Minnesota Board of Water and Soil Resources. Minutes.

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BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET, CONFERENCE ROOM
ST. PAUL, MINNESOTA 55155
JANUARY 24, 2001

BOARD MEMBERS PRESENT: Kathleen Roer, Darrell Bruggman, Jim Dahlvang, Jerome Deal, Clair Nelson, Jim Anderson-MES, Ginny Imholte, Dwain Otte, Jack Frost, Char Kahler, Allan Oehlke, Mark Dittrich-MDA, Lee Coe, Dan Wilson-MDH, Wayne Edgerton-DNR, Rod Massey-PCA

BOARD MEMBER ABSENT: Paul Krabbenhoft

STAFF PRESENT: Ron Harnack, Marybeth Block, Jim Haertel, Jeff Nielsen, Mary Jo Anderson, Ron Shelito, Phil Belfiori, John Jaschke, Bill Best.

Call Meeting to Order - Chair Roer called the meeting to order at 9:00 a.m.

** 01-01 **Adopt Agenda** - Moved by Lee Coe, seconded by Clair Nelson, to adopt the agenda as presented. Motion passed on a voice vote.

Minutes of December 13, 2000 – Chair Roer noted the correct spelling of Jack Uldrich, ** 01-02 deputy commissioner of Minnesota Planning. Moved by Jack Frost, seconded by Char Kahler, to approve the minutes of December 13, 2000, as corrected. Motion passed on a voice vote.

Chair's Report - Chair Roer stated that EQB cancelled their meeting this month.

Executive Director's Report - Ron Harnack reported that the Governor's Budget was presented yesterday. It was exciting news for BWSR - CREP was fully funded! Ron stated that chief authors of the CREP bill are Senator Dennis Frederickson, Senator John Hottinger, Representative Elaine Harder and Representative Henry Kalis. Two press conferences will be held to announce the bill introduction, February 1, 11:00 a.m., Room 181 of the State Office Building in St. Paul; and February 2, 3:00 p.m., at the Holiday Inn in Mankato. Board members are invited to attend. Ron commended the members of the CREP Coalition as well as BWSR staff, DNR Commissioner Allen Garber and staff, for their efforts to put CREP in a highly visible position during the budget decision process. Ron reported that an additional $700,000 was allocated for feedlots, a reallocation of dollars from PCA's Clean Water Partnership Program; a continued BWSR commitment of dollars historically going to feedlots in base grants and special project and Minnesota River grants. $140,000 of new general fund dollars for nonpoint engineering for support of the feedlot program. Legislative issues that BWSR will track include taxing; local water planning base grant adjustment; and WCA funding issues that have been addressed with Senator Dan Stevens; SWCD funding initiatives and other water policy and budget issues as they arise.

Dispute Resolution Committee (DRC) - Jim Haertel reported that there are two appeals pending. One appeal regards Anoka County Ditch number 53-62. The Rice Creek Watershed District denied an exemption involving the federal exemption. The Board has previously heard two appeals on this ditch at this location but they dealt with a different exemption. A pre-hearing conference will be held tomorrow to set the briefing and hearing schedule. The other pending appeal is in Delano and regards a replacement plan approval for a subdivision. A decision to accept or deny the appeal has not been made yet. Jim Dahlvang thanked Jim and Ron Harnack for their efforts on resolving issues before they come before the DRC, which has not received any appeals recently.

Wetlands Committee - Darrell Bruggman reported that the Wetlands Committee will meet today. Ron commented on the Supreme Court decision regarding an isolated wetland gravel pit in Illinois. This is a nationally recognized controversial decision.

Cost-Share/Soil Conservation Committee - Dwain Otte reported that the cost-share committee met yesterday. The staff met with and reviewed various options for committee consideration. Some conclusions have been made; the cost-share committee will review the options for cost-share allocations, policy, and non-point engineering assistance and will present information to the Board at the February meeting.

Education and Public Relations Committee - Jim Anderson reported that the committee met with Ron Struss this morning. The committee reviewed the upcoming Non-point Education for Municipal Officials (NEMO) project. The BWSR Education Strategy from 1998 was reviewed, which included eleven potential action items to implement those objectives. The education committee will review and consider those objectives and report to the Board at the February meeting.

Administrative Advisory Committee - Ron Harnack reported that the administrative advisory committee will meet via conference call to define procedures to adequately respond to incidents that occur regarding SWCD supervisors.

Ron Harnack reported that board appointments continue to be reviewed by the Governor's appointments office.

Agency Reports
Mark Dittrich, Minnesota Department of Agriculture (MDA), reported that he attended the Corn and Soybean Expo. MDA has feedlot rule training meetings scheduled. MDA has hired two staff to deal with feedlot issues and the dairy farm enhancement project.

Dan Wilson, Minnesota Department of Health (MDH), reported that a new arsenic drinking water report was published in the Federal Register, although it's been put on hold due to the new Bush administration. Dan reported that the Governor approved MDH's funding request. Dan stated that MDH proposes a new law for well testing upon property transfer. Minnesota would be the first in the country to have such a law.

Wayne Edgerton, Department of Natural Resources (DNR), reported that DNR is pleased with the CREP funding. DNR is in the process of hiring two replacement positions for CREP. Wayne stated that there's potential for opening of the trespass law, SF #207, regarding agricultural land definition. Concon lands is also before the legislature.

Rod Massey, Pollution Control Agency (PCA), thanked BWSR and MES for training on feedlot issues, things are going fairly well. Rod stated that the feedlot permit report was presented to the legislature. Rod stated that recommendations have been received regarding the Karst area; eventually rules will be modified. Rod thanked MDA for their efforts on feedlot issues as well. Rod reported that the PCA was not quite as lucky regarding the Governor's budget funding. Elimination of some programs will be presented to the legislature. Rod reported that a reform proposal has been submitted which consolidates some of PCA's fee funding sources. The first feedlot hearing will be held tomorrow.

Consent Agenda

Meeker County Request for Comprehensive Local Water Plan (CLWP) Extension - Marybeth Block reported that staff recommends approval of the Meeker County request
** for extension of the CLWP until December 31, 2002. Moved by Jim Dahlvang,
01-03 seconded by Char Kahler, to approve the Meeker County request for CLWP extension. Motion passed on a voice vote.

Committee Recommendations

Sunrise River WMO Watershed Management Plan - Jim Haertel reported that the metro
** subcommittee recommends approval of the draft order. Moved by Dwain Otte,
01-04 seconded by Jerome Deal, to approve the Sunrise River WMO Watershed Management Plan. Motion passed on a voice vote. Chair Roer commended Chris Lord for his efforts, as he has been very instrumental this plan.

Richfield Bloomington WMO Watershed Management Plan - Jim Haertel introduced Scott Anderson from the City of Bloomington. Jim reported that the metro subcommittee met to review the plan and recommend approval of this plan and draft order. Jim stated that a correction is needed on page four, the date on the signature page of the order
** should read January 24, 2001. Moved by Jack Frost, seconded by Dwain Otte, to
01-05 approve the Richfield Bloomington WMO Watershed Management Plan. Motion passed on a voice vote. Chair Roer will sign the order with the corrected date.

Jim Haertel noted that corrections were made to the dates on the orders of the Brown's Creek and Valley Branch Watershed District Enlargement and Increase Number of Managers.

Jim introduced Jane Harper, Washington County; Mark Doneux, Washington SWCD; Dave Baudet, mayor, Oak Park Heights; Don Scheel, manager, Valley Branch Watershed District; and John Hanson, engineer, Valley Branch Watershed District. Jim reported that the metro subcommittee recommends enlargement per the Washington County petition, but the number of managers remain at five. Dwain Otte approved of

the enlargement but felt it necessary to keep the managers at five, Jack Frost agreed
** with that as well. Moved by Allan Oehlke, seconded by Dwain Otte, to approve the
01-06 Brown's Creek Watershed District Enlargement, maintaining five managers. Motion passed on a voice vote.

Valley Branch Watershed District Enlargement and Increase Number of Managers - Jim Haertel reported that the metro subcommittee recommends enlargement per the Washington County petition, the managers remain at five, and the name of the
** watershed district be changed to the Lower St. Croix Valley Watershed District. Moved
01-07 by Dwain Otte, seconded by Jack Frost, to approve the order for enlargement, approval of the name change to Lower St. Croix Valley Watershed District, and the number of managers remain at five. Motion passed on a voice vote.

Carnelian-Marine Watershed District Enlargement and Increase Number of Managers Hearing - Jim Haertel reported that staff recommends approval of the hearing per the
** draft order. Moved by Jack Frost, seconded by Jim Dahlvang, to order the hearing for
01-08 the Carnelian-Marine Watershed District Enlargement and Increase Number of Managers. Motion passed on a voice vote.

Ron Harnack extended appreciation to Jane Harper and the Washington County for their leadership and efforts in Washington County. Chair Roer stated that the County has been impressive in dealing with this plan.

Chair Roer, on behalf of the State of Minnesota, presented Ron Harnack with a Seiko watch for 30 years of state service. Ron thanked the Board and staff for all their support.

Chair Roer called for a break in the meeting at 10:40 a.m. The meeting reconvened at 11:00 a.m.

New Business

Revised WCA Corrective Action/Oversight Policy - John Jaschke reported that the purpose of this policy is to establish the process that will be utilized to correct Local Government Unit (LGU) implementation and administration problems involving the Minnesota Wetland Conservation Act (WCA). The strategy of this policy is to provide a clear, concise, timely route to resolution of problems with local government implementation of WCA. Discussion followed. Chair Roer and Ron Harnack suggest
** some changes for policy clarity. Moved by Darrell Bruggman, seconded by Lee Coe, to
01-09 adopt the WCA Corrective Action/Oversight Policy, as amended. Motion passed on a voice vote.

FY01 Non-Point Engineering Assistance (NPEA) Challenge Grants - Dwain Otte, on behalf of the cost-share committee, stated that he appreciates Michelle Lewis' assistance with the grants process. Wayne Zellmer explained that the NPEA challenge grants provide additional engineering/technical assistance funding to SWCD Joint Powers Boards (JPBs). The purpose of the grant is to assist landowners to implement high priority conservation practices. Wayne reported that seven applications from JPBs where received, totaling $275,111. The total requested also includes $11,970 for Eagle Point software updates recommended by BWSR staff. Wayne reported that the staff reviewed the applications and recommend funding a total of $135,939 for challenge grants. Discussion followed. Moved by Ginny Imholte, seconded by Dwain Otte, to approve the FY01 NPEA Challenge Grants as recommended. Motion passed on a voice vote.

** 01-10

Advisory Comments
Natural Resource Conservation Service (NRCS) - Roger Musetter reported USDA is not certain of Pearlie Reed's position as chief due to the new administration. Roger reported that NRCS received their budget, it's a stable budget and they are able to maintain current staff. The USDA Wildlife Habitat Incentive Program (WHIP) received funding. NRCS currently has three district conservationist vacancies. NRCS has a new outreach coordinator position that will work in Greater Minnesota. NRCS is in the process of filling Bill Stokes' position after his retirement. Roger reported that NRCS has been allocated an additional position to work on technical and organizational issues. This position will take over some of the shared duties that Roger and Tim Koehler have been responsible for.

Upcoming Meetings
- NACD Annual Meeting, February 4-8, Fort Worth, Texas. Doug Thomas will attend.
- Farm Forum, Feb. 12, Radisson South, Bloomington
- Next BWSR Meeting, February 28, St. Paul

Clair Nelson thanked the board for coming to Lake County in September.

Chair Roer adjourned the meeting at 11:45 a.m.

Respectfully submitted,

Kathleen Roer

Kathleen Roer
Chair

Consent Agenda

1. Meeker County Request for Comprehensive Local Water Plan Extension
   DECISION

MEEKER COUNTY COMPREHENSIVE LOCAL WATER PLAN **(FOR BOARD ACTION)**

Meeker County has a comprehensive Local Water Plan (CLWP), which was approved by the Minnesota Board of Water and Soil Resources (BWSR) on June 26, 1996. Meeker County's board of commissioners locally adopted their CLWP on July 18, 1996. The effective date (end date) is December 31, 2001.

The 1995 amendments to the Comprehensive Local Water Management Act, M. S. 103B.301, give the BWSR authority to grant extensions to counties for the purpose of extending the end dates of their water plans. These extensions must be requested in writing and cannot be for more than two years.

At their December 15, 1999, board meeting, the BWSR approved a local water planning document which addressed BWSR expectations, internal actions and multi-planning strategies. Multi-planning strategies addressed granting CLWP extensions to counties where other planning efforts (water or watershed level) are currently underway. These other efforts require the input of the water planner and associated technical advisors in the county. Completion of other water planning efforts would be benefit the CLWP update.

Meeker County is an active participant in other major planning efforts currently underway: the CROW (Crow River Organized Watershed) Project, amending the county zoning and feedlot ordinance, and implementing the recently adopted county land use plan. Participation in these activities requires county staff and work effort.

Meeker County is also an active participant in the Middle Minnesota Joint Powers Board (JPB), which consists of Kandiyohi, McLeod, Meeker and Renville counties. This JPB was organized when the water planning effort was initiated in Minnesota. The JPB was instrumental during the process of developing the four original water plans and the four updates five years later. Meeker County's current update was the last one of the four to be completed.

Because of other major planning efforts underway in Kandiyohi, McLeod and Renville counties, each of these three counties requested and received approval from the BWSR to extend the end date of their plans to December 31, 2002. This extension has placed Meeker County one year out of sync with the other three counties.

On December 19, 2000, the Meeker County board of commissioners approved a resolution which requests that the BWSR grant an extension to the existing Meeker County CLWP in order to once again become in sync with the other three counties in the JPB.

Board Conservationist Tom Fischer recommends approval of Meeker County's extension request. Their existing CLWP would be extended until December 31, 2002.

RESOLUTION REQUESTING EXTENSION
OF
COUNTY COMPREHENSIVE WATER PLAN

WHEREAS, 1995 amendments to the Comprehensive Local Water Planning Act, M.S. 103B.301 gave the MN Board of Water and Soil Resources (BWSR) authority to extend the ending date of local water plans for a period not to exceed 1 year; and

WHEREAS, Meeker County has a current state approved and locally adopted Comprehensive Local Water Plan with an end date of 12/31/01; and

WHEREAS, Meeker County is an active participant in other major planning efforts currently underway such as the Crow River Watershed, amending the zoning and feedlot ordinance, and implementing the recently adopted Land Use Plan; and

WHEREAS, these other major planning efforts will result in information that will benefit the county during its Comprehensive Local Water Plan update efforts; and

WHEREAS, to continue as an active participant and obtain information that will benefit the Comprehensive Local Water Plan update, Meeker County will not be able to complete its Comprehensive Local Water Plan update prior to 12/31/01.

NOW, THEREFORE BE IT RESOLVED, the Meeker County Board of Commissioners request from BWSR an extension of their existing Comprehensive Local Water Plan to coincide with extensions for McLeod, Renville and Kandiyohi counties because of their affiliation on the Four County Water Planning Joint Powers Board.

BE IT FURTHER RESOLVED, that Meeker County will insure continued public participation in the form of Water Plan Advisory Committee and Public Information meetings.

BE IT FURTHER RESOLVED, that no projects will be ordered or commenced under M.S. 103B subd. 3 and 4 during the extension period.

Approved this 19th day of December 2000

Dale Smolnisky 2d Ch.

Dale Smolnisky, Chairperson

DRAFT

DRAFT

Minnesota Board of Water and Soil Resources
One West Water Street
Suite 200
St. Paul, Minnesota 55107

In the Matter of Extending the Comprehensive Local Water Plan
For **Meeker County** (1995 Minnesota Session Law, Chapter 184,
Section 24, authorizing BWSR to grant extensions).

Whereas, Meeker County has a state approved Comprehensive Local Water Plan that is effective until December 31, 2001, pursuant to Minnesota Statute 1990, Section 103B.301, and

Whereas, the Meeker County Board of Commissioners requested an extension of their Comprehensive Local Water Plan to the Board of Water and Soil Resources on December 19, 2000, pursuant to Minnesota Session Law 1995, Chapter 184, Section 24, and

Whereas, the Board of Water and Soil Resources has authorization to grant extensions pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

Now, Therefore, the Board of Water and Soil resources herby makes the following Findings of Fact, Conclusions and Order.

FINDINGS OF FACT

1. On December 21, 2000, the Board of Water and Soil Resources received a resolution from Meeker County requesting an extension of their Comprehensive Local Water Plan.

2. On December 22, 2000, the Board of Water and Soil Resources staff reviewed and recommended approval of the extension request by Meeker County.

CONCLUSIONS

1. All relevant requirements of law and rule have been fulfilled. The Board of Water and Soil Resources has proper jurisdiction in the matter of extending the Comprehensive Local Water Plan of Meeker County pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

ORDER

The Board of Water and Soil Resources hereby approves the extension of the Meeker County Comprehensive Local Water Plan until December 31, 2002. Dated at St. Paul, Minnesota, this 24th day of January 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

BY: Kathleen Roer, Chairperson

Committee Recommendations

1. Sunrise River WMO Watershed Management Plan
   DECISION

DRAFT

DRAFT

Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
Saint Paul, Minnesota 55107

In the Matter of the review of the Watershed Management Plan for the **Sunrise River Watershed Management Organization** pursuant to Minnesota Statutes Section 103B.231, Subdivision 9.

ORDER APPROVING WATERSHED MANAGEMENT PLAN

Whereas, the Sunrise River Watershed Management Organization (SRWMO) 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. **Establishment.** In April 1985, a Joint Powers Agreement (JPA) was entered into by the cities of East Bethel and Ham Lake and the townships of Linwood and Columbus. The 2000 JPA replaced the existing agreement executed in 1985 that created the SRWMO. The essential purpose of the SRWMO is to seek cooperation and assistance of governmental agencies, municipalities, and citizens within the WMO in order to conserve the WMO's natural resources.

2. **Requirement to Plan.** The Metropolitan 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 legal boundary of the SRWMO is approximately 45,300 acres in size. The SRWMO is located in the northeastern corner of Anoka County. The area within the SRWMO is primarily agriculture and wetlands, however the watershed is experiencing great pressure from developments. The area's significant water resources include Coon, Linwood, and Martin Lakes; also Carlos Avery Wildlife Management Area covers a large area of the WMO.

4. **Local review.** The SRWMO circulated a copy of the draft Plan to local units of government, the county, the state review agencies, the metropolitan council, and the Board for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7.

5. **Agency Review**. On February 29, 2000 the state review agencies met to discuss the draft Plan of the SRWMO. The following summarize each agency's comments.

5a. **Metropolitan Council Review.** On March 16, 2000 the Metropolitan Council provided written comments on the Plan to the Board containing the following findings and conclusions:

1. The Plan's policies are consistent with the policies of the Council's *Water Resources Management Development Guide.*
2. The inventory of land and water resources is fairly complete.
3. The Council asked the WMO to note the primary goals for the first generation plan and indicate whether or not they were met.
4. The Council recommended the SRWMO review land use plans from the local units of governments and identify any inconsistencies between the SRWMO and the local plans.
5. The SRWMO should work with its member communities on adopting and enforcing equitable erosion control standards.
6. The Council is concerned that the watershed's member communities may not have the resources necessary to implement the local water management plans.

5b. **Department of Natural Resources Review.** On March 24, 2000 the Department of Natural Resources provided written comment on the Plan and recommended amendments to include:

1. The primary recommendation from the DNR is the concern of declining water quality throughout the watershed, coupled with increased development.
2. The SRWMO will need more stringent standards and a willingness on the part of the SRWMO to work with local communities to ensure that these standards are met.

5c. **Department of Health Review.** No written comments were provided to the Board.

5d. **Department of Agriculture Review.** Recommended approval of the Plan.

5e. **Pollution Control Agency Review.** No written comments were provided to the Board.

On September 11, 2000 and November 7, 2000 the SRWMO responded in writing to the state review agencies concerns.

6. **Board Review.** On August 10, 2000 the SRWMO submitted an amended Plan that addressed most of the above noted agency concerns. The Council and the Board were the only agencies to provide the SRWMO with additional comments regarding the amended Plan. The Metro Water Planning Subcommittee of the Board and Board staff met with the SRWMO on January 9, 2001. The SRWMO made a presentation of the final amended Plan and requested the Plan be approved by the Board at the next Board meeting. The Subcommittee recommended approval of the plan.

7. **Highlights of the Plan.** The following are some of the highlights of the Plan as amended:

a) The SRWMO will rely on each member municipalities to address their own water resource management issues;
b) Each member municipality will administer maintenance programs. The member municipalities are encouraged to perform maintenance activities that reduce non-point source pollution according to minimum guidelines established by the WMO;
c) Land use management rests with the member municipalities;
d) This plan focuses on collecting resource information by monitoring, inventories, and investigations to enable more proactive resource management planning in the future;
e) The annual budget for implementation of the management plan has increased from zero dollars to a total of $1.07 million over the next 10 years. Much of this increase comes form on-going municipal projects. More than $350,000 will be funded over the next 10 years (averaging $35,000 per year) from the SRWMO for administration, data collection and inventory.

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 Sunrise River Watershed Management Organization pursuant to Minnesota Rules Chapter 8410 and Minnesota Statutes Section 103B.201, Subd. 9.

3. The Sunrise River Watershed Management Organization Watershed Management Plan attached to this Order defines water and related land use problems within the SRWMO's boundaries, possible solutions thereto, general objectives and policies of the SRWMO, and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Rules Chapter 8410 and Minnesota Statutes Sections 103B.201 to 103B.251.

ORDER

The Board hereby approves the attached Plan dated January 2001 as the Watershed Management Plan for the Sunrise River Watershed Management Organization.

Dated at Saint Paul, Minnesota this 24th day of January 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

DRAFT

BY: Kathleen Roer
Chair

Committee Recommendations

2. Richfield Bloomington WMO
   Watershed Management Plan
   DECISION

DRAFT

Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
Saint Paul, Minnesota 55107

DRAFT

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

ORDER APPROVING WATERSHED MANAGEMENT PLAN

Whereas, the Richfield Bloomington Watershed Management Organization (RBWMO) 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. **Establishment.** The RBWMO was formed on December 19, 1983. The agreement was amended and bylaws adopted January 23, 1984. The essential purpose of the RBWMO is to provide for the long-term management of water and associated land resources within the Richfield Bloomington Watershed.

2. **Requirement to Plan.** The Metropolitan 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 legal boundary of the RBWMO is approximately 7.55 square miles in size. The RBWMO is located in the center of the Twin Cities metropolitan area. The area within the RBWMO is a highly developed urban watershed, which includes The Mall of America, and is immediately west-southwest of the MSP International Airport; yet there remain some possible redevelopment and retrofit opportunities within the watershed. The area's significant water resources include Woodlake and Richfield Lake. All surface waters flow to the Lower Minnesota River.

4. **Local review.** The RBWMO circulated a copy of the draft Plan to local units of government, the county, the state review agencies, the metropolitan council, and the Board for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7.

5. **Agency Review**. Three state review agencies provided initial comments (60-day review) of the draft Plan to the Board. The Board incorporated the comments from the agencies into a single document to send to the RBWMO. The joint agency review letter was sent to the RBWMO on June 2, 2000. The following summarize each agency's key comments.

5a. **Metropolitan Council Review.** On May 26, 2000 the Metropolitan Council provided written comments on the Plan to the Board containing the following findings and conclusions:

1. The Plan's policies are consistent with the policies of the Council's *Water Resources Management Development Guide.*
2. Recommends the RBWMO develop a water-quality monitoring program.
3. The Plan needs to contain a function and value assessment for wetlands.
4. The Plan should include a specific statement about Best Management Practices requirements for redevelopment areas.
5. The RBWMO should work with its member communities on adopting and enforcing equitable erosion control standards.
6. The plan needs additional maps and discussions detailing stormwater management systems and flow direction, inter-municipal flooding and rate-control, and regulatory and permitting programs.

5b. **Pollution Control Agency Review.** On June 2, 2000 the MPCA provided the Board and the RBWMO written comments on the Plan containing the following findings and conclusions:

1. The hydrologic system section should be expanded to provide a more complete inventory of all water resources.
2. The need to monitor water resources to determine their condition should be discussed.
3. The Plan should clarify if NURP standards and MPCA BMP guidelines will be used on redevelopments in the watershed.
4. The magnitude of illegal connections to the stormwater system should be discussed in greater detail.

5c. **Department of Health Review.** No written comments were provided to the Board.

5d. **Department of Agriculture Review.** No written comments were provided to the Board.

5e. **Department of Natural Resources Review.** No written comments were provided to the Board.

6. **Additional Review Comment**

In addition to the state agency review, the RBWMO received extensive comments from the US Fish and Wildlife Service regarding the impact of the Plan on the Minnesota Valley National Wildlife Refuge. The major concerns identified were:

1. The Plan is inadequate because it emphasizes the preference to use regional stormwater retention basins without considering other BMPs.
2. The Plan does not adequately address refuge wetlands from toxic spills or accidents or who is responsible for cleanup if a spill occurs.
3. The Plan should identify a priority street sweeping schedule for all portions of the watershed where untreated runoff drains to wetlands in the Minnesota River Valley.

On January 21, 2000 the RBWMO responded in writing to the state and federal review agencies concerns.

7. **Board Review.** On August 22, 2000 the RBWMO submitted an amended Plan that addressed most of the above noted agency concerns. During the 45-day review the Council and MPCA provided the RBWMO with additional comments regarding the amended Plan. The RBWMO agreed to address the issues and amended the Plan. The RBWMO submitted a revised final Plan to the Board on October 27, 2000.

The Metro Water Planning Subcommittee of the Board and Board staff met with the RBWMO on January 9, 2001. The RBWMO made a presentation of the final amended Plan and requested the Board approve the Plan at the next Board meeting. Members of the Metro Water Plan Review Committee of the Board voted to approve the Plan.

8. **Highlights of the Plan.** The following are some of the key highlights and implementation strategies of the Plan as amended:

a) The RBWMO will incorporate the standards and requirements of the Nationwide Urban Runoff Program and MPCA's Best Management Practices for all new developments and redevelopment;
b) The RBWMO defers to the member cities all responsibilities for addressing storm water runoff water quality problems;
c) The RBWMO encourages the development of enhanced infiltration practices whenever it is practical;
d) Member cities will be responsible for establishing erosion and sedimentation controls and standards as approved by RBWMO;
e) The RBWMO has identified the method to be used to mediate inter-jurisdictional storm water rate and volume issues should member cities be unable to resolve them; and
f) If appropriate actions are not taken by the member cities the RBWMO shall take action to correct the problem.

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 Rules Chapter 8410 and Minnesota Statutes Section 103B.201, Subd. 9.

3. The Richfield Bloomington Watershed Management Organization Watershed Management Plan attached to this Order defines water and related land use problems within the RBWMO's boundaries, possible solutions thereto, general objectives and policies of the RBWMO, and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Rules Chapter 8410 and Minnesota Statutes Sections 103B.201 to 103B.251.

ORDER

The Board hereby approves the attached Plan dated December 1999 as the Watershed Management Plan for the Richfield Bloomington Watershed Management Organization.

Dated at Saint Paul, Minnesota this 26th day of April 2000.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

DRAFT

BY: Kathleen Roer
Chair

Committee Recommendations

3. Brown's Creek Watershed District Enlargement and Increase Number of Managers
   DECISION

DRAFT

Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, Minnesota 55107

DRAFT

In the Matter of the Enlargement and Increasing the Number of Managers of the Brown's Creek Watershed District in Washington County pursuant to Minnesota Statutes §§ 103D.261 and .305

ORDER ENLARGEMENT OF BROWN'S CREEK WATERSHED DISTRICT

Whereas, Washington County filed a Petition dated September 26, 2000 with the Board of Water and Soil Resources (Board) on September 28, 2000, to enlarge the Brown's Creek Watershed District pursuant to Minn. Stat. § 103D.261, and increase the number of managers of the Brown's Creek Watershed District pursuant to Minn. Stat. § 103D.305, 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. **Establishment Petition.** The Petition (Exhibit 2) to enlarge and increase the number of managers of the Brown's Creek Watershed District dated September 26, 2000, was filed by Washington County with the Board on September 28, 2000.

2. **Property Description.** The territory to be included in the watershed district, the Petitioned Area, is located in Washington County entirely within the metropolitan area and is approximately 9.7 square miles contiguous to the Brown's Creek Watershed District, which includes land in the Cities of Bayport, Oak Park Heights, and Stillwater, and the town of Baytown, and further depicted on a map attached to the petition as Exhibit A. The Petitioned Area includes the northern portion of the Middle St. Croix River Watershed Management Organization.

DRAFT

3. **District Name.** The Petition specifies the name of the enlarged district shall remain the "Brown's Creek Watershed District".

4. **Number of Managers.** The Petition specifies the number of managers shall be increased to seven (7) for two years, then return to the present number of five (5).

5. **Reasons for Change.** The Washington County Board authorized a Water Governance Study to identify and evaluate the best governance structure for water management in the County. The resulting report was adopted by the Washington County Board. The Petition is a direct result of the report and specifies the following:

   A. Washington County has a relatively large number of watershed management organizations of small size compared to other metropolitan counties.

   B. The ineffectiveness of some joint powers agreement watershed management organizations in Washington County.

   C. Insufficient budget due to small size and limited tax capacity of some watershed management organizations.

   D. Joint Powers Agreement Watershed Management Organizations have not established offices or a clear point of communication.

   E. Washington County has coordinated issues relating to the enlargement such as financing policies, watershed management plans, and board manager representation.

6. **Hearing Order.** At its regular meeting on October 25, 2000, the Board determined that the Petition met the requirements of Minn. Stat. §§ 103D.261 and 103D.305, and consequently ordered a public hearing to be held on the Petition for the Brown's Creek Watershed District Enlargement and Increase Number of Managers. (Exhibit 7)

7. **Hearing Notice.** Legal notice of the public hearing on the proposed watershed district enlargement and increase number of managers, pursuant to Minn. Stat. §§ 103D.261, Subd. 1 (c) and 103D.305, Subd. 4, was published in the Stillwater Evening Gazette on November 7 and 16, 2000, and in the Lillie Suburban Newspaper the Oakdale-Lake Elmo Review on November 8 and 15, 2000. (Exhibits 10 and 11) Further, a copy of the hearing notice was

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mailed to approximately 30 addressees including the Washington County Auditor, Washington County Attorney, Washington County Administrator, legal counsel for the watershed district, all of the cities in the proposed watershed district, all of the towns in the proposed watershed district, the SWCD, and the DNR. (Exhibit 8)

8. **Public Hearing.** A public hearing was held on the enlargement and increasing the number of managers of the Brown's Creek Watershed District on November 27, 2000, at the Washington County Government Center, 14900 North 61st Street, Room 560, Stillwater, Minnesota. The proceedings were tape recorded. The hearing panel was the Metro Water Planning Subcommittee which consisted of Board members Kathleen Roer, Dwain Otte, and Jack Frost as chair.

Jim Haertel, Board staff, entered Exhibits 1 through 11 into the record by reading a brief description of each exhibit.

Exhibit 1. Letter dated September 26, 2000, from Linda Krafthefer, Washington County Assistant Attorney, forwarding the Petition, which is Exhibit 2.

Exhibit 2. Petition dated September 26, 2000, from Washington County to enlarge the Brown's Creek Watershed District and increase the number of managers.

Exhibit 3. Attachment to Petition labeled "Exhibit A" which is a map of the proposed enlargement.

Exhibit 4. Attachment to Petition labeled "Exhibit B" which is a document entitled "Report for Water Governance Study, Washington County, Minnesota" dated May, 1999.

Exhibit 5. Letter dated October 12, 2000, from Linda Krafthefer, Washington County Assistant Attorney, forwarding Acceptance of Service of Petition.

Exhibit 6. Acceptance of Service of Petition signed by Louis Smith, Brown's Creek Watershed District Counsel, dated September 27, 2000.

Exhibit 7. Order dated October 25, 2000, from the Board of Water and Soil Resources for a Public Hearing on the Petition.

Exhibit 8. Letter dated November 3, 2000, from Jim Haertel to approximately 30 addressees notifying them of the public hearing, including copies of the legal notice and map.

Exhibit 9. Legal Notice of Public Hearing dated October 26, 2000, signed by Jim Haertel.

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Exhibit 10. Affidavit of Publication dated November 21, 2000, of Legal Notice in the Stillwater Evening Gazette on November 7 and 16, 2000.

Exhibit 11. Affidavit of Publication dated November 15, 2000, of Legal Notice in the Lillie Suburban Newspaper the Oakdale-Lake Elmo Review on November 8 and 15, 2000.

Exhibit 12. Written testimony dated November 27, 2000 of Craig Leiser.

Exhibit 13. Map presented by Craig Leiser entitled "Boundary Between Valley Branch WD and Brown's Creek WD.

Exhibit 14. Brown's Creek Watershed District Resolution No. 00-03 dated August 7, 2000 adopting a position regarding the Washington County Water Governance Study.

Exhibit 15. Middle St. Croix River Watershed Management Organization Resolution No. 00-02 dated July 13, 2000 opposing the proposed merger of the Brown's Creek Watershed District, Carnelian-Marine Watershed District, Marine on the St. Croix Watershed Management Organization, and the Middle St. Croix River Watershed Management Organization.

Exhibit 16. A cover page entitled "The State of Watershed Water Quality Management in Minnesota" by Environmental Ground, Inc., undated, funded by Minnesota Future Resources Fund and The McKnight Foundation, with pages 125 and 126 attached and reference to the entire document.

Exhibit 17. Middle St. Croix River Watershed Management Organization Resolution No. 00-02 dated July 13, 2000, regarding an unfavorable position towards the Washington County Water Governance Study proposal.

Exhibit 18. Document entitled "Washington County Petition for Enlargement of Brown's Creek Watershed District Public Hearing – November 27, 2000 Testimony Submitted by Washington County", consisting of 6 pages.

After all people present at the public hearing were given an opportunity to speak, the hearing record was left open for three weeks until 4:30 PM on December 18, 2000, for receipt of written comments. The following exhibits were received while the record was open.

Exhibit 19. BWSR Metro Region Staff report dated December 18, 2000 recommending the proposed enlargement be approved and the board of managers stay at five.

Exhibit 20. Washington County cover page received December 18, 2000, transmitting exhibits 21-27.

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Exhibit 21. Document entitled "Washington County Petition for Enlargement of Brown's Creek Watershed District Public Hearing – November 27, 2000 Testimony Submitted by Washington County", consisting of 6 pages.

Exhibit 22. Bound document entitled "Implementation Strategy Report Washington County Water Governance Study Adopted in July 1999 by the County Board of Commissioners".

Exhibit 23. Two pages detailing the number of WMO's affecting LGU's and levy values.

Exhibit 24. Three pages detailing the size of the proposed enlargement.

Exhibit 25. One page showing expiration dates of Board of Manager terms for Brown's Creek WD.

Exhibit 26. Document entitled "Washington County Water Governance Project Participatory process documentation, July 1998-December 2000".

Exhibit 27. Document entitled "A Comparative Review of Watershed Management plans and rules for Northern Washington County's water management organizations", dated September 2000.

Exhibit 28. E-mail from Jane Harper to Phil Belfiori received December 18, 2000 entitled "Washington County's Petition to Enlarge the Brown's Creek Watershed District and to Increase the Number of Managers" supplemental testimony to explain the revised strategy time line for full consolidation into a Northern Washington County Water Unit.

9. **Board Staff Report.** The Board's metro region staff report dated December 18, 2000, (Exhibit 19) supported the proposed enlargement be approved and the number of managers remain at five.

10. **Hearing Panel.** The hearing panel met on January 12, 2001, and, based on the oral and written record in this matter, decided with a unanimous vote to recommend to the full Board that the Brown's Creek Watershed District be enlarged as proposed in the Petition and that the number of managers remain at five instead of being increased to seven for a period of two years as proposed in the Petition. The enlargement would be for the public welfare and public interest and the purpose of Minnesota Statutes Chapters 103B and 103D would be served. The proposed increase in number of managers would not benefit the public welfare, public interest and the purpose of Minnesota Statutes Chapters 103B and 103D.

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In arriving at a decision on the number of managers, the hearing panel noted the following:

(A) there is presently one manager position vacant which the Washington County Board should make an effort to fill with a qualified candidate from the enlargement area;

(B) two manager terms expire in nine months which affords the Washington County Board additional opportunities in the very near future for manager representation in the enlargement area;

(C) a watershed district manager should consider and represent the entire watershed and not one area, one subwatershed, one city, or one town;

(D) watershed district managers "... must be appointed to fairly represent the various hydrologic areas within the watershed district by residence of the manager appointed" (See Minn. Stat. § 103D.311, Subd. 3 (c));

(E) the area, population and number of water resource issues of the enlarged watershed district are not as large or great in comparison to other metropolitan watershed districts, which almost all have five managers;

(F) there is presently only one metropolitan watershed district that has more than five managers and it is much larger in area, has a much greater population and has many more water resource issues than the enlarged watershed district;

(G) five managers is the number the Petition specifies after a two year transition period of an additional two managers;

(H) during the transition period the enlarged watershed district should appoint a transition team from the enlargement area to consult with the watershed district managers.

The hearing panel also recommended that the watershed management plan for the Brown's Creek Watershed District be amended within two years to include the enlargement area.

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CONCLUSIONS

1. The Petition for the enlargement and increasing the number of managers of the Brown's Creek Watershed District is valid in accordance with Minn. Stat. §§ 103D.261 and 103D.305.

2. Proper notice of hearing was given and the public hearing was held in accordance with applicable laws.

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

4. The Board has proper jurisdiction in the matter of ordering a watershed district enlargement.

5. The enlargement of the Brown's Creek Watershed District as proposed in the Petition would be for the public welfare and public interest and the purpose of Minnesota Statutes Chapters 103B and 103D would be served.

6. Increasing the number of managers of the Brown's Creek Watershed District as proposed in the Petition would not benefit the public welfare, public interest and the purpose of Minnesota Statutes Chapters 103B and 103D.

7. During the transition period the Brown's Creek Watershed District should appoint a transition team from the enlargement area to consult with the watershed district managers.

8. The Brown's Creek Watershed District Watershed Management Plan should be amended within two years to include the enlargement area.

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ORDER

The Board hereby orders that the Brown's Creek Watershed District be enlarged per the Washington County Petition (Exhibit 2) dated September 26, 2000, according to Exhibit A of said Petition (Exhibit 3) attached and made a part of this Order hereof and that the number of managers remain at five.

Dated at Saint Paul, Minnesota this 24th day of January, 2001.

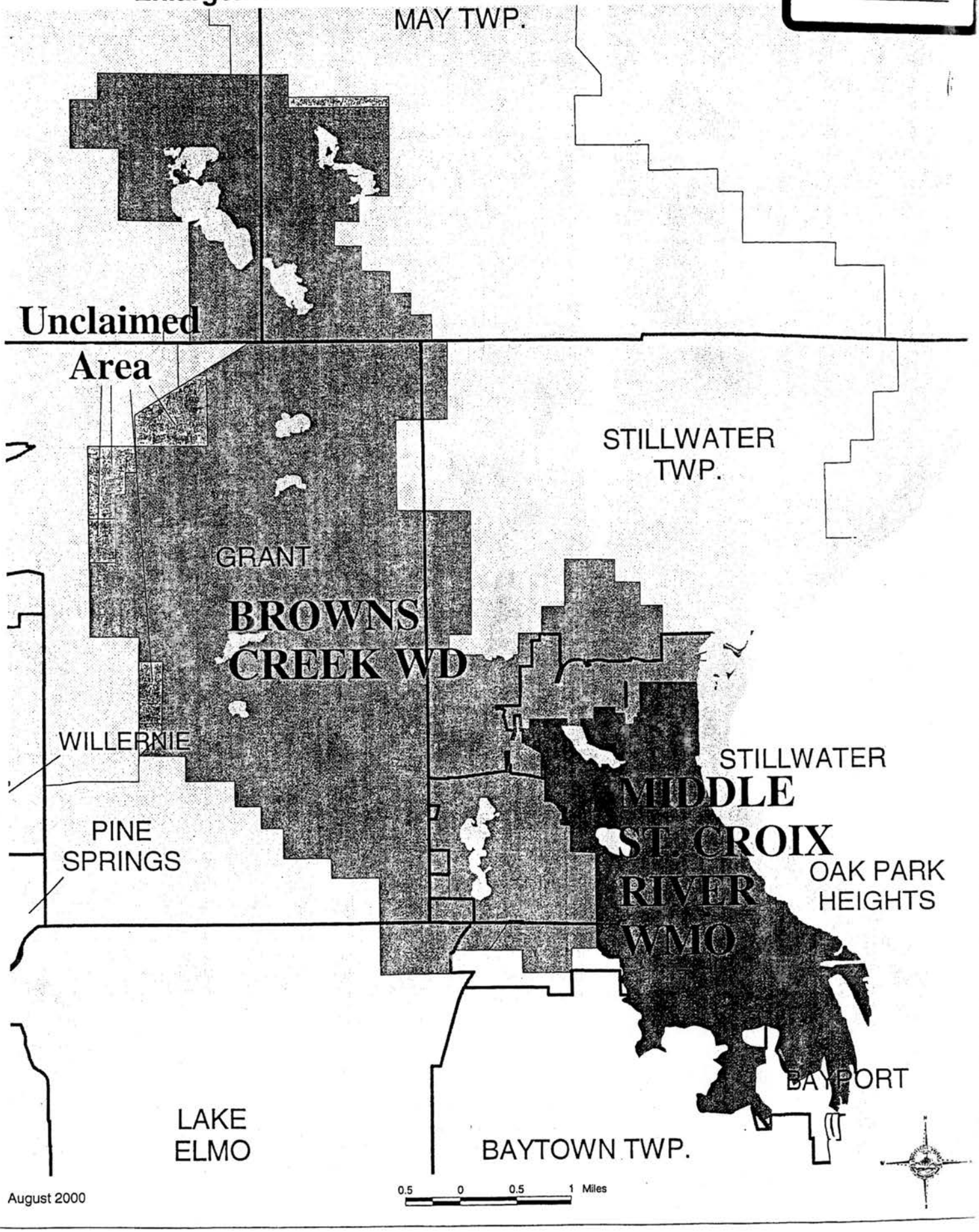
MINNESOTA BOARD OF WATER AND SOIL RESOURCES

DRAFT

By: _____
Kathleen M. Roer, Chair

Exhibit A
Washington County
Enlargement of Brown's Creek Watershed District

EXHIBIT 3



August 2000

Committee Recommendations

4. Valley Branch Watershed District Enlargement and Increase Number of Managers
   DECISION

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Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, Minnesota 55107

In the Matter of the Enlargement and Increasing the Number of Managers of the Valley Branch Watershed District in Washington County pursuant to Minnesota Statutes §§ 103D.261 and .305

ORDER ENLARGEMENT AND NAME CHANGE OF VALLEY BRANCH WATERSHED DISTRICT

Whereas, Washington County filed a Petition dated September 7, 2000 with the Board of Water and Soil Resources (Board) on September 14, 2000, to enlarge and change the name of the Valley Branch Watershed District pursuant to Minn. Stat. § 103D.261, and increase the number of managers of the Valley Branch Watershed District pursuant to Minn. Stat. § 103D.305, 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. **Establishment Petition.** The Petition (Exhibit 2) to enlarge, change the name, and increase the number of managers of the Valley Branch Watershed District dated September 7, 2000, was filed by Washington County with the Board on September 14, 2000.

2. **Property Description.** The territory to be included in the watershed district, the Petitioned Area, is located in Washington County entirely within the metropolitan area and is approximately 59.3 square miles contiguous to the Valley Branch Watershed District, which includes land in the Cities of Afton, Bayport, Cottage Grove, Hastings, Lake St. Croix Beach, Lakeland, Lakeland Shores, Oak Park Heights, and St. Mary's Point, and the towns of Baytown, Denmark, and West Lakeland, and further depicted on a map attached to the

Petition as Exhibit A. The Petitioned Area includes the southern portion of the Middle St. Croix River Watershed Management Organization and the entire Lower St. Croix Watershed Management Organization.

3. **District Name.** The Petition specifies the name of the enlarged district shall be the "Lower St. Croix Valley Watershed District".

4. **Number of Managers.** The Petition specifies the number of managers shall be increased to seven (7) for two years, then return to the present number of five (5).

5. **Reasons for Change.** The Washington County Board authorized a Water Governance Study to identify and evaluate the best governance structure for water management in the County. The resulting report was adopted by the Washington County Board. The Petition is a direct result of the report and specifies the following:

   A. Washington County has a relatively large number of watershed management organizations of small size compared to other metropolitan counties.

   B. The ineffectiveness of some joint powers agreement watershed management organizations in Washington County.

   C. Insufficient budget due to small size and limited tax capacity of some watershed management organizations.

   D. Joint Powers Agreement Watershed Management Organizations have not established offices or a clear point of communication.

   E. Washington County has coordinated issues relating to the enlargement such as financing policies, watershed management plans, and board manager representation.

6. **Hearing Order.** At its regular meeting on October 25, 2000, the Board determined that the Petition met the requirements of Minn. Stat. §§ 103D.261 and 103D.305, and consequently ordered a public hearing to be held on the Petition for the Valley Branch Watershed District Enlargement and Increase Number of Managers. (Exhibit 6)

7. **Hearing Notice.** Legal notice of the public hearing on the proposed watershed district enlargement and increase number of managers, pursuant to Minn. Stat. §§ 103D.261, Subd. 1 (c) and 103D.305, Subd. 4, was published in the Stillwater Evening Gazette on November 7 and 16, 2000, and in the Lillie Suburban Newspaper the Oakdale-Lake Elmo Review on November 8 and 15, 2000. (Exhibits 9 and 10) Further, a copy of the hearing notice was mailed to approximately 60 addressees including the Washington County Auditor, Washington County Attorney, Washington County Administrator, legal counsel for the watershed district, all of the cities in the proposed watershed district, all of the towns in the proposed watershed district, the SWCD, and the DNR. (Exhibit 7)

8. **Public Hearing.** A public hearing was held on the enlargement and increasing the number of managers of the Valley Branch Watershed District on November 29, 2000, at the Lake Elmo City Hall, 3800 Laverne Avenue North, Lake Elmo, Minnesota. The proceedings were tape recorded. The hearing panel was the Metro Water Planning Subcommittee which consisted of Board members Dwain Otte, Jack Frost, and Kathleen Roer as chair.

Jim Haertel, Board staff, entered Exhibits 1 through 10 into the record by reading a brief description of each exhibit.

Exhibit 1. Letter dated September 12, 2000, from Howard Turrentine, Washington County Assistant Attorney, forwarding the Petition, which is Exhibit 2.

Exhibit 2. Petition dated September 7, 2000, from Washington County to enlarge the Valley Branch Watershed District and increase the number of managers.

Exhibit 3. Attachment to Petition labeled "Exhibit A" which is a map of the proposed enlargement.

Exhibit 4. Attachment to Petition labeled "Exhibit B" which is a document entitled "Report for Water Governance Study, Washington County, Minnesota" dated May, 1999.

Exhibit 5. Acceptance of Service of Petition signed by Raymond Marshall, Valley Branch Watershed District Counsel, dated September 11, 2000.

Exhibit 6. Order dated October 25, 2000, from the Board of Water and Soil Resources for a Public Hearing on the Petition.

Exhibit 7. Letter dated November 3, 2000, from Jim Haertel to approximately 60 addressees notifying them of the public hearing, including copies of the legal notice and map.

Exhibit 8. Legal Notice of Public Hearing dated October 26, 2000, signed by Jim Haertel.

Exhibit 9. Affidavit of Publication dated November 21, 2000, of Legal Notice in the Stillwater Evening Gazette on November 7 and 16, 2000.

Exhibit 10. Affidavit of Publication dated November 15, 2000, of Legal Notice in the Lillie Suburban Newspaper the Oakdale-Lake Elmo Review on November 8 and 15, 2000.

Exhibit 11. Document entitled "Washington County Petition for Enlargement of Valley Branch Watershed District Public Hearing – November 29, 2000 Testimony Submitted by Washington County", consisting of 10 pages.

Exhibit 12. Bound document entitled "Implementation Strategy Report Washington County Water Governance Study" adopted July 1999 by the County Board of Commissioners.

Exhibit 13. One sheet of paper showing acreage and square miles for Brown's Creek and Valley Branch Watershed Districts for both existing and proposed (new).

Exhibit 14. Color map, approximately 11" by 17" entitled "Approximate Natural Watershed" dated November 13, 2000.

Exhibit 15. Four pages entitled "Washington County Water Governance Study Implementation Strategy Report" dated February 2000.

Exhibit 16. May 18, 2000 letter from Jane Harper to five addressees regarding "Treasurers Subcommittee Meeting" including six attached pages.

Exhibit 17. Brown's Creek Watershed District Resolution No. 00-03 dated August 7, 2000 regarding a favorable position towards the Washington County Water Governance Study proposal.

Exhibit 18. Carnelian-Marine Watershed District resolution dated August 7, 2000 regarding an unfavorable position towards the Washington County Water Governance Study proposal.

Exhibit 19. City of Oak Park Heights Resolution No. 00-10-51 regarding an unfavorable position towards the Washington County Water Governance Study proposal.

Exhibit 20. Lake St. Croix Beach Resolution No. 00-12 regarding an unfavorable position towards the Washington County Water Governance Study proposal.

After all people present at the public hearing were given an opportunity to speak, the hearing record was left open for three weeks until 4:30 PM on December 20, 2000, for receipt of written comments. The following exhibits were received while the record was open.

Exhibit 21. West Lakeland Township Resolution No. 2000-6 dated November 15, 2000 not supporting the Petition.

Exhibit 22. BWSR Metro Region Staff Report dated December 18, 2000, recommending the proposed enlargement be approved and the board of managers be increased to seven.

Exhibit 23. Washington County cover page received December 19, 2000, transmitting exhibits 24 and 25.

Exhibit 24. Three pages detailing the size of the proposed enlargement.

Exhibit 25. Document entitled "Washington County Water Governance Study Participation Process Documentation July 1998-December 2000".

Exhibit 26. City of Lakeland Resolution No. 2000-16 dated December 19, 2000 not supporting the Petition.

Exhibit 27. City of Lakeland Shores Resolution No. 2000-12-2 dated December 6, 2000 not supporting the Petition.

Exhibit 28. Facsimile transmittal from City of Oak Park Heights of what appears to be an article from a newspaper about the Carnelian-Marine Watershed District winning a state award.

Note: all the following exhibits were delivered from David Beaudet on December 20, 2000.

Exhibit 29. Two pages entitled "History of Water Govenance Study for Washington County, Minnesota" from May 1998-September 2000.

Exhibit 30. Washington County Board Agenda for March 7, 2000 with attached request for Board Action on the Implementation Strategy Report for the Water Governance Study.

Exhibit 31. Six legal pages numbered 377-382 dated September 19, 2000, excerpted from Washington County Board of Commissioners meeting minutes, detailing the Brown's Creek WD petition.

Exhibit 32. One legal page numbered 176 dated June 1, 1999, excerpted from Washington County Board of Commissioners meeting minutes, with some details about the Comfort Lake-Forest Lake WD petition and the Water Governance Study.

Exhibit 33. Washington County Board Agenda and excerpted minutes from August 8, 2000 regarding the Petition.

Exhibit 34. Washington County request for Board Action and excerpted minutes from April 4, 2000 regarding the Water Governance Study.

Exhibit 35. Excerpts from Washington County Board of Commissioners meeting minutes of June 27, 2000, regarding the Water Governance Study.

Exhibit 36. One page from Craig Leiser on the Northern Unit Work Group dated around March 13, 2000.

Exhibit 37. One page entitled "Financial Guidelines for Watershed North".

Exhibit 38. One page entitled "Watershed Mtg" dated 3/8/00.

Exhibit 39. One page entitled "Boundary Issues".

Exhibit 40. One page entitled "North Washington Water Unit Property Tax Impact".

Exhibit 41. Middle St. Croix WMO Resolution No. 00-02 dated July 13, 2000 not supporting the Petition.

Exhibit 42. Four pages entitled "Washington County Water Governance Study Boundaries Work Group November 22, 1999 Meeting Summary.

Exhibit 43. Four page letter dated March 20, 2000, from the Managers of the Carnelian-Marine Watershed District to the Washington County Board of Commissioners recommending a phased approach to watershed district enlargements.

Exhibit 44. Three pages entitled "Washington County Water Governance Study North Unit Phasing Work Group March 13, 2000 Meeting Summary".

Exhibit 45. Five pages entitled "Washington County Water Governance Study Report on Joint Meeting of North Unit Phasing and Boundaries Work Groups July 10, 2000".

Exhibit 46. Two pages entitled "Washington County Water Governance Study North Unit Phasing Work Group August 2000".

Exhibit 47. Three pages entitled "Washington County Water Governance Study Boundary Concerns – Central Communities September 22, 1999 Meeting Summary".

Exhibit 48. Four pages entitled "Boundaries Work Group".

Exhibit 49. Two pages entitled "Staffing and Budget Summary for Water Management Organizations in Washington County January 2000".

Exhibit 50. 42 pages with the cover dated July 6, 1999, from Jane Harper to the Water Governance Work Group regarding the County Board presentation – July 20, 1999.

9. **Board Staff Report.** The Board's metro region staff report dated December 18, 2000, (Exhibit 22) supported the proposed enlargement be approved and the number of managers be increased to seven.

10. **Hearing Panel.** The hearing panel met on January 12, 2001, and, based on the oral and written record in this matter, decided with a unanimous vote to recommend to the full Board that the Valley Branch Watershed District be enlarged as proposed in the Petition, that the name be changed as proposed in the Petition, and that the number of managers remain at five instead of being increased to seven for a period of two years as proposed in the Petition. The enlargement would be for the public welfare and public interest and the purpose of Minnesota Statutes Chapters 103B and 103D would be served. The increase in number of managers would not benefit the public welfare, public interest and the purpose of Minnesota Statutes Chapters 103B and 103D.

In arriving at a decision on the number of managers, the hearing panel noted the following:

(A) one Washington County manager term expires in less than ten months which affords the Washington County Board an opportunity in the very near future for manager representation in the enlargement area;

(B) the single Ramsey County manager term expires in less than nine months and in the near future the small portion of Ramsey County that is in the Valley Branch Watershed District may be included in the Ramsey-Washington Metro Watershed District thereby affording the Washington County Board an opportunity for manager representation in the enlargement area;

(C) a watershed district manager should consider and represent the entire watershed and not one area, one subwatershed, one city, or one town;

(D) watershed district managers "... must be appointed to fairly represent the various hydrologic areas within the watershed district by residence of the manager appointed" (See Minn. Stat. § 103D.311, Subd. 3 (c));

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(E) the area, population and number of water resource issues of the enlarged watershed district are not as large or great in comparison to other metropolitan watershed districts, which almost all have five managers;

(F) there is presently only one metropolitan watershed district that has more than five managers and it is much larger in area, has a much greater population and has many more water resource issues than the enlarged watershed district;

(G) five managers is the number the Petition specifies after a two year transition period of an additional two managers;

(H) during the transition period the enlarged watershed district should appoint a transition team from the enlargement area to consult with the watershed district managers.

The hearing panel also recommended that the watershed management plan for the Lower St. Croix Valley Watershed District be amended within two years to include the enlargement area.

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CONCLUSIONS

1. The Petition for the enlargement, name change, and increasing the number of managers of the Valley Branch Watershed District is valid in accordance with Minn. Stat. §§ 103D.261 and 103D.305.

2. Proper notice of hearing was given and the public hearing was held in accordance with applicable laws.

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

4. The Board has proper jurisdiction in the matter of ordering a watershed district enlargement and name change.

5. The enlargement of the Valley Branch Watershed District as proposed in the Petition would be for the public welfare and public interest and the purpose of Minnesota Statutes Chapters 103B and 103D would be served.

6. The name of the enlarged Valley Branch Watershed District should be changed to the "Lower St. Croix Valley Watershed District" pursuant to Minn. Stat. § 103D.261, Subd. 2 (b).

7. Increasing the number of managers of the Valley Branch Watershed District as proposed in the Petition would not benefit the public welfare, public interest and the purpose of Minnesota Statutes Chapters 103B and 103D.

8. During the transition period the Lower St. Croix Valley Watershed District should appoint a transition team from the enlargement area to consult with the watershed district managers.

9. The Lower St. Croix Valley Watershed District Watershed Management Plan should be amended within two years to include the enlargement area.

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ORDER

The Board hereby orders that the Valley Branch Watershed District be enlarged per the Washington County Petition (Exhibit 2) dated September 7, 2000, according to Exhibit A of said Petition (Exhibit 3) attached and made a part of this Order hereof, that the name be changed to the "Lower St. Croix Valley Watershed District", and that the number of managers remain at five.

Dated at Saint Paul, Minnesota this 24th day of January, 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

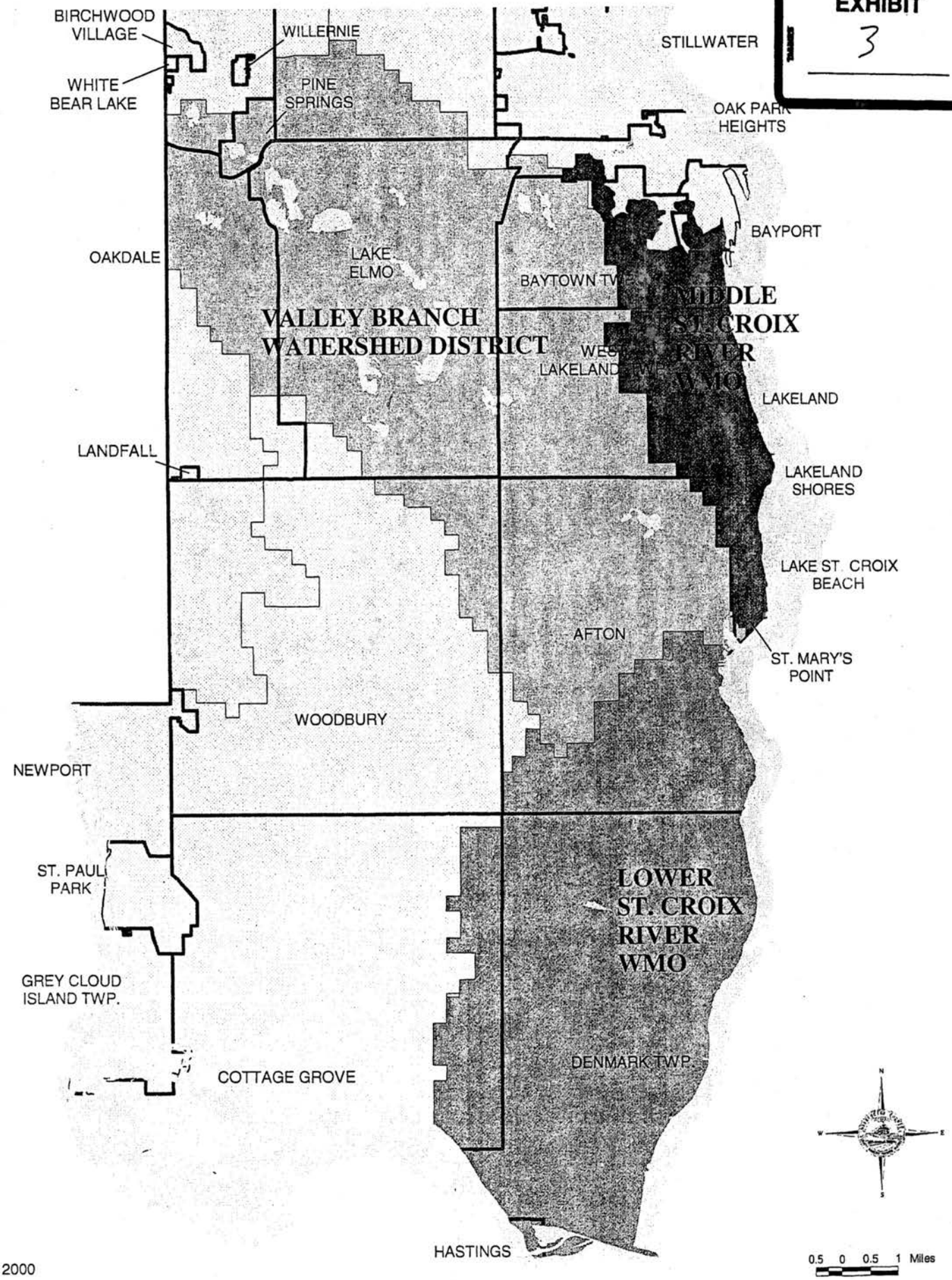
DRAFT

By: _____
Kathleen M. Roer, Chair

EXHIBIT A

Proposed Lower St. Croix River Watershed District
(Enlargement of Valley Branch Watershed District)

EXHIBIT 3



August 2000

Committee Recommendations

5. Carnelian-Marine Watershed District Enlargement and Increase Number of Managers Hearing
   DECISION

DRAFT

Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, Minnesota 55107

DRAFT

In the Matter of the Enlargement and Increasing the Number of Managers of the Carnelian-Marine Watershed District in Washington County pursuant to Minnesota Statutes §§ 103D.261 and 103D.305

ORDER ENLARGEMENT AND INCREASE NUMBER OF MANAGERS HEARING

Whereas, Washington County filed a Petition dated November 28, 2000 with the Board of Water and Soil Resources (Board) on December 6, 2000, to enlarge the Carnelian-Marine Watershed District pursuant to Minn. Stat. § 103D.261 and increase the number of managers of the Carnelian-Marine Watershed District pursuant to Minn. Stat. § 103D.305, 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

1. **Petition.** The Petition to enlarge and increase the number of managers of the Carnelian-Marine Watershed District was filed by Washington County with the Board on December 6, 2000.

2. **District Name.** The name of the proposed enlarged watershed district shall remain the "Carnelian-Marine Watershed District".

3. **Property Description.** The territory to be included in the watershed district, the Petitioned Area, is located in Washington County entirely within the metropolitan area and is approximately 39 square miles contiguous to the Carnelian-Marine Watershed District, which includes land in the City of Marine on St. Croix and in the towns of May, New Scandia and Stillwater, and further depicted on a map attached to the petition as Exhibit A. The Petitioned Area includes the Marine on St. Croix Watershed Management Organization.

4. **Increase Number of Managers.** The Board of Managers is proposed to be increased from five managers to seven managers for the first two years, then return to five managers after the first two years. The two proposed new manager positions would represent the subwatershed currently managed by the Marine on St. Croix Watershed Management Organization.

5. **Reasons for change.** The Washington County Board authorized a Water Governance Study to identify and evaluate the best governance structure for water management in the County. The resulting report was adopted by the Washington County Board. The Petition is a direct result of the report and specifies the following:

   A. Washington County has a relatively large number of watershed management organizations of small size compared to other metropolitan counties.

   B. The ineffectiveness of some joint powers agreement watershed management organizations in Washington County.

   C. Insufficient budget due to small size and limited tax capacity of some watershed management organizations.

   D. Joint Powers Agreement Watershed Management Organizations have not established offices or a clear point of communication.

   E. Washington County has coordinated issues relating to the enlargement such as financing policies, watershed management plans, and board manager representation.

6. **Petition Service.** The petition was served on the Board and the Carnelian-Marine Watershed District pursuant to Minn. Stat. § 103D.261, Subd. 1 (b).

7. **Hearing Location**. The hearing should be held at the Marine on St. Croix City Council Chambers, 121 Judd Street, Marine on St. Croix, Minnesota. The facility is handicap accessible and located within the proposed Carnelian-Marine Watershed District.

8. **Hearing Panel.** The Board's Metropolitan Water Planning Subcommittee, presently consisting of Kathleen Roer, Dwain Otte, and Jack Frost, should preside over the hearing due to their familiarity with the issues, and bring a recommendation to the Board.

9. **Hearing Time.** The pertinent parties have been coordinated with such that the hearing should be held on Monday, February 26, 2001, starting at 7:00 PM.

CONCLUSIONS

1. The Petition for the enlargement and increasing the number of managers of the Carnelian-Marine Watershed District is valid in accordance with Minn. Stat. §§ 103D.261 and 103D.305.

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 enlargement and increase number of managers hearing.

ORDER

The Board hereby orders that the hearing on the Enlargement and Increase Number of Managers of the Carnelian-Marine Watershed District be heard by the Metropolitan Water Planning Subcommittee on Monday, February 26, 2001, starting at 7:00 PM at the Marine on St. Croix City Council Chambers, 121 Judd Street, Marine on St. Croix, Minnesota.

Dated this 24th day of January, 2001.

DRAFT

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

By: _____
Kathleen M. Roer, Chair

MN Board of Water and Soil Resources
WCA Corrective Action/Oversight Policy

Approval Date 1/24/01
Resolution # 01-09

The purpose of this policy is to establish the process that will be utilized to correct Local Government Unit (LGU) implementation and administration problems involving the Minnesota Wetland Conservation Act (WCA). The strategy of this policy is to provide a clear, concise, timely route to resolution through implementation of the following steps:

1) BWSR staff receives complaints or has other reasons to warrant special evaluation of a particular LGU.

2) A combination of the following staff shall conduct an investigation of the situation:

   - Board Conservationist (BC)
   - Wetland Specialist (WS)
   - Senior Wetland Specialist (SWS)
   - DNR Wetland Enforcement Officer (WEO)

   This investigation shall:

   - Verify who the responsible LGU is and that WCA has been adopted
   - Conduct an audit of WCA actions, grant funds and coordination efforts
   - Consult with other local government units and regulatory agency representatives

3) Staff will promptly notify Regional Supervisor (RS) and Land Water Section Administrator (LWSA) of findings upon audit completion. Staff, RS, and LWSA shall review the findings and determine if the situation requires continued implementation of this process or some other remedy.

4) Within 30 days after completing the audit, the RS and BC shall notify the LGU staff in writing and via a meeting of findings which may include:

   - LGU properly applying WCA and no further action is needed; or
   - LGU needs to make minor changes in WCA application with BWSR assistance; or
   - LGU application is flawed seriously enough to require continuation of this process into the formal phase.

5) If continued action is deemed necessary, BWSR staff shall arrange a meeting with appropriate LGU staff and officials to discuss the findings of the audit and determine any necessary corrective actions. Within 30 days after this meeting, BWSR staff shall provide the LGU with written findings and recommendations for corrective actions to be implemented by the LGU within 60 days from receipt of the written findings and recommendations.

6) BWSR Staff shall schedule a follow-up meeting at the end of the 60-day implementation process to review progress by the LGU. If corrective action(s) are proceeding satisfactorily, the RS and BC will notify the LGU of such in writing within 30 days and continue monitoring. If implementation is not proceeding satisfactorily, staff shall recommend to the Executive Director (ED) that a letter to the LGU be issued indicating unsatisfactory implementation of corrective measures and request a written response from the LGU within 30 days.

7) The staff shall review the response received from the LGU. If the response is unsatisfactory, the Executive Director (ED) shall recommend to the Board that the LGU appear at a hearing before the Board, or committee thereof appointed by the Board, in accordance with MN Rule 8420.0260.

8) If a hearing is ordered and if it is determined at this hearing that corrective action is necessary, the Board shall write the LGU directing specific corrective action within 60 days.

9) If after the 60-day period described in Step #8 the LGU has not corrected the problem to the satisfaction of the Board, the Board shall take appropriate legal action to ensure compliance. Actions may include:

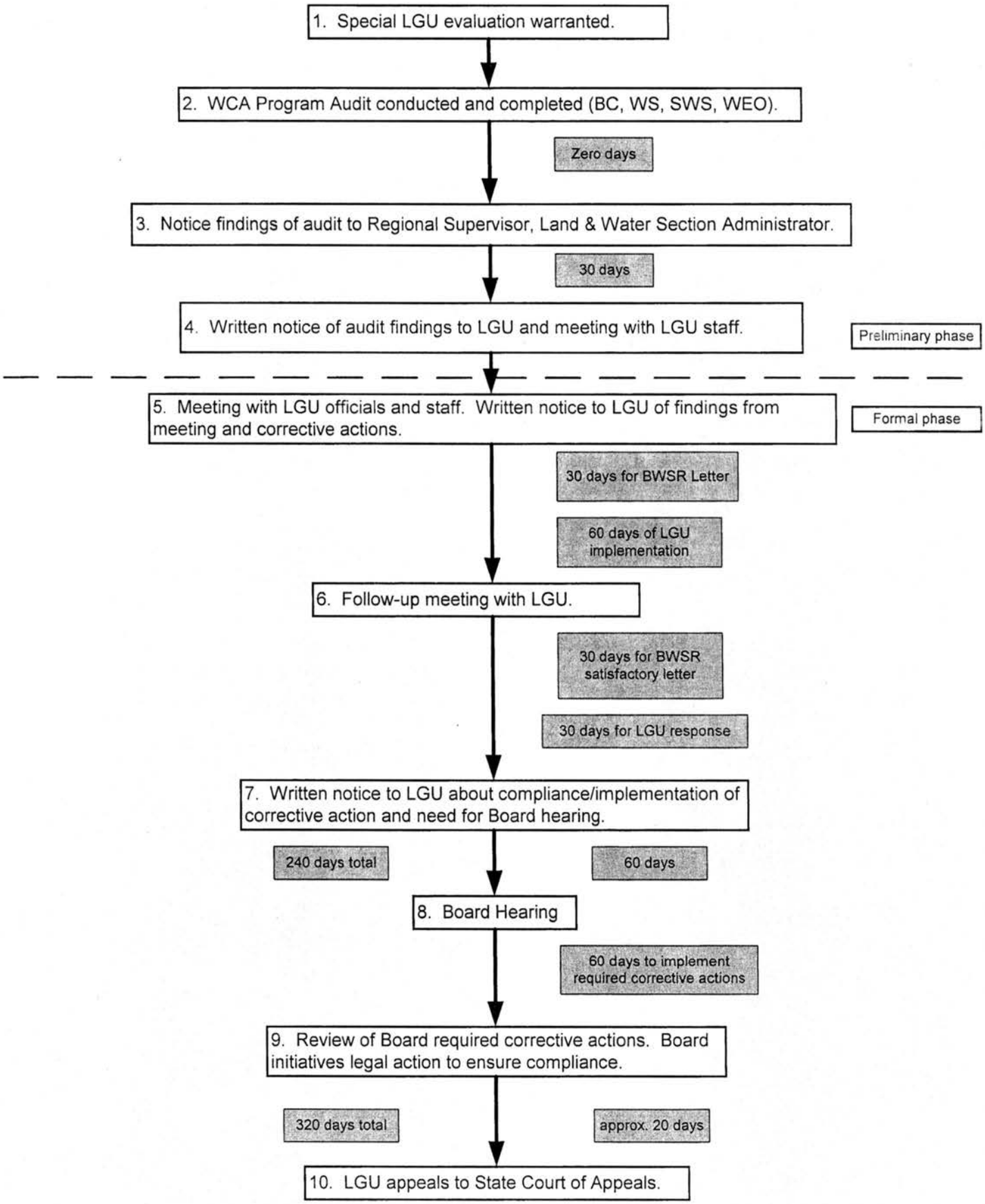
   - Declaring a moratorium until actions are corrected;
   - Withholding WCA funding
   - Assignment of WCA authority to another party
   - State auditor review of LGU
   - Legal actions by State of Minnesota

10) An LGU appeal of the Board's decision may be taken to the State Court of Appeals as specified in MN Rule 8420.0280 (Appeal from Board Decision).

Kathleen Roer

Kathleen Roer, Chair

WCA OVERSIGHT/CORRECTIVE ACTION PLAN
January 24, 2001



w:wca oversight flowchart

New Business

2. FY 01 NPEA Challenge Grants
   DECISION

FY 01 NON POINT ENGINEERING ASSISTANCE CHALLENGE GRANTS

Amount Available - $135,939

Grant Purpose – To provide additional engineering/technical assistance to landowners to implement high priority conservation practices.

Funding Priorities - The funding priorities as set forth by BWSR are that first funding should be to the JPBs 1) whose SWCDs received FY 01 Feedlot Water Quality Management Grants; and, 2) that will be employing additional staff to provide technical assistance.

Funding Recommendation - The BWSR received Applications from 7 JPBs requesting $275,111. The total requested also includes $11,970 for Eagle Point software updates recommended by BWSR staff.

Applications were reviewed by the G – Team. Applications recommended to be funded are itemized on the enclosed spreadsheet.

FY 01 NON POINT ENGINEERING ASSISTANCE CHALLENGE GRANT APPLICATIONS

AVAILABLE FUNDS - $135,939

JPB	RECEIVED FWQMG	DESCRIPTION	FUNDS REQUESTED	FUNDS RECOMMENDED
1	NO	PURCHASE A SECOND SEAT OF AUTOCAD AND EAGLE POINT.	$6,400	$0
2	NO	HIRE A 1/2 FTE TECHNICIAN for 2YRS. APPLICANT TO PROVIDE A 1 : 1 CASH MATCH.	$45,000	$20,363
3	NO		$0	
4	NO		$0	
5	YES	HIRE A FT TECHNICIAN FOR 2 YRS. APPLICANT PROVIDING A 1 : 1 CASH MATCH.	$40,000	$23,100
		COMPUTERS AND EQUIPMENT.	$39,350	$5,000
6	NO	HIRE SUMMER INTERN FOR TECHNICAL ASSISTANCE. 2 SUMMERS	$12,000	$6,605
7	YES	ADDITIONAL FUNDS FOR CONSULTING ENGINEERING.	$5,000	$0
8	YES		$0	
9	YES	CONTINUATION OF CURRENT (FY 99) CHALLENGE GRANT POSITION. 1 YR.	$47,434	$37,368
10	YES		$0	
11	YES	FUNDS FOR BUDGET SHORTFALL FOR THE EMPLOYMENT OF 2 ENGINEERS. 2 YRS.	$56,837	$27,020
		ADDITIONAL TOTAL SURVEY STATION.	$11,120	$4,513
ALL		EAGLE POINT SOFTWARE UPDATE FOR ALL JPBs.	$11,970	$11,970
		TOTAL	**$275,111**	**$135,939**

H:01NPEACGR

February 2001

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET, CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
FEBRUARY 28, 2001

BOARD MEMBERS PRESENT: Kathleen Roer, Jim Dahlvang, Darrell Bruggman, Jerome Deal, Clair Nelson, Jim Anderson-MES, Dwain Otte, Dan Wilson-MDH, Allan Oehlke, Paul Krabbenhoft, Lee Coe, Char Kahler, Mark Dittrich-MDA, Ginny Imholte, Jack Frost, Tim Scherkenbach-PCA, Wayne Edgerton-DNR

STAFF PRESENT: Ron Harnack, John Jaschke, Greg Larson, Ron Shelito, Jeff Nielsen, Mary Jo Anderson, Steve Woods, Jim Birkholz, Al Kean, Wayne Zellmer, Brian Dwight

OTHERS PRESENT:
LeAnn Buck, MASWCD
Tim Gieseke, MACDE

Chair Roer called the meeting to order at 9:10 a.m.

** 01-11 **Adopt Agenda** - Moved by Jim Dahlvang, seconded by Char Kahler, to adopt the agenda as presented. Motion passed on a voice vote.

** 01-12 **Minutes of January 24, 2001** - Moved by Jack Frost, seconded by Lee Coe, to approve the minutes of January 24, 2001, as circulated. Motion passed on a voice vote.

Chair's Report - Kathleen Roer reported that she was unable to attend the EQB meeting. The Hancock Pork issue was discussed; a subcommittee has been formed to study the issue. Chair Roer met with Senator Dan Stevens and John Jaschke regarding the wetlands/waters bill. She attended a hearing on Monday night regarding the Carnelian-Marine WMO. The subcommittee will meet next month and make a decision on the petition for enlargement, increasing the number of managers on a temporary basis.

Executive Director's Report - Ron reported that the staff has been busy with the legislative session. Formal BWSR overviews have been completed before the Senate Environment Finance and the House Environment and Natural Resources Policy Committee.

Ron reported that the Minnesota Waterfowl Association holds an annual conservation awards program. BWSR recognized Greg Larson, Ray Norrgard, Dorothy Waltz, Diane Jensen, and C. Ford Runge as pioneers of the RIM program.

Ron announced that the Governor appointed three new board members: Victor Ormsby, SWCD supervisor from Winona; Karen Harder, citizen member from Minneapolis; and JoAnn Coover, county commissioner from Minneota. Lee Coe has been appointed as chair. Ron stated that the Dispute Resolution Committee (DRC) needs to have new appointments to hear the pending appeal.

Ron announced a staffing change -- Jim Birkholz will be leaving his deputy director position effective March 15. Jim will be working half-time on special assignments, including district capacity. Jim thanked board members for their assistance in getting things done.

Ron stated that Senator Dan Stevens will carry the wetlands bill, more information will be provided later. BWSR has been actively involved in the Hugo/ Hardwood Creek litigation; the decision of the judge is pending.

Dispute Resolution Committee (DRC) – Chair Roer reported that there is presently one appeal pending. The appeal regards Anoka County Ditch number 53-62. The Rice Creek Watershed District denied an exemption involving the federal exemption. The Board has previously heard two appeals on this ditch at this location but they dealt with a different exemption. The DRC will begin to hear the matter next week. One other note: the two orders from last month's Board Meeting expanding Brown's Creek and Valley Branch Watershed Districts in Washington County were both appealed to the Court of Appeals by the Middle St. Croix WMO.

Wetlands Committee - Darrell Bruggman reported that the wetlands committee met after the January board meeting. Darrell distributed copies of the 2001 wetlands/waters bill summary of the draft legislation for information.

Education and Public Relations Committee - Paul Krabbenhoft reported that the committee met this morning. The committee is working on the implementation of the education strategy and working with staff to develop the work plan. Ron asked for board member e-mail addresses. He is assessing the benefit of providing laptops to board members for those who need them so they have access to the internet. It may reduce paper and the cost of doing business over term and can enhance member access.

Ron reported that a legislative audit of BWSR has just been completed. He will ask the Chair to participate in the audit report briefing.

Metro Subcommittee Report - Jack Frost reported that a state agency workshop will be held tomorrow regarding comprehensive local water plans. Agency member representatives are requested to attend. Jack stressed the importance of agency involvement in the comprehensive local water plans.

