.00	$ 682,000.00			
Total Expenses Without Proects	$ 862,531.28	$ 920,758.45			
Difference	$ (186,531.28)	$ (238,758.45)			
Total Expense -- Operational and Projects					
Total Canadian Expenses in US dollars					
Total Expense Budget Expressed in US dollars					
Income with Projects & Carry-Over	$ 1,136,588.37	$ 1,131,359.05			
Expenses with Projects	$ 1,226,347.59	$ 1,026,528.57			
Total After All Income/Expenses	$ (89,759.22)	$ 104,830.48			

Board Resolution #_____

Red River Valley Restoration Initiative (RRVRI) Establishment

WHEREAS the MN State Legislature appropriated $25 million to the RIM Reserve Program in the 2008 Bonding bill (Chapter 179, 2008 Session law) which governor Pawlenty signed into law on April 7, 2008;

WHEREAS the MN State Legislature identified that up to $8 million is available for use to restore wetlands and reduce flooding in the Red River Valley Area;

WHEREAS the Minnesota Board of Water and Soil Resources authorized staff to work with the Red River Watershed Management Board to develop a (RIM Reserve) Red River Valley Restoration Initiative (RRVRI);

WHEREAS the role and responsibilities of the Watershed Districts in the RRVRI is project engineering and design, project administration, river/stream restoration construction, and maintenance of the conservation plan on behalf of the landowner;

WHEREAS projects will be identified through the Red River Mediation Work Group (RRMWG) and local project work teams consistent with the Red River Mediation Agreement (RRMA) and its natural resource enhancement (NRE) goals and objectives;

WHEREAS the objective of the RRVRI is to achieve priority river/stream restoration and flood damage reduction outcomes consistent with the RRMA and RIM Reserve Program established in MS 103F.515;

WHEREAS the RIM Reserve Management Planning Committee (RRMPC) is recommending up to $3 million in 2008 RIM Reserve funds be used to acquire riparian easements and establish conservation practices on those riparian lands acquired via easements. These funds must be obligated by June 1, 2009 for the stated purposes of the RRVRI;

WHEREAS the RRMPC is recommending the payment rate for permanent easements on cropland be 100% of Estimated Market Value (EMV) and the payment rate for non-cropland be 60% of EMV for non-cropland. Rates are to be calculated using township mean for tillable property value established by county assessors for the 2009 tax year;

WHEREAS the RRVRI project recommendations will be submitted to the BWSR from the Red River Mediation Work Group for consideration;

WHEREAS the Minnesota Board of Water and Soil Resources will select and approve project areas for the RRVRI submitted for consideration by the RRMWG;

WHEREAS the Minnesota Board of Water and Soil Resources will acquire RIM Reserve easements and establish conservation practices through the Soil and Water Conservation Districts who are members of the local project work teams, unless otherwise determined locally;

WHEREAS the RRMPC met on November 24th, 2008 and is recommending the establishment of the RRVRI beginning December 18, 2008 and ending June 1, 2009 with a payment rate of 100% EMV for cropland and 60% EMV non-cropland;

NOW, THEREFORE BE IT RESOLVED THAT, the Minnesota Board of Water and Soil Resources authorizes the establishment of, and payment rates for, the RRVRI to begin December 18, 2008 and run through June 1, 2009.

_____ _____

Randy Kramer, Chair Date
Minnesota Board of Water and Soil Resources

9. Grants Program & Policy Committee Recommendations

A. **09 Drainage Records Modernization Grant, $500K** – Forty Six applicants have requested $1.35 M. to update local drainage records. The Grants Program & Policy Committee is requesting approval of their allocation recommendations. **Decision Item**.

B. **09 Native Buffer Cost Share Allocations, $753,524** – Competitive applications from SWCDs were received and the Grants Program & Policy Committee is requesting approval of their allocation recommendations. **Decision Item.**

C. **09 Ag-land Hydrologic Restoration Grants, $531,981 –** Phase II proposals for hydrologic modeling and data processing have been refined. The Grants Program & Policy Committee is requesting approval of their allocation recommendations. **Decision Item.**

D. **09 Clean Water Legacy Project Grants, $1.03 M BWSR, $1.61 M PCA –** The Grants Program & Policy Committee is forwarding the interagency Workteam recommendations for funding approval. **Decision Item**.

E. **Red River Basin Commission Annual Plan and Allocation –** The Grants Program & Policy Committee has reviewed the Commissions annual report, their annual plan for 2009, and recommends approval of their $100,000 annual allocation. **Decision Item.**

Wayne Zellmer
Grants Coordinator
651-297-7361
fax: 651-297-5615
wayne.zellmer@state.mn.us

From: Wayne Zellmer (BWSR)
Sent: Thursday, December 04, 2008 11:58 AM
To: 'rlburandt@gmail.com'; 'Paul Langseth'; 'Louise Smallidge'; 'Dana Allen'; 'Brian Kletscher'; 'Gene Tiedemann'; 'Joe Martin'; 'Rebecca.Flood@state.mn.us'
Cc: John Jaschke (BWSR); Julie Klocker (BWSR); David.Weirens@state.mn.us; 'rlkramer@westtechwb.com'; Joel R Peterson (BWSR); Al Kean (BWSR); Dan Shaw (BWSR); #BWSR_BWSR-Clean Water Specialists; Mary Jo Anderson (BWSR); Kari Keating (BWSR)
Subject: GRANTS PROGRAM & POLICY COMMITTEE MEETING CHANGE

The December 17 Grants Program & Policy Committee Meeting has been re-scheduled for December 12. The Meeting will be held in the BWSR Conference Room beginning at 10 AM with a planned ending around 12:30 PM. Committee members that cannot attend in person may attend via telephone. The number to call is 1-888-677-3050 and the pass code number is 43354.

Agenda items will include the following:

A. 09 Drainage Records Modernization Grant, $500K – Forty Six applicants have requested $1.35 M

B. 09 Native Buffer Cost Share Grants, $700K.

C. 09 Ag-land Hydrologic Restoration Grants, $1.5M

D. 09 Clean Water Legacy Project Grants, $3.2 M ($1.2M BWSR, $2.0M PCA).

E. State Cost Share Policy Revisions/Updates

- Livestock Waste Management Practice Eligible Components Revision
- Rain Garden/Bioretention Addition to Cost Share Program

F. 09 Red River Basin Commission Annual Plan and $100,000 Allocation Approval

Selected background materials for the above items will be provided to you prior to our December 12 Meeting. These items will be forwarded to the Board for their consideration at their December 17 Meeting.

Please contact me if there are any questions or concerns.

Thanks

Wayne Zellmer
Grants Coordinator

BOARD OF WATER AND SOIL RESOURCES INTERNAL MEMORANDUM

DATE: December 10, 2008

TO: Grants Program & Policy Committee

FROM: Joel Peterson

SUBJECT: **DECISION ITEM:** Drainage Records Modernization Grants

The grant application period was September 18, 2008 – October 31, 2008.

Electronic versions of the submission materials and a spreadsheet summarizing the pertinent data as well as some preliminary scoring can be found in the following folder.

\\Adm-data\BWSR\Shared Library\BWSR Grants Program Contents\Miscellanous Grant Programs\Drainage Records Modernization

Six scoring scenarios for the Drainage Records Modernization Grant were presented to the G-Team on November 24th. The recommendation from the G-Team was to present the following two scoring methods to the SMT for consideration.

Scenarios:

1) Applicants that partnered with one or more drainage authorities were grouped together and their scores averaged. This assumes an all or none for partnerships. Priority given to groups not receiving grants previously but **those who have can still be ranked higher than those who have not.**

2) Applicants that partnered with one or more drainage authorities were grouped together and their scores averaged. This assumes an all or none for partnerships. Significant priority given to groups not receiving grants before. Those not previously receiving grants were **moved to the front of the queue.**

The G-Team's preferred Scenario was #1 above, Table 1 of the attachment.

The Senior Management Team (SMT) recommended that the projects on Table 1 recommended for funding be forwarded to the Grants Program & Policy Committee. This would result in 17 of 32 proposals being funded (individual and joint applications). The 17 proposals comprise 22 drainage authorities. Seven (7) of the 22 drainage authorities have previously received grants for drainage records modernization.

This scenario assumes: 1) project partners are lumped together and their score is averaged. 2) Drainage authorities who have previously received grants can receive them.

File Link	No	Applicant Name	Amount Requested	Amount Recommended	Number of Systems or Miles	Cost/Mi or Cost/System	Basis/Cost	Total In-Kind	Ratio of Request to In-Kind (1:x)	Previous Work On Drainage Modernization?	Multi-Jurisdictional	Previous Grant?	Proposal Quality (H:M:L)	Score	Group Score		Cumulative Grant Request	Rank
	1	Aitkin County	$ 50,000		41	$ 1,219.51	1.23	$ 50,000	1.00	1	0	2	2	7.23	7.23	7.23		26
	2	Benton County	$ 22,107	$ 22,107	57.7	$ 383.14	3.92	$ 22,215	1.00	1	0	2	1	8.92	8.92	8.92	$ 280,907	11
	3	Big Stone County	$ 36,000		24	$ 1,500.00	1.00	$ 36,000	1.00	0	0	2	1	5.00	5.00	5.00		42
	4	Bois de Sioux Watershed District	$ 15,000	$ 15,000	10	$ 1,500.00	1.00	$ 20,000	1.33	1	0	2	3	8.33	8.33	8.33	$ 303,907	13
	5	Brown County	$ 46,346	$ 46,346	90	$ 514.95	2.91	$ 100,000	2.16	0	0	0	3	8.07	8.07	8.07	$ 350,253	14
	6	Buffalo Red River Watershed District	$ 50,000		64	$ 781.25	1.92	$ 62,500	1.25	1	0	0	2	6.17	6.17	6.17		40
	7	Chippewa County	$ 14,800	$ 14,800	1500	$ 9.87	7.60	$ 14,800	1.00	1	0	0	1	10.60	10.60	10.60	$ 38,800	2
	8	Faribault County	$ 24,000	$ 24,000	120	$ 200.00	7.50	$ 63,550	2.65	1	0	0	3	14.15	14.15	14.15	$ 24,000	1
	9	Jackson County	$ 42,000	$ 42,000	28	$ 1,500.00	1.00	$ 42,000	1.00	1	0	2	3	8.00	8.00	8.00	$ 392,253	15
	10	Kanabec County	$ 15,000		10	$ 1,500.00	1.00	$ 18,000	1.20	1	0	2	1	6.20	6.20	6.20		39
	11	Kittson County	$ 43,200	$ 13,269	36	$ 1,200.00	1.25	$ 86,400	2.00	0	1	2	1	7.25		7.56	$ 577,253	19
	12	Two River Watershed	$ 10,800	$ 3,317	9	$ 1,200.00	1.25	$ 21,600	2.00	1	1	2	1	8.25	7.56	7.56		19
	13	Roseau County	$ 50,000	$ 15,357	831	$ 60.17	1.25	$ 124,650	2.49	0	1	2	1	7.74		7.56		19
	14	Roseau River Watershed District	$ 7,500	$ 2,304	5	$ 1,500.00	1.00	$ 15,000	2.00	0	1	2	1	7.00		7.56		19
	15	Lake of the Woods County	$ 48,790		650.53	$ 75.00	1.00	$ 48,790	1.00	1	0	0	2	5.00	5.00	5.00		44
	16	Marshall County	$ 30,000	$ 30,000	25	$ 1,200.00	1.25	$ 45,000	1.50	0	1	2	2	7.75	9.03	9.03	$ 258,800	9
	17	Middle-Snake-Tamarac River Watershed District	$ 20,000	$ 20,000	24	$ 833.33	1.80	$ 50,000	2.50	1	1	2	2	10.30		9.03		9
	18	Martin County	$ 50,000	$ 50,000	178	$ 280.90	5.34	$ 126,725	2.53	0	0	0	2	9.87	9.87	9.87	$ 153,800	5
	19	Meeker County	$ 15,000	$ 15,000	48	$ 312.50	4.80	$ 20,000	1.33	1	1	0	2	10.13	9.13	9.13	$ 208,800	7
	20	Buffalo Creek Watershed District	$ 15,000	$ 15,000	28	$ 535.71	2.80	$ 20,000	1.33	1	1	0	2	8.13		9.13		7
	21	Nobles County	$ 48,000		32	$ 1,500.00	1.00	$ 50,000	1.04	1	0	2	2	7.04	7.04	7.04		35
	22	North Fork Crow River Watershed District	$ 15,000		16	$ 937.50	1.60	$ 25,000	1.67	1	1	0	2	7.27	7.37	7.37		24
	23	Pope County	$ 15,000		18	$ 833.33	1.80	$ 25,000	1.67	1	1	0	2	7.47		7.37		24
	24	Polk County	$ 50,000	$ 50,000	143	$ 349.65	4.29	$ 50,000	1.00	1	0	2	2	10.29	10.29	10.29	$ 103,800	4
	25	Red Lake Watershed District	$ 26,400		24	$ 1,100.00	1.36	$ 26,400	1.00	1	1	0	1	5.36	6.38	6.38		37
	26	Pennington County	$ 20,000		32	$ 625.00	2.40	$ 20,000	1.00	0	1	2	1	7.40		6.38		37
	27	Rice Creek Watershed District	$ 25,000	$ 25,000	23	$ 1,086.96	1.38	$ 70,000	2.80	1	0	2	2	9.18	9.18	9.18	$ 178,800	6
	28	Sandhill River Watershed District	$ 13,500	$ 13,500	9	$ 1,500.00	1.00	$ 22,500	1.67	1	0	2	2	7.67	7.67	7.67	$ 465,753	18
	29	Sauk River Watershed District	$ 12,000	$ 12,000	12	$ 1,000.00	1.50	$ 15,000	1.25	1	0	2	2	7.75	7.75	7.75	$ 452,253	17
	30	Sherburne County	$ 48,000	$ 48,000	32	$ 1,500.00	1.00	$ 48,000	1.00	1	0	2	3	8.00	8.00	8.00	$ 440,253	15
	31	Stevens County	$ 42,000		28	$ 1,500.00	1.00	$ 42,000	1.00	0	0	2	2	6.00	6.00	6.00		41
	32	Todd County	$ 27,560		49	$ 562.45	2.67	$ 31,000	1.12	1	0	0	2	6.79	6.79	6.79		36
	33	Waseca County	$ 50,000		39	$ 1,282.05	1.17	$ 50,000	1.00	0	1	2	2	7.17	7.17	7.17		27
	34	Watonwan County	$ 48,000		32	$ 1,500.00	1.00	$ 48,000	1.00	1	0	0	2	5.00	5.00	5.00		42
	35	Wild Rice Watershed District	$ 15,000	$ 15,000	44	$ 340.91	4.40	$ 30,000	2.00	1	1	0	2	10.40	10.40	10.40	$ 53,800	3
	36	Wilkin County	$ 8,000	$ 8,000	20	$ 400.00	3.75	$ 8,000	1.00	0	0	2	2	8.75	8.75	8.75	$ 288,907	12
	37	Wright County	$ 50,000		51	$ 980.39	1.53	$ 50,000	1.00	1	0	2	2	7.53	7.53	7.53		23
	38	Yellow Medicine River Watershed District	$ 40,000		30	$ 1,333.33	1.13	$ 40,000	1.00	1	0	2	2	7.13	7.13	7.13		34
	39	Chisago County	$ 21,000		14	$ 1,500.00	1.00	$ 21,000	1.00	0	1	2	2	7.00		7.14		28
	40	Nicollet County	$ 34,170		455.59	$ 75.00	1.00	$ 34,170	1.00	0	1	0	2	5.00		7.14		28
	41	Carver County - App #2	$ 20,000		14	$ 1,428.57	1.05	$ 20,000	1.00	1	1	2	2	8.05	7.14	7.14		28
	42	Rice County	$ 46,500		31	$ 1,500.00	1.00	$ 46,500	1.00	1	1	2	2	8.00		7.14		28
	43	Lincoln County-App#2	$ 25,000		50	$ 500.00	3.00	$ 25,000	1.00	1	1	0	2	8.00		7.14		28
	44	McLeod County	$ 50,000		52	$ 961.54	1.56	$ 63,000	1.26	1	1	0	2	6.82		7.14		28