Agency Reports
Mark Dittrich, Minnesota Department of Agriculture (MDA) reported that a meeting was held last week regarding rock inlets. Greg Larson gave an excellent report regarding a 319 proposal and soil surveys. MDA is involved with many legislative issues.

Dan Wilson, Minnesota Department of Health (MDH), reported that the federal arsenic issue is pending. MDH has an arsenic update on the web. MDH is also involved with legislative issues.

Wayne Edgerton arrived at 9:45 a.m.

Jim Anderson, Minnesota Extension Service (MES) reported that MES has gone through some reorganization. A group of "land and water" participants, which involves BWSR, will meet to discuss interests and areas of concern. Jim reported that he met with Jim Birkholz and Dianne Flynn regarding the MES/BWSR education specialists positions. MES will meet with DNR, MDA and Met Council as well regarding various positions. The U of M is celebrating its 150th anniversary!

Wayne Edgerton, Department of Natural Resources (DNR) reported that DNR is busy with the following legislative issues: concon; ATV trail issue; timber harvest on wildlife management areas; payment in lieu of taxes; trespass laws; and hunting and shooting issues. Wayne reported that a quarterly CREP staff meeting will be held tomorrow in Redwood Falls. Forest management practices were briefly discussed.

Tim Scherkenbach, Minnesota Pollution Control Agency (MPCA) distributed a fact sheet on MPCA's budget overview. He also distributed MPCA's staff and environmental work reductions. Ron Harnack asked that MPCA make a report at the BWSR March meeting on the impact and implications to local government activities as a result of these changes. Tim stated that MPCA is working on how to implement the federal legislation regarding impaired waters list regarding TMDLs; a stakeholders group is meeting on this issue.

Consent Agenda

Morrison County Request for Comprehensive Local Water Plan (CLWP) Extension - Ron Shelito reported that staff recommends approval of the Morrison County request
** for extension of the CLWP until February 28, 2002. Moved by Coe, seconded by
01-13 Jerome Deal, to approve the Morrison County request for CLWP extension. Jack Frost requested a map be included showing the location. Motion passed on a voice vote.

Recognition of Retiring Board Members - Ron stated that board members Kathleen Roer, Allan Oehlke, and Jim Dahlvang have decided to retire after their terms expired January, 2001. Ron stated that they have been three key members of the Dispute Resolution Committee. Ron stated that he has really appreciated working with Chair Roer. He recognized her great leadership and strong commitment to the Board. He presented Chair Roer with a certificate of commendation from Governor Ventura, and a plaque from the Board as a token of appreciation. Chair Roer stated that she appreciated the recognition and valued the dedicated BWSR staff. She wished Lee Coe the best as new chair; and wished the Board well. She stated that she will miss the Board but it's time to move on.

Ron recognized Allan Oehlke for his efforts in partnership with the county, and stated that was it great having Allan on the board. Allan thanked the Board, and stated that

he's happy to see Jim Birkholz carrying the district capacity effort. Ron presented Allan with a certificate of commendation from Governor Ventura, and a plaque from the Board as a token of appreciation.

Ron recognized Jim Dahlvang as a strong advocate for the Minnesota River efforts and his belief in local government, and wished him well as county commissioner. Jim thanked Ron for his leadership and dedicated staff. Ron presented Jim with a certificate of commendation from Governor Ventura, and a plaque from the Board as a token of appreciation.

Chair Roer called for a break in the meeting at 10:50 a.m. The meeting reconvened at 11:10 a.m.

Committee Recommendations

State Cost-Share Program Base Grant Allocation Revision - Wayne Zellmer explained that in June of 1999, the Board directed the Cost-Share Committee to explore revising the statewide cost-share allocation formula. The current formula was developed for FY85. Since that time, many physical, cultural, economic, and social changes are or have been taking place in Minnesota. These changes have prompted the committee to reevaluate the appropriateness of the current formula. Wayne presented the committee recommendations:

- Beginning in FY02, SWCD base grant allocations should be based on historical base grant expenditures for that SWCD. Average expenditures of the highest three or four most recent consecutive years for which BWSR has records will be used to calculate grant amounts annually. The formula adopted in FY85 will no longer be used. The BWSR will annually determine the total program amount available.
- Beginning in FY02, all SWCD grant amounts will be calculated from a minimum of $10,000.
- SWCD technical and administrative costs will be calculated at up to 20% of amount cost-shared on completed projects only.
- Beginning in FY03, implement performance standards to increase the efficiency of allocated funds. SWCDs with a "high" level of productivity will receive a $1,000 annual increase. Grants to SWCDs with a "medium" level of productivity will remain the same. SWCDs with a "low" level of productivity will receive a 5% grant decrease. Funds for increases will come from the special projects fund. Funds from decreases will go to the special projects fund.

Wayne, on behalf of the cost-share committee, recommends approval of the state
** cost-share program base grant allocation revision. Moved by Allan Oehlke, seconded

00-14 by Ginny Imholte, to approve the cost-share committee's recommendation to adopt the cost-share program base grant allocation revision. Discussion followed. Dwain Otte commended staff on the excellent work they have done revising the allocation. Motion passed on a voice vote. Wayne thanked and appreciated the efforts of Tom Fischer, Bill Best, and Doc Snyder for their work.

FY02 State Cost-Share Program Allocation Policy - Wayne Zellmer explained that the state cost-share program allocations are grants to SWCDs to cost-share with landowners the implementation of soil conservation and water quality improvement practices. The annual legislative appropriation is $2,120,000. The committee recommends the following:

1. FY02 Regular Statewide Cost-Share Program Allocation should be 90% of appropriation or $1,908,000.
2. FY02 Special Projects program:
   a. Allocations should be funded as:

10% of legislative appropriation	$212,000
Current roll-over funds available* 191,000	
Est. additional roll-over through spring of 2000	70,000
Total	$473,000

3. Maximum cost-share funding per special project should be capped at $40,000
4. Special project grants will not be used to pay for SWCD technical and administrative costs.

*Amount of roll-over will be that amount available at the time of allocation.

Wayne explained that at the June 2000 meeting, the Board decided that feedlots in riparian locations should be the #1 FY02 funding priority as follows:

Priority	
1	Feedlots in riparian locations
2	Feedlot operations where FLEVAL indicates a high pollution potential
3	Practices that *will* be applied in 2001.
4	Feedlot operators who have received a notice of violation.
5	Feedlots in counties that are conducting or have completed a level 2 or level 3 feedlot inventory.

Discussion followed. It was decided that "well-head protection areas" be named "drinking water supply management areas". Wayne, on behalf of the Committee,

recommends that feedlots in sinkhole catchment basins and feedlots in "drinking water supply management areas" also be included in "riparian locations" as the #1 funding
** priority. Moved by Ginny Imholte, seconded by Dwain Otte, to approve the
01-15 recommendation of the Cost-Share Committee for the appropriate amount to allocate for each program and to approve the FY02 feedlot water quality management grants funding priorities. Discussion followed. Motion passed on a voice vote.

Non-Point Engineering Assistance Base Grant Allocation Policy - Wayne Zellmer explained that the costs of funding the employment of the eleven joint powers board (JPB) engineers and technicians, along with providing up-to-date survey and design equipment, has reached $1,400,000 annually. Without any changes to BWSR allocations and policies, this program will not be solvent in FY2002. The BWSR Cost-Share Committee met on January 23, 2001, to consider various options, which included recommendations from MASWCD regarding the projected program budget shortfall. Wayne stated that the Committee supports MASWCD Option 1 and 2. The Committee recommends:

- That the entire FY02 legislative appropriation be allocated equally, (currently $102,727 per JPB) up to the total requested amount.
- JPBs will be responsible for their budget shortfalls.
- JPBs will be required to submit a board conservationist approved budget, detailing how they will resolve their budget shortfalls (estimated $27,800 average/JPB) and provide adequate engineering assistance in their JPB area.
- Any unused grant fund amounts will be subtracted from the next year's grant.

** Moved by Char Kahler, seconded by Jerome Deal, to adopt the recommendation of the
01-16 Cost-Share Committee and approve the Non-Point Engineering Assistance Base Grant Allocation Policy. Discussion followed. Motion passed on a voice vote.

Policy Establishing Payment Rates for Easements Taken for Public Road Replacement Bank Sites - John Jaschke explained that the Board adopted a policy in 1999 that allowed the BWSR to acquire easements for wetland restoration at a price not to
** exceed 125% of the RIM rate or the assessed land value. Moved by Darrell Bruggman,
01-17 seconded by Jerome Deal, to approve the attached policy relating to payment rates for easements taken for the public road wetland replacement program. Motion passed on a voice vote.

Approval of 2001 Spending Plan for the Public Road Wetland Mitigation Program - John Jaschke explained road program financial summary appropriations and what projects
** were recommended to be funded by the Wetlands Committee. Moved by Darrell
01-18 Bruggman, seconded by Jerome Deal, to approve the Wetlands Committee

recommendation and adopt the 2001 pending plan for the Public Road Wetland Mitigation Program. Motion passed on a voice vote.

New Business

Red River Valley Set-Aside Program - Ron Shelito explained that the 2000 Minnesota Legislature appropriated $2,650,000 to BWSR for establishment of an agricultural land set-aside program to provide short-term economic assistance to landowners. Funds will be allocated to northwestern SWCDs in designated primary counties in the 1999 Presidential Disaster Declaration. Each SWCD conducted a landowner sign-up. Staff recommend the following allocations to SWCDs: Clay $334,259.60; Kittson $258,314.98; Marshall $455,740.65; Marshall-Beltrami $118,790.38; Pennington $265,026.97; East Polk $50,131.49; West Polk $737,958.49; Red Lake $5,000; and
** Roseau $359,545.47. Moved by Clair Nelson, seconded by Allan Oehlke, to accept
01-19 the staff recommendation and to approve the Red River Valley Set Aside Program Allocation. Motion passed on a voice vote.

Legislative Update - Ron Harnack reported that board members have copies of a power point presentation in their packet for information. Ron reported that Representative Tim Finseth has authored House File #392, relating to state commissioner members of BWSR are non-voting members. Discussion followed. Moved by Jack Frost, seconded
** by Jerome Deal, that BWSR supports voting agency members. Motion passed on a
01-20 voice vote. Ron gave a brief update on legislative policy issues. Ron stated that the budget forecast came out today, the state has a lot less money than we thought we had. Ron reported that there is an unbelievable amount of support for CREP. Ron asked that board members contact him if they have specific questions on specific legislation.

Chair Roer appointed the new Dispute Resolution Committee - Dwain Otte, Lee Coe, Jerome Deal, Char Kahler, Clair Nelson.

Advisory Comments

Minnesota Association of Conservation District Employees (MACDE) - Tim Gieseke reported that MACDE met in January. They will work through Ron Harnack on various issues. The marketing issues are working well with CREP. Tim reported that BWSR is sponsoring a meeting on March 5-6 regarding a web-based reporting system. Participants represent local units of government that will come together as a Blue Ribbon Electronic Commerce Committee (BREC) to look at how local governments want to conduct business electronically with an emphasis on state supported programs. Tim reported that the NACD North Central meeting will be held July 15. He encouraged MACDE to attend. MACDE will not hold a summer meeting this year.

Minnesota Association of Soil and Water Conservation Districts (MASWCD) - LeAnn Buck reported that MASWCD legislative initiatives include full funding for CREP and an increase in local water planning base grants. The MASWCD Legislative Day at the Capitol will be held March 7-8. Ron Harnack is on the agenda. MASWCD delegation is going to Washington, D.C. in March to conduct their annual lobbying efforts. LeAnn thanked Kathi Roer, Jim Dahlvang, and Allan Oehlke for their work on BWSR. LeAnn stated that she is sorry that Jim Birkholz is stepping down as deputy director, but she is happy that he will continue working on district capacity.

Upcoming Meetings
The next BWSR meeting will be held March 28, 2001, in St. Paul.

Ginny Imholte reported that the Minnesota Association of Watershed Districts (MAWD) will hold their Legislative Breakfast on March 16 at the Kelly Inn in St. Paul.

Ron Harnack announced that "CREP Day at the Capitol" will be held on March 8, he encouraged board members to attend.

BWSR Tours for 2001 – Ron Harnack stated that the Board has received invitations to hold the BWSR tour and meeting in Aitkin County and also southeastern Minnesota (Root River/Houston/Fillmore). Staff will work with the invitees and field staff to plan the tours; possibly October for southeastern Minnesota and summer for Aitkin County. Ron stated that the Local Water Planners Conference will be held June 27-28 at Jackpot Junction in Morton. The Board could possibly hold the June board meeting in conjunction with the local water planners conference.

Chair Roer adjourned the meeting at 12:50 p.m.

Respectfully submitted,

Jerome Deal

~~Kathleen Roer~~ Jerome Deal
~~Chair~~ Chair-Designate

Resolution # 01-17

Policy Establishing Payment Rates for Easements Taken for Public Road Wetland Replacement Bank Sites

WHEREAS the Board of Water and Soil Resources adopted a policy in 1999 that allowed the BWSR to acquire easements for wetland restoration a price not to exceed 125% of the RIM rate or the assessed land value; and

WHEREAS the attorney general's office has advised that the policy needs certain clarification;

NOW THEREFORE the Board of Water and Soil Resources hereby adopts the following policy relating to payment rates for easements taken for the public road wetland replacement program:

1. That it is in the best interest of the State of Minnesota, where practical, to utilize the existing administrative process for the RIM conservation easement program to secure conservation easements for wetland restorations that will be utilized as wetland bank sites.

2. That this option be utilized only for sites that are eligible for RIM but can't be enrolled due to lack of adequate funding to accomplish an adequate restoration.

3. That the BWSR establishes a payment rate of 125 % of the established RIM rate for easement lands that would qualify for bank credits and further, any additional land included in the easement that is eligible for RIM but not eligible for bank credit will be acquired at the RIM rate.

4. That this option will only be used for projects where the BWSR engineer's estimate for implementing either the construction plan or the vegetation management plan is $15,000 or less. For projects meeting this criterion, the landowner will be reimbursed for the full amount of the cost of construction and vegetation management.

5. That the landowner sign an acknowledgement form (in addition to the agreement) indicating that they understand that the state will be banking any eligible credits.

Kathleen Roer, Chair

2/28/01
Date

March 2001

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BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET
CONFERENCE ROOM, LOWER LEVEL
ST. PAUL, MINNESOTA 55107
MARCH 28, 2001

BOARD MEMBERS PRESENT: Jerome Deal, Jim Anderson-MES, Darrell Bruggman, Char Kahler, Paul Krabbenhoft, Wayne Edgerton-DNR, Ginny Imholte, JoAnn Coover, Dan Wilson-MDH, Victor Ormsby, Jack Frost, Clair Nelson, Barbara Weisman-MDA, Karen Harder, Tim Scherkenbach-PCA, Dwain Otte

BOARD MEMBER ABSENT: Lee Coe

STAFF PRESENT: Ron Harnack, Mary Jo Anderson, Al Kean, Jim Haertel, Kevin Lines

Chair-Designate Jerome Deal called the meeting to order at 9:00 a.m. Chair Lee Coe's flight from Bemidji was cancelled due to mechanical problems, thus he was unable to attend the meeting today.

New board members JoAnn Coover, Karen Harder, and Victor Ormsby were welcomed. Introductions were made.

** 01-21 **Adopt Agenda** - Moved by Jack Frost, seconded by Char Kahler, to adopt the agenda as presented. Motion passed on a voice vote.

** 01-22 **Minutes of February 28, 2001** – Moved by Ginny Imholte, seconded by Dwain Otte, to approve the minutes of February 28, 2001, as circulated. Motion passed on a voice vote.

Reports

Chair's Report - Ron Harnack presented Chair Coe's report. Chair Coe attended the EQB meeting. The following three items were discussed at the EQB meeting: 1) EIS need decision for St. Paul cogeneration project. Based on the findings and conclusions, EQB determined that the proposed project does not require the preparation of an Environmental Impact Statement. 2) Hancock Pro Pork Feedlot Environmental Impact Statement Cost Agreement Dispute. EQB adopted a resolution that reduces the cost of the five components of the EIS. 3) Exemption application for the Arrowhead high voltage transmission line proposal. EQB approved the exemptions on transmission lines.

Executive Director's Report - Ron Harnack reported on staffing adjustments due to Jim Birkholz working half-time. Steve Woods has been assigned as acting operations director in addition to continuing to serve as metro supervisor; Doug Thomas as program and policy assistant director.

Dispute Resolution Committee (DRC) - Jim Haertel reported that there are presently three appeals pending. One appeal regards Anoka County Ditch number 53-62. The Rice Creek Watershed District denied an exemption involving the federal exemption. The Board has previously heard two appeals on this ditch at this location but they dealt with a different exemption. The DRC convened on March 8 and decided on jurisdictional issues and issues of standing as to who the active parties are. The DRC will convene on April 12 to hear the matter and bring it to the Board at the April Board meeting.

Another pending appeal regards a matter that was also previously heard by the DRC. It involves a replacement plan approval in Murray County that arose from a violation. The

Murray SWCD previously approved a replacement plan and this Board reversed that approval. Now, Murray SWCD has approved another replacement plan and it has been appealed. At issue in this appeal is sequencing and whether any feasible and prudent alternatives are available that would avoid and minimize impacts to wetlands and the wetland is located within the shorelands of most significant recreational lake in southwestern Minnesota. No action has been taken on accepting the appeal at this time.

The final pending appeal regards an exemption approval by the Lac qui Parle – Yellow Bank Watershed District involving the federal exemption. No action has been taken on accepting the appeal at this time. Ron Harnack did discuss the matter with some county commissioners from the area who also supported getting together and finding a resolution. A few other notes as mentioned at the February Board meeting, the two orders from the January Board Meeting expanding Brown's Creek and Valley Branch Watershed Districts in Washington County were both appealed to the Court of Appeals by the Middle St. Croix WMO. That decision will probably be made this fall.

There was a favorable decision for BWSR from Washington County District Court in the litigation brought by the City of Hugo and several Hugo landowners against BWSR, the DNR and the Rice Creek Watershed District. The court's decision was extremely clear that a drainage ditch repair petition needs to be filed with the Rice Creek Watershed District before the matter could move forward in court. The Court ruled that Hugo has not exhausted their administrative remedies.

Wetlands Committee - Ron Harnack reported that the Senate Environment and Natural Resources Committee heard the wetlands bill yesterday. Ron reported that the first policy deadline is this week. Bills must be heard in the House or Senate committees this week or they are dead for this session. The next deadline is next Thursday when bills must be through the policy committees of the other body. Ron stated that WCA met the first deadline. The deadline for finance bills is April 25. The policy issues will be included in the omnibus bill. Ron stated that funding is the issue, whose pot does this come out of?

Education and Public Relations Committee - Paul Krabbenhoft reported that the Education and Public Relations Committee will meet in April and present a report at April BWSR meeting.

Administrative Advisory Committee - Ron Harnack stated that the Legislative Audit Report will be reviewed by the Administrative Advisory Committee. The Administrative Advisory Committee will need to schedule Ron's performance review.

Agency Reports

Barbara Weisman, Minnesota Department of Agriculture (MDA), reported that applications are being reviewed for the sustainable agriculture program relating to alternative crops, fruits and vegetables. Barbara presented a packet of informational materials that MDA recently compiled regarding conservation programs. The informational packet will be distributed to SWCD offices. Barbara reported that she, Doug Thomas, and DNR staff attended the National Governor's Conference in Washington, D.C. to discuss conservation incentives on a national level. Barbara reported that on February 21, the MDA and MPCA signed a three-year memorandum of understanding (MOU) that allows MDA dairy inspectors to provide information to dairy farmers to help them comply with the state's new 7020 feedlot rules and other environmental regulations. The MOU does not transfer authorities. However, the two agencies will discuss the potential for MDA inspectors to eventually undertake environmental inspection and enforcement functions for dairy farms under an extension of the MOU. Feedback from the dairy industry, SWCDs and county officials will be sought during those discussions.

Dan Wilson, Minnesota Department of Health (MDH), gave an update on the property transfer of private well testing; unfortunately, this legislation was defeated in both houses yesterday. Dan stated that the federal legislation proposing federal standards on arsenic was put on stay by the Bush Administration. Dan stated that MDH will be watching this closely as it is a health concern.

Wayne Edgerton, Department of Natural Resources (DNR), reported that the consolidated conservation issue will be introduced by Senator Moe. The memorandum of understanding between DNR and Beltrami County was signed by the Beltrami County Board last week and signed by Commissioner Garber this week, addressing all-terrain vehicles, timber sales, payment-in-lieu of taxes. This legislation was just introduced and is on the agenda tomorrow for the Senate Environment and Natural Resources Policy Committee. Wayne stated that Representative Tim Finseth introduced HF #1009 regarding the trespass issue for lands in CRP, RIM and CREP. This legislation passed in the House Agriculture Committee last week. Wayne stated that the legislation regarding shooting enclosures for deer and elk passed in the House Agriculture Committee yesterday.

Jim Anderson, Minnesota Extension Service (MES), reported that a joint Minnesota/Iowa drainage forum will be held on April 4, starting at 9:00 a.m., at the Best Western Hotel in Clear Lake, Iowa. This forum presents an opportunity to share results on drainage research between Minnesota and Iowa. Jim stated that MES is working

with the Minnesota Lakes Association (MLA) on the MLA Conference at Cragun's in Brainerd, May 3-5. The conference will present a series of educational programs on various lake issues. Jim reported that MES, BWSR, PCA, and MDA will be conducting a series of eight workshops with producers and consultants regarding nutrient planning and feedlot rules in May and June, with another series of workshops to be held this fall.

Tim Scherkenbach, Pollution Control Agency (PCA), reported on legislative budget concerns regarding the environmental tax proposal. PCA has not received good response in the House, but somewhat in the Senate. PCA policy issues include a number of feedlot program issues; environmental review; draft general MPDS permit; registration requirements for feedlots; transfer of feedlots; requiring delegation at the local level. Tim reported that PCA is going through refining reorganization, shifting managers to be more bureaucratically friendly. PCA is in the process of negotiating a contract with EPA on funding and TMDL reduction issue and requirements.

Consent Agenda

Wilkin County Request for Comprehensive Local Water Plan (CLWP) Extension –
** Moved by Jack Frost, seconded by Clair Nelson, to approve the Wilkin County CLWP
01-23 request for extension to June 30, 2002. Motion passed on a voice vote.

Old Business

2001 SWCD CREP Technician Grants - Kevin Lines explained that in 1999 and 2000, BWSR funded 14 SWCD CREP technicians to implement CREP. Available funds are $425,000. In 2001, funding is requested to continue these positions in SWCDs. The only change in funding levels is that BWSR would fund West Ottertail at $28,000 up $4,000 from last year to bring them in line with the rest of the full-time funded staff. There would be a reduction in funding to the four-county group of Stevens, Douglas, Traverse and Grant from $8,600 to $5,000 due to funds left from previous years' grants.
** Moved by Jack Frost, seconded by Char Kahler to approve the year three staffing grant
01-24 agreements with SWCDs for CREP implementation. Motion passed on a voice vote.

Legislative Update - Ron Harnack reported that CREP is continuing to make progress in both houses. A CREP exhibit is being planned for display in the Capitol halls in the middle of May. Ron stated that there is much support for CREP from legislators in other parts of the state, not only in the Minnesota River area. Ron stated that Elaine Harder is the chief author of CREP; the first hearing in the House Environment Finance Committee will be held next Wednesday. Ron stated that feedlots is a big issue. The increase in cost-share dollars to help producers is coming through in the Governor's proposal. Ron stated that not all legislators are in support of this proposal for cost-share funds and loan money. There is strong concern for less than 500 unit facilities. Another legislative issue is non-point engineering assistance. Ron stated that WCA

does not have a policy hearing scheduled in the House. Ron reported that Hennepin County SWCD and county commissioners unanimously voted to appoint SWCD supervisors rather than be elected officials. Ron's concern is that without public debate, this may have impacts on the delivery system at the local level. This legislation heard in Senator Vickerman's committee yesterday and referred to Senate Environment Policy Committee without recommendation. The bill will be held in the Senate Environment Committee tomorrow. This bill is for Hennepin SWCD only, not statewide, however it raises the issue statewide. Ron stated that this clearly needs to be addressed in a public policy review process. Another policy bill issue deals with subwatershed authority in the metro area, an agency bill. Staff have worked with the Department of Revenue on language. Hennepin County Auditor's Office spoke against this legislation due to the cost. This policy clarification is critical for the newly combined watershed districts in Washington County. BWSR is working with MAWD and the county folks to find a reasonable compromise. BWSR is currently tracking about 60 legislative bills, issues of local water planning to disaster relief. Ron asked that board members contact him if they're interested in a copy of BWSR's legislative tracking sheet. Ron reported that a bill was introduced to eliminate voting membership for agencies. This bill has not received a hearing in the House, there is no Senate companion, so as of March 30, it's dead. Ron explained that the next two weeks of session are critical; by the end of April, BWSR will know where the House and Senate will fund or not fund programs. The differences will be negotiated in conference committee in May. Adjournment date is May 21.

Update on Blue Ribbon Electronic Commerce Committee (BREC) and LINNET – Ron Harnack reported that this will be presented at the April board meeting.

Advisory Comments

Minnesota Association of Watershed Districts (MAWD) – Jerome Deal reported that the MAWD Legislative Breakfast went very well; it was well received by legislators and the largest attendance ever. Ginny Imholte reported that the MAWD summer tour will be held in the Lake Okabena area after the Local Water Planner's conference.

Natural Resources Conservation Services (NRCS) - Roger Mussetter reported that the Snake River flood prevention project in Warren was partially funded out of emergency funding, construction will begin this summer. Roger reported that Minnesota is a pilot state, one of six, to restore wetlands on CRP; FSA is writing the rules. Roger reported on staffing: a district conservationist has been hired in Lake of the Woods; a culture resource specialist will be hired; an additional engineer position will be hired. Roger stated that the hybrid popular biomass project was approved for the St. Peter area.

Jerome Deal reported that the Red River Valley is moving forward with a legislative proposal regarding land removed from the local tax base as a result of watershed district projects. Watershed districts currently cannot pay in lieu of taxes. The legislation would provide this authority which would reduce the concern of townships over the loss of tax revenue.

Upcoming Meetings

- Next BWSR Meeting, April 25, 2001, in St. Paul
- The June BWSR Meeting will be held in conjunction with the Local Water Planners Conference, in Morton, Minnesota
- The July or August BWSR Meeting will be held in Aitkin County
- The October BWSR Meeting will be held in southeastern Minnesota

Chair-Designate Deal again welcomed the new board members and adjourned the meeting at 11:45 a.m.

Respectfully submitted,

Jerome Deal
Chair-Designate

CONSENT AGENDA

1. Wilkin County Request for Comprehensive Local Water Plan Extension
   DECISION

WILKIN COUNTY COMPREHENSIVE LOCAL WATER PLAN (FOR BOARD ACTION)

Wilkin County has an approved and locally adopted Comprehensive Local Water Plan (CLWP). The effective date (end date) of this CLWP is May 31, 2001.

The 1995 amendments to the Comprehensive Local Water Management Act, M.S. 103B.301, gives the Board of Water and Soil Resources authority to grant extensions to counties for the purpose of extending the ending date of their water plans. These extensions must be requested in writing and cannot be for more than two years.

At their December 15, 1999, board meeting, the BWSR approved a local water planning document which addressed BWSR expectations, internal actions, and multi-planning strategies. Multi-planning strategies address granting justifiable CLWP extensions to counties where other planning efforts (water or watershed level) are currently underway. These other efforts require the input of the water planner and associated technical advisors in the county. Completion of other water planning efforts would benefit the CLWP update.

Wilkin County is an active player in the Ottertail River Watershed planning effort and the Bois de Sioux Watershed District Overall Plan updating effort currently underway, as part of the Red River Basin Flood Damage Reduction Agreement

Board Conservationist Pete Waller recommends approval of Wilkin County's extension request to June 30, 2002.

2-2001

RESOLUTION REQUESTING EXTENSION
OF
COUNTY COMPREHENSIVE WATER PLAN

WHEREAS, 1995 amendments to the comprehensive Local Water Planning Act, M.S. 103B.301 gave the Minnesota Board of Water and Soil Resources (BWSR) authority to extend the ending date of local water plans for a period not to exceed 2 years; and

WHEREAS, Wilkin County has a current state approved and locally adopted Comprehensive Local Water Plan with an end date of May 31, 2001; and

WHERAS, Wilkin County is an active participant in other planning efforts currently underway in the Otter Tail River Watershed Project that will result in information that will benefit the county during its Comprehensive Local Water Plan update efforts; and

WHEREAS, Information obtained through the Otter Tail River Watershed planning efforts will benefit Wilkin County's Comprehensive Local Water Planning efforts and would not allow a complete Comprehensive Local Water Plan update prior to May 31, 2001.

NOW THEREFORE BE IT RESOLVED, that Wilkin County requests BWSR for an extension of their existing Comprehensive Local Water Plan until June 30, 2002.

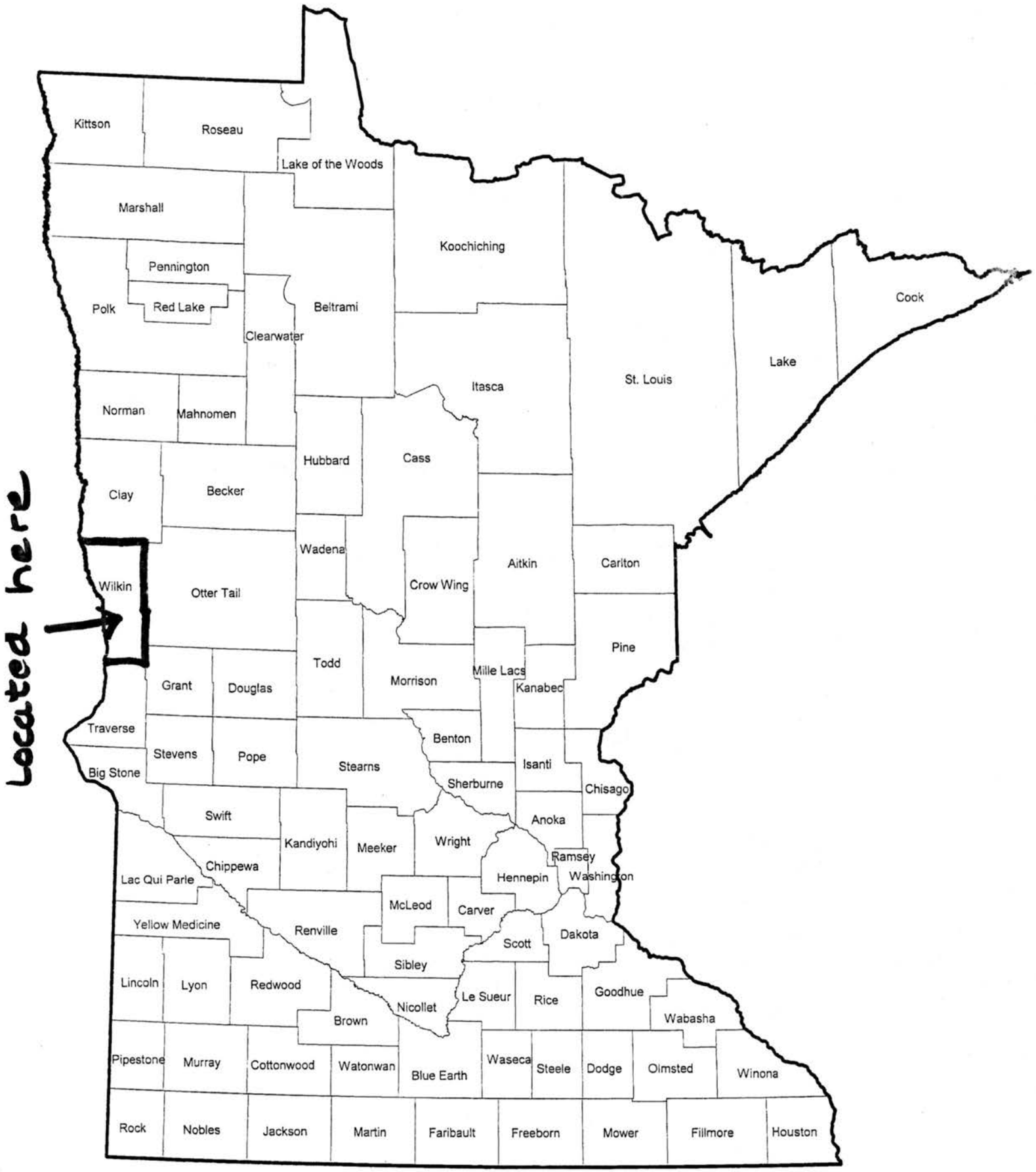
BE IT FURTHER RESOLVED, Wilkin County will insure continued public participation in the form of Water Plan Task Force and Public Information meetings and no projects will be ordered or commenced under M.S. 103Bsubd. 3 or 4 during the extension period.

Approved this 13th day of February 2001.

Chairman, Robert L. Perry

Auditor, Wayne Bezenek

Minnesota Counties



located here

Minnesota Board of Water and Soil Resources
One West Water Street
Suite 200
St. Paul, Minnesota 55107

In the Matter of Extending the Comprehensive Local Water Plan for **Wilkin** County (1995 Minnesota Session Law, Chapter 184, Section 24 authorizing BWSR to grant extensions).

Whereas, Wilkin County has a state approved Comprehensive Local Water Plan that is effective until May 31, 2001 pursuant to Minnesota Statute 1990, Section 103B.301, and

Whereas, the Wilkin County Board of Commissioners requested an extension of the Comprehensive Local Water Plan to the Board of Water and Soil Resources on February 21, 2001, pursuant to Minnesota Session Law 1995, Chapter 184, Section 24, and

Whereas, the Board of Water and Soil Resources has authorization to grant extensions pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

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

FINDINGS OF FACT

1. On February 21, 2001 the Board of Water and Soil Resources received a resolution from Wilkin County requesting an extension of their Comprehensive Local Water Plan.

2. On March 8, 2001, the Board of Water and Soil Resources staff reviewed and recommended approval of the extension request by Wilkin County.

CONCLUSIONS

1. All relevant requirements of law and rule have been fulfilled. The Board of Water and Soil Resources has proper jurisdiction in the matter of extending the Comprehensive Local Water Plan of Wilkin County pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

ORDER

The Board of Water and Soil Resources hereby approves the extension of the Wilkin County Comprehensive Local Water Plan until June 30, 2001. Dated at St. Paul, Minnesota, this 28th day of March, 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Leland Coe, Chairperson

YEAR THREE STAFFING GRANT AGREEMENTS WITH SWCD'S FOR CREP IMPLEMENTATION

MARCH 2001

SWCD	GRANT ($)	# of Staff
Chippewa	30,615	1
Yellow Medicine	29,067	1
Lac Qui Parle	28,545	1
Lincoln	28,545	1
Swift	28,722	1
Redwood	32,000	1
Lyon	32,000	1
Cottonwood [1]	28,000	1
Renville	33,599	1
Waseca, LeSueur, Blue Earth[2]	56,930	2
Martin	28,465	1
Watonwan	28,465	1
West Ottertail	28,000	1
Douglas, Grant, Traverse, Stevens[3]	5,000	See footnote [4]
TOTAL	**417,953**	**14.0**

[1]Position will also work in Jackson and Murray Counties.

[2]The fiscal agent (grant recipient) is LeSueur SWCD.

[3]The fiscal agent is Stevens SWCD.

[4]The grant is for contract easement promotion and processing.

s:\2crep\Year3staffing.xls

April 2001

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET
BWSR CONFERENCE ROOM, LOWER LEVEL
ST. PAUL, MINNESOTA 55107
APRIL 25, 2001

BOARD MEMBERS PRESENT: Lee Coe, Darrell Bruggman, Jerome Deal, Dwain Otte, Ginny Imholte, Paul Krabbenhoft, Jack Frost, Karen Harder, Char Kahler, Victor Ormsby, Joann Coover, Dan Wilson-MDH, Wayne Edgerton-DNR, Rod Massey-MDH, Sharon Clark-MDA, Jim Anderson-MES

BOARD MEMBERS ABSENT: Clair Nelson

STAFF PRESENT: Ron Harnack, Doug Thomas, Mary Jo Anderson, Steve Woods, Lynda Peterson, Tim Ogg, Marybeth Block, Wayne Zellmer

OTHERS PRESENT:
Sandy Hooker, Minnesota Association of Townships
Marcia Evenson, court reporter, Kirby A. Kennedy & Associates
Sabel - Gretch Sable, EQB/Water Resources Committee
Mark Dittrich, MDA
LeAnn Buck, MASWCD

Chair Coe called the meeting to order at 9:00 a.m. Chair Coe welcomed the new board members.

Introductions were made of others in attendance: Sandy Hooker, Minnesota Association of Townships, replacing Franklin Denn. Representatives of Rice Creek Watershed District: George Lander, Loren Henscher, Michelle Ulrich, attorney, Harold Sheff, and court reporter Marcia Evenson.

** 01-25 **Adopt Agenda** – Chair Coe added an additional item under New Business #3 - elect a vice-chair. Moved by Char Kahler, seconded by Jerome Deal, to approve the agenda as amended. Motion passed on a voice vote.

** 01-26 **Minutes of March 28, 2001** - Moved by Jack Frost, seconded by Jerome Deal, to approve the minutes of March 28, 2001 as circulated. Motion passed on a voice vote.

Reports

Chair Coe reported that he attended the private forest management meeting in McGregor, which addressed the needs for forestry stewardship in the private sector. He attended the EQB meeting and had EQB legislative information available for those interested.

Executive Director - Ron Harnack stated that legislative, budget, and flooding issues have been important items of concern. Ron reported that he received the Legislative Audit Report; he will meet with Chair Coe and the Vice-Chair elect to review the report, and prepare a response. Ron stated that a confirmation hearing may be held this year for the BWSR chair.

Dispute Resolution Committee - Chair Coe reported that in addition to the appeal on the agenda today, there are presently three appeals pending. One pending appeal regards a matter that was previously heard by the DRC. It involves a replacement plan approval in Murray County that arose from a violation. The Murray SWCD previously approved a replacement plan and this Board reversed that approval. Now, Murray SWCD has approved another replacement plan and it has been appealed. At issue in this appeal is sequencing and whether any feasible and prudent alternatives are available that would avoid and minimize impacts to wetlands. The appeal has been accepted and a pre-hearing conference will be set once the record has been received from the SWCD.

Another pending appeal regards an exemption approval by the Lac Qui Parle-Yellow Bank Watershed District involving the federal exemption. The appeal has been accepted and a pre-hearing conference has not been set since resolution will be pursued.

The final pending appeal involves an exemption denial in Eagan. No action has been taken on this new appeal.

Wetlands Committee - Darrell Bruggman stated that a wetlands and waters regulation joint staff meeting was held March 14-15 with BWSR, DNR, and the Corps of Engineers. WCA rulemaking is being developed and ready for the May meeting.

Education and Public Relations Committee - Paul Krabbenfhoft reported that the Education Committee continues to work on their work plan. Paul asked for time on the May meeting agenda to present the Education Committee proposed plan. Paul stated that the committee met this morning and will meet again later today. Wayne Edgerton stated that the Education Committee may consider contacting Dawn Flinn, DNR staff working on education/communications efforts.

Agency Reports
Sharon Clark, Minnesota Department of Agriculture (MDA) reported that MDA staff are spending lots of time on legislative issues. Sharon thanked DNR and PCA for their assistance on the foot and mouth disease efforts. MDA continues to spend much time on this devastating threat of concern. Sharon reported that MDA has cancelled the sustainable field days due to the possible threat of clove and hoof disease.

Dan Wilson, Minnesota Department of Health (MDH), reported that the legislative proposal to require testing wells and property transfer did not make it out of either houses in the legislature, thus, MDH will try this again. Dan stated that the federal regulatory arsenic issue has been withdrawn; a nine-month deadline has been set by EPA to repromulgate. Rule promulgation in the state will be delayed until the federal standard is set. Dan stated that the arsenic issue is significant with great impacts.

Wayne Edgerton, Department of Natural Resources (DNR), reported that he's not optimistic on passage of the concon bill, as it's not in the Senate or House budget. Wayne stated that the trespass bill is in good shape, (Representative Finseth and Senator Scheevel). Wayne stated that the Senate budget looks fairly positive at this time, the House budget doesn't look so positive. Wayne reported that DNR is meeting next week to decide if the tours of Big Woods and other dairy tours will be held or not due to foot and mouth disease.

Jim Anderson, Minnesota Extension Service (MES), reported that the Rivers and Lakes Conference will be held May 3-5, at Cragun's in Brainerd, sponsored by the Minnesota Lakes Association. Jim reported that MPCA, MDA, BWSR, and MES will be meeting jointly in May and June regarding nutrient management planning. Jim announced that the BWSR meeting on May 23 will be held at the University of Minnesota, Earle Brown

Center, St. Paul Campus. Jim stated that Charles Casey, Interim Dean and Director; and Diane Flynn, Interim Associate Dean and Director, of MES, plan to meet with BWSR on May 23.

Rod Massey, Pollution Control Agency (PCA), thanked folks for working together on various meetings. Rod stated that time will tell regarding legislative issues. Rod stated that the *StarTribune* had an article regarding PCA this past weekend. Rod stated that the foot and mouth disease needs stricter security and stronger disinfectant control for this serious threat. Rod reported that enforcement is in place for the metro dairy manure spill. Rod reported that Alliance Dairy is suing PCA regarding a feedlot issue; a decision will be made in the next few months. Ron Harnack asked that PCA staffing issues and also land use management (cost-share and BMP loan money) be reported at an upcoming Board meeting. Rod stated that he will work with staff to do this. Sharon Clark suggested that pollution credit trading be included on the BWSR agenda some time this summer.

Consent Agenda

** 01-27 **Rice County Request for Comprehensive Local Water Plan Extension** - Moved by Jerome Deal, seconded by Joann Coover, to approve the Rice County Comprehensive Local Water Plan request for extension to December 31, 2001. Discussion followed. Jerome Deal asked how many counties are under an extension. Ron Harnack stated that staff will develop a map showing which counties have been granted extensions. Marybeth Block reminded the board that the board approved of their December 1999 policy encouraging counties to apply for extensions if they were involved in other planning efforts such as watershed or basin plans. Motion passed on a voice vote.

Old Business

Dispute Resolution Committee Recommendation Regarding the Anoka County Ditch 53/62 - Greg Larson reported that the DRC voted on April 12 to affirm all three decisions on behalf of the Rice Creek Watershed District (RCWD). Greg

** 01-28 recommended that the Board act upon the order. Moved by Sharon Clark, seconded by Jim Anderson, to table the decision and ask for legislative briefing of 1991 regarding ditch maintenance. Affirmative: Clark. Opposed: Anderson, Bruggman, Coe, Coover, Deal, Edgerton, Frost, Imholte, Kahler, Krabbenhoft, Massey, Harder, Otte, Wilson, Ormsby. Motion defeated.

** 01-29 Moved by Jerome Deal, seconded by Dwain Otte, to adopt the findings of the Dispute Resolution Committee, to affirm the decisions of the Rice Creek Watershed District. Sharon Clark personally voted against because it sets a precedence pitting landowner against state and federal government. She advocates letting the board and DRC hear from them in a non-threatening manner. Chair Coe feels the Board needs to uphold the

Rice Creek Watershed District decision. Affirmative: Anderson, Bruggman, Coe, Coover, Deal, Edgerton, Frost, Imholte, Kahler, Krabbenhoft, Massey, Harder, Otte, Wilson, Ormsby. Opposed: Clark. Motion passed on a voice vote.

Chair Coe called for a break at 10:20 a.m. The meeting reconvened at 10:30 a.m.

Legislative Update - Ron Harnack gave a legislative update of the House and Senate as it relates to BWSR. The House has an $8M statewide cost of living reduction. The House eliminated all state funding for the Minnesota River Basin Joint Powers Board, the North Shore Management Board, the St. Louis River Board, and the Southeast Minnesota Resources Board. On the plus side, the House fully funded special projects cost-share at $1M for the biennium; and fully funded general services, but then diverted those funds to the Red River ring dikes. Ron stated that there were major readjustments taking DNR programs and putting them into BWSR - assistance to lake associations; lake management issues; ecosystems support; wildlife habitat support. BWSR was not out to raid someone's pot – this all happened without discussions with BWSR. Ron stated that more education to the committee is needed. Ron asked staff to review those programs, and determine how BWSR can deliver those programs collaboratively with DNR. Feedlot cost-share was funded in the House Ag Finance Committee. The House fully funded CREP at $20M, including sufficient implementation dollars. The Senate fully funded CREP in bonding. The Senate funded feedlots within PCA's Clean Water Partnership. The Senate increased nonpoint engineering assistance to full funding; approved general services increase to $270,000; funded $100,000 to the Red River Basin Board; soil surveys increased funding at $500,000 for biennium; Grazing Lands Coalition funded at $200,000; wetland road replacement funded in bonding; $100,000 one-time appropriation to St. George in Nicollet County for waste water treatment facility. Flooding discussion in both houses. Ron said BWSR is in a good position going into conference committees. The policy standpoint is generally good news; the RIM bill clarifies consistency, increases wetland restoration. The watershed district bill for increase in levy assessment is dead. An increase for petitioning to establish special levy water quality initiatives. Ron credited John Jaschke and the wetland committee for their efforts on the wetlands bill, it passed through to the floor, funding is the controversial issue. Ron stated that Representative Wagenius put a water organization study back in the House bill with $75,000 for a water agency. Ron suggested establishing a joint water committee to convene this summer to discuss issues; he will continue to look into this. County water plan base adjustment struggled to get a hearing and will not be funded this year. The House revamped LCMR, creating a new citizen committee for allocation of dollars. Ron stated that conference committees probably won't be appointed until next week. Ron encouraged board members to contact legislators regarding the elimination of various joint powers boards. Chair Coe thanked Ron and staff for all their efforts during session.

New Business Item #3

Local Water Planning Challenge Grants 2002/03 - Marybeth Block explained the local water planning challenge grants and the scoring system used by the review committee. Marybeth thanked Doug Snyder for his assistance with ranking. Marybeth presented the review committee's recommendation: Contingent upon the availability of legislative appropriations, BWSR approves funding for the challenge grants projects presented. All projects submitted in the cash/in-kind under $10K category; all of the projects submitted in the lake management planning category with the understanding that Otter Tail County, Rice County and St. Louis County, each of whom requested $50,000 will accept a reduction of $5,000 making their total individual grants $45,000. The standardized ranking will be used to fund projects submitted under the cash and in-kind over $10K category up to $160,000. The standardized rankings will be used to fund projects submitted under the cash only category up to $1,340,000. Moved by Sharon Clark, seconded by Ginny Imholte, to approve the review committee's recommendation as presented. Jerome Deal brought to the board's attention the Lake Traverse project, if other projects cannot proceed, the Lake Traverse project could use the dollars for a flooding resolution. Motion passed on a voice vote.

** 01-30

Old Business

National Governor's Association (NGA) "Private Lands, Public Benefits" - Doug Thomas reported that he, Dave Johnson, DNR, and Barbara Weismam, MDA, attended the policy summit in Washington, D.C., March 16-17, representing Minnesota. Doug presented his presentation on state examples of coordinated conservation programs. Doug stated that this information is posted on the national website. Chair Coe and Sharon Clark thanked Doug for his work.

New Business

Update on Blue Ribbon Electronic Commerce Committee (BREC) and Linnet - Tim Ogg reported that BWSR has investigated the development of a web-based software system to support business between BWSR and LGU's. A committee, BREC, was established to review LGU concerns, functional requirements, local activities, reporting/monitoring processes, planning, and education/information. Linnet is developing an electronic conservation information system that simplifies the business process, enhancing the local business system, while tracking activities, user-friendly, web-based applications. Doug Thomas stated that the intent is to track the finances involved in a project, not to override the accounting systems in place. This system will be finalized and ready for implementation by January, 2003. Discussion followed. Ron Harnack said BWSR will manage expectations as we move forward. Chair Coe thanked Tim and Doug for their presentation.

For this project only, section 8400.1400 Subd. 1, of the State Cost Share Program Rule, "Practices where construction has begun prior to conservation district approval are ineligible for financial assistance.", will be waived; and,

The board will allocate one-half of Project funds requested, or $16,250, to the Wright SWCD in FY 02, and $16,250 of the Wright SWCD State Cost Share Base Grant, may be expended by the Wright SWCD for the Robert Berg feedlot pollution abatement system.

Special Funding Request - Lynda Peterson presented background information regarding the Wright SWCD pollution abatement project. Ron Harnack provided additional information and supports some split costs of this project. Discussion followed. Dwain Otte stated that the state cost-share funding should come from the Wright SWCD portion of the state cost-share dollars. It was decided that the verbal commitment by the SWCD needs to be acknowledged. Ron's recommendation as an option for the Wright SWCD is half from feedlot, half from cost-share, or 1/3 district, 2/3 state or 50/50. Wayne Zellmer presented another option of 1/3 by landowner, 1/3 district, and 1/3 state. Ron stated that the state should decide what the state should do.

** 01-31 Moved by Joann Coover, seconded by Darrell Bruggman, that BWSR allocate half of the dollars ($16,250) out of the feedlot cost-share program and allow the district to pay the balance at their discretion out of their cost-share dollars, waive cost-share on both accounts up to half ($16,250). Motion passed on a voice vote. This will come out of the Wright SWCD allocation.

** 01-32 **Election of Vice-Chair** - Chair Coe recommended and nominated Jerome Deal as BWSR vice-chair. Chair Coe asked for other nominations. Moved by Darrell Bruggman, seconded by Jack Frost, to cease further nominations and declare Jerome Deal as BWSR vice-chair. Motion passed on a voice vote.

Advisory Comments

Chair Coe welcomed Sandy Hooker, district director of the Minnesota Association of Townships (MAT). Sandy will represent MAT at BWSR meetings, replacing Franklin Denn.

Minnesota Association of Soil and Water Conservation Districts (MASWCD) - LeAnn Buck thanked Ron Harnack for his assistance to MASWCD on legislative initiatives. LeAnn gave a brief update on MASWCD's legislative initiatives. LeAnn reported that a delegation of thirteen MASWCD representatives went to Washington, D.C., to meet with the Minnesota Congressional Delegation. LeAnn stated that MASWCD is working with BWSR on the WCA formula and workload. LeAnn announced that Minnesota will be hosting the NACD NASCA 11-state meeting, July 15-18, at the Radisson South in Bloomington. Issues to be discussed at this meeting include hypoxia, water monitoring, tmdl issues, and the farm bill. LeAnn appreciates BWSR staff assistance on this event.

Minnesota Association of Watershed Districts (MAWD) - Ginny Imholte reported that the MAWD summer tour will be hosted by the Heron Lake Watershed District, June 28-30. Ginny invited board members to attend. Jerome Deal reported that the Red River Flood Reduction Work Group met last month in Crookston. Bill Hunt attended and is in support of this initiative in the Red River.

Ron introduced Gretchen Sable, EQB/Water Resources Committee (WRC) staff. Ron looks forward to new endeavors with the WRC.

Upcoming Meetings

- Next BWSR Meeting, May 23, at U of M/Earle Brown Center. Maps and details will be provided with the board meeting notice.
- June 27 BWSR Meeting will be held in conjunction with the Local Water Planners Conference in Morton, Minnesota

** 01-33 Moved by Jack Frost, seconded by Jerome Deal, to adjourn the meeting at 12:55 p.m. Motion passed on a voice vote.

Respectfully submitted,

Leland Coe
Chair

BWSR Meeting Date 4/25/01

Motion: Table decision

Moved by: Sharon Clark

Seconded by: Jim Anderson

	Affirmative	Opposed
Anderson, Jim		✓
Bruggman, Darrell		✓
Clark, Sharon	✓	
Coe, Lee		✓
Joanne Coover ~~*Dahlvang, Jim*~~		✓
Deal, Jerome		✓
Edgerton, Wayne		✓
Frost, Jack		✓
Imholte, Ginny		✓
Kahler, Char		✓
Krabbenhoft, Paul		✓
Massey, Rod		✓
Nelson, Clair		out
Karen Harder ~~*Oehlke, Allan*~~		✓
Otte, Dwain		✓
Wilson, Dan		✓
Victor Ormsby ~~*Roer, Kathi*~~		✓

BWSR Meeting Date 4/25/01

Motion: DRC recommendation to affirm RCAD decision

Moved by: _____

Seconded by: _____

	Affirmative	Opposed
Anderson, Jim	✓	
Bruggman, Darrell	✓	
Clark, Sharon		✓
Coe, Lee	✓	
Joanne Coover ~~*Dahlvang, Jim*~~	✓	
Deal, Jerome	✓	
Edgerton, Wayne	✓	
Frost, Jack	✓	
Imholte, Ginny	✓	
Kahler, Char	✓	
Krabbenhoft, Paul	✓	
Massey, Rod	✓	
Nelson, Clair	— out	
Karen Haider ~~*Oehlke, Allan*~~	✓	
Otte, Dwain	✓	
Wilson, Dan	✓	
Victor Oransky ~~*Roer, Kathi*~~	✓	

BWSR Meeting Date _____

Motion:

_____

_____

_____

_____

_____

Moved by: _____

Seconded by:_____

	Affirmative	**Opposed**
Anderson, Jim	____	____
Bruggman, Darrell	____	____
Clark, Sharon	____	____
Coe, Lee	____	____
~~***Dahlvang, Jim***~~ Joanne Coover	____	____
Deal, Jerome	____	____
Edgerton, Wayne	____	____
Frost, Jack	____	____
Imholte, Ginny	____	____
Kahler, Char	____	____
Krabbenhoft, Paul	____	____
Massey, Rod	____	____
Nelson, Clair	____	____
~~***Oehlke, Allan***~~ Karen Harder	____	____
Otte, Dwain	____	____
Wilson, Dan	____	____
~~***Roer, Kathi***~~ Victor Ormsby	____	____

Minnesota Board of Water and Soil Resources
One West Water Street
Suite 200 St. Paul, Minnesota 55107

In the Matter of Extending the Comprehensive Local Water Plan
For Rice County (1995 Minnesota Session Law, Chapter 184,
Section 24, authorizing BWSR to grant extensions).

Whereas, Rice County has a state approved Comprehensive Local Water Plan that is effective until December 31, 2001 pursuant to Minnesota Statute 1990, Section 103B.301, and

Whereas, the Rice County Board of Commissioners passed a resolution requesting an extension for the Comprehensive Local Water Plan to the Board of water and Soil resources on January 23, 2001, pursuant to Minnesota Session Law 1995, Chapter 184, and

Whereas, the Board of Water and Soil Resources has authorization to grant extensions pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

Now therefore, the Board of Water and Soil resources hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. On February 13, 2001, the Board of Water and Soil Resources received a resolution from Rice County requesting an extension of their Comprehensive Local Water Plan to December 31, 2003.
2. On March 21, 2001, the Board of Water and Soil Resources staff reviewed and recommended approval of the extension request by Rice County.

CONCLUSIONS

1. All relevant requirements of law and rule have been fulfilled. The Board of Water and Soil Resources has proper jurisdiction in the matter of extending the Comprehensive Local Water Plan of Rice County pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

ORDER

The Board of Water and Soil resources hereby approves the extension of the Rice County Comprehensive Local Water Plan until December 31, 2003. Dated at St. Paul, Minnesota, this 25th day of April 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Richard H Coe

BY: Lee Coe, Chairperson

~~October 25, 2000~~
April 25, 2001

RICE COUNTY COMPREHENSIVE LOCAL WATER PLAN EXTENSION

(FOR BOARD ACTION)

Rice County has a Comprehensive Local Water Plan (LWP) that was approved by the Minnesota Board of Water and Soil Resources on June 25, 1997. The end date of the Rice County LWP is December 31, 2001.

The 1995 amendments to the Comprehensive Local Water Management Act, MS 103B.301, gives the Board of Water/Soil Resources authority to grant extensions to counties for the purpose of extending the ending date of their water plans. These extensions must be requested in writing and can't be for more than two years.

In December 15, 1999, the BWSR approved expectations for local water planning. Included in this document was provision for coordinating local water planning with other planning efforts being conducted by the county.

Rice County was in the process of updating the Comprehensive Land Use Plan in the summer of 2000. The county decided to coordinate the update of the water plan with the land use plan. Starting in the fall of 2000, numerous staff changes occurred in the county planning department including the planning director and the water plan coordinator. The staff changes set both planning processes back and has necessitated the extension of the completion date of the LWP.

The Rice County Board of Commissioners passed a resolution on January 23, 2001 requesting an extension of the current water plan end date to December 31, 2003.

Board Conservationist David Peterson recommends approval of the Rice County Local Water Plan.

BOARD of COMMISSIONERS
RICE COUNTY, MINNESOTA

RESOLUTION #01-006

RESOLUTION TO UPDATE A COUNTY
COMPREHENSIVE WATER MANAGEMENT PLAN

WHEREAS, Minnesota Statutes, Chapter 103B.301, Comprehensive Local Water Management Act, authorizes Minnesota Counties to develop and implement a comprehensive local water management plan, and

WHEREAS, the Act requires that a County update and revise their comprehensive local water management plan on a periodic basis, and

WHEREAS, the Act encourages that a county coordinate its planning with contiguous counties, and

WHEREAS, Rice County has determined that the revision and continued implementation of a comprehensive local water management plan will help promote the health and welfare of the citizens of Rice County.

NOW, THEREFORE, BE IT RESOLVED that Rice County Board of Commissioners resolve to revise and update its current comprehensive local water management plan.

BE IT FURTHER RESOLVED that Rice County will coordinate its efforts in the revision and update of its plan with all local governmental units within the county, and will incorporate, where appropriate, any existing plans and rules which have been developed and adopted by watershed districts having jurisdiction wholly or partly within Rice County into its comprehensive local water management plan.

BE IT FURTHER RESOLVED that the Rice County Board of Commissioners delegates the Planning and Zoning Department the responsibility of coordinating, assembling, and writing the revised comprehensive local water management plan pursuant to M.S. 103B.301 and M.R. 9300.

Dated this 23rd day of January, 2001.

RICE COUNTY BOARD OF COMMISSIONERS

Heather Robins, Chairwoman

ATTEST:

Gene Mahn, Rice County Administrator

Minnesota Counties

CONSENT AGENDA

1. Rice County Request for Comprehensive Local Water Plan Extension – DECISION

RICE COUNTY COMPREHENSIVE LOCAL WATER PLAN EXTENSION

(FOR BOARD ACTION)

Rice County has a Comprehensive Local Water Plan (LWP) that was approved by the Minnesota Board of Water and Soil Resources on June 25, 1997. The end date of the Rice County LWP is December 31, 2001.

The 1995 amendments to the Comprehensive Local Water Management Act, MS 103B.301, gives the Board of Water/Soil Resources authority to grant extensions to counties for the purpose of extending the ending date of their water plans. These extensions must be requested in writing and can't be for more than two years.

In December 15, 1999, the BWSR approved expectations for local water planning. Included in this document was provision for coordinating local water planning with other planning efforts being conducted by the county.

Rice County was in the process of updating the Comprehensive Land Use Plan in the summer of 2000. The county decided to coordinate the update of the water plan with the land use plan. Starting in the fall of 2000, numerous staff changes occurred in the county planning department including the planning director and the water plan coordinator. The staff changes set both planning processes back and has necessitated the extension of the completion date of the LWP.

The Rice County Board of Commissioners passed a resolution on January 23, 2001 requesting an extension of the current water plan end date to December 31, 2003.

Board Conservationist David Peterson recommends approval of the Rice County Local Water Plan.

Minnesota Board of Water and Soil Resources
One West Water Street
Suite 200 St. Paul, Minnesota 55107

In the Matter of Extending the Comprehensive Local Water Plan
For Rice County (1995 Minnesota Session Law, Chapter 184,
Section 24, authorizing BWSR to grant extensions).

Whereas, Rice County has a state approved Comprehensive Local Water Plan that is effective until December 31, 2001 pursuant to Minnesota Statute 1990, Section 103B.301, and

Whereas, the Rice County Board of Commissioners passed a resolution requesting an extension for the Comprehensive Local Water Plan to the Board of water and Soil resources on January 23, 2001, pursuant to Minnesota Session Law 1995, Chapter 184, and

Whereas, the Board of Water and Soil Resources has authorization to grant extensions pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

Now therefore, the Board of Water and Soil resources hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. On February 13, 2001, the Board of Water and Soil Resources received a resolution from Rice County requesting an extension of their Comprehensive Local Water Plan to December 31, 2003.
2. On March 21, 2001, the Board of Water and Soil Resources staff reviewed and recommended approval of the extension request by Rice County.

CONCLUSIONS

1. All relevant requirements of law and rule have been fulfilled. The Board of Water and Soil Resources has proper jurisdiction in the matter of extending the Comprehensive Local Water Plan of Rice County pursuant to Minnesota Session Law 1995, Chapter 184, Section 24.

ORDER

The Board of Water and Soil resources hereby approves the extension of the Rice County Comprehensive Local Water Plan until December 31, 2003. Dated at St. Paul, Minnesota, this 25th day of April 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Lee Coe, Chairperson
October 25, 2000

BOARD of COMMISSIONERS
RICE COUNTY, MINNESOTA

RESOLUTION #01-006

RESOLUTION TO UPDATE A COUNTY
COMPREHENSIVE WATER MANAGEMENT PLAN

WHEREAS, Minnesota Statutes, Chapter 103B.301, Comprehensive Local Water Management Act, authorizes Minnesota Counties to develop and implement a comprehensive local water management plan, and

WHEREAS, the Act requires that a County update and revise their comprehensive local water management plan on a periodic basis, and

WHEREAS, the Act encourages that a county coordinate its planning with contiguous counties, and

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NOW, THEREFORE, BE IT RESOLVED that Rice County Board of Commissioners resolve to revise and update its current comprehensive local water management plan.

BE IT FURTHER RESOLVED that Rice County will coordinate its efforts in the revision and update of its plan with all local governmental units within the county, and will incorporate, where appropriate, any existing plans and rules which have been developed and adopted by watershed districts having jurisdiction wholly or partly within Rice County into its comprehensive local water management plan.

BE IT FURTHER RESOLVED that the Rice County Board of Commissioners delegates the Planning and Zoning Department the responsibility of coordinating, assembling, and writing the revised comprehensive local water management plan pursuant to M.S. 103B.301 and M.R. 9300.

Dated this 23rd day of January, 2001.

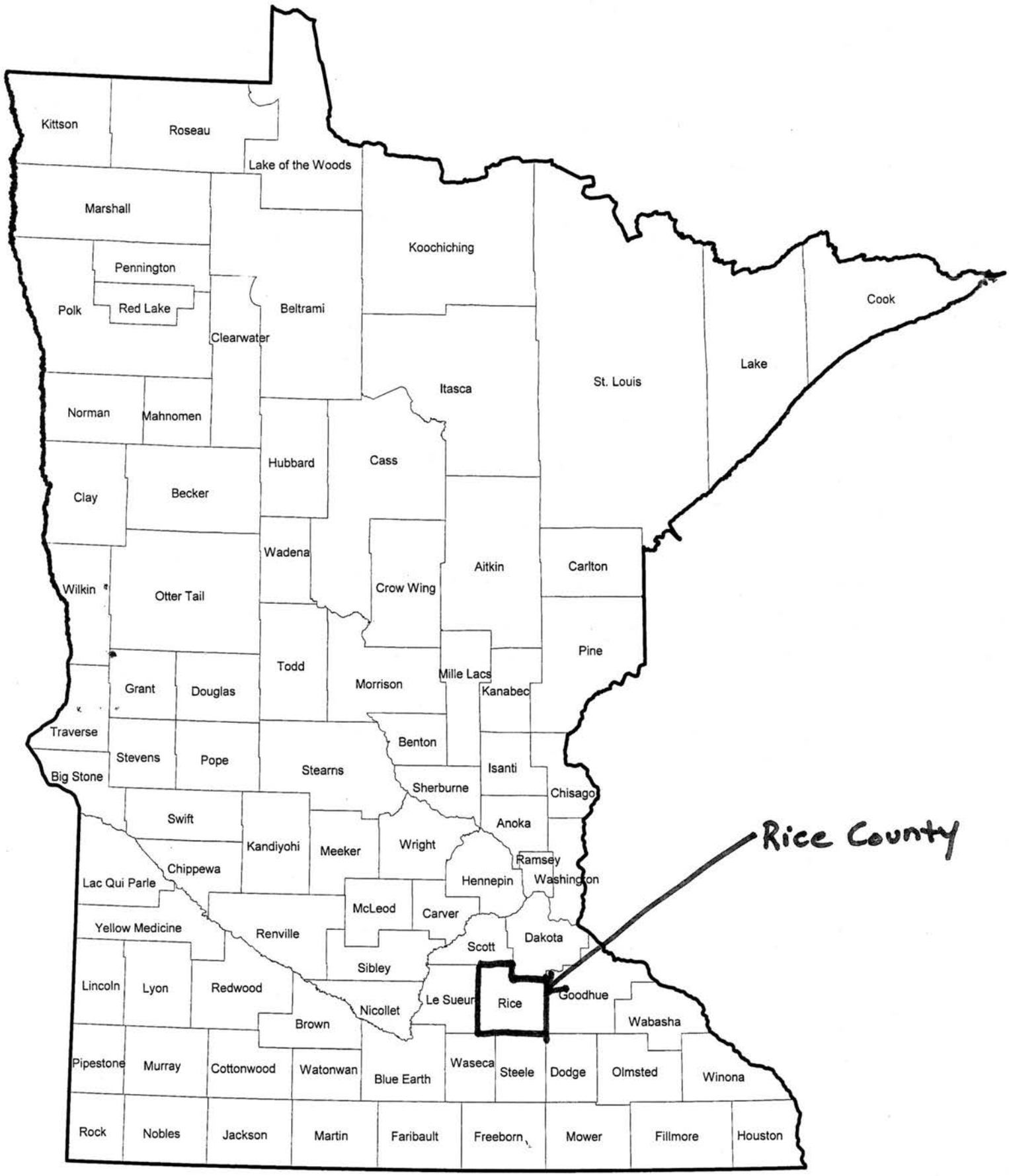
RICE COUNTY BOARD OF COMMISSIONERS

Heather Robins, Chairwoman

ATTEST:

Gene Mahn, Rice County Administrator

Minnesota Counties



OLD BUSINESS

1. National Governor's Association (NGA) "Private Lands, Public Benefits" INFORMATION

Private Lands, Public Benefits: A Policy Summit on Working Lands Conservation
March 16, 2001
JW Marriott-Washington, DC

THURSDAY, MARCH 15, 2001

6:30-8:30 PM — **REGISTRATION**
Capitol Foyer

FRIDAY, MARCH 16, 2001

7:00–8:45 AM — **REGISTRATION AND CONTINENTAL BREAKFAST**
Capitol Foyer

8:45-9:00 AM — **VIDEO PRESENTATION**
Salons F & G

Joel Hirschhorn
Director, NGA Center for Best Practices, Natural Resources Policy Studies Division

9:00–9:35 AM — **WELCOME**

- Maryland Governor Parris N. Glendening
  Chairman, National Governors Association
- Mack Gray
  Acting Deputy Under Secretary for Natural Resources and the Environment, U.S. Department of Agriculture
- Christine T. Whitman
  Administrator, U.S. Environmental Protection Agency

9:35–9:55 AM — **INTRODUCTORY REMARKS**

Iowa Governor Thomas J. Vilsack
Chair, NGA Committee on Natural Resources

9:55–10:15 AM — **WHAT IS PRIVATE LANDS CONSERVATION AND WHAT ARE ITS BENEFITS?**

Jean Hocker
President, Land Trust Alliance

10:15–10:30 AM — **BREAK**
Capitol Foyer

10:30–11:30 AM — **PANEL ONE: LANDOWNERS' STEWARDSHIP OPPORTUNITIES AND NEEDS**
Salons F & G

Moderator: Maryland Governor Parris Glendening
Chairman National Governors Association

Panelists:

- John Glenn
  Farmer and Executive Director of the Rathbun, Iowa, Regional Water Association
- Ralph E. Grossi
  Farmer and President of American Farmland Trust
- James Malone
  Forest Landowner and Executive Director of the Alabama Treasure Forest Association
- Bill Miller
  Rancher and Chair of the Malpai Borderlands Project

11:30 AM–12:00 PM — **OPEN DIALOGUE**
Lead Discussant: Bob Drake
Rancher and Chair of the National Grazing Lands Conservation Initiative

12:00–1:15 PM — **LUNCHEON**
Salons I & II

- Oklahoma Governor Frank Keating
  Vice Chair, NGA Natural Resources Committee
- Theodore Roosevelt IV
  Chair, League of Conservation Voters

1:15–2:15 PM — **WHAT IS GOVERNMENT'S ROLE IN SUPPORTING WORKING LANDS CONSERVATION?**
Salons F & G

- Oklahoma Governor Frank Keating
  Vice Chair, NGA Natural Resources Committee
- Senator Tom Harkin (D–Iowa)
  Ranking Member, Agriculture, Nutrition, and Forestry Committee
- Will Rogers
  President, Trust for Public Land

2:15–2:45 PM — **OPEN DIALOGUE**

2:45–3:00 PM — **BREAK**
Capitol Foyer

3:00–4:00 PM — **PANEL TWO: THE FUTURE OF PRIVATE WORKING LANDS CONSERVATION**
Salons F & G
Moderator: Otto Doering, Ph.D.
Purdue University, Department of Agricultural Economics

Panelists:

- Craig Cox
  Executive Vice President, Soil and Water Conservation Society
- Greg Low
  Vice President of Conservation Programs, Nature Conservancy
- Bob Stallman
  President, American Farm Bureau Federation
- Leland Swenson
  President, National Farmers Union

4:00–4:45 PM — **OPEN DIALOGUE**

4:45–5:00 PM — **CONGRESS OF PARTICIPANTS**
Several broad principles for guiding future conservation policy will be presented and voted upon by participants.

Joel Hirschhorn
Director, NGA Center for Best Practices, Natural Resources Policy Studies Division

5:00–5:30 PM — **CONCLUDING REMARKS**

- Pearlie S. Reed
  Chief, Natural Resources Conservation Service, U.S. Department of Agriculture
- Iowa Governor Tom Vilsack
  Chair, NGA Committee on Natural Resources

5:30–7:30 PM — **RECEPTION**
Salon E

Private Lands, Public Benefits:
A Policy Summit on Working Lands Conservation

Working Group Meeting
March 17, 2001

Willard Inter-Continental Hotel
1401 Pennsylvania Ave., NW, Washington, DC 20004
(202) 628-9100

7:00-8:30 AM — **BREAKFAST AND REGISTRATION**
Pierce Room

8:30-9:00 AM — **WELCOME AND DEFINITION OF PURPOSE**

- Iowa Governor Thomas J. Vilsack
  Chairman, NGA Natural Resources Committee
- Joel Hirschhorn
  Director, NGA Center for Best Practices, Natural Resources Policy Studies Division

9:00-9:20 AM — **INTRODUCTION OF ATTENDEES**
Mission of each organization and relation to summit.
(Please keep these remarks brief. We have a lot of groups and limited time.)

9:20-9:30 AM — **INTRODUCTION OF FACILITATION/REVIEW OF SUMMIT DISCUSSION**
Adam Saslow
Consensus Solutions, Inc.

9:30-10:00 AM — **PRESENTATION OF STATE EXAMPLES OF COORDINATED CONSERVATION PROGRAMS**
Moderator: Jim Cox
Executive Director, National Association of State Conservation Agencies

- Doug Thomas
  Minnesota
- Sarah Fast
  Missouri Soil and Water Conservation Commission
- Karl Brown
  Pennsylvania

10:00-10:15 AM — **BREAK**

10:15-11:45 — **FACILITATED DISCUSSION**

- What would the ideal program to promote conservation on working lands look like?
  - *What are we trying to achieve?*
  - *Who pays?*
  - *Who provide input into program design and how?*
  - *Who administers?*
  - *Who participates in the program and how?*
  - *Who measures effectiveness?*

11:45 AM-1:00 PM — **WORKING LUNCH AND ADVICE FOR AN NGA WORKING LANDS CONSERVATION PUBLICATION**
Help structure the NGA report on the future of conservation policy/programs.

1:00-1:30 — **CONCLUSION**
Joel Hirschhorn
Director, NGA Center for Best Practices, Natural Resources Policy Studies Division

PRIVATE LANDS, PUBLIC BENEFITS

A POLICY SUMMIT ON WORKING LANDS CONSERVATION

March 16, 2001
J.W. Marriott, Washington, DC

Join key policy makers to discuss the future of working lands. The National Governors' Association is sponsoring a one-day policy summit to discuss the public and landowner benefits of improved conservation on working lands. We invite you to attend. If you are interested, please print out the registration form (see link below) and fax it to Telita Campbell (202/624-5313); or you may email the same information to Telita (tcampbell@nga.org).

Private lands conservation refers to the many ways landowners might use and manage their land to serve economic, environmental, and social goals. Helping landowners do more to conserve their private working lands—our nation's farms, ranches, and forests—is necessary to maximize conservation benefits such as:

- Reducing air and water pollution
- Preserving open and green spaces
- Preserving fish and wildlife habitats, endangered species, and biodiversity
- Managing and protecting watersheds and wetlands
- Maintaining scenic landscapes and recreational amenities
- Preventing soil erosion and improving soil quality
- Reducing the negative impacts of flooding
- Improving resilience to drought and invasive species
- Helping to sequester greenhouse gases
- Protecting sustainable capacities to produce food and fiber

Such benefits translate into enormous economic value to society and support a high quality of life and place for all Americans. However, public policy has provided insufficient and fragmented support to these potential national benefits of private lands conservation.

It is important to note that conservation policies do not necessarily have to include public acquisition of the land or extensive regulation. Although these policy options sometimes serve an important function, they cannot meet all of the nation's conservation goals.

NGA's landmark summit seeks to spark a nationwide dialogue about the benefits of using publicly supported private lands conservation as a complementary "third way" to attain environmental and natural resource objectives beyond those achieved through acquisition or regulation. This third way will seek to work in harmony with private landowners' goals of maintaining a sustainable, productive business while providing important public benefits.

The summit will serve as a first step toward developing a state-federal strategy to create such policy by bringing together leading policymakers, conservation specialists, and representatives from many other interested sectors to discuss these principal questions:

- What is private lands conservation and who will employ it?
- Why are new or revised private lands conservation policies needed to provide better solutions for environmental and natural resource problems?
- How can government provide more support for private lands conservation?

Following the summit, a working group of specialists will help NGA staff prepare a follow-up report that will provide a clear and compelling case for greater public policy support for private lands conservation, including major policy options for a coherent state and federal government strategy.

Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, MN 55107

In Re: Wetland Conservation Act Appeal,

Messrs. Hentges, Preiner and Trost,

Appellants

Rice Creek Watershed District;
ABC League of Women Voters, St. Paul
Audubon Society, and the IzaakWalton
League, Minnesota Division,

Respondents

ORDER

BWSR File No. 01-1

Messrs. Hentges, Preiner and Trost appealed decisions of the Rice Creek Watershed District made November 22, 2000 and February 14, 2001 concerning exemptions to the Wetland Conservation Act and Anoka County Ditch 53/62. This matter was handled in two phases. Phase one determined jurisdictional issues, issues of standing (to appeal) and whether the November and February decisions should be consolidated. On March 8, 2001, the Dispute Resolution Committee ("DRC") of the Board of Water and Soil Resources ("BWSR") met concerning phase one. An order was issued, dated March 15, 2001. That Order is incorporated by reference and made a part of this Order and is attached thereto.

Phase two, the merits phase of these proceedings, was conducted by the DRC on April 12, 2001 at the BWSR offices at One West Water Street, St. Paul, Minnesota. The DRC heard oral arguments and considered the record, briefs and staff advisory report. DRC members Leland Coe (Chair), Clair Nelson, Jerome Deal, Dwain Otte and Char Kahler were in attendance. Paul R. Haik, Krebsbach and Haik, LTD., 701 Fourth Avenue South, Suite 500, Minneapolis, Minnesota 55415-1631 appeared on behalf of the Appellants. Michelle J. Ulrich, 1561 Lincoln Avenue, St. Paul, Minnesota 55105 and Harold Sheff, Smith, Gendler, Shiell, Sheff & Ford, 601 Second Avenue, S., 3350 U.S. Bank Place, Minneapolis, Minnesota 55402 appeared on behalf of the Watershed District. A.W. (William) Clapp 111, 785 Goodrich Avenue, St. Paul, Minnesota 55105 appeared on behalf of the ABC League of Women Voters, St. Paul Audubon Society and the Izaak Walton League, Minnesota Division.

Based on the aforementioned information, review of the record and after discussion and consideration of motions by the members, the DRC voted unanimously to affirm the decisions of the Rice Creek Watershed District.

At its meeting on April 25, 2001, BWSR adopted a resolution to accept the recommendation of the DRC and authorized the Chair of the BWSR to issue this Order.

The findings and conclusions of the Rice Creek Watershed District in these proceedings are adopted in their entirety and are incorporated by reference into the following Order and Memorandum.

Based on the entire record of this proceeding, the BWSR makes the following:

ORDER

1. The November 22, 2000 decisions of the Rice Creek Watershed District regarding the Wetland Conservation Act that determined the drainage exemption (Minn. Rules Chapter 8420.0122, Subp. 2.C.) required wetlands to be replaced and the federal exemption (Minn.Rules Chapter 8420.0122, Subp. 3.A.) is not applicable are affirmed.
2. The February 14, 2001 decision of the Rice Creek Watershed District regarding the Wetland Conservation Act that determined the federal exemption (Minn. Rules Chapter 8420.0122, Subp. 3.A.) is not applicable is affirmed.

3. The attached memorandum is incorporated by reference and made a part of this Order.

Dated: April 25, 2001

Minnesota Board of Water and Soil Resources

Roland A. Cole

Its Chair

Minnesota Board of Water & Soil Resources

One West Water Street
Suite 200
St. Paul, MN 55107
(651) 296-3767
Fax (651) 297-5615

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Duluth, MN 55802
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Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, MN 55107

In Re: Wetland Conservation Act Appeal,

Messrs. Hentges, Preiner and Trost,

Appellants

Rice Creek Watershed District;
ABC League of Women Voters, St.Paul
Audubon Society, and the Izaak Walton
League, Minnesota Division,

Respondents

ORDER

BWSR File No. 01-1

Messrs. Hentges, Preiner and Trost appealled a November 22, 2000 decision of the Rice Creek Watershed District ("District") concerning exemptions to the Wetland Conservation Act and Anoka County Ditch 53/62. Appellants also raised objections to a December 21, 2000 decision of the District. At a pre-hearing conference for the aforementioned appeal on January 25, 2001, the parties agreed to bifurcate the proceedings, with each phase to be separately briefed. Phase 1 determined jurisdictional issues and issues of standing, in this instance meaning parties to the appeal. On February 20, 2001, appellants appealed a February 14, 2001 decision of the District.

On March 8, 2001, the Dispute Resolution Committee ("DRC") of the Board of Water and Soil Resources met concerning phase 1. They considered the record, briefs and the staff advisory report. DRC members Leland Coe (Chair), Clair Nelson, Jerome Deal and Dwain Otte were in attendance. Paul R. Haik, Krebsbach and Haik, LTD., 701 Fourth Avenue South, Suite 500, Minneapolis, Minnesota 55415-1631 appeared on behalf of the appellants. Michelle J. Ulrich, 1561 Lincoln Avenue, St.Paul, Minnesota 55105 and Harold Sheff, Smith, Gendler, Shiell, Sheff &Ford, 601 Second Avenue, S.,

3350 U.S. Bank Place, Minneapolis, Minnesota 55402 appeared on behalf of the District.

There were no formal oral arguments. Based on the aforementioned information, and after discussion and consideration of motions by the members, the DRC makes the following:

ORDER

1. Parties to the appeal also include the ABC League of Women Voters, St. Paul Audubon Society, and the Izaak Walton League, Minnesota Division and may also involve participation by MnDOT.

2. Issues are limited to the Wetland Conservation Act, specifically, the applicability of two WCA exemptions ("Drainage Exemption" and Federal Approvals Exemption") to one culvert under I-35W.

3. Issues raised by appellants concerning a December 21, 2000 decision of the District are moot and are not included in this proceeding.

4. The November 22, 2000 and February 14, 2001 decisions of the District should be combined into the briefs for phase 2 of this proceeding. Any additional items of record for the February 14, 2001 decision should be prepared by the District and made available to the parties as soon as possible.

5. Briefs should address the aforementioned issues and proceed according the schedule agreed to by the parties at the January 25, 2001 pre-hearing conference.

Dated: March 15, 2001

Minnesota Board of Water and Soil Resources

Chair of its Dispute Resolution Committee

MEMORANDUM

This appeal involves three decisions made by the Rice Creek Watershed District (the District). Two of those decisions were made on November 22, 2000, and one of the decisions was made on February 14, 2001. The central issues in this appeal relate to the applications of certain Wetlands Conservation Act (WCA) exemptions to the proposed activity of lowering a culvert on I-35W that crosses Anoka County Ditch No. 53-62 and the cleaning out of sediment material from the ditch. Wetlands that have been in existence for a period of longer than 25 years will be impacted by lowering of the culvert and the removal of sediment.

The District's first determination on November 22, 2000 involved a decision on the application for exemption No. 2 under the Minnesota Rules 8420.0122, Subpart 2(c) to lowering the I-35W culvert in Anoka County Ditch No. 53-62. In its decision, the District determined that the exemption from the wetland replacement plan requirements of WCA, for the draining or filling of wetlands resulting from maintenance and repair of an existing public drainage system, Minn. Stat. § 103G.2241(2)(c) (2000), applied to wetland losses from lowering the interstate I-35W culvert in Anoka County Ditch No. 53-62. The District also found that 66.6 acres of wetland types 3-5 would be partially drained as a result of the lowering of the I-35W culvert, and that the mitigation or replacement requirement would be 66.6 acres of wetlands (Record Ex. No. 1).

The District's decision was made in response to a January 26, 2000 Order of the Board of Water and Soil Resources (BWSR), reversing an earlier decision by the District that the lowering of the culvert was exempt from the wetland replacement plan requirements under the incidental exemption provision of WCA, Minn. Stat. § 103G.2251(5) (2000) (Record Ex. No. 11). Appellants sought appeal of the November 22 district decision on November 26, 2000.

The second decision by the District on November 22, 2000 involved Appellants' application for Wetlands Conservation Act exemption based on federal approvals pursuant to Minnesota Rules 8420.0122, Subpart 3(A) to lowering of the I-35 culvert in Anoka County Ditch No. 53-62. The District determined that that exemption did not apply. Appellants also appealed that determination on November 26, 2000. The third part of this appeal involves the February 14, 2001 decision by the District regarding the application of WCA to a request for exemption again based on federal approval pursuant to Minnesota Rules 8420.122, Subpart 3(A). In its February 14, 2001 decision, the District determined that paragraph 103G.2241(3)(1) does not exempt from WCA replacement plan requirements for the draining of wetlands that would result from sediment removal. (Additional Record Ex. No. 3). Appellants appealed the third decision on February 20, 2001 and requested that it be combined with the appeal of the two prior decisions.

STANDARD OF REVIEW

Pursuant to the Wetland Conservation Act, the procedure for reviewing an appeal is provided in Minnesota Rule 8420.0250:

> The Board or its dispute resolution committee 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 of its dispute resolution committee will reverse the decision, amend it, or remand it with instructions for further proceedings.

The Board and its dispute resolution committee have found that BWSR does have jurisdiction over this matter. Upon review by the DRC and the full Board, the District's findings and conclusions in this matter have been adopted in their entirety and incorporated by reference into the Board's order. Based on the extensive review of the record, the Board finds that the local government unit's findings of fact are not clearly erroneous. Moreover the local unit of

government correctly applied the law to the facts in this case. The Board further determines that no procedural errors were made prejudicial to a party.

The Board is charged with the ultimate responsibility for implementing the Wetland Conservation Act and hears appeals from local government decisions. Minn. Stat. § 103G.2242, subd. 9 (2000); *see also* Minn. Rule 8420.0250. Decisions on the merits of an appeal are subject to judicial review under Minn. Stat. § 14.63 through 14.69 (2000). *Drum v. Minnesota Board of Water and Soil Resources*, 574 N.W.2d 71, 74 (Minn. Ct. App. 1998). The *Drum* decision reflects long-standing recognition by Minnesota courts that ditch maintenance and drainage activity is subject to the state's current environmental laws. *See, McLeod County Board of Commissioners v. State of Minn. Dept. of Natural Resources*, 549 N.W.2d 630-33 (Minn. App. 1996), pet. rev. denied (Minn., Aug. 1996).

EXEMPTION DETERMINATIONS

In this appeal, Appellants' main thrust is to establish a Wetlands Conservation Act exemption based on federal approval pursuant to Minn. Stat. § 103G.2241, subd. 3(1) and Minn. Rules 8420.0122, subp. 3(A). This rule provides an exemption from the replacement requirements of the Wetlands Conservation Act for activities exempted from regulation by United States Code, Title 33, Section 1344(f), of the Federal Clean Water Act. The rule provides as follows:

> A. Activities exempted from federal regulation under the United States Code, Title 33, Section 1344(f), as in effect on January 1, 1991.
>
> The local government unit may certify the exemption only if the landowner furnishes proof of qualification for one of the exemptions from the United States Army Corps of Engineers.
>
> This exemption does not apply to a project with a purpose of converting a wetland to a non-wetland, either immediately or gradually, or converting the wetland to another use, or when the fill will result in significant discernable

change to the flow or circulation of water in the wetland or partially draining it, or reducing the wetland area.

As promulgated by the Board of Water and Soil Resources, this rule goes to the core of what the Wetlands and Conservation Act was designed to protect. The ditch maintenance exemptions were specifically crafted to deal with land that has been previously altered through drainage and those exemptions demonstrate clear intent to protect certain wetlands that become reestablished through lack of maintenance or otherwise for the precise purpose that these wetlands and the activities related to them are not under other agency's jurisdiction.

The Board finds that the District correctly determined that the Section 1344(f) exemption is not applicable to either the culvert lowering or sediment removal in the present case for several reasons: First, Section 1344(f) of the Clean Water Act regulates the discharge and dredge of fill and material into water bodies. It does not regulate drainage. Appellants reliance on the letter from the Corps of Engineers of September 8 is misplaced. In its letter, the Corps relayed its position that the lowering of the culvert along I-35W is not within the Corps' regulatory jurisdiction. The Corps did not comment on what other jurisdiction may be applicable. (Exhibit 26, Tab 62). Appellants seek to have the inapplicability of Section 1344 operate as an all-inclusive exemption to the other clear drainage-related provisions of the Wetlands Conservation Act. Under Appellants' construction, WCA's role in ditch maintenance would be substantially negated. The Board further finds that the plain language of Minn. Rule 8420.0122, subp. 3(a), ¶3, prevents application of the federal approval exemption in this case. That language provides:

> This exemption does not apply to a project for the purpose of converting wetland to a non-wetland, either immediately or gradually or converting the wetland to another use or when the fill will result in significant discernable change to the flow or circulation of the water in the wetland, or partly draining it, or reducing the wetland area.

The record in this case makes it clear that the lowering of the culvert along I-35W will drain 66 acres of types 3 to 5 wetlands and other types of wetlands as well that have been in existence more than 25 years. As identified by the technical evaluation panel in their report to the District dated March 14, 2001 (Record Supplement Ex. 12), the proposed sediment removal will drain wetlands. Based on the clear language of the Rule, the federal approval exemption is not applicable in this case. Under Minnesota law, the ditch maintenance activity in this case is subject to the State's environmental laws. *In re Christenson*, 417 N.W.2d 607, 615 (Minn. 1987).

NEW BUSINESS

1. Update on Blue Ribbon Electronic Commerce Committee (BREC) and LINNET INFORMATION

Summary of the Blue Ribbon Electronic Commerce Committees Inaugural Meeting
March 5th – 6th ,2001

BWSR has been investigating the development of a web based software system to support business between BWSR and LGU's. This system would be a tool used by LGU's, the data developed as a by product of it's use would be available to BWSR.

The Blue Ribbon Electron Commerce (BREC) committee meeting was held to communicate BWSR's current direction regarding the web based software system and to get feedback about that direction. The BREC body consisted of one supervisor and one employee representative from each SWCD Area, four Local Water Planners and a few BWSR staff.

Below you will find an executive summary of the session, an invitation letter that identifies the goals for the session, and finally raw notes regarding the proceedings of the session.

EXECUTIVE SUMMARY

In general the meeting was very positive. BWSR and it's LGU partner representatives seemed to have similar concepts of a web based tool and potential benefits. Some of the characteristics of a successful system are:

+ Web based
+ Includes spatial component (GIS)
+ Easy to use
+ Supports daily business processes so "reporting" is a by product of daily work instead of an extra job that needs to be done at the end of the year.

Feedback that BWSR received could be generally categorized under the following points.

+ Categorize local business function similar to Local Water Planning activities.
+ Use a phased approach and start with a big success. Locals can be skeptical of systems provided by the State given past efforts.
+ Don't focus so much on State programs.
+ There is tremendous opportunity here and we are glad to see the attempt made to capitalize on it.

Invitation Letter:

Following is the letter of invitation that went out to the participants. From this you can see the goals as they were stated prior to the meeting.

Dear:

Thank you for agreeing to participate in the Board of Water and Soil Resources (BWSR) upcoming Blue Ribbon Electronic Commerce Committee (BREC) on March 5th and

6th. You have been hand picked by your peers to represent the local governments that BWSR interacts with on a daily basis. The purpose of coming together as a blue ribbon committee is to help BWSR ascertain to what degree local government want to conduct business electronically with a special emphasis on state supported programs. A few of the outcomes, which we hope to achieve in this meeting, are:

- *Define business functions performed by local governments, such as cost-share, WCA, reporting, conservation planning, etc.*
- *Identify business functions best done electronically.*
- *Identify the challenges, barriers, and benefits of doing business electronically.*
- *Clarify if reporting should be and outcome of a business process or a free standing system.*
- *Identify data privacy/access issues.*
- *Identify possible implementation strategies.*

We are at a crucial time in deciding how BWSR and its local government partners embrace and adopt the new world of electronic commerce and business. Your participation will help shape the vision and direction that BWSR will take in the near future and in coming years.

The meeting will be held at the Riverwood Conference Center located between Elk River and Albertville (see attached map for directions). We will begin on Monday, March 5th at 4 pm and adjourn on Tuesday, March 6th at 3 pm. Your room and meals will be provided for by BWSR. In exchange we expect you to come prepared to think hard and actively participate in the discussions. A draft agenda is included with this mailing to help you prepare and to give you some food for thought.

Lastly I need to make a choice on your dinner selection for the evening of Monday the 5th. Your choice of entrees is New York Strip served with salad, vegetable, and baked potato or Swordfish Steak served with salad, wild rice and a vegetable. Please make your choice and let MaryJo Anderson at BWSR know by March 1st, by calling (651) 297-4290 or by e-mail maryjo.anderson@bwsr.state.mn.us.

I look forward to seeing you on the 5th and 6th. In the meantime if you have any questions please feel free to contact myself at (651) 297-5617 or Tim Ogg at (651) 297-8024.

Sincerely,

Doug Thomas, Assistant Director

NOTES FROM THE PROCEEDINGS OF THE MEETING

OVERALL CONCERNS

- Cost of the project
- Cost to LGUS to upgrade infrastructure
- Cost of LGUS to participate
- How are LGU's positioning themselves to take on/admin federal initiatives?
- Delivery to all LGU's BWSR works with

HOPES and DREAMS for the system

- General form for annual work plans
- Log time reporting via oracle – payroll program

FUNCIOTNAL REQUIREMENTS for the system as stated by reps.

- Central location of data layers and ability to integrate local layers.
- Standardized parcel data.
- Enhance what LGU's are creating, not replace it.
- Time reporting by function/program
- Web site development (this data supplement locals efforts to communicate)
- Be dynamic so can link to other custom programs
- Landowner info i.e. location, programs, watershed etc.
- Track entities ??
- Cross link btw categories – modules – fields.
- Triggers, applied, approved, funded, unfunded, planned.
- Cross reference : spatial
- By in and use by other agencies

LOCAL ACTIVITIES

Initially BWSR brought a list of business functions broken down by State programs. BREC members didn't like the way things were listed. It didn't match up with the way they think of how they do business. So we changed the list of business functions based on their suggestions, which was to generally follow the reporting categories for local water planning activities.

The activity categories, in order of voted/ranked priority are:

1. Reporting / Work Plans / Budget
2. Land & Water Treatment

3. Inventory and Mapping
4. Regulatory Programs (WCA, Feedlots)
5. Monitoring / Data Collection
6. Planning i.e. Local Water Planning. Comprehensive Planning
7. Education Information.

Reporting – Work plans – Budgets

- NRBG
- LWP Challenge – part of NRBG
- 319
- NPEA – JPB
- SWCD Annual work plan/budget
- DNR Shoreland (part of NRBG)
- Reporting to State Auditor
- AgBMP
- EQIP

Challenges Barriers and Bennefits for Reporting – Workplans – Budgets

- Save a lot of time in this area
- Increase accountability – keep track of everything easily/timely
- Tracks (labor) match (benefit but maybe a challenge regarding staff acceptance) many are doing labor tracking. Begin as an optional component.
- Reporting increases likelihood staff will carry out tasks.
- Time reporting integrated w/ project reporting
- To be highly accurate should be tied w/ payroll but could be a barrier because of security/private data.
- Standardizing reporting is a benefit: "corporate reporting" w/ ability to do custom reporting.
- If linked to project, payroll, etc… are we getting into an accountability nightmare: allocations based on outcomes/activity level. State looking for outcomes, locals looking at project management.
- If you track everything you do its easier to document match.
- From state/auditor/legislature accountability isn't optional
- High benefit showing significant outcomes w/minimal investment.
- Match will be built in, no longer up front.
- Minimize effort to bring many reports together (NRBG)
- Barrier: not everyone is doing the same thing. Different LGU's carrying out same program differently. I.e. LWP.
- OPP: be able to meet reporting req. of other agencies this has to become a State Program. Use Board forum to accomplish this.
- Opportunity: Integrate systems locally.

Land and Water Treatment

- State Cost Share
- CRP
- CREP
- RIM
- EQIP
- 319
- Tree Program
- Equip Rental / Planting Services
- AgBMP loans
- Oak Wilt
- "Other" L&W Treatment?? Forest Management Plans?
- Conservation Farm Plans
- Nutrient Management Plans
- Forestry Management Plans
- Tree plans
- Windbreak programs

Challenges Barriers and Bennefits for Land and Water Treatment

- RIM easy to capture and start with. Do the same thing over/over
- Incorporate everybody's L/W treatment to truly capture accomplishments (feds, nonprofits) this is a plus for marketing also. Feds, nonprofits, local program, state
- Ability to track service programs like tree programs, inventory, sales, plantings, facilitate working w/others e.g. nice to know what district gets out of this program.
- Track by landowner: how many L/W projects are they involved in?
- Identify patterns of local adoption and use to market.
- Challenge: whose actually doing the project? They should be the one reporting the accomplishment. Avoid dual reporting but capture who did what and allow that to be viewed by all entities.
- Benefit: forms, apps, etc. change fairly frequently. This will facilitate everyone using the most up to date process.

Inventory and Mapping

- Local Water Planning
- 319
- Challenge Grants
- Local needs
- Drained/Banked/Wetlands
- Feedlots
- Exotic Species
- Ditches / Tile Intakes

Challenges Barriers and Bennefits for Iventory and Mapping

- Local governments looking at developing local layers: junkyards, pits, etc..

- Can look at other counties and learn from the layers they've developed.
- Barrier: How do you create continuity of data. Important to be able to compare apples to apples. What about local programs delivered differently across the state?
- Maps won't mean what they use to because they will be created at different points in time.
- Inventory is just a snapshot in time at a particular place. Don't feel that should be a priority. Maybe statewide but not local.
- Design a system to allow local inventories
- Standardization is important, what is a wetland?
- Benefit: facilitates watershed planning across jurisdictional boundaries.
- Standardization isn't that important if you know how the inventory/monitoring was done. What is quality of data?
- Display info geographically

Regulatory Programs

- WCA / Banking
- ISTS
- Feedlot
- Shoreland/Floodplain
- Drainage
- NPDES
- Site Visits
- Local programs/ordinances
- Violation / enforcement

Challenges Barriers and Benefits for Regulatory Programs

- Benefit: paper reduction very time saving because of triggers that guide the procedures.
- Benefit: reduces errors, and meeting time deadlines, very detailed proceedings w/legal implications.
- Streamline process
- Nicollet County land use program: tax parcels in ArcView esp. program w/ landowner info tied to GIS. Scott Co. using a program too. "expedia"
- Manage local permitting would be an important benefit.
- Barrier: integrating sophisticated co. program designed for similar purposes. Bridge folks w/ no technology and those w/ sophisticated programs.

Monitoring/Data Collection

- Local Water Planning
- 319
- Challenge Grants
- Local Programs e.g. gravel pits, wetlands

- Lakes / Rivers/ Streams/ Etc.
- Groundwater protection/legislation
- Rain Gauge Network

Challenges Barriers and Benefits for Monitoring/Data Collection

- Opportunity: easy to structure, could get quick product
- Is this LGU's niche? I see it more toward implementation
- OPP: coordinate monitoring efforts and use existing databases such as STORET identify where data is avoidable.
- Challenge: just finding where the data is located.
- Coordinate/share/coordinate/share – w/special emphasis on state agencies probably bigger than this effort but key.

Planning

- SWCD comprehensive planning
- Local Water Plan / updates
- Metro water planning – updates
- Watershed District Planning – updates
- Local planning – landuse planning, zoning. Shoreland Management plans. Construction sites, regulatory erosion control plans, other ordinance
- Comprehensive wetland management plans
- MHB??
- Landuse Planning

Challenges Barriers and Benefits for Planning

- Ability to report how much of what is recommended is actually carried out.
- Benefit: LWP, WD, WMO plans trigger update process helps manage the process
- Benefit: forestry/tree/farm/nutrient plans are on the system. Automated soils, sensitive areas at the table w/planner and landowner build in calculators: RULSE, once applied it becomes L/W treatment
- Track how many acres in a county or watershed have a plan or are at "T" or below.
- Barrier: data privacy
- If farm bill moves forward payment if planned this will position us to accommodate that but need links.
- Benefit: forms/process on computer reducing paperwork.
- Opportunity: to link modules planning/treatment.

Education / Information

- Local Water Planning
- 319
- Challenge Grants
- Local

- Educations Fairs
- Newsletters
- Testing Clinics
- Workshops
- Websites

Challenges Barriers and Benefits for Education and Information

- Low priority because it's not geographically relevant. Not a strong need to link to GIS
- Easy to report w/out electronic aids, so it's a lower priority
- Often easy to log w/workload reporting
- Can be reported as a local program or an off shoot of the other modules

Question was proposed to the group – "Should a web based farm planning tool be accessible to individual landowners?"

Responses

- Landowner pays taxes for us to do it.
- Tried it with lake shoreland planning. They will do homework but they won't write the plan.
- May work if integrating into Vo-Ag curriculum.
- May reach some, but not a blanket approach. A plus if they want to do it
- Runs against our "we'll do it for you" image.
- That's how Ag Extension approaches it, not SWCD's
- Perhaps the background piece, but not actual planning software.
- Consider how we can share farm plan information w/ coops (this is farmers responsibility)

Data Privacy Vs. Data Access - discussion

- Landowners may not work w/LGU if they know the info can be accessed by people in St. Paul. "Accessed by the Government"
- Unless a law ids data as private it's not.
- Build in landowner privacy but allow to identify a dot on a map
- Raw data shouldn't be easily accessed. You can comply w/ info requests w/ a map but don't have to provide landowner info.
- Build a system where landowner info (intent to apply conservation practices) that would be on local PC, but a summary of that data would be on a state server e.g. acres planned.
- Problem may be lack of security @ local level

- Does it make a difference where it is, as long as adequate security is provided?
- Can we encrypt the data to address this?
- Do we need to define and get data privacy protection? (Legislate our privacy definitions)
- May be particular concern because it will be shared w/other agencies.
- Conservation Plan stands out as different from program participation
- Resurrect cooperator agreement w/language addressing data privacy.
- Use the "RA" law. If used may help address this.
- Training issue
- What is public/private? Really a question off access
- What hurdles does the entity have to go thru to provide data?
- Permanent record v. temporary file
- Don't approach too strongly from a "protect the landowner" view. If it keeps us from getting what we want.

Two more groups of ideas seemed to be brought up during the 2 days.

Principles for the system

- Driven by local "activities" not State/Federal programs. Activities are just another way of saying "business functions"
- Easy to Use !!! This does not mean dumb it down.
- Flexibility. Programs will come and go in the future.
- Web-based
- Inter agency buy in
- Secure
- Make it interesting, fun to do
- Incentive to participate
- QA/QC what is entered

Some Generally Stated Desired Benefits

- Access to basic GIS functionality
- Marketing for BWSR and LGU's
  + towards legislature, county boards, citizens, etc.
- Work efficiencies (increased productivity)
- An easy ability to Analyze/Summarize efforts by different geographic areas.
- Ability to accommodate unique programs and services offered by the LGU.
- Inter agency access to data/programs
- What are we going to drop?

Where do we go from here?

1. Take products from this meeting and meet w/Linnet to see where things fit their system and what it would cost to adapt.
2. MASWCD – Supervisors discussions. April/May 60-90 days. Are they behind the effort given more detail and the cost?
3. Summarize and publish results of this meeting. Distribute to all participants, water planner's focus group BWSR board, email to SWCD's and water planners.
4. Suggestion of placing a power point slide on BWSR's web site that explains this meeting, general intro into this effort, what are the expected benefits.

How do we go from here?

General steps that need to happen

1. Finalize project definition
2. Contracting
3. Development
4. Debugging
5. Training
6. Implementation

January 1, 2003 Kickoff. Offer a paper option when phasing in.
Keep this card in back pocket, get as many voluntary users as possible, consider charging those who use paper to recover State costs to enter in the data instead of mandating system use.

Brainstorm funding ideas.

- McKight foundation
- United States as a pilot
- DNR, Feedlot, ISTS Funds, BWSR Board with agency reps. has the ability to comment
- Rural Development Authority
- U of M
- Met Council
- BGIC
- SWCD's raising funds reinvesting state dollars/local dollars
- Watershed districts
- Counties
- MDA
- NASA/USGS
- ESRI
- Givespost.com
- NACD
- Other States?
- Local Initiative Funds

- Conservation Groups, DU , PF, TNC etc.

Appendix:

Below you'll find comments from the "around the room" activity of our session. We gave each person an opportunity to express anything they wanted to regarding this project.

Dick Borrell, Wright SWCD, Area IV:
Electronic concept is a must or we'll be buried by paper. Needs to be closer to 2-year project than a 5 year project.

Bill Best, BWSR:
Time is here we have done things different ways in different years. Getting this in place will allow LGUs to do their work efficiently. Reduce changes in playing field.

Mike Hewitt, Redwood SWCD, Area V:
Counties/others need to be aware so locals don't waste time inventing similar programs.

Kevin Clough, Kandiyohi SWCD, Area VI:
Believe in it whole-heartedly but do right! Test, do in steps not all in one shot.

Curt Borchert, Norman SWCD, Area I:
Will be great. Needs to be ongoing and flexible to add/drop activities. Don't build program specific and make sure has appropriate links. Don't change unless there's large consensus. Develop a way to request and decide on changes. Give locals a forum to suggest changes.

Dan Livdahl, Nobels SWCD, Area V:
While moving forewarned be sensible. Start w/web based glorified LARS w/ land and water treatment reporting. Start small

LeAnn Buck MASWCD Executive Director:
Like that it's not program driven, lay out a realistic timeline as this begins to congeal and move foreword.

Dennis Fuchs, Stearns SWCD, Area Farea IV:
Invite more stakeholders – or expand project. Especially counties NRCS. Really use the BWSR board. Keep SWCS and counties informed. Email an overview of this meeting soon.

Tim asked Dennis: "What is SWCD opinion to this project"

Dennis: "largely positive response. but one concern that BREC is too loaded with reps of "Techie" capable districts"

LeAnn Buck: spatial system and web based need to be emphasized to separate this effort from LARS/FOLKS

Chris Lord, Anoka SWCD, Area IV:
Important to get this elevated to a statewide effort ASAP. If we go too far the turf issues will arise in the form of negative opinions of the system.

Michele Stindtman, Faribault SWCD, Area VI:
Great tool especially when we have multiple programs admin by LGU. But you may have to do ground work where battles are going on because one LGU has the water plan other has cost-share. Be aware there are districts that aren't ready for this and are adamant about that fact. If they could see the big picture/benefits it'd be an easier sell.

Pam Rivers, Nicollet County, Water Planner:
I see a lack of being able to enter something and have it shared by all the local offices doing the work. e.g. MPCA feedlots. Positive way to report to the policy makers.

Scott Allen, Carver County, Water Planner:
Thinking big picture my issue is that there are so many pieces that need to be worked on-don't take on t too much. I like the idea of web based LARS. Prioritize what needs to be done first. Needs to tie into things that are already being done and have defined reporting. (Other State agencies)

Doug Snyder, BWSR:
Build it for the people who want to use it. Don't dumb it down. Build w/idea to streamline work to increase productivity.

Jeff Nielsen, BWSR:
Tackle the things we understand and can get our arms around first. There are some things we know more about i.e. WCA, State Cost Share,. Take it slow but move forward. Work w/out board to get commitment from the agencies that are partners and other agencies "inch by inch life's a cinch, yard by yard life is hard"

Wayne Zellmer, BWSR:
Involved in the launching of LARS and people responded w/"can't you just send me the money" This is a much bigger deal. Have to get hardware/software that will work and get users comfortable-bring them up to speed technically.

Daryl Franklin, Mower SWCD, Water Planner:
Concerned about coordination. Get DNR/PCA involved. Their part of the money train. Concerned about timing:2002/03 NRBG? Good idea.

Merril Loy, Carlton SWCD, Area III:
Good idea but you have to sell: Break into modules, start with one that is simple and benefits LGUS

Craig Mell, Chisago SWCD, Area III
People are for making process/admin easier but uneasy about accountability.

John Voz, Mower SWCD, Area VII:
A little late but .. first module L&W treatment, first module spatial, don't dumb down.
discuss getting beat up by your own data. long range: it will affect funding.

Helen McLennan, Morrison SWCD, Area II:
Water planning has taught us to play together.
May be difficult to bridge the barrier between staff and supervisors/commissioners.
system designeer:reputable company w/a company w/strong successes and capability.
Develop a strong contact to make sure we're protected.
Don't think LARS is that bad NOW.
Great idea-can't wait until the new system is in it's place.

Marilyn Bayerl Douglas County Water Planner:
make it local. Use ArcView, Oracle and other software that counties area already using.
Involving other agencies. e.g. Storet is soon to be revamped and it should be done w/this in mind.

NEW BUSINESS

2. Special Funding Request
   DECISION

Special Funding Request for Wright SWCD Pollution Abatement Project

BACKGROUND

Landowner Robert Berg of Wright County requested $32,500 in cost-share for a $55,000 agricultural pollution abatement system for his dairy operation, from the Wright Soil & Water Conservation District in the spring of 1999.

The Wright SWCD verbally informed Mr. Berg that MPCA 319 dollars were available for his Project. Mr. Berg commenced construction on the pollution abatement system in the summer of 1999, which was before official funding approval for the project was given (319 funds must receive official approval prior to construction similar to State Cost Share Program funds).

ISSUE

Because no formal approval was given from 319 funding before construction commenced, the Wright SWCD informed Mr. Berg his project was ineligible for funding. Mr. Berg feels that he was given was funding approval for his project from the Wright SWCD.

On behalf of Mr. Berg, the Wright SWCD is requesting from BWSR funding for Mr. Berg's project. The Wright SWCD has no other available sources of funding for this project.

RECOMMENDATIONS

Option 1: Approve funding using State Cost Share Program funds.

Because construction of this project has already occurred, this project would be ineligible for State Cost Share Program funding, as the Program requires project approval prior to construction. A waiver of the State Cost Share Program Rule by the Board would have to occur for State Cost Share funds to be used for this project. Funding this Project would reduce the overall amount available for Special Projects.

Option 2: Approve funding using Local Water Planning funds.

This Project is eligible for Local Water Planning funds. However, using Local Water Planning funds for this project would decrease the overall amount available for the FY 01 Local Water Planning Challenge Grant Program.

Option 3: Deny BWSR funding.

H:WSWCDBF

WRIGHT SOIL AND WATER CONSERVATION BOARD

RESOLUTION

WHEREAS, Robert Berg started construction of an agricultural waste management system with the understanding that there would be funds available to defray costs associated with the pollution abatement aspects of the system; and

WHEREAS, those funds were subsequently denied due to timing problems associated with grant reception and start of construction; and

WHEREAS, there were mixed messages given by various agency personnel on what would be grant eligible based on the timing of the installation;

NOW THEREFORE BE IT RESOLVED:

THE Wright Soil and Water Conservation District Board requests the Board of Soil and Water Resources (BWSR) consider funding this project with special state cost share funds or other available funds to the amount that had formerly been secured from the Minnesota Pollution Control Agency (MPCA) 319 funds ($32,500) on an "after the fact" basis.

BE IT FURTHER RSOLVED, THAT, to be eligible for the payment of these funds Mr. Berg must complete the plan as designed or obtain written approval of any requested changes from both the design engineer and MPCA.

Motion by Supervisor: Borrell Seconded by: Uecker

Motion Passed: Affirmative: Borrell, Uecker & Dahlman
Negative: McNamara

Date: 04-09-01

Attested to by Kenny Sexton

NEW BUSINESS

3. Local Water Planning Challenge Grants 2002/03 DECISION

2002-2003 Challenge Grant Applicants
Cash Match Only

Applicant	Description	Water Source	Pred. CLWP	Grant Amount	Match Amount
Black Dog WMO	Demonstrate the effectiveness of a green roof (a.k.a. rooftop meadow) to reduce stormwater runoff volumes and peak flows in an ultra-urban environment	Streams/ Rivers	L&W	$50,000	$948,000
Blue Earth County	Create a mgmt system and database that will inventory and describe public ditch watersheds, identify problem ditches and support long-range maintenance plans .	Streams/ Rivers	Inventory	$26,391	$26,391
Minnesota River Basin JPB	Unify federal, state and local efforts by developing a locally-led approach that targets high priority strategies in major watersheds of the basin to implement objectives, indicators and targets established by Watermark	n/a	P & EC	$125,000	$125,000
Brown's Creek WSD	Identification, design, and implementation of a demonstration site for the education of member communities, developers and citizens regarding the environmental controls and stormwater management standards required by Brown's Creek WSD Rules.	n/a	E&I	$25,000	$25,000
Buffalo-Red River WSD	Create a tool to easily manage and disseminate data that can be used by other agencies.	Stream/ River	E&I	$10,450	$10,450
Carnelian - Marine WSD	Inventory and prescribe stewardship strategies for their long-term protection and management.	Streams/ Rivers	Inventory	$49,500	$49,500
Cass and Crow Wing Counties	Coordinate implementation of priority initiatives and land protection measures within the Pine River Watershed.	watershed	P & EC	$75,000	$76,500
Chippewa County	Improve water quality in the Spring Creek Sub-basin using whole farm planning and voluntary participation, and implementing bmp and environmental practices.	watershed	Mon/Inv	$25,000	$25,000
Clay County	Assess a subwatershed prone to severe erosion and flood damage using the Clay Wetland Model and engineering technology.	watershed	Inventory	$25,000	$25,000
Clearwater River WSD	Determine silt distribution and composition in selected lakes in CRWD. Those lakes being Clear, Louisa, Marie, Augusta, Clearwater East and West	Surface Water	Inventory	$10,000	$10,000
Crow Wing County	Help fund septic system inventories for four lake associations (8 total lakes) that have already completed Lake Management Plans.	Lake	L&W	$17,000	$32,240
Fillmore County	Provide incentives to livestock producers to set aside acres and apply manure on an annual rotating basis to demonstrate the soil-building benefits of manure.	watershed	L&W	$50,000	$58,950
Goodhue County	Properly dispose of milkhouse waste to improve the water quality of Wells Creek by preventing excess nutrients from entering the water.	Stream/ River	L&W	$25,500	$30,000
Grass Lake WMO	Eliminate untreated direct storm water discharge to Lake Emily and Lake Owasso and to control soil erosion from surface flow.	Lake	L&W	$125,000	$397,32
Gun Club Lake WMO	Gather relevant data necessary in the development of a comprehensive management plan for protection and restoration of this unique area (Nicols Fen, Kennaley's and Harnack Creeks) as a natural greenway.	Streams/ Rivers	Inventory	$15,000	$15,000
Heron Lake WSD	Remove and replace open tile intakes with subsurface intakes to Improve surface water quality in the Heron Lake WSD.	Surface Water	L&W	$36,000	$36,000
Houston County	Accelerate implementing Bear Creek Watershed Mgmt Plan by providing cost-share assistance for conservation practices not eligible for current PL-566 funding.	watershed	L&W	$10,000	$12,000
Houston County	Repair aging erosion control structures within the Lower Mississippi Basin in Minnesota to extend their life and improve water quality by reducing sedimentation and pollutant run-off.	Stream/ River	L&W	$125,000	$149,500

2002-2003 Challenge Grant Applicants
Cash Match Only

Applicant	Description	Water Source	Pred. CLWP	Grant Amount	Match Amount
Isanti County	Improve the Eutrophic condition of Green Lake by funding a new $300,000 Flood control structure.	Lake	L&W	$50,000	$250,000
Itasca County	Protect water quality by implementing critical elements of the new Itasca County Comprehensive Land Use Plan adopted May 2000.	n/a	P & EC	$40,000	$40,000
Lake of the Woods County	Complete inventory of uninventoried ditch systems and rights of way, develop a ditch maintenance policy utilizing BMPs, and develop a buffer strip implementation plan.	Stream/ River	Inventory	$30,000	$30,000
Lake of the Woods County	Develop a comprehensive wetland protection and management plan and ordinance for LOW county.	Stream/ River	P & EC	$40,000	$40,000
Lower Mississippi River WMO	Create guidelines for stormwater planning in areas where stormwater goals conflict with each other and with regional development goals.	Lake	P & EC	$45,000	$45,000
Lower St. Croix Valley WSD	Economical, feasible, and reliable non-traditional flood relief measures need to be developed for a landlocked lake with a history of flooding houses, septic systems, and main neighborhood and emergency vehicle access.	Lake	Inventory	$50,000	$50,000
Marshall County	Correct stream flow problems on the Tamarac River. Woody debris is causing severe flow obstruction, excessive bank erosion, and infrastructure damage	Stream/ River	L&W	$15,000	$15,000
Marshall County	Stabilize drainage ditch and roadside ditch slopes where they outlet into the respective river.	Stream/ River	L&W	$22,000	$22,000
Nobles County	To improve surface water quality and reduce runoff in Nobles county and several watershed districts by establishing and agricultural BMP cost-share program	Surface Water	L&W	$125,000	$125,000
North Cannon River WMO	Evaluate the overall health of the Pine Creek and Trout Brook Sub-watershed of the Cannon River through water quality and quality monitoring, macroinvertebrate monitoring, landcover mapping, and citizen involvement	Stream/ River	Mon/Inv	$32,000	$32,162
North Fork Crow River Watershed District	Digitized (GIS) County and Judicial drainage ditch systems within the Watershed District so that better land use management can be implemented in protecting water quality and water quantity	Stream/ River	P & EC	$13,500	$13,500
Olmsted & Dodge Counties	Develop a South Zumbro Stormwater and Capital Improvement Plan that utilizes riparian buffers, rural section rain gardens, wetland restorations, stream bank erosion controls and stormwater management for water quality and wildlife habitat improvement.	watershed	P & EC	$54,000	$54,000
Polk County	Restoration and stabilization on the banks of the Red Lake River to protect city sewer pipes, thus safeguarding the river from contamination by pathogens and sedimentation.	Streams/ Rivers	L&W	$125,000	$751,000
Prior Lake-Spring Lake WSD	Improve water clarity in Spring and Upper Prior Lakes to eliminate toxic algae blooms, improve aesthetics, reduce nuisance Curlyleaf Pondweed conditions, and enhance coverage of native aquatic plants.	Lake	L&W	$50,000	$160,500
Red Lake WSD	Establish watershed assessment protocol procedures for developing water quality reports, field and lab standards operating procedures, quality assurance project plans and statistical analysis techniques.	n/a	E&I	$50,000	$50,000
Sauk River Watershed District	Reduce sediment and phosphorus loading to Lake Osakis from Judicial Ditch 2 (JD2) by constructing a sedimentation basin provides water quality benefits	Lake	L&W	$125,000	$125,000
Snake River WSD	To give Snake River Watershed residents, agencies and organizations information about best management practices, funding sources, completed watershed projects and upcoming activities in the watershed.	watershed	E&I	$10,000	$10,000

2002-2003 Challenge Grant Applicants
Cash Match Only

Applicant	Description	Water Source	Pred. CLWP	Grant Amount	Match Amount
Snake River WSD	Protect critical areas from erosion thereby reducing the amount of nutrients and sediment reaching surface waters in the Snake River Watershed	Surface Water	L&W	$65,000	$65,000
South Washington WSD	Secure additional ponding capacity, conservation easements and, emergency overflow routes for designed flooding in high priority locations during critical hydrologic events as an element of land use planning to minimize flood damages in watershed.	Streams/ Rivers	P & EC	$50,000	$50,000
South Washington WSD	Obtain a better understanding of precipitation, snow depth, soil moisture, and frost depth to help implement mgmt techniques that mitigate natural elements limiting infiltration during the critical spring snowmelt events.	Streams/ Rivers	L&W	$50,000	$60,000
South Washington WSD	Encourage developers to incorporate infiltration at a local scale by developing a cost-share program.	Streams/ Rivers	L&W	$50,000	$50,000
Stearns County	Compile information through a lakeshed assessment approach and organize it into a GIS database.	Lake	L&W	$25,000	$25,000
Stearns County	Solve lakeshed area problems by implementing conservation practices in areas identified by the Stearns County Lakeshed study.	Lake	L&W	$50,000	$50,000
Thirty Lakes WSD	Determine current and future Stormwater loading to the fifty-five lakes in the "Thirty Lakes WSD" based on current land use, current zoning and loading generated from projected zoning	Lake	P & EC	$20,500	$20,500
Todd County	Provide cost-share to Todd and Douglas County landowners to 1)perform soils investigations around unpermitted manure storage basins to evaluate compliance with current regulations, or 2) properly close and reclaim abandoned manure storage basins.	Stream/ River	L&W	$125,000	$125,000
Two Rivers WSD	Prevent erosion, sedimentation, & infrastructure damage in Springbrook Township by installing flow control, resloping road ditches, relocating dikes away from waterway edges, & seeding grass buffers.	watershed	L&W	$14,450	$14,450
Wadena & Becker Co's	Identify, prioritize, and assist in the closure of abandoned animal waste pits, to eliminate contamination of surface and ground water.	Groundwater		$100,000	$100,000
Washington Co and several WSDs	Integrate groundwater elements into watershed district management strategies and policies protecting lakes, wetlands, streams and water supplies dependent on groundwater.	Groundwater	Inventory	$125,000	$125,000
Watonwan County	The project purpose is to improve surface water quality by partnering with local townships and landowners to repairing eroding riverbanks and improving in-stream aquatic habitat.	Streams/ Rivers	L&W	$44,000	$44,000
Wild Rice WSD	Improve water quality/quantity mgmt decisions at the local, state and federal level by providing continuous stream flow data at critical locations in the WSD	Streams/ Rivers	mon	$70,000	$70,000
Wild Rice WSD	Reduce flood damages to public and private infrastruc-ture, including the City of Ada, by reducing the threat of ice jams that increase and overland flooding	Streams/ Rivers	L&W	$125,000	$143,000
Wilkin County	Install BMPs to reduce flooding and enhance natural resources.	Stearns/ Rivers	L&W	$125,000	$125,000
Winona County	Develop a GIS linked to a hydrologic and hydraulic water quality model for Winona to facilitate an effective watershed management program for the city.	Lake	P & EC	$50,000	$50,000
		Total		**$2,615,291**	**$4,806,969**

2002-2003 Challenge Grant Applicants
Lake Management Grant

Applicant	Description	Pred. CLWP	Grant Amount	Match Amount
Beltrami County and Turtle River Watershed Management Planning	Develop watershed database within 152,000 acre Turtle River Watershed focused on data collection to develop watershed management plan. Focus will be land use, lake monitoring and watershed assessment for 11 lakes and Turtle River with watershed.	P & EC	$17,500	$18,000
Cook County	A citizen team has proposed a watershed investigation agenda that includes inter-lake flow analyses, improved vegetation management for blowdown recovery areas, development/build out scenario analysis, expanded phosphorus/non-point simulation modeling and detailed map data	P & EC	$5,000	$4,000
Crow Wing County	The purpose of this project is to capitalize on the Initiative Foundations Healthy Lakes Program, which builds the capacity of citizen leaders to develop and implement lake management plans.	P & EC	$10,000	$22,500
Douglas County	Develop Lake Management Plans for three priority lakes in Douglas County. Facilitate lake association ability to take an active role in preserving the quality of these and other Douglas County Lakes through leadership training	P & EC	$32,900	$32,900
Elk River Watershed Association JPB	Evaluate watershed conditions of Little Elk Lake and prepare a lake management plan that will be implemented to complete projects that result in improved and protected water quality for the Little Elk Lake watershed	P & EC	$4,100	$9,300
Hennepin County	To develop an ecologically-based lake management plan that employs sustainable lake management approaches to protect and improve Gleason Lake's inlake and watershed resource including water quality, scenic/recreational amenities and fish and wildlife habitat	P & EC	$23,500	$23,500
Itasca County	Create a countywide program to assist lake associations and similar groups to develop effective lake/watershed management plans to sustain or improve the quality of specific lakes.	P & EC	$35,200	$36,280
Otter Tail County	To create a strategic vision for the Otter Tail County Pine *L.I.D, and establish goals, priorities, and policies for the next 20 years, resulting in the completion of a sustainable, comprehensive, ** Lake Management Plan.	P & EC	$50,000	$50,000
Pelican River WSD	To adopt the Minnesota Lake Association's management planning model (Sustainable Lakes) to Lake management planning for becker county lakes. The development of Lake Management Plans on all Becker County Lakes is the long-range goal	P & EC	$17,000	$17,000
Pope County Enviromental Services/Pelican Lake Association	To develop and implement a Lake Management Plan for Pelican Lake and Pelican Lake Watershed. The plan shall identify needs, detail action plans and work to coordinate all efforts and resources impacting the watershed.	P & EC	$15,000	$15,000
Red Lake WSD/Clearwater Lake Area Association	The purpose is to develop the Clearwater Lake Management Plan, needed to improve lake water quality, reduce sedimentation, and restore the natural shoreline, through active educational efforts with lakeshore owners and partnerships with local agencies.	P & EC	$9,000	$14,000
Rice County	Develop a county lake management plan involving public and private partnerships to develop long-term sustainable projects to protect and restore Rice County lakes and their watershed from recreational and aesthetic purposes.	P & EC	$50,000	$50,000
Rice Creek WSD	Develop a strategic lake management plan for Bald Eagle Lake. We will build on the project program developed by the Rice Creek WSD and the Lake Association and we will prepare a long-term, sustainable lake managementplan for Bald Eagle Lake.	P & EC	$14,000	$22,600

2002-2003 Challenge Grant Applicants
Lake Management Grant

Applicant	Description	Pred. CLWP	Grant Amount	Match Amount
Rice Creek WSD and Otter Lake Association	Develop a strategic lake management plan for Otter Lake. We will build on the project program developed by the Rice Creek WSD and the long-term Eurasian watermilfoil studies that nave been conducted by the U of M.	P & EC	$5,000	$5,000
Sauk River Watershed District	Develop a Lake Management Plan for the Big Birch Lake Watershed, using the MLA Lake Management Model as a planning guide	P & EC	$17,720	$17,720
St. Louis County	Large lakes such as Lake Vermilion present complex economic and enviromental issues for citizens and decision makers This project will develop a model that will expand upon the Minnesota Lakes Associatioin Sustainable Lakes Plan to address the unique issues of the large lakes.	P & EC	$50,000	$61,000
Wadena County	To develop and design implementing a lake management plan for Spirit Lake in Menahga. Furture growht and other municipal activities should fit into a management shceme that protects this urban lake.	P & EC	$9,000	$9,000
	Lake Management Grant Totals		**$364,920**	**$407,800**

Local Water Planning Challenge Grants

Distribution for the past three cycles:

Grant year	Category	Number of application	Dollars available	Dollars requested	Ratio	Match offered
1999		**63**	**$423,000**	**$1,499,532**	**3.54**	**<1,499,532**
2000	Grants over $7,500	84	$1,690,000	$3,595,946	2.13	$4,722,760
	Grants under $7,500	28	$ 75,000	156,018	2.08	$241,969
	total	**112**	**$1,765,000**	**$3,751,964**	**2.13**	**$4,964,729**
2002	Cash match only	51	$1,340,000	$2,790,291	2.08	$4,806,969
	Cash/In kind over 10K	14	$160,000	$529,837	3.31	$ 681,635
	Cash/In kind under 10K	19	$ 150,000	$148,187	.98	$221,790
	Lake Management Plans	17	$350,000	$364,920	1.04	$407,800
	total	**101**	**$2,000,000**	**$3,833,235**	**1.92**	**$6,118,194**

2002-2003 Grants:

- In early December the board approved policy changes from the 2000/01 LWP Challenge Grant Program.
- Applications were announced via the State Register and letters to eligible local units of government in early December.
- Invitations to review and rank the applications were sent to the 22 entities identified in rule.
- Applications were received in St. Paul on February 16, 2001.
- BC's reviewed applications from their areas.
- Review packages were sent to those accepting the invitation to review and rank the applications. Several reviewers attended a meeting on April 16 to finalize the recommendation to the board.

MN Dept of Agriculture
MN Dept. of Health
MN Dept. of Natural Resources
MN Pollution Control Agency
MN Planning
MN Geologic Survey
BWSR Northern Region
BWSR Southern Region
BWSR Metro Region
BWSR Central Office

Met Council
Association of Minnesota Counties
MN Assoc. of Soil and Water Conservation Districts
MN Assoc. of Conservation District Employees
MN Assoc. of Planning and Zoning Administers
MN Assoc. of Watershed Districts

* Staff workloads barred AMC and MN Planning from submitting scores.

Recommendation of the Review Committee:

The fourteen scores of the reviewers were ranked using standardized scores, raw scores and ranked scores.

The review team agreed to recommend that the board fund the projects according to the order resulting from standardized scores rankings for both the cash only and cash/in kind over $10K projects.

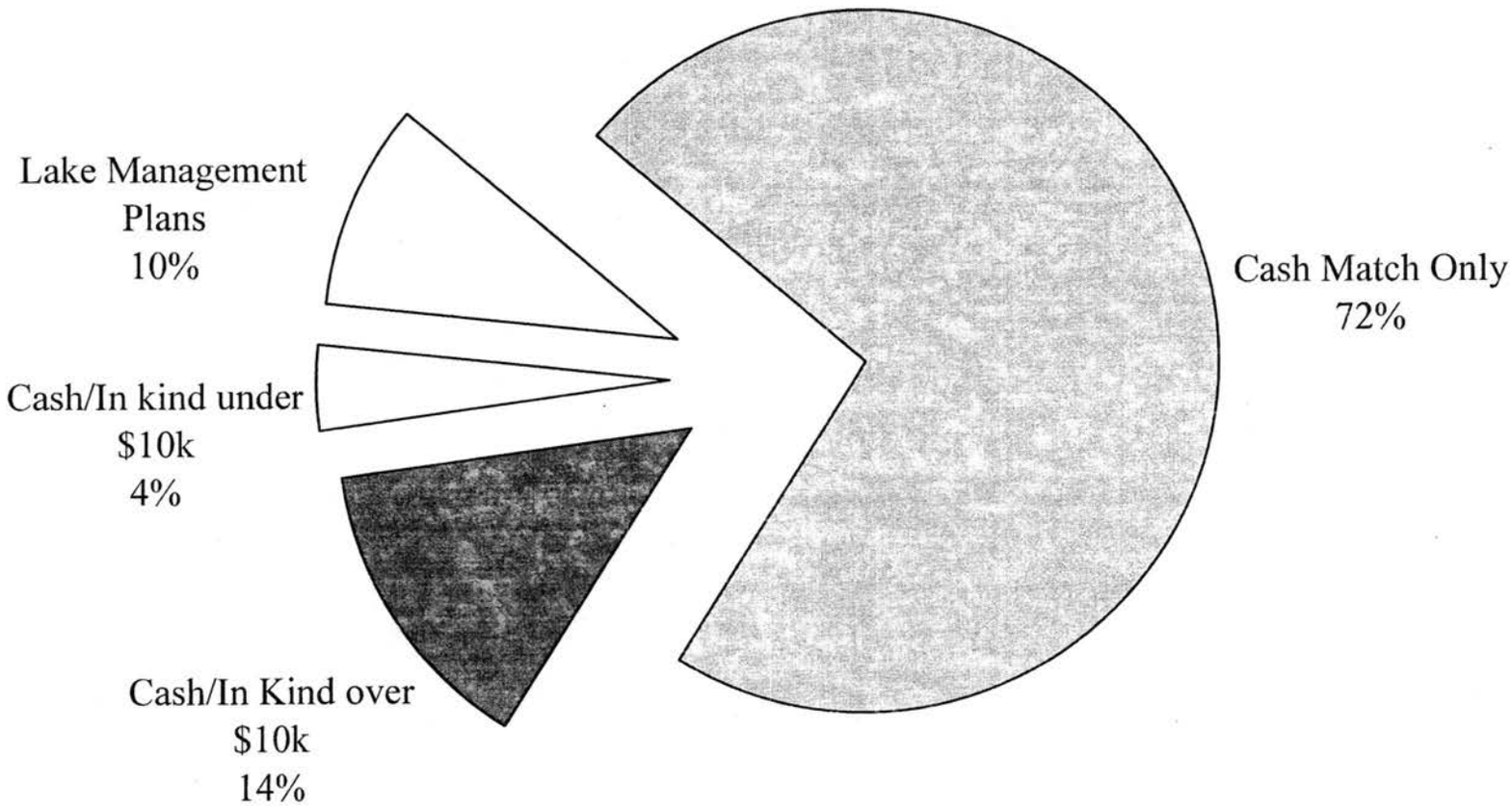
Because the project requests were less than (or close to) the dollars available for the categories of Cash/In kind Projects under 10K, and the lake management planning grants, all of the projects are recommended for funding.

Recommended Motion:

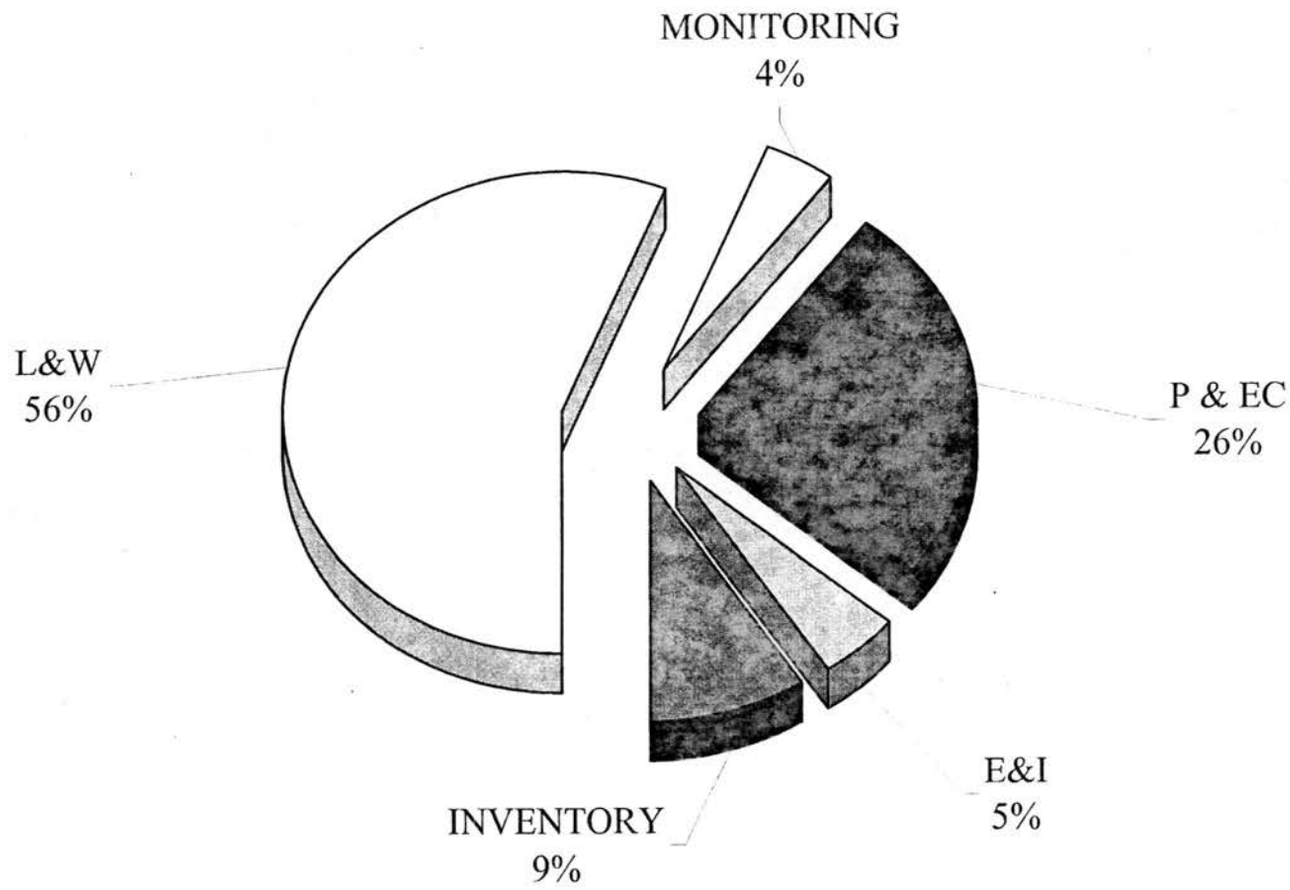
Contingent on the availability of Legislative appropriations, the BWSR approves funding the following challenge grant projects:

- All of the projects submitted in the cash/in kind under 10K category.
- All of the projects submitted in the lake management planning category with the understanding that Otter Tail County, Rice County and St. Lois County, each of whom requested $50,000, will accept a reduction of $5,000 making their total individual grants $45,000.
- The standardized ranking will be used to fund projects submitted under the Cash and In Kind Over 10K category up to $160,000.
- The standardized rankings will be used to fund projects submitted under the Cash Only category up to $1,340,000.

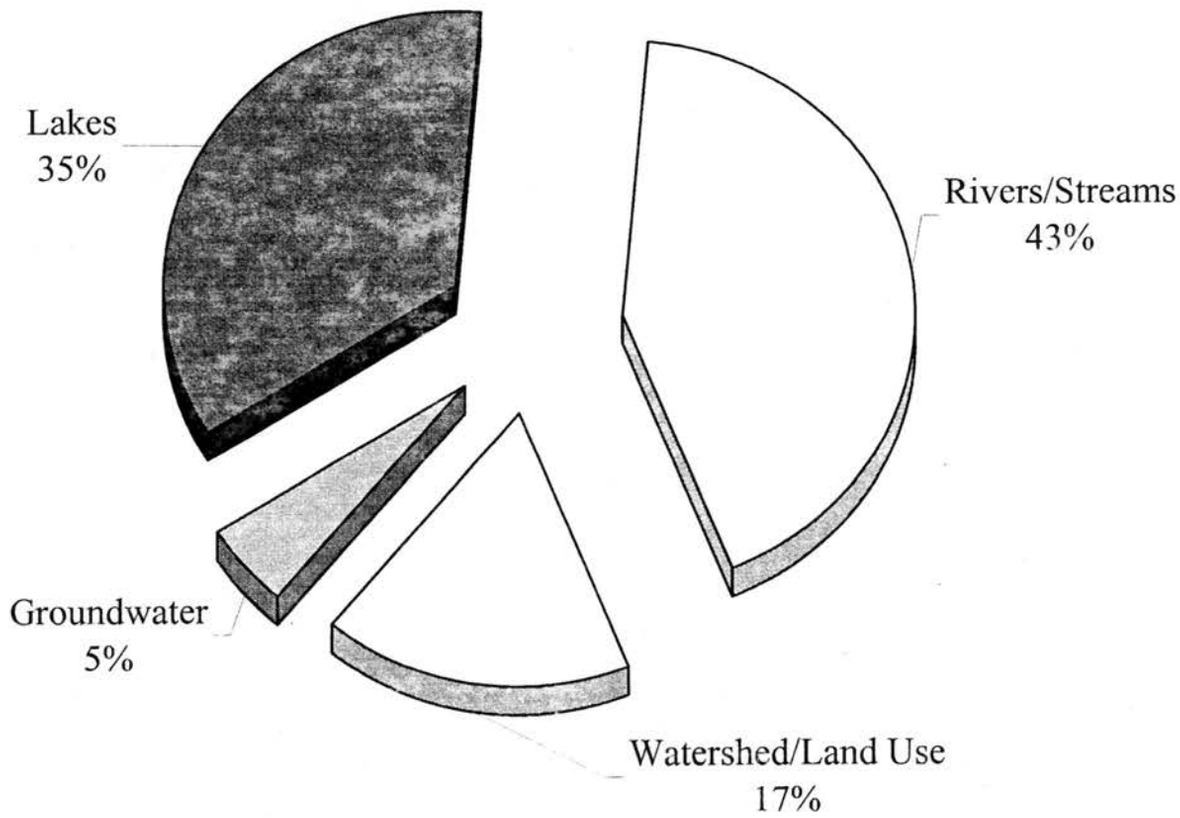
2002-2003 Challenge Grant
Distribution By Funding Category



2002-2003 Challenge Grant Applications
Distribution By Predominant CLWP



2002-2003 Challenge Grant Applications
Distribution By Water Source



Match Type: Cash Only

Allocation	Applicant	Description	Pred. CLWP	Grant Amount	Match Amount	Average Score	Average Rank	Average Raw Score
$125,000	Polk County	Restoration and stabilization on the banks of the Red Lake River to protect city sewer pipes, thus safeguarding the river from contamination by pathogens and sedimentation.	L&W	$125,000	$751,000	1.39	#N/A	92.7
$165,000	Itasca County	Protect water quality by implementing critical elements of the new Itasca County Comprehensive Land Use Plan adopted May 2000.	P & EC	$40,000	$40,000	0.88	#N/A	89.4
$205,000	Lake of the Woods County	Develop a comprehensive wetland protection and management plan and ordinance for LOW county.	P & EC	$40,000	$40,000	0.78	12.0	87.2
$230,000	Brown's Creek WSD	Identification, design, and implementation of a demonstration site for the education of member communities, developers and citizens regarding the environmental controls and stormwater management standards required by Brown's Creek WSD Rules.	E&I	$25,000	$25,000	0.69	13.6	86.5
$255,000	Chippewa County	Improve water quality in the Spring Creek Sub-basin using whole farm planning and voluntary participation, and implementing bmp and environmental practices.	Mon/Inv	$25,000	$25,000	0.70	12.3	85.7
$309,000	Olmsted & Dodge Counties	Develop a South Zumbro Stormwater and Capital Improvement Plan that utilizes riparian buffers, rural section rain gardens, wetland restorations, stream bank erosion controls and stormwater management for water quality and wildlife habitat improvement.	P & EC	$54,000	$54,000	0.63	15.6	85.5
$359,000	Red Lake WSD	Establish watershed assessment protocol procedures for developing water quality reports, field and lab standards operating procedures, quality assurance project plans and statistical analysis techniques.	E&I	$50,000	$50,000	0.62	14.9	83.8
$409,000	Stearns County	Solve lakeshed area problems by implementing conservation practices in areas identified by the Stearns County Lakeshed study.	L&W	$50,000	$50,000	0.59	15.1	84.2
$434,000	Stearns County	Compile information through a lakeshed assessment approach and organize it into a GIS database.	L&W	$25,000	$25,000	0.56	14.9	85.2
$559,000	Sauk River Watershed District	Reduce sediment and phosphorus loading to Lake Osakis from Judicial Ditch 2 (JD2) by constructing a sedimentation basin provides water quality benefits	L&W	$125,000	$125,000	0.56	16.0	82.1
$659,000	Wadena & Becker Co's	Identify, prioritize, and assist in the closure of abandoned animal waste pits, to eliminate contamination of surface and ground water.		$100,000	$100,000	0.55	15.4	84.5
$784,000	Nobles County	To improve surface water quality and reduce runoff in Nobles county and several watershed districts by establishing and agricultural BMP cost-share program	L&W	$125,000	$125,000	0.44	17.0	82.6
$833,500	Carnelian - Marine WSD	Inventory and prescribe stewardship strategies for their long-term protection and management.	Inventory	$49,500	$49,500	0.44	17.0	81.8
$869,500	Heron Lake WSD	Remove and replace open tile intakes with subsurface intakes to Improve surface water quality in the Heron Lake WSD.	L&W	$36,000	$36,000	0.38	17.8	81.4
$913,500	Watonwan County	The project purpose is to improve surface water quality by partnering with local townships and landowners to repairing eroding riverbanks and improving in-stream aquatic habitat.	L&W	$44,000	$44,000	0.38	18.3	83.0
$938,500	Clay County	Assess a subwatershed prone to severe erosion and flood damage using the Clay Wetland Model and engineering technology.	Inventory	$25,000	$25,000	0.39	18.0	82.9

Match Type: Cash Only

Allocation	Applicant	Description	Pred. CLWP	Grant Amount	Match Amount	Average Score	Average Rank	Average Raw Score
$1,063,500	Washington Co and several WSDs	Integrate groundwater elements into watershed district management strategies and policies protecting lakes, wetlands, streams and water supplies dependent on groundwater.	Inventory	$125,000	$125,000	0.35	19.8	80.4
$1,188,500	Wilkin County	Install BMPs to reduce flooding and enhance natural resources.	L&W	$125,000	$125,000	0.26	20.1	81.2
$1,202,000	North Fork Crow River Watershed District	Digitized (GIS) County and Judicial drainage ditch systems within the Watershed District so that better land use management can be implemented in protecting water quality and water quantity	P & EC	$13,500	$13,500	0.24	21.3	81.4
$1,252,000	Prior Lake-Spring Lake WSD	Improve water clarity in Spring and Upper Prior Lakes to eliminate toxic algae blooms, improve aesthetics, reduce nuisance Curlyleaf Pondweed conditions, and enhance coverage of native aquatic plants.	L&W	$50,000	$160,500	0.22	20.6	80.4
$1,272,500	Thirty Lakes WSD	Determine current and future Stormwater loading to the fifty-five lakes in the "Thirty Lakes WSD" based on current land use, current zoning and loading generated from projected zoning	P & EC	$20,500	$20,500	0.21	20.8	80.9
$1,304,500	North Cannon River WMO	Evaluate the overall health of the Pine Creek and Trout Brook Sub-watershed of the Cannon River through water quality and quality monitoring, macroinvertebrate monitoring, landcover mapping, and citizen involvement	Mon/Inv	$32,000	$32,162	0.13	22.0	79.2
$1,340,000	Fillmore County	Provide incentives to livestock producers to set aside acres and apply manure on an annual rotating basis to demonstrate the soil-building benefits of manure.	L&W	~~30000~~ 14,500	$58,950	0.12	23.6	80.3
	Minnesota River Basin JPB	Unify federal, state and local efforts by developing a locally-led approach that targets high priority strategies in major watersheds of the basin to implement objectives, indicators and targets established by Watermark	P & EC	$125,000	$125,000	0.09	22.4	79.8
	South Washington WSD	Secure additional ponding capacity, conservation easements and, emergency overflow routes for designed flooding in high priority locations during critical hydrologic events as an element of land use planning to minimize flood damages in watershed.	P & EC	$50,000	$50,000	0.07	23.2	81.3
	Gun Club Lake WMO	Gather relevant data necessary in the development of a comprehensive management plan for protection and restoration of this unique area (Nicols Fen, Kennaley's and Harnack Creeks) as a natural greenway.	Inventory	$15,000	$15,000	0.03	22.6	77.8
	Snake River WSD	Protect critical areas from erosion thereby reducing the amount of nutrients and sediment reaching surface waters in the Snake River Watershed	L&W	$65,000	$65,000	0.02	23.9	79.7
	Black Dog WMO	Demonstrate the effectiveness of a green roof (a.k.a. rooftop meadow) to reduce stormwater runoff volumes and peak flows in an ultra-urban environment	L&W	$50,000	$948,000	0.00	24.9	79.3
	Houston County	Repair aging erosion control structures within the Lower Mississippi Basin in Minnesota to extend their life and improve water quality by reducing sedimentation and pollutant run-off.	L&W	$125,000	$149,500	-0.01	24.3	76.0
	Goodhue County	Properly dispose of milkhouse waste to improve the water quality of Wells Creek by preventing excess nutrients from entering the water.	L&W	$25,500	$30,000	-0.04	24.3	77.5
	Houston County	Accelerate implementing Bear Creek Watershed Mgmt Plan by providing cost-share assistance for conservation practices not eligible for current PL-566 funding.	L&W	$10,000	$12,000	-0.12	25.6	78.3
	Wild Rice WSD	Improve water quality/quantity mgmt decisions at the local, state and federal level by providing continuous stream flow data at critical locations in the WSD	mon	$70,000	$70,000	-0.13	24.7	75.5

Match Type: Cash Only

Allocation	Applicant	Description	Pred. CLWP	Grant Amount	Match Amount	Average Score	Average Rank	Average Raw Score
	Wild Rice WSD	Reduce flood damages to public and private infrastruc-ture, including the City of Ada, by reducing the threat of ice jams that increase and overland flooding	L&W	$125,000	$143,000	-0.16	26.1	76.2
	Crow Wing County	Help fund septic system inventories for four lake associations (8 total lakes) that have already completed Lake Management Plans.	L&W	$17,000	$32,240	-0.15	26.0	76.0
	Winona County	Develop a GIS linked to a hydrologic and hydraulic water quality model for Winona to facilitate an effective watershed management program for the city.	P & EC	$50,000	$50,000	-0.16	26.4	77.0
	Two Rivers WSD	Prevent erosion, sedimentation, & infrastructure damage in Springbrook Township by installing flow control, resloping road ditches, relocating dikes away from waterway edges, & seeding grass buffers.	L&W	$14,450	$14,450	-0.19	27.0	76.5
	Grass Lake WMO	Eliminate untreated direct storm water discharge to Lake Emily and Lake Owasso and to control soil erosion from surface flow.	L&W	$125,000	$397,326	-0.20	27.6	75.2
	Lower St. Croix Valley WSD	Economical, feasible, and reliable non-traditional flood relief measures need to be developed for a landlocked lake with a history of flooding houses, septic systems, and main neighborhood and emergency vehicle access.	Inventory	$50,000	$50,000	-0.21	26.8	75.8
	Todd County	Provide cost-share to Todd and Douglas County landowners to 1)perform soils investigations around unpermitted manure storage basins to evaluate compliance with current regulations, or 2) properly close and reclaim abandoned manure storage basins.	L&W	$125,000	$125,000	-0.22	26.6	73.3
	Cass and Crow Wing Counties	Coordinate implementation of priority initiatives and land protection measures within the Pine River Watershed.	P & EC	$75,000	$76,500	-0.24	27.1	77.0
	South Washington WSD	Obtain a better understanding of precipitation, snow depth, soil moisture, and frost depth to help implement mgmt techniques that mitigate natural elements limiting infiltration during the critical spring snowmelt events.	L&W	$50,000	$60,000	-0.41	29.9	75.2
	South Washington WSD	Encourage developers to incorporate infiltration at a local scale by developing a cost-share program.	L&W	$50,000	$50,000	-0.43	30.6	75.2
	Lower Mississippi River WMO	Create guidelines for stormwater planning in areas where stormwater goals conflict with each other and with regional development goals.	P & EC	$45,000	$45,000	-0.50	29.9	73.2
	Lake of the Woods County	Complete inventory of uninventoried ditch systems and rights of way, develop a ditch maintenance policy utilizing BMPs, and develop a buffer strip implementation plan.	Inventory	$30,000	$30,000	-0.49	31.1	71.2
	Isanti County	Improve the Eutrophic condition of Green Lake by funding a new $300,000 Flood control structure.	L&W	$50,000	$250,000	-0.53	31.0	70.8
	Buffalo-Red River WSD	Create a tool to easily manage and disseminate data that can be used by other agencies.	E&I	$10,450	$10,450	-0.57	29.4	71.5
	Snake River WSD	To give Snake River Watershed residents, agencies and organizations information about best management practices, funding sources, completed watershed projects and upcoming activities in the watershed.	E&I	$10,000	$10,000	-0.61	33.2	71.8
	Blue Earth County	Create a mgmt system and database that will inventory and describe public ditch watersheds, identify problem ditches and support long-range maintenance plans .	Inventory	$26,391	$26,391	-0.61	34.0	70.0
	Marshall County	Correct stream flow problems on the Tamarac River. Woody debris is causing severe flow obstruction, excessive bank erosion, and infrastructure damage	L&W	$15,000	$15,000	-0.80	35.1	71.5

Match Type: Cash Only

Allocation	Applicant	Description	Pred. CLWP	Grant Amount	Match Amount	Average Score	Average Rank	Average Raw Score
	Marshall County	Stabilize drainage ditch and roadside ditch slopes where they outlet into the respective river.	L&W	$22,000	$22,000	-0.94	34.2	70.3
	Clearwater River WSD	Determine silt distribution and composition in selected lakes in CRWD. Those lakes being Clear, Louisa, Marie, Augusta, Clearwater East and West	Inventory	$10,000	$10,000	-1.73	41.7	60.5
			Total	**$2,575,291**	**$4,190,969**			

Match Type: Cash/In-kind Over $10,000

		Description	Pred. CLWP	Grant Amount	Match Amount	Ave. Raw Scores	Ave. Standardized Scores	Ave. Rank Scores
$33,500	Benton and Morrison Counties	Install filter strips, headland plantings, waterways, nutrient manag-ement demonstratioin plots and other conservation measures on the Pierz Drumlin Field to reduce algae in Little Rock Lake.	L&W	$33,500	$33,650	89.4	0.73	4.5
$83,500	Ramsey-Wash WSD	Restore 2,000 feet of degraded shoreline and establish over 60 native plant species.	L&W	$50,000	$79,000	86.7	0.58	4.8
$105,250	Red Lake WSD, et.al	Assess the technical feasibility of various nutrient reductions and their effect on lake water quality.	Mon/Inv	$21,750	$32,250	86.5	0.39	5.4
$116,250	Sherburne SWCD	Promote planting: native prairie, pasture improvement and previously cropped wetlands to native vegetation to reduce erosion, nutrient and sediment runoff and nitrate leaching.	L&W	$11,000	$11,000	84.3	0.27	6.4
$136,250	Traverse County	Repair a severely eroded site, thereby reducing sediment loading, improve and protect water quality, improve fish habitat, and prevent further degradation of the shores of Lake Traverse.	L&W	$20,000	$20,000	84.1	0.29	6.0
$154,250	Blue Earth County	Treat storm water entering the Minnesota River from densely developed area of the City of Mankato and to compare the effectiveness of at least 2 different technologies.	L&W	$18,000	$19,000	83.6	0.27	5.6
$184,250	Morrison and Todd Counties	Reduce the phosphorus and nitrogen levels in the Swan River Watershed by nutrient management planning with all poultry producers.	P & EC	$30,000	$30,000	81.4	0.01	6.5
$234,250	Traverse County	Remove all individual sewage treatment system at the Shady Dell development along Lake Traverse, currently all in the flood plain, and install one cluster system that meets all current regulations.	L&W	$50,000	$175,000	81.3	0.16	5.9
$274,750	Elk River Watershed Association JPB	Reduce phosphorus and sediment reaching Mayhew Lake and other surface waters by giving watershed residents ownership of the water quality concerns. Gound water will be protected by demonstrating the effectiveness of nutrient management.	L&W	$40,500	$44,500	80.0	-0.31	8.3
$334,135	Brown Nicollet Cottonwood JPB	Build and strengthen the wateshed partnership in the eight counties of the Middle Minnesota Basin, assist in the development of strategic funding, and energize and engage the urban citizenry.	E&I	$59,385	$59,385	79.3	-0.34	8.0
$367,837	Stearns County	Determine the impact of inputs from minor watersheds upon water quality within a 303d designated reach of the Sauk River.	L&W	$33,702	$37,100	78.9	-0.18	7.6
$417,837	Faribault County	Develop user friendly methodology that can be used locally to inventory, categorize, and organize individual county drainage systems for better environmental controls and local decision making	P & EC	$50,000	$52,750	78.6	-0.06	7.7
$457,837	Pope County	Give local zoning authorities the resources necessary to require Land Use Mitigation improvements within shoreland area in exchange for building permits in specific situations	L&W	$40,000	$48,000	72.4	-0.63	9.6
$497,837	Wabasha County	Implement low cost effective management practices through education and incentives to reduce enivornmental impacts associated with feedlots.	L&W	$40,000	$40,000	67.6	-1.22	11.5
			Total	**$497,837**	**$681,635**			

Match Type: Cash/In-kind Under $10,000

Applicant	Description	Pred. CLWP	Grant Amount	Match Amount
Aitkin County	To protect Aitkin County Wetlands by developing a Comprehensive Protection and Management Plan.	Inventory	$9,999	$9,999
Beltrami County	This project's purpose is to assist with groundwater protectin efforts through providing incentives for sealing of privately owned abandoned wells.	L&W	$3,000	$4,250
Cass County	Implement the Ground-water functional model being developed by the UofM Duluth to identify enviromentally sensitive area in the Upper Boy River Watershed. Incorporate these assessments in the CLMP and the county Comprehensive Land Use Plan	P & EC	$8,500	$10,000
Cass County	Reduce road-related storm water impacts to Leech Lake and its tributaries by inventorying water conveyance systems (culverts) priortizing, problem sites, ground truthing minor watershed boundaries, and building the township's capability to address water quality impacts	Inventory	$9,500	$9,500
Faribault County	To eliminate discharge of untreated sewage to the Blue Earth River from dewllings in the Unincorporated areas of Guckeen, Huntley and Walters by developing a Feasibility Study/Facilities Plan for waste water treatment	P & EC	$10,000	$10,000
Freeborn County	Develop a feasibility/preliminary engineering report (per USAD guidelines) to treat waste water from the communities of Conger, Manchester, and Myrtle MN that will eliminate the discharge of untreated sewage into the Cedar, Shell Rock, and Winnebago River watersheds.	L&W	$10,000	$10,000
Hubbard County	This project widens the scope of the county-wide land use planning process to include an analysis of water resource/land use issues and the development of acceptable watershed-based strategies to address those issues	P & EC	$7,500	$7,500
Mower County	To develop an incentive program for establishing temporary vegetative cover on land in canning crop production.	L&W	$5,250	$5,250
Pelican River WSD	Prepare plan and designs for treatments to achieve a 50 percent reduction in nutrient and sediment loading from Rice Lake to Detroit Lakes. Such a treatment program would result in less available phosphorus in the summer months, thereby improving clarity and ensuring that Big Detroit will remain a mesotrophic lake.	P & EC	$9,500	$9,500
Pennington County	The grant is to complete the hydrology, modeling, and final report of the sediment study.	P & EC	$5,000	$5,000
Rock County	An enviromental education program consisting of approximately 16 hands-on learning stations covering enviromental topics including:trees, water quality, wetlands, wind and water erosion, and soils. Students will attend approximately 8 different sessions during the day	E&I	$10,000	$47,350
Sibley County	To protect the public water supply of the city of Green Isle.	L&W	$2,500	$2,500
Sibley County	To continue the County Well Sealing Program	L&W	$7,000	$7,000
Southeast MN Water Resources Board	To educate the public about the close connections between land use and ground water quality in southeast Minnesota's sensitive karst landscape by using the new karst education exhibit and learning trunks as primary education tools	E&I	$9,999	$10,000
Traverse County	The purpose is to repair a severely eroded site, thereby reducing sediment loading,improve and protect water quality, improve fish habitat, and prevent further degradation of the shores of Lake Traverse.	L&W	$4,000	$4,000

Match Type: Cash/In-kind Under $10,000

Applicant	Description	Pred. CLWP	Grant Amount	Match Amount
Two Rivers WSD	All culverts located in selected sub-watersheds will be inventoried in order to provide detailed information on water flow patterns. The information gathered will be used for various water management initiatives including flood control, erosion control and water quality	Inventory	$9,000	$9,000
Wabasha County	Interact with minimum of 30 county farmers to reduce runoff from manure applications to impaired water systems of Zumbro River and Lake Pepin by minimizing the purchase of commercial fertilizer.	L&W	$9,999	$39,500
Wadena County	Regional shift, from agricultural to recreational land-use, is creating new challenges in land-use management.	P & EC	$9,000	$9,000
Wright County	To obtain baseline data for lakes to aid in developing water quality trends showing effectiveness and efficiency of implemented best management practices and to educate and energize landowners to install conservation measures within lakeshed.	mon	$8,440	$8,440
		Total	**$148,187**	**$217,789**

Lake Management Planning Grants

Applicant	Description	Pred. CLWP	Grant Amount	Match Amount
Beltrami County and Turtle River Watershed Management Planning	Develop watershed database within 152,000 acre Turtle River Watershed focused on data collection to develop watershed management plan. Focus will be land use, lake monitoring and watershed assessment for 11 lakes and Turtle River with watershed.	P & EC	$17,500	$18,000
Cook County	A citizen team has proposed a watershed investigation agenda that includes inter-lake flow analyses, improved vegetation management for blowdown recovery areas, development/build out scenario analysis, expanded phosphorus/non-point simulation modeling and detailed map data	P & EC	$5,000	$4,000
Crow Wing County	The purpose of this project is to capitalize on the Initiative Foundations Healthy Lakes Program, which builds the capacity of citizen leaders to develop and implement lake management plans.	P & EC	$10,000	$22,500
Douglas County	Develop Lake Management Plans for three priority lakes in Douglas County. Facilitate lake association ability to take an active role in preserving the quality of these and other Douglas County Lakes through leadership training	P & EC	$32,900	$32,900
Elk River Watershed Association JPB	Evaluate watershed conditions of Little Elk Lake and prepare a lake management plan that will be implemented to complete projects that result in improved and protected water quality for the Little Elk Lake watershed	P & EC	$4,100	$9,300
Hennepin County	To develop an ecologically-based lake management plan that employs sustainable lake management approaches to protect and improve Gleason Lake's inlake and watershed resource including water quality, scenic/recreational amenities and fish and wildlife habitat	P & EC	$23,500	$23,500
Itasca County	Create a countywide program to assist lake associations and similar groups to develop effective lake/watershed management plans to sustain or improve the quality of specific lakes.	P & EC	$35,200	$36,280
Otter Tail County	To create a strategic vision for the Otter Tail County Pine *L.I.D, and establish goals, priorities, and policies for the next 20 years, resulting in the completion of a sustainable, comprehensive, ** Lake Management Plan.	P & EC	$45,000	$50,000
Pelican River WSD	To adopt the Minnesota Lake Association's management planning model (Sustainable Lakes) to Lake management planning for becker county lakes. The development of Lake Management Plans on all Becker County Lakes is the long-range goal	P & EC	$17,000	$17,000
Pope County Enviromental Services/Pelican Lake Association	To develop and implement a Lake Management Plan for Pelican Lake and Pelican Lake Watershed. The plan shall identify needs, detail action plans and work to coordinate all efforts and resources impacting the watershed.	P & EC	$15,000	$15,000
Red Lake WSD/Clearwater Lake Area Association	The purpose is to develop the Clearwater Lake Management Plan, needed to improve lake water quality, reduce sedimentation, and restore the natural shoreline, through active educational efforts with lakeshore owners and partnerships with local agencies.	P & EC	$9,000	$14,000
Rice County	Develop a county lake management plan involving public and private partnerships to develop long-term sustainable projects to protect and restore Rice County lakes and their watershed from recreational and aesthetic purposes.	P & EC	$45,000	$50,000

Lake Management Planning Grants

Applicant	Description	Pred. CLWP	Grant Amount	Match Amount
Rice Creek WSD	Develop a strategic lake management plan for Bald Eagle Lake. We will build on the project program developed by the Rice Creek WSD and the Lake Association and we will prepare a long-term, sustainable lake managementplan for Bald Eagle Lake.	P & EC	$14,000	$22,600
Rice Creek WSD and Otter Lake Association	Develop a strategic lake management plan for Otter Lake. We will build on the project program developed by the Rice Creek WSD and the long-term Eurasian watermilfoil studies that have been conducted by the U of M.	P & EC	$5,000	$5,000
Sauk River Watershed District	Develop a Lake Management Plan for the Big Birch Lake Watershed, using the MLA Lake Management Model as a planning guide	P & EC	$17,720	$17,720
St. Louis County	Large lakes such as Lake Vermilion present complex economic and enviromental issues for citizens and decision makers. This project will develop a model that will expand upon the Minnesota Lakes Associatioin Sustainable Lakes Plan to address the unique issues of the large lakes.	P & EC	$45,000	$61,000
Wadena County	To develop and design implementing a lake management plan for Spirit Lake in Menahga. Furture growht and outher municipal activities should fit into a management shceme that protects this urban lake.	P & EC	$9,000	$9,000
	Lake Management Grant Totals		**$349,920**	**$407,800**

EQB

April 12, 2001

To: MEQB Members

From: Alan Mitchell (Phone: 651-296-3714)
Manager, Power Plant Siting Program

Subject: Pending Legislation

The purpose of this memorandum is to briefly describe for the Board the changes in law that are being considered by the Legislature that would affect the way energy planning is done in this state and the role of the EQB in permitting new power plants and transmission lines. Bills are moving through both the House (H.F. 659) and the Senate (S.F. 722). The bills are quite lengthy, and while complete copies can be readily provided, I have attached only those portions of the bills that most directly affect the role of the EQB.