This scenario assumes: 1) project partners are lumped together and their score is averaged. 2) Drainage authorities who have previously received grants will not receive them before those who have not.

File Link	No	Applicant Name	Amount Requested	Amount Recommended	Number of Systems or Miles	Cost/Mi or Cost/System	Basis/Cost	Total In-Kind	Ratio of Request to In-Kind (1:x)	Previous Work On Drainage Modernization?	Multi-Jurisdictional	Previous Grant?	Proposal Quality (H:M:L)	Score	Group Score		Cumulative Grant Request	Rank
	1	Aitkin County	$ 50,000	$ 50,000	41	$ 1,219.51	1.23	$ 50,000	1.00	1	0	2	2	7.23	7.23	7.23	$ 497,107	17
	2	Benton County	$ 22,107	$ 22,107	57.7	$ 383.14	3.92	$ 22,215	1.00	1	0	2	1	8.92	8.92	8.92	$ 147,107	5
	3	Big Stone County	$ 36,000		24	$ 1,500.00	1.00	$ 36,000	1.00	0	0	2	1	5.00	5.00	5.00		23
	4	Bois de Sioux Watershed District	$ 15,000	$ 15,000	10	$ 1,500.00	1.00	$ 20,000	1.33	1	0	2	3	8.33	8.33	8.33	$ 170,107	7
	9	Jackson County	$ 42,000	$ 42,000	28	$ 1,500.00	1.00	$ 42,000	1.00	1	0	2	3	8.00	8.00	8.00	$ 212,107	8
	10	Kanabec County	$ 15,000		10	$ 1,500.00	1.00	$ 18,000	1.20	1	0	2	1	6.20	6.20	6.20		21
	11	Kittson County	$ 43,200	$ 43,200	36	$ 1,200.00	1.25	$ 86,400	2.00	0	1	2	1	7.25		7.56	$ 397,107	12
	12	Two River Watershed	$ 10,800	$ 10,800	9	$ 1,200.00	1.25	$ 21,600	2.00	1	1	2	1	8.25	7.56	7.56		12
	13	Roseau County	$ 50,000	$ 50,000	831	$ 60.17	1.25	$ 124,650	2.49	0	1	2	1	7.74		7.56		12
	14	Roseau River Watershed District	$ 7,500	$ 7,500	5	$ 1,500.00	1.00	$ 15,000	2.00	0	1	2	1	7.00		7.56		12
	16	Marshall County	$ 30,000	$ 30,000	25	$ 1,200.00	1.25	$ 45,000	1.50	0	1	2	2	7.75	9.03	9.03	$ 125,000	3
	17	Middle-Snake-Tamarac River Watershed District	$ 20,000	$ 20,000	24	$ 833.33	1.80	$ 50,000	2.50	1	1	2	2	10.30		9.03		3
	21	Nobles County	$ 48,000		32	$ 1,500.00	1.00	$ 50,000	1.04	1	0	2	2	7.04	7.04	7.04		20
	24	Polk County	$ 50,000	$ 50,000	143	$ 349.65	4.29	$ 50,000	1.00	1	0	2	2	10.29	10.29	10.29	$ 50,000	1
	27	Rice Creek Watershed District	$ 25,000	$ 25,000	23	$ 1,086.96	1.38	$ 70,000	2.80	1	0	2	2	9.18	9.18	9.18	$ 75,000	2
	28	Sandhill River Watershed District	$ 13,500	$ 13,500	9	$ 1,500.00	1.00	$ 22,500	1.67	1	0	2	2	7.67	7.67	7.67	$ 285,607	11
	29	Sauk River Watershed District	$ 12,000	$ 12,000	12	$ 1,000.00	1.50	$ 15,000	1.25	1	0	2	2	7.75	7.75	7.75	$ 272,107	10
	30	Sherburne County	$ 48,000	$ 48,000	32	$ 1,500.00	1.00	$ 48,000	1.00	1	0	2	3	8.00	8.00	8.00	$ 260,107	8
	31	Stevens County	$ 42,000		28	$ 1,500.00	1.00	$ 42,000	1.00	0	0	2	2	6.00	6.00	6.00		22
	33	Waseca County	$ 50,000	$ 2,893	39	$ 1,282.05	1.17	$ 50,000	1.00	0	1	2	2	7.17	7.17	7.17	$ 547,107	18
	36	Wilkin County	$ 8,000	$ 8,000	20	$ 400.00	3.75	$ 8,000	1.00	0	0	2	2	8.75	8.75	8.75	$ 155,107	6
	37	Wright County	$ 50,000	$ 50,000	51	$ 980.39	1.53	$ 50,000	1.00	1	0	2	2	7.53	7.53	7.53	$ 447,107	16
	38	Yellow Medicine River Watershed District	$ 40,000		30	$ 1,333.33	1.13	$ 40,000	1.00	1	0	2	2	7.13	7.13	7.13		19
	5	Brown County	$ 46,346		90	$ 514.95	2.91	$ 100,000	2.16	0	0	0	3	8.07	8.07	8.07		
	6	Buffalo Red River Watershed District	$ 50,000		64	$ 781.25	1.92	$ 62,500	1.25	1	0	0	2	6.17	6.17	6.17		
	7	Chippewa County	$ 14,800		1500	$ 9.87	7.60	$ 14,800	1.00	1	0	0	1	10.60	10.60	10.60		
	8	Faribault County	$ 24,000		120	$ 200.00	7.50	$ 63,550	2.65	1	0	0	3	14.15	14.15	14.15		
	15	Lake of the Woods County	$ 48,790		650.53	$ 75.00	1.00	$ 48,790	1.00	1	0	0	2	5.00	5.00	5.00		
	18	Martin County	$ 50,000		178	$ 280.90	5.34	$ 126,725	2.53	0	0	0	2	9.87	9.87	9.87		
	19	Meeker County	$ 15,000		48	$ 312.50	4.80	$ 20,000	1.33	1	1	0	2	10.13	9.13	9.13		
	20	Buffalo Creek Watershed District	$ 15,000		28	$ 535.71	2.80	$ 20,000	1.33	1	1	0	2	8.13		9.13		
	22	North Fork Crow River Watershed District	$ 15,000		16	$ 937.50	1.60	$ 25,000	1.67	1	1	0	2	7.27	7.37	7.37		
	23	Pope County	$ 15,000		18	$ 833.33	1.80	$ 25,000	1.67	1	1	0	2	7.47		7.37		
	25	Red Lake Watershed District	$ 26,400		24	$ 1,100.00	1.36	$ 26,400	1.00	1	1	0	1	5.36	6.38	6.38		
	26	Pennington County	$ 20,000		32	$ 625.00	2.40	$ 20,000	1.00	0	1	2	1	7.40		6.38		
	32	Todd County	$ 27,560		49	$ 562.45	2.67	$ 31,000	1.12	1	0	0	2	6.79	6.79	6.79		
	34	Watonwan County	$ 48,000		32	$ 1,500.00	1.00	$ 48,000	1.00	1	0	0	2	5.00	5.00	5.00		
	35	Wild Rice Watershed District	$ 15,000		44	$ 340.91	4.40	$ 30,000	2.00	1	1	0	2	10.40	10.40	10.40		
	39	Chisago County	$ 21,000		14	$ 1,500.00	1.00	$ 21,000	1.00	0	1	2	2	7.00		7.14		
	40	Nicollet County	$ 34,170		455.59	$ 75.00	1.00	$ 34,170	1.00	0	1	0	2	5.00		7.14		
	41	Carver County - App #2	$ 20,000		14	$ 1,428.57	1.05	$ 20,000	1.00	1	1	2	2	8.05	7.14	7.14		
	42	Rice County	$ 46,500		31	$ 1,500.00	1.00	$ 46,500	1.00	1	1	2	2	8.00		7.14		
	43	Lincoln County-App#2	$ 25,000		50	$ 500.00	3.00	$ 25,000	1.00	1	1	0	2	8.00		7.14		
	44	McLeod County	$ 50,000		52	$ 961.54	1.56	$ 63,000	1.26	1	1	0	2	6.82		7.14		

Native Buffer Cost-share Program

Requesting approval of FY 2009 Native Buffer Cost-share applications

History:

- Native Buffer Cost-share program developed Summer/Fall 2007
- Grants for cost-sharing contracts to establish and maintain vegetation buffers of restored native prairie and restored prairie, using seeds of local ecotype region within the BWSR state Cost-share program.
- $ 950,000 distributed to 74 SWCDs through an allocation process for FY2008

Current Applications:

- Approximately 1.16 million available for FY2009
- $753,523.80 requested from 16 SWCDs ($356,443 matching funds)
- 39 Individual projects proposed

    Shoreline (lake) 14

    Remnant Prairie 6

    Ag Buffer 5

    Shoreline (River) 3

    Stormwater (Raingarden) 3

    Stormwater (Sediment Pond) 2

    Wetland Buffer 2

    Wellhead Protection 1

    Groundwater Protection 1

    RIM Enhancement 1

    Feedlot Buffer 1

- BWSR staff worked with applicants to ensure fit with cost-share requirements and program guidelines

Next Steps:

- December 17th BWSR Board Meeting

2009 Native Buffer Cost-Share Applications

SWCD	Project Name	Landowner	Project Type	BWSR Fund	Match	Comments
Anoka						
1	Bunker Lake Savanna Restoration	County	Remnant Prairie	$56,136.00	$36,352.00	Buffer for Bunker Lake
Becker						
1	City of Detroit Lakes - Buffer Wet Sediment Ponds	City	Stormwater (SP)	$3,188.00	$850.00	Increasing diversity around pond
2	Guetter Project - Establish New Buffer Area and Enhance Existing Native Seeding	Private Landowner	Wetland Buffer	$9,375.00	$2,500.00	Eroding hillside -Wetland buffer
Benton						
1	Little Rock Lake Watershed Buffer Projects	Private Landowner	Shoreline (Lake)	$10,000.00	$5,475.00	720 linear feet of shoreline
Cottonwood						
1	Midway Township Section 16 Buffer Planting	Private Landowner	Agricultural Buffer	$8,000.00	$2,000.00	Pasture conversion to natives - on Watonwan River
2	Rosehill Township Section 18 Buffer Planting	Private Landowner	Wetland Buffer	$10,000.00	$2,500.00	Current RIM site
East Otter Tail						
1	Amor Park Demonstration Site and Outdoor Classroom	Township	Shoreline (Lake)	$3,000.00	$1,000.00	Eroding slope, replacing non-natives
2	Ferguson Shoreline Stabilization and Restoration	Private Landowner	Shoreline (Lake)	$6,000.00	$2,000.00	Eroding Shoreline
3	Jack Pearson Shoreline Restoration	Private Landowner	Shoreline (Lake)	$3,300.00	$1,100.00	Replacing Kentucky bluegrass shoreline
4	Girls Scout Rain Garden at Prairie Wetlands Learning Center	Federal (FWS)	Stormwater (RG)	$3,600.00	$1,200.00	Demonstration rain garden
5	Otter Tail County Shoreline Restoration and Stabilization Demonstration Site	Multiple	Shoreline (Lake)	$22,500.00	$7,500.00	10 Native plant buffers planned by SWCD
6	Otter Trail County Water Plan Assistance Program	Private Landowner	Shoreline (Lake)	$2,822.50	$8,467.50	County water plan cost-share assistance