EQB staff has participated with the Department of Commerce and numerous interested persons in working with Legislative staff to develop changes in Minnesota law that would promote conservation and renewable resources and ensure continued reliable, cheap, and environmentally sound electric energy. Most of the EQB staff's efforts have been directed to changes in the Power Plant Siting Act to expedite and streamline the siting and routing process.

The following discussion highlights the major changes being considered by the Legislature.

Power Plant Siting Act. EQB staff has suggested a number of changes in the Act that should ensure expeditious and sound decisions by the EQB on the siting of proposed power plants and the routing of high voltage transmission lines. The following identifies the most significant changes in the Power Plant Siting Act under consideration.

1. Elimination of Exemption. Presently, under the Power Plant Siting Act, the proposer of any size high voltage transmission line or a power plant under 80 megawatts may apply for an exemption from the permitting requirements of the Act. An example is the Arrowhead high voltage transmission line that was before the Board in March. One of the changes in both the Senate bill and the House bill would eliminate the concept of an exemption and require a permit from the EQB for any project that is within the EQB jurisdiction. The reason for this change is to eliminate a procedure designed to simply

ENVIRONMENTAL QUALITY BOARD 658 CEDAR STREET ST PAUL MN 55155 612 296-2603 FAX 612 296-3698 STAFF PROVIDED BY ETC PLANNING

determine which procedure to follow next. If an exemption is granted, the applicant then has to seek approval from local authorities with jurisdiction over the project. If the exemption is designed, the applicant has to reapply to the EQB for a permit under the full siting process.

2. Permitting Process. There are two different processes established in the legislation for Board consideration of a permit application. The existing process, often thought of as the full process, is for the bigger projects, like 230 kV and larger transmission lines and coal-fired power plants. The other process, which is new, is called the alternative process, and it is followed for smaller projects, presumably the less controversial, lower impact projects. The bills identify the projects that fall under the alternative review process. These projects include power plants under 80 megawatts, natural gas fired power plants of any size, 100 to 200 kV transmission lines, short transmission lines (under five miles) of any size, generally intended to connect substations to existing high voltage transmission lines, and transmission lines of any size that follow existing transmission line right-of-way at least 80% of the length.

Under the full process, the Board must prepare an Environmental Impact Statement and hold a contested case hearing conducted by an administrative law judge. Under the alternative process, the Board must prepare a document called an Environmental Assessment and hold a public hearing, but the hearing is less formal and the Board is not required to have an ALJ conduct the hearing and write a report. The Environmental Assessment is the only environmental review document required (no EIS is required), but the Assessment must examine alternatives and consider mitigation of impacts.

Once an application is submitted to the EQB, the chair of the Board has ten days to determine whether the application is complete. The date the chair accepts the application is the date that triggers the deadline for completing the permitting process. The Board has one year (with a possible three month extension) to complete the process and make a permit decision. Under the alternative process, the Board has six months to make a decision (with a possible three month extension). Under the present Act, the Board has a year to make a decision, with a possible six month extension.

3. Jurisdiction Over 100-200 Kilovolt Transmission Lines. Both bills extend the jurisdiction of the EQB to all transmission lines over 100 kilovolts (essentially 115 kV and 169 kV lines). Presently, the EQB has jurisdiction only over those lines that are greater than 200 kilovolts. The reason for extending EQB jurisdiction to transmission lines over 100 kV is to allow for a single permit from a single agency to authorize construction, rather than requiring numerous permits from many local governmental bodies through which the line passes. However, the Senate bill provides for the preservation of local jurisdiction in some situations, and that point is described next.

4. Local Jurisdiction. The Senate bill has language that identifies certain projects that may still fall within local jurisdiction, including the 100 to 200 kV transmission lines and other types of projects that likely would have been the subject of an exemption application in the past. If the utility opts to proceed locally, and the local

jurisdictions want to maintain jurisdiction over the project, then a permit from the EQB is not required.

Certificate of Need. Under the present law, a Certificate of Need from the Public Utilities Commission is not required for every project that comes before the EQB for a permit or an exemption. However, one of the proposals under consideration would require a Certificate of Need from the PUC for nearly every project that falls within the EQB's jurisdiction. One specific type of project that will require a Certificate of Need in the future that has not required one in the past is the short, high voltage, interstate transmission line. Presently only those lines longer than 25 miles in the state are required to obtain a Certificate of Need. If the legislation passes, all interstate lines greater than 100 kV, regardless of length in Minnesota, will require a Certificate of Need.

The Senate bill has additional language requiring the PUC to maintain a list of priority high voltage transmission line projects. Placement of a project on the list satisfies the requirement to obtain a Certificate of Need for the project.

These changes will relieve the EQB of considering the need question in the permitting process. Indeed, the Senate bill has language that provides that when a Certificate of Need from the PUC has been issued for a project, the EQB is precluded from considering questions of need, including size, type, and timing, and system alternatives and voltage. In the future, the EQB will be an active participant in Certificate of Need proceedings before the PUC to assist in the creation of an adequate record on the environmental impacts of a proposed project and possible alternatives.

Energy Planning. The Department of Commerce has been working closely with the Legislature to develop changes in the way Minnesota does energy planning. The House bill has more extensive changes than does the Senate bill on this point. The House bill would create a new office of Reliability Administrator within the Department of Commerce. The Reliability Administrator must develop a reliability report every other year beginning in 2003. The PUC is required to develop an Energy Security Blueprint every four years beginning in 2002.

The Senate bill requires the Department of Commerce to prepare a State Energy Planning Report by December 15, 2001, that identifies important trends in energy consumption and related matters and recommends energy goals for the state.

Other Provisions. Both the Senate and House bills also address issues relating to energy conservation and use of renewable resources. EQB staff has not participated in the development of these provisions. These provisions are crucial to the ultimate passage of any bill, however, because the interested parties and the bill authors have indicated that the bills represent a balanced package, and consensus on the entire package is likely required for the bill to pass.

May 2001

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BOARD OF WATER AND SOIL RESOURCES
EARLE BROWN CENTER, ROOM 52
UNIVERSITY OF MINNESOTA/ST. PAUL CAMPUS
1890 BUFORD AVENUE
ST. PAUL, MINNESOTA 55108
MAY 23, 2001

BOARD MEMBERS PRESENT: Lee Coe, Jerome Deal, Jim Anderson-MES, Clair Nelson, Jack Frost, Dwain Otte, Dan Wilson-MDH, Sharon Clark-MDA, JoAnn Coover, Karen Harder, Victor Ormsby, Paul Krabbenhoft, Rod Massey-PCA, Char Kahler, Wayne Edgerton-DNR

BOARD MEMBERS ABSENT: Darrell Bruggman, Ginny Imholte

STAFF PRESENT: Ron Harnack, Mary Jo Anderson, Greg Larson, Jim Birkholz

OTHERS PRESENT:
Chuck Casey, Dean and Director, University of Minnesota Extension Service
Dianne Flynn, Associate Director, University of Minnesota Extension Service
H.H. Cheng, U of M/State Soils Office
Steve Taff, U of M/Ag Economics
Sandy Hooker, Minnesota Association of Townships (MAT)
Gretchen Sabel, EQB/Water Resources Committee
Tim Gieseke, MACDE
LeAnn Buck, MASWCD
Ray Bohn, MAWD
Roger Mussetter, NRCS

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

Chair Coe thanked Jim Anderson for the accommodations at the Earle Brown Center. Chuck Casey, Dean and Director of the University of Minnesota Extension Service (MES) was introduced to welcome BWSR to the University. He introduced Diane Flynn, Associate Dean; H.H. Chang, Head, Department of Soil, Water, and Climate; and Steve Taff, Professor of Ag Economics. Mr. Casey welcomed BWSR to the U o f M today. Chuck commented on the importance of the working relationship with BWSR. Chuck stated that he's nervous regarding the legislative outcome relating to education and the University of Minnesota. The funding will impact education programs, tuition, extension services, with no shortage of challenges. Chair Coe asked that board members introduce themselves.

** 01-34 **Adopt Agenda** – Chair Coe stated that New Business will be moved forward on the agenda today to accommodate schedules. Moved by Char Kahler, seconded by Jerome Deal, to approve the agenda as amended. Motion passed on a voice vote.

** 01-35 **Minutes of April 25, 2001** – A clarification and correction is needed on page seven regarding the special funding request for the Wright SWCD pollution abatement project. Dwain Otte stated that the minutes should reflect the language in the letter sent to the Wright SWCD. The minutes to state: *For this project only, section 8400.1400 Subd. 1, of the State Cost-Share Program Rule, "Practices where construction has begun prior to conservation district approval are ineligible for financial assistance", will be waived; and, the board will allocate one-half of Project funds requested, or $16,250, to the Wright SWCD in FY02, and $16,250 of the Wright SWCD State Cost-Share Base Grant, may be expended by the Wright SWCD for the Robert Berg feedlot pollution abatement system.* Moved by Jack Frost, seconded by Sharon Clark, to approve the minutes of April 25, 2001 as amended. Motion passed on a voice vote.

Reports
Chair Coe reported that he attended the EQB meeting. Items discussed included two energy issues regarding wind power projects in southern Minnesota.

Executive Director's Report - Ron Harnack reported that he has spent the last month on legislative issues. Overall, the session has been a real struggle, he will report on that later in the meeting. Ron stated that board members must submit their expense claims by the end of June. Ron stated that CREP continues to be successful. There is strong CREP support from state and federal agencies, local governments, and state and local interest group supporters as well. Ron reported that as of May 10, the number of pending acres is close to 19,000. There are rumors that there is general agreement in both the House and Senate leadership and the Governor for full funding

of CREP. Congressman Kennedy has also been an active supporter of CREP. The state flood recovery team has not yet reconvened, however, discussions are taking place. 31 counties have been declared as flood disaster counties to date, with several more expected to be added. WCA continues to pose controversies particularly as it relates to drainage. The biggest issue is the lack of acknowledgement of WCA in the early stages of drainage projects. This results in conflicts later in the process along with delays and increased costs. The Wetlands Committee will need to meet some time before July, to discuss the WCA rulemaking process, review guiding principles and policies. The Cost-Share Committee will meet before the June meeting to review feedlot and NPEA grant allocations.

Dispute Resolution Committee Report - Chair Coe reported that there are presently three appeals pending. All three appeals involve WCA. One pending appeal regards a matter that was previously heard by the DRC. It involves a replacement plan approval in Murray County that arose from a violation. The appeal has been accepted and a pre-hearing conference will be set once the record has been received from the SWCD. Another pending appeal regards an exemption approval by the Lac Qui Parle –Yellow Bank Watershed District involving the federal exemption relating to a county drainage system repair. The appeal has been accepted and a pre-hearing conference has not been set since resolution is being pursued. The final pending appeal involves an exemption denial in Eagan. A TEP was recently held and the city needs to complete further administrative work before this appeal can move forward. For the Board's information, the decision made at the last Board meeting regarding Anoka County Ditch 53-62 was appealed to the Court of Appeals. A decision is expected this fall. Ron reported that the Middle St. Croix has also been appealed. The Hugo case authorized their attorney to ask district court to reconsider, the district court turned that down. The Hugo matter is now in mediation and there is optimism that mediation will succeed.

Cost-Share/Soil Conservation Committee – Dwain Otte reported that the Cost-Share Committee is awaiting the outcome of the legislative session.

Education and Public Relations Committee - Paul Krabbenhoft introduced the 2001 Plan of Work for the Education and Public Relations Committee for Board review. The Committee will seek Board approval of the plan at the June 2001 meeting. Comments on the plan should be submitted to Ron Struss, BWSR Metro Region, 651-215-1950.

Administrative Advisory Committee – Chair Coe reported that the Administrative Advisory Committee will meet after the Board meeting today.

Agency Reports

Sharon Clark, Minnesota Department of Agriculture (MDA), reported that Ron Harnack met with MDA Commissioner Gene Hugoson and Sharon regarding legislative issues. Sharon attended President Bush's energy gathering last week. Sharon thanked Ron Harnack for BWSR staff raising the safety of staff going from farm to farm with the threat of foot and mouth disease. Sharon reported that Commissioner Hugoson will attend a trade mission with NASDA in Mexico. Sharon reported that the Conservation Security Act has just been reintroduced, information came out yesterday to reward farm plans. Sharon distributed various informational brochures regarding MDA activities. Ron Harnack will distribute Farm Bill introductions to board members.

Dan Wilson, Minnesota Department of Health (MDH), reported that legislative issues have kept MDA staff busy. MDA succeeded in getting fee increases approved and are awaiting final action. Dan reported that 600 water sampling kits were supplied to counties with flooding problems. Dan distributed "Safe Drinking Water for the Next Generation" a summary of drinking water protection activities for board members' information.

Wayne Edgerton, Department of Natural Resources (DNR), was saddened to report the beating and death of a DNR employee at Blue Mountain State Park. The park will be closed until further notice to facilitate the investigation. Wayne stated that DNR is in legislative limbo; the concon issue is dead this session. Wayne reported that due to the threat of foot and mouth disease, DNR has put an executive order in place regarding biosecurity for employees for use in feedlot facilities. The Big Woods State Park tours have been cancelled this year due to the threat of the foot and mouth disease.

Jim Anderson, Minnesota Extension Service (MES) distributed information on the Minnesota Institute, Soil Management Series. Jim reported that feedlot meetings will be held in Marshall and Mankato; looking at current feedlot rules, nutrient management plans, in conjunction with PCA, MDA, DNR, and the U of M. Follow-up series are scheduled for this fall.

Rod Massey, Pollution Control Agency (PCA), reported that feedlot general permit (NPDES) has been approved by EPA. The application deadline is June 1st. Application extensions must also be submitted by June 1st, to meet the deadline of September 1st. Rod thanked DNR for working closely with PCA on the sugar beet issue in southern Minnesota, that resulted in floating and rotted sugar beets reaching drainage areas due to high water levels from the heavy rains. Rod reported that mediation is underway with MDH, MDA and PCA regarding feedlot issues. Rod commented on a drainage project in Pope County with potential adverse effect to the Minnesota River and believes that the agencies can be more proactive in these types of projects to address water quality and quantity. Ron Harnack stated that the county

has determined that EIS was not necessary. This will be addressed at a future meeting. Rod thanked Ron Harnack for doing an excellent job before the conference committee on feedlot issues. Rod stated that agencies need to maintain strong communication/cooperation/coordination as the feedlot funding elements come together in the remaining legislative days.

New Business

Partnerships Between BWSR and MES – H.H. Chang, Head of the University of Minnesota Department of Soil, Water and Climate, stated that he looks forward to the new soils staffing relationship with BWSR. He stated that Greg Larson is now officed in the Department of Soil, Water and Climate. He was also pleased with the successes of the other partnerships that they have with BWSR. Ron Harnack stated that Greg Larson's education, experience, training, expertise and professional credibility makes him uniquely suited to this role as States Soils Specialist. This relationship is tailored after the successful State Climatologist position developed in the early 80's. Moved by
** Dwain Otte, seconded by Victor Ormsby, to approve the two-year agreement that
01-36 BWSR and the Department of Soil, Water and Climate at the University of Minnesota will establish a "State Soils Office". The intent of this agreement is to build upon an established relationship by sharing resources and expertise to better serve both the Board and the Department. Motion passed on a voice vote. The Memorandum of Agreement was signed by Ron Harnack and H.H. Chang.

Jim Anderson reported on the three education positions with BWSR/MES: Kamal Alsharif in Duluth; Ron Struss in metro, and Derek Fisher in New Ulm. Jim stated that Derek is in Mankato today working with nutrient management software plans and presenting how that works; Ron Struss' leadership in water quality education and Kamal's leadership in the State Envirothon as well as his work on grazing lands in the northern part of the state illustrates the good cooperative working partnerships. BWSR/MES recognize those relationships/partnerships by sharing the cost of salaries and office space. Ron Harnack stated that Steve Taff has worked with BWSR on various agricultural economist issues; and the Red River mediation with MES has been very helpful. Ron stated that these partnerships need to be kept flexible, focusing on the unique areas and diversity in the state. Jim stated that the evolving partnerships include timeframes, struggles with prioritizing challenges, building on the direction for the future. Rod Massey publicly thanked the Minnesota Extension Service for their education on feedlots. Vic Ormsby thanked MES for the Rural Cooperators Program. Jerome Deal thanked MES for their assistance on facilitation of watershed district meetings. There is room for a coordinated approach as MES and BWSR put things in place as we look at long-term priorities. Chair Coe thanked everyone for their involvement.

Farm Services Agency (FSA) Update - John Munson, Executive Director of FSA, was introduced. John stated that he worked as a congressional aid to Congressman Stenglund, was an employee of Dodge SWCD and now executive director of FSA. John stated that FSA is trying to build a strong partnership with BWSR. He believes in local government, decentralizing control is a good thing, local partnership is good. He's looking forward to working outside of the "federal box". John thanked Ron Harnack for his efforts on CREP; FSA supports CREP funding. John commented on biomass, which is not totally supported, however alternative energy is needed; FSA will work to achieve other ways to continue with biomass. John suggested that continuous CRP might be the best program for producers, its flexible, it pays well, it focuses on addressing agricultural water quality issues, and it's non-competitive. It is also a great program to get living snowfences on the ground. Communication, education, leadership, and partnership is very important. John asked board members to continue to work with MES. He stated that the foot and mouth disease is a critical issue, FSA is working with MDA on informational brochures, and will continue to inform others; perception can become reality. John reported that he is the flood emergency chair at the federal level. John stated that FSA is very involved with GIS and satellite imagery and will continue to work with BWSR, MDA and locals on this program. He looks forward to working with BWSR, he urges board members to call if they have questions; he hopes to attend board meetings on a regular basis. Chair Coe thanked John for coming in with his inspiring remarks.

Chair Coe called for a break in the meeting at 11:00 a.m. The meeting reconvened at 11:15 a.m.

Consent Agenda

Douglas County Request for Comprehensive Local Water Plan Extension – Ron Harnack stated that BWSR staff recommend approval of the Douglas County request
** for extension. Moved by Clair Nelson, seconded by Jerome Deal, to approve the
01-37 Douglas County Comprehensive Local Water Plan request for extension to December 31, 2003. Discussion followed. Karen Harder requested a map identifying how many plans have extensions. There was also interest in ensuring consistency with the past decisions and making the counties aware that the extension in no way removes their obligation to complete the update in a timely manner. Motion passed on a voice vote.

Committee Recommendations

Metro Water Planning Sub-Committee

Lower Mississippi River Watershed Management Organization Watershed Management Plan - Jack Frost reported that the metro subcommittee met and
** recommends approval. Moved by JoAnn Coover, seconded by Dwain Otte, to approve
01-38 the Lower Mississippi River Watershed Management Organization Watershed Management Plan. Discussion followed. Motion passed on a voice vote.

Carver County Watershed Management Organization Watershed/Groundwater Management Plan - Jack Frost reported that the metro subcommittee met and recommends approval. This is a good, unique plan with cooperation between SWCD
** and the county. Moved by Dwain Otte, seconded by Jerome Deal, to approve the
01-39 Carver County Watershed Management Organization Watershed/Groundwater Management Plan. Discussion followed. Paul Moline, Carver County representative, has been working on statutes rule revision for levy limits. Motion passed on a voice vote.

Legislative Update - Ron Harnack anticipates that special session will convene sometime before June 15. Ron explained the budget targets and comparisons. The allocation targets to the committee is small and the Senate will need to concede a lot to get down to the targets. It appears that within the agreements are the Governor's inflationary base adjustments for agencies. CREP has been a big issue on everyone's radar screen, full funding is hoped for in the bonding bill. Rumor has it that the leadership on the three sides have general agreement on CREP. Ron stated that county feedlot allocations for delegation is questionable as is funding for NPEA, however, some funding is expected for feedlot cost-share. How the feedlot cost-share comes is still of some debate ie through MDA or PCA or direct appropriation to BWSR. Funding for the water management joint powers organizations in the natural resources block grant is uncertain. Best bet is funding the first year and not the second. The SWCD funds are uncertain; however, there is optimism relating to general services grants. Discussion followed. Chair Coe thanked Ron for his efforts during the legislative session.

Advisory Comments

Minnesota Association of Townships (MAT) - Sandy Hooker thanked BWSR for inviting MAT to attend meetings, she looks forward to attending. Ron Harnack stated that he will attend MAT's legislative meeting June 5, assuming the legislative session is not a conflict.

Minnesota Association of Conservation District Employees (MACDE) - Tim Gieseke reported that MACDE met on April 6. Tim stated that there is potential for the board conservationists role to assist in communication as MAWD, MACDE, AMC, and MAT employees work together. Tim commented that Carver County works closely with MES regarding dairy feedlots, enhancing enforcement issues efficiently, and bringing the education efforts up front.

Minnesota Association of Soil and Water Conservation Districts (MASWCD) - LeAnn Buck stated that MASWCD is patiently awaiting the legislative outcomes. She thanked various agencies for the information provided to SWCDs on legislative issues. NACD

has a generic MOU with SWCDs regarding delivery systems, how do you meld DNR forestry issues. MASWCD looks to BWSR as the lead role in this partnership effort. LeAnn asked for a new BWSR directory. LeAnn reported that MASWCD is host to the NACD North Central Region conference, July 15-18, at the Radisson South in Bloomington.

Minnesota Association of Watershed Districts (MAWD) - Ray Bohn invited board members to attend the MAWD summer tour, June 28-30 in Worthington. MAWD legislative issues are still pending. Ray thanked Ron Harnack and Doug Thomas for their assistance during this legislative session.

Natural Resources Conservation Service (NRCS) - Roger Mussetter reported that CRP is the major issue now. Minnesota and five other states have CRP sign-up starting on June 4, awaiting official announcement from the USDA Secretary. There are 100,000 acres in the. A new pilot program, Soil and Water Conservation Act, will be rolled out June 1st, a one-year commitment, similar to the annual ACP program, $20M allocated for this year, 37 counties in Minnesota are eligible, all dollars allocated by October 1.

Upcoming Meetings

- Next BWSR Meeting, June 27, 2001, Jackpot Junction, Morton
- 2001 Local Water Planners Conference, June 27-28, Jackpot Junction, Morton
- MAWD Summer Tour, June 28-30, Worthington
- NACD North Central Region Meeting, July 15-18, Radisson South, Bloomington
- July 25, 2001 BWSR Meeting, St. Paul
- BWSR Tour and Meeting, August 22-23, McGregor

The Administrative Advisory Committee will meet today after the BWSR meeting adjourns.

** 01-40 Moved by Jerome Deal, seconded by Sharon Clark, adjourn the meeting at 12:35 p.m. Motion passed on a voice vote.

Respectfully submitted,

Leland Coe

Leland Coe
Chair

Memorandum of Agreement

State Soils Office

Board of Water and Soil Resources
And
University of Minnesota Department of Soil, Water, and Climate

Proper management of soil is vital to preservation of food and fiber production and environmental quality. The Board of Water and Soil Resources (Board) is the state soil conservation agency. Faculty and staff of the University of Minnesota Department of Soil, Water, and Climate (Department) provide technical information and support to the Board and its clientele through its research, teaching and extension activities. Because of the importance of soil and their identified roles in promoting its proper management, the Board of Water and Soil Resources and the University of Minnesota Department of Soil, Water, and Climate both view soil as a high priority topic for collaboration and outreach.

Therefore, it is agreed by the Board of Water and Soil Resources and Department of Soil, Water, and Climate at the University of Minnesota will establish a "State Soils Office". The intent of this agreement is to build upon an established relationship by sharing resources and expertise to better serve both the Board and Department.

Both parties agree to collaborate as follows:

- Faculty from the Department and staff from the Board will meet initially, and annually thereafter, to discuss and plan collaborative and outreach activities specific to state soils office.
- A soil scientist from the Board will assume the role of "State Soil Specialist" and staff the state soils office.
- Both parties agree to enter into agreements, if needed, concerning the use of office space and facilities for the purpose of carrying out collaborative efforts.
- Constituent groups will be invited to collaborate to ensure the relevance of this joint effort.

This agreement is effective July 1, 2001.

We, the undersigned, agree to the provisions of this memorandum, which may be amended by mutual agreement.

Executive Director, Board of Water and Soil Resources — Date 5/23/01

Head, Department of Soil, Water, and Climate — Date 23 May 01

Minnesota Board of Water & Soil Resources

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April 26, 2001

Dick Borrell, Chair
Wright SWCD
306C Brighton Ave.
Buffalo, MN 55313

RE: **Special Funding Request for Wright SWCD Pollution Abatement**

Dear Mr. Borrell:

At their April 25, 2001 Meeting, the Board of Water and Soil Resources considered the Wright SWCD special funding request for the Robert Berg feedlot project. Their decision follows:

For this project only, section 8400.1400 Subd. 1, of the State Cost Share Program Rule, "Practices where construction has begun prior to conservation district approval are ineligible for financial assistance." ,will be waived; and,

The board will allocate one-half of Project funds requested, or $16,250, to the Wright SWCD in FY 02, and $16,250 of the Wright SWCD State Cost Share Base Grant, may be expended by the Wright SWCD for the Robert Berg feedlot pollution abatement system.

To be eligible for these funds, Mr. Berg must complete the project as designed, or obtain written approval of any changes from the design engineer and MPCA.

Attach this letter to your completed cost share contract. If you have any questions about this decision, please contact Lynda Peterson, Board Conservationist.

Sincerely,

Ronald Harnack
Executive Director

c: Senator Steve Dille
Rod Massey, Division Director, MPCA
Steve Woods, Regional Supervisor, BWSR
Lynda Peterson, Board Conservationist, BWSR

H:WSWCDSFRL

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May 8, 2001

TO : Dwain Otte

FROM : Wayne Zellmer

RE : **Special Funding Request for Wright SWCD Pollution Abatement**

Enclosed is the Harnack letter regarding the Board's April decision. If you are going to be at the May Board Meeting, please correct the April minutes to include the italicized language.

Let me know if you will not be at the May Meeting, and I will try to get someone else to correct the minutes.

New Business

3. Legislative Update
   INFORMATION

S. F. No. 2340 / H. F. No. 2189

TRANSPORTATION AND DEPARTMENT OF TRANSPORTATION (DOT) - Omnibus transportation funding bill regulating transportation, criminal justice and prevention programs, providing infrastructure, proposing a constitutional amendment, and appropriating money.

MOTION FOR CONFERENCE COMMITTEE

House: 05/08/2001 -- Senate: 05/02/2001

PASSAGE

House: -- Senate:

CONFEREES AND DATE OF APPOINTMENT

House: 05/10/2001

Molnau;Stanek;Workman;Holberg;Murphy

Senate: 05/07/2001

Johnson, Dean;Kelly, R.C.;Ranum;Terwilliger;Ourada

OTHER ACTION

S. F. No. 2351 / H. F. No. 766

ENVIRONMENT AND NATURAL RESOURCES, DEPARTMENT OF NATURAL RESOURCES (DNR) - Omnibus environment and natural resources and agriculture appropriations bill.

MOTION FOR CONFERENCE COMMITTEE

House: 05/08/2001 -- Senate: 05/02/2001

PASSAGE

House: -- Senate:

CONFEREES AND DATE OF APPOINTMENT

House: 05/10/2001

Holsten;Finseth;Ozment;Harder;Osthoff

Senate: 05/07/2001

Price;Krentz;Higgins;Frederickson;Dille

OTHER ACTION

From: <Raybohnmga@aol.com>
To: <Raybohnmga@aol.com>, <PegBohn@aol.com>, <merleanderson@cloudnet.com>, <James.Birkholz@bwsr.state.mn.us>, <bdswd@traversenet.com>, <kchandler@barr.com>, <CCWD@aol.com>, <mdeutschman@mpls.houstoneng.com>, <draeg001@tc.umn.edu>, <Cfiskness@aol.com>, <roland@lkdllink.net>, <Ronald.Harnack@bwsr.state.mn.us>, <nfcrwsd@midstate.tds.net>, <admin@minnehahacreek.org>, <DAVEMORAN-PL@worldnet.att.net>, <nnelson@barr.com>, <elpson@worldnet.att.net>, <rhecock@lakesnet.net>, <hlwd@frontiernet.net>, <bobhult@pconline.com>, <imholte@lakesnet.net>, <plslwd@cpinternet.com>, <rwmwd@mtn.org>, <srwd@saukherald.com>, <suscribner@yahoo.com>, <smith@smithparker.com>, <TomorViv@twwn.com>, <doug.thomas@bwsr.state.mn.us>, <mpanzer@wenck.com>, <jabwrwd@rrv.net>, <dlm@mn.nrcs.usda.gov>, <okabenaochedawd@netscape.net>, <ymrw@starpoint.net>, <swenson@eor.cnchost.com>, <vanambur@cord.edu>, <shrwd@gvtel.com>, <LWHarste@info-link.net>, <cohoffer@aps.mntm.org>, <tguetter@lakesnet.net>, <jor@rrv.net>, <Bbeduhn@hdrinc.com>, <pblixt@opencircle.org>, <PHaik@haik.com>, <eevenson@minnehahacreek.org>, <mjacobson@barr.com>, <jhanson@barr.com>, <siox@mnns.com>, <KDeter@rnoon.com>, <JKolb@rnoon.com>, <mmoore@ci.woodbury.mn.us>, <cliff@rwmwd.org>, <mrsrwd@ruralaccess.net>, <paulsws@earthlink.net>, <dedgerton@bonestroo.com>, <CarMarWD@aol.com>, <rrwd@means.net>, <dskral@tekstar.com>, <RPN@wiktel.com>, <deellefson@mail.co.lac-qui-parle.mn.us>, <dml2@mnworthing.fsc.usda.gov>, <hansonr@gvtel.com>, <wwright01@email.msn.com>, <lanning@wiktel.com>, <comserv@frontiernet.net>, <dogaard@means.net>, <brrwd@rrt.net>, <lakeswsd@brainerd.net>, <kate.drewry@state.mn.us>, <mrsrwd@wiktel.com>, <jellis@minnehahacreek.org>, <mtdeneen@email.msn.com>, <holtman@smithparker.com>, <ckjacobs@loretel.net>, <dcjohnso@hdrinc.com>, <rlwaters@wiktel.com>, <MLTolly@aol.com>, <jimwy@albanytel.com>, <Fornine@aol.com>
Date: 5/10/01 1:01PM
Subject: MAWD Legislative Update

MAWD Legislative Update
May 9, 2001

The final committee deadline was Wednesday, April 25th. All bills had to be out of all policy committees in both bodies to remain viable for the session and out of all finance or budget divisions, or in the respective tax committees.

Most of the viable legislation of interest to watershed districts was either placed in an omnibus budget division bill or in the omnibus taxes bill. The final days of session are rapidly approaching and most of the conferees for the various omnibus bills are still yet to be appointed. Old-timers at the capitol observe that this session is running later than most can remember. Hopefully, the work will get done.

We have made excellent progress on our top legislative priority, the administrative levy increase issue, and have language in both the House and Senate omnibus taxes bills. Below are the various bills of interest to watershed districts and their present status.

SF 178 Moe HF 1167 Skoe: Red Lake WD Membership. Red Lake watershed district manager position authorized to represent the Red Lake Indian Reservation. No hearings have been held. No action this session.

SF 241 Berg HF217 Peterson; Lazarus Creek floodwater retention project. Appropriates $1.5 million from the general fund for construction of the Lazarus Creek floodwater retention project. ACTION: Heard before the Senate Environment & Agriculture Division for possible inclusion in the omnibus bill. No House action. Not included in the Senate Bonding Bill.

SF 448 Frederickson HF 532 Harder; CREP funding bill. Appropriates $48.9 million from bond proceeds for easements. $2.6 million appropriated for implementation
costs. ACTION: Heard before the respective finance divisions for inclusion in their omnibus bills and or bonding bills. Senate Rules Committee did a delete everything amendment to HF1266 (the House Ag Finance Bill) and attached SF 1404, the Senate Bonding bill. It will be transferred back to the House for their action. Earlier House action provided $20 million in easements and $4.3 million for implementation in the House Environment Finance bill (HF766). The House position continues to be no bonding bill, although some doubt that. The Senate provided full funding of $51 million for CREP in the Senate Bonding bill (HF1266).

SF 483 Vickerman HF 561 Harder; Heron Lake WD Admin Levy Increase. Increases administrative levy limit to $225,000. ACTION: Heard before House & Senate Property Tax Divisions for possible inclusion in their omnibus tax bill. Replaced by HF1635 & SF1846 (MAWDΓÇÖs administrative fund bill) in the House & Senate Taxes bills.

SF604 Pariseau HF 652 Anderson, B.; Eminent Domain. Requires reimbursement of fees to owner if final award is 15% or more of original offer, lengthens quick-take period. ACTION: Tabled by House Local GovΓÇÖt Committee.

SF2307 Ranum HF 820 Erhardt; Enforcement Levy. Watershed districts authorized to increase levies up to $125,000 for enforcement purposes. ACTION: Heard in House Property Tax Division - amended to $75,000. House Omnibus Taxes bill (HF2498) includes $50,000 for enforcement fund for Minnehaha Creek WD.

SF 917 Robling HF 1349 Molnau; Provides for separate county levy for watershed management. ACTION: Heard in both House & Senate Property Tax Divisions for possible inclusion in omnibus taxes bill. Included in both House & Senate Omnibus Taxes bills.

SF 1137 Berg HF1083 Fuller; Beaver Damage Control Grants. Appropriates $250,000 per year to the Dept. of Ag for beaver damage control grants. ACTION: Heard in Senate Environment & Agriculture Finance Division and House Ag Finance Division. Moved to House Environment Finance Division. Heard in House Environment Finance Division and sent back to House Ag Finance Division for their action. $73,000 per year was included in Senate Environment Finance bill (SF2351). No funding in House Environment or Ag Finance bill.

SF 1402 Langseth HF Finseth; Appropriating money for flood hazard mitigation grants. Appropriates $16.95 million from bond proceeds for flood hazard mitigation grant program for the Red River basin. ACTION: Hearings held in both the House & Senate finance divisions for possible inclusion in their omnibus bills. $234,000 included in House Environment Finance bill (HF766), and $234,000 included in Senate Bonding bill (HF1266).

SF1486 Stevens HF 1828 Ozment; Wetland replacement and classification & wetland delineator certification program. ACTION: Heard in both policy committees and passed to Finance Divisions. Amended in both the House and Senate to delete certification program and funding. On House floor awaiting

action. In Senate Finance Committee to be heard on May 10.

SF 1496 Murphy HF XXXX; Authorizing tax levies in subwatershed units. ACTION: Heard in Senate Environment Policy Committee, passed to Taxes Committee. Not part of Senate Taxes bill.

SF1524 Stumpf HF Finseth; Ring Dikes. Appropriates $1.5 million for construction of ring dikes. ACTION: Heard in the House & Senate environment finance divisions for possible inclusion in the omnibus bill. $750,000 for one year appropriated in Senate Environment Finance bill, $250,000 first year and $318,000 second year appropriated in House Environment Finance bill.

SFXXXX HF1578 Goodno; Authorizing an ad valorem levy for WDs. Provides for ad valorem tax not to exceed 0.02418 percent for development, construction, and maintenance of projects and programs of benefit to the district, provided the district does not have a construction fund financed by a levy through a joint powers agreement. No action on this legislation.

SF 1555 Higgins HF 1524 Leppik; Phosphorus fertilizers use regulation. Phosphorus fertilizer use restricted in metro area. ACTION: House bill has passed through three committees and is on the floor. Senate bill was scheduled but not heard. Metro area local government opposed this legislation because it took away their local control over this issue. Legislation is dead for this session.

SF 1565 Higgins HF 1508 Howes; Phosphorus fertilizers use regulation. Phosphorous-based fertilizer application restricted statewide. No action.

SF 1811 Ourada HF 1763 Olson; Transfer of public drainage systems. Allows transfer of a public drainage system to a water management authority. ACTION: Passed Senate Environment Policy and Ag Policy Committees. Awaiting final action on the Senate floor. Passed House Environment Policy, being heard in various House committees. Failed to meet committee deadline, so bill is dead for this session.

SF 1846 Stumpf HF 1635 Daggett; Administrative levy increase and name change. Sub watershed unit tax levies authorized, and ad valorem tax levy authorized for watershed management cost increases, Administrative levy increase to $345,000 and fund name change. ACTION: Heard and amended in the House Property Tax Division and Senate Property Tax Division. Subwatershed district and ad valorem tax levy dropped from bill and petition for basic water management added. House & Senate Omnibus Taxes bills (HF2498) include administrative levy name change and increased to .048 with $250,000 cap. Language for petition for basic water management also included in both bills. Senate Tax bill also includes provision on payment in lieu of taxes for the Red River Water Management Board projects.

SF 2119 Fischbach HF 1990 Stang; Watershed district borrowing modified. Exempts projects secured by special assessment from borrowing limits. ACTION: Passed House Environment Policy, moved to Taxes Committee. Heard in Senate Environment Committee, amended to $300,000 level, and passed to Senate floor. May be heard by House Taxes committee after passage of omnibus bill.

SF 2205 Stevens HF 2191 Ozment; Local road wetland replacement funding.

Authorizes .18% of annual net revenue in highway user tax distribution fund appropriated from the general fund and .06 % of annual net revenue in the highway user tax distribution fund for wetland replacement purposes. ACTION: Heard in Senate Environment Finance Division for possible inclusion in their omnibus bill. Heard in House Environment Finance Division, passed and re-referred to House Transportation Finance Division. $2.7 million in Senate Transportation Finance bill. No other funding allocated at this time.

Please circulate copies of this MAWD Legislative update to other managers and staff in your watershed district. Thank you.

From: Judith Erickson <jlerickson@tcinternet.net>
To: leann buck <lbuck@PioneerPlanet.infi.net>, Sheila Vanney <vanney@hotmail.com>
Date: 5/10/01 12:39PM
Subject: Conferees named -- Cation Needed!

May 11, 2001

Memo To: SWCDs
From: Judy Erickson

Re: Session Update

Soil and Water Conservation Districts have stepped to the plate this year and your efforts are paying off. There was a significant delay in the appointing of House conferees on the Environment Budget Bill. They have been appointed finally and as we go into the last week of the session, it is your time to make the last push in support of MASWCD*s legislative priorities.

1. CREP. This week marks a critical time for the full funding of the Conservation Reserve Enhancement Program. Here's a quick report on where CREP stands.

Senate Action: On Monday, May 7th, the Senate voted 50-14 to approve HF1266, which is the bonding bill and includes language to fully fund CREP at $50 million. THANKS TO COALITION MEMBERS WHO RESPONDED TO THE ACTION ALERT LAST FRIDAY AND CONTACTED SENATORS!

Since bonding has to be initiated by the House, the Senate Rules Committee did a "delete all" from HF1266 on Friday, May 4, and attached SF1402. Now HF1266 will be transferred back to the House and the House will most likely table the bill. If the House determines it will do a bonding bill, the House will take the bill off the table and amend the bill. Then a conference committee will have to be named to work out the differences. Those working on CREP lobbying tell us that a conference committee could come together early next week.

Earlier House Action: The House Environment and Natural Resources Budget bill, HF766, provides $20 million in easements and $4.3 million for implementation. That bill passed the House May 1. There were no CREP amendments offered. The House position continues to be no bonding bill.

What's at stake? If there isn't a House bonding bill, it will be unlikely full funding for CREP will be accomplished this year. CREP needs full funding this year to ensure that all federal dollars are fully leveraged. The House's funding scenario for $20 million for easements will result in only 68,000 acres of the 100,000 acres enrolled in CREP and will allow $53.7 million earmarked for Minnesota to be used by another state. That money would no longer be available for Minnesota. On the other hand, full funding would release approximately $98 million in federal funds to Minnesota for the program.

Action: What can people do? Call their legislators and remind them of the importance of supporting full funding of CREP this session. If we want to get funding for RIM Reserve back before the Legislature, we must finish funding CREP this year.

2. SF2351. Omnibus Environment and Agriculture Finance Bill.
Conferees appointed.
Senate Conferees: Price, Krentz, Higgins, Frederickson, Dille.
House Conferees: Holsten, Ozment, Finseth, Harder, Osthoff,
This Conference Committee will conferee both the House Environment Budget bill and the House Agriculture Budget Bill.

Action: Please contact your senators and legislators, especially if they are a conferee in support of the SWCD funding Initiative programs as outlined below. We are in terrific shape to secure full funding for this initiative if you swing into action once more!
**If your local legislator is a conferee, please make sure to contact them!

SWCD Funding Initiative.
General Services Increases
Senate: Fully funded at $270,000 for the biennium
House: No increases

NPEA Increases
Senate: Fully funded at $637,000 for the biennium.
House: No increases.

Feedlot Cost Share Increases:
The Governor*s recommendation to shift funding from General Cost Share to Feedlot Cost Share was not adopted by the House or Senate.

Senate: Funded an increase of $1.4 million for the biennium out of PCA*s Cleanwater Partnership funds.

House: Funding provided at $3.5 million, program is administered by the Department of Agriculture. We are concerned with this provision as the Department of Agriculture is not set up to implement a cost-share program. SWCDs who effectively deliver this program are not even referenced in the Legislation. Finally, the language is open ended leaving a lot of discretion to the Commissioner of Agriculture which may not represent the needs of the small feedlot operations.

Provides $500,000 for the feedlot specialist program in the Department of Agriculture, the authorizing language is included in the bill.

***If you are concerned about these provisions, please be sure to contact your legislators and express yourself.

Special Projects Cost Share:
Senate: No increase.
House: Fully funded at $1 million for the biennium.

Soil Surveys.
Senate: Increased funding at $500,000 for the biennium.
House: No increases.

Ag BMP Loan Program.
Changes are included in both the House and Senate.

Easy Come. Easy Go!
The House provisions which transfered the following activities to BWSR were removed in the House Ways & Means Committee and are no longer under consideration.

* Transfers $150,000 for the biennium from DNR*s Ecological Services program to BWSR for management assistance to lake associations and shore land owners.

* Transfers $218,000 for the biennium from DNR*s Ecological Services program to BWSR to deliver and interpret ecological data for local units of government, etc.

* Transfers $550,000 for the biennium from DNR*s Ecological Services program to BWSR to provide technical assistance to local units of government., etc.

* Transfers $955,000 for the biennium from DNR*s Wildlife Division to BWSR to provide technical assistance to improve wildlife habitats on private lands.

HF 766/SF /SF 1402(Bonding) Comparision

Item	House Position	Senate Position
Operating Budget	The House reduced agency operating funds for salary increases from the 3% recommended by the Governor to 1% which amounts to a reduction amount of $223,000 for the biennium to BWSR.	Appropriates the Governors Recommendation for agency base budget.
CREP	The House provides $20 million for easements from a special revenue contingency account, $724,000 for the shortfall of the 2000 bonding bill implementation and $2.967 million of new general fund dollars for implementation. When added to the base funding for easement implementation, this provides the full funding for $20 million in easement acquisitions. The house is maintaining their position that there will be no bonding bill this session.	The Senate provides $2,034 million in general fund for implementation and has a bonding bill which includes $43 million for easements and $5.9 million for implementation. This takes care of the full funding needed to match federal funds with a 100,000 acre goal.
Feedlot Cost Share	The House provides approximately $3 million to the Commissioner of Agriculture for a new cost share program to be developed by the Commissioner that is not exclusively for water quality. The chair of the committee wanted a program that would be of benefit to farmers and allow for expansion of facilities to be covered in a cost share program. As a result of the new money in cost share in the Ag bill, the Environment and Natural Resources committee reduced the BWSR cost share rider from $1.5 million to $1.0 million. The Ag bill does not have a provision to allow any of the Ag Department cost share program to be used for technical assistance. As it is appropriated in another section of law (not BWSR's cost share) the authority for districts and NPEA to use a % of the total for administrative cost or technical assistance does not exist unless the Commissioner of Ag builds it into the program he designs or implements. The house does not appropriate new funding for county delegated permits.	The Senate bill does not appropriate any new dollars to BWSR for feedlot cost share. The Senate appropriates new funding to PCA, Clean Water Partnership in the amount of $700,000 with a rider to transfer this money to BWSR for feedlot cost share. This does provide new funding for feedlot cost share but it will not be in the BWSR base, it will be in MPCA's base. The Senate also appropriated $535,000 new general fund dollars for the clean water partnership to add to the delegated permitting process. These dollars are transferred to BWSR in a rider.
NPEA	No new funding is provided for this activity in the House bill.	The Senate increases the base funding for this activity by $637,000 for the biennium to fully fund the JPB's. (A MASWCD initiative, $295,000 the first year and $342,000 the second.
General Services Grants	No new funding is provided for this activity in the House bill.	The Senate increases the base funding for this grant by $270,000 for the biennium to address inflation. (A MASWCD initiative, $100,000 the first year and $170,000 the second.
Red River Basin Board	No funding is provided for this board in the House bill.	The Senate provides $200,000 for the biennium for the board provided matching funds are received from ND, SD and Manitoba.

HF 766/SF /SF 1402(Bonding) Comparision

Item	House Position	Senate Position
Soil Surveys	No funding is provided for this activity in the House bill.	The Senate bill provides $500,000 for the biennium for grants to counties for cost sharing on updating and digitizing outmoded soil surveys.
SWCD Cost Share	The House provides an additional $1 million for the biennium for a new special projects program for erosion and sediment control and water quailty improvement.	No new funding is provided for this activity by the Senate.
Grazing Lands Management	No new funding is provided for this activity in the House bill.	The Senate bill provides $200,000 for the biennium for technical assistance to farmers and ranchers for grazing systems.
St. George Watershed	No new funding is provided for this activity in the House bill.	The Senate bill provides $100,000 for a grant to the town of West Newton to reimbuse them for costs in construction of the St. George community wastewater treatment systems.
Lottery in Lieu	The House appropriates $1.989 million to BWSR from Lottery in Lieu funds for statewide techncial assistance to improve wildlife habitat on private lands ($772,000 the first year and $181,000 the second), funds for assistance to lake management associations and shoreland owners (75,000 the first year and $293,000 the second), $218,000 to Chisago County SWCD for lake quality improvements in Chisago County, and $225,000 each year to provide technical assistance to LGU's citizen organizations and resource agencies. These are one-time appropriations.	The Senate has no similar provision for BWSR to receive Lottery in Lieu funding.
North Shore Management Board	The House reduced all funding for this organization from the NRBG grant.	Senate funds this organization at the same level in NRBG.
St. Louis River Board	The House reduced all funding for this organization from the NRBG grant.	Senate funds this organization at the same level in NRBG.
MN River JPB	The House reduced all funding for this organization from the NRBG grant.	Senate funds this organization at the same level in NRBG.
SE MN Resources Board	The House reduced all funding for this organization from the NRBG grant.	Senate funds this organization at the same level in NRBG.
Local Government Wetland Road Replacement	No funding is provided for this activity in the House bill.	The Senate provides $8,000 for the bienium for this activity. It was a typing error that they do not have the $792,000 to fix. The Senate bonding bill passed out of committee yesterday with no funding for the projects. The Senate intends to delete this item from the environment and finance omnibus bill in conference committee and spend the $8,000 elsewhere since the project did not make the bonding bill.

CREP APPLICATIONS IN PROCESS

May 10, 2001

	At BWSR Offices				Completed at SWCD				Pending at SWCD				Total Aps in Process			
County	# of Aps	Acres	State $	Federal $	# of Aps	Acres	State $	Federal $	# of Aps	Acres	State $	Federal $	# of Aps	Acres	State $	Federal $
Big Stone	0	0.0	0.00	0.00	2	10.0	7,200.00	16,560.00	6	275.0	198,000.00	455,400.00	8	285.0	205,200.00	471,960.00
Blue Earth	2	91.4	82,007.40	188,617.02	10	173.0	124,560.00	286,488.00	4	266.0	191,520.00	440,496.00	16	530.4	398,087.40	915,601.02
Brown	5	313.3	301,856.00	694,268.80	3	111.6	80,352.00	184,809.60	0	0.0	0.00	0.00	8	424.9	382,208.00	879,078.40
Carver	0	0.0	0.00	0.00	3	114.4	82,368.00	189,446.40	2	200.0	144,000.00	331,200.00	5	314.4	226,368.00	520,646.40
Chippewa	9	1,085.6	861,236.70	1,980,844.41	10	836.0	601,920.00	1,384,416.00	18	340.0	244,800.00	563,040.00	37	2,261.6	1,707,956.70	3,928,300.41
Cottonwood	0	0.0	0.00	0.00	7	100.0	72,000.00	165,600.00	0	0.0	0.00	0.00	7	100.0	72,000.00	165,600.00
Dakota	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Douglas	3	28.7	13,747.10	31,618.33	7	386.1	277,992.00	639,381.60	5	200.0	144,000.00	331,200.00	15	614.8	435,739.10	1,002,199.93
Faribault	4	183.3	180,521.50	415,199.45	18	465.0	334,800.00	770,040.00	12	340.0	244,800.00	563,040.00	34	988.3	760,121.50	1,748,279.45
Freeborn	0	0.0	0.00	0.00	3	102.0	73,440.00	168,912.00	5	183.0	131,760.00	303,048.00	8	285.0	205,200.00	471,960.00
Grant	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Hennepin	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Jackson	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Kandiyohi	2	131.4	104,474.30	240,290.89	3	288.0	207,360.00	476,928.00	8	365.0	262,800.00	604,440.00	13	784.4	574,634.30	1,321,658.89
Lac qui Parle	5	208.0	123,292.80	283,573.44	4	250.0	180,000.00	414,000.00	10	500.0	360,000.00	828,000.00	19	958.0	663,292.80	1,525,573.44
LeSueur	0	0.0	0.00	0.00	1	7.5	5,400.00	12,420.00	3	60.0	43,200.00	99,360.00	4	67.5	48,600.00	111,780.00
Lincoln	4	267.3	155,324.30	357,245.89	3	30.0	21,600.00	49,680.00	1	10.0	7,200.00	16,560.00	8	307.3	184,124.30	423,485.89
Lyon	6	180.0	98,905.50	227,482.65	7	400.0	288,000.00	662,400.00	3	117.2	84,384.00	194,083.20	16	697.2	471,289.50	1,083,965.85
Martin	2	55.5	55,501.30	127,652.99	22	660.0	475,200.00	1,092,960.00	30	600.0	432,000.00	993,600.00	54	1,315.5	962,701.30	2,214,212.99
McLeod	0	0.0	0.00	0.00	1	15.7	11,304.00	25,999.20	1	15.0	10,800.00	24,840.00	2	30.7	22,104.00	50,839.20
Murray	0	0.0	0.00	0.00	10	993.9	715,608.00	1,645,898.40	12	911.6	656,352.00	1,509,609.60	22	1,905.5	1,371,960.00	3,155,508.00
Nicollet	0	0.0	0.00	0.00	8	277.3	199,656.00	459,208.80	8	108.0	77,760.00	178,848.00	16	385.3	277,416.00	638,056.80
Otter Tail, West	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Pipestone	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Pope	2	87.7	39,066.20	89,852.26	9	630.0	453,600.00	1,043,280.00	3	250.0	180,000.00	414,000.00	14	967.7	672,666.20	1,547,132.26
Redwood	1	11.4	6,757.70	15,542.71	6	174.0	125,280.00	288,144.00	3	60.0	43,200.00	99,360.00	10	245.4	175,237.70	403,046.71
Renville	5	217.2	171,521.00	394,498.30	5	341.5	245,880.00	565,524.00	5	500.0	360,000.00	828,000.00	15	1,058.7	777,401.00	1,788,022.30
Rice	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Scott	1	2.2	1,997.60	4,594.48	1	10.1	7,272.00	16,725.60	2	20.0	14,400.00	33,120.00	4	32.3	23,669.60	54,440.08
Sibley	0	0.0	0.00	0.00	0	0.0	0.00	0.00	6	147.7	106,344.00	244,591.20	6	147.7	106,344.00	244,591.20
Steele	0	0.0	0.00	0.00	1	18.0	12,960.00	29,808.00	4	260.0	187,200.00	430,560.00	5	278.0	200,160.00	460,368.00
Stevens	1	18.0	13,834.00	31,818.20	1	26.5	19,080.00	43,884.00	6	147.6	106,272.00	244,425.60	8	192.1	139,186.00	320,127.80
Swift	1	10.9	3,897.77	8,964.87	7	385.0	277,200.00	637,560.00	14	1,039.0	748,080.00	1,720,584.00	22	1,434.9	1,029,177.77	2,367,108.87
Traverse	0	0.0	0.00	0.00	0	0.0	0.00	0.00	6	605.0	435,600.00	1,001,880.00	6	605.0	435,600.00	1,001,880.00
Wascca	2	217.4	202,966.70	466,823.41	0	0.0	0.00	0.00	8	190.0	136,800.00	314,640.00	10	407.4	339,766.70	781,463.41
Watonwan	2	28.5	23,653.90	54,403.97	4	100.0	72,000.00	165,600.00	6	250.0	180,000.00	414,000.00	12	378.5	275,653.90	634,003.97
Yellow Medicine	1	93.6	48,462.36	111,463.43	6	220.0	158,400.00	364,320.00	6	200.0	144,000.00	331,200.00	13	513.6	350,862.36	806,983.43
Tabor Hoek	3	100.0	72,000.00	165,600.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	3	100.0	72,000.00	165,600.00
David Sill	4	300.0	216,000.00	496,800.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	4	300.0	216,000.00	496,800.00
Chris Hughes	13	390.0	280,800.00	645,840.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	13	390.0	280,800.00	645,840.00
Tom Fischer	8	326.1	234,792.00	540,021.60	0	0.0	0.00	0.00	0	0.0	0.00	0.00	8	326.1	234,792.00	540,021.60
Dave Peterson	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Pete Waller	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Doug Snyder	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
TOTALS	86	4,347.5	3,292,616.13	7,573,017.10	162	7,125.6	5,130,432.00	11,799,993.60	197	8,160.1	5,875,272.00	13,513,125.60	445	19,633.2	14,298,320.13	32,886,136.30

CREP Summary
May 10, 2001

	Applications In Program 4/27/01				Applications In Process 5/10/01				Total			
County	# of Esmt	Acres	State $	Federal $	# of Aps	Acres	State $	Federal $	# of Aps	Acres	State $	Federal $
Big Stone	8	66.9	31,378.67	72,170.94	8	285.0	205,200.00	471,960.00	16	351.9	236,578.67	544,130.94
Blue Earth	57	1,493.9	1,206,738.42	2,775,498.37	16	530.4	398,087.40	915,601.02	73	2,024.3	1,604,825.82	3,691,099.39
Brown	37	1,545.5	1,332,980.33	3,065,854.76	8	424.9	382,208.00	879,078.40	45	1,970.4	1,715,188.33	3,944,933.16
Carver	1	36.6	29,972.66	68,937.12	5	314.4	226,368.00	520,646.40	6	351.0	256,340.66	589,583.52
Chippewa	75	2,536.2	2,056,062.90	4,728,944.67	37	2,261.6	1,707,956.70	3,928,300.41	112	4,797.8	3,764,019.60	8,657,245.08
Cottonwood	37	1,195.7	891,383.71	2,050,182.53	7	100.0	72,000.00	165,600.00	44	1,295.7	963,383.71	2,215,782.53
Dakota	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Douglas	14	571.0	276,777.59	636,588.46	15	614.8	435,739.10	1,002,199.93	29	1,185.8	712,516.69	1,638,788.39
Faribault	40	1,015.3	890,883.72	2,049,032.56	34	988.3	760,121.50	1,748,279.45	74	2,003.6	1,651,005.22	3,797,312.01
Freeborn	3	109.1	115,533.52	265,727.10	8	285.0	205,200.00	471,960.00	11	394.1	320,733.52	737,687.10
Grant	1	34.3	19,173.00	44,097.90	0	0.0	0.00	0.00	1	34.3	19,173.00	44,097.90
Hennepin	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Jackson	7	276.7	228,313.82	525,121.79	0	0.0	0.00	0.00	7	276.7	228,313.82	525,121.79
Kandiyohi	24	1,115.6	800,076.69	1,840,176.39	13	784.4	574,634.30	1,321,658.89	37	1,900.0	1,374,710.99	3,161,835.28
Lac qui Parle	90	4,451.1	2,871,124.16	6,603,585.57	19	958.0	663,292.80	1,525,573.44	109	5,409.1	3,534,416.96	8,129,159.01
LeSueur	30	840.1	711,191.92	1,635,741.42	4	67.5	48,600.00	111,780.00	34	907.6	759,791.92	1,747,521.42
Lincoln	37	1,639.6	803,976.15	1,849,145.15	8	307.3	184,124.30	423,485.89	45	1,946.9	988,100.45	2,272,631.04
Lyon	46	1,674.2	1,153,340.68	2,652,683.56	16	697.2	471,289.50	1,083,965.85	62	2,371.4	1,624,630.18	3,736,649.41
Martin	36	1,040.1	1,000,939.43	2,302,160.69	54	1,315.5	962,701.30	2,214,212.99	90	2,355.6	1,963,640.73	4,516,373.68
McLeod	2	120.6	103,178.69	237,310.99	2	30.7	22,104.00	50,839.20	4	151.3	125,282.69	288,150.19
Murray	13	735.3	498,714.89	1,147,044.25	22	1,905.5	1,371,960.00	3,155,508.00	35	2,640.8	1,870,674.89	4,302,552.25
Nicollet	13	684.3	517,690.21	1,190,687.48	16	385.3	277,416.00	638,056.80	29	1,069.6	795,106.21	1,828,744.28
Otter Tail, West	11	372.0	177,251.33	407,678.06	0	0.0	0.00	0.00	11	372.0	177,251.33	407,678.06
Pipestone	6	213.0	136,904.64	314,880.67	0	0.0	0.00	0.00	6	213.0	136,904.64	314,880.67
Pope	35	2,171.0	1,031,687.85	2,372,882.06	14	967.7	672,666.20	1,547,132.26	49	3,138.7	1,704,354.05	3,920,014.32
Redwood	97	4,129.9	3,131,201.33	7,201,763.06	10	245.4	175,237.70	403,046.71	107	4,375.3	3,306,439.03	7,604,809.77
Renville	115	3,661.3	2,922,988.94	6,722,874.56	15	1,058.7	777,401.00	1,788,022.30	130	4,720.0	3,700,389.94	8,510,896.86
Rice	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Scott	2	24.8	11,514.95	26,484.39	4	32.3	23,669.60	54,440.08	6	57.1	35,184.55	80,924.47
Sibley	2	37.2	32,723.52	75,264.10	6	147.7	106,344.00	244,591.20	8	184.9	139,067.52	319,855.30
Steele	3	39.1	38,232.26	87,934.20	5	278.0	200,160.00	460,368.00	8	317.1	238,392.26	548,302.20
Stevens	4	74.9	49,295.80	113,380.34	8	192.1	139,186.00	320,127.80	12	267.0	188,481.80	433,508.14
Swift	41	1,675.4	1,141,914.99	2,626,404.48	22	1,434.9	1,029,177.77	2,367,108.87	63	3,110.3	2,171,092.76	4,993,513.35
Traverse	3	133.7	55,841.96	128,436.51	6	605.0	435,600.00	1,001,880.00	9	738.7	491,441.96	1,130,316.51
Waseca	37	989.6	890,242.95	2,047,558.79	10	407.4	339,766.70	781,463.41	47	1,397.0	1,230,009.65	2,829,022.20
Watonwan	37	1,214.6	1,093,266.21	2,514,512.28	12	378.5	275,653.90	634,003.97	49	1,593.1	1,368,920.11	3,148,516.25
Yellow Medicine	72	2,969.7	1,792,764.15	4,123,357.55	13	513.6	350,862.36	806,983.43	85	3,483.3	2,143,626.51	4,930,340.97
Tabor Hoek				0.00	3	100.0	72,000.00	165,600.00	3	100.0	72,000.00	165,600.00
David Sill				0.00	4	300.0	216,000.00	496,800.00	4	300.0	216,000.00	496,800.00
Chris Hughes				0.00	13	390.0	280,800.00	645,840.00	13	390.0	280,800.00	645,840.00
Tom Fischer				0.00	8	326.1	234,792.00	540,021.60	8	326.1	234,792.00	540,021.60
Dave Peterson				0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Pete Waller				0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
Doug Snyder				0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
TOTALS	1,036	38,888.3	28,045,262.04	64,504,102.69	445	19,633.2	14,298,320.13	32,886,136.30	1,481	58,521.5	42,343,582.17	97,390,238.99

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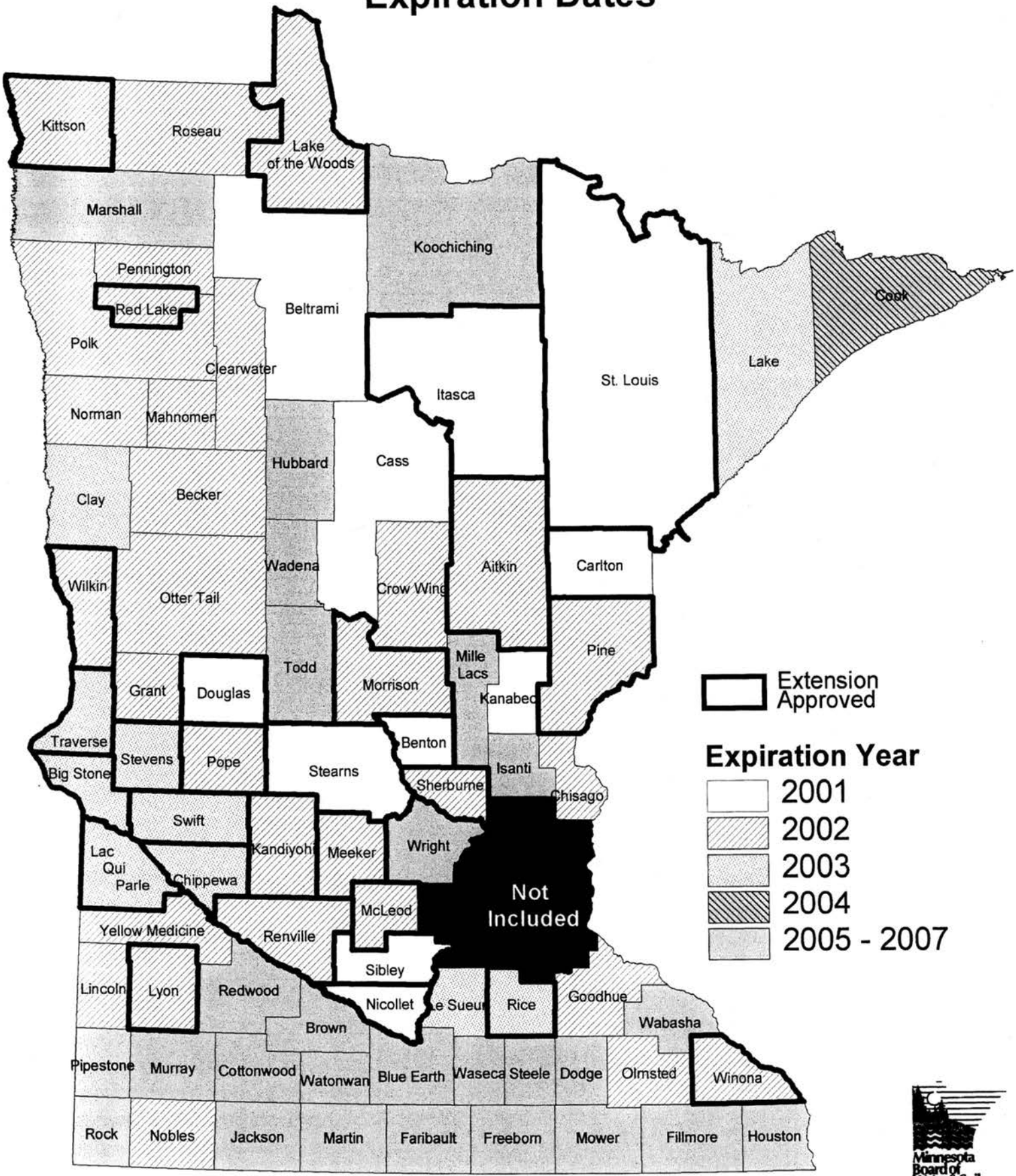
County Water Plan Expiration Dates



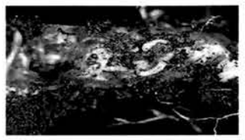
Minnesota Board of Water & Soil Resources
WWW.BWSR.STATE.MN.US

New Insect Pest Fact Sheets available on VegEdge Web site

Bill Hutchison & Suzanne Wold, Extension Entomology, University of Minnesota

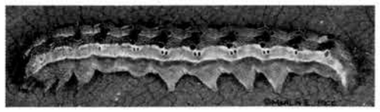
During the past 6 weeks, we have completed several new fact sheets for important (and/or interesting) insect pests of vegetable crops. The following fact sheets are now available:

Cabbage Maggot



http://www.vegedge.umn.edu/vegpest/colecrop/cabmag.htm

Corn Earworm (snap beans)



http://www.vegedge.umn.edu/vegpest/cewbean.htm

Wireworms

http://www.vegedge.umn.edu/vegpest/swtcorn/wirewrm.htm

Asparagus Beetles

http://www.vegedge.umn.edu/vegpest/aspbeet.htm

REMINDER: Keep monitoring for asparagus beetles!

NOTE: All VegEdge Fact sheets can be accessed by linking to the *FactSheet Page*:
http://www.vegedge.umn.edu/intro/pestfact.htm

Search Engine Working Well for VegEdge!

Bill Hutchison & Suzanne Wold, Extension Entomology, University of Minnesota

This past winter we "revamped" the Search Engine Feature for the VegEdge site; ALL Fact Sheets have now been cross-listed in the VegEdge database, as well as MANY previous NEWSLETTER articles. In addition, many articles from other states, that are relevant to Vegetable Crop Production have been included. The search engine can be accessed from several locations within the site, including:

- VegEdge Welcome Page < http://www.vegedge.umn.edu >
- MN Vegetable IPM Newsletter page, http://www.vegedge.umn.edu/mnvegnew/mnindex.htm

If you are having difficulty with the Search Engine providing useful information, please contact Suzanne Wold (woldx018@tc.umn.edu) or Bill Hutchison (hutch002@umn.edu).

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Disclaimer
Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Minnesota
Vegetable IPM Newsletter

Vol. 3, No. 4 http://www.vegedge.umn.edu/mnvegnew/mnindex.htm May 11, 2001

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- Starlink Reprieve?
- New Insect Pest Fact Sheets Available on VegEdge Web site
- Search Engine for VegEdge

Feature Article: Education is Key to Sustainable Agriculture Adoption: New Poll Results

Forwarded by Dr. Bill Wilcke, Dept. Biosystems and Agricultural Engineering, University of Minnesota, St. Paul, MN 55108

Over 50% of all large conventional farmers have considered sustainable alternatives. But over a third say they don't know how.

A sizable number of American farmers are looking for sustainable alternatives to high-input farming - the type of farming that features heavy use of pesticides and commercial fertilizer to get the most short-term output from the soil.

The Trends in Ag 2000 study found that almost one-fourth (23%) of all U.S. farmers say they use sustainable farming as their primary production system. And, over half (52%) of all conventional farmers say that they have considered using sustainable practices. The study was conducted for APA by The Gallup Organization, and was co-sponsored by the W.K. Kellogg Foundation with assistance from the Alpha Zeta Foundation. The national poll surveyed 1,218 farmers and ranchers with large operations in the summer of 2000.

In addition to measuring farmer adoption of sustainable agriculture, the survey also sought to identify barriers keeping more farmers from adopting sustainable farm practices. Farmers greatest (89%) concern was that sustainable farming practices would reduce their yields and profits, followed by "don't know how to do it" (36%), and "landlord won't allow" (17%).

The poll found that producers of tree crops were significantly more likely (33%) to primarily use sustainable agriculture than any other crop producer types, while wheat/hay producers (22%) were significantly more likely to than corn, soybean and cotton farmers (17%) and vegetable producers (10%).

On the animal producer side, the poll found that beef producers (28%) were significantly more likely to primarily use sustainable agriculture than dairy farmers (20%) or hog producers (23%).

The APA is the association of leading agricultural media. A more detailed look at the Trends in Ag 2000 study results can be found at the web site: http://www.agmedia.org

For more information about Sustainable Agriculture in Minnesota, contact: Dr. Bill Wilcke (wilck001@umn.edu) of the Minnesota Institute for Sustainable Agriculture (MISA), or check the MISA web site: http://www.misa.umn.edu/Other/about.html

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VegEdge

New Vegetable Pesticide "Plant-back" Updates for 2001

Provided by Wayne Wells, Chiquita Processed Foods, LLC, River Fall, Wisconsin

Pesticide "plant-back" restrictions for the major processing vegetable crops in the Upper Midwest, USA, are now available on the *VegEdge Web Site*. Information for each crop can be downloaded as WORD or PDF file formats.

Editor's Note: As in previous years, Wayne Wells has updated an exhaustive list of pesticide "plant-back" restrictions for the major processing vegetable crops in the Upper Midwest. Beginning this year, we are making this information available on the VegEdge site. If and when label changes are made during the growing season these can be updated. In addition, all restrictions will be critically reviewed over the winter months.

Disclaimer: Please note, ALL INFORMATION PROVIDED SHOULD ONLY BE VIEWED AS A GUIDE IN SELECTING THE APPROPRIATE PESTICIDE. BEFORE USING A GIVEN PESTICIDE, ALWAYS REFER TO THE LABEL. The inclusion of specific pesticides does not imply endorsement or non-endorsement by either Chiquita Processing Foods, or the University of Minnesota. This information is provided for educational purposes.

To access date for each crop, go to:
http://www.vegedge.umn.edu/intro/PlBack/PlBack.htm

Vegetable IPM Newsletter Survey Results

Natalie Pacholl, MDA Student Assistant, and Jean Ciborowski, MDA IPM Coordinator

As you may recall, we sent out a Readership Survey this past February. A total of 45 surveys were returned. Survey results were tabulated and this is what those of you who responded had to say.

Which category best describes your occupation?

Occupation	# Responses
Grower	21
Processor	13
Teaching/research	5
Crop consultant	2
Other	4

The two largest groups of respondents were growers (47%) and processors (29%).

In which states are you located?*

Minnesota	40	Wisconsin	11
Iowa	4	North Dakota	2
Illinois	2		

*May have listed more than one state.

In which counties in Minnesota do you work?
All counties were represented. Counties mentioned four or more times include: Dodge, Freeborn, Mower, Pope, Sterns, and Steele counties.

How many total acres of vegetables do you produce or manage?
Most respondents had either less than 25 acres or more than 100 acres as part of their operation.

What are the most important crops that you grow?
The top five crops in order of importance:
1. Sweet corn; 2. Peas; 3. Pumpkins; 4. Squash; 5. Beans and Tomatoes (tied)

Of the following categories, which are useful to you?

Rank	Topic
1	Information on sweet corn pests
2	Information on plant disease IPM methods; Detailed information on specific pests *(tied)*
3	Information on new issues (food safety, GMO crops)
4	Data from the Pheromone Trap Network (Corn earworm)
5	Insect IPM; weed IPM; Data from BLT Network (European corn borer) *(3 way tie)*
6	Information on pumpkin and squash pests
7	Information on cabbage pests

Survey respondents felt that the most important topics included receiving information on sweet corn pests followed by receiving information on plant disease IPM methods and detailed information on specific pests. Many respondents also indicated that they would like more information on specific crops, especially on fruits. A majority of respondents felt that the length of articles was just right and they preferred articles that contained some biological information or explanation along with recommendations. Finally, a majority of respondents found the Vegetable IPM newsletter useful, or very useful to their operations in 2000.

A big thanks to all who took the time to respond! This survey will help us plan future editions to better serve your needs.

Pesticide Updates: DuPont to Phase Out Sale of Benlate(R)

Rich Carver, DuPont Crop Protection

WILMINGTON, Del, April 19, 2001 -- Today DuPont informed its customers around the world that it will discontinue the manufacture of its fungicide benomyl and will phase out sales of Benlate® in all its forms from the global market. No sales will occur after December 31, 2001, and we expect all product will clear the channels of trade by the end of 2002.

DuPont advised customers that this is not a product recall, but a voluntary business decision based on a review of global market conditions and other factors. The decision is part of the recently announced restructuring to improve the overall competitiveness of its agricultural businesses.

A significant element of the reason to withdraw is that the company is no longer willing to bear the high and continuing costs of defending the product in the U.S. legal system where factors other than good science can influence outcomes. In addition, there are significant ongoing costs and resources necessary to meet increased regulatory requirements around the world and keep the product active. The company believes those resources are better applied to other areas of the business.

DuPont remains fully confident that Benlate® is safe when used as directed. The 30-year-old fungicide has been an excellent crop protection option for growers worldwide.

StarLink to get a Reprieve? *EPA weighs allowing human food to contain traces of biotech corn; the policy now calls for zero tolerance.*

George Anthan from the Des Moines Register, Washington Bureau (4/25/2001)

Washington, D.C. - The Bush administration could seek to defuse the StarLink controversy by allowing tiny traces of the controversial biotech corn to exist in human food, two industry officials said Tuesday. The industry experts suggest a change in the Environmental Protection Agency's zero-tolerance policy on StarLink in human food after the agency received new information about health risks associated with StarLink. That information came from Aventis CropScience, which produced StarLink. The corn was originally approved only for animal feed and/or industrial uses. StarLink began showing up in food products last year, causing major disruptions in the grain industry because of fears that the corn could trigger allergic reactions in a small percentage of humans. The EPA said new information submitted by Aventis indicates that human food products may be contaminated with StarLink "for the foreseeable future" but suggests that the level of contamination is so low it poses no health risk.

Aventis made a similar request of the EPA to allow trace amounts of StarLink in human food late last year, but the request was turned down by the EPA, which at that time was under the leadership of Democrat Carol Browner. The agency now is led by Republican Christie Whitman, who was appointed by Bush. "I would not be surprised to see some more flexibility on this issue" from the Bush administration, said Don Roose, a market analyst with U.S. Commodities Inc. in West Des Moines. Susan Keith, an official here with the National Corn Growers Association, called the EPA's announcement of the Aventis request "very positive."

The government's zero tolerance for StarLink has resulted in hundreds of food product recalls after traces of StarLink's unique Cry9C protein were found in taco shells, corn chips and other products. As long as the EPA has a zero tolerance for StarLink in human food "major disruptions of the food supply will continue even though the theoretical risk is vanishingly small," Aventis told the EPA in a filing. The EPA said Aventis' "new information is likely to be an important addition to the growing body of scientific data." The agency said that Aventis' new data seem to confirm the EPA's belief that processing of corn into oil, syrup, alcohol and starch through a wet-milling process effectively eliminates the StarLink protein from finished foods. Earlier tests involving dry-milling to produce flour were not as effective in eliminating the Cry9C protein, the EPA said.

Submitted by: Dr. Ed Rajotte
Penn State IPM Coordinator
Associate Professor of Entomology

IPM OVERVIEW

Minnesota Department of Agriculture • Integrated Pest Management Fact Sheet Series

AUTHOR: Minnesota Department of Agriculture

SUBJECT: School Integrated Pest Management - What Is It?

What is IPM?

There is a delicate balance between protecting our children and other school occupants from unnecessary exposure to pesticides and protecting them from the health risks associated with pest organisms. It is to everyone's advantage to protect and maintain indoor air quality and a healthy environment as children may be more sensitive to environmental health threats. Integrated pest management (IPM) looks at pest problems using a multi-tactic approach. It considers all aspects of the interactions between people and the pest to find the easiest way to resolve the pest problem with the lowest overall risk to people's health and the school environment. IPM looks beyond exterminating the pest and the use of preventative regularly scheduled pesticide applications. IPM considers factors that allow pests to become problems in the first place and uses a combination of cultural, physical, biological and chemical pest management strategies.

The most important strategy is communication and cooperation among school officials, teachers, staff, custodians, and parents. How people use and manage a school determines the pest problems that will occur. IPM emphasizes regular inspections and monitoring to detect pests before they become a problem, making it easier to manage them in less toxic ways. Inspections, information on the pest's life cycle, setting action thresholds, and information on how the school facility is used determine when and what action is taken. IPM's flexibility to adapt to any pest problem is what makes it work. IPM does not rule out the use of pesticides. Pesticide use is weighed against other less toxic and more permanent methods.

Why IPM?

A school is a difficult place to practice pest management. The design and use of schools buildings and landscapes may encourage pest problems. Schools also operate on tight budgets and have to craft policies which incorporate a diversity of people and opinions. Only by looking beyond pest extermination and routine pesticide applications can pesticide exposure to users of schools be reduced. The benefits and barriers to the use of IPM are:

Benefits[1]

- Provides long term results
- Environmentally friendly
- Reduces unnecessary chemical use and its liability
- Reduces risk of pesticide resistance
- Proactive, not reactive
- Detects a potential pest problem before it's a major problem
- Provides a written record of pest activities and control actions
- Promotes a better school/community relationship
- Site-specific

Barriers

- May be more expensive to implement – especially when first starting IPM
- Requires everyone, even students, to take an active role
- Requires more skill and knowledge than traditional pest control
- Additional paperwork and communication
- May require on-going training
- Requires persistent attention

The four basic IPM components

1. Monitoring

IPM is based on consistently inspecting and monitoring for pests to determine the location and degree of infestation. Monitoring includes traps, visual inspections, and interviews with staff members, and can be incorporated into other activities such as cleaning. Proper indentification of the pest is critical to gathering information about the pest's life cycle and habits. Identification is essential for selecting the combination of strategies which will be most effective and knowing when to implement them. Map out and prioritize problem areas. Take thorough notes to help you determine what to do now and in the future.

2. Setting Action Levels

School officials must set thresholds to determine if and when action should be taken against a certain pest. The action level is the number of pests that can be tolerated before treatment is necessary. While health concerns are always most important for determining the action threshold, economic and aesthetic factors cannot be ignored. An example of an action threshold would be detecting one mouse. Because mice can pose a significant health threat, action should be taken immediately. In other words, one mouse is too many.

3. Applying IPM Strategies

IPM employs a multi-tactic approach, integrating several strategies to combat a particular pest. Criteria for selecting a treatment strategy are:

1. Least hazardous to human health[2]
2. Least disruptive of natural controls
3. Least toxic to non-target organisms
4. Most likely to be permanent
5. Easiest to carry out safely and effectively
6. Most cost-effective
7. Most site-appropriate

There are four common types of control strategies that remove a pest's food, water, and shelter, and limit its access into and throughout buildings and on school grounds.

1. *Cultural control* is a preventative measure using fertilization, plant selection, and sanitation to exclude problematic pests and weeds.
2. *Physical control*, or pest exclusion is another preventative strategy. It includes creating barriers; modifying conditions such as temperature, light and humidity; trapping; and manually weeding.
3. *Biological control* makes use of a pest's natural enemies. This strategy introduces beneficial insects or bacteria to the environment or, if they already exist, provides them with the necessary food and shelter and avoids using broad-spectrum chemicals that will inadvertently kill them.
4. *Chemical control* is used after all other control strategies are deemed inappropriate or ineffective. Target-specific, low-toxicity pesticides should be applied in a manner that will maximize the effectiveness of pest management and minimize the exposure to humans and other non-target species. Spot treat if possible to reduce exposure.

4. Evaluation

Program evaluation involves reviewing monitoring data, actions taken, treatment impacts and effectiveness, and any other relevant observations. These reports will provide information on previous and current pest populations and which strategies were applied. Comparing data will clearly indicate which pest management strategies were most effective for the amount of time and money spent. IPM practices and procedures can be modified, if necessary, based on past experience, results, and gained knowledge. Ask yourself questions about the program.

- Was the treatment(s) effective?
- What were the effects on non-target species?
- What worked and what did not?
- What can I do differently next time?
- Should I consult an outside source of expertise for further IPM recommendations?
- Is the program compatible with current public expectations?

Remember, be flexible! The key to a good IPM program is adaptability and allowing for continuous fine-tuning in your program. Keeping other school personnel informed and involved will help make them aware of the school's IPM program and it's advantages.

[1] Modified from *A Practical Guide to Management of Common Pests in Schools*, developed by the Illinois Pest Control Association, Illinois Department of Health, Structural Pest Control Advisory Council and University of Illinois Extension, 1999.

[2] Taken from *Integrated Pest Management for Schools: A How-to Manual*, United States Environmental Protection Agency, Region 9, 1998.

To obtain additional copies of this publication, contact the Minnesota Department of Agriculture at 651-296-7673 or the University of Minnesota Extension Service at 1-800-876-8636.
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COCKROACHES

Minnesota Department of Agriculture • Integrated Pest Management Fact Sheet Series

AUTHOR: Jeffrey Hahn, University of Minnesota Extension Service

SUBJECT: Cockroach Management in Schools

Importance

Cockroaches are an important public health problem. They can eat and contaminate food and can give off a disagreeable odor. Cockroaches are known to carry human pathogens and can potentially transmit diseases to people. Additionally, cockroaches are a source of allergens and can cause allergic reactions and asthma in people, especially children.

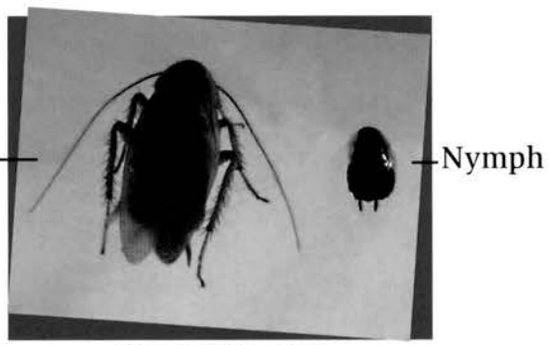

Photo by Don Brenneman

Identification

A cockroach has a flattened, oval shaped body and long antennae (about the length of their body). When looking at a cockroach from above, its head is hidden from view. A cockroach has six strong legs covered with spines. Cockroaches are most active at night and are usually not seen during the day. When cockroaches are sighted during the day, this often indicates a large cockroach population.

The most common species of cockroach is the German cockroach. The adult is about 1/2 inch long and is light brown or tan with two dark bands behind the head. The immature nymph is dark-colored and similar in shape but is smaller and has a light-colored streak running part way down its back.

Biology

There are three stages during a cockroach's life cycle: egg, nymph, and adult. Adults lay eggs contained within an egg case. This egg case is yellow-brown and is roughly the same size and shape as a dry kidney bean. An egg case generally contains 30 - 40 eggs (for the German cockroach). Eggs hatch into young cockroaches called nymphs. In a normal cockroach population, nymphs are more numerous than adults.

Cockroaches prefer to be in areas that are warm and moist and near sources of food and water. They spend most of their time in narrow, tight cracks and spaces. In schools, cockroaches are especially found in kitchens, food storage areas, and bathrooms. Cockroaches are scavengers and will eat almost any food. They also have been known to eat such nonfood materials as backing glue, leather, bookbindings, and bar soap.

Prevention & Nonchemical Management

Monitoring and inspecting on a regular basis helps detect cockroaches before they become established or abundant.

- Use sticky traps to help monitor if and where cockroaches are a problem. Place sticky traps so they are tight against edges, e.g. along the edge of a wall where it meets the floor. Place them in areas where cockroaches are likely to occur, e.g. refrigerators, stoves, sinks.

- Inspect boxes and bags for cockroaches and egg cases that may be accidentally brought into school buildings.

Sanitation is very important in reducing a cockroach infestation. Cockroaches need water, food, and favorable living conditions. By limiting their access to these resources, you reduce their ability to survive and reproduce. Even if you do not have cockroaches, being proactive by using these nonchemical management strategies can help to minimize the chances that you will have cockroaches.

- Do not leave food out overnight; keep all food stored in a refrigerator or in insect-proof containers made of plastic, metal, or glass with tight-fitting covers; including pet food used in classrooms.
- Take garbage out daily in closed plastic containers; keep waste containers washed and clean.
- Repair any leaky water pipes or faucets.
- Recycle cans and bottles on a regular basis; wash and clean containers that hold recycling items.
- Remove boxes, especially if they're made from corrugated cardboard; newspapers; bags; and other unnecessary items that can clutter rooms. When storing items, leave space between the packages.
- Seal spaces and cracks that cockroaches use to hide. In cases of infestation, concentrate on areas where cockroach numbers are the highest.
- Vacuum cockroaches and their egg cases. When possible, use vacuums with a high efficiency particulate air (HEPA) filter to reduce cockroach debris that may become airborne.

Insecticidal Management

If cockroaches become a problem in school buildings in spite of nonchemical measures, supplement them with an insecticide application. Remember that insecticides are most effective when their use is combined with sanitation and other nonchemical efforts.

- Before buying and again before using any pesticide product, read the label carefully. Be sure the product you intend to use is labeled for the particular site you wish to apply it. The label is the final authority on how you may legally use any pesticide.
- Apply insecticides in precise, specific sites by using crack and crevice treatments or bait placements. Avoid general broadcast sprays; they greatly increase exposure to pesticides without being more effective (in many cases they are less effective).
- Use insect growth regulators, such as hydroprene (Gentrol) and pyriproxifen (Archer, Nylar). They disrupt the normal development of immature cockroaches. They are very effective against nymphs and very low in toxicity to people and animals. They may take several weeks to work.
- Use baits, such as abamectin (Avert) and hydramethylnon (Siege); they can be placed in very precise locations.
- Apply an inorganic dust, such as boric acid or silica gel, in wall voids or in isolated places, such as behind and under refrigerators, stoves, and sinks.
- Cockroaches are a challenging pest to manage and often require the services of an experienced professional applicator.

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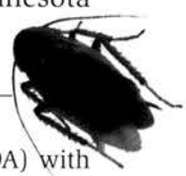

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RATS & MICE

Minnesota Department of Agriculture • Integrated Pest Management Fact Sheet Series

AUTHOR: Minnesota Department of Agriculture

SUBJECT: Rat and Mouse Management in Schools

Importance

The word rodent means "to gnaw", and rats and mice have an amazing ability to gnaw through almost anything. Rodents are notorious for damaging buildings, and their preference for chewing electrical wires often causes expensive malfunctions and can even start fires. Rodents are involved in the transmission of diseases such as Salmonellosis, Meningitis, Leptospirosis, Hantavirus illness, and Dermatitis. Rats and mice release steady droplets of urine and may defecate up to 70 times a day. This, coupled with the pest's gnawing and nest building habits, enables rats and mice to contaminate considerable amounts of food and cause immeasurable damage.

Identification

The two most common rodents that are able to live in close proximity to humans and their differentiating characteristics are summarized in the table below.

Biology

Both species are primarily nocturnal. They are omnivorous, eating both animal and plant material, and can consume up to 10% of their body weight each day! They are able to scale vertical walls, run across electrical wires and can jump well over a foot and fall from a distance of eight feet without injury. Rodents reproduce year round. Rats average three to six litters per year, but can have as many as twelve. They have four to six young per litter, which mature and are ready to reproduce in about three months. Mice have five to six young per litter, averaging six to ten litters per year, and mature at about two months of age. If rodents are in an environment with plenty of food and no predators, they can live two years or longer. In the wild they seldom exceed six months of age. **There are some signs that help to identify if there is a rodent infestation. The signs include:**

- urine stains
- droppings
- gnaw marks
- grease marks
- live or dead rodents
- rodent sounds or odor
- tracks
- burrowing
- runways

SPECIES	HOUSE MOUSE	NORWAY RAT
Norway rat is also known as common, sewer, brown, wharf, water rat	Photo from Zeneca Professional Products	Photo from Zeneca Professional Products
Size	small, slender, 0.4-1 oz., 5-8 in.	large, stocky, 7-18 oz., 16 in.
Fur	smooth, light brown or light gray color	course, brown or red gray color above with a whitish gray belly
Tail	nearly hairless, dark color with obvious scale rings, about the same length as body (3-4 in.)	dark color above and pale beneath, scaly, shorter than body (5-8 in.)
Snout	pointed	blunt
Droppings	rod shaped, 0.5 in.	capsule shaped, up to 1 in.
Habitat	ground-dwelling: walls, storage boxes, furniture	ground-dwelling: cellars, crawl spaces, garages

Prevention

How can you keep rats and mice from becoming a problem? The first step involves a building inspection. You can determine the extent of an infestation, location of possible shelter sites and entry points, and sources of food and water by making use of the signs listed above. Your observations should be recorded in detail for future monitoring and proper trap placement.

Proper sanitation is the best way to prevent rats and mice from becoming a problem. Some key steps which can be readily implemented are:

- Allow food in designated areas only.
- Don't leave food in lockers.
- Remove paper clutter.
- Remove trash regularly.
- Store pet food, snacks, or grass seed in tightly sealed containers.
- Routinely clean areas around vending machines, refrigerators, and dumpsters.
- Fix leaky or "sweaty" pipes.
- Keep areas around sinks and toilets dry.
- Consider a waste disposal company that takes charge of cleaning the dumpsters.

Rodent proofing, or exclusion, is another preventive measure.

- Install springs on external doors so that they close immediately. Never prop open doors or windows!
- Cover vent pipes with hardware cloth secured with wire.
- Weather strip doors and windows.
- Move all items off the floor and away from the walls.
- Replace vegetation, with gravel, around at least a one-foot perimeter of the building.
- Fill in small holes with steel wool or caulk and seal larger holes around pipes, utility lines, and vents with 1/4 inch hardware cloth, 19 gauge or greater sheet metal, plaster, or mortar.

Management Strategies

If you have a rodent problem, it's time to take action. The three main kinds of non-chemical traps are snap, glue, and multiple live catch. Often a combination of the three is effective.

- Set the traps where there is evidence of activity, for instance, between the nest and the food source.
- Set many traps in a small area, concentrating on one area at a time. While a rat will travel up to 150 feet from its nest in search of food, a mouse may only venture 20 feet away. Remember that rodents can climb and burrow, so set traps in a three dimensional area, i.e. on the floor and also up on shelves.
- Place two or three traps in a row with triggers facing the wall to prevent the rodent from jumping over them.
- It's best to use sticky baits that a rodent can't steal, such as peanut butter or melted cheese. Nesting materials, such as a cotton ball or dental floss, also work.

Trapping has several advantages: it does not use poisonous chemicals; it allows you to confirm that the rodent has been killed; and, it allows for disposal of the carcass. Traps must be inspected regularly to check for a catch and to see if the bait is still in place and fresh. If non-chemical alternatives don't work, you may want to consider using a rodenticide.

- Before buying and again before using any pesticide product, read the label carefully. Be sure the product you intend to use is labeled for the particular site you wish to apply it. The label is the final authority on how you may legally use any pesticide.
- Place rodent baits in tamper-resistance, clearly labeled bait stations where children and pets cannot enter.
- Place stations 15 to 30 feet apart for rats and 6 to 8 feet apart for mice.
- Be aware that rodenticides often take a few days to work, and that the rodent will often die and start to decompose before it is found.

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ANTS

Minnesota Department of Agriculture • Integrated Pest Management Fact Sheet Series

AUTHOR: Jeffrey Hahn, University of Minnesota Extension Service

SUBJECT: Ant Management in Schools

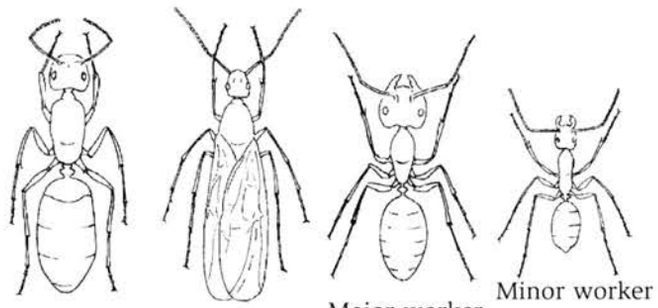
Importance

Ants are common insects in and around schools. They are pests when they infest and contaminate food products. Ants can be a nuisance just by their presence, especially if they occur in large numbers.

Identification

There are 11 species of ants that may be found in Minnesota schools. They vary in size - from 1/20 inch long to 1/2 inch long; and in color - from yellowish to reddish to brown or black. All ants have a narrowed area between the thorax and abdomen called the petiole. The petiole has either one or two nodes (bumps) which is important in ant identification. In Minnesota, the most common ants in schools are pavement ants, cornfield ants, pharaoh ants, and field ants.

Typical ant castes



Figures from U of MN Extension Service

Biology

Ants are social insects that live in nests. Some ants build nests in soil, either in the open, producing characteristic mounds; or under objects, such as stones, sidewalks, or slab construction. Other ants nest in buildings behind moldings, baseboards, under countertops, and in similar spaces. Yet other ants nest in decaying or moisture-damaged wood.

Ants feed on many different types of food, including starches, meats, fats, insects, and sweets. Many ants also feed on honeydew, a sweet liquid produced by aphids and scale insects. Some ants eat a wide variety of foods, while others have a narrower range of preferred foods. Even within a particular ant species, dietary needs of a nest may change during the year.

Ants have four stages in their life cycle: egg, larva, pupa, and adult. Queens lay eggs, which turn into legless grub-like larvae. After pupating, ants mature into adults. Adults are divided into three castes: queens, males, and workers. Workers of some species may be found in different sizes, termed major and minor workers.

Nearly all ants produce winged males and queens. These reproductives swarm (i.e. fly) from their nest to mate. A particular species will swarm and mate during a specific time of the year. After mating, the females seek a proper site to begin new nests. Although annoying, winged ants are harmless. However, their presence inside a building does indicate an indoor ant nest.

Prevention & Nonchemical Management

The first step in ant pest management is identification. Knowing what species of ant is present is important to determine the nesting site, food preference, and the best method of control. If the species cannot be determined from available resources, contact an expert for identification.

Exclusion, sanitation, and physical removal are crucial in preventing and reducing ant infestations in school buildings.

- Seal cracks and spaces along the buildings' exterior that allow ants to enter.
- Cut back plants around the outside of buildings so they do not come in contact with structures.

- Store food, including candy, snacks, and pet food used in classrooms, in insect-proof containers made of plastic, metal, or glass with tight-fitting covers.

- Take garbage out regularly in closed plastic bags; vacuum and sweep regularly to remove food.

- Clean all kitchen surfaces regularly; wash dishes, pans, and utensils soon after they are used; rinse recyclable containers before storage.

- Vacuum winged ants and small numbers of workers that are found inside. After collecting ants in this way, vacuum up some cornstarch in order to suffocate the ants in the bag.

Insecticidal Management

- Before buying and again before using any pesticide product, read the label carefully. Be sure the product you intend to use is labeled for the particular site you wish to apply it. The label is the final authority on how you may legally use any pesticide.

- Exclude ants from outside nests with an insecticide application (e.g. permethrin or bifenthrin) around the exterior of the building. It may be necessary to spot treat just part of the foundation if ants are only a problem on one side. Re-treatments may be necessary.

- If you can determine where an outside nest is, treat it with an insecticide (e.g. permethrin or deltamethrin). Drenching the nest with liquid is most effective.

- Baits (e.g. fipronil, hydramethylnon, borax [sodium octaborate tetrahydrate], or boric acid) are available for many ant species. They use much less insecticide than other application methods and can be delivered to very precise sites. The workers take the bait back to the nest, eventually killing the queen(s). However, baits are slow acting and need time to work.

- Do not spray insecticides when using baits.

- One type of bait will not control all ants. It is important to understand the dietary requirements of a particular ant to use the most appropriate bait. Because of the variable food habits of some ants, the same bait may not always be effective throughout the year.

- When ants, such as pavement ants, nest beneath concrete slab construction, the only practical control may be to bait the workers.

- The only effective method for controlling pharaoh ants is baiting. This is because spraying insecticides will usually cause a pharaoh ant colony to split and form new colonies, making the problem worse.

- When the nest is concealed, such as behind a wall, it may be necessary to drill small holes and apply an insecticidal dust, such as boric acid.

- Spraying foraging ants is generally not suggested for schools. The effect of spraying is only temporary and has very little, if any, impact on the nest.

- If at any time you wish to seek professional help or an ant problem becomes too difficult to manage, contact a pest control service. They have the training and experience to effectively deal with ant problems.

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2000

WEEDS

Minnesota Department of Agriculture • Integrated Pest Management Fact Sheet Series

AUTHOR: Robert J. Mugaas, Extension Educator, Horticulture, University of Minnesota Extension Service, Hennepin County

SUBJECT: Weed Management on School Grounds and Athletic Fields

Integrated Pest Management (IPM) strategies can be successfully applied to managing weeds in lawns and athletic fields. A cornerstone of IPM for weeds is accurate identification along with developing an understanding of their growth habits and biology. This knowledge along with the weed history of a site are important steps in designing and implementing an appropriate control strategy.

Learning the Weeds

One of the first tasks in implementing an IPM program for weeds is to learn about the weeds themselves. Lawn weeds can be divided into two groups based on the way the shoot emerges from the seed: **monocots** have a single seed leaf and **dicots** have two seed leaves. In addition, monocots have the "veins" in the leaves running parallel to each other while the vein pattern in dicots is more netlike or branched. Most monocot weeds in turf belong to the *Graminae* or Grass family. Dicots are broadleaf plants and belong to many different plant families.

Weeds can be further divided according to how long they live. **Perennial** plants live for more than two years although they may produce seed every year. **Biennial** plants require two years to complete their life cycle. They store up food reserves in leaves and roots the first year and flower and produce seed the second year. **Annuals** germinate from seed, grow, flower and produce seed in one season. **Summer annuals** germinate in the spring, grow, flower and complete their lifecycle by fall. **Winter annuals** germinate in the fall or late winter and mature in late spring or early summer.

There are many printed resources for help in identifying weeds. You may also wish to consult your U of MN County Extension office for additional help.

Weed Growth Stages & Control Strategies

Most methods of weed control are directed at the growth stage of the weed. **Pre-emergence** control is directed at destroying the weed seedlings as they begin to germinate but before they emerge from the ground. This method usually involves the use of a chemical herbicide. The most common use is for control of annual grasses such as crabgrass before they emerge in the spring.

Post-emergence control is directed at visible, growing plants after they have emerged from the ground. This method may or may not involve the use of a chemical herbicide. This is usually the method of control for many of our common broadleaf plants such as dandelion.

When Herbicides are Needed

The practice of IPM does not preclude the use of a chemical herbicide. However, their use is often considered only after other weed management strategies have provided inadequate control. Herbicides may also be used as an initial treatment to reduce the weed competition while cultural practices to restore the turf are initiated.

When the use of herbicides is being considered, always read and check product labels to be sure the intended target weeds are controlled and will not harm non-target plants. Herbicides are generally grouped by their ability to control certain types or groups of weeds, **selective**, or all green vegetation to which it is applied, **non-selective**.

Controlling dandelions or crabgrass in a bluegrass lawn without harming the bluegrass are examples of selective control. Eliminating all vegetation under a fence line or from cracks in an asphalt parking lot would be examples of non-selective control.

Maintenance Zones and Standards

One of the best strategies to launch a turf weed IPM program is to determine what turf areas need what level of care. For example, the high school varsity football field would require a much higher level of care than an elementary school playground field.

As determinations regarding levels of maintenance are made for the various turf areas on a site and across a school district, a matrix of **Maintenance Zones** (**MZ**) will be created. That is, those areas requiring the greatest level of care and the most weed free surface would be considered a MZ 1. Each MZ will have a set of **Standards** that spell out the kind and level of maintenance to be used in that MZ. As the MZ number increases the level of maintenance decreases and weed tolerance increases. That is, the standards are not as rigorous for a MZ 3 as they would be for MZ 1. Typically there are three or four designated MZ categories. While it is beyond the scope of this fact sheet to describe all of the cultural practices that make up the MZ standards, some typical weed tolerance levels are listed below.

Figure 1 is a stylized portrayal of several different levels of maintenance zones on a given school site. Within a school district, these would collectively make up the maintenance zone matrix mentioned above.

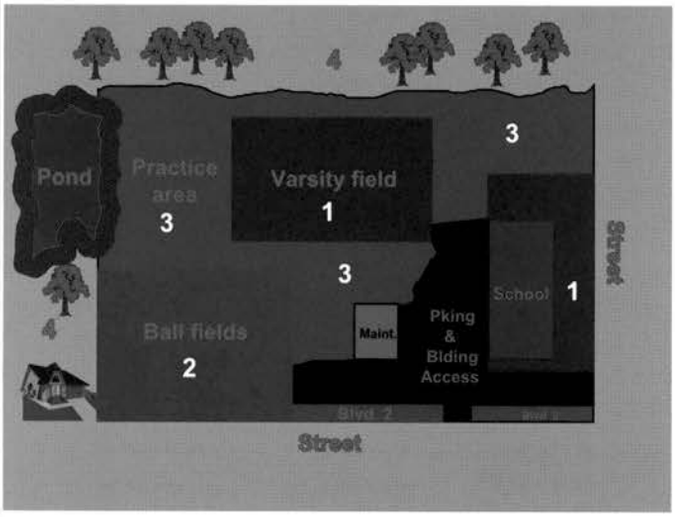

Figure 1. Sketch of possible school maintenance zones.

MZ-1: These areas have the greatest expectation for a uniform, relatively weed free surface. They are typically reserved for highly visible turf areas or the premier athletic fields within the school district. There are usually only a few turf areas within this maintenance zone designation and weed tolerance levels are often established at 15% or less. That is, weeds comprise 15% or less of the turf area.[1]

MZ-2: These are areas with relatively good turf density and vigor but up to 30% may be covered with weeds and no more than 10% bare ground.[1] Typically, these areas would include multi-purpose turf areas and most general use athletic fields.

MZ-3: Typically these areas would have moderate to poor turf quality with 50% or more of the area covered with weeds. Parts of the field may be bare ground but this should be kept to no more than 10% for safety reasons.[1] Examples would be general use fields and playgrounds, elementary school fields, and practice areas at primary or secondary schools.

MZ-4: In these areas the primary vegetation cover may or may not be grasses. The only weed control in these areas may be related to controlling certain undesirable weeds from invading adjacent finer turf areas either by seed or vegetatively such as through runners. Examples would include areas such as ditches, fence lines, adjacent woodland or field edges receiving little to no maintenance including mowing. State determined noxious weeds would also need to be controlled in these areas.

Monitoring for the presence of weeds, how many there are and where they occur will be an ongoing practice. This will be important in regularly assessing the impact current cultural practices and/or field usage are having on the presence or absence of weeds. For example, increasing amounts of prostrate knotweed, pineapple weed or broadleaf plantain are indicators of increasing soil compaction.

Modifying Cultural Practices

Although somewhat time consuming initially, establishing maintenance zones and their accompanying standards is an important step in the process of putting together a useful IPM program. However, other changes in cultural practices to improve turfgrass competitiveness against weeds can be implemented immediately. Two such examples include mowing and aerification.

Raising mowing heights will increase the potential depth of turfgrass rooting and help shade the soil surface thereby decreasing the amount of necessary sunlight for weed seed germination. Deeper rooting means a greater degree of stress tolerance as the plant will have access to a greater volume of soil in which to obtain water and nutrients. Where shorter heights may be required, provide supplemental irrigation and fertility to maintain turfgrass density and minimize stress.

Provide a healthier soil environment for turfgrass roots by increasing the use of *aerification to combat soil compaction problems*. This will help turfgrasses root deeper and enhance soil microbial activity. If at all possible perform aerification during those times when most of our problem weed seeds are not likely to be germinating. This would generally mean avoiding late April, May, June and July in the Twin Cities area. Cores of soil removed by the aerifier and deposited on the surface will likely have some weed seeds in them. Once exposed to sunlight and moisture they will germinate and potentially establish themselves in the turf.

In summary, a healthy, dense turf is still the best weed control strategy. However, it is not always possible to provide the optimum turfgrass growing conditions in every area. Establishing maintenance zones and standards will help set appropriate quality and use levels for all turf areas. When weeds do occur, identify them accurately and select appropriate weed control strategies.

[1] Information adapted from Wisconsin's School Integrated Pest Management Manual

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2000

SMALL FLIES

Minnesota Department of Agriculture • Integrated Pest Management Fact Sheet Series

AUTHOR: Jeffrey Hahn, University of Minnesota Extension Service

SUBJECT: Small Fly Management in Schools

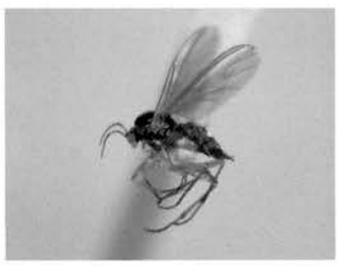
Importance

Fruit flies, moth flies, humpbacked flies, and fungus gnats can be common insect pests in schools. They are primarily nuisances, especially when they occur in large numbers. Any of these flies can be troublesome by contaminating food products in food handling areas. Whenever these flies come in contact with unsanitary conditions, they can potentially contaminate food with disease-causing bacteria.

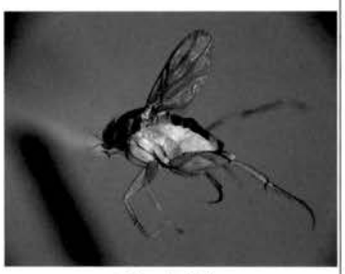
Identification

Fruit flies are about 1/16 to 1/8 inch long, usually have red eyes, a tan body, and a striped abdomen. ***Moths flies*** (also known as drain flies) are about 1/12 inch long, and dark-colored. They have long black hairs on their wings and body, giving them a fuzzy, moth-like appearance. They have pointed wings held flat over their bodies. ***Humpbacked flies*** (also called phorid flies) are about 1/8 inch long with a humpbacked body. They are often found running along counters, walls, and other surfaces. ***Fungus gnats*** are about 1/8 inch long with a slender body and long legs.

Because these flies are similar in size, it can be difficult for an untrained person to correctly identify them. If you are unsure which flies are present, have an expert identify them before a control program is started.



Fungus gnat



Phorid fly

Photos from U of MN, Dept. of Entomology

Moth fly

Fruit fly

Photos from the Ken Gray Collection, Oregon State University

Biology

All of these flies lay eggs on some type of moist, decaying organic material.

Fruit flies are attracted to fermenting and rotting food smells. They commonly infest old, overripe fruits and vegetables, food residue in sinks, trash containers, floor drains, and dirty mops, as well as soft-drink and fruit juice residue. Fruit flies are particularly common during late summer and fall.

Moth flies lay eggs in all types of damp decomposing organic matter. They are commonly found in the slimy gelatinous layer in floor drains and sinks. They are also associated with organic matter in sump pumps and broken sewage lines.

Humpbacked flies are found in many types of moist decaying organic material. They can be found in drains, food residues in trash containers, cracks under and around kitchen equipment, potting soil, organic material on the bottom of pet cages, and in the matter resulting from broken sewage lines.

Fungus gnats feed on fungus, mold, and decaying plant material. They are found in the soil of overwatered houseplants or soil containing organic material, such as peat. Adults are usually found on infested plants or flying nearby. Fungus gnats may also be found in other places where excess moisture allows fungus to grow.

Prevention & Nonchemical Management

Sanitation is very important in preventing small fly infestations.

- Flush drains in sinks and floors with water on a regular basis, especially in food handling areas.
- Remove garbage in tied plastic bags daily. Clean any food residue that accumulates on the inside of garbage containers.
- Eat fresh fruits and vegetables or refrigerate them. Do not allow produce to sit out and become overripe.
- Rinse bottles and cans that are being recycled. Remove recyclables on a regular basis. Periodically clean the recycling container to prevent a build-up of food residue.
- Keep mops clean and dry.

If a small fly problem should occur, the most effective permanent control is a clean-up of their breeding sites. These sites are generally found where moist, organic material is present in infrequently used or undisturbed areas.

Because different flies infest different types of food, a proper identification is an important first step. Once you find an infestation, keep checking for additional food sources as there may be more than one. Consider a professional pest control service to help eliminate your small fly problem.

- Remove organic build-up in drains with a brush.
- Use a bacterial drain maintenance product designed to remove organic build-up.
- Bleach and hot water does not eliminate a fly problem in drains.
- To manage fungus gnats, allow soil in containers to become more dry between waterings without letting the plant wilt.
- The presence of flies does not always indicate where a fly infestation is located. Their food source could be nearby or in a different room.

Insecticidal Management

- Before buying and again before using any pesticide product, read the label carefully. Be sure the product you intend to use is labeled for the particular site you wish to apply it. The label is the final authority on how you may legally use any pesticide.
- Insecticides, such as pyrethrins or tetramethrin, temporarily reduce the numbers of adults that are present. This is useful once the breeding site is eliminated. However, insecticides can not eliminate a small fly problem as long as a food source exists.
- To manage fungus gnats in potted plants, use the bacterial insecticide, *Bacillus thuringiensis* H-14 (Knock-Out Gnats, Gnatrol).

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2000

WASPS/BEES

Minnesota Department of Agriculture • Integrated Pest Management Fact Sheet Series

AUTHOR: Jeffrey Hahn, University of Minnesota Extension Service

SUBJECT: Wasp and Bee Management Around Schools

Importance

Although both wasps and bees are beneficial insects, they may be pests because they can sting. Wasps and bumble bees can pull their stinger out and potentially sting many times. Honey bees sting just once, leaving their stingers hooked in the skin. Most people experience intense, short-lived local reactions to wasp and bee stings, although a few may experience more serious allergic reactions. Wasps and bees may nest near or in buildings or areas of human activity, increasing the chance for stings. Some wasps (yellowjackets) are more likely to scavenge for food and drinks during late summer and fall, which also increases the risk of stings.

Identification

Although all stinging insects are sometimes referred to as 'bees', wasps cause the most problems for people. Wasps appear smoothed-skinned and shiny. Some are slender with long legs (paper wasps). Others are more stout and are either black and yellow or black and white (yellowjackets and baldfaced hornets). Bees are fuzzy and more robust in appearance, particularly bumble bees. Honey bees are golden brown and black while bumble bees are black and yellow.

↓ Honey bee

← Yellowjackets from nest in wall void

Baldfaced hornet nest in tree ↓

Baldfaced hornet queen in spring ←

Photos by Jeffrey Hahn

Biology

Wasps are predators, feeding insects and other arthropods to their young. Bees feed on nectar and pollen from flowers.

Wasps build nests out of a papery material. Yellowjackets and baldfaced hornets construct layers of combs surrounded by an outer envelope. Paper wasps construct only one comb without any protective envelope. Wasps may nest in the ground, in trees and shrubs, under horizontal surfaces such as eaves, and in buildings where they occupy wall voids and similar spaces.

Bees build combs made of wax. Honey bee colonies are mostly in manufactured hives although they do occasionally nest in cavities in large trees, voids in building walls, or other protected areas. Bumble bees use abandoned mice burrows, cavities in buildings, and other locations to make their nests.

Wasp and bumble bee colonies live for just one season. The old queen and workers die in the fall, when temperatures reach freezing. Newly produced queens survive winter in protected sites outside the nest. The following spring, they search for sites to construct new nests. Old nests are not reused. Honey bee colonies are perennial, surviving more than one year in the same nest location.

Wasp and Bee Management

Some types of wasp or bee problems are easy to control for school personnel. For more challenging cases, consider hiring an experienced pest control service. Nests are best dealt with during late evening when wasps and bees are less active and foraging workers have returned to the nest. Wasps and bees generally will not attack as long as they are not physically threatened. However, use caution as wasps and bees will protect their nest. Wear protective clothing, such as a bee veil and a bee suit to protect against stings.

Prevention & Nonchemical Management

- Use trash containers with tight lids. Keep containers emptied on a regular basis. Clean the inside of containers regularly to remove food residue.
- If a nest (wasp or bumble bee) does not pose a threat to students and staff, wait and allow freezing temperatures to kill the colony.
- If an individual wasp or bee accidentally enters a school building, capture and release it outside or kill it with a fly swatter.
- Never use gasoline or fuel oil in ground nests as this will contaminate the environment. Instead, pour a sudsy soap (dish or laundry soap) and water solution into the entrance. Plug the hole with dirt after all wasps or bumble bees have been killed.
- Seal the nest entrance in a wall void to prevent new nests once you are sure all wasps or bees are dead. Sealing it while wasps or bees are still alive can force them indoors.
- Vacuum nests in wall voids or in an area where insecticides can not be used. This should be done by a professional pest control operator.
- Physically remove an exposed wasp nest. Cover it with a large, heavy, plastic bag at night and seal it shut. Cut the nest from the tree and freeze it or let the bag sit in the sun. Use caution to avoid stings.

Insecticidal Management

- Before buying and again before using any pesticide product, read the label carefully. Be sure the product you intend to use is labeled for the particular site you wish to apply it. The label is the final authority on how you may legally use any pesticide.
- For exposed nests, e.g. in trees or the outside of buildings, apply a ready-to-use aerosol 'wasp and hornet spray' into the entrance of the nest. Repeat the treatment in several days if live wasps are still present.
- For nests in the ground, apply an insecticide (such as permethrin or deltamethrin.). If live wasps or bumble bees are still present after a few days, repeat the treatment. Plug the hole with dirt after all wasps or bumble bees have been killed.
- Apply a dust (such as boric acid, bendiocarb [Ficam], or deltamethrin) to hidden nests in wall voids. An aerosol insecticide would not be effective if the nest is not near the entrance. An aerosol insecticide application may force workers indoors.
- Remove and destroy honey bee combs found inside buildings. Never eat honey or wax from colonies that have been treated with an insecticide.

Stings

Very rarely, a person may suffer a life-threatening, systemic allergic reaction to a bee or wasp sting, which can cause anaphylactic shock (fainting, difficulty breathing, swelling, and blockage in the throat) within minutes of being stung. If these symptoms are observed, seek immediate medical attention.

A lesser allergic reaction may include hives or rash, swelling in an area away from the sting site, headache, minor respiratory symptoms, and stomach upset. These allergic reactions are not life-threatening and may be readily treated with an antihistamine.

Most people only have intense, short-lived, local reactions to wasp and bee stings. Symptoms may range from burning, itching, redness, and tenderness to massive swelling and itching that may last up to a week. You can relieve these symptoms with ice or a commercial topical ointment. If you are stung by a honey bee, the first thing you should do is remove the stinger with a fingernail, credit card, or similar object as soon as possible.

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2000

A report from the Minnesota Department of Health

Safe Drinking Water for the Next Generation:

Ensuring Our Future

A summary of

Drinking Water Protection Activities

in Minnesota for 2000

Issued May 2001
Minnesota Department of Health
Division of Environmental Health

MINNESOTA MDH DEPARTMENT OF HEALTH

Safe Drinking for the Next Generation:
Ensuring Our Future

A Summary of Drinking Water Protection Activities in Minnesota for 2000

Issued May 2001

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This report is available on the World Wide Web at
http://www.health.state.mn.us/divs/eh/dwp/pws/dwpreport00.html

Reports from previous years (through 1995) are at
http://www.health.state.mn.us/divs/eh/consinfo.html#Drinking

Introduction

Ensuring the safety of our drinking water is one of the most fundamental—and most critical—responsibilities of modern public health. In fact, safe drinking water has been a key ingredient in some of the greatest public health achievements of the last half-century, including the dramatic reductions in disease and improvements in longevity that we now tend to take for granted. Along with other basic public health measures like immunization, drinking water protection has played a crucial role in building a safer and healthier society.

We need to remain vigilant if we are to protect those past gains. The Minnesota Department of Health (MDH) is strongly committed to safeguarding the quality of our drinking water, and as part of that commitment, we routinely monitor all of our state's public water supply systems for a broad range of chemical, radiological, and biological contaminants.

MDH believes that educating the public about water quality issues is an important element of drinking water protection. Since 1995, we have been releasing annual summary reports like this one to help us achieve that goal. Like previous reports in the series, this year's report covers test results and actions taken during the preceding calendar year.

The main body of the report provides information about Minnesota's community water supply systems—that is, systems that provide people with drinking water in their places of residence. The section on Emerging Issues contains a number of topics that relate to the future, including an update on Source Water Protection activities, a key component in the mission to keep our water safe to drink. Standards set for drinking water are done with a strong margin of safety built in and are constantly being reviewed, a process that sometimes results in the revisions of certain standards. This section addresses a few of the standards that have been undergoing such revisions. These changes can sometimes pose financial challenges for public water suppliers. The Drinking Water Revolving Fund (DWRF) helps water systems to upgrade their facilities to meet stricter standards or to replace aging infrastructure to ensure continued compliance with existing standards. A summary of recent DWRF activities is addressed in this section.

Protecting our drinking water requires the involvement and awareness of everyone, not just those employed in the drinking water profession. To promote greater awareness and education, the Minnesota Department of Health has been involved in an educational initiative to get curriculum on drinking water into Minnesota classrooms through the establishment of Drinking Water Institutes for teachers. Information on these Institutes is in the Emerging Issues section beginning on page 12.

We hope this information will provide the people of Minnesota with a clearer picture of what's being done to protect the quality of their drinking water, and what our monitoring efforts have revealed about the success of those efforts. We believe that the picture is a positive one, and we hope this report will build Minnesotans' confidence in the both the safety and the quality of their drinking water.

Executive Summary

The Minnesota Department of Health (MDH) is responsible for enforcing the federal Safe Drinking Water Act—and safeguarding the quality of drinking water—in our state. That includes responsibility for regulating approximately 8,300 *public water supply systems* statewide. This figure includes 955 *community* systems, which provide drinking water to people in their places of residence. These community systems include 710 *municipal* systems, serving towns or cities.

The Major Elements of Drinking Water Protection

Minnesota's drinking water protection strategy includes three major elements:

- ***Prevention*** measures are used to protect the quality of drinking water at the source—by controlling potential sources of pollution, regulating land use, and reviewing plans and providing advice on construction of water treatment and distribution facilities, and inspecting these facilities on a regular basis.

- ***Treatment*** measures—including routine disinfection—are used to make the water palatable and safe to drink.

- ***Monitoring*** of water supplies for potentially harmful contaminants—on a routine basis—is the critical element of the state's enforcement responsibilities under the Safe Drinking Water Act.

The Monitoring Process

Minnesota's community water supply systems are monitored for the following types of *contaminants:*

- **Pesticides and industrial contaminants.** Each system may be tested regularly for for more than 100 pesticides and industrial contaminants—including both synthetic organic chemicals (SOCs) and volatile organic chemicals (VOCs). The list of chemicals to be tested for—and the testing schedule—may vary from one system to another. Testing requirements depend on factors such as whether a particular chemical is likely to be present in the local environment—and how vulnerable the system is to contamination. If a system exceeds the applicable federal or state drinking water standard for a particular chemical, it must notify the people who use the water and take appropriate steps to correct the problem.

- **Bacterial contamination.** Larger community systems are tested monthly—and smaller systems are tested quarterly—for contamination by *coliform bacteria.* The coliform test is used as a general indicator of water quality in the system, in terms of potential microbial contamination.

  Standard procedures are followed whenever potential bacterial contamination is detected. Systems are disinfected, flushed, and retested to ensure that any contamination problems are eliminated. All of the residents served by the system are also informed of the situation. In some cases, boil water notices are issued, advising residents to boil their water before using it for drinking or cooking.

- **Nitrate.** Each system must be tested annually for nitrate. Nitrate occurs naturally in the environment, but elevated nitrate levels in drinking water are usually associated with the use of fertilizer, or the breakdown of human and animal waste. It is a health concern primarily for infants under the age of six months. If the federal standard for nitrate is exceeded, an advisory is issued regarding consumption of the water by infants. The advisory remains in effect until steps can be taken to correct the nitrate problem.

- **Inorganic Chemicals and Radioactive Elements.** Each system is typically tested once every three years—or as often as once a year, in some cases—for a list of 13 additional inorganic chemicals, and a number of radioactive elements. Both inorganic chemicals and radioactive elements may be naturally present in the water. If the water exceeds health standards for either type of contaminant, people who use the water are informed, and steps are taken to correct the problem.

- **Lead and Copper.** For the last several years, community water supply systems have participated in efforts to reduce lead and copper contamination in drinking water. Lead and copper are not typically present in the water when it leaves the treatment plant. Lead and copper differ from other contaminants in that they are rarely present in source waters. Rather, they enter the water through contact with plumbing components, usually in individual homes. If more than 10 percent of the homes in a community exceed the federal "action level" for lead or copper based on the results of community-wide monitoring—the local water supply system must do additional testing and take steps to reduce levels. Systems that exceed the action level for lead must also perform a regular program of public education.

Note: Any time a drinking water standard is violated, the affected water system must take correction actions that include notifying its residents of the violation. In addition to this type of notification, all community water systems issue an annual **Water Quality Report** (sometime referred to as a **Consumer Confidence Report**) that lists the source of the system's drinking water as well as a list of all regulated contaminants that were *detected,* even in trace amounts well below the legal standard, during the previous calendar year.

A Current Profile of

Minnesota's Drinking Water Protection Program

Since 1974, the U.S. Environmental Protection Agency has been responsible for regulating the nation's public water supply systems, under the provisions of the federal Safe Drinking Water Act. However, almost all states—including Minnesota—have now assumed responsibility for enforcing the act within their own borders. Minnesota became one of the first states to achieve *primacy*—and begin regulating public water supply systems at the state level—in 1977.

The definition of "public water supply system," for purposes of the Safe Drinking Water Act, is a broad one. To be considered "public," a water supply system must have its own water source and provide water to 25 or more people or have 15 or more service connections.

Minnesota currently has 8,300 public water supply systems—more than all but six other states. Of those systems, 955 are *community* systems—that is, systems which provided water to people in their homes or places of residence. Most of these community systems use *groundwater* from underground sources, tapped by water wells, as their source of water. However, 23 of these systems—including the municipal systems that serve the state's largest cities—use *surface water,* drawn from lakes or rivers.

Only 710 of the state's community systems are municipal systems, serving towns or cities. The rest of the community systems provide water to people in a variety of residential locations, including manufactured home parks, apartment buildings, housing subdivisions, colleges, hospitals and correctional facilities.

The remainder of the state's public water supply systems are *noncommunity* systems. Some of these noncommunity systems provide water to an ever-changing "transient" population, at places such as restaurants, resorts, and highway rest stops. Other noncommunity systems may provide water to relatively stable population groups, in non-residential locations such as schools, places of employment, and day-care facilities.

The Major Elements of Drinking Water Protection

Three basic strategies are used to safeguard the quality of our drinking water:

- **Prevention.** Preventing contamination of the source water used by public water supply systems—lakes, rivers and water wells—is an important component of drinking water protection. This aspect of drinking water protection includes measures like regulating land use, regulating the construction of water treatment facilities, and controlling potential sources of pollution.

- **Treatment.** Most community water supply systems use some form of treatment, so the water will be palatable and safe to drink. Many systems—but not all—require routine disinfection as a safeguard against potential problems with bacterial contamination. Groundwater systems are less likely to require disinfection, because contaminants tend to be filtered out of the water as it moves downward through the earth, from the surface to the underground sources tapped by water wells.

- **Monitoring.** Monitoring is the critical element of compliance activities under the Safe Drinking Water Act (SDWA). Under provisions of the act, public water supply systems are required to sample treated—or "finished"—water on a regular basis, and submit the samples to MDH. The samples are tested for a broad range of potential contaminants. If unacceptable levels of contaminants are found, the water supply owner or operator is legally responsible for informing the people who use the water, and taking steps to eliminate potential health hazards.

  Under the provisions of the SDWA, the individual water supply system is responsible for taking water samples and submitting them to MDH for testing. To lessen the burden on water supply operators, most of the required samples are collected by field staff from MDH. Minnesota's water supply operators have one of the best records in the nation regarding compliance with these sampling and testing requirements.

Note: *The monitoring requirements and test results described in this report apply primarily to community water supply systems.*

Monitoring: What We Test For—and Why

Minnesota's community water supplies are tested for a number of different types of contaminants. The reasons for testing—and how often the testing is done—depends on the type of contaminant and other factors. The type of contaminant also determines what actions will be taken, if unacceptable levels are found in the water.

The major types of contaminants we test for include:

Pesticides and Industrial Contaminants. Minnesota's community water supply systems are routinely tested for more than 100 different pesticides and industrial contaminants—including synthetic organic compounds (SOCs) and volatile organic compounds (VOCs). Systems may be tested anywhere from four times a year to once every six years, depending on the specific chemical and the vulnerability of the system to contamination (see ***Assessing Vulnerability to Contamination,*** on page 8). Some systems may not need to do any testing for a particular contaminant. A formal *use waiver* is sometimes granted, specifically exempting a water supply system from testing for a particular contaminant, if that chemical or pesticide is not commonly used in the immediate area.

The U.S. Environmental Protection Agency (EPA) has developed legal standards known as *maximum contaminant levels (or **MCLs**)* for 60 of the more than 100 chemicals on the list. *Advisory* standards have been developed for the other 58 chemicals on the list, and those are used in the same way as the MCLs in assessing test results.

Any time a community water supply exceeds the applicable standard for one of these contaminants, the water supply operator must immediately take steps to notify the people who use the water—with the assistance of MDH. Appropriate steps are then taken to reduce the contamination to acceptable levels.

In some cases, the MCL or advisory standard is calculated to prevent immediate or short term health effects. More often, however, these standards are designed to reduce the long-term risk of developing cancer or other chronic health conditions. They are calculated very conservatively. If the concern is long-term health effects, the standards are calculated to keep the risk of illness at levels most people would regard as negligible—even if they drink the water every day, over an entire 70-year lifetime.

Bacterial Contamination. Community water supply systems serving more than 1,000 people are tested one or more times per month for *coliform bacteria.* Smaller systems are tested four times a year. The coliform test is used as a general indicator of water quality in the system, in terms of potential microbial contamination. If the coliform test is negative, it is an indication that the system is adequately protected against contamination from other types of disease-causing organisms. However, if any detectable amount of coliform is found in the water, it is assumed that the system may be compromised, and steps are taken to protect the people who use the water. Standard procedures are followed whenever potential bacterial contamination is detected. Systems are disinfected, flushed, and retested to ensure than any contamination problems are eliminated. All of the residents served by the system are informed of the situation. In some cases, boil water notices are issued, advising residents to boil their water before using it for drinking or cooking.

Bacterial contamination problems are most commonly found in smaller water supply systems. Most of these smaller systems use groundwater, and many do not routinely disinfect the water as part of the treatment process.

Nitrate/Nitrite. Community water supply systems in Minnesota are tested once a year for *nitrate*—a chemical which may occur naturally in the environment, but can also enter the water from sources like fertilizer run-off, decaying plant and animal wastes, or sewage. Nitrate is a health *concern primarily for infants under the age of six months.* The infant's digestive system can convert the nitrate to *nitrite,* which can interfere with the ability of the infant's blood to carry oxygen. The result is a serious illness know as *methemoglobinemia,* or "blue baby syndrome." Methemoglobinemia can be fatal if nitrate levels in the water are high enough, and the illness isn't treated properly.

The current standard (MCL) for nitrate in drinking water is 10 parts per million (ppm). If a water supply system exceeds the standard, the people who use the water are notified and advised not to use the water for mixing infant formula, or other uses that might result in consumption of the water by infants under six months. The advisory is kept in place until steps can be taken to reduce nitrate levels in the water. Possible remedial measures include treating the water to remove the nitrate, or drilling a new water well.

Older children and adults are generally not at risk from drinking nitrate-contaminated water. In fact, the average adult consumes about 20-25 milligrams per day in food—primarily from vegetables. Because of changes that occur after six months of age, the digestive tract no longer converts nitrate into nitrite. However, some adults—including people with low stomach acidity and people with certain blood disorders—may still be at risk for nitrate induced methemoglobinemia.

Inorganic Chemicals. Community water systems in Minnesota are also tested for a list of 13 *other inorganic chemicals,* in addition to nitrate. The testing is usually done once every three years, but may be done as often as once a year, or as seldom as once every nine years. The list includes *antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sulfate,* and *thallium.* In some cases, these chemicals may be naturally present in the groundwater. If a water supply system were to exceed the federal MCL for one of these chemicals, the people who use the water would be notified, and appropriate steps would be taken to reduce levels of these chemicals in the water.

Radioactive Elements. Community water systems in Minnesota are also usually tested once every three years—or as often as once a year, in some cases—for a list of *radioactive elements.* These radioactive elements—*or radiochemicals*—may be present in the water from natural sources. If a system were to exceed the federal MCL for one of these radioactive elements, the people who use the water would be notified, and steps would be taken to correct the problem.

Lead and Copper. Some public water supply systems in Minnesota are required to test their water, on a regular basis, for lead and copper. All public systems in the state took part in an initial round of lead and copper testing that ended in 1994. The water was tested in a number of homes within each system, to determine if they exceeded the federal "action level" of 15 parts per billion for lead or 1,300 parts per billion for copper. If a system exceeded the action level for lead or copper—in more than 10 percent of the locations tested—the system was required to take corrective action and do further testing. Current testing requirements are based partly on the results of that initial round of testing, and the success of subsequent efforts to reduce risk of lead contamination in systems that have previously exceeded the action level.

Lead in drinking water is not an environmental contamination problem in the conventional sense. Water is almost never contaminated with lead at the source, or when it first enters the distribution system. However, water can absorb lead from plumbing components used in individual homes. Possible sources of lead in the system include lead pipe, lead plumbing solder and brass fixtures. Lead exposure is a potentially serious health concern, especially for young children. However, the water must usually be in contact with lead plumbing components for an extended period of time—usually by standing in the system overnight—before it can absorb potentially hazardous levels of lead. Consumers can usually protect themselves simply by turning on the faucet and letting the water run for 30 seconds—or until it runs cold—before using it for drinking or cooking.

While most people are subject to lead exposure from a number of possible sources—and drinking water typically accounts for a relatively small proportion of a person's total lead exposure—it is also one of the easiest sources of lead exposure to control and eliminate. Some Minnesota water supply systems are addressing the lead issue by treating their water, so it will be less likely to absorb lead from plumbing.

Assessing Vulnerability to Contamination

Monitoring requirements for individual water supply systems depend partly on how vulnerable the system is to contamination. MDH does vulnerability assessments of water supply systems, taking into account a number of factors. If the system uses groundwater, the way in which the wells are constructed can serve to increase or decrease the risk of contamination. In some systems, natural geologic barriers may serve to protect the source water from contamination. Systems with a past history of contamination problems may be at higher risk.

Compared to surface water systems, groundwater systems tend to be less vulnerable to certain types of contamination. Water tends to be naturally filtered as it moves downward through the earth, making its way from the surface to the underground aquifers tapped by water wells. That process tends to remove certain kinds of contaminants, including bacteria and parasites like *Cryptosporidium*. For that reason, many groundwater systems do not routinely include disinfection as part of their normal water treatment procedures.

Monitoring Test Results
for calendar year 2000

Pesticides and Industrial Contaminants

During 2000, MDH conducted 20,561 tests for pesticides and industrial contaminants in community water systems. No systems exceeded drinking water standards for these contaminants.

Bacterial Contamination

Twenty-four community systems—including 17 municipal systems—tested positive for bacterial contamination in 2000. All but 3 of the affected systems served fewer than 1,000 people.

The municipal systems that had confirmed coliform bacteria contamination in 2000 were Borup (population 91, Norman County), Browns Valley (pop. 758, Traverse County), Cold Spring (pop. 3,000, Stearns County), Ellsworth (pop. 561, Nobles County), Good Thunder (pop. 589, Blue Earth County), Hinckley (pop. 1,203, Pine County), LaPrairie (pop. 180, Itasca County), Marble (pop. 600, Itasca County), Minnesota Lake (pop. 676, Blue Earth County), Northome (pop. 312, Koochiching County), Parkers Prairie (pop. 956, Otter Tail County), Rockville (pop. 628, Stearns County), St. Joseph (pop. 4,406, Stearns County), St. Martin (pop. 317, Stearns County), Shafer (pop. 387, Chisago County), Stewart (pop. 566, McLeod County), and Trommald (pop. 99, Crow Wing County).

Standard procedures were followed in all of these cases. Systems were disinfected, flushed, and retested to ensure that any contamination problems had been eliminated. All of the residents served by the affected systems were also informed of the situation. In one case, a boil water notice was issued, advising residents to boil their water before using it for drinking or cooking.

Nitrate/Nitrite

Two municipal systems continued to exceed the nitrate standard in 2000. The affected systems are Edgerton (pop. 1,123, Pipestone County) and Lewiston (pop. 1,405, Winona County). Both systems had one well that produced a level of nitrate over the maximum contaminant level of 10 parts per million. Residents were notified to not give the water to infants who are six months or younger. Both cities are exploring options for reducing the nitrate levels under a compliance agreement with MDH.

No additional community water systems exceeded the nitrite standard in 2000; however, one municipal system is still dealing with a nitrite exceedance that was first detected in 1998. The system, Clara City (pop. 1,307, Chippewa County), is exploring options for reducing nitrite levels in its water and has advised its residents to not let infants consume the water until the problem can be corrected.

Radioactive Elements

Gross Alpha Emitters

Fifteen community water systems—including 10 municipal systems—were exceeding the standard for gross alpha emitters in 2000. The affected municipal systems are Butterfield (pop. 578, Watonwan County), Dennison (pop. 152, Goodhue County), Hinckley (pop. 1,203, Pine County), LaCrescent (pop. 4,733, Houston County), Lucan (pop. 262, Redwood County), Medford (pop. 800, Steele County), Norwood (pop. 1,219, Carver County), Red Wing (pop. 15,770, Goodhue County), Savage (pop. 14,502, Scott County), Watson (pop. 211, Chippewa County). No restrictions were placed on water consumption although residents were notified of the situation. Residents were told that this is not an emergency situation, advised to consult their doctors if they have any special concerns. The systems will study alternatives to correct the problem.

Radium 226 & 228

Fifteen community water systems—including 11 municipal systems—were exceeding the standard for radium 226 & 228 in 2000. The affected municipal systems are Arlington (population 1,897, Sibley County), Butterfield (pop. 578, Watonwan County), Goodview (pop. 3,000, Winona County), Harris (pop. 400, Chisago County), Hinckley (pop. 1,203, Pine County), LaCrescent (pop. 4,557, Houston County), Lucan (pop. 262, Redwood County), North Mankato (pop. 11,764, Nicollet County), Norwood (pop. 1,219, Carver County), Red Wing (pop. 15,770, Goodhue County), and Savage (pop. 14,502, Scott County). No restrictions were placed on water consumption although residents were notified of the situation. Residents were told that this is not an emergency situation and were advised to consult their doctors if they have any special concerns.

In 2000, the EPA formally reaffirmed a standard of 5 picoCuries/liter (pCi/l) for combined radium 226 and 228. MDH will work with the affected systems to study alternatives to correct the problem.

Lead and Copper

Minnesota's community water supplies are continuing with efforts, begun during the early part of the 1990s, to reduce lead and copper levels in their drinking water.

These systems started their lead/copper testing program in 1992 and 1993. The testing is done by taking first-draw water samples from a number of consumers' taps in the system. If more than 10 percent of the samples exceed the federal action level of 15 parts per billion (ppb) for lead or 1,300 ppb for copper, the entire system is considered to be "in exceedance." Communities that exceed the action level(s) are required to do additional testing, and take steps to reduce the absorption of lead/copper into the water from the water distribution system and/or household plumbing. Systems that exceeded the lead action level have also been required to perform an ongoing public-education program.

When these systems were first tested in the early 1990s, 87 exceeded the action level for lead, and 142 exceeded the action level for copper. Of the 87 systems with lead exceedances, 11 systems still exceed the action level and will be continuing their public education program until they comply with the action level for lead. Among the 142 systems with copper exceedances, 50 systems still exceed the action level, although the tap copper levels in these communities have already been significantly reduced.

Results of recent testing reveal the following:

Large Systems (serving 50,000 or more people). Over the past few years, the number of systems serving more than 50,000 people has increased from 5 in 1992 to the current number of 12. Initial testing revealed unacceptable lead level in two systems and three systems with unacceptable copper levels. All five systems have instituted corrosion control measures, which reduce the ability of water to absorb lead and copper from plumbing. Follow-up testing shows significant reduction in lead/copper levels for all five systems, and all are back in compliance. Two systems still exceed the copper action level and are required to maintained optimal corrosion control treatment specified by the state to ensure the copper levels at consumers' taps continues to be minimized.

Medium-Sized Systems (serving 3,300 to 50,000 people). When the state's 128 medium-sized systems were initially tested in 1992, 21 were found to exceed the action level for lead. Seventeen of these systems have retested and were found to be in compliance. The Minnesota Department of Health has required the other four systems to comply with some specific water quality parameter values relating to optimal corrosion control treatment, hoping to bring these systems into compliance through the effort of treatment optimization.

Of 26 systems that exceeded the action level for copper, 17 have successfully retested. The remaining nine systems have been specified with water quality parameter values to optimize the treatment to further lower the copper levels.

Smaller Systems (serving fewer than 3,300 people). Sixty-four of the state's 818 smaller systems exceeded the action level for lead when they were initially tested in 1993. All 64 systems have gone through many rounds of retesting with six systems still exceeding the action level for lead.

Of 113 systems that initially exceeded the action level for copper, all of them have completed follow-up testing with thirty-nine of them still exceeding the action level for copper.

The Minnesota Department of Health will complete the corrosion control treatment evaluations for the small systems in 2001, and it will specify specific water quality parameter values relating to corrosion control treatment to systems that are determined to have not optimized their corrosion control treatment, in hopes of bringing these systems into compliance through the effort of treatment optimization.

Other Inorganic Chemicals

No community water systems exceeded the standards for inorganic chemicals in 2000.

Emerging Issues

Youth Education Initiative

Drinking water may be our world's most important resource. Through recorded history, civilizations have risen and fallen depending on the availability of an adequate supply of water that is safe to drink. Water is just as important today as it was thousands of years ago. As we look at the problems—both health-related and economic—in many third-world nations, the lack of a safe supply of drinking water is often a major factor. Water's importance is not confined to Earth. Because water in liquid form is essential to all known forms of life, the search for the origins of life, and for life on other worlds, has centered largely around the search for water. Water was the first word learned by Helen Keller. It was the last word spoken by Ulysses Grant.

However, today, water is a resource that is often taken for granted. People turn on the tap while giving little thought to where their water comes from or what has been done to water to ensure its safety. While such an attitude may indicate that, overall, people have a high degree of confidence in the water supplied to them, the Minnesota Department of Health (MDH) believes that it is in everyone's best interest to have a greater awareness and understanding of drinking water. We think it is important for people to realize that safe drinking water does not happen by accident, that getting a reliable and safe supply of drinking water delivered to their taps is the result of a lot of effort on behalf of many people in the drinking water profession. Even more crucial is the understanding that all of us, not just those in the drinking water profession, play a key role in ensuring the safety of water in the future.

Over the last three years, the Minnesota Department of Health, in conjunction with the Education Committee of the Minnesota Section of American Water Works Association (Minnesota AWWA), has been actively involved in an initiative that may eventually mean that we will have an ongoing group of high school graduates in Minnesota who are well-versed on the subject of drinking water by virtue of having had this as a key part of their education at several different grade levels.

MDH and Minnesota AWWA will attempt to achieve this goal by conducting a series of Drinking Water Institutes for Minnesota teachers. Teachers will learn about drinking water and also have an opportunity to write curriculum for their class. The Institutes will be two or three days in addition to a follow-up session that will occurs a month or two after the Institute. At the follow-up session, teachers will present the curriculum they have written.

MDH and Minnesota AWWA will work with the Science Museum of Minnesota in conducting these Institutes, and teachers will receive college credit for attending them and writing curriculum on drinking water. Teachers will also have the opportunity to work with water professionals from their particular communities and to arrange a tour for their classes of their community's drinking water treatment facilities.

The Drinking Water Institutes will have two primary components—content and methods of instruction (pedagogy). Professionals from the water industry will present the content, covering topics such as sources of water, treatment, and distribution. The Science Museum of Minnesota will handle the pedagogical aspects of the Institutes, working with teachers on how to pass on the information to the students in an inquiry-based method. Focusing on instruction methods will greatly increase the chances that the content translates into curriculum that will end up in classrooms.

The first two Drinking Water Institutes have been scheduled for the summer of 2001. The first one—which will focus on treatment—will take place in Eden Prairie in late June. The other—which will cover groundwater—will occur in Monticello in August. The latter Institute will be conducted with the participation of the American Ground Water Trust. Both of these Institutes will be targeted toward middle-school teachers, although future Institutes will include teachers of other grade levels from kindergarten through 12th grade.

MDH and Minnesota AWWA will assess the feedback and results of these Institutes at the end of the summer and make a decision regarding how many Drinking Water Institutes to schedule for the summer of 2002.

Source Water Protection

Source water protection refers to three programs—wellhead protection, source water assessments, and surface water intake protection plans—underway at the Minnesota Department of Health that are directed toward protecting the quality of public drinking water. Much of this effort starts with requirements from the federal Safe Drinking Water Act that were refined to reflect the needs and concerns of Minnesotans.

Wellhead Protection—The goal of wellhead protection is to prevent contaminants from entering public water supply wells at levels that are harmful to people. For noncommunity transient systems (parks, restaurants, campgrounds, resorts, etc.), an inner wellhead protection zone is defined using a 200-foot radius around the well. This area is managed to protect well users from sources of disease-causing organisms and the direct release of other contaminants into the area immediately around the well. The state wellhead protection rule (Minnesota Rules Chapter 4720) requires that by June 2003, an inner wellhead management zone be established for all noncommunity transient wells and that potential contaminant sources be managed within it.

A capture zone or wellhead protection area is scientifically determined for wells serving community systems (municipalities, mobile home parks, subdivisions, etc.) and noncommunity nontransient systems (schools, factories, government buildings, etc.). Criteria for delineating a wellhead protection area are specified under the state wellhead protection rule. Community and noncommunity nontransient public water suppliers are required to develop and implement a plan for addressing potential contamination sources that are located within the wellhead protection area. The vulnerability of community and noncommunity nontransient wells has been determined by MDH and is being used to phase public water supply systems into the wellhead protection program. Staff in the Source Water Protection Unit assist public water suppliers with designating their wellhead protection areas and for preparing and implementing wellhead protection plans. MDH has set a goal to have all community and noncommunity nontransient water suppliers that use wells in the wellhead protection program by 2006.

Source Water Assessments—The 1996 amendments to the federal Safe Drinking Water Act require states to prepare an assessment for each public water supply system that contains 1) designation of the area that supplies water to the system; 2) the contaminants that are of concern to users of the system; and 3) the location of potential contaminant sources to the extent this is practical. The assessments must be completed by May 2003 and address all public water suppliers, including those that use surface water. The results of source water assessment must be made available to the public. Of the approximately 8,900 public water supply systems in Minnesota, 86 use surface water; the rest collectively use approximately 10,000 wells.

Surface Water Intake Protection Plans—This is the newest component of source water protection and is just beginning to take form. There are no state or federal rules requiring public water suppliers using surface water to develop and implement surface water intake protection plans. However, over concerns that they may not be able to treat all contaminants that could enter surface water, public water systems are expressing interest in developing such protection plans. MDH is working with public water suppliers, watershed groups, and others to determine what everyone's roles and responsibilities should be and to determine the process for having protection plans recognized by local, state, and federal governments. For example, MDH is working with the cities of Minneapolis, St. Cloud, and St. Paul to prepare source water protection plans for their surface water intakes.

Standard Review and Revisions

In the next few years, Minnesota water supplies will have to deal with a change in standard for arsenic and radionuclides, as well as an anticipated rule for radon.

Arsenic

A revision to the Arsenic Rule was finalized in January 2001 with the federal standard of 50 parts per billion (ppb) being lowered to 10 ppb. On March 22, 2001, new EPA Administrator Christie Whitman announced that the arsenic standard of 10 ppb would be withdrawn while EPA seeks an independent review of the science behind the standard as well as the estimates of costs to communities to comply with the stricter MCL of 10 ppb. EPA officials have stated that they intend for the new rule to be completed by February 2002 and that its provisions will become effective in 2006, the same year in which the MCL of 10 ppb was to have taken effect. If the MCL in the new rule were to be set at 10 ppb, as many as 80 community water supplies in Minnesota could be affected by it.

The reduction in the maximum contaminant level has been anticipated for several years. Water supplies in Minnesota that have measurable levels of arsenic in their water have been studying alternatives, preparing for the possibility of having to add treatment processes or replace existing wells to comply with the new, more stringent standard.

Arsenic occurs naturally in the environment and, as a component of underground rock and soil, can work its way into groundwater. Adverse health effects associated with long-term exposure to elevated levels include an increased risk of bladder and skin cancer, as well as problems associated with the circulatory system and the nervous system. Residents of community water systems can find out the arsenic levels, if any, in their drinking water by reading the Water Quality Report (sometimes referred to as the Consumer Confidence Report) that is issued each year by their water utility.

Radionuclides
A revision to the Radionuclides Rule was finalized in December 2000 with a federal standard of 5 picocuries per liter (pCi/L) for combined radium 226 and radium 228, 15 pCi/L for gross alpha emitters, and 45 pCi/L for uranium. The most significant revision affected the sampling point used for compliance. The former rule required samples to be taken from a representative point on the distribution system, while the revised rule requires samples to be taken from each entry point to the distribution system. It is anticipated that many supplies will be unable to meet the standard at these sampling points.

Several public water systems currently exceed the existing standard and, while anticipating the revised rule, have been working to meet the standard. These systems have been studying alternatives, including the addition of treatment or the replacement of existing wells to comply with the revised standard.

Radionuclides are naturally occurring contaminants that are found in groundwater throughout central and southern Minnesota. Long-term exposure to elevated levels of these contaminants may result in an increased risk of cancer.

Radon
The Radon Rule was proposed in November 1999 with a federal standard of 300 pCi/L and an alternative standard of 4,000 pCi/L being proposed. It is anticipated that the rule will be finalized this year. For those states that adopt a multi-media mitigation program—compels citizens, homeowners, schools, and communities to reduce radon exposure from indoor air—a standard of 4,000 pCi/L would apply. For those states that do not adopt the multi-media mitigation program, the 300 pCi/L standard would apply.

In anticipation of this rule, the Minnesota Department of Health has surveyed water systems and determined that approximately one-third of the community water systems may exceed the standard of 300 pCi/L, while approximately one percent may exceed the standard of 4,000 pCi/L.

Radon occurs naturally in both indoor air and ground water, as a decay product of uranium in the soil. Exposure to radon may occur from soil gases that enter the home or with the use of groundwater that releases radon into the air (showering, washing dishes, cooking, etc.) as well as ingestion of water containing radon. Exposure to radon in air is the second-leading cause of lung cancer in the United States.

Drinking Water Revolving Fund
The Drinking Water Revolving Fund (DWRF) provides a pro-active approach for financing improvements to public water systems. Federal grants and matching state money is lent to communities to bring systems into compliance with drinking water standards and to upgrade aging systems so they don't fall out of compliance. In some cases, below-market-rate loans allow communities to accomplish more than bare minimum improvements so they can achieve cost-effective, long-term solutions.

The DWRF, which came into existence in 1997, was patterned after the revolving fund loan program already in existence for wastewater projects. The first loan was made in the summer of 1998, and since then more than $100 million has been lent to 69 systems throughout the state for 97 different water system improvement projects. Money from loan repayments is used to finance new projects, which allows the fund to revolve in perpetuity.

Typical projects are new or rehabilitated wells, treatment plants, storage towers, and watermains. Examples of several projects include:

- A water treatment plant in Sauk Centre that features an outside sand infiltration basin for discharging backwash water.

- A new well and an aeration/filtration facility to remove iron in Comfrey. The new plant also provides phosphate treatment to help the city reduce lead and copper problems.

- An expansion of the water filtration plant in Dassel. New filters were installed into an addition to the plant while the old filter bay was converted into a detention tank.

- A treatment plant, wells, towers, and water mains for the formation of the Green Lake Water and Sewer District, which was created by the consolidation of water systems serving the cities of Spicer and New London as well as homes along the shoreline of Green Lake.

- A central treatment plant in Litchfield that replaces four small, aging treatment facilities that had been scattered throughout town.

Often the Drinking Water Revolving Fund allows water systems to make upgrades to their treatment facilities that are necessary as a result of revisions to existing federal standards. An example of this pertains to the recent revision to the Radionuclide Rule (noted in the section preceding this one). Sixteen Minnesota systems have water that will not meet the new standards set under the revised rules. Additional state sampling is expected to reveal up to twice as many additional systems that likewise will not be in compliance. Federal drinking water standards are also expected to change for arsenic. As many as 80 systems in Minnesota may find themselves unable to meet the new standard set for arsenic without expensive improvements to their facilities.

The solutions for allowing these systems to stay in compliance with the revised rules will vary on a community-by-community basis. New wells and treatment systems may be necessary. Regardless of the response that a water system chooses, however, DWRF loans will help these communities make these capital improvements possible.

Conclusion

Monitoring test results for 2000 tend to reinforce the conclusions of previous years: The quality of Minnesota's drinking water is very high. Even as our monitoring activities have expanded, we have rarely found any detectable contamination. Contaminant levels that exceed applicable health standards have been rarer still. Although we need to remain vigilant, Minnesotans can continue to have confidence in their drinking water.

MDH remains committed to protecting the high quality of our drinking water. The safety of our drinking water should never be taken for granted—but Minnesotans can be assured that their local water supply system is making every effort to ensure that their water is safe. And they can also be assured that the Minnesota Department of Health—and the broader public health community—are working to ensure that their confidence is well placed.

Appendix

Summary of Safe Drinking Water Monitoring Results for Minnesota

Includes Results for Both Community and Non-Community
Public Water Supply Systems in Minnesota for 2000

The following is a summary of drinking water monitoring test results for all public water supply systems in Minnesota for calendar year 2000. Public water supply systems include all systems that serve 25 or more people on a regular basis, or that have 15 or more service connections. There are approximately 8,300 such systems in Minnesota, including:

- *955* **community** *systems, which provide water to consumers in their places of residence, including 710* **municipal** *systems.*

- *approximately 7,300* **noncommunity** *systems, which provide drinking water in settings like factories, schools, restaurants, and highway rest stops.*

Minnesota issued the following violations in calendar year 2000; in some cases, the violations were issued to water systems that were already in exceedance of the particular standard:

- 8 noncommunity systems with a violation of the maximum contaminant level (MCL) for nitrate.

- 1 community system with a violation of the MCL for nitrite.

- 24 community systems with a violation of the MCL for total coliform.

- 245 noncommunity systems with a violation of the MCL for total coliform.

- 3 community systems with a violation of the MCL for combined radium.

- 5 community systems with a violation of the MCL for gross alpha emitters.