7	Little Pine Lake Access Stabilization and Restoration	City	Shoreline (Lake)	$6,700.00	$2,234.00	Replacing turf shoreline
8	Wellhead Area Expiring CRP Incentive	Private Landowner	Wellhead Protectio	$9,200.00	$12,667.00	Expiring CRP-Landowner Incentive
(Pooling agreement) 9	Shoreline Stabilization and Restoration	Private Landowner	Shoreline (Lake)	$24,000.00	$6,667.00	demonstration sites, eroding shorelines
(Pooling Agreement) 10	Storm Water Retention	City	Stormwater (SP)	$24,000.00	$6,667.00	Diverse plantings around stormwater ponds
(Pooling agreement) 11	Remnant Prairie Protection and Enhancement	Private Landowner	Remnant Prairie	$12,000.00	$3,334.00	prescribed burning, interseeding and invasive sp. control
Isanti						
1	Anderson Park Buffer	County	Shoreline (River)	$35,000.00	$8,750.00	North Branch Sunrise River Buffer
LeSuer						
1	Hugh Valiant - Native Prairie Restoration/Buffer	Private Landowner	Agricultural Buffer	$21,815.30	$10,420.00	CRP enhancement, Waterville Creek buffer
Martin						
1	Martin SWCD Native Buffer Cost share program	Private Landowner	Agricultural Buffer	$45,000.00	$15,000.00	Cost-share program for interested landowners
Nobles						
1	Grand Prairie Township Restoration	Private Landowner	Groundwater Prote	$6,000.00	$2,000.00	Gravel pit with low water table,
Ramsey						
1	Shoreline Restoration on McCarron's and Long Lakes and other High Priority Lakes Shorelines within Ramsey County	Private Landowner	Shoreline (Lake)	$80,000.00	$40,000.00	Focus on Long and McCarron's Lakes
2	Residential, Commercial and Institutional Property Stormwater Infiltration BMPs	Private Landowner	Stormwater (RG)	$20,000.00	$20,000.00	20-40 Residential Rain Gardens
Renville						
1	Local Ecotype Native Seeding and RIM Conversions	Private Landowner	Agricultural Buffer	$50,400.00	$16,800.00	Four projects buffering MN River

2	Remnant Prairie Management	Private Landowner	Remnant Prairie	$16,000.00	$5,333.00	Five landowners with remnants buffering MN River
3	Native Rain Garden Plantings	Private Landowner	Stormwater (RG)	$2,500.00	$833.00	Minnesota River water quality improvement
Sherburne						
1	Oak Savanna Restoration, Uncas Dunes SNA	DNR	Remnant Prairie	$49,068.00	$62,368.00	Remnant Adjacent to Lake Ann
Stearns						
1	North Lake Native Buffer Shoreline Restoration	City	Shoreline (Lake)	$15,939.00	$5,313.00	Educational lakeshore
2	Native Buffer Shoreline Restoration Projects	Private Landowner	Shoreline (Lake)	$54,000.00	$18,000.00	5 projects determined by SWCD
Waseca						
1	Dave Arndt RIM Enhancement	Private Landowner	RIM Enhancement	$19,610.00	$4,902.50	Existing RIM
2	Dawn McGregor Lakeshore	Private Landowner	Shoreline (Lake)	$5,000.00	$1,250.00	Lake Elysian - 350 feet
3	Lake Elysian Shoreline Planting	Private Landowner	Shoreline (Lake)	$5,000.00	$1,250.00	Lake Elysian - 350 feet
Washington						
1	St.Croix River Islands Buffers	Federal (NPS)	Shoreline (River)	$15,000.00	$5,000.00	St. Croix River islands erosion
2	Lake St. Croix Beach Shoreline Buffer	City	Shoreline (River)	$18,750.00	$6,250.00	Slumping bluff adjacent to river
3	Long Lake Shoreline Buffer	City	Shoreline (Lake)	$43,500.00	$14,500.00	Reed canary grass conversion
4	Big Marine Lake Feedlot Buffer	Private Landowner	Feedlot Buffer	$11,250.00	$3,750.00	Buffer/cattle exclusion area
5	Washington County Parks Cropland Conversion Buffers	County	Agricultural Buffer	$10,000.00	$10,000.00	Farmland currently draining to St. Croix River
Yellow Medicine						
1	Bergeson/Bakken Remnant Prairie Restoration	Private Landowner	Remnant Prairie	$7,923.00	$1,260.00	Remnant 1000 ft from Minn. River
2	Doom Remnant Prairie Restoration	Private Landowner	Remnant Prairie	$7,947.00	$950.00	Buffer Canby Creek
			Total	$753,523.80	$356,443.00	

Minnesota Board of Water & Soil Resources

DATE: December 12, 2008 .

TO: BWSR Grants Program and Policy Committee

FROM: Matt Drewitz, Jeff Hrubes, and Marcey Westrick – Clean Water Specialists

SUBJECT: **DECISION ITEM**: Clean Water Legacy (CWL) Agricultural Watershed Restoration (AWR) Phase II Awards

The purpose of this memorandum is to provide the BWSR Grants Program and Policy Committee with a brief update on the activities that have taken place regarding the Agricultural Watershed Restoration project and to request the committee to approve the phase II funding recommendations listed in Table 1.

In January, 2008, the BWSR Grants Program and Policy Committee recommended and the full BWSR Board approved entering into grant agreements with 6 organizations to carry out the AWR project. In July, 2008, BWSR staff drafted an example RFP and distributed to the sponsoring organizations, who then further refined the RFP for their particular area. The local sponsors then distributed their RFP through their regular communication channels to interested technical consultants.

The technical consultants were asked to investigate multiple scenarios within each watershed in order to develop proposed implementation activities that would achieve water quality standards through hydrologic modification. All proposals have been returned to the local sponsors and proposal evaluations have been finalized by the review committees and consultant teams have been selected. See Table 1 for technical consultant selections by watershed and the associated grant requests to undertake these projects. Funding will be granted to the local sponsor to hire the consultant to do the modeling effort (Column A) and to the local sponsor to collect and package data for the modeling effort, conduct outreach efforts for the project, work with local landowners to identify implementation areas, and report results in eLINK or other required reports (Column B). A maximum grant of 20% of the AWR modeling project has been set for the administrative and planning portion of the grant.

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Table 1. AWR Consultant Selection and Grant Requests for Projects

LGU	Watershed	Consultant Selected	Project Cost for Consultant (A)	Local Sponsor Grant*(B)
Clearwater SWCD	Lost River	EERC – U of ND	$64,340	$16,085
Stearns SWCD	Hoboken Creek	Kieser and Associates	$74,000	$18,500
Whitewater JPB	Logan Creek	Barr Engineering	$54,675	$13,669
Scott WMO	West Raven Creek	Houston Eng.	$78,500	$19,625
Cedar River Watershed District	Dobbins Creek	HDR	$87,170	$21,792
Brown-Nicollet Cottonwood WQ Board	7 Mile Creek	Barr Engineering	$66,900	$16,725
A + B = **$531,981** for all costs *Grant maximum of 20% of Project Cost		**Total Costs**	$425,585	$106,396

If approved, this funding recommendation will be presented to the full BWSR board at their December 17th meeting. Watershed modeling, stakeholder participation and other Phase II activities will commence upon execution of grant agreements between BWSR and the local sponsors. Implementation of identified land management and conservation BMPs will begin to be implemented during Phase III of the project, which will commence later in 2009 upon completion of Phase II.

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Minnesota Board of Water & Soil Resources

DATE: December 12, 2008

TO: Grants Program and Policy Committee

FROM: Matt Drewitz, Jeff Hrubes, and Marcey Westrick – Clean Water Specialists

SUBJECT: **Decision Item** - Clean Water Legacy Reporting and Closeout Policy Document

The purpose of this memorandum is to update the BWSR Grants Program and Policy Committee (GPPC)on the history of the Clean Water Legacy Reporting and Closeout Policy Document (Attachment 1). In addition, we are looking for the GPPC to endorse this document so it can be taken to the BWSR Board for their consideration at their January 2008 meeting.

The need to come up with a close out policy for the Clean Water Legacy competitive grant funds was discussed in February of this year. With input from Steve Woods and the Clean Water Legacy Subcommittee, we came up with an idea of what this would look like and in the beginning of April, took this to Wayne Zellmer. At this time, it was suggested by Wayne that we also create a brief policy/handbook document for CWL funds. Below is the history leading up today:

- The concept version of this document was presented at the dry staff meeting held in Saint Cloud on April 30th.
- On June 5th, the Clean Water Specialists presented the document to the Grants Committee, received feedback and made edits.
- On July 1st, the Clean Water Subcommittee group met and reviewed the document. Feedback was received and edits were made.
- On July 17th, the Clean Water Specialists presented the document to the Grants Committee who endorsed the document. Some minor suggestions were given and edits were made.
- On August 19th, the Clean Water Specialists met with the three regional supervisors to discuss the policy document. Suggestions were given to make some minor edits and take the document to Steve.
- On August 25th, the Clean Water Specialists met with Steve who recommended taking the document to the September 16th, 2008 SMT meeting for their endorsement.
- On September 16th, 2008 SMT reviewed the document and recommended taking the document to the BWSR Grants Program and Policy Committee.

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Clean Water Legacy Policy for Competitive Grants – Clean Water Legacy Assistance Grants

1.0 Purpose

The Clean Water Legacy Act (CWL)(M.S. 114D) was adopted by the State Legislature in 2006. Through this Act, the State employed an interagency strategy to fund implementation efforts to address impaired waters and water quality protection activities. This policy was developed by BWSR to provide clear guidance for implementation funds appropriated to BWSR associated with Clean Water Legacy.

This policy document establishes a set of policies for competitive grants; also know as Clean Water Legacy Assistance Grants. BWSR will use grant agreements as contracts for assurance of deliverables and compliance with appropriate statutes, rules and established policies. Willful disregard of relevant statutes, rules and policies may lead to imposition of financial penalties on the grant recipient. State statute 114D.20, authorizes BWSR to "impose monetary damages in an amount up to 150 percent of the financial assistance received for failure to comply."

2.0 Eligible Activities

Policy. The primary purpose of activities funded with Clean Water Legacy Assistance Grants (LAG) is the control or prevention of chemical or nutrient runoff, soil erosion, sedimentation, runoff volume or materials that affect human or aquatic system health. Eligible projects can consist of structural practices, technical assistance or non-structural measures and best management practices. Local government units are eligible to receive grant funds if they are working under a current state approved, locally adopted water management plan. All practices must be consistent with an approved TMDL implementation plan, or a current watershed or county comprehensive local water management plan that has been state approved and locally adopted.

1. All structural practices must be designed and maintained for a minimum effective life of ten years,

2. An operation and maintenance plan for the life of the structural practice is included with the design standards, and

3. An inspection schedule shall be included as a component of maintaining the effectiveness of the conservation practice.

3.0 Incentive Payments

Policy. Incentives using CWL funds may be used to encourage landowners to install structural practices or to adopt land management practices that improve water quality. Incentive payments

should be reasonable and justifiable, approved by LGU Board policy, consistent with prevailing local conditions and must be associated with established practices.

4.0 Financial Assistance for Structural Practices

Policy. MS 114D.20, Subd 6 (3) identifies priorities for projects that: "most effectively leverage other sources of restoration funding, including federal, state, local, and private sources of funds." In order to encourage long-term operation and maintenance of structural practices, matching cash or in-kind contributions provided by the landowner, land occupier or other sources at a rate acceptable to the LGU may be used to match Legacy Assistance Grant funds for practice installation. The amount of funding leveraged by the CWL application will be considered as part of the application process.

1. For non-priority practices or areas, combined state and federal funding may not exceed 75% of the total project costs.
2. Priority practices or priority sub-watersheds that maximize pollution reduction identified in the TMDL implementation plan or local water management plan may provide up to 90% combined state and federal funding assistance. Priority areas and practices must be identified in the CWL application with reference citations and the pollution reduction must be documented.
3. Specific CWL funding categories identified in the grant announcement and guidance (i.e. Subsurface Sewage Treatment System (SSTS) upgrade grants for low income households may exceed the above assistance limits.

5.0 Board Approval

Policy. BWSR finds that the Board of LGUs has both the authority and responsibility to approve expenditure of funds within their own organization.

1. The board of the LGU administering the grant must approve or deny expenditure of funds. The action taken must be documented in the LGUs meeting minutes.
2. Individual member organizations of Joint Powers Boards or project partners may make agreements with the primary grant recipient to approve implementation of conservation practices at the member level. The details of the agreement should be agreed upon before administration of the CWL funds begins.
3. Grant reporting and administration is the responsibility of the grant recipient organization.
4. Contracts to provide financial assistance to landowners or other local governments are expected to be developed or modified from existing documents to meet CWL requirements. BWSR recommends all contracts be reviewed by the organization's legal counsel.

6.0 Technical Expertise

Policy. BWSR finds that the Boards and staff of LGU's have the responsibility to ensure that the designated technical staff for a project have the appropriate technical expertise, skills and training for their assigned role(s). Further, BWSR requires that structural practices be designed and installed

consistent with appropriate standards.