- 1 noncommunity system with a treatment technique violation for the Surface Water Treatment Rule.

- 11 community systems with a violation of the Consumer Confidence Rule.

A report which lists all violations of the Safe Drinking Water Act in Minnesota for calendar year 2000 is available from the Drinking Water Protection Section, Minnesota Department of Health, Box 64975, St. Paul, MN 55164-0975.

Individual water systems produce an annual report listing contaminants that were detected, even in trace amounts, during the previous calendar year. Please contact the individual water system if you would like a copy of this report.

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MDH
DEPARTMENT OF HEALTH

Protecting, maintaining and improving the health of all Minnesotans

May 10, 2001

RECEIVED
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Bd. of Water & Soil Resources
St. Paul

Mr. Ron Harnack
Board of Water & Soil Resources
One Water Street
St. Paul, Minnesota 55107

Dear Mr. Harnack:

We are pleased to provide you with a copy of our Drinking Water Annual Report for 2000. We have been issuing this report each year since 1995 to provide Minnesotans with basic information about the world's most important resource—drinking water.

This year's Minnesota report once again indicates that, in general, public drinking water supplies in the state are in good shape, although there were some contamination violations. Over 20,000 separate tests, for up to 118 different pesticides and industrial contaminants, were conducted on water samples from more than 950 community water systems in the state in 2000. Of those 20,000 tests, only 116 found detectable levels of contamination, even in trace amounts and none exceeded the federal standards for these contaminants.

Twenty-four community water systems had tested positive for bacterial contamination during the year. All of the affected systems were disinfected, flushed, and retested to ensure that any contamination problems had been eliminated.

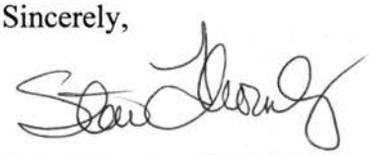
The results of the testing are extremely encouraging although not unusual in the context of our state's experiences in complying with the Safe Drinking Water Act.

Besides the results of monitoring done in 2000, the report contains information on a variety of topics in the "Emerging Issues" section, including an exciting project we are involved in to get curriculum on drinking water into Minnesota schools.

In addition to the copy we are providing you, the report is available on the world wide web at:
http://www.health.state.mn.us/divs/eh/dwp/pws/dwpreport00.html

Past reports (back to 1995) are available at:
http://www.health.state.mn.us/divs/eh/consinfo.html#Drinking

Sincerely,



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ST:jlb
Enclosure

A report from the Minnesota Department of Health

Safe Drinking Water for the Next Generation:

Ensuring Our Future

A summary of

Drinking Water Protection Activities

in Minnesota for 2000

Issued May 2001
Minnesota Department of Health
Division of Environmental Health

MINNESOTA MDH DEPARTMENT OF HEALTH

Safe Drinking for the Next Generation:
Ensuring Our Future

A Summary of Drinking Water Protection Activities in Minnesota for 2000

Issued May 2001

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This report is available on the World Wide Web at
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Introduction

Ensuring the safety of our drinking water is one of the most fundamental—and most critical—responsibilities of modern public health. In fact, safe drinking water has been a key ingredient in some of the greatest public health achievements of the last half-century, including the dramatic reductions in disease and improvements in longevity that we now tend to take for granted. Along with other basic public health measures like immunization, drinking water protection has played a crucial role in building a safer and healthier society.

We need to remain vigilant if we are to protect those past gains. The Minnesota Department of Health (MDH) is strongly committed to safeguarding the quality of our drinking water, and as part of that commitment, we routinely monitor all of our state's public water supply systems for a broad range of chemical, radiological, and biological contaminants.

MDH believes that educating the public about water quality issues is an important element of drinking water protection. Since 1995, we have been releasing annual summary reports like this one to help us achieve that goal. Like previous reports in the series, this year's report covers test results and actions taken during the preceding calendar year.

The main body of the report provides information about Minnesota's community water supply systems—that is, systems that provide people with drinking water in their places of residence. The section on Emerging Issues contains a number of topics that relate to the future, including an update on Source Water Protection activities, a key component in the mission to keep our water safe to drink. Standards set for drinking water are done with a strong margin of safety built in and are constantly being reviewed, a process that sometimes results in the revisions of certain standards. This section addresses a few of the standards that have been undergoing such revisions. These changes can sometimes pose financial challenges for public water suppliers. The Drinking Water Revolving Fund (DWRF) helps water systems to upgrade their facilities to meet stricter standards or to replace aging infrastructure to ensure continued compliance with existing standards. A summary of recent DWRF activities is addressed in this section.

Protecting our drinking water requires the involvement and awareness of everyone, not just those employed in the drinking water profession. To promote greater awareness and education, the Minnesota Department of Health has been involved in an educational initiative to get curriculum on drinking water into Minnesota classrooms through the establishment of Drinking Water Institutes for teachers. Information on these Institutes is in the Emerging Issues section beginning on page 12.

We hope this information will provide the people of Minnesota with a clearer picture of what's being done to protect the quality of their drinking water, and what our monitoring efforts have revealed about the success of those efforts. We believe that the picture is a positive one, and we hope this report will build Minnesotans' confidence in the both the safety and the quality of their drinking water.

Executive Summary

The Minnesota Department of Health (MDH) is responsible for enforcing the federal Safe Drinking Water Act—and safeguarding the quality of drinking water—in our state. That includes responsibility for regulating approximately 8,300 *public water supply systems* statewide. This figure includes 955 *community* systems, which provide drinking water to people in their places of residence. These community systems include 710 *municipal* systems, serving towns or cities.

The Major Elements of Drinking Water Protection

Minnesota's drinking water protection strategy includes three major elements:

- ***Prevention*** measures are used to protect the quality of drinking water at the source—by controlling potential sources of pollution, regulating land use, and reviewing plans and providing advice on construction of water treatment and distribution facilities, and inspecting these facilities on a regular basis.

- ***Treatment*** measures—including routine disinfection—are used to make the water palatable and safe to drink.

- ***Monitoring*** of water supplies for potentially harmful contaminants—on a routine basis—is the critical element of the state's enforcement responsibilities under the Safe Drinking Water Act.

The Monitoring Process

Minnesota's community water supply systems are monitored for the following types of *contaminants:*

- **Pesticides and industrial contaminants.** Each system may be tested regularly for for more than 100 pesticides and industrial contaminants—including both synthetic organic chemicals (SOCs) and volatile organic chemicals (VOCs). The list of chemicals to be tested for—and the testing schedule—may vary from one system to another. Testing requirements depend on factors such as whether a particular chemical is likely to be present in the local environment—and how vulnerable the system is to contamination. If a system exceeds the applicable federal or state drinking water standard for a particular chemical, it must notify the people who use the water and take appropriate steps to correct the problem.

- **Bacterial contamination.** Larger community systems are tested monthly—and smaller systems are tested quarterly—for contamination by *coliform bacteria.* The coliform test is used as a general indicator of water quality in the system, in terms of potential microbial contamination.

  Standard procedures are followed whenever potential bacterial contamination is detected. Systems are disinfected, flushed, and retested to ensure that any contamination problems are eliminated. All of the residents served by the system are also informed of the situation. In some cases, boil water notices are issued, advising residents to boil their water before using it for drinking or cooking.

- **Nitrate.** Each system must be tested annually for nitrate. Nitrate occurs naturally in the environment, but elevated nitrate levels in drinking water are usually associated with the use of fertilizer, or the breakdown of human and animal waste. It is a health concern primarily for infants under the age of six months. If the federal standard for nitrate is exceeded, an advisory is issued regarding consumption of the water by infants. The advisory remains in effect until steps can be taken to correct the nitrate problem.

- **Inorganic Chemicals and Radioactive Elements.** Each system is typically tested once every three years—or as often as once a year, in some cases—for a list of 13 additional inorganic chemicals, and a number of radioactive elements. Both inorganic chemicals and radioactive elements may be naturally present in the water. If the water exceeds health standards for either type of contaminant, people who use the water are informed, and steps are taken to correct the problem.

- **Lead and Copper.** For the last several years, community water supply systems have participated in efforts to reduce lead and copper contamination in drinking water. Lead and copper are not typically present in the water when it leaves the treatment plant. Lead and copper differ from other contaminants in that they are rarely present in source waters. Rather, they enter the water through contact with plumbing components, usually in individual homes. If more than 10 percent of the homes in a community exceed the federal "action level" for lead or copper based on the results of community-wide monitoring—the local water supply system must do additional testing and take steps to reduce levels. Systems that exceed the action level for lead must also perform a regular program of public education.

Note: Any time a drinking water standard is violated, the affected water system must take correction actions that include notifying its residents of the violation. In addition to this type of notification, all community water systems issue an annual **Water Quality Report** (sometime referred to as a **Consumer Confidence Report**) that lists the source of the system's drinking water as well as a list of all regulated contaminants that were *detected,* even in trace amounts well below the legal standard, during the previous calendar year.

A Current Profile of

Minnesota's Drinking Water Protection Program

Since 1974, the U.S. Environmental Protection Agency has been responsible for regulating the nation's public water supply systems, under the provisions of the federal Safe Drinking Water Act. However, almost all states—including Minnesota—have now assumed responsibility for enforcing the act within their own borders. Minnesota became one of the first states to achieve *primacy*—and begin regulating public water supply systems at the state level—in 1977.

The definition of "public water supply system," for purposes of the Safe Drinking Water Act, is a broad one. To be considered "public," a water supply system must have its own water source and provide water to 25 or more people or have 15 or more service connections.

Minnesota currently has 8,300 public water supply systems—more than all but six other states. Of those systems, 955 are *community* systems—that is, systems which provided water to people in their homes or places of residence. Most of these community systems use *groundwater* from underground sources, tapped by water wells, as their source of water. However, 23 of these systems—including the municipal systems that serve the state's largest cities—use *surface water,* drawn from lakes or rivers.

Only 710 of the state's community systems are municipal systems, serving towns or cities. The rest of the community systems provide water to people in a variety of residential locations, including manufactured home parks, apartment buildings, housing subdivisions, colleges, hospitals and correctional facilities.

The remainder of the state's public water supply systems are *noncommunity* systems. Some of these noncommunity systems provide water to an ever-changing "transient" population, at places such as restaurants, resorts, and highway rest stops. Other noncommunity systems may provide water to relatively stable population groups, in non-residential locations such as schools, places of employment, and day-care facilities.

The Major Elements of Drinking Water Protection

Three basic strategies are used to safeguard the quality of our drinking water:

- **Prevention.** Preventing contamination of the source water used by public water supply systems—lakes, rivers and water wells—is an important component of drinking water protection. This aspect of drinking water protection includes measures like regulating land use, regulating the construction of water treatment facilities, and controlling potential sources of pollution.

- **Treatment.** Most community water supply systems use some form of treatment, so the water will be palatable and safe to drink. Many systems—but not all—require routine disinfection as a safeguard against potential problems with bacterial contamination. Groundwater systems are less likely to require disinfection, because contaminants tend to be filtered out of the water as it moves downward through the earth, from the surface to the underground sources tapped by water wells.

- **Monitoring.** Monitoring is the critical element of compliance activities under the Safe Drinking Water Act (SDWA). Under provisions of the act, public water supply systems are required to sample treated—or "finished"—water on a regular basis, and submit the samples to MDH. The samples are tested for a broad range of potential contaminants. If unacceptable levels of contaminants are found, the water supply owner or operator is legally responsible for informing the people who use the water, and taking steps to eliminate potential health hazards.

  Under the provisions of the SDWA, the individual water supply system is responsible for taking water samples and submitting them to MDH for testing. To lessen the burden on water supply operators, most of the required samples are collected by field staff from MDH. Minnesota's water supply operators have one of the best records in the nation regarding compliance with these sampling and testing requirements.

Note: *The monitoring requirements and test results described in this report apply primarily to community water supply systems.*

Monitoring: What We Test For—and Why

Minnesota's community water supplies are tested for a number of different types of contaminants. The reasons for testing—and how often the testing is done—depends on the type of contaminant and other factors. The type of contaminant also determines what actions will be taken, if unacceptable levels are found in the water.

The major types of contaminants we test for include:

Pesticides and Industrial Contaminants. Minnesota's community water supply systems are routinely tested for more than 100 different pesticides and industrial contaminants—including synthetic organic compounds (SOCs) and volatile organic compounds (VOCs). Systems may be tested anywhere from four times a year to once every six years, depending on the specific chemical and the vulnerability of the system to contamination (see ***Assessing Vulnerability to Contamination,*** on page 8). Some systems may not need to do any testing for a particular contaminant. A formal *use waiver* is sometimes granted, specifically exempting a water supply system from testing for a particular contaminant, if that chemical or pesticide is not commonly used in the immediate area.

The U.S. Environmental Protection Agency (EPA) has developed legal standards known as *maximum contaminant levels (or **MCLs**)* for 60 of the more than 100 chemicals on the list. *Advisory* standards have been developed for the other 58 chemicals on the list, and those are used in the same way as the MCLs in assessing test results.

Any time a community water supply exceeds the applicable standard for one of these contaminants, the water supply operator must immediately take steps to notify the people who use the water—with the assistance of MDH. Appropriate steps are then taken to reduce the contamination to acceptable levels.

In some cases, the MCL or advisory standard is calculated to prevent immediate or short term health effects. More often, however, these standards are designed to reduce the long-term risk of developing cancer or other chronic health conditions. They are calculated very conservatively. If the concern is long-term health effects, the standards are calculated to keep the risk of illness at levels most people would regard as negligible—even if they drink the water every day, over an entire 70-year lifetime.

Bacterial Contamination. Community water supply systems serving more than 1,000 people are tested one or more times per month for *coliform bacteria.* Smaller systems are tested four times a year. The coliform test is used as a general indicator of water quality in the system, in terms of potential microbial contamination. If the coliform test is negative, it is an indication that the system is adequately protected against contamination from other types of disease-causing organisms. However, if any detectable amount of coliform is found in the water, it is assumed that the system may be compromised, and steps are taken to protect the people who use the water. Standard procedures are followed whenever potential bacterial contamination is detected. Systems are disinfected, flushed, and retested to ensure than any contamination problems are eliminated. All of the residents served by the system are informed of the situation. In some cases, boil water notices are issued, advising residents to boil their water before using it for drinking or cooking.

Bacterial contamination problems are most commonly found in smaller water supply systems. Most of these smaller systems use groundwater, and many do not routinely disinfect the water as part of the treatment process.

Nitrate/Nitrite. Community water supply systems in Minnesota are tested once a year for *nitrate*—a chemical which may occur naturally in the environment, but can also enter the water from sources like fertilizer run-off, decaying plant and animal wastes, or sewage. Nitrate is a health *concern primarily for infants under the age of six months.* The infant's digestive system can convert the nitrate to *nitrite,* which can interfere with the ability of the infant's blood to carry oxygen. The result is a serious illness know as *methemoglobinemia,* or "blue baby syndrome." Methemoglobinemia can be fatal if nitrate levels in the water are high enough, and the illness isn't treated properly.

The current standard (MCL) for nitrate in drinking water is 10 parts per million (ppm). If a water supply system exceeds the standard, the people who use the water are notified and advised not to use the water for mixing infant formula, or other uses that might result in consumption of the water by infants under six months. The advisory is kept in place until steps can be taken to reduce nitrate levels in the water. Possible remedial measures include treating the water to remove the nitrate, or drilling a new water well.

Older children and adults are generally not at risk from drinking nitrate-contaminated water. In fact, the average adult consumes about 20-25 milligrams per day in food—primarily from vegetables. Because of changes that occur after six months of age, the digestive tract no longer converts nitrate into nitrite. However, some adults—including people with low stomach acidity and people with certain blood disorders—may still be at risk for nitrate induced methemoglobinemia.

Inorganic Chemicals. Community water systems in Minnesota are also tested for a list of 13 *other inorganic chemicals,* in addition to nitrate. The testing is usually done once every three years, but may be done as often as once a year, or as seldom as once every nine years. The list includes *antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sulfate,* and *thallium.* In some cases, these chemicals may be naturally present in the groundwater. If a water supply system were to exceed the federal MCL for one of these chemicals, the people who use the water would be notified, and appropriate steps would be taken to reduce levels of these chemicals in the water.

Radioactive Elements. Community water systems in Minnesota are also usually tested once every three years—or as often as once a year, in some cases—for a list of *radioactive elements.* These radioactive elements—*or radiochemicals*—may be present in the water from natural sources. If a system were to exceed the federal MCL for one of these radioactive elements, the people who use the water would be notified, and steps would be taken to correct the problem.

Lead and Copper. Some public water supply systems in Minnesota are required to test their water, on a regular basis, for lead and copper. All public systems in the state took part in an initial round of lead and copper testing that ended in 1994. The water was tested in a number of homes within each system, to determine if they exceeded the federal "action level" of 15 parts per billion for lead or 1,300 parts per billion for copper. If a system exceeded the action level for lead or copper—in more than 10 percent of the locations tested—the system was required to take corrective action and do further testing. Current testing requirements are based partly on the results of that initial round of testing, and the success of subsequent efforts to reduce risk of lead contamination in systems that have previously exceeded the action level.

Lead in drinking water is not an environmental contamination problem in the conventional sense. Water is almost never contaminated with lead at the source, or when it first enters the distribution system. However, water can absorb lead from plumbing components used in individual homes. Possible sources of lead in the system include lead pipe, lead plumbing solder and brass fixtures. Lead exposure is a potentially serious health concern, especially for young children. However, the water must usually be in contact with lead plumbing components for an extended period of time—usually by standing in the system overnight—before it can absorb potentially hazardous levels of lead. Consumers can usually protect themselves simply by turning on the faucet and letting the water run for 30 seconds—or until it runs cold—before using it for drinking or cooking.

While most people are subject to lead exposure from a number of possible sources—and drinking water typically accounts for a relatively small proportion of a person's total lead exposure—it is also one of the easiest sources of lead exposure to control and eliminate. Some Minnesota water supply systems are addressing the lead issue by treating their water, so it will be less likely to absorb lead from plumbing.

Assessing Vulnerability to Contamination

Monitoring requirements for individual water supply systems depend partly on how vulnerable the system is to contamination. MDH does vulnerability assessments of water supply systems, taking into account a number of factors. If the system uses groundwater, the way in which the wells are constructed can serve to increase or decrease the risk of contamination. In some systems, natural geologic barriers may serve to protect the source water from contamination. Systems with a past history of contamination problems may be at higher risk.

Compared to surface water systems, groundwater systems tend to be less vulnerable to certain types of contamination. Water tends to be naturally filtered as it moves downward through the earth, making its way from the surface to the underground aquifers tapped by water wells. That process tends to remove certain kinds of contaminants, including bacteria and parasites like *Cryptosporidium*. For that reason, many groundwater systems do not routinely include disinfection as part of their normal water treatment procedures.

Monitoring Test Results
for calendar year 2000

Pesticides and Industrial Contaminants

During 2000, MDH conducted 20,561 tests for pesticides and industrial contaminants in community water systems. No systems exceeded drinking water standards for these contaminants.

Bacterial Contamination

Twenty-four community systems—including 17 municipal systems—tested positive for bacterial contamination in 2000. All but 3 of the affected systems served fewer than 1,000 people.

The municipal systems that had confirmed coliform bacteria contamination in 2000 were Borup (population 91, Norman County), Browns Valley (pop. 758, Traverse County), Cold Spring (pop. 3,000, Stearns County), Ellsworth (pop. 561, Nobles County), Good Thunder (pop. 589, Blue Earth County), Hinckley (pop. 1,203, Pine County), LaPrairie (pop. 180, Itasca County), Marble (pop. 600, Itasca County), Minnesota Lake (pop. 676, Blue Earth County), Northome (pop. 312, Koochiching County), Parkers Prairie (pop. 956, Otter Tail County), Rockville (pop. 628, Stearns County), St. Joseph (pop. 4,406, Stearns County), St. Martin (pop. 317, Stearns County), Shafer (pop. 387, Chisago County), Stewart (pop. 566, McLeod County), and Trommald (pop. 99, Crow Wing County).

Standard procedures were followed in all of these cases. Systems were disinfected, flushed, and retested to ensure that any contamination problems had been eliminated. All of the residents served by the affected systems were also informed of the situation. In one case, a boil water notice was issued, advising residents to boil their water before using it for drinking or cooking.

Nitrate/Nitrite

Two municipal systems continued to exceed the nitrate standard in 2000. The affected systems are Edgerton (pop. 1,123, Pipestone County) and Lewiston (pop. 1,405, Winona County). Both systems had one well that produced a level of nitrate over the maximum contaminant level of 10 parts per million. Residents were notified to not give the water to infants who are six months or younger. Both cities are exploring options for reducing the nitrate levels under a compliance agreement with MDH.

No additional community water systems exceeded the nitrite standard in 2000; however, one municipal system is still dealing with a nitrite exceedance that was first detected in 1998. The system, Clara City (pop. 1,307, Chippewa County), is exploring options for reducing nitrite levels in its water and has advised its residents to not let infants consume the water until the problem can be corrected.

Radioactive Elements

Gross Alpha Emitters

Fifteen community water systems—including 10 municipal systems—were exceeding the standard for gross alpha emitters in 2000. The affected municipal systems are Butterfield (pop. 578, Watonwan County), Dennison (pop. 152, Goodhue County), Hinckley (pop. 1,203, Pine County), LaCrescent (pop. 4,733, Houston County), Lucan (pop. 262, Redwood County), Medford (pop. 800, Steele County), Norwood (pop. 1,219, Carver County), Red Wing (pop. 15,770, Goodhue County), Savage (pop. 14,502, Scott County), Watson (pop. 211, Chippewa County). No restrictions were placed on water consumption although residents were notified of the situation. Residents were told that this is not an emergency situation, advised to consult their doctors if they have any special concerns. The systems will study alternatives to correct the problem.

Radium 226 & 228

Fifteen community water systems—including 11 municipal systems—were exceeding the standard for radium 226 & 228 in 2000. The affected municipal systems are Arlington (population 1,897, Sibley County), Butterfield (pop. 578, Watonwan County), Goodview (pop. 3,000, Winona County), Harris (pop. 400, Chisago County), Hinckley (pop. 1,203, Pine County), LaCrescent (pop. 4,557, Houston County), Lucan (pop. 262, Redwood County), North Mankato (pop. 11,764, Nicollet County), Norwood (pop. 1,219, Carver County), Red Wing (pop. 15,770, Goodhue County), and Savage (pop. 14,502, Scott County). No restrictions were placed on water consumption although residents were notified of the situation. Residents were told that this is not an emergency situation and were advised to consult their doctors if they have any special concerns.

In 2000, the EPA formally reaffirmed a standard of 5 picoCuries/liter (pCi/l) for combined radium 226 and 228. MDH will work with the affected systems to study alternatives to correct the problem.

Lead and Copper

Minnesota's community water supplies are continuing with efforts, begun during the early part of the 1990s, to reduce lead and copper levels in their drinking water.

These systems started their lead/copper testing program in 1992 and 1993. The testing is done by taking first-draw water samples from a number of consumers' taps in the system. If more than 10 percent of the samples exceed the federal action level of 15 parts per billion (ppb) for lead or 1,300 ppb for copper, the entire system is considered to be "in exceedance." Communities that exceed the action level(s) are required to do additional testing, and take steps to reduce the absorption of lead/copper into the water from the water distribution system and/or household plumbing. Systems that exceeded the lead action level have also been required to perform an ongoing public-education program.

When these systems were first tested in the early 1990s, 87 exceeded the action level for lead, and 142 exceeded the action level for copper. Of the 87 systems with lead exceedances, 11 systems still exceed the action level and will be continuing their public education program until they comply with the action level for lead. Among the 142 systems with copper exceedances, 50 systems still exceed the action level, although the tap copper levels in these communities have already been significantly reduced.

Results of recent testing reveal the following:

Large Systems (serving 50,000 or more people). Over the past few years, the number of systems serving more than 50,000 people has increased from 5 in 1992 to the current number of 12. Initial testing revealed unacceptable lead level in two systems and three systems with unacceptable copper levels. All five systems have instituted corrosion control measures, which reduce the ability of water to absorb lead and copper from plumbing. Follow-up testing shows significant reduction in lead/copper levels for all five systems, and all are back in compliance. Two systems still exceed the copper action level and are required to maintained optimal corrosion control treatment specified by the state to ensure the copper levels at consumers' taps continues to be minimized.

Medium-Sized Systems (serving 3,300 to 50,000 people). When the state's 128 medium-sized systems were initially tested in 1992, 21 were found to exceed the action level for lead. Seventeen of these systems have retested and were found to be in compliance. The Minnesota Department of Health has required the other four systems to comply with some specific water quality parameter values relating to optimal corrosion control treatment, hoping to bring these systems into compliance through the effort of treatment optimization.

Of 26 systems that exceeded the action level for copper, 17 have successfully retested. The remaining nine systems have been specified with water quality parameter values to optimize the treatment to further lower the copper levels.

Smaller Systems (serving fewer than 3,300 people). Sixty-four of the state's 818 smaller systems exceeded the action level for lead when they were initially tested in 1993. All 64 systems have gone through many rounds of retesting with six systems still exceeding the action level for lead.

Of 113 systems that initially exceeded the action level for copper, all of them have completed follow-up testing with thirty-nine of them still exceeding the action level for copper.

The Minnesota Department of Health will complete the corrosion control treatment evaluations for the small systems in 2001, and it will specify specific water quality parameter values relating to corrosion control treatment to systems that are determined to have not optimized their corrosion control treatment, in hopes of bringing these systems into compliance through the effort of treatment optimization.

Other Inorganic Chemicals

No community water systems exceeded the standards for inorganic chemicals in 2000.

Emerging Issues

Youth Education Initiative

Drinking water may be our world's most important resource. Through recorded history, civilizations have risen and fallen depending on the availability of an adequate supply of water that is safe to drink. Water is just as important today as it was thousands of years ago. As we look at the problems—both health-related and economic—in many third-world nations, the lack of a safe supply of drinking water is often a major factor. Water's importance is not confined to Earth. Because water in liquid form is essential to all known forms of life, the search for the origins of life, and for life on other worlds, has centered largely around the search for water. Water was the first word learned by Helen Keller. It was the last word spoken by Ulysses Grant.

However, today, water is a resource that is often taken for granted. People turn on the tap while giving little thought to where their water comes from or what has been done to water to ensure its safety. While such an attitude may indicate that, overall, people have a high degree of confidence in the water supplied to them, the Minnesota Department of Health (MDH) believes that it is in everyone's best interest to have a greater awareness and understanding of drinking water. We think it is important for people to realize that safe drinking water does not happen by accident, that getting a reliable and safe supply of drinking water delivered to their taps is the result of a lot of effort on behalf of many people in the drinking water profession. Even more crucial is the understanding that all of us, not just those in the drinking water profession, play a key role in ensuring the safety of water in the future.

Over the last three years, the Minnesota Department of Health, in conjunction with the Education Committee of the Minnesota Section of American Water Works Association (Minnesota AWWA), has been actively involved in an initiative that may eventually mean that we will have an ongoing group of high school graduates in Minnesota who are well-versed on the subject of drinking water by virtue of having had this as a key part of their education at several different grade levels.

MDH and Minnesota AWWA will attempt to achieve this goal by conducting a series of Drinking Water Institutes for Minnesota teachers. Teachers will learn about drinking water and also have an opportunity to write curriculum for their class. The Institutes will be two or three days in addition to a follow-up session that will occurs a month or two after the Institute. At the follow-up session, teachers will present the curriculum they have written.

MDH and Minnesota AWWA will work with the Science Museum of Minnesota in conducting these Institutes, and teachers will receive college credit for attending them and writing curriculum on drinking water. Teachers will also have the opportunity to work with water professionals from their particular communities and to arrange a tour for their classes of their community's drinking water treatment facilities.

The Drinking Water Institutes will have two primary components—content and methods of instruction (pedagogy). Professionals from the water industry will present the content, covering topics such as sources of water, treatment, and distribution. The Science Museum of Minnesota will handle the pedagogical aspects of the Institutes, working with teachers on how to pass on the information to the students in an inquiry-based method. Focusing on instruction methods will greatly increase the chances that the content translates into curriculum that will end up in classrooms.

The first two Drinking Water Institutes have been scheduled for the summer of 2001. The first one—which will focus on treatment—will take place in Eden Prairie in late June. The other—which will cover groundwater—will occur in Monticello in August. The latter Institute will be conducted with the participation of the American Ground Water Trust. Both of these Institutes will be targeted toward middle-school teachers, although future Institutes will include teachers of other grade levels from kindergarten through 12th grade.

MDH and Minnesota AWWA will assess the feedback and results of these Institutes at the end of the summer and make a decision regarding how many Drinking Water Institutes to schedule for the summer of 2002.

Source Water Protection

Source water protection refers to three programs—wellhead protection, source water assessments, and surface water intake protection plans—underway at the Minnesota Department of Health that are directed toward protecting the quality of public drinking water. Much of this effort starts with requirements from the federal Safe Drinking Water Act that were refined to reflect the needs and concerns of Minnesotans.

Wellhead Protection—The goal of wellhead protection is to prevent contaminants from entering public water supply wells at levels that are harmful to people. For noncommunity transient systems (parks, restaurants, campgrounds, resorts, etc.), an inner wellhead protection zone is defined using a 200-foot radius around the well. This area is managed to protect well users from sources of disease-causing organisms and the direct release of other contaminants into the area immediately around the well. The state wellhead protection rule (Minnesota Rules Chapter 4720) requires that by June 2003, an inner wellhead management zone be established for all noncommunity transient wells and that potential contaminant sources be managed within it.

A capture zone or wellhead protection area is scientifically determined for wells serving community systems (municipalities, mobile home parks, subdivisions, etc.) and noncommunity nontransient systems (schools, factories, government buildings, etc.). Criteria for delineating a wellhead protection area are specified under the state wellhead protection rule. Community and noncommunity nontransient public water suppliers are required to develop and implement a plan for addressing potential contamination sources that are located within the wellhead protection area. The vulnerability of community and noncommunity nontransient wells has been determined by MDH and is being used to phase public water supply systems into the wellhead protection program. Staff in the Source Water Protection Unit assist public water suppliers with designating their wellhead protection areas and for preparing and implementing wellhead protection plans. MDH has set a goal to have all community and noncommunity nontransient water suppliers that use wells in the wellhead protection program by 2006.

Source Water Assessments—The 1996 amendments to the federal Safe Drinking Water Act require states to prepare an assessment for each public water supply system that contains 1) designation of the area that supplies water to the system; 2) the contaminants that are of concern to users of the system; and 3) the location of potential contaminant sources to the extent this is practical. The assessments must be completed by May 2003 and address all public water suppliers, including those that use surface water. The results of source water assessment must be made available to the public. Of the approximately 8,900 public water supply systems in Minnesota, 86 use surface water; the rest collectively use approximately 10,000 wells.

Surface Water Intake Protection Plans—This is the newest component of source water protection and is just beginning to take form. There are no state or federal rules requiring public water suppliers using surface water to develop and implement surface water intake protection plans. However, over concerns that they may not be able to treat all contaminants that could enter surface water, public water systems are expressing interest in developing such protection plans. MDH is working with public water suppliers, watershed groups, and others to determine what everyone's roles and responsibilities should be and to determine the process for having protection plans recognized by local, state, and federal governments. For example, MDH is working with the cities of Minneapolis, St. Cloud, and St. Paul to prepare source water protection plans for their surface water intakes.

Standard Review and Revisions

In the next few years, Minnesota water supplies will have to deal with a change in standard for arsenic and radionuclides, as well as an anticipated rule for radon.

Arsenic

A revision to the Arsenic Rule was finalized in January 2001 with the federal standard of 50 parts per billion (ppb) being lowered to 10 ppb. On March 22, 2001, new EPA Administrator Christie Whitman announced that the arsenic standard of 10 ppb would be withdrawn while EPA seeks an independent review of the science behind the standard as well as the estimates of costs to communities to comply with the stricter MCL of 10 ppb. EPA officials have stated that they intend for the new rule to be completed by February 2002 and that its provisions will become effective in 2006, the same year in which the MCL of 10 ppb was to have taken effect. If the MCL in the new rule were to be set at 10 ppb, as many as 80 community water supplies in Minnesota could be affected by it.

The reduction in the maximum contaminant level has been anticipated for several years. Water supplies in Minnesota that have measurable levels of arsenic in their water have been studying alternatives, preparing for the possibility of having to add treatment processes or replace existing wells to comply with the new, more stringent standard.

Arsenic occurs naturally in the environment and, as a component of underground rock and soil, can work its way into groundwater. Adverse health effects associated with long-term exposure to elevated levels include an increased risk of bladder and skin cancer, as well as problems associated with the circulatory system and the nervous system. Residents of community water systems can find out the arsenic levels, if any, in their drinking water by reading the Water Quality Report (sometimes referred to as the Consumer Confidence Report) that is issued each year by their water utility.

Radionuclides
A revision to the Radionuclides Rule was finalized in December 2000 with a federal standard of 5 picocuries per liter (pCi/L) for combined radium 226 and radium 228, 15 pCi/L for gross alpha emitters, and 45 pCi/L for uranium. The most significant revision affected the sampling point used for compliance. The former rule required samples to be taken from a representative point on the distribution system, while the revised rule requires samples to be taken from each entry point to the distribution system. It is anticipated that many supplies will be unable to meet the standard at these sampling points.

Several public water systems currently exceed the existing standard and, while anticipating the revised rule, have been working to meet the standard. These systems have been studying alternatives, including the addition of treatment or the replacement of existing wells to comply with the revised standard.

Radionuclides are naturally occurring contaminants that are found in groundwater throughout central and southern Minnesota. Long-term exposure to elevated levels of these contaminants may result in an increased risk of cancer.

Radon
The Radon Rule was proposed in November 1999 with a federal standard of 300 pCi/L and an alternative standard of 4,000 pCi/L being proposed. It is anticipated that the rule will be finalized this year. For those states that adopt a multi-media mitigation program—compels citizens, homeowners, schools, and communities to reduce radon exposure from indoor air—a standard of 4,000 pCi/L would apply. For those states that do not adopt the multi-media mitigation program, the 300 pCi/L standard would apply.

In anticipation of this rule, the Minnesota Department of Health has surveyed water systems and determined that approximately one-third of the community water systems may exceed the standard of 300 pCi/L, while approximately one percent may exceed the standard of 4,000 pCi/L.

Radon occurs naturally in both indoor air and ground water, as a decay product of uranium in the soil. Exposure to radon may occur from soil gases that enter the home or with the use of groundwater that releases radon into the air (showering, washing dishes, cooking, etc.) as well as ingestion of water containing radon. Exposure to radon in air is the second-leading cause of lung cancer in the United States.

Drinking Water Revolving Fund

The Drinking Water Revolving Fund (DWRF) provides a pro-active approach for financing improvements to public water systems. Federal grants and matching state money is lent to communities to bring systems into compliance with drinking water standards and to upgrade aging systems so they don't fall out of compliance. In some cases, below-market-rate loans allow communities to accomplish more than bare minimum improvements so they can achieve cost-effective, long-term solutions.

The DWRF, which came into existence in 1997, was patterned after the revolving fund loan program already in existence for wastewater projects. The first loan was made in the summer of 1998, and since then more than $100 million has been lent to 69 systems throughout the state for 97 different water system improvement projects. Money from loan repayments is used to finance new projects, which allows the fund to revolve in perpetuity.

Typical projects are new or rehabilitated wells, treatment plants, storage towers, and watermains. Examples of several projects include:

- A water treatment plant in Sauk Centre that features an outside sand infiltration basin for discharging backwash water.

- A new well and an aeration/filtration facility to remove iron in Comfrey. The new plant also provides phosphate treatment to help the city reduce lead and copper problems.

- An expansion of the water filtration plant in Dassel. New filters were installed into an addition to the plant while the old filter bay was converted into a detention tank.

- A treatment plant, wells, towers, and water mains for the formation of the Green Lake Water and Sewer District, which was created by the consolidation of water systems serving the cities of Spicer and New London as well as homes along the shoreline of Green Lake.

- A central treatment plant in Litchfield that replaces four small, aging treatment facilities that had been scattered throughout town.

Often the Drinking Water Revolving Fund allows water systems to make upgrades to their treatment facilities that are necessary as a result of revisions to existing federal standards. An example of this pertains to the recent revision to the Radionuclide Rule (noted in the section preceding this one). Sixteen Minnesota systems have water that will not meet the new standards set under the revised rules. Additional state sampling is expected to reveal up to twice as many additional systems that likewise will not be in compliance. Federal drinking water standards are also expected to change for arsenic. As many as 80 systems in Minnesota may find themselves unable to meet the new standard set for arsenic without expensive improvements to their facilities.

The solutions for allowing these systems to stay in compliance with the revised rules will vary on a community-by-community basis. New wells and treatment systems may be necessary. Regardless of the response that a water system chooses, however, DWRF loans will help these communities make these capital improvements possible.

Conclusion

Monitoring test results for 2000 tend to reinforce the conclusions of previous years: The quality of Minnesota's drinking water is very high. Even as our monitoring activities have expanded, we have rarely found any detectable contamination. Contaminant levels that exceed applicable health standards have been rarer still. Although we need to remain vigilant, Minnesotans can continue to have confidence in their drinking water.

MDH remains committed to protecting the high quality of our drinking water. The safety of our drinking water should never be taken for granted—but Minnesotans can be assured that their local water supply system is making every effort to ensure that their water is safe. And they can also be assured that the Minnesota Department of Health—and the broader public health community—are working to ensure that their confidence is well placed.

Appendix

Summary of Safe Drinking Water Monitoring Results for Minnesota

Includes Results for Both Community and Non-Community Public Water Supply Systems in Minnesota for 2000

The following is a summary of drinking water monitoring test results for all public water supply systems in Minnesota for calendar year 2000. Public water supply systems include all systems that serve 25 or more people on a regular basis, or that have 15 or more service connections. There are approximately 8,300 such systems in Minnesota, including:

- *955* **community** *systems, which provide water to consumers in their places of residence, including 710* **municipal** *systems.*
- *approximately 7,300* **noncommunity** *systems, which provide drinking water in settings like factories, schools, restaurants, and highway rest stops.*

Minnesota issued the following violations in calendar year 2000; in some cases, the violations were issued to water systems that were already in exceedance of the particular standard:

- 8 noncommunity systems with a violation of the maximum contaminant level (MCL) for nitrate.
- 1 community system with a violation of the MCL for nitrite.
- 24 community systems with a violation of the MCL for total coliform.
- 245 noncommunity systems with a violation of the MCL for total coliform.
- 3 community systems with a violation of the MCL for combined radium.
- 5 community systems with a violation of the MCL for gross alpha emitters.
- 1 noncommunity system with a treatment technique violation for the Surface Water Treatment Rule.
- 11 community systems with a violation of the Consumer Confidence Rule.

A report which lists all violations of the Safe Drinking Water Act in Minnesota for calendar year 2000 is available from the Drinking Water Protection Section, Minnesota Department of Health, Box 64975, St. Paul, MN 55164-0975.

Individual water systems produce an annual report listing contaminants that were detected, even in trace amounts, during the previous calendar year. Please contact the individual water system if you would like a copy of this report.

Minnesota Department of Health
Drinking Water Protection Section
Division of Environmental Health
121 East Seventh Place—P. O. Box 64975
St. Paul, Minnesota 55164-0975
651/215-0770 (voice)
651/215-0775 (fax)

June 2001

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BOARD OF WATER AND SOIL RESOURCES
JACKPOT JUNCTION
GRAND EAGLE 3 ROOM
MORTON, MINNESOTA 56270
June 27, 2001

BOARD MEMBERS PRESENT: Lee Coe, Jerome Deal, Jim Anderson-MES, Darrell Bruggman, Clair Nelson, Dwain Otte, Char Kahler, JoAnn Coover, Mark Dittrich-MDA, Art Persons-MDH, Paul Krabbenhoft, Victor Ormsby, Wayne Edgerton-DNR, Jack Frost, Ginny Imholte, Karen Harder

BOARD MEMBERS ABSENT: Rod Massey-PCA

STAFF PRESENT: Doug Thomas, Mary Jo Anderson, Jeff Nielsen, Sara Johnson, Tom Fischer, Marybeth Block, Tim Fredbo, Tabor Hoek, Jim Birkholz

OTHERS PRESENT:
Sandy Hooker, Minnesota Association of Townships (MAT)
Ernest Vogel and Greg Roiger, Brown SWCD
Kerry Netzke, Marvin Tinklenberg, Darold Neperman, Andrew Lochner, Joseph Schwieller, Larry Hansen, Kevin Anderson, Area II Minnesota River Basin
Lindberg Ekola, Ekola & Associates
Mark Wettlaufer, Morrison SWCD

Chair Coe called the meeting to order at 9:00 a.m., and welcomed everyone to Jackpot Junction.

Adopt Agenda - Chair Coe stated that Browns' Creek and Lower St. Croix Valley Watershed Districts Boundary Change has been removed from the agenda. Moved by
** Char Kahler, seconded by Jim Anderson, to approve the agenda as presented. Motion
01-41 passed on a voice vote.

Minutes of May 23, 2001 – Jim Anderson stated that a correction is needed in the spelling of H.H. Cheng; it should read Cheng, rather than Chang. Wayne Edgerton stated that on page four, corrections are needed under his DNR report. It should read Blue "Mound" State Park rather than Blue "Mountain" State Park. Also, Wayne referred
** to Big Woods State Park tours, it should read "farm" tours. Moved by Jack Frost,
01-42 seconded by Jerome Deal, to approve the minutes of May 23, 2001, as corrected. Motion passed on a voice vote.

Reports

Chair's Report - Chair Coe reported that he attended a Forestry Group meeting in McGregor with Ron Shelito. Chair Coe attended the EQB meeting; the EQB moved to approve the Exemption Application request from Xcel Energy to upgrade their transmission line from Willmar to Paynesville. The project is being received positively as a portion of the right of way located in a Willmar residential area will be relocated providing a minimum impact on local residents. The Power Plant Siting Act recently passed by the legislature and signed by the Governor was also discussed. An overview of the Power Plant Siting Program was distributed for board members' information. Chair Coe attended the Wetlands Committee meeting on June 21. Chair Coe stated that the updated version of BWSR Committees are in the board members' packets. Board members should contact Chair Coe if changes are needed to the assigned committees. Chair Coe reported that the Administrative Advisory Committee met; performance evaluation forms for the executive director had been sent to board members. Chair Coe thanked board members for the 13 completed performance evaluations he has received and stated that he had summarized them and planned to review the results with Mr. Harnack.

Executive Director's Report - Doug Thomas was sitting in on behalf of Ron Harnack, who is attending legislative meetings today. Doug reported that the Tax Committee passed a report last night paving the way for the bonding bill to be introduced, with full funding for CREP. Doug gave highlights of the legislative session and a brief budget update. Doug stated that retooling will begin in the grants arena. Doug stated that information is in board members' packets on the Presidential disaster declarations in Minnesota. Doug reported that the possible government shut-down has resulted in

significant planning, time and effort. BWSR is prepared in the event a shut-down does occur, for additional information on the possible government shut-down, see the BWSR website. Doug reported that BWSR has worked with MES on an interactive website and compact disk (CD) creating fact sheets on shoreland management and best management practices (BMPs). This has been a huge success for water planners, schools, and resource professionals; and is linked to BWSR's website. Doug stated that the CD is available at the Local Water Planners Conference, exhibitors booth. Doug reported that the State Envirothon was held on May 23 in Park Rapids. 27 teams competed; the winning team was Rushford-Peterson, who will go on to the National Envirothon competition in Mississippi. Kamal Alsharif will take the lead in coordinating the State Envirothon for BWSR. Doug asked that board members submit their expense claims by July 13.

Dispute Resolution Committee Report - Chair Coe reported that there are presently three appeals pending, all three appeals involve WCA. One appeal is in LaCrescent along the Mississippi River in Houston County. The replacement plan denial arose from a cease and desist order and a restoration order. The appeal has been accepted and a prehearing conference will be scheduled. Another pending appeal regards a matter that was previously heard by the DRC. It involves a replacement plan approval in Murray County that arose from a violation. The appeal has been accepted and a pre-hearing conference will be set once the record has been received from the SWCD. Another pending appeal regards an exemption approval by the Lac Qui Parle-Yellow Bank Watershed District involving the federal exemption. The appeal has been accepted; a pre-hearing conference has not been set since resolution is being pursued.

Wetlands Committee Report - Darrell Bruggman reported that the Wetlands Committee met on June 21. The board will have procedures to take action on at the July BWSR meeting.

Cost-Share/Soil Conservation Committee Report- Dwain Otte reported that the committee met on June 21; additional information will be presented today later in the meeting.

Education and Public Relations Committee Report – Paul Krabbenhoft stated that information will be presented today later in the meeting.

Administrative Advisory Committee Report - Chair Coe reported that the Administrative Advisory Committee met after the board meeting on May 23. The Committee discussed BWSR committee assignments, the executive director's performance evaluation, and BWSR authority to removal a SWCD supervisor from office – which will be covered later in the meeting.

Agency Reports

Mark Dittrich, Department of Agriculture, reported that Farm Fest will be held July 7-9. MDA is going through an organization evaluation process. Mark stated that rock inlet demonstrations will be held over the next few years.

Art Persons, Department of Health, reported that MDA's Environmental Health Division on Drinking Water and Wellhead Protection continue with the ongoing workload of surface and subsurface water assessments. Art reported that 28 organizations have been contacted requesting their assistance in establishing an ad hoc work group to look at how these assessments can get done, are separate plans needed, and making the public aware of the existing problems.

Wayne Edgerton, Department of Natural Resources, reported that antlerless deer permits will be increased by 52,000 permits this fall. Wayne reported that DNR now has a program for cost-sharing and technical assistance to alleviate the geese population problems, possibly a permit to kill geese. Wayne asked that you contact your area wildlife manager to work through this process. Wayne stated that DNR concerns regarding the conservation provisions to the federal Farm Bill appropriations have been provided to Ron Harnack and Doug Thomas. Wayne looks forward to working with various agencies on a state policy position on the provisions of the state Farm Bill. Wayne reported that a CREP video is being developed to provide information on CREP. The video will be completed on Friday. Wayne will bring a copy to the next board meeting.

Jim Anderson, Minnesota Extension Service, reported that H.H. Cheng has had discussions with NRCS, MDA, and BWSR regarding comments he will make at a Farm Bill conference tomorrow, where he will deliver Minnesota's message on the Farm Bill. Jim reported that there is a wetlands manual in the works under the direction of Greg Larson and John Jaschke, as well as the U of M, and NRCS. The wetlands manual will be distributed this fall.

Consent Agenda

Ramsey-Washington Metro Watershed District Management Plan - General Amendment - Jack Frost reported that the metro subcommittee met on June 21, and recommends approval of the amendments, which are consistent with their plan. Moved

** by Jack Frost, seconded by Dwain Otte, to accept the metro subcommittee

01-43 recommendation to approve the Ramsey-Washington Metro Watershed District Management Plan, general amendment. Motion passed on a voice vote.

Marybeth Block distributed for board members' information, the board policy regarding local water plan extensions, as endorsed by the Board at the December 15, 1999 meeting. Doug Thomas gave additional background information on the comprehensive local water planning process.

Cass County Request for Comprehensive Local Water Plan Extension - Moved by
** Jerome Deal, seconded by Darrell Bruggman, to approve the Cass County Request for
01-44 Comprehensive Local Water Plan Extension to May 2002. This is a unique plan integrating the land use plan and the comprehensive local water plan, in addition, a consultant has been hired to provide leadership training. Motion passed on a voice vote.

Lincoln County Request and Yellow Medicine County Request for Comprehensive Local Water Plan Extensions - date change needed in the Findings of Fact on both Orders.
** Moved by Ginny Imholte, seconded by Dwain Otte, to approve the Lincoln County and
01-45 Yellow Medicine County Requests for Comprehensive Local Water Plan extensions to March 26, 2004. Discussion followed. Staff continue to coordinate the workload issues of the plans. The signature date will be added to the Orders as well as the location changed from St. Paul to Morton. Motion passed on a voice vote.

Chair Coe called for a break in the meeting at 10:30 a.m. The meeting reconvened at 10:45 a.m.

Committee Recommendations

FY02 SWCD Grants - Wayne Zellmer distributed an updated version of the proposed FY02 grants to SWCDs. Wayne briefly explained the applications and allocations. Wayne stated that pending legislative approval of the Feedlot Water Quality Management and General Services Grant appropriation increases, the Cost-Share
** Committee recommends approval of allocations as submitted. Moved by Ginny Imholte,
01-46 seconded by Dwain Otte, to approve the FY02 SWCD Grant allocations. Discussion followed. Motion passed on a voice vote.

** Moved by Jack Frost, seconded by Char Kahler, as part of the approval of the grant
01-47 allocations, a periodic follow-up report be developed summarizing the operation maintenance, information/technology transfer, and evaluation of these good innovative projects. Paul Krabbenhoft suggests a two year follow-up report due to implementation, a summary done by BWSR Cost-Share Committee a year later, which will be on the BWSR website, of outcome based projects. Also, use a digital camera showing before and after pictures as a way to let the legislature know what's being done around the state. Chair Coe asked Dwain Otte, on behalf of the Cost-Share Committee, to develop a year-end report/summary. Motion passed on a voice vote.

2001 Plan of Work for the Education and Public Relations Committee - Paul Krabbenhoft presented the 2001 Plan of Work for the BWSR Education and Public Relations Committee, based on the May 1998 BWSR Educational Strategy. Ginny Imholte stated that she wants BWSR information as a high priority on the BWSR website. Doug Thomas reported that each BWSR section is working on placing BWSR programs on the website. This hasn't been a high priority, but it is a priority to have the BWSR website current and it is in the process of being updated to provide information and service to our clientele. Paul stated that BWSR staff are trying to collaborate with MES and other agencies to define roles and responsibilities, it's a continuing process that is being developed. Moved by Paul Krabbenhoft, seconded by Jim Anderson, to approve the 2001 Plan of Work with an amendment to objective #2, which will be a high priority. Motion passed on a voice vote, as amended.

** 01-48

New Business

Area II Work Plan - Tabor Hoek introduced Kerry Netzke, Area II Minnesota River Basin Projects coordinator. Tabor presented background information, and recommends approval of the Area II Annual Plan for fiscal year 2002. Dwain Otte commended those involved in Area II for their hard work. Moved by JoAnn Coover, seconded by Jerome Deal, to approve the Area II Annual Work Plan for fiscal year 2002. Motion passed on a voice vote.

** 01-49

Linking Land Use Plans and Water Plans - Marybeth Block introduced Mark Wettlaufer, Morrison County Water Plan Coordinator, and Lindberg Ekola, Ekola & Association. They presented an overview of linking water planning to local comprehensive plans in Morrison County. A comparison table showing water planning and land use planning was distributed. Mark Wettlaufer thanked Marybeth Block and Doug Thomas for their efforts on this project and supporting Morrison County on comprehensive and land use planning. Mark stressed the importance of water planning. Chair Coe thanked Mark and Lindberg for their efforts. The table presented is a good tool that could be used for other planning efforts.

BWSR Authority to Remove a Soil and Water Conservation District Supervisor from Office - Jim Birkholz distributed a summary of his presentation which is for information, with future action to be taken the Board. He represented two recommendations of the Administrative Advisory Committee: 1) pursue legislation to handle Supervisor removal the same as for other county elected officials; 2) in the interim, work through the State Administrative Hearings Office. Ask them to conduct hearings; prepare findings; give a recommendation to the BWSR; BWSR make the final decision; petition must qualify with MS351.16. Chair Coe thanked Jim for his efforts on this process.

Upcoming Meetings
- MAWD Summer Tour, June 28-30, 2001, Worthington
- NACD North Central Region Meeting, July 15-18, 2001, Radisson South, Bloomington
- BWSR Meeting, July 25, St. Paul
- BWSR Tour and Meeting, August 22-23, McGregor
- BWSR Meeting, September 26, St. Paul
- BWSR Tour and Meeting, October 22-23, Caledonia

** 01-50 Moved by Jerome Deal, seconded by Victor Ormsby, to adjourn the meeting at 12:05 p.m. Motion passed on a voice vote.

Respectfully submitted,

Leland Coe
Chair

BOARD OF WATER AND SOIL RESOURCES
ATTENDANCE ROSTER

	NAME	AFFILIATION	PHONE #
1.	Tom Fischer	BWSR-New Ulm - staff	
2.	Sara Johnson	BWSR - New Ulm staff	
3.	Sandy Hooker	MAT	
4.	Ernest Vogel	Brown SWCD	
5.	Greg Roiger	" "	
6.	Tabor Hook	BWSR - Marshall	
7.	Jim Birkholz	BWSR	
8.	Kerry Netzke	Area II MN River Basin	
9.	LINDBERG ERIC A	EVOLVA & ASSOCIATES	320-256-2112
10.	MARK WETTLAUFER	MORRISON CO.	
11.	MARVIN TINKLENBERG	Pipestone Co - Area II	507-442-4632
12.	Darold Neperman	Area II - Redwood Co	507-752-7810
13.	Andrew Lochner	Area II Brown Co	507 794-770
14.	Joseph Schowalter	AREA II Redwood Co	
15.	LARRY HANSEN	AREA II Lincoln Co	507-247-5968
16.	Kevin Anderson	AREA II Murray Co.	507-879-3198
17.	Jeff Nielsen	BWSR	
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MN Board of Water and Soil Resources

"Assisting local governments to manage and conserve their irreplaceable water and soil resources"

Memo

To: board members

From: Marybeth Block

Date: June 21, 2001

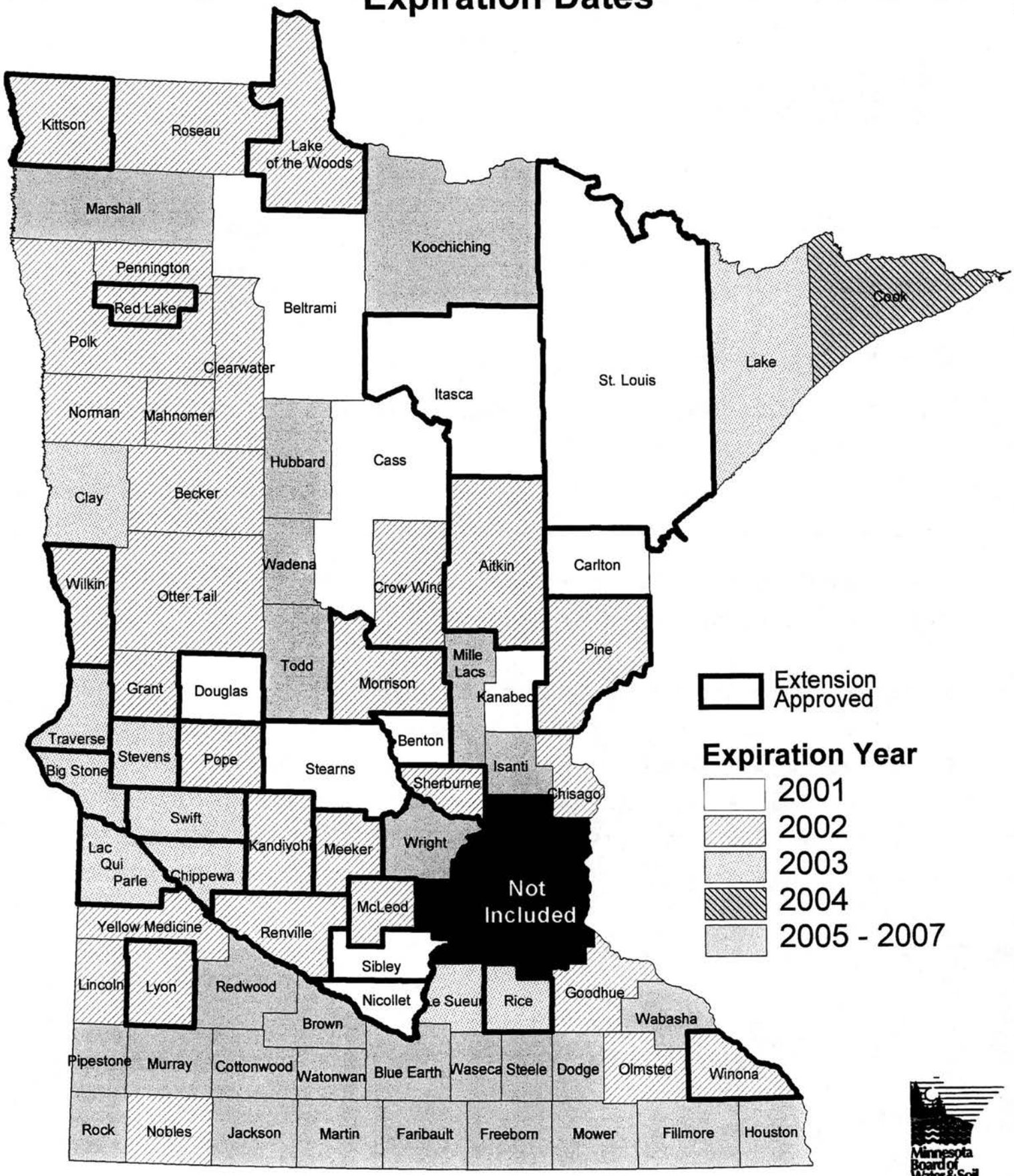
Subj: Board Policy regarding local water plan extensions

Minnesota Board of Water & Soil Resources

As you all know BWSR has received numerous requests from counties to extend their existing water plans. The map on the back of this memo is current as of the 06/26/01.

Some of you may remember that an ad hoc committee of the board was convened in late 1999 to formulate and recommend to the full board BWSR expectations for third generation plans. Given that a fair amount of time has passed, and some new members have joined the board, I thought it would be good to pass on the Local Water Planning Board Expectations, Internal Actions, and Multi-Planning Strategies document endorsed by the board at their December 15, 1999 meeting. Please refer to page 5, item 1 for language pertaining to granting water plan extensions.

County Water Plan Expiration Dates



connected into this proposal is CREP, RIM, etc., which also complements the citizen's advisory council and LCMR proposals. This ties together with the Governor's big plan of healthy vital communities. Chair Roer thanked Commissioner Garber for sharing this information with the BWSR.

Old Business

Report from Ad hoc Subcommittee Comprehensive Local Water Plan (CLWP) Third Generation Plans - Ginny Imholte explained that in September an Ad hoc committee of the Board was appointed to identify BWSR expectations for third generation comprehensive local water plans. In addition, the ad hoc committee reviewed revisions to the strategies presented at the October BWSR meeting aimed at managing workload associated with multi-planning efforts that local governments are involved in. Doug Thomas presented the six expectations for third generation water plans. Doug stated that another way to share ideas is in the new "Local Water Planning Newsletter".

99-73 Moved by Ginny Imholte, seconded by Barb Cobb, that the board endorse the strategies in the document for third generation plans. Motion passed on a voice vote. Chair Roer thanked Ginny Imholte, Doug Thomas, Marybeth Block, and DNR Deputy Commissioner Steve Morse for their involvement in putting this document together.

Recognition of Outgoing Board Members Glenn Annexstad and Barbara Cobb - Chair Roer thanked Glenn Annexstad for all his efforts and involvement in various committees during his term. She appreciated Glenn's service on the DRC, and congratulated him on his retirement from the board. Chair Roer presented Glenn with a certificate of commendation from the Governor, and a print from the Board. Glenn stated that he appreciated the opportunity to be on the Board and his new home in Arizona has many aspects that will remind him of BWSR.

Chair Roer commended Barb for her leadership as chair, and all her efforts and service on various committees. Chair Roer presented Barb with a certificate of commendation from the Governor, and a print from the Board. Barb expressed her experiences with the Board in a delightful poem she wrote.

Chair Roer called for a break at 10:35 a.m. The meeting reconvened at 10:55 a.m.

Wetlands Committee Recommendations Regarding Senate File 83 - Ron Harnack stated that many meetings and discussions have been held regarding SF83. John explained the changes made by the Wetland Heritage Advisory Committee (WHAC) and the wetland committee. The various stakeholders in SF83 will meet tomorrow, and request the Board to provide a framework for legislative changes. John reported that Ron Harnack will meet next week with the Governor's office and others to discuss the

BWSR EXPECTATIONS FOR THIRD GENERATION WATER PLANS:

1. Strong, active taskforces.

Involvement leads to ownership, and if local citizens and government entities are involved in the water planning taskforce/committee, they'll work to ensure that the actions identified in the plan are put into place. The Board, acting through its ad-hoc water plan review committees, has observed that the best water plans are those where strong citizen and agency participation has been present.

The board expects that plan updates will be completed with the assistance of strong taskforces having diverse representation, including citizen interests and municipality and agency representation. In addition, the board expects the taskforces to remain active overseeing the implementation plan.

2. A summary of progress.

It is important to communicate, and celebrate, progress towards the goals identified. Often when people are kept apprized of the status of an effort their interest in it grows, and the momentum to continue to achieve goals and strategies set forth is sustained.

The board expects the executive summary of the updated plan to discuss the progress made towards the goals, strategies, and actions laid out in the county's previous plan(s). They will also be looking to see how that progress was communicated to local citizens, groups and governments.

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3. Framing the plan in a geographic watershed context.

Planning and funding efforts at the regional, state and federal level continue to be carried out using the geographic watershed approach. Many of these efforts also look to the comprehensive local water plans to communicate local water data and management issues. Presenting the contents of the CLWP within a geographic watershed context will facilitate interaction and coordination between different levels of planning.

The board will look for a strong geographic watershed context when reviewing and approving local water plans.

4. Reflect current and future trends.

For a plan to be effective it must consider the current and future trends that may influence the water resources the plan is intended to address. Questions to addressed include: What's happening to the population of the county? Is it increasing or decreasing? What is the percent of land in public ownership? What are the economic mainstays? How are the economic mainstays – such as agriculture, forestry and tourism – changing? What impacts may they have on water resources?

The board will look for a thorough discussion of "Expected Changes to Physical Environment, Land Use, and Development" (rule item 9300.0060) and their influence on current and future water resource management in the county.

5. **Prioritize using the appropriate tools.**
   It is important that the tools used to prioritize issues; resources or geographic areas are up-to-date and respected. Examples of such tools include: total maximum daily loads, lake prioritization schemes, critical area inventories, etc.

   The board expects counties to use the most appropriate, up-to-date tools to prioritize geographic areas, water features, or pollutants.

6. **Emphasize special areas of concern: stormwater, source water protection and flood damage reduction.**

   Increasing pressure from land development for housing, intensified agriculture and recreation has a direct, and often negative impact on water resources. Stormwater management and flood damage were both required data elements in previous plans. Sourcewater protection is a new required data element.

   The board's review of plans will look for sections addressing stormwater management and flood damage reduction. In addition, the plan must address the county's role in source water protection plans for public water supplies, including identification or priority areas or a plan to identify such areas, and how the county intends to participate in developing source water protection planning.

BWSR internal actions regarding water planning:

- Obtain agreement on behalf of the partner agencies that all agencies will recognize water resource priorities implementation strategies identified in the biennial workplan, in addition to those identified in the comprehensive plan.

- Create a review sheet for the board review ad-hoc committee members. Include a spot for them to record activities they think should be shared with other water planners.

- Develop a format for ad-hoc water plan review committee meetings including a list of information that ad-hoc committee members will receive in advance of the meetings.

- Work on communicating the best of the best via posting projects or activities on the BWSR website, communicating them via the local water planner's newsletter and showcasing projects at the annual water planners conference.

- Have BWSR staff monitor agency involvement early on in the plan update process. If problems are encountered i.e., a county not inviting agencies to participate or an agency representative is not attending meetings efforts can be made early on to resolve them.

- Compile the recommendations for changes to state programs that are included in water plan updates on an annual basis and provide that information to BWSR board, cooperating state agencies, the EQB Water Resources Committee, and other state policy makers.

(Doug, because the final bullet does not address multi-planning efforts, which is the header for the strategies, I think it belongs under internal actions)

BWSR strategies to address multi-planning efforts:

I. The board will grant extensions to counties and watershed management organizations where BWSR and LGU staff, along with the partner agency staff, have determined other water, or watershed level, planning efforts are currently underway require the input of the water planner and associated technical advisors in the county, and the water plan update would benefit by the completion of the other water planning activities first.

II. Where basin, major watershed or comprehensive community plans exist and contain relevant data, assessments, issues and watershed goals and objectives, encourage the comprehensive local water plan to incorporate that data by reference. This will allow local water plans to focus on implementation strategies and measurable outcomes.

III. The Board will work with Minnesota Planning and the projects receiving community-based planning grants in 1998 and 1999 to explore how community-based plans and local water plans can work together. Identify key elements that may be integrated, areas where the plans should reflect one another and processes, such as seeking public participation, which may be done in concert with one another.

New Business

1. Linking Land Use Plans and Water Plans –
   ~~DECISION~~
   Information

	Water Planning	Land Use Planning (aka Comprehensive Planning)
Approach	Voluntary, a statewide program. Strategic state support.	Voluntary. Different planning processes for counties, townships and cities. Limited state support.
State Technical Support	BWSR – board conservationists. Multi agency support. Generally well attended meetings throughout planning process. Involvement by agencies seems to be growing.	Varies with local unit of government. Many communities get substantial assistance while other communities report limited service or connections with state agencies. Needs for technical support vary considerably, perhaps more so than for water planning.
State Financial Support	Annual program: $2 – 3 million. • Annual NRBG grants through BWSR. • Statewide.	1997 – Community Based Planning Act: $1.5 million • 4 pilots • 4 second round projects • **Program out of funds. Act has sunset.**
Policy Structure	More often uniform statewide • Goals • Objectives • Action items • Implementation program.	Varies more greatly by local government (and consultant) • Mission or vision statements – sometimes. • Goals or objectives – used interchangeably. • Policies or strategies. • Plans often lack specific action items or tasks.
Resource Framework	• Groundwater resources • Surface water resources • Land resources	Varies, depends on if the document is a land use plan or a comprehensive plan. Varies with type and needs of local government.
Implementation Strategies	Eight general strategies – Administration, education, monitoring, inventory/mapping, land & water treatment, regulations, technical staff, and equipment.	ZONING… Many other implementation tools are available (and used) Subdivision regulations, capital improvement program, official mapping,
Resource Inventory	Water covers 5 percent of the state.	Land covers 95 percent of the state (includes wetlands).
Resource Ownership	Water is generally considered a public resource.	Mix of landholder types – from private (individuals, businesses and industry), to non profits and community groups, to public (local, special purpose, state, federal).
Statutory Framework	"Modern" – generally in one location. Chapter 103.	"Antiquated" – provisions located throughout the statutes. Chapters 462, 394, 365, 473, 505…

Linking Water Planning To Local Comprehensive Plans
Morrison County, Minnesota

County Contact:

Mark Wettlaufer, Morrison County Water Plan Coordinator
Ph. (320) 632-0172 E-mail: mark@co.morrison.mn.us

Consultant Contact:

Lindberg Ekola, Ekola & Associates, Melrose, Minnesota
Ph. (320) 256-2112 E-mail: ekola@meltel.net

BWSR Contacts:

Marybeth Block, Water Planning Coordinator
Ph. (651) 297-7965 E-mail: marybeth.block@bwsr.state.mn.us

Dan Steward, Board Conservationist
Ph. (218) 828-2598 E-mail: dan.steward@bwsr.state.mn.us

Project Purpose: The purpose of this project is to:

- identify how local water planning can be integrated with or linked to county comprehensive planning and subsequent land use controls;
- assess county comprehensive water planning program requirements and their efficacy in promoting wise water management at the local level; and
- assess the various roles and relationships between local units of governments in implementing County Comprehensive Water Plans and related state programs administered by local governments.

Project Evolution: the County approached BWSR about embarking on a joint project that would explore ways to better connect local land use planning and controls to resource protection issues identified in Comprehensive Water Plans. In consultation with BWSR staff the county also agreed to assess the relevance of required data elements and assessments of the program given the availability of electronic and digital geographic information to assess land and water resources. Finally, county agreed to evaluate and describe how their various units work together to implement state environmental programs such as the Wetland Conservation Act, public drainage, etc.

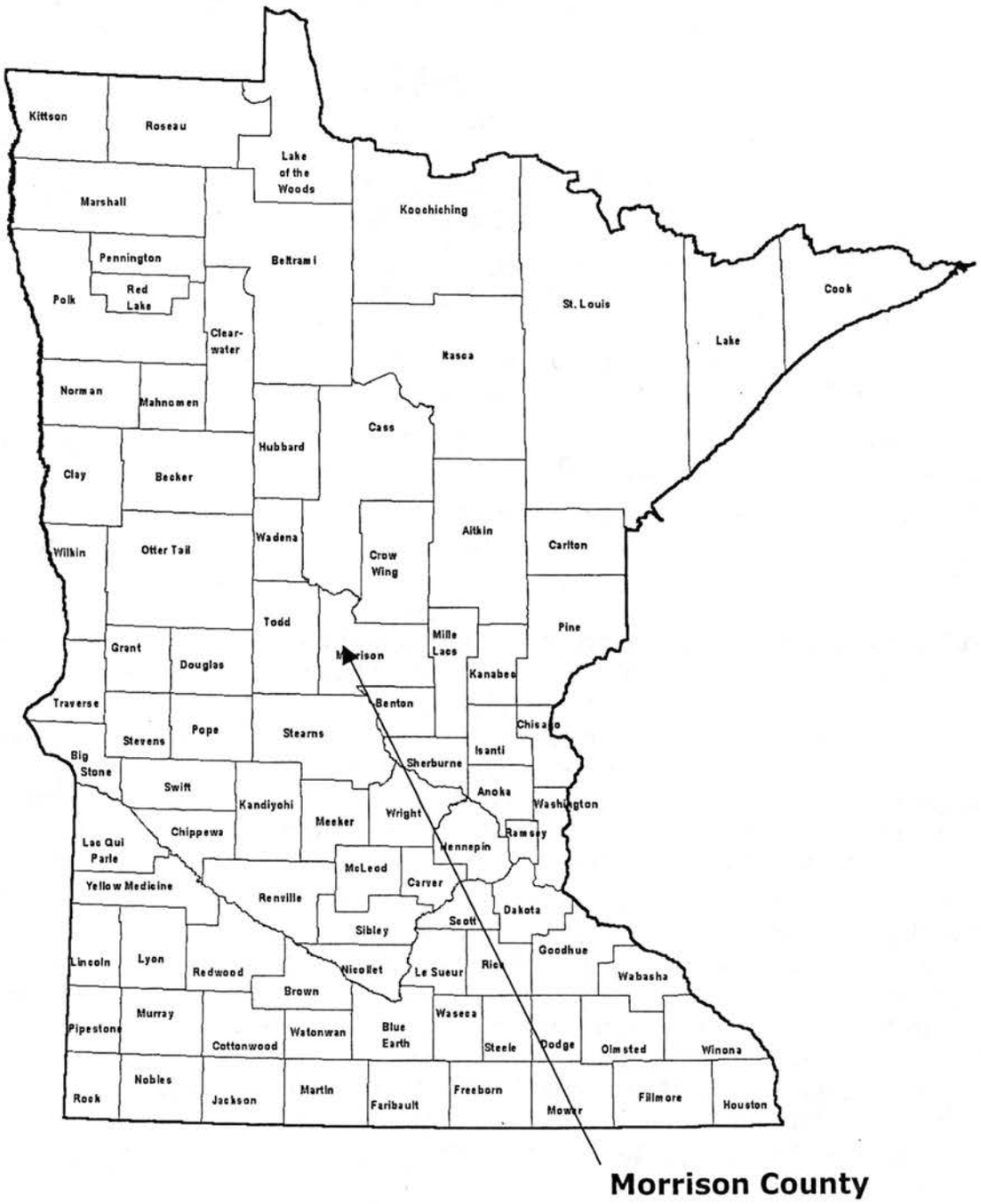
Project Deliverables:

- guidelines to integrant or link county water plans and county comprehensive plans.
- White paper regarding the adequacy and usefulness of the required data elements and assessments and recommendations for improvement.
- White papers addressing: local government structure and efficacy administering resource management programs; local water management; and how county water plans can facilitate watershed, basin and state water plans.
- Recommended changes to program statues and rules.

Project Cost and Timeline: A $15,000 grant will be awarded to Morrison County to develop guidelines, white papers and recommendations regarding many facets of the Comprehensive Local Water Planning Program. The grant period is from June 2001 until June 2003.

Flip page for project location

Figure 1: Project Location



Flip page for project location

BWSR Authority to Remove a SWCD Supervisor

- History
  - Original SWCD Law
  - Never used to full extent—threat was sufficient
  - Recent questions
  - Decision made to establish procedures
- How Other States Handle This
  - Have direct removal authority—IA, MI, SD, IN
  - District law does not address—WI, MO, ND, IL
- Considerations/Analysis of BWSR Authority
  - MN Constitution—emphasis placed on the electorate
  - Required hearing would be trial type procedure
  - Existing law seems obsolete in light of other county-wide offices
- Recommendations of the BWSR Administrative Advisory Committee
  - Pursue legislation to handle Supervisor removal the same as for other county elected officials
  - In the interim, work through the State Administrative Hearings Office. Ask them to:
    - ◇ Conduct hearing
    - ◇ Prepare findings
    - ◇ Give a recommendation to the BWSR
    - ◇ BWSR make the final decision
    - ◇ Petition must qualify with MS351.16

New Business

2. BWSR Authority to Remove a Soil and Water Conservation District Supervisor from Office - ~~DECISION~~ Information

June 12, 2001

TO: Members, BWSR Administrative Advisory Committee

FROM: Jim Birkholz

THRU: Ron Harnack, Executive Director

SUBJECT: BWSR Authority to Remove a Soil and Water Conservation District Supervisor from Office

Following your May 23 meeting, I consulted with Matt Seltzer from the Office of the Attorney General and Allan Klein an Administrative Law Judge with the State Administrative Hearings Office who is familiar with the business of BWSR. I informed them of your two decisions in this matter:

1. Pursue legislation to amend SWCD statute to handle removal of SWCD supervisors in the same manner as for removing other elected county officials.
2. In the interim, until legislation is passed, to utilize the capabilities of the Administrative Hearings Office to hear any cases and to give findings and a recommendation to the BWSR for its final decision.

Both Mr. Seltzer and Judge Klein concur with your decision. Judge Klein suggested that you may wish to consider using the Administrative Hearings Office as the long term solution for how the supervisor removal process is handled. Regarding this suggestion, I'm assuming that you are still comfortable handling this the same as for other elected county officials. Let me know if you wish to reconsider.

Attachment 1 is a draft of legislation that would amend statute to include SWCD supervisors in the process to remove elected county officials.

Attachment 2 is an interim process to refer cases to the Administrative Hearings Office until the statute change can be accomplished. This process is very simple and follows the same standards laid out in MS351 for removal petitions. Note that the bar is set very high for these petitions. This is obviously serious business.

:RemovalSWCDsuper

Attachment 1

Board of Water and Soil Resources
Legislative Initiative
Removal of Soil and Water Conservation District Supervisors

Two parts of statute need to be changed: MS103C and MS351.

I. The following change to soil and water conservation district law does two things. First, it amends soil and water conservation district law by removing the authority of the BWSR to remove elected supervisors from office. Secondly, it clearly assigns the removal of supervisors to the process established in the section of statutes that deals with the removal of elected county officials.

MS103C.315, Subd. 5 is amended to read:

Subd. 5. Removal of Supervisor. A supervisor may be removed ~~by the state board upon notice and hearing, for neglect of duty or~~ from office in accordance with the procedures established in sections 351.14 to 351.23 for malfeasance or nonfeasance in office, but for no other reason.

II. The following change to Minnesota Statutes Chapter 351 adds soil and water conservation district supervisor to the list of definitions for the portion of statute that deals with removal of elected county officials.

MS351.14 is amended to read:

Subd. 5. Elected County Official. "Elected county official" means any public official who is elected to countywide office or appointed to an elective countywide office, including county attorney, county sheriff, county auditor, county recorder, ~~and~~ county treasurer, and soil and water conservation district supervisor.

Attachment 2

Procedure for Handling Requests for Removal of Soil and Water Conservation District Supervisors

Minnesota Board of Water and Soil Resources

The Minnesota Board of Water and Soil Resources resolves that any requests for removal of a soil and water conservation district supervisor shall be referred to the Minnesota Administrative Hearings Office to conduct the required hearing and to prepare findings and a recommendation for final Board decision. Requests for removal must be in a form prescribed by MS351.16.

Note: MS351.16 specifies that a petition signed by at least 25% of the number of persons who voted in the preceding election for the office which is held by the person named in the petition is required. The petition must contain specific facts which allege with specificity that the elected official committed malfeasance or nonfeasance in the performance of specific duties.

Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.14 Definitions.

Subdivision 1. Applicability. The definitions in this section apply to sections 351.14 to 351.23.

Subd. 2. Malfeasance. "Malfeasance" means the willful commission of an unlawful or wrongful act in the performance of a public official's duties which is outside the scope of the authority of the public official and which infringes on the rights of any person or entity.

Subd. 3. Nonfeasance. "Nonfeasance" means the willful failure to perform a specific act which is a required part of the duties of the public official.

Subd. 4. Misfeasance. "Misfeasance" means the negligent performance of the duties of a public official or the negligent failure to perform a specific act which is a required part of the duties of the public official.

Subd. 5. Elected county official. "Elected county official" means any public official who is elected to countywide office or appointed to an elective countywide office, including county attorney, county sheriff, county auditor, county recorder, and county treasurer. "Elected county official" also means a county commissioner elected or appointed from a commissioner district.

HIST: 1986 c 418 s 1

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.15 Removal of elected county official.

An elected county official may be removed from office in accordance with the procedures established in sections 351.14 to 351.23.

HIST: 1986 c 418 s 2

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.16 Petition; review.

Subdivision 1. **Form of petition.** Any registered voter may petition the county auditor requesting a removal election and setting forth facts which allege with specificity that an elected county official committed malfeasance or nonfeasance in the performance of official duties during the current or any previous term in the office held by the elected county official, except that a petition may not be submitted during the 180 days immediately preceding a general election for the office which is held by the county official named in the petition. The petitioner must attach to the petition documents which contain the signatures of supporters who are registered voters totaling at least 25 percent of the number of persons who voted in the preceding election for the office which is held by the county official named in the petition. Each page on which signatures are included must clearly identify the purpose of the petition. The registered voters must be residents of the county or, in a removal election involving a county commissioner, of the commissioner district which elected the named county commissioner. The signatures of supporters must be on forms provided by the county auditor.

Subd. 2. **County auditor's duties.** The county auditor shall examine the petition to determine whether it contains the requisite number of valid signatures of registered voters. If so, the county auditor shall forward the petition, but not the signatures, to the clerk of appellate courts within 15 days of receipt of the petition. If the county auditor determines that the petition does not include the requisite number of signatures, the county auditor shall deny the petition within 15 days of receipt of the petition.

Subd. 3. **Removal of county auditor.** If the county auditor is the named elected county official, the petition must be submitted to the chair of the county board of commissioners who shall appoint a county official to perform the duties of the county auditor specified in sections 351.14 to 351.23.

Subd. 4. **Limitation.** An elected county official is not subject to a removal election on the ground that misfeasance in the performance of official duties was committed, or on the ground of disagreement with actions taken that were within the lawful discretion of the elected county official.

HIST: 1986 c 418 s 3

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.17 Chief justice review; assignment to special master.

The clerk of appellate courts shall submit the petition to the chief justice. The chief justice shall review the petition to determine whether the petition properly alleges facts which, if proven, constitute malfeasance or nonfeasance in the performance of official duties. If the petition properly contains factual allegations of malfeasance or nonfeasance, the chief justice shall assign the case to a special master for a public hearing. The special master must be an active or retired judge. The chief justice may issue an order denying the petition if it appears that the petition does not contain allegations which, if proven, constitute malfeasance or nonfeasance in the performance of official duties.

HIST: 1986 c 418 s 4

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.18 Waiver.

An elected county official who is the subject of a petition under section 351.16 may waive in writing the right to a public hearing. If the hearing is waived, the case must be certified by order of the chief justice to the county auditor for a removal election to be held within 30 days of the receipt of the order.

HIST: 1986 c 418 s 5

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.19 Public hearing.

Subdivision 1. **Time; subpoenas; amendment of petition.** A public hearing into the allegations of a petition under section 351.16 must be held within 60 days after issuance of the order of the chief justice assigning the case to a special master. The special master may issue subpoenas to compel the testimony of witnesses and the production of documents. The petition may be amended of right by the petitioners at any time prior to 40 days before the scheduled hearing. The special master may permit later amendment of the petition only for good cause.

Subd. 2. **Determinations by special master.** The special master shall take evidence at a public hearing under this section and determine:

(1) whether the petitioners have shown by clear and convincing evidence that the factual allegations of malfeasance or nonfeasance are true; and

(2) if so, whether the facts found to be true constitute malfeasance or nonfeasance.

The special master shall dismiss the petition at any time if it appears that this standard has not been met.

Subd. 3. **Rules.** The public hearing under this section must be conducted using the Minnesota Rules of Civil Procedure, unless modified in sections 351.14 to 351.23, and the Minnesota Rules of Evidence.

Subd. 4. **Legal counsel.** The petitioners and the elected county official shall be represented by legal counsel at their own expense, and shall pay their costs associated with the hearing except that the county may assume the legal costs incurred by the elected county official. The county shall pay all other costs of the hearing.

Subd. 5. **Decision.** The special master shall issue a decision within 60 days after the end of a public hearing under this section.

Subd. 6. **Appeal.** If a petition under this section is dismissed by the special master, either before or after a public hearing, the petitioner may appeal the decision to the supreme court within 30 days. The supreme court shall grant an expedited appeal.

HIST: 1986 c 418 s 6

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.20 Decision; certification.

If the special master determines that the elected county official committed malfeasance or nonfeasance in the performance of official duties, the case must be certified to the county auditor for a removal election on a date to be fixed by the county auditor and held within 30 days of the order of the special master.

HIST: 1986 c 418 s 7

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.21 Appeal.

An elected county official may appeal the decision of a special master under section 351.20 to the supreme court within ten days. The removal election is stayed until 20 days after the supreme court issues a decision on the appeal. The supreme court shall grant an expedited appeal.

HIST: 1986 c 418 s 8

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.22 Removal election; disqualification.

Subdivision 1. **Majority vote; form of question.** An elected county official may be removed pursuant to sections 351.14 to 351.23 by majority vote. The removal election is a special election conducted under applicable provisions of section 375.20. The question submitted to the voters must be:

"Should ....., elected (appointed) to the office of .....
(Name) (title)
be removed from that office?

Yes .....
No ....."

Any resulting vacancy must be filled as provided by law.

Subd. 2. **Disqualification.** A removed county official may not thereafter hold the same office for the remainder of the term to which the official was elected.

HIST: 1986 c 418 s 9

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Minnesota Statutes 2000, Table of Chapters

Table of contents for Chapter 351

351.23 Extension of time.

The chief justice may extend the time limitations in sections 351.14 to 351.23 for good cause.

HIST: 1986 c 418 s 10

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New Business

3. Area II Work Plan - DECISION

approved 6/27/01

AREA II RIVER BASIN PROJECTS INC
ANNUAL PLAN-FISCAL YEAR 2002.

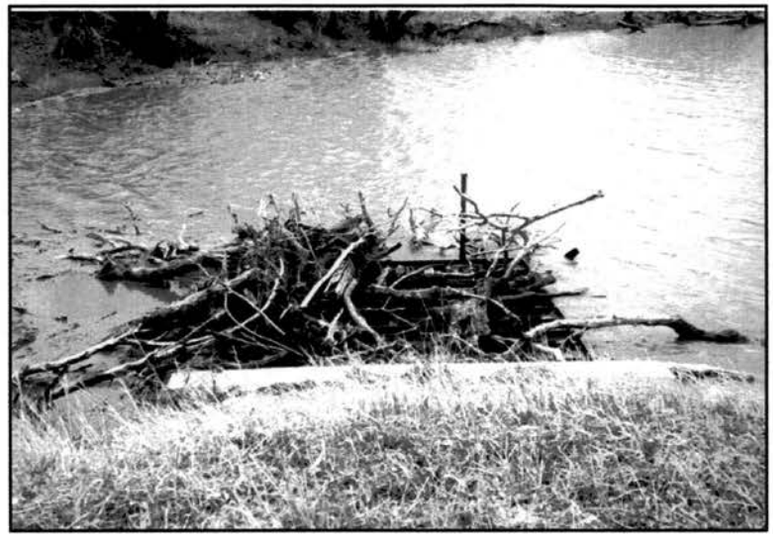
Area II River Basin is seeking approval of their Fiscal Year 2002 annual work plan. The BWSR is the pass through agency for this 1978 statutory project to control flooding in 9 counties in SW MN. These counties are Brown, Cottonwood, Lac Qui Parle, Lincoln, Lyon, Murray, Pipestone, Redwood, and Yellow Medicine draining into the MN River. The project receives $189,000 annually from the State of Minnesota and is required to match these funds by 25%. Of the state share, $148,608.75 will be used to cover administrative costs of a Coordinator, Engineer, Technician and office operations. Directors compensation and related expenses are paid by the member counties. The remaining state grant of $40,391.25 will be added to other state project monies and local match to install flood control projects under individual grant agreement upon project initiation.

Area II has been successful in securing state funding, including two bonding allocations in 1996 and 1998 for a combined total of $750,000. In the past 5 yrs. a total of $1.55M (69.3%) has been leveraged by $.7M (30.7%) local cash match. Currently Area II is finishing up the remaining three projects funded under the last bonding allocation. These should be completed by fall. Planning and assessment of future projects is ongoing and a 2002 bonding allocation will be imperative for the continued operations of Area II.

Board Conservationist Tabor Hoek, has reviewed and is recommending approval of this work plan. Copies of the full plan will be provided at the board meeting.

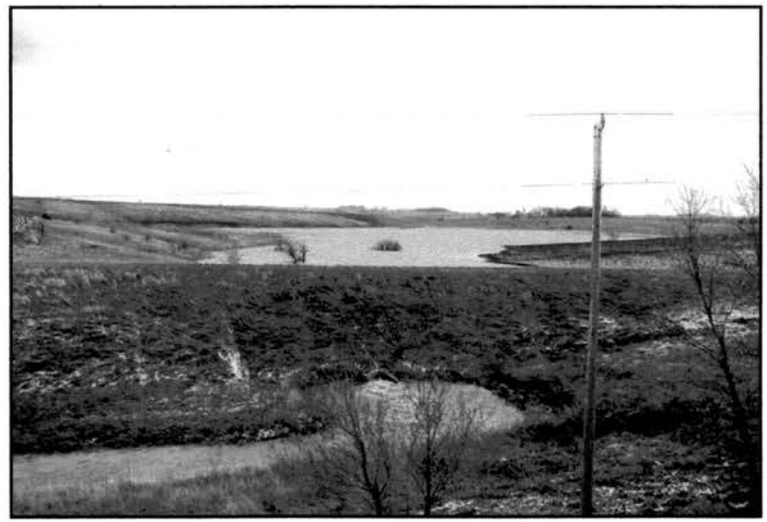
FLOODWATER RETENTION PROJECTS IN ACTION
SPRING 2001

ANN 6 [COTTONWOOD COUNTY]



MONROE 4 [LYON COUNTY]

ROCK LAKE 15 [LYON COUNTY]



ROCK LAKE 21 [LYON COUNTY]

ANNUAL PLAN – FISCAL 2002

JULY 1, 2001 – JUNE 30, 2002

AREA II MINNESOTA RIVER BASIN PROJECTS, INC.

2001 BOARD OF DIRECTORS

BROWN COUNTY
ANDREW LOCHNER - CHAIR
CHARLES GUGGISBERG

COTTONWOOD COUNTY
KENNETH ELG
MARLOWE NELSEN

LAC QUI PARLE COUNTY
ALBERT HOFFMAN - SECRETARY
HAROLD SOLEM

LINCOLN COUNTY
LARRY HANSEN
CURT BLUMEYER

LYON COUNTY
CLARENCE BUYSSE - TREASURER
PHILIP NELSON

MURRAY COUNTY
KEVIN ANDERSON
STEVE JOHNSON

PIPESTONE COUNTY
ROBERT WEETS
MARVIN TINKLENBERG

REDWOOD COUNTY
DAROLD NEPERMAN - 1ST VICE CHAIR
JOSEPH SCHOUVIELLER

YELLOW MEDICINE COUNTY
LOUIS SHERLIN - 2ND VICE CHAIR
JOANN COOVER

AREA II MINNESOTA RIVER BASIN PROJECTS, INC.

AREA II ANNUAL REPORT
FISCAL 2002

PROJECTS FUNDED	STATE	AREA II	MATCH SOURCE	
North Hero 35 Road Retention - Redwood County	$ 43,295.65	$ 17,984.26	$ 10,879.51	Redwood County
Monroe 14 Road Retention - Lyon County	54,642.74	0.00	39,985.40	Lyon County
Amiret17 Small Dam Repair - Lyon County (14,657.84)	4,657.84	552.61	1,000.00	Landowner0
Sodus 5 Small Dam Repair - Lyon County	10,000.00	3,333.33		Area II
Sodus 4 Small Dam Repair - Lyon County	14,727.60	3,068.25	1,840.95	Landowner
Sodus 5 Small Dams Construction - Lyon County	73,685.47	1,101.54	24,556.95	Landowner
Norman 16 Dam Construction - Yellow Medicine County	81,036.15	0.00	25,012.05	Landowner
			2,000.00	LQP-YB Watershed District
Stately 6 Small Dam Repair - Brown County	70,995.00	0.00	23,665.00	Landowner
	$ 353,040.45	$ 26,039.99	$ 128,939.86	*(69.5/30.5 cost-share average)*
			Local match = $ 154,979.85	

COMPLETED PROJECTS

Sodus 4 Small Dam Repair - Lyon County

This former ACP dam was reconstructed by replacing the 24" diameter corroded metal culvert with a 36" diameter concrete pipe, in addition to reconstructing and raising the embankment 4' to a safe, operational condition. A cleanout of the silt/sediment buildup within the existing pool was also performed. Besides serving as a sediment basin, the dam will impound 22.8 acre-feet of floodwater and will provide wildlife habitat with the 5.0 acre permanent pool. This project reduces the 100-year storm flow by 102 cfs, a reduction of 51%.

North Hero 35 Road Retention - Redwood County

Partnered with Redwood County SWCD and Highway Department, North Hero Township and the landowner to downsize the existing culvert and raise the roadway elevation to create a temporary floodpool of 24.6 acres and impound 88 acre-feet of floodwater. The 100-year flow is reduced from 424 cfs to 253 cfs (a 40% reduction).

Sodus 5 Small Dams Construction - Lyon County

This project consisted of constructing two earthen dams upon the same property. The upper dam was 16' in height with an 20' wide overflow section at 10' height. This dam retains a small permanent pool for wildlife purposes. The lower dam is 18' in height consisting of a 36" diameter outlet with a 48" riser pipe. This dam is most effective in reducing the more frequent 5- and 10-year storm events (76% reduction in flows), and reduces the 100-year event by 53%, or 137 cfs. 32.2 acre-feet of floodwater storage is provided.

AREA II ANNUAL PLAN
FISCAL 2002

FUNDING

		Local Match
Annual Allocation from the State of Minnesota *(75/25)*	$ 189,000.00	
Technical Services Agreement (details on Attachment I)	[147,671.25]	$ 49,223.75
Available Project Funds	[41,328.75]	13,776.25
1998 $500,000 General Appropriation for Floodwater Retention - Balance *(60/40)*	0.00	0.00 *
FUNDING AVAILABLE FOR FISCAL 2002	**$ 189,000.00**	**$ 63,000.00**
	Total = $252,000.00	

*Local match of $208,609.69 has been provided to date, and is expected to surpass the $333,000.00 required at grant completion. All funds are encumbered and three projects await completion during the summer of 2001.

2002 WORK PLAN

Office staff: Kerry Netzke, Coordinator Joe DeSchepper, Engineering Technician Duane Hansel, PE ~ Consultant Engineer

Focus: Administratively, the professional engineering services of Duane Hansel from the firm of Bolton & Menk, Inc. as proven to be a wonderful working arrangement since his start in March 2000. Area II has been able to provide quality engineering of floodwater retention projects at a lesser expense than retaining a full-time professional engineer on staff. Progress continues on the feasibility, design, and construction of retention projects throughout the nine county region of Area II. Naturally, the spring flooding of 2001 only elevated the interest in floodwater retention and provided us with a new list of potential projects. The only problem being encountered is the lack of actual construction dollars. The nine counties remain strongly supportive of this joint powers organization and have recently signed a new 2-year joint powers agreement taking effect July 1, 2001.

Financially, Area II is very limited in the next fiscal year with regards to construction with $55,105.00 available. The remaining 1998 General Appropriation for Retention Projects *(see page 5)* was encumbered in entirety the Spring of 2001. Three projects await construction this summer as delayed from last fall all due to an early onset of winter weather conditions. Additional construction funding was sought from the 2001 Legislature in the amount of $500,000 with a local match of 25%. Our request was warmly received by the Senate Ag & Environment Budget Division, which referred the request over to the Capital Investment Committee. However, like all other requests for local funding, our request was not deemed "emergency" in nature and was lain over until the 2002 Bonding Bill. Work will continue at Area II for the feasibility and design of the prioritized projects as listed on page 4 of this plan. Obtaining construction funding in 2002 will become crucial to this organization.

Scheduled Projects: The primary efforts of the office staff will be on the feasibility, design, and installation of road retention structures, small dams, and small dam repairs within the nine county area. Project prioritization includes: feasibility, cost, local support, emergency situations (such as bridge failures) and timing with scheduled construction plans. The following projects have been prioritized by the Area II Board of Directors and have been contracted with the engineering firm of Bolton & Menk, Inc. to be designed for construction.

INITIAL AGREEMENT ~ signed April 6, 2000	***Status***
Norman Township Section 16 - Yellow Medicine County	Bids let. Awaiting construction Summer 2001.
Charlestown 34 Dam Construction - Redwood County	Design complete. Arranging local match.
Sodus 11 Small Dam Repair - Lyon County	Design complete. Landowner considering alternatives.
AMENDMENT #1 ~ signed June 1, 2000	
Marble 14 Road Retention - Lincoln County	Design complete. Plunge pool design alternatives being considered.
Germantown 4 - Cottonwood County	Preliminary Design Complete. Currently being reviewed by DNR for permit concerns.
Lynd Township Section 20 - Lyon County	Preliminary Design Phase.
Lynd Township Section 16 - Lyon County	Preliminary Design Phase.
Monroe 10 Road Retention - Lyon County	Design complete. Acquiring easements.
Monroe 14 Road Retention - Lyon County	Bids let. Awaiting construction Summer 2001.
Coon Creek 23 Road Retention - Lyon County	Design complete. Acquiring easements.
AMENDMENT #2 ~ signed October 5, 2000	
Amiret Township, Section 17 - Lyon County	Design complete. Acquiring quotes for construction.
Springdale Township, Section 21 - Redwood County	Survey underway for final design.
Monroe Township, Section 36 - Lyon County	Design complete. Acquiring easements and quotes.
North Hero Township, Section 34 - Redwood County	Plans and specifications complete. DNR permitting needed.
Ann Township, Section 26- Cottonwood County	Design Complete. Not cost-effective for construction.
North Hero 26 Road Retention-Redwood County	Preliminary Design complete. Feasible, but not advisable due to county ditch impact.
Germantown 2 Road Retention-Cottonwood County	Design complete. Acquiring easements.
Amboy 24 Road Retention-Cottonwood County	Investigating CREP requirements upon the property.
Hansonville 11 Small Dam-Lincoln County	Design complete. Feasible, but not cost-effective.
Marble 23 Small Dam-Lincoln County	Survey underway.
Royal 7 Small Dam Repair - Lincoln County	Plans complete.

Projects in Preliminary Design Phase:

Monroe 8 Road Retention - Lyon County
Norman 35N Road Retention - Yellow Medicine County
Springdale 28 Road Retention - Redwood County
Delton 19 Small Dams - Cottonwood County

AMENDMENT #3 ~ signed May 3, 2001	
Stately 29 Road Retention-Brown County	Final Design. Acquiring easements.
Stately 28 Road Retention/Small Dam-Brown County	Preliminary Design. Being done in conjunction with CSAH 2 upgrade scheduled for 2002.
Springdale 32 Small Dam - Lyon County	Survey complete. Design stage.
Custer 13 Small Dam - Lyon County	Survey underway.

Projects in Preliminary Design Phase:

Fortier 22 Small Dam - Yellow Medicine County
Limestone 3 Road Retention - Lincoln County
Amiret 19 Road Retention - Lyon County
Lake Marshall 28 Small Dam Repair - Lyon County
Holly 9 Small Dam - Murray County
Rock Lake 1Road Retention - Lyon County
Amiret 34 Road Retention - Lyon County
Lake Marshall 29 Small Dam - Lyon County
Lyons 12 Small Dam - Lyon County
Limestone 27 Road Retention - Lincoln County
Amiret 14 Road Retention - Lyon County
Nordland 5 Road Retention - Lyon County
Lake Marshall 32 Small Dam - Lyon County

LQP-25 {LAZARUS CREEK}
FLOODWATER CONTROL PROJECT

Project Co-Sponsors - Lac qui Parle-Yellow Bank Watershed District and Yellow Medicine County.

Project Status - Plans and specifications finalized by Houston Engineering, Inc. in December 1999.
Engineering fees in excess of $146,799.90 have been funded through the Area II's project funds.
The DNR granted the Protected Waters/Dam Safety Permit in January 1999. Permit has been extended to January 2004.

Funding Status - $ 1.5 Million Requested from the 2001 Legislature. $500,000 local match requirement (75/25).

May 1999	Vetoed by Governor Ventura.
May 10, 2000	Project was included in the Senate's Bonding Bill proposal for $1.25 million, however was accidentally allowed to drop out due to the marathon committee meeting.
May 17, 2000	Representative Marty Seifert made an attempt upon the House floor to override the Governor's veto from the previous year, but the motion failed with 63-65 vote.
May 2001	Following the Senate Ag & Environment Budget Division's recommendation for inclusion in the bonding bill, the project was deemed non-emergency in nature and failed to make the project list.

Next Step - The watershed district has already stated its intentions to pursue State funding in 2002. There has been too much time, effort, and money put into the planning and design of this project to give up when funding the project becomes difficult.

FLOODWATER RETENTION FUNDS STATUS

APPROPRIATED AMOUNT: $ 500,000.00 **(Balance: $0.00)**
STATUS OF 40% LOCAL MATCH: $241,373.69 local match has been provided to date, $333,000 when last three projects constructed.
APPROPRIATION LANGUAGE: For grants to assist local governments in acquiring and constructing floodwater retention systems in Area II of the Minnesota River Basin.

PROJECT STATUS: Three projects remain to construct as shown in the shaded rows. Construction for these projects was scheduled for Fall 2000, however, winter weather conditions prevented construction.

PROJECT	LOCATION	STATE FUNDING	LOCAL FUNDING	STATUS
Banks Small Dam Repair	Lyon County	1,500.00	5,025.00	Completed November 1998
Black Rush Lake Wetland Restoration	Lyon County	51,000.00	106,815.00	Completed Summer 1999
Anderson Wetland Restoration	Lincoln County	2,500.00	4,099.25	Completed Fall 1999
Amiret 33W Road Retention	Lyon County	39,871.08	16,855.57	Completed Fall 1999
Amiret 33E Road Retention	Lyon County	39,355.94	15,385.72	Completed Fall 1999
Coon Creek 28 Dam	Lyon County	99,633.78	42,103.00	Completed Fall 1999
Pankonin Dam Repair	***Brown County***	***11,250.00 59,745.00***	***3,750.00 19,915.00***	***Spring 2001***
Steffes Small Dam Repair	Lincoln County	1,970.00	4,950.00	Completed Fall 1999
Fairchild Small Dam Repair	Yellow Medicine County	6,435.00	2,145.00	Completed Fall 1999
Citterman Small Dam Repair	Lincoln County	3,281.25	1,343.75	Completed Spring 2000
Sodus 4 Small Dam Repair	Lyon County	14,727.60	6,137.40	Completed Fall 2000
Norman 16 Small Dam Construction	***Yellow Medicine County***	***81,036.15***	***31,725.91***	***Spring 2001***
North Hero 35 Road Retention	Redwood County	43,295.65	32,764.00	Completed Fall 2000
Monroe 14 Road Retention	***Lyon County***	***44,398.55***	***39,985.40***	***Spring 2001***
TOTALS		**$ 500,000.00**	**$ 333,000.00**	

ATTACHMENTS

ANNUAL PLAN – FISCAL 2002

ATTACHMENT I –
FISCAL 2002 TECHNICAL OFFICE BUDGET

ATTACHMENT II –
PAST FUNDING SCENARIOS FOR COST-SHARED ROAD RETENTION PROJECTS

AREA II MINNESOTA RIVER
BASIN PROJECTS, INC.

ATTACHMENT I
FISCAL 2002 TECHNICAL OFFICE BUDGET

OFFICE OPERATIONS

Personal Services:

*Directors' Compensation	$ *11,000.00**
*Directors' FICA	*1,000.00**
Employees' Salaries	73,500.00
Employees' FICA	5,600.00
Employees' Medical Insurance	7,200.00
Employees' Retirement	3,300.00
Employee' FlexPlan	120.00
Total Personal Services	**$ 101,720.00**

Supplies:

Office	$ 2,500.00
Field	1,000.00
Capital Outlay	1,000.00
Total Supplies	**$ 4,500.00**

Other Services and Costs:

*Directors' Expenses	$ *5,500.00**
Employees' Expenses	1,500.00
Continuing Education	500.00
Professional Services	40,000.00
Maintenance & Repairs	2,000.00
Telephone	1,000.00
Postage	1,500.00
Vehicle Expense	2,000.00
*Director's Insurance	*1,250.00**
Other Insurance	9,500.00
Rent	6,675.00
Miscellaneous & Other Expenses	3,000.00
*Miscellaneous Expenses - Directors	*100.00**
Subsurface Investigations	25,000.00
Other Technical Services and Testing	10,000.00
Total Other Services and Costs	**$ 109,525.00**

TOTAL OFFICE OPERATIONS	$ 215,745.00
Total Ineligible for Cost-Share by the State	*18,850.00**
Total Eligible for Cost-Share by the State	$ 196,895.00
STATE SHARE OF ELIGIBLE COSTS	**$** 147,671.25 (75%)
Local Share of Eligible Costs	49,223.75 (25%)
Costs Ineligible for Cost-Share	*18,850.00**
NET BUDGETED LOCAL COSTS	$ 68,073.75

** These items not cost-shared by the State*

SUMMARY:

Technical Office Grant	***$ 147,671.25***
Project Grants	***41,328.75***
Annual Allocation from State of Minnesota	***$ 189,000.00***

ATTACHMENT II
PAST 5-YEAR FUNDING SCENARIOS FOR RETENTION PROJECTS

PROJECT	COMPLETION DATE & LOCATION	TOTAL ELIGIBLE COSTS	BWSR AMOUNT (% of Total)	OTHER STATE FUNDING	AREA II AMOUNT (% of Total)	LOCAL AMOUNT (% of Total)
Monroe 14 Road Retention	Summer 2001 Lyon County	$94,628.14	$54,642.74 (57.7%)	0.00	$17,116.25	$22,869.15 (24.2%)
Norman 16 Small Dam Construction	Summer 2001 Yellow Medicine Co.	$112,762.06	$81,036.15 (71.9%)	0.00	0.00	$31,725.91 (28.1%)
Sodus 5 Small Dams Construction	Fall 2000 Lyon County	$99,548.78	$73,685.47 (74.0%)	0.00	$1,101.54 (1.10%)	$24,761.77 (24.9%)
Sodus 4 Small Dam Restoration	Fall 2000 Lyon County	$24,546.00	$14,727.60 (60.0%)	3,681.00[1] (15.0%)	$3,068.25 (12.5%)	$3,069.15 (12.5%)
Citterman Small Dam Restoration	Spring 2000 Lincoln County	$5,468.75	$3,281.25 (760.0%)	0.00	0.00	$2,187.50 (40.0%)
North Hero 35 Road Retention	Fall 2000 Redwood County	$88,059.32	$43,295.65 (49.2%)	$12,000.00 (13.6%)	$17,984.26 (20.4%)	$14,779.41 (16.8%)
Pankonin Small Dam Restoration	Summer 2001 Brown County	$94,660.00	$70,995.00 (75%)	0.00	0.00	$23,665.00 (25%)
Amiret 33W Road Retention	Fall 1999 Lyon County	$56,726.65	$39,871.08 (70.3%)	0.00	0.00	$16,855.57 (29.7%)
Amiret 33E Road Retention	Fall 1999 Lyon County	$54,741.66	$39,355.94 (71.9%)	0.00	0.00	$15,385.72 (28.1%)
Lake Marshall 19 Road Retention	Fall 1999 Lyon County	$78,068.55	0.00	$58,284.00[5] (74.6%)	0.00	$19,784.55 (25.3%)
Coon Creek 28 Dam	Fall 1999 Lyon County	$146,202.78	$99,633.78 (68.1%)	$4,466.00 (3.1%)	0.00	$42,103.00 (28.8)
Anderson Wetland Restoration	Summer 1999 Lincoln County	$6,599.25	$2,500.00 (37.9%)	0.00	0.00	$4,099.25 (62.1%)
Fairchild Small Dam Repair	Summer 1999 Yellow Med. Co.	$8,580.00	$6,435.00 (75.0%)	0.00	$145.00 (1.7%)	$2,000.00 (23.3%)
Steffes Small Dam Repair	Summer 1999 Lincoln County	$8,920.00	$1,970.00 (22.1%)	$2,000.00[1] (22.4)	0.00	$4,950.00 (55.5%)

continued on next page

ATTACHMENT II
PAST 5-YEAR FUNDING SCENARIOS FOR RETENTION PROJECTS

Black Rush Lake Wetland Restoration	Summer 1999 Lyon County	$263,362.00	$51,000.00 (19.4%)	$105,547.00 [3] (40.0%)	0.00	$106,815.00 (40.6%)
Banks Small Dam Repair	Fall 1999 Lyon County	$13,727.6	$1,500.00 (10.9%)	$7,202.60 [1] (52.5%)	0.00	$5,025.00 (36.6%)
North Hero 10 Road Retention	Summer 1998 Redwood County	$84,318.00	0.00	$11,318.00[1] (13.4%) $54,750.00[5] (65.9%)	$18,250.00 (21.6%)	In-kind construction inspection
Island Lake 22 Road Retention	Fall 1998 Lyon County	$231,790.15	0.00	$125,815.00[2] (54.3%) $56,875.00[5] (24.5%)	$0.00	$49,100.15 (21.2%)
Rock Lake 21 Dam Construction	Fall 1998 Lyon County	$92,600.00	$69,450.00 (75.0%)	0.00	$23,150.00 (25.0%)	0.00
Fortier 15 Road Retention	Summer 1997 Yellow Med. Co.	$41,138.10	0.00	0.00	$30,000.00 (73.0%)	$11,138.10 (27.0%)
Ann 6 Modification	Fall 1997 Cottonwood Co.	$30,235.00	0.00	$22,500.00[5] (74.4%)	$5,000.00 (16.6%)	$2,375.00 (9.0%)
Traen Small Dam Restoration	Fall 1997 Lincoln County	$7,115.11	$1,500.00 (21.1%)	$2,000.00[1] (28.1%)	0.00	$3,615.11 (50.8%)
Gales 16 Road Retention	Fall 1996 Redwood County	$20,404.00	0.00	$18,154.00[1] (89.0%)	$2,250.00 (11.0%)	0.00
Carlson Small Dam Restoration	Fall 1996 Lincoln County	$12,006.75	$3,750.00 (31.2%)	$5,878.38[1] (49.0%)	0.00	$2,378.37 (19.8%)
Lyons 3 Road Retention	Fall 1996 Lyon County	$202,408.30	$11,232.52 $41,864.00[4] (26.2%)	$53,125.00[5] (26.2%)	$10,444.17 (5.2%)	$85,742.61 (42.4%)
North Hero 31 Road Retention	Fall 1996 Redwood County	$103,820.59	$21,242.48 (20.4%)	$53,445.00[2] $17,651.11[1] (68.5%)	$7,080.83 (6.9%)	$4,401.17 (4.2%)
Nordland 30/29 Road Retention	Summer 1996 Lyon County	$30,172.15	$21,000.00 $4,500.00[4] (84.5%)	0.00	0.00	$4,672.15 (15.5%)
Nordland 7 Road Retention	Summer 1996 Lyon County	$82,487.65	$30,000.00 (36.4%)	26,000.00[4] (31.5%)	0.00	$26,487.65 (32.1%)
Lake Stay 9 Road Retention	Summer 1996 Lincoln County	$156,983.00	$18,750.00 (11.9%)	$95,330.00[2] $6,500.00[1] (64.9%)	$6,250.00 (4.0%)	$15,200.00 (19.2%)
TOTALS		2,237,127.35	1,549,740.75 (69.3%)		687,386.60 (30.7%)	

NOTE: [1] Water Plan Base Grant funds; [2] MNDOT funds; [3] DNR FDR Grants funds; [4] BWSR Challenge Grant Funds; [5] Road Retention Bonding Funds

As of June 2001

ANNUAL PLAN – FISCAL 2002

JULY 1, 2001 – JUNE 30, 2002

2001

AREA II MINNESOTA RIVER BASIN PROJECTS, INC.

2001 BOARD OF DIRECTORS

BROWN COUNTY
- ANDREW LOCHNER - CHAIR
- CHARLES GUGGISBERG

COTTONWOOD COUNTY
- KENNETH ELG
- MARLOWE NELSEN

LAC QUI PARLE COUNTY
- ALBERT HOFFMAN - SECRETARY
- HAROLD SOLEM

LINCOLN COUNTY
- LARRY HANSEN
- CURT BLUMEYER

LYON COUNTY
- CLARENCE BUYSSE - TREASURER
- PHILIP NELSON

MURRAY COUNTY
- KEVIN ANDERSON
- STEVE JOHNSON

PIPESTONE COUNTY
- ROBERT WEETS
- MARVIN TINKLENBERG

REDWOOD COUNTY
- DAROLD NEPERMAN - 1ST VICE CHAIR
- JOSEPH SCHOUVIELLER

YELLOW MEDICINE COUNTY
- LOUIS SHERLIN - 2ND VICE CHAIR
- JOANN COOVER

AREA II MINNESOTA RIVER BASIN PROJECTS, INC.

AREA II ANNUAL REPORT
FISCAL 2002

PROJECTS FUNDED	STATE	AREA II	MATCH SOURCE	
North Hero 35 Road Retention - Redwood County	$ 43,295.65	$ 17,984.26	$ 10,879.51	Redwood County
Monroe 14 Road Retention - Lyon County	54,642.74	0.00	39,985.40	Lyon County
Amiret17 Small Dam Repair - Lyon County (14,657.84)	4,657.84	552.61	1,000.00	Landowner0
Sodus 5 Small Dam Repair - Lyon County	10,000.00	3,333.33		Area II
Sodus 4 Small Dam Repair - Lyon County	14,727.60	3,068.25	1,840.95	Landowner
Sodus 5 Small Dams Construction - Lyon County	73,685.47	1,101.54	24,556.95	Landowner
Norman 16 Dam Construction - Yellow Medicine County	81,036.15	0.00	25,012.05	Landowner
			2,000.00	LQP-YB Watershed District
Stately 6 Small Dam Repair - Brown County	70,995.00	0.00	23,665.00	Landowner
	$ 353,040.45	$ 26,039.99	$ 128,939.86	***(69.5/30.5 cost-share average)***
		Local match = $ 154,979.85		

COMPLETED PROJECTS

Sodus 4 Small Dam Repair - Lyon County

This former ACP dam was reconstructed by replacing the 24" diameter corroded metal culvert with a 36" diameter concrete pipe, in addition to reconstructing and raising the embankment 4' to a safe, operational condition. A cleanout of the silt/sediment buildup within the existing pool was also performed. Besides serving as a sediment basin, the dam will impound 22.8 acre-feet of floodwater and will provide wildlife habitat with the 5.0 acre permanent pool. This project reduces the 100-year storm flow by 102 cfs, a reduction of 51%.

North Hero 35 Road Retention - Redwood County

Partnered with Redwood County SWCD and Highway Department, North Hero Township and the landowner to downsize the existing culvert and raise the roadway elevation to create a temporary floodpool of 24.6 acres and impound 88 acre-feet of floodwater. The 100-year flow is reduced from 424 cfs to 253 cfs (a 40% reduction).

Sodus 5 Small Dams Construction - Lyon County

This project consisted of constructing two earthen dams upon the same property. The upper dam was 16' in height with an 20' wide overflow section at 10' height. This dam retains a small permanent pool for wildlife purposes. The lower dam is 18' in height consisting of a 36" diameter outlet with a 48" riser pipe. This dam is most effective in reducing the more frequent 5- and 10-year storm events (76% reduction in flows), and reduces the 100-year event by 53%, or 137 cfs. 32.2 acre-feet of floodwater storage is provided.

AREA II ANNUAL PLAN
FISCAL 2002

FUNDING

		Local Match
Annual Allocation from the State of Minnesota *(75/25)*	$ 189,000.00	
Technical Services Agreement (details on Attachment I)	[147,671.25]	$ 49,223.75
Available Project Funds	[41,328.75]	13,776.25
1998 $500,000 General Appropriation for Floodwater Retention - Balance *(60/40)*	0.00	0.00 *
FUNDING AVAILABLE FOR FISCAL 2002	**$ 189,000.00**	**$ 63,000.00**
	Total = $252,000.00	

*Local match of $208,609.69 has been provided to date, and is expected to surpass the $333,000.00 required at grant completion. All funds are encumbered and three projects await completion during the summer of 2001.

2002 WORK PLAN

Office staff: Kerry Netzke, Coordinator Joe DeSchepper, Engineering Technician Duane Hansel, PE ~ Consultant Engineer

Focus: Administratively, the professional engineering services of Duane Hansel from the firm of Bolton & Menk, Inc. as proven to be a wonderful working arrangement since his start in March 2000. Area II has been able to provide quality engineering of floodwater retention projects at a lesser expense than retaining a full-time professional engineer on staff. Progress continues on the feasibility, design, and construction of retention projects throughout the nine county region of Area II. Naturally, the spring flooding of 2001 only elevated the interest in floodwater retention and provided us with a new list of potential projects. The only problem being encountered is the lack of actual construction dollars. The nine counties remain strongly supportive of this joint powers organization and have recently signed a new 2-year joint powers agreement taking effect July 1, 2001.

Financially, Area II is very limited in the next fiscal year with regards to construction with $55,105.00 available. The remaining 1998 General Appropriation for Retention Projects *(see page 5)* was encumbered in entirety the Spring of 2001. Three projects await construction this summer as delayed from last fall all due to an early onset of winter weather conditions. Additional construction funding was sought from the 2001 Legislature in the amount of $500,000 with a local match of 25%. Our request was warmly received by the Senate Ag & Environment Budget Division, which referred the request over to the Capital Investment Committee. However, like all other requests for local funding, our request was not deemed "emergency" in nature and was lain over until the 2002 Bonding Bill. Work will continue at Area II for the feasibility and design of the prioritized projects as listed on page 4 of this plan. Obtaining construction funding in 2002 will become crucial to this organization.

Scheduled Projects: The primary efforts of the office staff will be on the feasibility, design, and installation of road retention structures, small dams, and small dam repairs within the nine county area. Project prioritization includes: feasibility, cost, local support, emergency situations (such as bridge failures) and timing with scheduled construction plans. The following projects have been prioritized by the Area II Board of Directors and have been contracted with the engineering firm of Bolton & Menk, Inc. to be designed for construction.

➢ ***INITIAL AGREEMENT*** ~ *signed April 6, 2000*	***Status***
Norman Township Section 16 - Yellow Medicine County	Bids let. Awaiting construction Summer 2001.
Charlestown 34 Dam Construction - Redwood County	Design complete. Arranging local match.
Sodus 11 Small Dam Repair - Lyon County	Design complete. Landowner considering alternatives.
➢ ***AMENDMENT #1*** ~ *signed June 1, 2000*	
Marble 14 Road Retention - Lincoln County	Design complete. Plunge pool design alternatives being considered.
Germantown 4 - Cottonwood County	Preliminary Design Complete. Currently being reviewed by DNR for permit concerns.
Lynd Township Section 20 - Lyon County	Preliminary Design Phase.
Lynd Township Section 16 - Lyon County	Preliminary Design Phase.
Monroe 10 Road Retention - Lyon County	Design complete. Acquiring easements.
Monroe 14 Road Retention - Lyon County	Bids let. Awaiting construction Summer 2001.
Coon Creek 23 Road Retention - Lyon County	Design complete. Acquiring easements.
➢ ***AMENDMENT #2*** ~ *signed October 5, 2000*	
Amiret Township, Section 17 - Lyon County	Design complete. Acquiring quotes for construction.
Springdale Township, Section 21 - Redwood County	Survey underway for final design.
Monroe Township, Section 36 - Lyon County	Design complete. Acquiring easements and quotes.
North Hero Township, Section 34 - Redwood County	Plans and specifications complete. DNR permitting needed.
Ann Township, Section 26- Cottonwood County	Design Complete. Not cost-effective for construction.
North Hero 26 Road Retention-Redwood County	Preliminary Design complete. Feasible, but not advisable due to county ditch impact.
Germantown 2 Road Retention-Cottonwood County	Design complete. Acquiring easements.
Amboy 24 Road Retention-Cottonwood County	Investigating CREP requirements upon the property.
Hansonville 11 Small Dam-Lincoln County	Design complete. Feasible, but not cost-effective.
Marble 23 Small Dam-Lincoln County	Survey underway.
Royal 7 Small Dam Repair - Lincoln County	Plans complete.

Projects in Preliminary Design Phase:

Monroe 8 Road Retention - Lyon County
Norman 35N Road Retention - Yellow Medicine County
Springdale 28 Road Retention - Redwood County
Delton 19 Small Dams - Cottonwood County

➢ ***AMENDMENT #3*** ~ *signed May 3, 2001*	
Stately 29 Road Retention-Brown County	Final Design. Acquiring easements.
Stately 28 Road Retention/Small Dam-Brown County	Preliminary Design. Being done in conjunction with CSAH 2 upgrade scheduled for 2002.
Springdale 32 Small Dam - Lyon County	Survey complete. Design stage.
Custer 13 Small Dam - Lyon County	Survey underway.

Projects in Preliminary Design Phase:

Fortier 22 Small Dam - Yellow Medicine County
Limestone 3 Road Retention - Lincoln County
Amiret 19 Road Retention - Lyon County
Lake Marshall 28 Small Dam Repair - Lyon County
Holly 9 Small Dam - Murray County
Rock Lake 1Road Retention - Lyon County
Amiret 34 Road Retention - Lyon County
Lake Marshall 29 Small Dam - Lyon County
Lyons 12 Small Dam - Lyon County
Limestone 27 Road Retention - Lincoln County
Amiret 14 Road Retention - Lyon County
Nordland 5 Road Retention - Lyon County
Lake Marshall 32 Small Dam - Lyon County

LQP-25 {LAZARUS CREEK}
FLOODWATER CONTROL PROJECT

Project Co-Sponsors - Lac qui Parle-Yellow Bank Watershed District and Yellow Medicine County.

Project Status - Plans and specifications finalized by Houston Engineering, Inc. in December 1999.
Engineering fees in excess of $146,799.90 have been funded through the Area II's project funds.
The DNR granted the Protected Waters/Dam Safety Permit in January 1999. Permit has been extended to January 2004.

Funding Status - $ 1.5 Million Requested from the 2001 Legislature. $500,000 local match requirement (75/25).

May 1999	Vetoed by Governor Ventura.
May 10, 2000	Project was included in the Senate's Bonding Bill proposal for $1.25 million, however was accidentally allowed to drop out due to the marathon committee meeting.
May 17, 2000	Representative Marty Seifert made an attempt upon the House floor to override the Governor's veto from the previous year, but the motion failed with 63-65 vote.
May 2001	Following the Senate Ag & Environment Budget Division's recommendation for inclusion in the bonding bill, the project was deemed non-emergency in nature and failed to make the project list.

Next Step - The watershed district has already stated its intentions to pursue State funding in 2002. There has been too much time, effort, and money put into the planning and design of this project to give up when funding the project becomes difficult.

FLOODWATER RETENTION FUNDS STATUS

➢**APPROPRIATED AMOUNT:** $ 500,000.00 **(Balance: $0.00)**

➢**STATUS OF 40% LOCAL MATCH:** $241,373.69 local match has been provided to date, $333,000 when last three projects constructed.

➢**APPROPRIATION LANGUAGE:** For grants to assist local governments in acquiring and constructing floodwater retention systems in Area II of the Minnesota River Basin.

➢ **PROJECT STATUS:** Three projects remain to construct as shown in the shaded rows. Construction for these projects was scheduled for Fall 2000, however, winter weather conditions prevented construction.

PROJECT	LOCATION	STATE FUNDING	LOCAL FUNDING	STATUS
Banks Small Dam Repair	Lyon County	1,500.00	5,025.00	Completed November 1998
Black Rush Lake Wetland Restoration	Lyon County	51,000.00	106,815.00	Completed Summer 1999
Anderson Wetland Restoration	Lincoln County	2,500.00	4,099.25	Completed Fall 1999
Amiret 33W Road Retention	Lyon County	39,871.08	16,855.57	Completed Fall 1999
Amiret 33E Road Retention	Lyon County	39,355.94	15,385.72	Completed Fall 1999
Coon Creek 28 Dam	Lyon County	99,633.78	42,103.00	Completed Fall 1999
Pankonin Dam Repair	***Brown County***	***11,250.00 59,745.00***	***3,750.00 19,915.00***	***Spring 2001***
Steffes Small Dam Repair	Lincoln County	1,970.00	4,950.00	Completed Fall 1999
Fairchild Small Dam Repair	Yellow Medicine County	6,435.00	2,145.00	Completed Fall 1999
Citterman Small Dam Repair	Lincoln County	3,281.25	1,343.75	Completed Spring 2000
Sodus 4 Small Dam Repair	Lyon County	14,727.60	6,137.40	Completed Fall 2000
Norman 16 Small Dam Construction	***Yellow Medicine County***	***81,036.15***	***31,725.91***	***Spring 2001***
North Hero 35 Road Retention	Redwood County	43,295.65	32,764.00	Completed Fall 2000
Monroe 14 Road Retention	***Lyon County***	***44,398.55***	***39,985.40***	***Spring 2001***
TOTALS		**$ 500,000.00**	**$ 333,000.00**	

ATTACHMENTS

ANNUAL PLAN – FISCAL 2002

ATTACHMENT I –
FISCAL 2002 TECHNICAL OFFICE BUDGET

ATTACHMENT II –
PAST FUNDING SCENARIOS FOR COST-SHARED ROAD RETENTION PROJECTS

AREA II MINNESOTA RIVER
BASIN PROJECTS, INC.

ATTACHMENT I
FISCAL 2002 TECHNICAL OFFICE BUDGET

OFFICE OPERATIONS

Personal Services:

*Directors' Compensation	$ *11,000.00**
*Directors' FICA	*1,000.00**
Employees' Salaries	73,500.00
Employees' FICA	5,600.00
Employees' Medical Insurance	7,200.00
Employees' Retirement	3,300.00
Employee' FlexPlan	120.00
Total Personal Services	**$ 101,720.00**

Supplies:

Office	$ 2,500.00
Field	1,000.00
Capital Outlay	1,000.00
Total Supplies	**$ 4,500.00**

Other Services and Costs:

*Directors' Expenses	$ *5,500.00**
Employees' Expenses	1,500.00
Continuing Education	500.00
Professional Services	40,000.00
Maintenance & Repairs	2,000.00
Telephone	1,000.00
Postage	1,500.00
Vehicle Expense	2,000.00
*Director's Insurance	*1,250.00**
Other Insurance	9,500.00
Rent	6,675.00
Miscellaneous & Other Expenses	3,000.00
*Miscellaneous Expenses - Directors	*100.00**
Subsurface Investigations	25,000.00
Other Technical Services and Testing	10,000.00
Total Other Services and Costs	**$ 109,525.00**

TOTAL OFFICE OPERATIONS	$ 215,745.00
Total Ineligible for Cost-Share by the State	*18,850.00**
Total Eligible for Cost-Share by the State	$ 196,895.00
STATE SHARE OF ELIGIBLE COSTS	$ 147,671.25 (75%)
Local Share of Eligible Costs	49,223.75 (25%)
Costs Ineligible for Cost-Share	*18,850.00**
NET BUDGETED LOCAL COSTS	$ 68,073.75

** These items not cost-shared by the State*

SUMMARY:

Technical Office Grant	***$ 147,671.25***
Project Grants	***41,328.75***
Annual Allocation from State of Minnesota	***$ 189,000.00***

ATTACHMENT II
PAST 5-YEAR FUNDING SCENARIOS FOR RETENTION PROJECTS

PROJECT	COMPLETION DATE & LOCATION	TOTAL ELIGIBLE COSTS	BWSR AMOUNT (% of Total)	OTHER STATE FUNDING	AREA II AMOUNT (% of Total)	LOCAL AMOUNT (% of Total)
Monroe 14 Road Retention	Summer 2001 Lyon County	$94,628.14	$54,642.74 (57.7%)	0.00	$17,116.25	$22,869.15 (24.2%)
Norman 16 Small Dam Construction	Summer 2001 Yellow Medicine Co.	$112,762.06	$81,036.15 (71.9%)	0.00	0.00	$31,725.91 (28.1%)
Sodus 5 Small Dams Construction	Fall 2000 Lyon County	$99,548.78	$73,685.47 (74.0%)	0.00	$1,101.54 (1.10%)	$24,761.77 (24.9%)
Sodus 4 Small Dam Restoration	Fall 2000 Lyon County	$24,546.00	$14,727.60 (60.0%)	3,681.00[1] (15.0%)	$3,068.25 (12.5%)	$3,069.15 (12.5%)
Citterman Small Dam Restoration	Spring 2000 Lincoln County	$5,468.75	$3,281.25 (760.0%)	0.00	0.00	$2,187.50 (40.0%)
North Hero 35 Road Retention	Fall 2000 Redwood County	$88,059.32	$43,295.65 (49.2%)	$12,000.00 (13.6%)	$17,984.26 (20.4%)	$14,779.41 (16.8%)
Pankonin Small Dam Restoration	Summer 2001 Brown County	$94,660.00	$70,995.00 (75%)	0.00	0.00	$23,665.00 (25%)
Amiret 33W Road Retention	Fall 1999 Lyon County	$56,726.65	$39,871.08 (70.3%)	0.00	0.00	$16,855.57 (29.7%)
Amiret 33E Road Retention	Fall 1999 Lyon County	$54,741.66	$39,355.94 (71.9%)	0.00	0.00	$15,385.72 (28.1%)
Lake Marshall 19 Road Retention	Fall 1999 Lyon County	$78,068.55	0.00	$58,284.00[5] (74.6%)	0.00	$19,784.55 (25.3%)
Coon Creek 28 Dam	Fall 1999 Lyon County	$146,202.78	$99,633.78 (68.1%)	$4,466.00 (3.1%)	0.00	$42,103.00 (28.8)
Anderson Wetland Restoration	Summer 1999 Lincoln County	$6,599.25	$2,500.00 (37.9%)	0.00	0.00	$4,099.25 (62.1%)
Fairchild Small Dam Repair	Summer 1999 Yellow Med. Co.	$8,580.00	$6,435.00 (75.0%)	0.00	$145.00 (1.7%)	$2,000.00 (23.3%)
Steffes Small Dam Repair	Summer 1999 Lincoln County	$8,920.00	$1,970.00 (22.1%)	$2,000.00[1] (22.4)	0.00	$4,950.00 (55.5%)

continued on next page

ATTACHMENT II
PAST 5-YEAR FUNDING SCENARIOS FOR RETENTION PROJECTS

Black Rush Lake Wetland Restoration	Summer 1999 Lyon County	$263,362.00	$51,000.00 (19.4%)	$105,547.00 [3] (40.0%)	0.00	$106,815.00 (40.6%)
Banks Small Dam Repair	Fall 1999 Lyon County	$13,727.6	$1,500.00 (10.9%)	$7,202.60 [1] (52.5%)	0.00	$5,025.00 (36.6%)
North Hero 10 Road Retention	Summer 1998 Redwood County	$84,318.00	0.00	$11,318.00[1] (13.4%) $54,750.00[5] (65.9%)	$18,250.00 (21.6%)	In-kind construction inspection
Island Lake 22 Road Retention	Fall 1998 Lyon County	$231,790.15	0.00	$125,815.00[2] (54.3%) $56,875.00[5] (24.5%)	$0.00	$49,100.15 (21.2%)
Rock Lake 21 Dam Construction	Fall 1998 Lyon County	$92,600.00	$69,450.00 (75.0%)	0.00	$23,150.00 (25.0%)	0.00
Fortier 15 Road Retention	Summer 1997 Yellow Med. Co.	$41,138.10	0.00	0.00	$30,000.00 (73.0%)	$11,138.10 (27.0%)
Ann 6 Modification	Fall 1997 Cottonwood Co.	$30,235.00	0.00	$22,500.00[5] (74.4%)	$5,000.00 (16.6%)	$2,375.00 (9.0%)
Traen Small Dam Restoration	Fall 1997 Lincoln County	$7,115.11	$1,500.00 (21.1%)	$2,000.00[1] (28.1%)	0.00	$3,615.11 (50.8%)
Gales 16 Road Retention	Fall 1996 Redwood County	$20,404.00	0.00	$18,154.00[1] (89.0%)	$2,250.00 (11.0%)	0.00
Carlson Small Dam Restoration	Fall 1996 Lincoln County	$12,006.75	$3,750.00 (31.2%)	$5,878.38[1] (49.0%)	0.00	$2,378.37 (19.8%)
Lyons 3 Road Retention	Fall 1996 Lyon County	$202,408.30	$11,232.52 $41,864.00[4] (26.2%)	$53,125.00[5] (26.2%)	$10,444.17 (5.2%)	$85,742.61 (42.4%)
North Hero 31 Road Retention	Fall 1996 Redwood County	$103,820.59	$21,242.48 (20.4%)	$53,445.00[2] $17,651.11[1] (68.5%)	$7,080.83 (6.9%)	$4,401.17 (4.2%)
Nordland 30/29 Road Retention	Summer 1996 Lyon County	$30,172.15	$21,000.00 $4,500.00[4] (84.5%)	0.00	0.00	$4,672.15 (15.5%)
Nordland 7 Road Retention	Summer 1996 Lyon County	$82,487.65	$30,000.00 (36.4%)	26,000.00[4] (31.5%)	0.00	$26,487.65 (32.1%)
Lake Stay 9 Road Retention	Summer 1996 Lincoln County	$156,983.00	$18,750.00 (11.9%)	$95,330.00[2] $6,500.00[1] (64.9%)	$6,250.00 (4.0%)	$15,200.00 (19.2%)
TOTALS		2,237,127.35	1,549,740.75 (69.3%)		687,386.60 (30.7%)	

NOTE: [1] Water Plan Base Grant funds; [2] MNDOT funds; [3] DNR FDR Grants funds; [4] BWSR Challenge Grant Funds; [5] Road Retention Bonding Funds

As of June 2001

New Business

4. Legislative Update

From: Peter Raeker
To: # Everyone at BWSR
Date: 6/18/01 10:35AM
Subject: Possible Gov't Shutdown/Letter to clients text

FYI: This is the text of a letter that is going to be sent in the mail today. It lists a number of BWSR services/programs that will be affected by a possible government shutdown.

***

TIME SENSITIVE INFORMATION

June 18, 2001

TO: Soil and Water Conservation District Chairpersons
County Board Chairpersons
Watershed District Presidents

FROM: Ron Harnack, Executive Director
Board of Water and Soil Resources

RE: Possible State Government Shutdown

As you are probably aware, Governor Ventura called for a special session of the Legislature that started Monday, June 11. To date, the Legislature has not been able to resolve differences on significant tax and spending issues that affect funding of state agency operations, including the Board of Water and Soil Resources.

While I'm hopeful that our elected leaders will reach an agreement on tax and spending bills before June 30-the end of the fiscal year-and avert a shutdown, we have been instructed to plan for a possible shutdown. A shutdown of state government operations has never happened in state history. It is the last of reasonable and practical options available.

What does this mean for you? I've developed a list of some BWSR services that, as a result of a state government shutdown, may impact your LGU and require action on your part.

-Local government units will not receive grants that they have historically received in July, including SWCD general services grants, RIM services, cost-share grants, and local water planning challenge grants.

-Existing LCMR-funded local water planning challenge grants will end on June 30, with no opportunity for extensions.

-BWSR staff assistance on Wetland Conservation Act Technical Evaluation Panels and violations will not be available.

-Appeals, to BWSR, of local government unit decisions, including WCA and watershed district plans and projects will not be acted upon.

-BWSR RIM Reserve and related Conservation Reserve Enhancement Program implementation and state processing will be put on hold; however, the federal and district processing will continue. BWSR's move to hire former DNR CREP technicians will also be put on hold.

-BWSR engineering assistance on current RIM and CREP wetland restoration projects will be put on hold. SWCDs, NRCS, or JPOs can continue with site assessments, surveys, and construction as they are able and without BWSR participation.

-The Local Government Road Replacement Program will not be operational. Ongoing acquisition and construction will be terminated during the shutdown.

-The state Wetland Bank will be shut down. No withdrawals or new deposits will occur during the shutdown. Any projects waiting for certification of withdrawal of credits will be delayed.

Once a possible shutdown is over, we will get back to normal operations as soon as possible. If you have specific questions before June 29, 2001, please contact the board conservationist serving your area.

I would like to stress that we aren't certain that a government shutdown will happen, but we need to plan for it. Thank you in advance for your patience and understanding. We will post this letter and any updates to the letter on our website: www.bwsr.state.mn.us. You may also access a special website created for a possible shutdown: http://www.mainserver.state.mn.us/mnshutdown/index.html.

CC: LeAnn Buck, MASWCD
Ray Bohn, MAWD
Jim Mulder, AMC
Bill Hunt, NRCS
John Monson, FSA
County Administrators

the second year are for the community assistance program to provide for technical assistance and regional resource enhancement grants.

$2,538,000 the first year and $2,595,000 the second year are for the operations of the youth programs. Of these amounts, $478,000 the first year and $491,000 the second year are from the natural resources fund.

Notwithstanding Minnesota Statutes, section 16A.28, the appropriations encumbered under contract on or before June 30, 2003, for the metro greenways, Red River, and community assistance program grants in this subdivision are available until June 30, 2004.

The commissioner may contract with and make grants to nonprofit agencies to carry out the purposes, plans, and programs of the office of youth programs, Minnesota Conservation Corps.

$304,000 the first year and $304,000 the second year are from the natural resources fund for grants to be divided equally between the city of St. Paul for the Como Zoo and Conservatory and the city of Duluth Zoo. This appropriation is from the revenue deposited to the natural resources fund under Minnesota Statutes, section 297A.94, paragraph (e), clause (5). This is a one-time appropriation.

$199,000 the first year is for grants to Cook, Lake, and St. Louis counties for emergency communications equipment. This appropriation is available until spent. Of this amount, $106,000 is for a grant to Cook county for a communications system upgrade and development of radio paths along the north shore of Lake Superior; $47,000 is for a grant to Lake county to upgrade the existing communications tower in the Two Harbors area; and $46,000 is for a grant to St. Louis county to enhance the emergency alerting system by installing a dispatching transmitter in the Crane Lake area.

Sec. 6. BOARD OF WATER AND SOIL RESOURCES 19,054,000 18,936,000

$5,480,000 the first year and $5,268,000 the second year are for natural resources block grants to local governments. Of this amount, $50,000 the first year is for a grant to the North Shore management board, $35,000 the first year is for a grant to the St. Louis river board, $100,000 the first year is for a grant to the Minnesota river basin joint powers board, and $27,000 the first year is for a grant to the southeast Minnesota

resources board.

The board shall reduce the amount of the natural resource block grant to a county by an amount equal to any reduction in the county's general services allocation to a soil and water conservation district from the county's previous year allocation.

Grants must be matched with a combination of local cash or in-kind contributions. The base grant portion related to water planning must be matched by an amount that would be raised by a levy under Minnesota Statutes, section 103B.3369.

$3,967,000 the first year and $4,037,000 the second year are for grants to soil and water conservation districts for general purposes, nonpoint engineering, and implementation of the reinvest in Minnesota (RIM) conservation reserve program. Upon approval of the board, expenditures may be made from these appropriations for supplies and services benefiting soil and water conservation districts.

$4,730,000 the first year and $4,735,000 the second year are for grants to soil and water conservation districts for cost-sharing contracts for erosion control and water quality management. Of this amount, at least $2,110,000 the first year and $2,115,000 the second year are for grants for cost-sharing contracts for water quality management on feedlots.

$189,000 the first year and $189,000 the second year are for grants to watershed districts and other local units of government in the southern Minnesota River basin study area 2 for floodplain management. If the appropriation in either year is insufficient, the appropriation in the other year is available for it.

$463,000 the first year and $476,000 the second year are for the administrative costs of easement and grant programs.

Any unencumbered balance in the board's program of grants does not cancel at the end of the first year and is available for the second year for the same grant program. This appropriation is available until expended. If the appropriation in either year is insufficient, the appropriation in the other year is available for it.

$100,000 the first year is to reimburse the town of West Newton in Nicollet county for costs the town has incurred in construction of the St. George

community wastewater treatment system using wetlands to treat wastewater from 23 properties. The reimbursement is for the cost of installing additional treatment components that were not part of the originally planned project and resulted in excessive costs to homeowners. The reimbursement must be used to reduce the bonded indebtedness of the town of West Newton for the St. George community wastewater treatment system.

Sec. 7. MINNESOTA-WISCONSIN BOUNDARY AREA COMMISSION 194,000 199,000

Summary by Fund

General	159,000	163,000
Natural Resources	35,000	36,000

This appropriation is only available to the extent it is matched by an equal amount from the state of Wisconsin.

$35,000 the first year and $36,000 the second year are from the water recreation account in the natural resources fund for the St. Croix management and stewardship program.

Sec. 8. SCIENCE MUSEUM OF MINNESOTA 1,300,000 1,300,000

Sec. 9. COMMISSIONER OF AGRICULTURE

Subdivision 1. Total Appropriation 22,338,000 22,512,000

Summary by Fund

General	21,991,000	22,159,000
Environmental	347,000	353,000

The amounts that may be spent from this appropriation for each program are specified in the following subdivisions.

Subd. 2. Protection Service 11,840,000 12,054,000

Summary by Fund

General	11,493,000	11,701,000
Environmental	347,000	353,000

(a) $1,004,000 the first year and $1,005,000 the second year are for continuation of the dairy development and profitability enhancement grant program under Laws 1997, chapter 216, section 7, subdivision 2, and to expand the program to include additional dairy business planning and modernization activities. Grants from this appropriation for the dairy development and profitability enhancement programs (formerly known as the "dairy diagnostics program") must require

periodic reports to the commissioner on the aggregate changes in producer financial stability, productivity, product quality, animal health, environmental protection, and other performance measures attributable to the program. Information reported to the commissioner must be sufficient to establish regional and statewide performance benchmarks for the dairy industry.

(b) In designing and implementing the dairy development and profitability enhancement program the commissioner must consult with the dairy leaders roundtable, appropriate producer and processor groups, the Minnesota state colleges and universities system, the Minnesota extension service, farm credit services, and other agricultural lending institutions.

(c) Of the appropriation in paragraph (a), at least $704,000 the first year and $705,000 the second year are for the activities of dairy development and profitability enhancement teams. The commissioner must make grants, under contract, to regional or statewide organizations qualified to manage the several components of the program. Each regional or statewide organization must designate a coordinator responsible for overseeing the program and making required reports to the commissioner. Dairy development and profitability enhancement teams are encouraged to engage in activities including, but not limited to, comprehensive financial analysis, risk management education, enhanced milk marketing tools and technologies, five-year business plans, and design and engineering costs. Up to 40 percent of the appropriation under this paragraph may be used to provide producers with technical and environmental compliance support services required to implement dairy environmental quality assurance practices. A producer is eligible for support under any program under paragraphs (a) to (e) for no more than three consecutive calendar years. Grants to producers must not be used for capital improvements or for the start up of a new dairy enterprise.

(d) Of this amount, up to $300,000 each year may be used as grants to producers of up to $5,000 per producer to develop comprehensive five-year business plans.

(e) The regional and statewide organizations that deliver the dairy development and profitability enhancement program must provide required reports to the commissioner in a format that maintains the confidentiality of business information

WIND, WATER AND THE PRAIRIE

2001 Local Water Planners Conference

June 27 & 28, 2001
Jackpot Junction
Morton, Minnesota

2001 Local Water Planners
- Conference Agenda -

Tuesday, June 26th

5:00 p.m. - Conference Registration Begins
7:30 p.m. - Hors d' oeuvres and Cash Bar
8:00 p.m. - Performance by Cansayapi Oyate-
Native American Dancers

Wednesday, June 27th

Breakfast on your own-$2.99 buffet available/Express Club -
$5.99 Without Express Club
7:00 a.m.-Conference Registration
8:00 a.m.-Exhibits Open
9:00 a.m.-Welcome and Opening Remarks
9:10 a.m.-General Session-Geology, Prairie, etc.
10:25 - 10:45 a.m.-Break
10:45 - 12:15 p.m.-General Session
12:15 - 1:15 p.m.-Lunch-Fragments of a Dream Pageant
Presentation
1:15 - 2:05 p.m.-Breakout Sessions
2:10 - 3:00 p.m.-Breakout Sessions
3:00 - 3:20 p.m.-Break
3:20 - 4:10 p.m.-Breakout Sessions
4:45 p.m.-Leave for Plum Creek Park, Walnut Grove
5:45 p.m.-Evening Meal at Plum Creek Park
6:30 - 9:00 p.m.-Special performance of "Fragments of a Dream"

Thursday, June 28th

Breakfast on Your Own
8:30 a.m. - Tour Buses Depart
4:30 p.m. - Tour Buses Return
Wrap up

Breakout Sessions:

The following breakout sessions are not in chronological order.

- GIS-EROS Data Center
- Emergency Response
- History of Drainage-How it Affects Water Quality
- Bio Control of Weeds
- Prairie Lakes
- Reverse Osmosis Implementation-MN Corn Processors
- Aggregate Resources
- Water Planning Skills for the Future
- Weather Variability and Climatic Change
- Shoreland Management Web Site
- Carbon Sequestering-Tillage, Soil Carbon and Water Quality
- Don't Work at Odds: Making the Connection Between County Comprehensive Plans and Local Water Plans

Tours:

- A Crossroads of People on the Prairie
- Alternative Resources and the Ridge
- A Glimpse at the Prairie
- The River and Prairie Connection

These Sessions and Tours are subject to change!

Concurrent Breakout Sessions - June 27, 2001

GIS-EROS Data Center
-David D. Greenlee, Scientist, EROS Data Center

This session will cover the work EROS has done in the Northeastern portion of South Dakota, where rising lake levels have caused many changes in recent years. Greenlee will discuss the growing environmental problems addressed in that area. He will also introduce the way USGS is serving geospatial datasets over the Internet. The principal clientele for this data is the scientific team which is working on the project, but it is also aimed at providing data for the larger scientific community which looks over the shoulder of USGS, as well as interested members of the public who wish to see the data on which the science team is working.

Emergency Response
-Craig Schafer, MPCA - 507-537-6378

This presentation will cover Emergency Response material. It will include a demonstration of the proper use of Spill Equipment, State Duty Officer reporting requirements, containment and control of release, and preparedness measures. Craig will also explain the importance of protecting the water (lakes, streams, rivers, etc.), water courses and intakes of the waters.

History of Drainage-How it Affects Water Quality
-Dr. Bruce Wilson, University of Minnesota-Biosystems and Agricultural Engineering, and
-Dr. Jeff Strock, University of Minnesota-Southwest Research and Outreach Center

The University of Minnesota has had a long history of drainage research to address the needs and concerns of this important and often contentious water management tool. This session will focus on summarizing research related to drainage, and soil and water management and conservation. This session will cover:

- Research conducted prior to 1990
- Research conducted from 1990 to present

Topic includes research on drainage system design and installation methods, materials for subsurface drainage, soil and water management for crop production, and environmental impacts.

Bio Control of Weeds
-Anthony B. Cortilet, MN Department of Agriculture - 651-282-6808

This session will cover various aspects of weed biological control and its implementation into current watershed/landscape weed management strategies. Currently, Minnesota has several successful weed biological control programs for exotic/invasive weed species, that have had serious impacts on the agricultural and natural resources communities throughout the state. These programs will serve as the basis for discussion to illustrate the importance and utility of considering natural enemies as a control option for exotic/invasive weed species impacting a watershed. The risks and benefits of implementing weed biological control programs will also be discussed.

Prairie Lakes
-Tom Kresko, Murray County Water Resources
-Mymique Baxter, MN DNR Hydrologist

This session will feature an overview of Southwestern Minnesota's shallow prairie lakes. The presentation will feature water quality data from the regional lakes, presented with vivid photographs and anectdotal stories of successful and unsuccessful lake management strategies. An in-depth emphasis upon shoreline degradation and improvement will be examined through the analysis of several Murray County lakes, particularly Lake Shetek.

Reverse Osmosis Implementation
-Tom Nelson, Water Systems Supervisor, and
-Rick Third, Utilities Manager, both with Minnesota Corn Processors, LLC

This session will focus on the implementation of the Reverse Osmosis water treatment system in use at Minnesota Corn Processors. An overview of the system will be provided, along with a detailed look at the following:

- Reverse Osmosis Recovery Rates
- Membrane Maintenance and Cleaning Process
- Impact on Water Management Processes
- Reverse Osmosis-Treatment Processes

Aggregate Resources
-Dennis Martin, Senior Geologist, DNR - 651-297-1125

This session will include:

- A description of construction aggregate consumption in Minnesota;
- The 14 recommendations to the state legislature from the Aggregate Resources Task Force final report of Feb. 1, 2000;
- An update on recent (2001) legislative actions on the 14 recommendations;
- A description of the mineral resource information that is currently available, or is soon to be available; and
- A discussion about the possibilities of planning, in general, for future mineral resources, and mine planning, more specifically.

Water Planning Skills for the Future
-Charles Kost, Director-GIS Center, Southwest State University
-Peggy Dunblazier, Soil & Water Cons. Technology Program
Instructor, MN West Community & Technical College

Charles will present information needed to prepare effective maps, through a discussion of some of the basics of cartographic presentation. The session will also explore some methods used to export maps from ArcView, as digital images for use in Microsoft Powerpoint and other programs.

Peggy will give an overview of the Soil and Water Conservaion Technology Program offered at Minnesota West Community and Technical College. A two-year program, 64 semester credits program that offers students the option of obtaining an AAS Degree or a Diploma. The graduates of this program have obtained positions with NRCS, SWCD's, Joint Powers Agencies, County Highway Departments and Private Industry.

Weather Variability and Climatic Change
-David Craigmile, Planning/Zoning Board Chairperson,
Lac qui Parle County

An examination of the paleo-proxy and instrumental record of weather / climatic variability. Is deciphering the past, the key to projecting the future? A discussion of forcing and feedback mechanisms and their relation to General Circulation Models. The possible implications and associated challenges for both natural and human resources.

Shoreland Management Web Site
-Barbara Liukkonen, Water Resources Center and MN Sea Grant
-Cindy Hagley, MN Sea Grant Program

This new website provides a wealth of information that will help you serve your clientele. The site includes PDF and web versions of Quick and Easy Answers, In-Depth technical resources, Citizen Action Highlights, and an extensive glossary. Fact sheets are available in online versions and PDF format, so you can print and distribute them. There's even a current list of contacts in each county for water-related information.

Carbon Sequestering-Tillage, Soil Carbon and Water Quality
-D.C. Reicosky, Soil Scientist, USDA-Agricultural Research
Service - 320-589-3411 ext. 144

Agricultural ecosystems can play a significant role in the production and consumption of greenhouse gases, specifically carbon dioxide. Soil carbon content can have a significant effect on water quality. This work evaluated the impact of various conservation tillage tools and strip tillage on tillage-induced CO_2 loss. The smaller CO_2 loss from conservation tillage tools is significant and suggests progress in developing conservation tillage tools that can lead to soil carbon enhancement and improved water quality. Reducing the volume of soil disturbed should enhance soil and air quality. The larger differences in CO_2 loss between moldboard plow and not-tilled treatments reflect the need for improved soil management and conservation policies to enable carbon sequestration and improved water quality in agricultural production systems.

Don't Work at Odds: Making the Connection Between County Comprehensive Plans and Local Water Plans
-Lindberg S. Ekola, Ekota and Associates - 320-256-2112

Sooner or later, counties will be involved with actively planning and implementing both local water plans and comprehensive (land use) plans. Learn about two planners' (nongovernment) experiences in doing just that. Not only will they share their experiences, they will also convey some guiding principles and key elements to successfully connecting these county plans.

Tours - June 28, 2001

A Crossroads of People on the Prairie

-Kristin Legg, National Park Service Resources Program Manager
-Bill Bolin, Local Historian, Lake Shetek Massacre/1862 Dakota Conflict
-Louise Gervais, Park Manager, End 'O' the Line Train Museum
-MN Historical Society Interpretive Guide, Jeffers Petroglyphs

Participants will stop at sites in Cottonwood, Murray and Pipestone counties. This tour will provide participants with guided tours and a journey through the last 5,000 years of people living on the prairie, in what is now Southwestern Minnesota. It will begin with the most ancient site, the Jeffers Petroglyphs. A new visitor center and a guided tour by the MN Historical Society, explaining the significance of the site, are some of the highlights. The next stop on the tour at End 'O' the Line Train Museum, will highlight the entrenchment of white settlement and prosperity on the prairie. A catered lunch will be served in the replica coal bunker storage house. Tour participants will board the bus, or walk the paved trail along Lake Shetek to the Shetek Massacre Monument for a presentation from local historian, Bill Bolin, explaining the relationship between the local tribes and the new white settlers. The last site to be visited will be Pipestone National Monument, where you will have a guided tour on a journey through the quarry and prairie.

One of the sites participants will visit on this tour, will be the End 'O' the Line Train Museum.

AlternativeResources and the Ridge

-Jay Stuefen, Treatment Plant Operator, LPRWS
-Dr. Michael Schmitt, Associate Dean, University of Minnesota
-Brian Lammers and Mark Hansen, Navitas Energy
-Dennis Johnson, District Conservationist, NRCS
-Ron Madsen, Engineering Technician and Dale Sterzinger, Conservation Technician, Lincoln SWCD
-Tom Hanson, Minnesota Corn Processors
-Janice Everman, Memorabilia Curator, Schwans

Stops on this tour include parts of Pipestone, Lincoln and Lyon counties. It begins at the Holland Wellfield, to see the latest technology in water treatment-the Reverse Osmosis Plant. The next stop will be at one of the Nitrogen Management Research Plots in the Verdi Wellfield Area, to hear about last years nitrogen use test plot and how this years sites are set-up. Then, enjoy a catered lunch at the newly established exquisite Midwest Center for Wind Energy, overlooking the beautiful Lake Shaokatan. At the center, get a brief overview of the Lake Shaokatan Project and a presentation at one of the wind turbines located near the center. The next stop will be at the Anderson wetland site, which was constructed in 1999, through the US Fish and Wildlife Service. Participants will then enjoy a tour of the Minnesota Corn Processors Plant in Marshall. The final stop will be at the Schwans Training Center where you will discover how Schwans started and why it continues to grow. Participants will also enjoy a Schwans Novelty Ice Cream Treat.

Construction contnues on the exquisite Midwest Center for Wind Energy,which we will visit on this tour.

A Glimpse at the Prairie

-Stan and Virginia McCone, Proprietors
-David Geis, Owner/Operator
-Tim Talbott and other interpretive center staff
-Marilyn Bernhardson, District Administrator, Redwood Soil and Water Conservation District

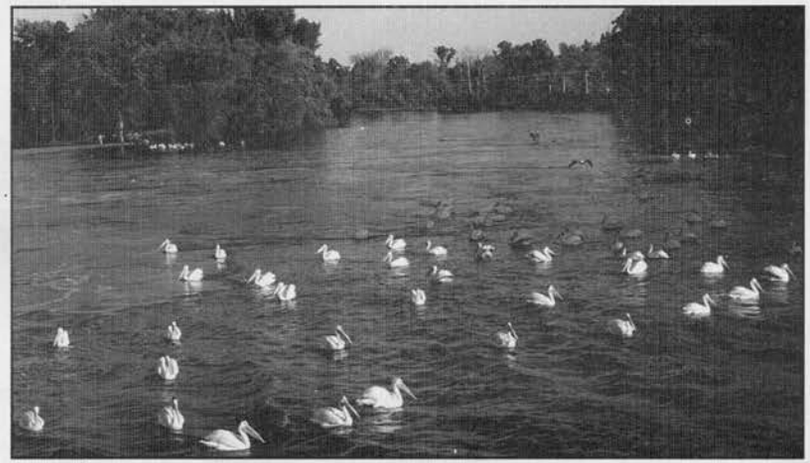
Get a glimpse at the Southwestern Minnesota prairie on this tour, all within Redwood County boundaries. It begins with a stop near Sanborn to tour two, full-sized replicas of sod houses and a trapper's log cabin, authentically furnished, and surrounded by prairie grasses and wildflowers. Tour participants will then visit a local bison ranch. The group can roam through the pasture areas, created by taking marginal farmland out of production, and restored to tall grass prairie. Owner David Geis shares his stories of working with cool and warm season grasses, and the effectiveness of these restorations in improving water quality. The group will enjoy a buffalo burger lunch with all the fixings, in the Soldiers and Sailors Park, along the Cottonwood River in Sanborn. The bus will then head back north to visit a site enrolled in the Conservation Reserve Enhancment Program, one of 115 CREP sites in the county. The final stop takes a look back at the heritage and surroundings of the Lower Sioux community, at the Interpretive Center. Visit the 1861 stone warehouse and period farming and garden sites, included in the three miles of various trails along the scenic Minnesota River. The visitors center contains history of the Dakotas, cultural artifacts and other glimpses at their life, past and present.

This Bed and Breakfast Soddy is one of the Sod Houses on the Prairie which will be visited on this tour.

The River and Prairie Connection

-Randy Melby, Corps of Engineers
-Dave Traube, Manager, Lac qui Parle Refuge
-John Rebehn, Lac qui Parle County Water Plan Coordinator
-Brad Olson, Wildlife Manager, DNR
-Willis Beecher, Lac qui Parle-Yellow Bank Watershed District Manager

On this tour, participants will visit sites in Lac qui Parle and Yellow Medicine counties. It begins with a journey up the Minnesota River Valley Scenic Byway to the northwest part of the region. Participants will visit Lac qui Parle Lake, to hear about how the operation of the "Church Hill" Dam affects water bodies downstream. We will continue driving along the Lac qui Parle Lake, which the Dakota viewed as the headwaters of the Minnesota River. Enjoy a picnic lunch on the banks of Salt Lake and hear about the uniqueness of this lake, which is the saltiest body of water east of the Great Salt Lake. The next stop will be a view from the top of the Prairie de Coteau. We will continue on past the Lincoln-Pipestone Rural Water System treatment plant, which supplies 664 rural connections and 4 municipalities with a reliable source of water. The next stop will be at a calcareous fen, where participants will walk out on the fen and hear about what makes these wetlands so unique. The final stop will be at Del Clark Lake, a flood control structure that provides additional recreational opportunities, such as camping, swimming and fishing.



See the Pelicans on the Minnesota River below the "Church Hill" Dam on this tour.