1. BWSR reserves the right to review the licensure of all technical staff selected by the LGU where appropriate.
2. BWSR reserves the right to consult with other agencies or entities regarding technical questions and expertise where appropriate.

7.0 Structural Practice Construction and sign-off

Policy. BWSR realizes that how a structural practice is designed and constructed can have a significant impact on the performance of the practice

1. The technical staff will attest that the practice was properly installed and completed according to the plans and specifications, including technically approved modifications, prior to authorization for payment.

8.0 Post Construction and Follow Up Activities

Policy. Identifying operation and maintenance needs is necessary to plan and schedule effective operation and maintenance activities. BWSR also finds that it is necessary to follow up on practices once they have been installed by conducting periodic site inspections.

1. Technical staff must prepare an operation and maintenance plan tailored to fit the conservation practice and the site where it is located. The operation and maintenance plan should be as detailed as necessary to identify all of the maintenance activities that are likely to be needed and specify how to accomplish them. The plan should be prepared and reviewed with the land owner or occupier before installation of the conservation practices begins.

2. Technical staff are to determine that the operation and maintenance plan is being followed and that the practices have not been altered or removed.

9.0 Project Close Out Reporting Requirements

Policy. To ensure the continued success of the Clean Water Legacy Program, it is important for the LGU and BWSR to show the accomplishments and benefits of the program. As such, BWSR requires that the LGU show the accomplishments and benefits of their projects by documentation. BWSR has developed a two-tiered reporting system for LGUs to follow.

Tier 1 Contracts: Those projects that use CWL funds exclusively to hire staff to provide technical assistance or to implement activities where the grant recipient is the primary initiator of the project, and maintains substantial operational control over all aspects of the practice installation, operation and maintenance.

Tier 2 Contracts: Those projects that utilize secondary financial assistance contracts with landowners or other units of government to implement project activities.

10.0 BWSR Program Close-out Procedures

Policy. BWSR will review at least 10% of CWL grant agreements in detail for compliance with contractual requirements on an annual basis

1. Elements described in Table 1 will be reviewed in the program Close-out.
2. Project files for CWL expenditures including landowner contact information, contracts, bills and invoices, inspection schedule, O&M information, design plans and miscellaneous communication must be retained by the LGU pursuant to MS 138.17 and consistent with ongoing record retention schedules.

Table 1. CWL Grant Administration Comparison

	Tier 1 Grant Contracts	Tier 2 Grant Contracts
Work Plans	Work Plans will be submitted and a summary of measurable results will be reported semi annually in e-link or its successor. BMPs will be mapped via the Land and Water Module or its equivalent.	Work Plans will be submitted and a summary of measurable results will be reported semi annually in e-link or its successor. BMPs will be mapped via the Land and Water Module or its equivalent
Interim Reports	Additional interim reports will not be required.	Additional interim reports will be submitted electronically outside of e-link or its equivalent. BWSR CWL staff will develop a template that can be used as an interim report and updated for a final report.
Final Reports	Final Report will be published on the grant recipient's web site in a format provided by BWSR.	Final Report will be published on the grant recipient's web site in a format provided by BWSR.
Interaction with BWSR Staff	BWSR staff will meet with grant recipients periodically (as specified in grant agreement—minimum requirement will be annually) to discuss attainment of project goals and timelines and review project budget.	BWSR staff will meet with grant recipients periodically (as specified in grant agreement—minimum requirement will be annually) to discuss attainment of project goals and timelines and review project budget.
Grant Actions Table		A table that summarizes LGU actions on legacy assistance contracts and implementation activities funded with CWL grants. This should be updated periodically, at a minimum when interim reports and final reports are due. This form will be provided by BWSR
Web Publishing of Project Information	All project final reports and program materials will be posted on the grant recipient's web site. Final report template will be provided by BWSR. . • Board minutes authorizing expenditures of CWL funds. • Final Report in template provided by BWSR	All project final reports and program materials will be posted on the grant recipient's web site. Final report template will be provided by BWSR. • Board minutes authorizing expenditures of CWL funds. • Final Report in template provided by BWSR
Project Final Review Requirements	BWSR review could be of on-line documents • Measurable results summary in Elink or equivalent • Final Report template • Spreadsheet or accounting software reports showing project expenditures	BWSR review could be of on-line documents. • Measurable results summary in Elink or equivalent • Final Report template • Grant Action Table • Spreadsheet or accounting software reports showing project expenditures
Final Review Procedure	Final Report will be reviewed by CWL staff to determine if the project has accomplished all contractual grant agreement requirements. Upon satisfactory completion, a letter will be sent to the grant recipient verifying that the project has been	Final Report will be reviewed by CWL staff to determine if the project has accomplished all contractual grant agreement requirements. Upon satisfactory completion, a letter will be sent to the grant recipient verifying that the project has been closed out.

	closed out. BWSR reserves the right to review specific project documents at a future time.	BWSR reserves the right to review specific project documents at a future time.

Clean Water Legacy Grant Recommendation
Background:

- Grant Period ran from October 1st through November 7th
- Staff conducted approximately 7 statewide information outreach sessions starting immediately after the September board meeting
- Those outreach sessions were coordinated with MPCA staff to provide information about the Surface Water Assessment Grants (volunteer monitoring) that was running at the same time.
- There were 21 Clean Water Legacy applications requesting 5.8 million dollars.

Total Funding	BWSR LAG	BWSR TA	BWSR FLWQ	MPCA 319
$3,196,000	$558,000	$442,000	$196,000	$2,000,000

- Only restoration funds were available for Fiscal Year 2009.
- The interagency ranking team consisted of DNR, MPCA, MDA and BWSR staff.
- Applications and scoring criteria were distributed to regional agency staff for input into the scoring process. Matt, Jeff, and Marcey met with BC staff for their input into the ranking process.
- The Interagency Team met on Monday December 10th to finalize ranking and allocate funds from the various funding programs.

2009 CWL Funding Recommendations

				Fund Type	MPCA 319	BWSR LAG	BWSR Tech Asst.	BWSR Feedlot
				Amt. Available	$2,000,000	$558,000	$442,000	$196,000
				Amt. Remaining	$389,591	$0	$18,500	$146,000
Project I	Applicant	Final Rank			MPCA 319 Request	BWSR LAG Request	BWSR Tech Asst. Request	BWSR Feedlot Request
09R15	Southeast Minnesota Water Resources Board	1			$300,000			
09R07	Renville County - Hawk Creek Watershed Project	2			$148,525			
09R14	Todd County Soil & Water Conservation District	3			$300,000	$300,000		
09R19	City of New Hope	4				$55,155		
09R10	Fillmore Soil and Water Conservation District	5					$85,000	
09R05	Goodhue County Soil & Water Conservation District	5						$50,000
09R09	Rock River TMDL Organization	7			$147,372			
09R02	Redwood-Cottonwood Rivers Control Area	8			$253,440			
09R03	Pomme de Terre Watershed Project	8			$286,322			
09R01	Soil & Water Conservation Districts in Lincoln, Lyon &Yellow Medicine Counties	8				$100,000	$20,000	
09R20	Carver County Land and Water Services	8					$120,000	
09R08	GREATER BLUE EARTH RIVER BASIN ALLIANCE	12			$108,000	$102,845	$20,000	
09R04	SE SWCD TECHNICAL SUPPORT JOINT POWERS BOARD	16					$150,000	
09R06	Wilkin SWCD	17			$66,750		28,500	

1. **D.6 Livestock Waste Management Eligible Components** – Because, the practice standard for eligible component Wastewater and Feedlot Runoff Control (784) no longer exists (this was an interim standard), Filter Strip (393) has been replaced by Waste Treatment Strip (635), and Runoff Management System (570) applicability is now mainly for construction sites, the SMT is recommending the following be added/removed as eligible components to the D.6 Livestock Waste Management State Cost Share Program practice category:

   Add:

   Pumping Plant (533)
   Underground Outlet (620)
   Manure Transfer (634)
   Composting Facility (317)
   Subsurface Drain (606)
   Waste Treatment (629)
   Waste Treatment Strip (635)

   Remove:

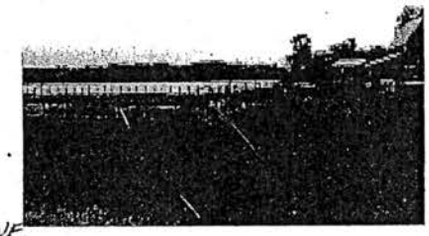
   Runoff Management System (570)
   Filter Strip (393)
   Wastewater and Feedlot Runoff Control (784)

   These additions/removals don't really change anything that we have or have not already been doing, but they bring our policy up-to-date. **Decision**.
   (See attached Adobe file D.6 Eligible Components.)

D. 6 Livestock Waste Management

Conservation Practice

Livestock Waste Management: The application of eligible conservation practice components to improve water quality associated with livestock wastewater and runoff.



Eligible Component(s):

Diversion (362)
Runoff Management System (570) REMOVE
Waste Storage Facility (313)
Filter Strip (393) REMOVE
Fencing (382)
Heavy Use Area Protection (561)
Roof Runoff Management (558)
Wastewater and Feedlot Runoff Control (784) DELETED

(In certain circumstances, other eligible components may be applicable. If other eligible components are needed, please see Part V.E. Other Recognized Technical Practices.)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

STATE FEEDLOT COST-SHARE POLICIES

General Policies

1) Cost-sharing is limited to correction of existing pollution problems at feedlots that are at least 5 years old.
2) Cost-sharing is limited to feedlots that are not classified as a Large Concentrated Animal Feeding Operation (CAFO) and have less than 1000 animal units, in accordance with state feedlot rules.
3) Feedlot pollution abatement projects must acquire all applicable permits and comply with all applicable environmental standards to be eligible for cost-share.
4) Partial systems that correct only a portion of an existing feedlot pollution problem are eligible for cost-share only if allowable by the applicable regulatory authority.
5) The maximum cost-share rate is 75% for eligible practices. (Applies to combined state and federal cost-share from any source.)
6) The maximum cost-share amount is limited to the amount authorized by the district board for the most feasible and practical alternative that achieves the cost-share program objectives, not to exceed $50,000 per feedlot project, including interim and final measures.
7) Cost-sharing is authorized for eligible runoff control, waste storage and treatment practices for manure and process wastewaters, including milkhouse wastewater and silage leachate, and for associated transfer components.
8) Cost-sharing is not authorized for production facilities or equipment including, but not limited to, buildings, feed storage, feeding facilities and equipment, or manure application equipment, except that cost-sharing is authorized for waste storage structures that serve as foundations for buildings, up to the eligible cost-share for a functionally comparable waste storage structure that does not serve as a foundation for a building.
9) Cost-sharing is not authorized for manure or process wastewater collection facilities, except for the inlet of eligible systems to transfer manure or process wastewater to storage or treatment facilities.
10) Innovative waste management systems with multiple benefits, or design standard variances, can be considered by submitting a written request to the BWSR Grants Coordinator.

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

PUMPING PLANT
(No.)
CODE 533

DEFINITION

A pumping facility installed to transfer water for a conservation need.

PURPOSE

Provide a dependable water source or disposal facility for water management.

CONDITIONS WHERE PRACTICE APPLIES

Wherever water must be pumped to accomplish a conservation objective, which may include but is not limited to one of the following:

- To provide a water supply for such purposes as irrigation, recreation, livestock, or wildlife.
- To maintain critical water levels in swamps, marshes, open water, or for newly constructed wetlands and ponds.
- To transfer wastewater for utilization as part of a waste management system.
- To provide drainage by the removal of surface runoff water or groundwater.

CRITERIA

Design, installation, and operation of a pumping plant shall comply with all federal, state, and local laws, rules and regulations.

The efficiency of units, type of power, quality of building, automation features, and other accessories installed shall be in keeping with the economic and environmental value of the system to accomplish the conservation objectives.

Criteria for the design of components not addressed in NRCS practice standards shall be consistent with sound engineering principles.

Pump requirements. Capabilities, range of operating heads, and general class and efficiency of equipment shall be determined by appropriate technical means. Size and number of pumps and their performance shall be determined on the basis of system conservation requirements in order to meet the intended purpose. Total head shall be determined for critical operating conditions, taking into account all hydraulic losses. Automatic controls shall be included as required.

Pumps utilized for the transfer of wastewater or manure shall be sized to transfer material at the required system head and flow rate determined by the waste management plan. The pump type shall be based on the consistency of material being pumped and manufacturer's recommendations.

Power units. Power units shall be selected on the basis of availability of fuel or power costs, operating conditions, conservation needs, and objectives, including the need for automation. The power unit shall be matched to the pump and be capable of operating the pump efficiently and effectively within the range of operating conditions. The horsepower requirements, pump efficiency and total head on the pump shall be computed.

Suction and discharge pipes. The size of suction and discharge pipes shall be based on a hydraulic analysis, operating cost, and compatibility with other system components. The arrangement and length of discharge pipe shall be based on the need for recovery of head through siphoning action, and for delivery of water in keeping with conservation

NRCS-Minnesota
March 2004

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

UNDERGROUND OUTLET
(no.)
CODE 620

DEFINITION

A conduit installed beneath the surface of the ground to collect surface water and convey it to a suitable outlet.

PURPOSE

To dispose of excess water from terraces, diversions, subsurface drains, surface drains, trickle tubes or principal spillways from dams (outside the dam area only), or other concentrations without causing damage by erosion or flooding.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies where: (1) excess surface water needs to be disposed of; (2) a buried outlet is needed for Diversions (362), Terraces (600), or similar practices; (3) an underground outlet can be installed that will safely dispose of excess water; and (4) surface outlets are impractical because of stability problems, climatic conditions, land use, or equipment traffic. It does not apply to trickle tubes or to principal spillways in Pond (378) or in Subsurface Drain (606).

DESIGN CRITERIA

Capacity. The underground outlet shall be designed, alone or in combination with other practices, with adequate capacity to insure that the terrace, diversion, or other practices function according to the standard for the specific practice. For example, an underground outlet can be used in combination with a grassed waterway or a surface drain to carry part of the design flow. The capacity of the underground outlet for natural basins shall be adequate for the intended purpose without causing excessive damage to crops, vegetation, or improvements.

Simplified flood routing techniques may be used to determine the relationship between flooding duration, underground release rate, and basin storage volume. Table M-1, found the NRCS Engineering Field Handbook, Chapter 8, "Terraces", MN–EFH Notice 3, page 8-72.1 may be used for this purpose.

Inlet. An inlet can be a collection box, a perforated riser, a blind inlet (gravel), or other appropriate devices. Its capacity shall be adequate to provide the maximum design flow in the conduit. Flow-control devices shall be installed as necessary. Perforated risers must be of durable material, structurally sound, and resistant to damage by rodents or other animals. If burning of vegetation is likely, the inlet shall be fire resistant.

Blind inlets can be used where they are effective. Collection boxes must be large enough to facilitate maintenance and cleaning operations.

The inlet must have an appropriate trash guard to insure that trash or other debris entering the inlet passes through the conduit without plugging. The trash guard must be adequate to also prevent the entry of rodents or other animals.

Inlets shall be offset from the main conduit a minimum of 8 ft, except for the top inlet in the system. At least 8 ft. of sealed conduit shall be installed downstream from any vertical inlet.

Perforated risers or blind inlets shall be used where crop residues or other trash could plug ground level inlets. The minimum diameter of perforated risers shall be 5 inches. To compensate for possible plugging, slots or holes in risers shall be adequate to provide at least twice the design flow with the water depth in the basin at the design depth. Minnesota supplement to the NRCS Engineering Field Handbook, page 8-102.2 provides a chart of maximum tile intake capacities.

Hydraulics. Underground outlets shall be continuous conduits, tubing, or tile. Joints shall be hydraulically smooth, and the materials and methods used shall be recommended by the manufacturer.

If a pressure system is used, joints shall be adequate to withstand the design pressure, including surges

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

MANURE TRANSFER
(No.)
CODE 634

DEFINITION

A manure conveyance system using structures, conduits, or equipment.

PURPOSE

To transfer animal manure (bedding material, spilled feed, process and wash water, and other residues associated with animal production may be included) through a hopper or reception pit, a pump (if applicable), and a conduit to;

a manure storage/treatment facility,

- a loading area, and
- to agricultural land for final utilization. This includes application of manure to the utilization area.

CONDITIONS WHERE PRACTICE APPLIES

The manure transfer component is a part of a planned agricultural manure management system.

Where manure is generated by livestock production or processing; and a conveyance system is necessary to transfer manure from the source to a storage/treatment facility and/or a loading area, and/or from storage/treatment to an area for utilization.

CRITERIA

Criteria for all purposes

Manure transfer components shall comply with all federal, state, and local laws, rules and regulations.

Structures - All structures, including those which provide a work area around pumps, will be designed to withstand the anticipated static and dynamic loading. The structure shall withstand earth and hydrostatic loading in accordance with Practice Standard 313, Waste Storage Facility. The minimum thickness of component elements of concrete structures shall also be in accordance with Practice Standard 313. When needed, covers shall be designed to support the anticipated dead and live loads.

Reception pits shall be sized to contain one full days manure production.

Openings to structures to receive manure from alley scrape collection shall be a minimum of 9 square feet with one dimension no smaller than 4 feet. The opening shall be equipped with a grate designed to support the anticipated loads.

When curbs are needed in conjunction with structures, they shall be constructed of either concrete or wood. Curbs shall be of sufficient height to insure total manure flow into the structure and be adequately anchored.

Pipelines - Design of pipelines shall be in accordance with Practice Standard 430, Irrigation Water Conveyance. The minimum pipeline capacity from collection facilities to storage/treatment facilities shall be the maximum flow anticipated on a daily basis. The minimum pipeline capacity from storage/treatment facilities to utilization areas shall insure the storage/treatment facilities can be emptied within the time limits stated in the management plan for manure utilization. Pipelines shall be designed to have a minimum of 2 feet per second and a maximum of 6 feet per second velocity except where ruminant manure is transferred in a gravity system; in which case velocities can be reduced if a minimum of 5 feet of head is provided on the pipe system.

Clean-out access shall be provided for gravity pipelines at a maximum interval of 200 feet for lines carrying non-bedded manure. For pipelines carrying bedded manure the maximum interval shall be 150 feet. Gravity pipelines shall not have horizontal curves or bends except minor deflections (less than 10 degrees) in the pipe joints unless special design considerations are used.

Other Conduits - Concrete lined ditches shall be designed in accordance with Practice Standard 428A, Irrigation Water Conveyance-Non-reinforced Concrete Ditch and Canal Lining. A minimum design velocity of 1.5 feet per second shall be used.

NRCS-Minnesota
August 2003

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

COMPOSTING FACILITY

(No.)
CODE 317

DEFINITION

A facility to process raw manure or other raw organic by-products into biologically stable organic material.

PURPOSE

To reduce the pollution potential of organic agricultural wastes to surface and ground water.

The material for composting may include livestock and poultry manure, dead animal carcasses, and food processing wastes where food is processed as part of normal farming operation. Municipal sludge, solid waste, and other non-farm type wastes are not included in this standard.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies where:

- Organic waste material is generated by agricultural production or processing.
- A composting facility is a component of a planned agricultural waste management system;
- A composting facility can be constructed, operated and maintained without polluting air and/or water resources;
- There is a need to improve air quality by reducing the emissions of odorous gases; and,
- The facility is operated as a component of an agricultural management system.

CRITERIA

General Criteria Applicable to All Purposes

Laws and Regulations. The installation and operation of the composting facility shall comply with all federal, state and local laws, rules and regulations.

Safety. Safety and personal protection features and practices shall be incorporated into the facility and its operation as appropriate to minimize the occurrence of equipment hazards and biological agents during the composting process.

Facility Siting. The bottom elevation of the composting facility shall be above the seasonal high water table and on soils with an acceptable permeability that does not allow materials to contaminate the ground water, and meets all applicable regulations, or the facility shall be installed on concrete slabs or other appropriate liners.

Ideally, compost facilities should be located outside of floodplains. However, if site restrictions require location within a floodplain, they shall be protected from inundation or damage from a 25-year flood event, or larger.

Locate compost facilities so prevailing winds and landscape elements such as building arrangement, landforms and vegetation minimize odors and protect the visual resource.

Direct surface runoff away from the compost facility. Direct contaminated runoff from compost facilities to an appropriate storage or treatment facility for further management.

Compost Mix. Develop a compost mix that encourages aerobic microbial decomposition and avoids nuisance odors.

Carbon-Nitrogen Ratio. The initial compost mix shall result in a carbon to nitrogen (C:N) ratio between 25:1 and 40:1. Compost with a greater carbon to nitrogen ratio can be used if nitrogen immobilization is not a concern.

NRCS-Minnesota
August 2004

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

SUBSURFACE DRAIN
(Ft)
CODE 606

DEFINITION

A conduit, such as corrugated plastic tubing, tile, or pipe, installed beneath the ground surface to collect and/or convey drainage water.

SCOPE

This standard applies to the design and installation of conduits placed beneath the surface of the ground to provide drainage.

PURPOSE

The purpose of subsurface drainage is to:

1. Improve the soil environment for vegetative growth, reduce erosion, and improve water quality by:

   a. regulating water table and ground water flows,
   b. intercepting and preventing water movement into a wet area,
   c. relieving artesian pressures,
   d. removing surface runoff,
   e. leaching of saline and sodic soils,
   f. serving as an outlet for other subsurface drains, and
   g. regulating subirrigated areas or waste disposal areas.

2. Collect ground water for beneficial uses.

3. Remove water from heavy use areas, such as around buildings, roads, and play areas; and accomplish other physical improvements related to water removal.

4. Regulate water to control health hazards caused by pests such as live fluke, flies, or mosquitoes.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to areas having a high water table where the benefits of lowering the water table or controlling ground water or surface runoff justify installing such a system.

This standard applies to areas suitable for the intended use after installation of required drainage and other conservation practices. The soil shall have enough depth and permeability to permit installation of an effective and economically feasible system. The ability to drain and treat saline and sodic soils shall be considered where this is a problem.

In areas where an outlet is available, either by gravity flow or by pumping, the outlet shall be adequate for the quantity and quality of effluent to be discharged. Consideration shall be given to possible damages above or below the point of discharge that might involve legal actions under state or local laws. Consideration shall be given to maintaining or enhancing environmental values.

DESIGN CRITERIA

The design and installation shall be based on adequate surveys and investigations.

Capacity. The required capacity shall be determined by one or more of the following:

1. Application of a locally tried and proven drainage coefficient to the acreage drained, including added capacity required to dispose of surface water entering through inlets.

The drainage coefficient is the rate at which excess water must be removed from cropland in order to provide the proper degree of protection for crops to be grown. Coefficients are expressed in inches (millimeters) of water to be removed in 24 hours. Minimum coefficients are as follows:

NRCS-Minnesota
October 1999

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Natural Resources Conservation Service
Conservation Practice Standard

WASTE TREATMENT

(No.)
Code 629

DEFINITION

The mechanical, chemical or biological treatment of agricultural waste.

PURPOSE

To use mechanical, chemical, or biological treatment facilities and/processes as part of an agricultural waste management system.

- To improve ground and surface water quality by reducing the nutrient content, organic strength, and/or pathogen levels of agricultural waste.
- To improve air quality by reducing odors and gaseous emissions
- To produce value added byproducts
- To facilitate desirable waste handling, storage, or land application alternatives.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to the treatment of milking center wastewater generated from the cleaning of empty milking lines and tanks and to the liquid portion of milk parlor wash water. It applies for facilities with less than 300 AU and not permitted under current MN NPDES permit.

This practice does not apply to the treatment of waste milk, manure, or human waste.

CRITERIA

The following criteria establishes minimum allowable limits for design parameters, acceptable installation processes, or performance requirements.

General Criteria.
All tanks shall meet the structural requirements for waste storage structures found in Practice Standard 313, Waste Storage Facility. Tanks shall be installed with a minimum of 2 feet of soil cover over the top to protect from freezing.

Pipelines shall be designed to avoid freezing.

The treatment system shall be located a minimum of 25 feet from drainage tile.

A sanitary trap is required to prevent gasses from flowing into the milking center from the treatment system.

All riser joints, access openings, and pipe connections shall be installed watertight.

Federal, State and Local Laws. All systems must comply with all national, state and local laws, rules and regulations. State and national laws, rules, and regulations shall be as interpreted by the Minnesota Pollution Control Agency (MPCA). This standard does not contain the text of the federal, state, or local laws, rules or regulations.

Treatment Systems. Treatment systems covered under this standard are:

1. Chemical Batch Reactor. Milking center wastewater only.
2. Bark bed. Milking center wastewater only.
3. Aeration and Media Filtration. Milking center wastewater only.

NRCS-Minnesota
November 2006

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the MN Natural Resources Conservation Service in your area, or download it from the electronic Field Office Technical Guide for Minnesota

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

WASTEWATER TREATMENT STRIP

(Ac.)
CODE 635

DEFINITION

A treatment component of an agricultural waste management system consisting of a strip or area of herbaceous vegetation.

PURPOSE

The purpose of this practice is to improve water quality by reducing loading of nutrients, organics, pathogens, and other contaminants associated with animal manure and other wastes, and wastewater by treating agricultural wastewater and runoff from livestock holding areas

CONDITIONS WHERE PRACTICE APPLIES

The control of wastewater and feedlot runoff is bracketed into five levels of control with Level 1 being full runoff control. The primary Minnesota NRCS practice standards addressing the control of wastewater and feedlot runoff and their respective levels of control are:

- Waste Storage Facility (313), Level 1
- Waste Facility Cover (367), Level 1, Feedlot Roof Structure
- Wastewater Treatment Strip (635), Levels 2 - 5

Wastewater and feedlot runoff from Concentrated Animal Feeding Operations (CAFO's) must be controlled using LEVEL 1 methods, unless all necessary permits have been obtained from the MPCA.

This practice applies:

- To provide levels 2 thru 5 control of contaminated runoff from such areas as feedlots, barnyards, and other livestock holding areas
- Where the treatment system is a component of a planned agricultural waste management system
- Where the treatment system can be constructed, operated and maintained without polluting air or water resources

Conditions where each level of treatment covered in this standard applies are as follows:

LEVEL 2—Vegetated Infiltration Area.

Runoff is pretreated in a settling basin. Liquids are discharged onto a confined vegetated area to be infiltrated into the soil root zone and utilized by vegetation. This is considered to be zero surface water discharge.

Acceptable uses:

1. Runoff from all feedlots designated as AFO's by MPCA where site conditions are appropriate and adequate land is available.
2. Where manure solids from the feedlot can be effectively trapped prior to discharge to the treatment area.

LEVEL 3—Controlled Discharge Vegetated Treatment Strip (sunny day release).

Runoff is stored in an impoundment for solids separation and during periods of dormant vegetation or filter strip saturation. Liquids are discharged onto a graded vegetated treatment strip with active growth in such a way as to eliminate or minimize discharge from the strip.

NRCS-Minnesota
November 2006

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NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

RUNOFF MANAGEMENT SYSTEM
(No. and acre)
CODE 570

DEFINITION

A system for controlling excess runoff caused by construction operations at development sites, changes in land use, or other land disturbances.

PURPOSE

To regulate the rate and amount of runoff and sediment from development sites during and after construction operations to minimize such undesirable effects as flooding, erosion, and sedimentation.

CONDITIONS WHERE PRACTICE APPLIES

The practice applies if there is a need to control runoff, erosion, and sedimentation to compensate for increased peak discharges and erosion resulting from construction operations at development sites or from other changes in land use. The discharges may be caused by such factors as increased runoff, reduced time of concentration, reduced natural storage.

DESIGN CRITERIA

Overall. A runoff management system must be compatible with the flood plain management program of the local jurisdiction and with local regulations for controlling sediment, erosion, and runoff. The system, a single component or a combination of components, must properly regulate storm discharges from a site to a safe, adequate outlet. Consideration shall be given to the duration of flow as well as the peak discharge. Adequate erosion-control measure and other water-quality practices must be provided. The components must be planned and designed to insure minimal impact on visual quality and human enjoyment of the landscape. Structures and materials must harmonize with surrounding areas.

The peak discharge from the 2-year and 100-year, 24-hour storms shall be analyzed. No increase in peak from these storms shall be allowed unless downstream increases are compatible with the overall flood plain management system.

Components. Components include but are not limited to dams, excavated ponds, infiltration trenches, parking lot storage, rooftop storage, and underground tanks.

Each component shall be designed according to sound engineering principles to insure that the system achieves its intended purpose. Design criteria for individual components shall be based on the following:

1. Dams shall meet the requirements specified in the National Engineering Manual, Part 520, Subpart C.

2. Excavated ponds shall meet the requirements specified in NRCS Conservation Practice Standard 378, Pond.

3. The design of infiltration trenches shall be based on such factors as soil permeability, soil depth, seepage, quality of water to be temporarily stored, foundations for adjacent buildings and structures, drainage conditions, and vegetation. Other considerations are:

   a. Only relatively clean water shall enter the trench to insure that oils, grease, and sediments do not seal trench walls and bottom and thus reduce the effectiveness of the practice. At parking lots and at other areas having a similar contamination potential, filter strips; sediment traps; grease traps or filter traps, or both, shall be installed to remove objectionable materials from the water before it reaches the infiltration device. A strip of close growing grasses at least 25 ft wide must be properly placed and maintained to insure the effectiveness of the

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

FILTER STRIP

(ACRES)

CODE 393

DEFINITION

A strip or area of herbaceous vegetation situated between cropland, grazing land, or disturbed land (including forestland) and environmentally sensitive areas.

PURPOSE

- To reduce movement of pathogens, particulate organics; sediment and sediment adsorbed nutrients; pesticides and other materials towards sensitive areas. *
- To reduce movement of dissolved nutrients and other dissolved material towards sensitive areas.
- To serve as Zone 3 of a Riparian Forest Buffer, Practice Standard 391
- To restore, create or enhance herbaceous habitat for wildlife and beneficial insects.

*Sensitive areas include but may not be limited to perennial and intermittent streams, lakes, and wetlands, wells, drainage ditches, grassed waterways, sinkholes, crevices, springs, surface tile inlets, surface water side inlets and other surface inlets which deliver surface runoff to ground water or surface water.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies when planned as part of a conservation management system:

- In cropland, grazing land, or disturbed land (including forestland) where contaminants are transported towards sensitive areas.
- In areas where permanent vegetative establishment is needed to enhance wildlife and beneficial insects.

This practice is unsuitable and does not apply:

- When greater than 50% of the runoff from the area to be filtered is or will remain concentrated in gullies or other channelized flow mechanisms.
- Where sheet and rill soil losses of areas contributing sediment to the filter strip are greater than 10 tons/acre/year.
- Where combined sheet, rill, and wind soil losses of areas contributing sediment to the filter strip are greater than 3 tons/acre/year and the area of the land contributing that sediment is ≥ 60 times the area of the filter strip (≥ 60:1 upland to filter strip ratio).
- On sites where it is historically difficult to maintain a stand of perennial grasses or legumes due to high water tables or frequency or timing of flooding.
- On unstable channel banks eroding due to undercutting of the bank toe.
- Where the predominant slope of the contributing area is ≥ 10% unless runoff is controlled to low levels (Runoff Curve Number of ≤ 70) or soil losses are controlled to the soil quality criteria level
- To conditions where treatment of high levels of pollutants is desired (e.g. animal feedlot

NRCS-Minnesota
December, 2002

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

2. **Rain Garden/Bioretention** – Follow-up on 2006 MASWCD resolution. GP&P Com. Supported resolution but tabled action because of no adequate practice standard. The SMT recommends that the new standard Bioretention Basin (712), now adopted by NRCS, should be added as eligible components to D.7 Filter Strips and D.8 Sediment Basins. **Decision.**

   (See attached file Bio Basin.pdf.)

NATURAL RESOURCES CONSERVATION SERVICE
MINNESOTA INTERIM CONSERVATION PRACTICE STANDARD

BIORETENTION BASIN
(No.)
CODE 712

DEFINITION

A bioretention basin is a constructed stormwater management practice that accepts and treats stormwater runoff through filtration and/or infiltration. The basin is not in a direct flow path for runoff, but is sufficiently adjacent for efficient water diversion.

PURPOSE

A bioretention basin may be applied individually or as part of a system of stormwater management practices to support one or more of the following purposes:

- Enhance stormwater infiltration and/or filtration
- Reduce discharge of stormwater pollutants to surface and ground waters
- Decrease runoff peak flow rates and volumes
- Preserve base flow in streams
- Reduce temperature impacts of stormwater runoff

CONDITIONS WHERE PRACTICE APPLIES

Bioretention basins are suitable for drainage areas less than 2 acres in size where increased urban stormwater pollutant loadings, thermal impacts, runoff volumes, and peak flow discharges are a concern and the area is suitable for infiltration. Bioretention basins are best suited to providing on-site stormwater management opportunities adjacent to source areas such as landscaped areas, rooftops, parking lots, and streets.

Bioretention basins are not suitable for controlling construction site erosion. These basins will not treat chlorides, and will be damaged by heavy loading of salt-based de-icers.

CRITERIA

General Criteria Applicable to All Purposes

Site Criteria. The bioretention basin shall be located a minimum of fifty (50) feet from any private onsite wastewater treatment system and shall not be hydraulically connected to the treatment system's dispersal system or cause negative impacts such as cross contamination.

The bioretention basin shall not be hydraulically connected to any building or pavement foundation or cause negative impacts to structures.

Sloped areas immediately adjacent to the bioretention basin shall be less than 20% (excluding berms constructed as part of the bioretention basin) but greater than 0.5% for pavement and greater than 1% for vegetated areas to ensure positive flow toward the basin.

The area draining to the bioretention basin shall not exceed 2 acres, including up to 1 acre of impervious surface. The drainage area shall not contain significant sources of sediment. The watershed above a basin should be stabilized to the maximum extent possible.

Design. The bioretention components may include pretreatment, flow regulation, ponding area, planting bed vegetation and surface mulch layer, engineered soil planting bed, storage layer, underdrain, sand/native soil interface layer and observation well. See Figures 1, 2, and 3.

If the bioretention basin is constructed to provide treatment for new impervious surfaces, it shall be sufficient to infiltrate a volume of ½ inch of runoff (1 inch for protected waters) from the new surfaces. If the bioretention basin is to provide runoff treatment for existing impervious surfaces, a design volume of ½ inch runoff is required.

The minimum depth to bedrock or seasonally high ground water table shall be 3 feet. The minimum surface area (at the high water level (HWL)) of the bioretention practice shall be 200 square feet.

NRCS-Minnesota
June 2008

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the MN Natural Resources Conservation Service in your area, or download it from the electronic Field Office Technical for Minnesota.

Flow Regulation. The flow at the inlet to the bioretention basin shall be controlled to prevent erosion and achieve uniform distribution across the surface of the soil planting bed.

The overflow system shall meet the following requirements:

- A weir or standpipe shall be used to regulate the maximum ponding depth. The invert of the overflow structure shall be at the elevation of the maximum ponding depth of the bioretention basin.
- Water discharged from the overflow shall be conveyed to a stable outlet leading to a suitable conveyance such as a swale, storm drain, or surface water.
- Overflow control structures such as curtain drains, that bypass the soil planting bed and discharge directly to ground water are allowed only if the sole source of stormwater runoff is from rooftops without significant contamination from industrial activity.

Ponding Area. The design ponding depth shall not exceed 18 inches. The maximum drawdown time for each basin is 48 hours. The optimal design pond depth for overall system function is 6 to 9 inches.

The side slopes of the berm that form the ponding area shall be between 0.5H:1V and 3H:1V. The outer slopes are recommended to be 5H:1V or flatter.

Vegetation and Mulch. A vegetation plan and planting specifications shall be prepared. The following apply:

- The plan shall identify planting zones based on anticipated depth of water level fluctuations and duration of inundation.
- Rootstock and plugs shall be used in establishing trees, shrubs, and herbaceous perennials. Seed shall not be used to establish vegetation.
- If the bioretention basin receives runoff from non-residential source areas or streets, the plant density at maturity must be low enough to accommodate long-term maintenance or replenishment of the surface mulch layer. If the bioretention basin receives runoff only from residential land uses other than streets, the mulch layer can be discontinued at maturity provided that a dense vegetation layer is formed.
- Plants shall be native to the area when possible and capable of withstanding the environmental conditions of the bioretention basin such as insect and disease infestations, drought, water level fluctuations, and regional temperature variations.
- Turf grass shall not be used to vegetate the bioretention basin, although it may be used in the pretreatment area. Invasive plants and noxious weeds shall not be used.
- Woody vegetation shall not be specified at inflow locations. Trees and other vegetation shall not block flow paths, create traffic or safety issues, or obstruct utilities.
- The planting plan shall cover plant placement, planting sequence, time of year to plant, watering, and protection from other stresses such as animals, wind, and sun to maximize plant growth and survival. Use of fertilizer is not recommended.
- If the engineered planting media soil will be left to settle prior to planting, the surface shall be mulched.

Double shredded hardwood mulch shall be placed on the surface of the bioretention area. The mulch shall be MNDOT Type 6 or equivalent, spread evenly to a depth of 3 inches. The mulch shall be free of foreign material, including bark, chips, trash, and other plant material.

Engineered Planting Media. The surface slope of the basin shall not exceed 1%. After settling, sufficient soil must be present to support the rooting depth of the vegetation. The soil layer shall be at least 30 inches deep and without gravel to encourage deep root penetration. The soil layer shall be a minimum of 48 inches for installations with large trees.

The soil shall be engineered to the following specifications:

The engineered planting media shall consist of a mixture of sand and compost. The mix shall be 30% compost and 70% clean sand (USDA coarse sand 0.02 to 0.04 inches). For the compost component, MNDOT Grade 2 organic leaf compost or equivalent shall be used. The sand component shall consist of mineral sand that is at least 97% SiO2. Substitutions, such as calcium carbonated sand, dolomitic sand, manufactured sand, or stone dust are not allowed. The sand shall be washed to remove clay and silt particles, and well-drained prior to mixing.

The engineered planting media shall be free of rocks, stumps, roots, brush, or other material over 1 inch in diameter. No other materials shall be mixed with the planting media that may be harmful to plant growth or prove a hindrance to planting or maintenance.

Storage Layer. A porous sand or gravel storage layer, free of fines, situated beneath the underdrain will facilitate groundwater recharge because water in this storage area cannot exit via the underdrain, but only by infiltration into the native soil. The following requirements shall be met in designing the storage layer:

- The storage layer is required when the design infiltration rate of the native soil is less than 0.3 inches/hour.
- The design thickness of the storage layer shall be that which results in a total basin drain time of 48 hours, but shall not exceed 48 inches. In calculating the total basin drain time, assume that event runoff has ended and the bioretention basin is fully saturated prior to the initiation of drawdown.

Pretreatment. Pretreatment is mandatory and will extend the life of the bioretention basin, particularly when runoff is from parking lots and streets, or other areas expected to contribute sediment and other pollutants. Alternatives include, but are not limited to, a two-stage sand/peat box, grass channels, grass filter strips, sumps, or forebays. Sumps and forebays should be sized to trap coarse sand (0.02 to 0.04 inch). Table 1 provides guidelines for sizing filter strips.

Table 1a. Pretreatment Filter Strip Sizing : Stormwater Runoff Inflow Approach from Impervious Parking Lots

Maximum inflow approach length	35 feet	35 feet	75 feet	75 feet
Filter strip slope	≤2%	>2%	≤2%	>2%
Filter strip minimum length	10 feet	15 feet	20 feet	25 feet

Note: The maximum slope is 6% for a pretreatment filter strip

Table 1b. Pretreatment Filter Strip Sizing : Stormwater Runoff Inflow Approach from Lawns/Landscaped Areas

Maximum inflow approach length	75 feet	75 feet	150 feet	150 feet
Filter strip slope	≤2%	>2%	≤2%	>2%
Filter strip minimum length	10 feet	12 feet	15 feet	18 feet

Note: The maximum slope is 6% for a pretreatment filter strip

A level spreader must be used between the grass channel and the bioretention basin. The channel shall have:

- A parabolic or trapezoidal cross-section with a bottom width of 2 to 8 feet.
- Channel side slopes that are 3H:1V or flatter.
- Flow velocities under 1 foot per second for the 1- year 24-hour design storm.
- A flow depth of 4 inches or less for the 1-year 24-hour design storm.

Underdrain. A perforated underdrain pipe is required unless no suitable outlet for the pipe exists, or if the design infiltration rate of the native soil is determined to be at least 0.8 inches/hour, which is considered minimal design risk.

- The underdrain pipe shall be placed at the top of the sand storage layer, or suspended two feet below the basin floor, not on the bottom of the engineered soil at the native soil interface.
- The pipe shall have a minimum diameter of 8 inches and be made of flexible pipe or other material approved by the site designer. The pipe shall be capable of

withstanding expected traffic loads over the portions of the pipe extending beyond the soil planting bed.

- The underdrain orifice shall be restricted as necessary so that the design infiltration rate plus the underdrain flow rate equal the design draw down rate. The restriction shall be achieved by using an adjustable restrictor plate or valve. The restriction basin shall be accessible for adjustment.
- The total opening area of all perforation holes combined shall be sufficient to allow the underdrain pipe to discharge at full capacity, as would occur if no orifice restriction were used. The amount of perforation shall be increased to provide a margin of safety but shall not be so great as to compromise the structural integrity of the pipe material.
- The underdrain pipe shall be protected from clogging by use of filter fabric or a filter sock. Filter fabric shall cover the underdrain pipe and shall not extend laterally from either side of the pipe more than two (2) feet. The fabric shall meet the MnDOT specifications for Type 1 nonwoven geotextile.
- The underdrain pipe shall discharge to an existing drainage system. Examples of drainage systems include swales, storm sewers, subsurface dispersal fields, and surface waters. A check valve shall be installed when backflow is possible. Access for maintenance of the check valve shall be provided.
- A secondary underdrain can be installed and left capped, only to be made operational should the first become non-functional.

Native Soil Interface. All dissimilar soil interfaces must be mixed to a 6" or greater matrix. For example, the engineered planting media must be tilled into the native soil at least 6 inches before remaining lifts are placed. If a storage layer is used and it consists of a material that cannot be mixed into the native soil interface, three inches of sand shall be placed below the storage layer and vertically mixed with the native soil to a depth of 2-4 inches.

Construction Sequencing and Oversight. A person trained and experienced in the construction, operation, and maintenance of bioretention basins shall be responsible for construction oversight of the basin.

Construction site runoff from disturbed areas shall not be allowed to enter the bioretention basin. Runoff from pervious areas shall be diverted from the basin until the pervious areas have reached final stabilization, defined as uniform perennial vegetative cover with a density of at least 70%.

Construction shall be suspended during periods of rainfall or snowmelt. Construction shall remain suspended if ponded water is present or if residual soil moisture contributes significantly to the potential for soil smearing, clumping, or other forms of compaction.

Compaction and smearing of the soils beneath the floor and side slopes of the bioretention area and compaction of the soils used for backfill in the soil planting bed shall be minimized. During site development, the area dedicated to the bioretention basin shall be cordoned off to prevent access by heavy equipment. Acceptable equipment for constructing the bioretention basin includes excavation hoes with toothed buckets, light equipment with turf type tires, marsh equipment, or wide-track loaders. Minimize machinery use in the bioretention basin itself.

The soil shall be tilled or ripped to a depth of at least 12 inches on all sites, and possibly deeper if compaction has occurred. If smearing occurs, the affected areas shall be ripped with a frost-ripper and then tilled.

Prior to placement in the bioretention basin, the engineered soil shall be premixed and the moisture content shall be low enough to prevent clumping and compaction during placement. The engineered soil shall be placed in multiple lifts, each approximately 12 inches in depth. Steps may be taken to induce mild settling of the engineered soil bed as needed to prepare stable planting medium and to stabilize the ponding depth. Excavator buckets and vibrating plate-style compactors shall not be used to induce settling.

The entire soil planting bed shall be mulched prior to planting vegetation to help prevent compaction of the planting soil during the planting process. Mulch shall be pushed aside for the placement of each plant. Mulch shall be spread evenly to a

maximum 3 inch depth. To discourage pests and disease, do not mound mulch at the base of plants.

CONSIDERATIONS

A bioretention basin that promotes infiltration is especially suitable where other benefits are desired such as a windbreak for shade, noise absorption, reduction in reflected light, microhabitat for plants and wildlife, and improved aesthetics.

The bioretention basin should be placed such that it is visible to encourage routine maintenance. Place the site such that ample access is available to all parts of the bioretention basin. Consider traffic visibility and other safety issues when siting the bioretention basin. Some local ordinances prohibit obstruction of corners.

The bioretention basin may be constructed as a filtration and recovery system, with discharge to a storm sewer or surface outlet.

The underdrain pipe diameter shall be 8" minimum. Include extra storage for snowmelt runoff; this may involve setting the underdrain above the bottom of the basin.

The bioretention basin is not suitable for treating chlorides. Aggressive sweeping, along with pretreatment options will reduce the impact of sand and chlorides on the bioretention basin.

A maximum drainage area is established to protect the basin and reduce risk of failure. Potential problems such as erosion at the inflow points, disruption of the mulch layer, premature clogging of the basin, and inputs of chlorides and sodium will be reduced by limiting the drainage area. Numerous smaller bioretention basins are expected to have better long term performance when compared to one large basin. For large impervious areas, such as parking lots, dividing the drainage area up into smaller portions (0.5 to 1 acre) is recommended. An alternative practice should be selected if the drainage area of a basin would exceed 2 acres.

Longevity of the engineered soil is decreased by clogging, reduced cation exchange capacity, and accumulation of sodium. Clogging problems can be reduced by limiting the input of sediment. Cation exchange capacity can be rejuvenated by tilling in MNDOT Grade 2 compost or by the full replacement of the engineered soil. Sodium accumulation can be countered by adding gypsum to the soil and/or by allowing about 1 inch of clean water to percolate through the planting bed 3 or 4 times in the spring.

Erosion at the inlet to the bioretention basin can be reduced by using a sump inlet or gravel bed. Level spreading can be enhanced by the use of a level spreader or by using multiple pipe inlets.

When possible, the dimensions of the planting bed should have a minimum width of 10 feet, a minimum length of 15 feet, and a width to length ratio of about 2:1.

If no vegetated pretreatment area is provided, for example if a device such as a sump is used, snow may be piled upgradient of the bioretention basin, preferably upgradient of the pretreatment forebay or sump. If a vegetated pretreatment area, such as a filter strip, is provided, heavy machinery should not be driven onto or across the vegetated area. No storage of snow shall be allowed within a bioretention facility.

If possible, settling of the planting bed should be accomplished naturally by allowing the filled bed to sit for several months. This will require over-filling the planting area so that after settling the proper ponding depth is achieved. Watering each lift of the planting bed to induce settling is not recommended unless water can be gently applied and the watered lift is allowed sufficient time (at least 24 hours) to thoroughly drain prior to adding the subsequent lift and at least 48 hours prior to adding mulch.

To reduce lateral flow of water from the bioretention basin towards the pavement foundations, a geotextile fabric may be placed along the sidewalls of the basin.

Plant community selection shall be based on existing and designed growing conditions, including duration of inundation and saturation, light availability, light intensity, and shade. Forest and forest fringe communities should contain a mix of trees and shrubs. The spacing of trees, shrubs, and shrub-tree mixes should be determined by the characteristics of the species selected. Ornamental communities should contain a mix of shrubs and perennial herbaceous plants. The foliage canopy of ornamental communities should completely cover the soil planting bed at the end of two growing seasons. Mesic-meadow communities shall consist of a minimum of 50% sedges with remaining species to be a mix of forbs, grasses, and/or shrubs. Prairie communities shall

consist of a minimum of 50% grasses with the remaining species to be a mix of forbs and/or shrubs.

Use plant materials from a certified nursery that offers a plant warranty. Select plants that can thrive with minimum maintenance in the environment of the bioretention basin and that have added wildlife value as food or cover. Consultation with an individual experienced in plant selection is recommended.

The rooting depth of plants is likely to exceed the depth of the underdrain. Some plant roots may clog holes in the underdrain.

A reasonable underdrain perforation safety factor is 2 to 4. The underdrain outlet may be fitted with an end wall and rodent shield if allowed by local ordinances.

If no underdrain is installed, one or more observation wells may be installed to monitor drainage from the basin. A minimum of one well per 1000 square feet of effective infiltration area is recommended, or one well per basin, whichever results in more wells. The wells shall be located at the center of each section being monitored. Each shall be constructed of a minimum 4 inch diameter slotted PVC pipe, anchored vertically to a footplate at the bottom of the bioretention basin. The top of the pipe shall be high enough to prevent the entry of water ponded within the bioretention basin. An above-ground cap that secures well is required.

A 72-hour time limit is established in this standard for draining water from a fully saturated storage layer. A 24-hour limit is desirable for the live storage portion of the bioretention basin. These limits are established to reduce the risk of declining infiltration caused by persistent saturation at the native soil interface.

The maximum allowable thickness of the storage layer will depend on how much time is available to drain water from that layer after time is taken to drain water from the ponding area and engineered soil. The water in the ponding area and the engineered soil exits the bioretention basin via the underdrain and the native soil. The water in the storage layer exits only via the native soil.

A municipal easement may be acquired to facilitate maintenance.

Once the design depth of the storage layer is determined, it can be reduced as long as the total storage volume is maintained. This will require making a corresponding increase in the surface area of the storage layer. This may be necessary at some sites to meet the required groundwater separation.

PLANS AND SPECIFICATIONS

Plans and specifications shall be prepared for each specific field site in accordance with the criteria of this standard and shall describe the requirements for applying the bioretention basin to achieve its intended use. Plans shall specify the materials, construction processes and sequence, location, size, and elevations of all components of the bioretention basin to allow for certification of construction upon completion.

The plans shall include:

- A vicinity map showing the drainage area, basin location, and flow paths to and from the basin.
- On-site soils data including a profile to at least a 6-foot depth, preferably to at least 2' below the proposed bottom of the bioretention basin.
- A plan view of the basin showing the shape, dimensions, flow paths to and from the basin, vegetation plan (including plant names and planting locations), and pretreatment components.
- Longitudinal and cross-section views of the basin.
- Construction details of all inlets, outlets, flow splitters, and other basins.

Specifications need to require:

- site preparation sufficient to establish and allow growth of the selected species;
- planting dates, care, and handling of the plants to ensure an acceptable rate of survival, including weeding and watering responsibilities;
- a vegetation warranty period.

OPERATION AND MAINTENANCE

An operation and maintenance plan shall be developed that is consistent with the purposes of this bioretention basin, its intended life, safety requirements and the criteria for its design. The plan shall be developed for inspection, operation and maintenance of the basin. The plan shall assign responsibility for activities and state the minimum qualifications of the personnel performing the work.

At a minimum, the plan shall address operation and maintenance of all vegetative and non-vegetative components identified in this standard.

The plan shall include details on:

- Frequency of inspections
- Inspecting for sediment buildup and clogging
- Erosion, trash and debris buildup
- Plant health
- Frequency of sediment removal
- Disposal locations for sediment
- pH testing of the soil
- frequency of soil, mulch, and plant replacement
- inlet and outlet maintenance
- providing access to perform the operation and maintenance activities

Snow shall not be dumped directly onto the conditioned plant bed.

REFERENCES

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United States Environmental Protection Agency. 2000. Low Impact Development: A Literature Review. Publ. EPA-841-B-00-005. US EPA Low Impact Development Center, Office of Water, Washington, D.C.

Wisconsin Department of Natural Resources, Standards 1003 "Infiltration Basin" (Oct. 2004) and 1004 "Bioretention for Infiltration" (July 2006).

DEFINITIONS

Bioretention Basin: A soil and plant-based stormwater management structure or mechanism engineered to facilitate the entry and movement of precipitation or runoff into or through the soil.

Curtain Drain: An overflow system with structures consisting of vertical columns of gravel or sand, called curtain drains, that allow the water quality volume to bypass the soil planting bed and discharge untreated to ground water.

Design Drawdown Rate: The rate in inches per hour at which water drains from the ponding area through a combination of infiltration into the native soil and discharge through the underdrain.

Design Infiltration Rate: The infiltration rate of the native soil selected as a basis to size a bioretention basin.

Design Ponding Depth: The distance in inches between the top of the mulch layer and the invert of the overflow structure.

Effective Infiltration Area: The area of the bioretention system that is used to infiltrate runoff, not to include the area used for site access, berms, or pretreatment. For bioretention, the effective infiltration area is considered to be the surface area of the bottom of the excavated hole at the native soil interface.

Fully Saturated: A bioretention basin that has a saturated storage layer, a saturated engineered soil layer and water ponded to the invert of the overflow pipe in the ponding area.

Heavy equipment: Equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high-pressure tires.

Hydraulically Connected: Two entities are said to be hydraulically connected if a surface or subsurface conduit exists between the two such that water is transmitted from one entity to the other.

Infiltration: Entry and movement of precipitation or runoff into or through the soil. It includes water that may be subsequently evapotranspired. It does not include water discharged through underdrains or overflow basins.

Native soil: The undisturbed soil, situated below the bioretention basin.

Pretreatment: Preliminary reduction of pollutants from stormwater prior to discharge of the stormwater to the bioretention basin.

Source Area: A component of land use including rooftops, sidewalks, driveways, parking lots, storage areas, streets, and lawns from which urban runoff pollutants and volumes are generated during periods of snow melt and rainfall runoff.

Target Stay-on Depth: The amount of infiltration required on an average annual basis. It is the portion of the annual rainfall (in inches) on the development site that must be infiltrated on an annual basis to meet the infiltration goal.

Total Basin Drain Time: The time it takes water to drain from a fully saturated bioretention basin. This includes the time it takes to drain water from the ponding area, the engineered soil, and the storage layer. Water from the ponding area and engineered soil exit via a combination of the underdrain and native soil. Water from the storage layer exits only via the native soil.

Underdrain: A perforated drain pipe situated below the engineered soil bed and above the sand storage layer.

Underdrain Flow Rate: The rate at which water is discharged from the underdrain, as determined by the orifice flow equation.

Figure 1. Example of **Bioretention Basin – plan view**

Figure 2. Example of **Bioretention Basin – cross-section across width of basin**

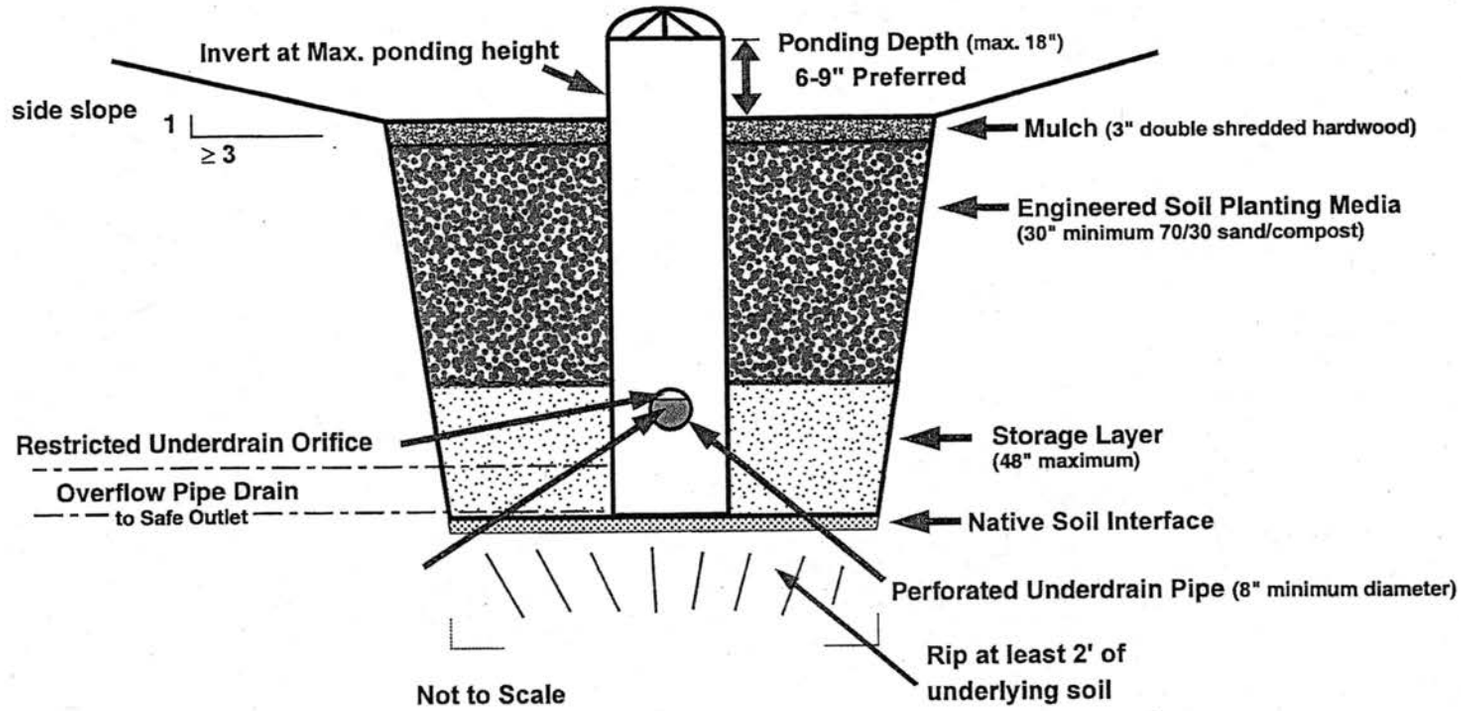
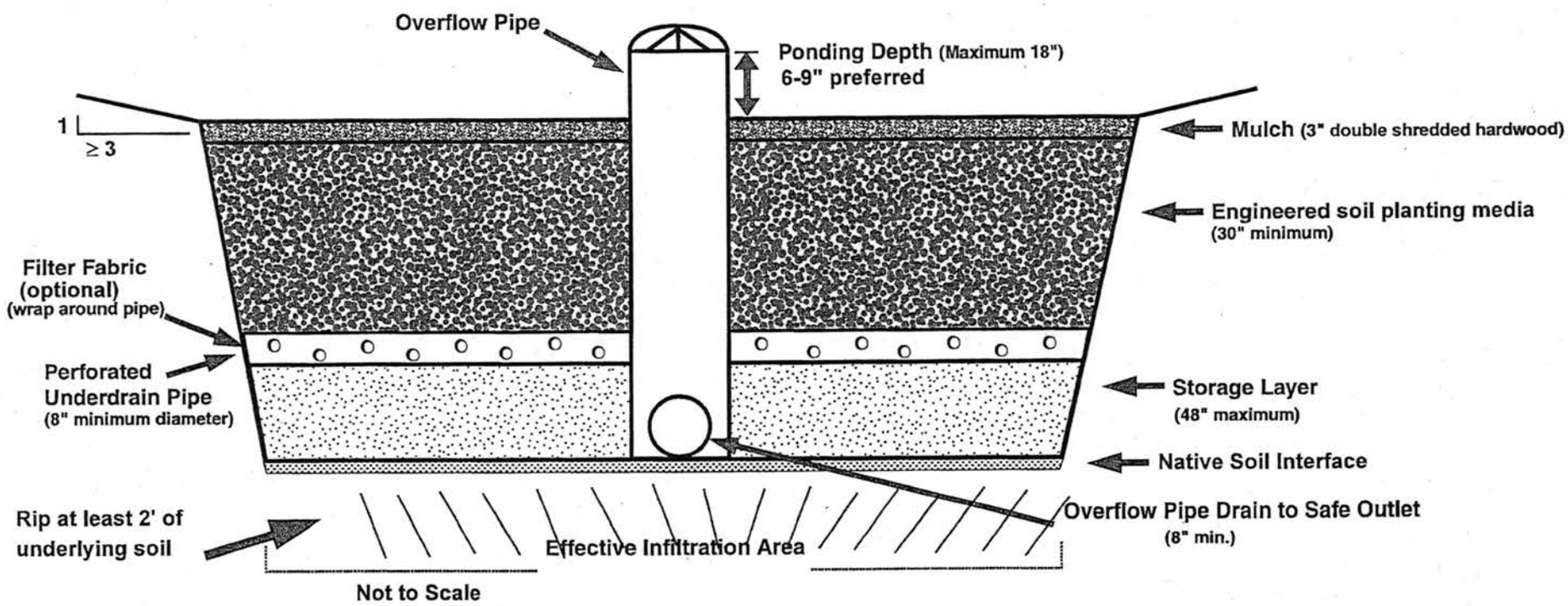


Figure 3. Example of **Bioretention Basin – profile along length of basin**



D. 7 Filter Stips

Conservation Practice

Filter Strip (393): A strip or area of herbaceous vegetation situated between cropland, grazing land, or distributed land (including forest land) and environmentally sensitive areas.

Eligible Component(s):

- Channel Bank Vegetation (322)
- Clearing and Snagging (326)
- Fencing (382)
- Field Border (386)
- Use/Livestock Exclusion(472)
- **Riparian/Forest Buffers(391)**
- Pasture & Hayland Planting (512)
- Pipeline (516)
- Tree/Shrub Establishment (612)
- Trough or Tank
- Water Facility (614)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

- Seed
- Trees & Shrubs
- Herbicides*
- Fertilizer*
- Fence Materials
- Minerals
- Mulch
- Netting
- Pipeline
- Rip Rap
- Trough or Tank

Activities:

- Earthwork- Grading & Shaping
- Site Preparation-Seeding
- Planting
- Fertilizer/Herbicide Application
- Mulching & Netting Labor
- Fencing Labor

* The use of herbicides and fertilizers is permitted only in conjunction with soil tests and an application plan developed by the district technical representative.

- Construction of livestock watering facilities outside of the filter strip is authorized.
- Areas established to grass may be grazed or hayed periodically if it is identified in a conservation farm plan and the conservation district determines that these management measures are needed for wildlife management, weed control, or nutrient removal. The operation and maintenance plan must include provisions for approved grazing or haying.

D. 8 Sediment Basins

Conservation Practices

Sediment Basin (350): A basin constructed to collect and store debris or sediment.

Pond (378): A water impoundment made by constructing a dam or an embankment or by excavating a pit or dugout.

Grade Stabilization Structure (410): A structure used to control the grade and head cutting in natural or artificial channels.

Water & Sediment Control Basin (638): An earth embankment or a combination ridge and channel generally constructed across the slope and minor watercourses to form a sediment trap and water detention basin.

Eligible component(s):

Critical Area Planting (342)
Fencing (382)
Mulching (484)
Subsurface Drainage (606)
Underground Outlet (620)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

POLICIES

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:
Tile Systems
Pipes
Rip Rap
Filter Material
Seed
Herbicides
Fertilizer
Minerals
Fence Materials
Mulch
Netting

Activities:
Earthwork—Grading & Shaping
Site Preparation—Seeding
Planting
Fertilizer/Herbicide Application
Mulching & Netting Labor
Tile Installation

- Cost share is authorized where at least 75 percent of the contributing watershed controlled by the land occupier has the appropriate cultural, management, or structural practices in place (or scheduled to be installed) to stabilize sources of sediment and reduce surface water runoff.
- Cost share is not authorized where runoff or sediment from the contributing watershed would prevent the practice from achieving its intended purpose with normal operation and maintenance. The contributing watershed includes land not controlled by the land occupier.
- Cost share of subsurface drain tile is limited to the minimum size and length of tile needed for the proper functioning of the structure and to convey the water to a safe and stable outlet as determined by the conservation district technical representative. If the land occupier wants to install larger tile (s)he must document, in writing, the purpose and the area to be served, and must be responsible for the additional material and installation costs.

Board Resolution #_____

Pertaining to the Allocations of the following FY 09 Grant Programs:

- **Drainage Records Modernization Grants**
- **Native Buffer Cost Share Grants**
- **Ag-Land Hydrologic Restoration Grants**
- **Clean Water Legacy Project Grants**

WHEREAS, the 2007 Laws of Minnesota, Chapter 57, Section 5, appropriated funds to BWSR for these pertinent Grant Programs; and,

WHEREAS, the BWSR has authorized via previously adopted resolutions 08-87, 08-52, 08-63, and 08-88, respectively, these Grant Programs; and,

WHEREAS, competitive LGU requests for these funds have been received and reviewed according to applicable rules and policies; and,

WHEREAS, the Red River Basin Commission has requested $100,000 for coordination of their water management activities; and,

WHEREAS, the Board has approved their annual plan and report.

NOW THEREFORE, the BWSR hereby authorizes staff to allocate the following FY 09 Grant Program funds according to the attached respective allocation lists (Exhibit A) which are incorporated into this resolution.

- **Drainage Records Modernization Grants - $500,000**
- **Native Buffer Cost Share Grants - $753,524**
- **Ag-Land Hydrologic Restoration Grants - $531,981**
- **Clean Water Legacy Project Grants - $2.64 M ($1.03 M BWSR)**

AND, the BWSR authorizes the allocation of $100,000 to the Red River Basin Commission.

_____ Date: _____

Randy Kramer, Chair
Board of Water and Soil Resources

H:091217BR

Board Resolution # _____

BWSR Proposed 2009 Meeting Schedule

January 28, 2009

February 25, 2009 (tentative) – Committee Meetings

March 25, 2009

April 22, 2009

May 27, 2009

June 24, 2009

July – no meeting

August 26 – 27, 2009 Tour and Meeting

September 23, 2009

October 28, 2009

November – no meeting

December 16, 2009

_____ Date _____

Randy Kramer, Chair
Minnesota Board of Water and Soil Resources

FOR YOUR INFORMATION

December 17, 2008

- Updated Board Member Listing
- Updated BWSR Staff Listing
- BWSR Committee Schedule

MINNESOTA BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD NORTH
ST. PAUL, MINNESOTA 55155
Phone: 651-296-3767 Fax: 651-297-5615

Appointed Members	***Appointment Designation***	***Term Expires***	***Telephone/Fax***	
Randy Kramer, Chair 42808 County Road 11, Bird Island, MN 55310 rlkramer@westtechwb.com	**Citizen**	01-03-11	320-365-3094 320-365-4784	*Home* *Office*
Dana Allen 11304 19th Street, SE, Eyota, MN 55934 dm.allen@myclearwave.net	**Citizen**	01-05-09	507-545-3969 507-951-5597	*Home* *Office*
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Faye Sleeper Room 173 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 fsleeper@umn.edu	**U of M/Water Resources Center**	612-624-3738 612-625-1263	*Office* *Fax*
Rebecca Flood 520 Lafayette Road, St. Paul, MN 55155 Rebecca.Flood@state.mn.us	**Pollution Control Agency**	651-757-2022 651-296-7923	*Office* *Fax*

December 2008

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Fredbo, Tim	282-2929
Fure, Jon	296-0880
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Hubbell, Dianne	215-1703
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Ragan, Terry (cell 507-450-3644)	(507)523-2171

BWSR Committee Schedule (tentative agenda items)

December 12, 2008

(Contact Mary Jo Anderson @ 651-297-4290 if you have any questions)

January 28, 2009

RIM Reserve Planning Committee immediately following Board meeting