July 2001

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET
LOWER LEVEL CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
JULY 25, 2001

BOARD MEMBERS PRESENT: Lee Coe, Darrell Bruggman, Dwain Otte, Jerome Deal, Victor Ormsby, Jack Frost, Ginny Imholte, Paul Krabbenhoft, Dan Wilson-MDH, Karen Harder, Jim Anderson-MES, Mark Dittrich-MDA, Roger Bjork-PCA

BOARD MEMBERS ABSENT: Wayne Edgerton-DNR, JoAnn Coover, Clair Nelson, Char Kahler

STAFF PRESENT: Doug Thomas, Phil Belfiori, John Jaschke, Marybeth Block, Steve Woods, Debbie Anderson

OTHERS PRESENT:
Sandy Hooker, Minnesota Association of Townships (MAT)
Dave Weirens, Association of Minnesota Counties (AMC)
Bruce Gerbig, DNR/Waters

Chair Coe called the meeting to order at 9:00 a.m. He introduced Debbie Anderson taking minutes today for Mary Jo Anderson, and Doug Thomas reporting for Ron Harnack who was out with a back injury.

** 01-51 **Adopt Agenda** – Moved by Jerome Deal, seconded by Victor Ormsby, to accept the agenda as presented. Motion passed on a voice vote.

** 01-52 **Minutes of June 27, 2001** - Moved by Jack Frost, seconded by Darrell Bruggman, to approve the minutes of June 27, 2001 as circulated. Motion passed on a voice vote.

Reports
Chair's Report - Chair Coe reported that the EQB did not meet last month. Chair Coe attended the NACD North Central Region Meeting on July 16th in Bloomington.

Executive Director's Report - Doug Thomas reported on behalf of Ron Harnack and said that Ron Harnack has a back injury, is at home, answering his phone and e-mail if you need to correspond with him. Doug reported that LCMR met yesterday and they are doing one of their summer tours today. This afternoon at 1:00 p.m. they will be visiting three sites that were funded through LCMR money and funneled through the local water planning challenge grant program. This past year, the LCMR bill funded two of our projects, the Continuation of the Soil Survey Update in southeastern Minnesota, which was funded $500,000. That is actually half of what was needed to finish southeast and begin updating five counties in southwestern Minnesota. Senator Vickerman from the southwest is supporting this issue, so we are hopeful that we will be able to keep this program. We also received an additional $1.3 million for local water planning challenge grants which actually this Board acted on in June, in anticipation of the bill being passed. Later this summer, LCMR will be having a planning retreat that will be held in northern Minnesota at Lake Itasca. They will start to set their agenda for the next go around for LCMR funding. Applications for funding will start in February of 2002.

Doug reported that the Minnesota River Basin Joint Powers Board summer conference will be held August 2-3 in Montevideo. There will be a celebration Thursday evening recognizing those who played an important role in getting the CREP bill funded this session. If you are interested in attending, contact Mary Jo Anderson or Doug Thomas for more details.

Doug reported that there is currently a water study being conducted that is looking into how agencies are organized to address water management issues in the state. Representative Wagenius is organizing this study and $75,000 was appropriated to

Minnesota Planning for this study. Minnesota Planning will hire a six-month position to assist them with this project. The Water Resources Committee, which is a subcommittee of the Environmental Quality Board, will play a principal role working with the study. The next Water Resources Committee meeting will be July 31st. The first legislative reports are due in late August and final report to the legislature in February.

Doug reported that the City of Lakeville had some well interference issues recently, due to dry weather, wells went dry. DNR is engaged in that issue. Representative Dennis Ozment has concerns about groundwater and groundwater protection in the Metropolitan area.

Dispute Resolution Committee - Chair Coe reported that there are presently three appeals pending. All three involve WCA. One appeal is an exemption determination in McLeod County. The appeal has been remanded to the county to develop a better record including more technical analysis. Another pending appeal is in LaCrescent along the Mississippi River in Houston County. The replacement plan denial arose from a cease and desist order and a restoration order. The appeal has been accepted and a pre-hearing conference will be scheduled once the record has been received. Another pending appeal regards an exemption approval by the Lac Qui Parle – Yellow Bank Watershed District involving the federal exemption. The appeal has been accepted, a pre-hearing conference has not been scheduled because a resolution is being pursued.

Wetlands Committee - Darrell Bruggman reported that John Jaschke is going to give a wetlands report and presentation later in the meeting.

Cost-Share/Soil Conservation Committee - Dwain Otte reported that the committee did not meet this month.

Education and Public Relations Committee – Paul Krabbenhoft reported that the committee met this morning, and reviewed the work they've done over the last year. The work plan was accepted last month and is being forwarded to the BWSR Executive Team. Paul also reported that the State Envirothon has been a very successful program and has been run through BWSR and the Minnesota Association of Soil and Water Conservation Districts. On a statewide basis, there were 1,200 students involved, 261 teams representing different areas of the state, 27 teams participated in the state Envirothon. The winner of the State Envirothon (for third year in a row) was Rushford/Peterson High School from Fillmore County. The Education Committee has a concern regarding the relationship between BWSR and the MASWCD on staffing and funding for this program. They would like to start seeking corporate sponsorships. On a national basis, the Envirothon is sponsored by Cannon, Inc. The national competition will be held in Mississippi. Another concern is staff time. Priorities need to be defined.

Kamal Alsharif in Duluth is handling the clerical end of this program. The committee also received an update from MASWCD and their Education Committee with their view on priorities. We want to make sure there is communication throughout the state for volunteer help. Paul reported that the Education Committee members have changed. Lee Coe has stepped down, and JoAnn Coover, Wayne Edgerton and Jack Frost have been added to the committee. The committee will meet every three or four months.

Administrative Advisory Committee – Chair Coe reported that the Administrative Advisory Committee did not meet. Chair Coe met with Ron Harnack to review his performance evaluation and appraisal summary.

Agency Reports
Mark Dittrich, Department of Agriculture, reported on organic farming. Mary Hanks of the MDA/Energy and Sustainable Ag Program worked in cooperation with other organizations to produce a video on organic farming. It ties in with the general public, and farmers who are conventional and just considering the options of organic production. In addition, there are federal rules on organic production and those rules have bridged the state's organic certification program. There is also a manual on organic livestock production and curriculum for marketing organic products. If you would like a copy of any of these materials, please contact Lynda Bougie at 651-296-7673.

Mark reported that the NACD North Central Region Meeting had good discussions on the Farm Bill and components of the Farm Bill in comparison to the Harkin Bill and it supports voluntary measures, wants to use the existing infrastructure, wants to promote new innovative ideas including funds that would encourage advanced conservation tillage practices, and more incentive for payments for cover crops. We have a deadline for bio-gas grants and loans which is July 31. In September, Paul Burns will talk to the Board about the new feedlot publication - *Feedlots Made Simple.* Mark Dittrich reported that FarmFest will be held on August 7,8,9. Discussion followed regarding bio-gas/feedlots to produce energy.

Dan Wilson, Department of Health, reported that MDH's drinking water program had an operator certification program approval by the FDA to expand into the non-community (non-transients) areas. They are now qualified to apply for a one-time $3 million training grant. Non-transients are schools, factories, colleges, etc. with repeat exposures. In addition, their laboratory has been overhauling its certification process for private certified laboratories. Well samples that come into MDH are done by certified labs which are scattered around the state. ~~The agency can now do lab certification and more~~ information is available on the internet regarding certified labs. He also reported that there are many wells going in, drillers are backed up and working hard. There are

approximately 12,000 drinking water wells in the current economy. In 2000, there were about 13,000 wells, and in 2001 it was down to 11,500 drinking water wells.

Jim Anderson, Minnesota Extension Service, reported that NRCS over the years has had the opportunity to assign up to five percent of EQIP dollars coming into the state for educational purposes, which has included a small grant educational program. Jim distributed two items to the Board, which have also been distributed to all NRCS offices in the state and Extension offices and should be available in all counties. One is a booklet put together on low-cost conservation practices. The other handout is a summary of the EQIP education projects.

Roger Bjork, Pollution Control Agency, reported that their board made a decision yesterday regarding mercury concentration at several large wastewater plants. Their board decided the wastewater plants in Detroit Lakes, Alexandria, and in St. Cloud will have mercury protection levels that they have not had in the past. He also noted that an Appeals Court over-turned a lower court decision and agreed with PCA on not doing an EIS on the Bois Cascade expansion. That appeals decision can have major impacts on forests here in the state. Internally – senior management staff are meeting on a work detailed analysis to re-evaluate their goals. Issues such as groundwater, odor, and noise are being looked at. They have also lost approximately 70 staff positions over the last year and are moving staff around to other programs to avoid layoff.

Consent Agenda

St. Louis County Comprehensive Local Water Plan Update — Darrell Bruggman reported that the northern subcommittee met on July 13 in Duluth and recommends
** approval of the plan. Moved by Darrell Bruggman, seconded by Ginny Imholte, to
01-53 approve the St. Louis County Comprehensive Local Water Plan Update. Ginny made a request on behalf of St. Louis County which was directed at the DNR, MPCA and also involves BWSR. We should start looking at water resources not all being all the same value or level of protections. The county would like homeowners to look at new methods of septic system education. In addition, they would like agencies to request funding for further testing for alternates and any education on new technology. This request was well written in their plan. Motion passed on voice vote.

Committee Recommendations

Grass Lake Watershed Management Organization Plan – Jack Frost
** reported that the metro subcommittee reviewed the plan and recommends. Moved by
01-54 Jack Frost, seconded by Karen Harder, to approve the Grass Lake Watershed Management Organization Plan. Motion passed on a voice vote.

New Business

Wetland Principles and Goals – Darrell Bruggman reported that the report on WCA Rule Revision Principles will be given by John Jaschke. John Jaschke reported that the cost-share program will hire an intern position to look at sites and generate a report over the next year. Greg Larson will post this position at the U of M. The Wetland Conservation Act statute changes in 2000 state that BWSR has the responsibility to have amended permanent rules in place by July 31, 2002. The formal rule-making phase will begin in mid-October with a draft rule proposed and statement of need and reasonableness supporting it and submitted to the Office of Administrative Hearings, and published in the State Register. It is helpful to BWSR, staff, and various stakeholders, to convene informally before an official proposal is developed. Having principles and goals helps stakeholders and staff, understand what the Board is trying to accomplish.

John Jaschke explained that WCA could benefit from being better incorporated into local ordinances. The WCA could be integrated into the local zoning and planning activities in a county or city. Time also needs to be spent working with federal and state agencies to get regulatory coordination agreements and to clarify who is doing what and when. We continue to hear that there is a great amount of duplication occurring. John Jaschke reviewed the WCA Rule Revision Principles and Goals. If anyone has comments, please send them to John Jaschke for decision at the August meeting. Discussion followed. Phil Belfiori gave a brief presentation entitled *"A Better Connection"* on the local ordinance incorporation process. WCA is best done in conjunction with both local and state responsibilities and works best when they are connected. The rule should perpetuate this.

CREP Video - Wayne Edgerton, Department of Natural Resources, was not available to present the CREP video.

Legislative Update - Doug Thomas distributed a copy H. F. No. 8, passage of the CREP Bill. Doug asked that your legislators be thanked, by a phone call, card or letter for their efforts and their vote in support of CREP. We have 19 of the 20 DNR positions that were in place one year ago converted to the BWSR payroll and they will be working for the next 12 months continuing to do the landowner contacts. The biggest hurdle is the engineering; about 40 percent of the easements have a wetland restoration as part of it. Those restorations all require site investigation, survey, design, and construction supervision by our staff or local staff.

Doug reported that the tax bill had three items in it – the first one was with watershed districts. The watershed districts administrative levy had been at $125,000 since the early 1970's. That limit was raised to $250,000 as well as the percent. There is actually two parts to that cap, the lesser of $125,000 or a tax rate that was applied to the market

value within the watershed. We also sought a name change from administrative levy to the general level. That levy can be used for projects, monitoring, not just for administrative purposes. There was always a provision in the Watershed District Act that if a municipality petitioned for a project, the watershed district had the ability to determine which portion of that project was a basic water management feature or basic water management function of the project. That petition requirement was expanded now to include any local unit of government or 50 residents within the watershed district.

Doug reported that counties in the metro area that are now levying for purposes of implementing the water management plans, are established as special purpose taxing districts. Minnehaha Creek received an enforcement levy authority because they are often challenged on permits, projects, and involved in litigation. It has been difficult for Minnehaha Creek to finance those front-end costs on litigation out of their current general administrative levy. They were authorized $75,000 to levy for an enforcement fund to help defend the district when needed. Soil and water conservation districts received a general services grant increase of $270,000 over the biennium. In feedlot cost-share, the money that is available for this program increases $625,000 in the first year of the biennium and then goes up to $650,000 in the second year of the biennium and that builds to the agency's base. PCA also received $500,000 of additional money for grants to support work at the counties effort for delegation. Road replacement funding was accomplished. Counties, cities and townships pushed and we did get $2 million in the bonding bill. The trespass law was amended this year, it defines the fact that RIM land and CRP land that is held in a conserving use under a state or federal program is by definition agricultural land and it does not need to be posted. There were minor changes to the RIM program which dealt with the landowner definition. We wanted it to be consistent with the State's definition of an agricultural producer who qualifies under the ag definitions. It also increased payment rates.

Doug reported that last winter we started a federal farm bill forum which included DNR, MDA, and many of the conservation organizations to gather comments on the farm bill. Ron Harnack would like to get a small committee together from the Board as quickly as possible to work on this issue. We would like to have board members develop a high-level position statement explaining where we are on existing farm programs. Ron Harnack would like the Board to come up with a statement and he will work with the Governor's office for signature and then forward this on to our congressional members. Dwain Otte, Karen Harder, Joann Coover, Darryl Bruggman would like to be a part of this committee. We would also like at least one member from each of the agencies that are represented on the Board. Someone from NRCS and FSA would also be asked to participate. Mary Jo Anderson will follow-up on this and contact everyone next week.

Advisory Comments

Minnesota Association of Townships (MAT) - Sandy Hooker commented that funding for Minnesota River Basin Joint Powers Board which is $100,000 is not a lot of money. They have discussed asking the 37 counties to pitch in more money in order to help alleviate the budget crunch. Unfortunately, many of those counties are dealing with their own economic hardships. The townships would like to know when are these agencies going to stop having so many studies about the river and just do something. MAT would also like to see septic system education in out-state Minnesota. Regarding wetland issues, farmers feel they are being blamed for destroying wetlands. Farmers feel there are too many agencies involved to restore wetlands.

Natural Resources Conservation Service (NRCS) - Roger Mussetter gave an update on the CRP. NRCS is going to meet their goal and are getting about 6,000 contracts this year. There was a meeting last week to try to generate more interest and a partnership has been formed with Pheasants Forever Chapters, BWSR, DNR, and districts to encourage funding to hire staff to work with producers one-on-one to explain what the programs are about and to encourage participation. Roger reported that district conservationists positions are all filled. NRCS would be happy to participate on the farm bill policy committee with the BWSR Board.

Upcoming Meetings

- BWSR Tour and Meeting, August 22-23, McGregor
- BWSR Meeting, September 26, St. Paul
- BWSR Tour and Meeting, October 24-25, Caledonia

** 01-55 Moved by Jack Frost, seconded by Darrell Bruggman to adjourn the meeting at 12:20 p.m. Motion passed on a voice vote.

Respectively submitted,

Leland D. Coe

Leland Coe
Chair

Low-Cost Conservation Practices

UNIVERSITY OF MINNESOTA
Extension
SERVICE

USDA

Low-Cost Conservation Practices

You don't need a large cash investment to go a long way in soil and water conservation.

This brochure highlights low-cost conservation practices that are made even more affordable through government incentive and cost-share payment programs. Incentive payments are provided to the agricultural producer to implement a management plan.

With cost-share payments, the government provides up to 75% of the cost of implementing a conservation practice, and the remainder is paid by the producer. Often times the producers' cost-share can be made up of their own time and energy needed to implement the practice.

All of the practices listed in this brochure are supported through the USDA Environmental Quality Incentives Program (EQIP). In addition, stream buffers can be protected through enrollment in the Conservation Reserve Program (CRP) continuous sign-up for buffers. The Wetlands Reserve Program (WRP) pays 100% of wetland restoration costs and easement payments. The Wildlife Habitat Incentives Program (WHIP) is available to pay cost-share to implement practices that develop or improve fish or wildlife habitat. Applications and technical assistance are available at USDA County Service Centers for EQIP, CRP, WRP, and other federal programs.

Residue management reduces soil erosion

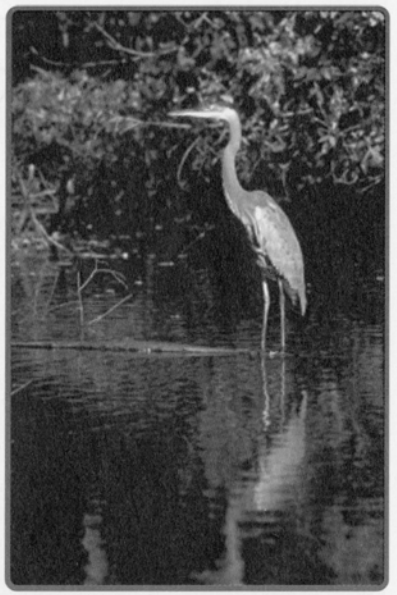
Some conservation practices are supported by state and local government loans or payments to producers. Your local Soil and Water Conservation District, usually located at the USDA Service Center, can provide assistance with state and local conservation programs.

Contour strip cropping reduces soil erosion

Low-cost NRCS (Natural Resources Conservation Service) defined practices are listed by category in the following tables:

- Manure Management
- Field Practices
- Pasture Management Practices
- Water, Wind, Trees, and Wildlife

In each table, the practice is named and described and the EQIP payment type is listed. Incentive payments are either one-time or multiple-year payments, depending on the management plan, and do not require a matching cash input from the producer. Cost-share payments are 75% of the cost for all practices listed below except Tree Planting. Check with your NRCS office for the percentage cost share for various tree species plantings.



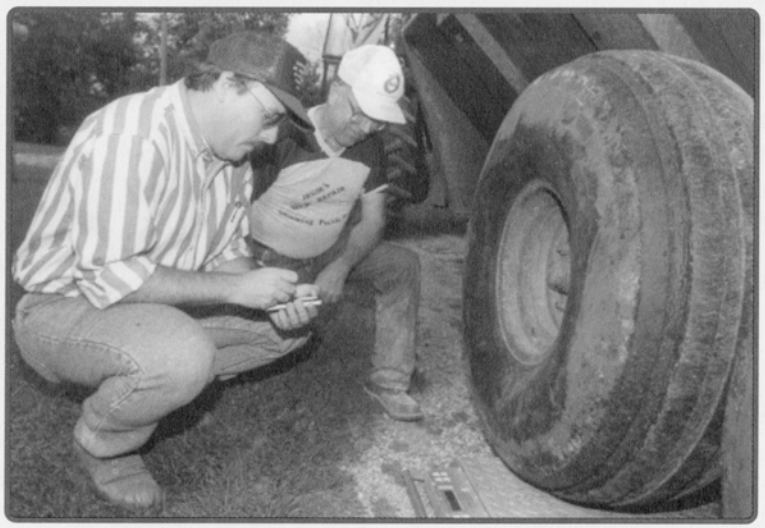
Wildlife habitat increases the aesthetic value of the land

Manure Management

The goal of good manure management is to collect and use manure efficiently as a source of crop nutrients, without polluting streams, lakes, or groundwater.

Examples of low-cost practices that can improve manure management are:

- Reducing the amount of rainwater that mixes with manure and creates polluted runoff by diverting clean water from roofs and up-slope locations away from feedlots.
- Filtering runoff from open feedlots through vegetative strips to reduce pollutants.
- Developing a crop nutrient management plan that "credits" the fertilizer value of manure applied to fields, thereby reducing fertilizer costs and preventing application of manure at rates which would result in water pollution.



Manure spreader calibration is necessary for accurate nutrient application

Soil testing is an essential part of a crop nutrient and manure management plan

Practice	Type of Payment
Waste utilization Crediting the use of organic wastes for fertilizer in a manner that improves the soil and protects water resources.	Incentive
Nutrient management Develop and follow a crop nutrient management plan with recommended amount, form, placement, and timing to maximize use and minimize detrimental effects of applied nutrients.	Incentive
Waste management system A planned system to manage wastes from animal concentrations in a manner that does not degrade air, soil or water resources. Examples of low-cost components include: Filter strips Clean water diversions Roof runoff management	Cost-Share

Field Practices

Good crop field practices are essential to soil conservation and clean water in agricultural areas. The USDA emphasizes planning and implementation of management plans for crop rotations, pests, and tillage that minimize soil erosion, contaminated runoff, and leaching of nutrients. Incentive payments are provided on a per-acre basis to implement approved management plans. Cost-share is provided to protect soil and filter water by establishing permanent vegetation at field edges and in field waterways.

Strip cropping and contour farming reduce soil erosion

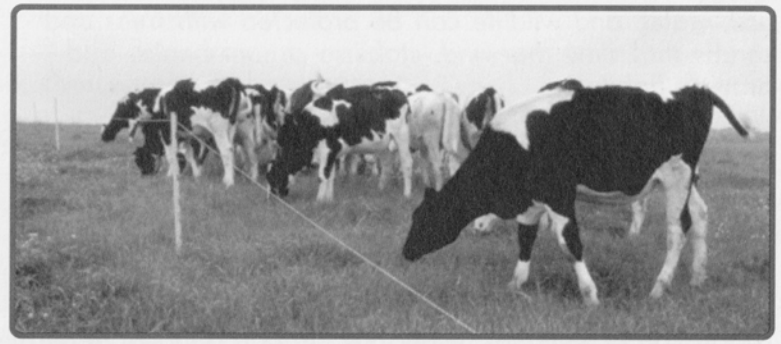
Practice	Type of Payment
Nutrient management Develop and follow a crop nutrient management plan that includes recommended amount, form, placement, and timing to maximize use and minimize detrimental effects of plant nutrients.	Incentive
Pest management Develop and follow a crop pest (weeds, insects and disease) management plan to reduce adverse effects on plant growth, crop production and enviromental resources.	Incentive
Residue management Managing the amount, orietation, and distribution of crop and other plant residues on the soil surface. Includes no-till, strip till, mulch till, and ridge till management systems.	Incentive
Conservation crop rotation Growing crops in a recurring sequence on the same field to improve the soil, reduce erosion and pests, balance plant nutrients and provide food for livestock.	Incentive
Contour farming Farming land across the slope in order to reduce erosion, control water flow, and increase infiltration.	Incentive
Contour strip cropping Growing crops in a systematic arrangement of strips or bands across the slope to reduce water erosion.	Incentive
Filter strip, contour buffer strip, or field border A strip of land in which vegetation is planted and maintained to control erosion and filter pollutants from runoff.	Incentive, Cost-Share
Critical area planting Planting vegetation to stabilize the soil in critically eroding areas and reduce erosion and runoff.	Cost-Share
Grassed waterway A natural or constructed channel or outlet maintained with vegetative cover in order to carry runoff without sediment and to filter nutrients.	Cost-Share

Pasture Practices

Good pasture management provides high quality forage with low capital investment and minimal operating expenses. Well-managed grazing enhances herd health, farm profitability, and water quality of streams and lakes. Financial and technical assistance is available to assist with pasture and grazing management practices, including:

- Developing and follow a written grazing management plan.
- Installing fencing that helps manage the rotation of herds through paddocks, and keeps them out of sensitive areas, like streams and lakes.
- Establishing a desirable mix of forage species.
- Providing water to herds close to where they are grazing and in a way that prevents pollution of streams and lakes.

A well-designed fence system is key to managed grazing



Managed grazing improves pasture conditions and provides excellent nutrition

Practice	Type of Payment
Prescribed grazing Managing grazing to improve plant health and vigor, reduce erosion, and improve water quality.	Incentive
Pasture planting Establishing forage plants to reduce runoff and erosion and produce high quality forage.	Cost-Share
Use exclusion Excluding livestock and other activities from an area to maintain soil and water resources.	Incentive
Fence Enclosing a sensitive area of land or water with fencing to exclude or control livestock	Cost-Share
Livestock watering systems: Spring develpment Trough or tank Pipeline Well Pond	Cost-Share

Water, Wind, Trees and Wildlife

Soil, water, and wildlife can be protected with trees and shrubs that slow the wind, stabilize stream banks, and provide habitat.

Windbreaks reduce soil erosion and protect adjacent crops from wind damage and moisture loss. Shelterbelts protect livestock and reduce farmstead heating costs.

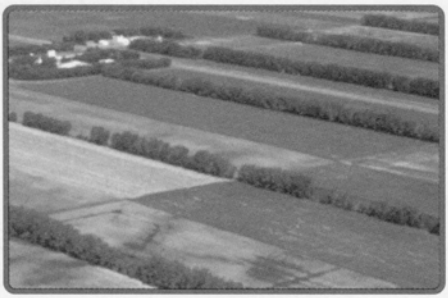
Wetlands provide storage, buffering, and filtering of field runoff, and are excellent waterfowl and other wildlife habitat. Both groundwater and stream water quality are improved with restoration of wetlands, especially through removal of nitrates, phosphorus, and sediment.

Groundwater also needs protection by filtering or diverting field runoff from sinkholes, and by properly sealing abandoned wells.

Windbreaks enhance crop growth and reduce soil erosion

Wildlife habitat can be integrated into the farm plan

Practice	Type of Payment
Windbreak, shelterbelt, and hedgerow establishment or renovation A strip or belt of trees established to reduce wind erosion.	Incentive, Cost-Share
Herbaceous wind barriers Narrow rows or strips of heraceous plants established to reduce soil loss, protect growing plants from sandblast, trap snow and increase available moisture, and provide food or cover for wildlife.	Incentive, Cost-Share
Tree planting Planting trees, especially on critical or highly erodible areas, to prevent erosion, conserve moisture and reduce water quality impacts.	Cost-Share
Forest riparian buffer Establish and maintain a strip of land varying in width along streams and other water bodies in which grass and trees are planted and maintained to filter pollutants from runoff.	Incentive, Cost-Share
Streambank and shoreline protection Stabilizing and protecting banks of streams, lakes, estuaries, or excavated channels against scour and erosion. Vegetative means of protecting streambanks can be low-cost.	Cost-Share
Wildlife habitat establishment and management Creating, restoring, maintaining or enhancing areas for food, cover and water for upland wildlife and associated species.	Incentive, Cost-Share
Wetland restoration Rehabilitation of a drained or degraded wetland where soils, hydrology, vegetation and habitat are returned to natural conditions.	Cost-Share
Sinkhole treatment Prevention of contaminated runoff from entering sinkholes. Diversions and filter strips are low-cost sinkhole treatments.	Cost-Share
Well decommissioning Sealing and permanent closure of a water well no longer in use.	Cost-Share



Trees reduce wind erosion and farmstead energy costs

Pheasants find shelter in windbreaks

For more information about low-cost conservation practices, see your local NRCS, SWCD, or University of Minnesota Extension office. For information about cost-share and incentive programs, visit your local NRCS and SWCD offices.

Photos provided by the USDA and the University of Minnesota Extension Service.

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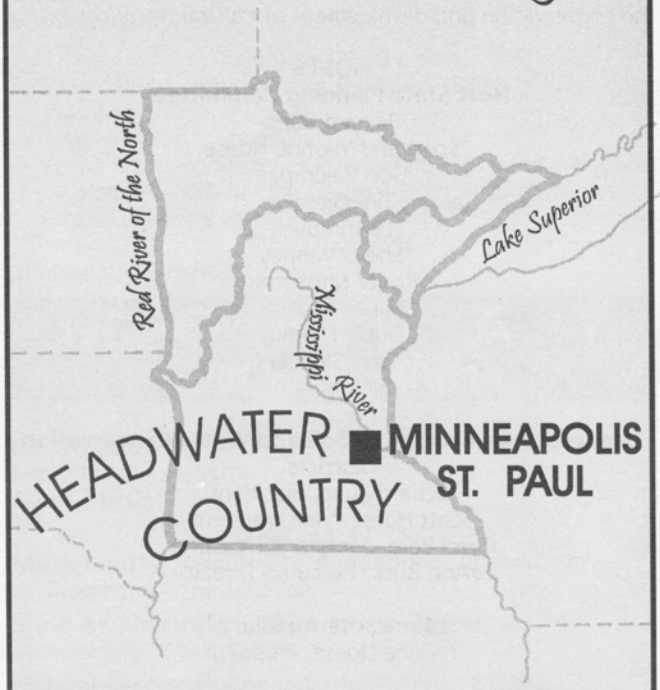
Headwater Country

— where the river begins



NACD NORTH CENTRAL REGION MEETING

JULY 15-18, 2001 - RADISSON SOUTH HOTEL

MINNEAPOLIS (Bloomington), MINNESOTA

The North Central Region — Home of 737 Conservation Districts in Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin

Conference is informal—no ties allowed

The National Association of Conservation Districts (NACD), founded in 1946, is a non-government, nonprofit organization representing nearly 3,000 conservation and natural resources districts and their state associations in the 50 states, the District of Columbia, Puerto Rico, Virgin Islands and the Pacific Basin. NACD services the districts as one voice using the force of local initiative and self-government in the conservation and development of natural resources.

HOSTS

Host State Planning Committee
Richard Zupp
Scott and Yvonne Hoese
Don Bajumpaa
Tim Gieseke
LeAnn Buck
Sheila Vanney
Roger Mussetter
Mike Majeskie
Doug Thomas
Faye Sleeper
Bill Horvath

Minnesota Association of Soil and Water Conservation Districts
Richard Zupp, President
Scott Hoese, Vice President
Carol Berg, Secretary/Treasurer
LeAnn Buck, Executive Director

Minnesota Auxiliary
Yvonne Hoese, President

Minnesota Association of Conservation District Employees
Tim Gieseke, President
Don Bajumpaa, President, North Central Region

Minnesota Board of Water and Soil Resources
Lee Coe, Chair
Ronald Harnack, Executive Director

USDA Natural Resources Conservation Service
William Hunt, State Conservationist
Charles Whitmore, Midwest Regional Conservationist

NACD North Central Region
Gene Schmidt, Region Chair
Steve Hopper, Executive Board Member

Press Room-Veranda 1-2
Sylvia Rainford, PAS-NRCS Minnesota
Sunday Evening-Wednesday Noon

SUNDAY
JULY 15, 2001

1:00 a.m. - 5:00 p.m.

Registration - Bloomington Foyer
Exhibits - Bloomington Foyer
Silent Auction - Bloomington Foyer

7:00 p.m. - 8:00 p.m.

Soil and Water Stewardship Program - Edina
Presiding - Yvonne Hoese
Speaker - Portia Martinson
Portia Martinson teaches listeners how to paint a brighter picture. With her life stories she inspires, motivates and educates.

8:00 - 9:00 p.m.

Minnesota Reception - Garden Court

MONDAY
JULY 16, 2001

8:00 a.m. - 5:00 p.m.

Registration - Bloomington Foyer
Exhibits - Bloomington Foyer
Silent Auction - Bloomington Foyer

8:00 - 11:30 a.m.

North Central Region Board Meeting - Veranda 3-4
Presiding - Gene Schmidt

State Administrative Officers Meeting - Veranda 5-6
Presiding - Sarah Fast

Natural Resources Conservation Service Meeting - Veranda 7-8
Presiding - Charles Whitmore

North Central Region District Employees Meeting - Bloomington
Presiding - Don Bajumpaa
Board and Staff—The Leadership Partnership
Robert Toole

9:00 a.m. - 11:30 a.m.

Innovative and Unique District Activities in Minnesota - This session will highlight three creative district activities. Recognizing a need to offer a more environmentally friendly option for stabilizing and replanting shorelines and streambanks in an urban county, the Hennepin Conservation District has promoted and offered technical assistance on lakescaping and bioengineering.

The Itasca District provides lake and stream monitoring, watershed planning, wetland conservation, forestry, and shoreland stabilization and revegetation projects. County Water Planning, a program unique to Minnesota, has made it possible to develop many of the district's programs.

Soil and water conservation districts as well as other government agencies and citizens groups are members of the Basin Alliance for the Lower Mississippi in Minnesota. Listen to the strategies and initiatives being implemented in Southeast Minnesota to include a buffer brigade and conservation tillage campaign.

Grand Ballroom East - Presiding - Doug Thomas
Lakescaping and Bio-engineering, Carolyn Dindorf
County Lake Vulnerability Poll, Art Norton
Conservation Tillage/Buffer Strip Campaign, Bev Nordby and Kevin Scheidecker

8:50 a.m.

NACD Auxiliary Tour - Mall of America and Aquarium - *Meet in Lobby at 8:30 a.m.*

1:00 p.m. - 3:00 p.m.

OPENING Session - Grand Ballroom East
Presiding - Richard Zupp
Welcome - Lee Coe
Keynote Address - Congressman Ron Kind, 3rd Congressional District, Wisconsin
Address - David Ulrich, Acting Administrator, Region 5, EPA
NACD Address - J. Read Smith, President, NACD

1:00 p.m. - 8:00 p.m.

Minnesota District Administration Session - Plaza
Presiding - Felicia Brockoff

Session will include accounting, district annual reports, grant reports, etc. (for Minnesota district employees only).

3:00 p.m. - 3:30 p.m.
BREAK - Grand Ballroom Foyer East

3:30 p.m. - 5:00 p.m.

CONCURRENT WORKSHOPS

TMDLs Are Your Friend; Not Your Enemy - Bloomington
Presiding - Tim Gieseke

Minnesota's Approach to TMDLs-Glenn Skuta

TMDLs in the Stillwater Watershed, Ohio - Nikki Reese

EPA chose TMDLs as the method to achieve water quality standards. They are here to stay. Speakers will advise on how districts can be involved.

Water Quality Monitoring - Veranda 5-8
Presiding - James Main
Monitoring in Minnesota - Mark Doneux
Monitoring Partnerships - Sylvia McCollar
Monitoring in the St. Joseph Watershed, Indiana - Bill Lambert

With the majority of districts involved in water resources, have you wondered what the role of districts in monitoring might be? Hear what a water quality agency has to say about that and learn from some districts up to their eyeballs in water quality monitoring.

Evening on Your Own
(Check information at Registration Desk)

TUESDAY
JULY 17, 2001

7:00 a.m. - 8:15 a.m.

Presidents Association Breakfast - Vista 2205
(For Past and Current Association Presidents)
Presiding - L. Jeanette Winegarden

8:00 a.m. - 5:00 p.m.

Registration - Bloomington Foyer

8:30 a.m. - 11:30 a.m.

GENERAL SESSION - Grand Ballroom East
Presiding - Scott Hoese
Film - FISH
Sediment & Erosion Control in an Urban Area - Louis Flynn
Opportunities for Districts in State & Private Forestry - Larry Payne
NACD Legislative Efforts - Tom Spellmire

9:00 a.m. - 11:30 a.m.

NACD Auxiliary Business Meeting - *Bloomington*
Presiding - Pam Snodgrass
Backyard Conservation - Carrol Henderson
Did you know that you can double the number of bird and butterfly species visiting your yard if you provide the right types of plantings? This presentation will cover the basics for providing food and shelter in your backyard in all four seasons. Author Carrol Henderson published the book Landscaping for Wildlife in 1987, and it has become a regional standard reference for people who want to attract wildlife to their property. The presentation will include highlights from the book and a slide presentation of the landscaping plants that are most successful in attracting wildlife.
Special Guest - Carolyn Cardova

10:00 a.m. - 10:30 a.m.
BREAK - Grand Ballroom Foyer East

Noon

North Woods Luncheon - Grand Ballroom West
Presiding - Scott Hoese
Invocation - Scott Hoese
Minnesota Bound - Ron Schara
North Central Region District Employee Awards - Sherri Doane

Ron Schara and Raven

Telling stories about the outdoors, meeting people who appreciate the wonders of nature... this has been the experience of Ron Schara for 30 years. His writings and observations have captured the essence of the natural world. Now in its fourth year, Ron's television magazine show, *Minnesota Bound,* delivers the heart of the outdoors into the living rooms of TV viewers. Enjoy a real North Woods meal of brats, hamburgers, corn on the cob, and other treats

while listening to one of the North Woods' most popular outdoor/naturalist commentators and an integral part of the Midwest's outdoor community.

The North Central Association of District Employees conducts an awards program to recognize professionalism and dedication in the people who drive the Region's conservation district programs. Sherrie Doane will present the North Central Region 2001 Conservation District Professional Award and the 2001 Conservation District Board Member Award.

1:45 p.m. - 3:00 p.m.

CONCURRENT WORKSHOPS

BioEnergy—Agricultural Solutions to Global Change with New Energy Sources - Bloomington

Presiding - Tim Gieseke

Overview - Gerald Talbert

Minnesota Methane Project - Carl Nelson

If you are curious on how bioenergy fits into agriculture this is the session for you. View the big picture and how methane is being used as an agricultural asset.

Urban & Community Forestry - Veranda 5-8

Presiding - Mike Majeski

Green Infrastructure - Al Singer

One Minnesota District's Approach to Urban Forestry - Don Bajumpaa

This session will show how Community Forestry activities have strengthened local partnerships between community leaders and the conservation district and opened the door for soil and water conservation activities in and around the community.

3:00 p.m. - 3:30 p.m.

BREAK - Grand Ballroom Foyer East

3:30 p.m. - 5:00 p.m.

Hypoxia and the Headwaters - Bloomington

Presiding - Wayne Anderson

Gyles Randall

Jim Gulliford

This presentation will describe the hypoxia condition of the Gulf of Mexico, probable causes for it, and why we, in the headwaters, should be concerned. High nitrate loadings from tile drained, row-crop agriculture have been identified as major sources of nitrogen in the Mississippi River Basin, and other rivers draining intensive agricultural areas are potential sources of nitrate. Professor Randall and Jim Gulliford will discuss the effects of sources and rates of nitrogen applications, cropping systems, manure, tillage systems, and nutrification inhibitors on nitrate loss and subsurface drainage and how these management factors may affect hypoxia as well as management strategies.

Nutrient Management - Veranda 5-8

Presiding - Steve Lutes

Mark Hauck, Gerry Maciej, Derek Fisher

Everybody is talking about nutrient management. Hear how Minnesota is coping with it.

5:30 p.m.

Buses begin loading for Boat Dock at North Entrance of Hotel

6:30 p.m. - 9:30 p.m.

The Dinner Cruise travels through the Upper St. Anthony Falls Lock, the northern most lock of the 29 on the Mississippi River and the deepest—it descends 50 feet. The area is abundant in history and commerce with old St. Anthony, where Minneapolis began. On one side the spectacular downtown skyline, on the other the historic James J. Hill Stone Arch Bridge and the Hennepin Avenue suspension bridge. Dinner Buffet entrees include Chicken and Pork Loin.

WEDNESDAY
JULY 18, 2001

8:30 a.m. - 11:30 a.m.

GENERAL SESSION - Grand Ball Room East

The Making of the 2002 Farm Bill

Presiding - Gene Schmidt

J. Read Smith, National Association of Conservation Districts

Charles Ingram, National Association of Departments of Agriculture

Marc Curtis, American Soybean Association

Ron Nargang, The Nature Conservancy

10:00 a.m. - 10:15 a.m.

STRETCH BREAK

11:30 a.m.

NACD Luncheon - Grand Ball Room Center

Presiding - Gene Schmidt

Invocation - Scott Hoese

Address - Tim Penny, Senior Fellow, Hubert H. Humphrey Institute of Public Affairs

National Policy Issues Related to the 2002 Farm Bill

Tim Penny
Senior Fellow
Hubert H. Humphrey Institute of Public Affairs

WHO'S WHO

Wayne Anderson, Supervisor, District Planning, North and South Districts, Minnesota Pollution Control Agency, St. Paul, MN

Don Bajumpaa, President, North Central Region Association of Conservation District Employees; Wilkins Soil and Water Conservation District, Breckenridge, MN

William Bennett, NACD North Central Region Board, Elgin, IA

Felicia Brockoff, Administrative Assistant, Carver Soil and Water Conservation District, Waconia, MN

LeAnn Buck, Executive Director, Minnesota Association of Soil and Water Conservation Districts, St. Paul, MN

Carolyn Cardova, President, Auxiliary, National Association of Conservation Districts, Colorado Springs, CO

Lee Coe, Chair, Minnesota Board of Water and Soil Resources, Tenstrike, MN

Marc Curtis, Chair, American Soybean Association; President, Mississippi Association of Conservation Districts, Leland, MS

Carolyn Dindorf, Limnologist, Hennepin Conservation District, Minnetonka, MN

Sherri Doane, Vice President, North Central Association of District Employees, Ava, MO

Mark Doneux, Water Resource Coordinator, Washington Soil and Water Conservation District, Stillwater, MN

Sarah Fast, Director, North Central Region, Association of State Conservation Agencies, Jefferson City, MO

Derek Fisher, Conservation Agronomist, Minnesota Board of Soil and Water Resources, St. Paul, MN

Louis Flynn, Staff Engineer, Policy and Planning Division, Minnesota Pollution and Control Agency, St. Paul, MN

Marvin Fox, NACD North Central Region Board, Kaukauna, WI

Tim Gieseke, President, Minnesota Association of Conservation Districts Employees, Waconia, MN

Jim Gulliford, Director, Division of Soil Conservation, Iowa Department of Agriculture and Land Stewardship, Des Moines, IA

Ronald Harnack, Executive Director, Minnesota Board of Water and Soil Resources, St. Paul, MN

Mark Hauck, District Manager, Benton Soil and Water Conservation District, Foley, MN

Carrol Henderson, Nongame Wildlife Specialist, Minnesota Division of Natural Resources, St. Paul, MN

Scott Hoese, Vice President, Minnesota Association of Soil and Water Conservation Districts, Mayer, MN

Yvonne Hoese, President, Auxiliary-Minnesota Association of Soil and Water Conservation Districts, Mayer, MN

Steve Hopper, NACD Executive Board, Chillicothe, MO

Bill Horvath, Director, NACD North Central Region Programs, Stevens Point, WI

William Hunt, State Conservationist, Natural Resources Conservation Service, St. Paul, MN

Charles Ingram, National Association of State Departments of Agriculture, Washington DC

Ron J. Kind, Congressman, Wisconsin 3rd Congressional District, LaCrosse, WI

Bill Lambert, Program Administrator, St. Joseph River Watershed Initiative, Allen County Soil and Water Conservation District, Fort Wayne, IN

Steve Lutes, Natural Resources Conservation Service, Long Prairie, MN

Gerald Maciej, District Technician, Benton Soil and Water Conservation District, Foley, MN

James Main, Board Member, Minnesota Association of Conservation Districts, Chaska, MN

Mike Majeski, North Central Region Liaison, NE Area State and Private Forestry, USDA Forest Service, St. Paul, MN

Eli Mast, NACD North Central Region Board, Seymour, MO

Sylvia McCollor, Supervisor, Lakes and Streams Monitoring Unit, Environmental Outcomes Division, Minnesota Pollution Control Agency, St. Paul, MN

Roger Mussetter, Assistant State Conservationist, NRCS, St. Paul, MN

Ron Nargang, Assistant Director, The Nature Conservancy, Minneapolis, MIN

Carl Nelson, Program Assistant, Minnesota Project, St. Paul, MN

Harry Nikides, President, National Association of State Conservation Agencies, Indianapolis, IN

Bev Nordby, Manager, Mower Soil and Water Conservation District, Austin, MN

Art Norton, Manager, Itasca Soil and Water Conservation District, Grand Rapids, MN

Larry Payne, Director, Cooperative Forestry, USDA Forest Service, Washington DC

Tim Penny, Senior Fellow, The Hubert H. Humphrey Institute of Public Policy, University of Minnesota

Gyles Randall, Soil Scientist and Professor, University

of Minnesota, Southern Research and Outreach Center, Waseca, MN

Nicole Reese, Stillwater Watershed Project Coordinator, Darke Soil and Water Conservation District, Greenville, OH

Steve Robinson, NACD North Central Region Board, Marysville, OH

Ron Schara, Host, ESPN's "Backroads with Ron and Raven" and magazine show "Minnesota Bound", Minneapolis, MN

Kevin Scheidecker, Administrator, Fillmore Soil and Water Conservation District, Preston, MN

Gene Schmidt, Chair, NACD North Central Region Board, Hanna, IN

Al Singer, Coordinator, Metro Greenways, Minnesota Department of Natural Resources, St. Paul, MN

Glenn Skuta, Supervisor, Watershed Financial and Technical Assistance Programs, Policy and Planning Division, Minnesota Pollution Control Agency, St. Paul, MN

Joe Slater, NACD North Central Region Board, Holton, MI

Faye Sleeper, Manager, Policy & Planning Section, Minnesota Pollution Control Agency, St. Paul, MN

J. Read Smith, President, National Association of Conservation Districts, St. John, WA

Jerry Snodgrass, NACD North Central Region Board, Geneseo, IL

Pam Snodgrass, Chair, North Central Region, NACD Auxiliary

Tom Spellmire, North Central Region Representative, NACD Legislative Committee, Lebanon, OH

Gerald Talbert, Energy Consultant, Relay, MD

Doug Thomas, Water Planning Coordinator, Board of Soil and Water Resources, St. Paul, MN

Robert Toole, Director of NACD Leadership Services, South, Edmond, OK

David Ulrich, Acting Administrator, Region 5, U.S. Environmental Protection Agency, Chicago, IL

Sheila Vanney, Communications & Training Coordinator, Minnesota Association of Soil and Water Conservation Districts, St. Paul, MN

Charles Whitmore, Midwest Region Conservationist, Natural Resources Conservation Service, Madison, WI

L. Jeanette Winegarden, North Central Region Director, NACD Presidents Association, Cedar Falls, IA

Richard Zupp, President, Minnesota Association of Soil and Water Conservation Districts; NACD North Central Region Board, Pipestone, MN

Acknowledgments

The Hosts acknowledge with appreciation financial and other support for the 2001 NACD North Central Region Meeting from the following:

Minnesota Association of Soil and Water Conservation Districts
Auxiliary, Minnesota Association of Soil and Water Conservation Districts
Minnesota Board of Soil and Water Resources
Minnesota Pollution Control Agency
Minnesota Natural Resources Conservation Service
Truax Company

Hotel Information

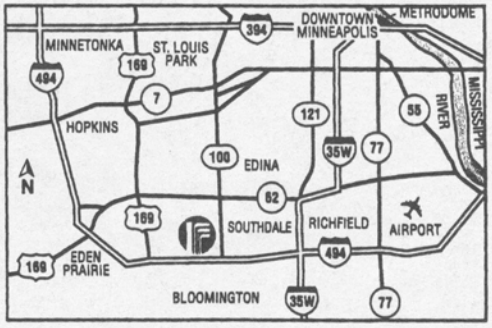
Radisson Hotel South & Plaza Tower

7800 Normandale Boulevard
Minneapolis, MN 55439-3145

- 7 Minutes from Mall of America
- 10 Minutes from Minneapolis/St. Paul Airport
- Shuttle from airport every l/2 hour via Airport Express
- 18 Minutes from downtown Minneapolis and St. Paul
- Indoor Swimming Pool, spa, sauna Exercise center
- Complimentary parking
- Indoor Play Area/game room for children

Directions: From I-494 take Highway 100 North, exit at Industrial Boulevard/77th Street and go west two blocks.

Reservations: Call 1(952) 835-7800 or 1-800-333-3333. Room rate is $99 single/double. Reservations after June 23rd are subject to availability.



For registration information
call the NACD Meeting Services Office at 202/547-6223

Marathon Travel and Cruise Shops—
the official travel agency of NACD 1-800-283-6672

NOTES

Locally Led Conservation Education

EQIP Education in Minnesota Counties and Watersheds

Locally Led: EQIP Education in Minnesota

Natural resources in Minnesota range from trout streams and hardwoods in the southeast to prairie fields and wetlands in the west, from fertile soils in the Red River Valley to aspen and pine forests in the north. Conservation of these resources depends on the stewardship of thousands of landowners and rural residents. This requires targeted conservation education.

Since 1998, conservation education programs have been designed and delivered by Local Work Groups made up of county or watershed staff from the USDA-Natural Resources Conservation Service (NRCS), Soil and Water Conservation Districts (SWCD), University of Minnesota Extension Service (Extension), County Water Planners, Watershed Districts, and other organizations. Local Work Groups select topics, methods, and audiences for their educational programs.

Funds are available to these groups on a competitive-grant basis from the Environmental Quality Incentives Program (EQIP), part of the 1996 Federal Farm Bill. NRCS in Minnesota works with Extension to administer EQIP education grants and to support the Local Work Groups with educational methods, materials, and expertise.

Many Local Work Groups install recommended practices on farms where neighbors can see results and ask questions at field days.

Why Does Minnesota Need an EQIP Education Program?

- Farmers need to understand EQIP practices such as nutrient and manure management to carry them out effectively. That requires education.
- EQIP Education programs reach a much larger and more diverse audience than the approximately 250 agricultural producers who receive EQIP financial assistance in Minnesota each year.
- The EQIP Education program brings together the educational and technical expertise of Extension, NRCS, SWCD, and other organizations at the local, regional, and state levels to present a unified message about conservation practices.
- EQIP Education funds have been matched with funds or staff time from Extension, the Board of Water and Soil Resources (BWSR), the Minnesota Department of Agriculture (MDA), and local governments. This cooperative approach leverages resources not available to one organization alone.

The following pages highlight examples of the 62 educational programs supported by EQIP education grants. The programs are organized into four categories:

1. Protecting lakes and rivers in agricultural areas
2. Protecting ground and drinking water
3. Protecting lakes and rivers in forested areas
4. Reaching non-traditional audiences

A list of all 62 grants and a complete description of EQIP Education in Minnesota can be seen at http://wrc.coafes.umn.edu/EQIP/

Protecting Lakes and Rivers in Agricultural Areas

Protection of lakes and rivers in agricultural areas was the educational goal most often selected by Local Work Groups. Programs usually focused on management practices related to manure, grazing, or tillage.

Manure and Nutrient Management. Concerns about phosphorus and bacteria entering rivers and lakes prompted development of new feedlot rules at the state and federal level, and are motivating more livestock farmers to improve feedlot and manure management. Field demonstrations of manure injection equipment and spreader calibration, tours of feedlot improvements, and workshops on manure and nutrient management planning were emphasized in fifteen local education programs across the state.

In Stearns County, workshops increased the number of producers preparing manure management plans.

Field demonstrations of newer techniques for land application of manure drew a large audience of farmers.

Tillage Management. Soil and phosphorus are washed off cropland into rivers and lakes with every major rainfall, reducing soil productivity and polluting water. Fall strip tillage is being introduced in Minnesota as a way to maintain soil-conserving crop residue between rows and allow rapid in-row soil warm-up and drying in the spring. Three Local Work Groups emphasized tillage practices in their education programs, two with on-farm demonstrations of strip tillage.

Field day participants at the Tom Muller farm in Cottonwood County take a close look at a strip-till unit in action. Muller and staff from Extension and the Cottonwood SWCD presented agronomic and economic considerations for strip tillage at the field day and at winter meetings.

Grazing Management. Producers looking for higher profits, healthier grass stands, better soil management, and less personal stress are learning about managed grazing systems, the subject of nine EQIP local education programs. Demonstration sites for native grasses and other forage species have been established in Clay, Norman, and Olmsted counties. Workshops on planning and management of rotational grazing systems were held in counties from Fillmore in the south to Koochiching in the north.

Livestock producers can compare modern fencing options for managed grazing at the new fencing demonstration site established by the Cottonwood SWCD on the grounds of the SW Research and Outreach Center at Lamberton. The site is open all year and is reviewed by farmers and professionals on field day tours. A video on fencing alternatives filmed during site construction was distributed throughout the state.

Paul Peterson, Extension Forage Specialist, along with other Extension, NRCS, and SWCD staff and farmers reviewed forage and livestock management for grazing at the Dan Miller Farm in Fillmore County. The field day was attended by 130 farm family members and others from the region.

Windbreaks. Wind lifts topsoil from farm fields and deposits it in ditches and streams. Wind speeds the loss of crop moisture in summer, and can kill unprotected livestock in winter. Several local education programs emphasized establishment and management of windbreaks. Mower and Olmsted counties planted and upgraded sites to demonstrate use of several types of trees and shrubs in windbreaks.

Fugles' Mill, a long-established demonstration site for trees, shrubs, and grasses, was the focal point for the Olmsted County education project. New signs and brochures guide visitors through the plots, and field days provide an opportunity for local audiences and specialists to discuss uses and management of windbreak plants.

Protecting Ground and Drinking Water

Shallow aquifers overlain by sandy soils in agricultural areas are susceptible to nitrate contamination, and well water in these areas often approaches or exceeds drinking water standards for nitrate. Local Work Groups in Nicollet, Martin, Pipestone, Lincoln, Hubbard, Todd, Wadena, and Otter Tail counties chose protection of surface water and groundwater used for drinking as a focus for educational programs.

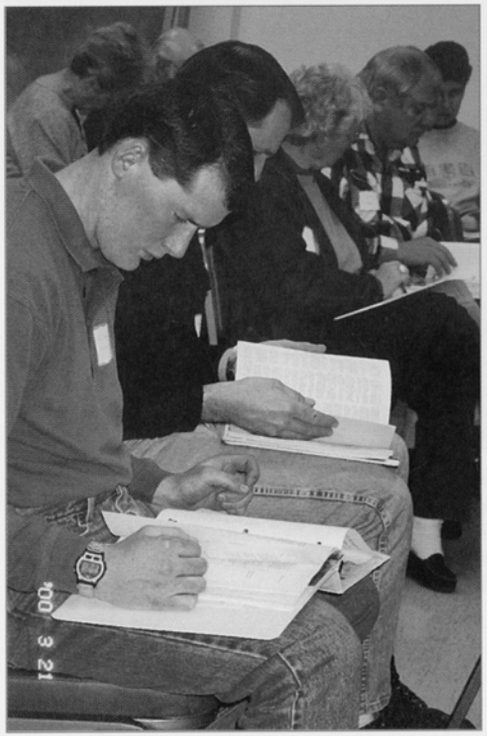
High nitrate levels in well water required the Lincoln-Pipestone Rural Water System to install an expensive denitrification plant. To reduce the amount of nitrate reaching the groundwater, nitrogen fertilizer application rate demonstrations were established in the Verdi wellhead protection area of Lincoln County, funded by EQIP Education grants and additional state funds. Here University of Minnesota researcher Neal Eash tests for soil nitrate at several depths in the demonstration plots early in the season to follow nitrate movement down through the soil.

Fertilizer Management. Over-application of nitrogen fertilizer is a primary cause of groundwater contamination by nitrate, according to MDA tile line monitoring studies and detailed surveys. Most of these Local Work Groups are collaborating with Extension and the MDA to demonstrate appropriate nitrogen fertilizer rates on farms in source-water protection areas. Project staff contacted farmers in the wellhead or source-water protection area with information about the demonstration site and about nutrient management planning. On-site field days were followed with winter workshops to present yield results and nutrient management strategies.

In mid-July, area farmers attended a field day at the Verdi demonstration site to compare plots and learn about agronomic, economic, and water quality aspects of nitrogen management over vulnerable aquifers. USDA, Extension, and local water system staff presented options for combining water quality protection with agricultural practices.

Protecting Northern Rivers and Lakes

The pristine rivers and lakes of the northern Minnesota forest region are being degraded by sediment, nutrients, and altered stream flows. Stream bank restoration, stream buffers, tree planting, and forestry practices were highlighted by Local Work Groups in the Flute Reed, Knife, and Nemadji River watersheds. The Mississippi Headwaters area and St. Louis County programs concentrated on agriculture, forestry, landscaping, and shoreland management. Newsletters to landowners in the forest zone projects focused on practices to restore streams and manage woodlands.



Sixty-four participants attended the Park Rapids field tour and workshop organized by the Mississippi Headwaters Board. Speakers covered the glacial and geological history of the area; management of shoreland vegetation, pastures, and forest land; and other concerns in the rivers and lakes region of the north. The workshop was repeated in three additional Headwaters locations.

Paul Sandstrom, NRCS District Conservationist in St. Louis County, explains features of the Knife River watershed and the steps needed for its protection.

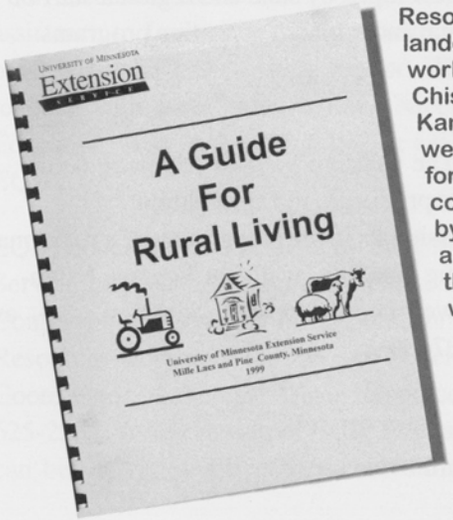
Forest stewardship, tree planting in riparian areas, erosion control along streams, pasture management, and fish population monitoring were featured in a bus tour, a workshop, a portable display, and a series of newsletters for the Knife River watershed.

Reaching Non-traditional Audiences

USDA financial and technical assistance programs are used primarily by conventional farm operators. EQIP local education programs have been successful in reaching audiences less often served by USDA programs with education about resource concerns and practices.

Examples of EQIP Education programs addressing traditionally underserved audiences include a rotational grazing workshop developed for Amish farmers (hosted by Fillmore County) and a Renville County student field day focusing on natural resource awareness for children and families.

David Wise, NRCS staff and member of the Fond du Lac Band of Ojibwe, organized educational programs about lake water management to enhance stands of native wild rice and improve wildlife habitat. With the Fond du Lac Tribal and Community College, he hosted a regional conference and developed a video on wild rice management.

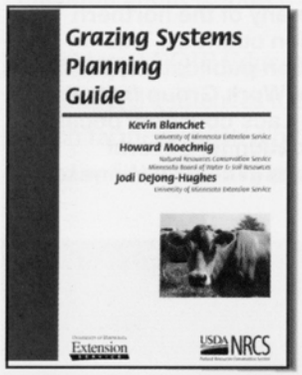


Resource management for small landowners was addressed through workshops, tours, and publications in Chisago, Pine, Mille Lacs, Carlton, Kanabec, and Hennepin counties as well as in many of the northern forest region counties. This conservation publication, produced by a Local Work Group from Pine and Mille Lacs counties, became the foundation for several workshops in central Minnesota.

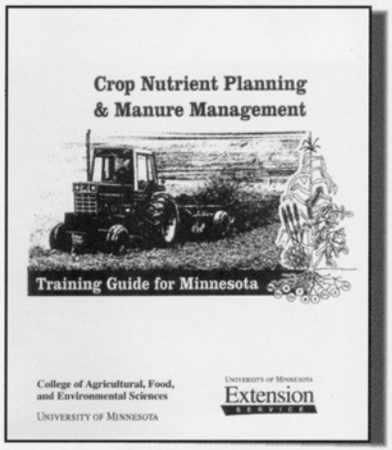
Land Stewardship Opportunities for Women, **an annual conference conducted with EQIP Education assistance, has drawn a large audience of women landowners from south central Minnesota for three years. Topics range from conservation clauses in farmland leases to native prairie restoration. Here, participants get hands-on experience in identifying prairie species native to their region of the state.**

Educational Materials

Educational materials have been developed by state and regional staff of NRCS and Extension for use in local and regional education programs:



■ The *Grazing Systems Planning Guide* assists producers and agricultural professionals in the preparation of a rotational grazing plan. It is available from the Extension website, <www.extension.umn.edu>, as BU-07606.



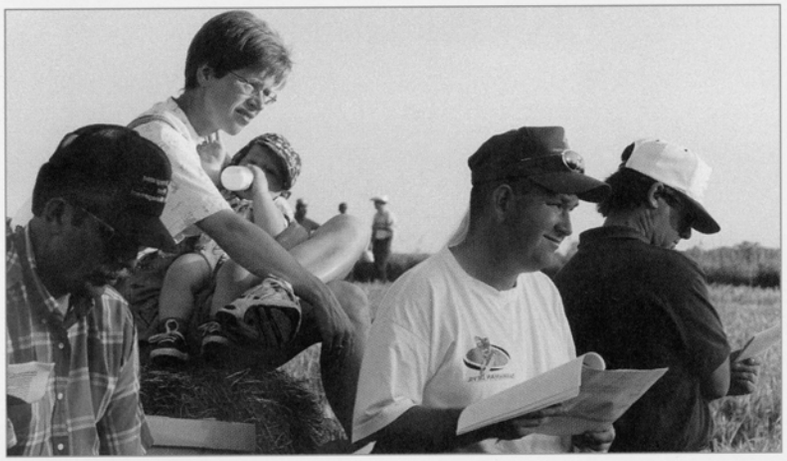
■ The *Crop Nutrient Planning and Manure Management* training guide and slide set was prepared to assist with teaching crop nutrient and manure management planning. The guide was distributed to county NRCS and Extension offices.

■ The *Nutrient Management Planner for Minnesota* computer software guides producers, professionals, and agency staff through the preparation of a field-level nutrient management plan, based on Extension recommended nutrient rates. The software has been distributed at EQIP training workshops organized by Extension.

Resources

Four Extension coordinators located around the state provide direct assistance to Local Work Groups with educational materials, specialist presenters, and grant writing support. They also provide regional programs, together with other Extension and NRCS specialists, as part of EQIP Education. A current staff listing is available at http://wrc.coafes.umn.edu/EQIP/

EQIP Education is organized by the University of Minnesota Extension Service and Water Resources Center, the USDA-Natural Resources Conservation Service in Minnesota, and the Board of Water and Soil Resources working with Soil and Water Conservation Districts. The State Coordinator, at the UM Water Resources Center, can be reached at 612-625-2282. A description of EQIP Education and a listing of local grants can be viewed at **http://wrc.coafes.umn.edu/EQIP/**



Conservation education reaches a wide audience through the EQIP Education partnership.

Photos provided by Local Work Groups.

In keeping with the Americans with Disabilities Act, this material is available in other formats upon request. Call the University of Minnesota Water Resources Center at 612-624-9282.

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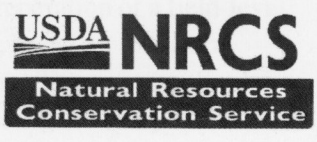

New Business

1. WCA Principles and Goals
   INFORMATION

WCA Rule Revision Principles

- Maintain no net loss of wetlands
- Emphasize sequencing
- Simplify and reduce paperwork
- Integrate with other local land use plans and regulations
- Establish measurement standards for no net loss
- Not all wetlands are equal or similar
- Ensure efficient and effective state and federal involvement, training and oversight
- Consider surrounding landuse impacts /affects (not regulated by WCA)
- Must consider wetlands as one resources issue among many
- Get wetlands engaged into planning /development process early

Goals of WCA
Rule Revision Process

- Fewer LGU with increased capability
- Coordination between LGU's to share resources
- Local staff "do what they do best"
- From prescriptive to performance
- Create incentive for local flexibility and innovation (example -buffers)
- Link to water management and other related landuse plans
- Regulatory coordination with state/federal programs
- Organize rule language to follow "on-the-ground" process
- Better "on-site" coordination
- Minimize decision-making timeframe

103A.201 refers to public value and public interest of wetlands:

- Achieve no net loss in quantity, quality and biological diversity of existing wetlands;
- Increase the quantity, quality and biological diversity by restoring and enhancing impacted wetlands;
- Avoid impact from activities that impact quantity, quality and biological diversity;
- Replace values where avoidance of activity is not feasible and prudent.

103A.202 refers to wetlands as an integral part of total water management system:

- Conserving surface waters;
- Maintaining and improving water quality;
- Preserving wildlife habitat;
- Reducing runoff;
- Providing floodwater retention;
- Reducing stream sedimentation;
- Contributing to improved subsurface moisture;
- Enhancing the natural beauty of the landscape.

Voluntary incorporation of WCA in local ordinance

1. LGU's may adopt wetland management controls under authority of MN Rules 8420 if the controls are not inconsistent with or less restrictive than the controls provided in MN Rules 8420.

2. Local controls will only be considered consistent if they cover same full range of wetland management provisions and standards covered by MN Rules 8420 and contain standards consistent with other all other environmental management and land use ordinances.

Voluntary incorporation of WCA in local ordinance (cont.)

3. Local governments must demonstrate to Board the capacity to administer and enforce the controls consistent with the process defined in MN Rules 8420.

4. Local governments must allow for notification procedures as specified in MN Rules 8420.

5. After local controls are adopted, property owners obtain necessary permits and approvals from local governments and do not have to obtain similar approves pursuant to MN Rules 8420.

A Better Connection

Connecting wetland conservation act to "everyday" local land use decisions

How It Could Work

Now there would be 3 ways to administer WCA

Via local ordinance (1-2):

1) In CWMP:

a) F/V assessment

b) Wetland classification

c) Develop land use growth scenarios

d) Establish "wetland impact zones" +contingency overlay district.

e) approve local wetland ordinance

2) Complete steps a-e above *as requirement of next update of water plan.*

or

3) "standard" prescriptive case-by-case method

This proposal is based on the 1996 City of Superior WI Special Area Management Plan

- Delegation of wetland management from ACOE and WDNR.
- Permitting done through city with 20 day time frame for review–building permit
- No net loss through mitigation plan
- Predictability for landowners/developers by identifying requirements upfront
- Protection of moderate- and high-value wetlands and other important natural resources while allowing for development of less valuable wetlands with mitigation

How It would Work in Minnesota

- 1) Define growth area coverage (RED)
- 2) Define high priority wetland coverage (GREEN)
  - GIS based wetland assessment
  - Field function and value assessment
- 3) Overlay 1 and 2
- 4) Areas in growth area and not in high priority wetland area = wetland impact zone
- 5) May only impact wetlands in wetland impact zone

How It would Work in Minnesota *Continued*

- 6) 15% contingency for hardship variances for small impacts outside of wetland impact zone on low priority wetlands (Mostly WHITE)
- 7) Define mitigation area/bank consistent with city /County parks and open space visions
- 8) Steps 1-4 above required to be defined in 3rd generation water plan or in comp. wetland plan.
- 9) Apply for 5 year ACOE general permit and 5 year WCA delegation
- 10) City /County approves ordinance to implement/administer
- *All impacts require 20 day federal /state review for conformity with water/wetland plan/ local ord.

Benefits to Rural Minnesota to administer WCA through local ordinance

- Establish framework for new era of projects for FDR and NRE consistent with "next generation" red river watershed planning.
- Define project, protection and mitigation areas consistent with County land use vision and watershed district projects.
- Avoid costly gridlock regarding flood control issues resulting from no land use information/priorities.

How it would work in rural Minnesota

- 1) Define areas with high /low capacity for agricultural drainage coverage
- 2) Define high priority wetland coverage
  - GIS based wetland assessment
  - Field function and value assessment
- 3) Overlay 1 and 2
- 4) Areas in high ag. drainage capacity area and not in high priority wetland area = wetland impact zone
- 5) May only impact wetlands in wetland impact zone -

How it would work in rural Minnesota (cont.)

- 6) 15% contingency for hardship variances for small impacts outside of wetland impact zone on low priority wetlands
- 7) Define mitigation area/bank consistent with County /watershed district open space vision and FDR/NRE project planning
- 8) Steps 1-4 above required to be defined in 3rd generation water /watershed district plan.
- 9) Apply for 5 year ACOE general permit and 5 year WCA delegation
- 10) County/WD approves ordinance to implement/administer
- *All impacts require 20 day federal /state review for conformity with water/wetland plan/ local ord.

Variances

- For areas outside of wetland impact zones for small fills on low priority wetlands
- Applicant must prove hardship
- Local board of adjustors required to follow checklist to review variance requests
- Those granted variance must mitigate at existing ratio's

Local 3rd Generation Water or Comp. Wetland Plan will include other flexibility:

- **Restrict/require replacement location.**
- **Wetland type requirements for replacement.**
- **Level of mitigation required.**
- **Rate inflow restrictions and water quality pretreatment.**
- **Buffers zones.**
- **Flexibility /restrictions on exemptions and "no-loss".**
- **Economic incentives for upgrading wetlands.**
- **Integrate project noticing and review.**

Why would LGU's want to take this track?

- Efficiency –200 day review process now takes 20 days with same local process as all zoning permits
- Predictability – Local boards, staff and applicants know the one person to ask, regulations defined upfront, and where they can and cannot impact
- Habitual "hang-ups in review process can be worked out once instead of every time.

Conclusion

- All LGU's would be administering WCA program through local ordinance by the end of 4th generation local water planning /3rd gen. in metro
- LGU could administer through ordinance before requirement date with development of CWMP which must include new landuse growth scenarios and wetland management zones.
- Proposal directly follows a stream-lined version of an ACOE agreed upon process.
- Proposal addresses all general principles in state wetland law and those defined by the BWSR

STATE OF MINNESOTA
HOUSE OF REPRESENTATIVES
SPECIAL SESSION---2001

Capital Investment

Knoblach

H.F. NO. 8
FISCAL CALENDAR
PASSAGE

DATE - 06-29-2001
SEQUENCE NO. - 1006

The bill was read for the third time and placed upon its final passage.

The question was taken on the passage of the bill and the roll was called. There were 115 yeas and 17 nays as follows:

Y	Abeler	N	Holberg	Y	Osthoff
Y	Abrams	Y	Holsten	Y	Otremba
N	Anderson, B.	Y	Howes	Y	Ozment
Y	Anderson, I.	Y	Huntley	Y	Paulsen
N	Bakk	Y	Jacobson	Y	Pawlenty
Y	Bernardy	Y	Jaros	Y	Paymar
Y	Biernat	Y	Jennings	Y	Pelowski
Y	Bishop	N	Johnson, J.	Y	Penas
Y	Boudreau	Y	Johnson, R.	Y	Peterson
Y	Bradley	Y	Johnson, S.	Y	Pugh
N	Buesgens	Y	Juhnke	Y	Rhodes
Y	Carlson	Y	Kahn	Y	Rifenberg
Y	Cassell	Y	Kalis	Y	Rukavina
Y	Clark, J.	Y	Kelliher	Y	Ruth
Y	Clark, K.	Y	Kielkucki	Y	Schumacher
Y	Daggett	Y	Knoblach	Y	Seagren
Y	Davids	Y	Koskinen	Y	Seifert
Y	Davnie	N	Krinkie	Y	Sertich
Y	Dawkins	Y	Kubly	N	Skoe
N	Dehler	Y	Kuisle	Y	Skoglund
Y	Dempsey	Y	Larson	Y	Slawik
Y	Dibble	Y	Leighton	Y	Smith
Y	Dorman	Y	Lenczewski	Y	Solberg
Y	Dorn	Y	Leppik	Y	Stanek
Y	Eastlund	Y	Lieder	Y	Stang
Y	Entenza	N	Lindner	Y	Swapinski
Y	Erhardt	Y	Lipman	Y	Swenson
Y	Erickson	Y	Luther	Y	Sykora
Y	Evans	Y	Mahoney	Y	Thompson
N	Finseth	Y	Mares	O	Tingelstad
Y	Folliard	O	Marian	Y	Tuma
Y	Fuller	Y	Marko	Y	Vandeveer
N	Gerlach	Y	Marquart	Y	Wagenius
Y	Gleason	Y	McElroy	Y	Walker
Y	Goodno	Y	McGuire	Y	Walz
N	Goodwin	Y	Milbert	Y	Wasiluk
Y	Gray	Y	Molnau	Y	Wenzel
Y	Greiling	Y	Mulder	N	Westerberg
Y	Gunther	Y	Mullery	Y	Westrom
Y	Haas	Y	Murphy	Y	Wilkin
Y	Hackbarth	N	Ness	Y	Winter
Y	Harder	Y	Nornes	Y	Wolf
Y	Hausman	N	Olson	N	Workman *
Y	Hilstrom	N	Opatz	Y	Spk. Sviggum
Y	Hilty	Y	Osskopp		

Consent Agenda

1. St. Louis County Comprehensive Local Water Plan Update
   DECISION

approved 1/25/01

EXECUTIVE SUMMARY

St. Louis County Water Plan Update

On July 13, 2001 the BWSR northern Ad Hoc Committee recommended approval of the St. Louis County Water Plan Update (Update). The BWSR Northern Staff also recommends approval of the Update.

Summary of Update Review Process and Update Strengths

St. Louis County held several public meetings and topical forums to gain input on their Update. Topical forums on Septic systems and Lakes provided valuable information to the Update. In addition, groundwater quality emerged as a higher priority as was summarily included in the Update.

The Update follows the State of Minnesota's "Watermarks" framework. New areas of emphasis in the Update include: Natural Disasters, Water Export, Alternative Septic Systems, and Surface Water for Drinking Assessment. State agencies had several comments for improvement. No inconsistencies with state law were noted.

In BWSR's preliminary comments, we suggested incorporating priority actions, stormwater management, and MPCA's "Protecting Water Quality in Urban Areas" in the Update. The County incorporated these items.

In BWSR's final comments, we suggested creating an implementation matrix and required documenting the expiration date of the plan. No other technical issues were noted in the final review.

The county also recommended changes to state programs including: funding for river plans, expanded septic system training, use of state lands for sewage disposal, higher accuracy flood maps, and development of a northern lake classification system.

The final BWSR ad hoc committee review concludes that the Update does fundamentally comply with Minnesota Rule 8420 and the fundamental expectations articulated by the BWSR.

County Description

St. Louis County is rich in water resources. The County borders Lake Superior on the south, the Boundary Waters Canoe Area o the northeast and Voyageurs National Park on the northwest. The abundant supply of surface water and rainfall results in the County being a supplier of water to three continental drainage systems: St. Lawrence, Mississippi, and Hudson Bay. Within these drainage systems, the County has 6,105 miles of rivers, 4,499 miles of lake shore, and 2, 078 water basins.

Minnesota Board of Water and Soil Resources
One West Water Street
Suite 200
St. Paul, Minnesota 55107

In the Matter of Reviewing the Comprehensive Water Plan Update for **St. Louis County** (Minnesota Statutes 1990, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5 and Minnesota Rules 9300.0170)

ORDER APPROVING COMPREHENSIVE WATER PLAN

Whereas, the St. Louis County Board of Commissioners adopted a Comprehensive Water Plan (Plan) under authority of M.S. 1990, Section 103B.301, which was approved by the Minnesota Board of Water and Soil Resources (Board) on November 18, 1992, pursuant to M.S. 1990, Section 103B.315, Subd. 5, and

Whereas, the Plan provided for updating in 2000 pursuant to M.S. 1990, Section 103B.311, Subd. 4, and

Whereas, St. Louis County requested an extension to their update until September 1, 2001.

Whereas, the St. Louis County Board of Commissioners submitted a Comprehensive Water Plan Update (Plan Update) to the Board on April 9, 2001, pursuant to M.S. 1990, 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. M.S. 1990, Section 103B.311, Subd. 4, requires adopted Comprehensive Water Plans to be updated on a recurring basis.

2. In December 1999, St. Louis County passed a resolution to develop a Comprehensive Water Plan Update to meet the Plan Update requirements. In November, 2000.

3. St. Louis County completed a draft Plan Update, and submitted it to affected local government units for review and comment pursuant to Section 103B.315, Subd. 1.

4. On April 9, 2001, St. Louis County submitted a draft Plan Update to the Departments of Agriculture, Health, and Natural Resources, the Pollution Control Agency, the Environmental Quality Board and the Minnesota Geological Survey for final review and comment. Preliminary comments were also requested from the agencies.

5. On Feb. 15 and March 8, 2001, St. Louis County held public hearings on the Plan Update pursuant to Section 103B.315, Subd. 4, for the purpose of obtaining public input into the Plan Update.

6. On April 5 1999, St. Louis County submitted its Plan Update, along with all written comments received on the Plan Update and a record of the public hearing, to the Board for final State review pursuant to Section 103B.315, Subd. 5.

7. On May 23, 2001, a written overview of the St. Louis County Plan Update was presented to the Board for their information and review.

8. **Minnesota Department of Agriculture (MDA) Review:** In its final review dated June 4, 2001, the MDA provided a written acknowledgment on receiving the Plan Update. The Department of Agriculture expressed their continued cooperation in implementation of the Plan. Cooperative programs mentioned were the Ag BMP Loan Program, the Sustainable Agriculture Program, and the Nitrogen Fertilizer Management Program.

9. **Minnesota Department of Health (MDH) Review:** In its review dated May 31, 2001, MDH noted that the Update presents a great opportunity to further public health protection through its proposed actions to protect water and related-land resources. The MDH recommends approval.

10. **Minnesota Department of Natural Resources (DNR) Review:** On May 29, 2001 the final review letter from the DNR was received. Preliminary review comments from the DNR were received on November 3, 2000 and were incorporated for reference in the final review letter. According to the DNR, the biggest challenges to water quality and the related economies in the County include habitat loss and degradation due to development of riparian areas and failing septic systems. Another concern mentioned was data needed to develop long term plans to manage vacated mine pits.

    Specific comments from the DNR were offered on Lake Management, tree canopy protection on trout streams, forestry BMPs, and the increasing recreatonal land use impacts on water resources. The DNR offered assistance to help the county develop tools, workshops and other actions to accomplish their policy objectives.

    The County responded in writing to the DNR comments. The letter will be presented at the July 13 Ad Hoc Committee meeting.

11. **Minnesota Pollution Control Agency (MPCA) Review:** In its final review dated April 10, 2001, the MPCA provided many recommendations. These recommedations include: developing an implementation schedule, developing a priority project list, and coordination with the Basin Planning Process. The MPCA letter was thoughtful and related to big picture policy items.

12. **Environmental Quality Board (EQB) Review:** No written comments were received.

13. **Minnesota Geological Survey (MGS) Review:** In its review dated May 21, 2001, the MGS recommended approval of the Update. The MGS noted that they are currently working on a geologic study on the iron range.

14. **Minnesota Board of Water and Soil Resources (Board):** The Board provided preliminary and final to St. Louis County. Techinical issues include: referencing the MPCA Urban manual, and including stormwater as a concern in the urbanizing area of St. Louis County. Policy issues include: creating a matrix to refine implementation of the Update, documenting the expiration date of the Update, and refererncing how readers can access the data and resource assessments of the Update.

15. **County Response to Agency Comments:** St. Louis County has incorporated most of the BWSR comments into its final draft. Remaining issues will be resolved at the July 13 Ad Hoc committee

meeting. The County has responded to the DNR comments in writing and this letter will be discussed on July 13th.

State agencies did not flag any policies that are contrary to state water laws or policies.

16. **Board Water Plan Review Committee Meeting:** On July 13, 2001, the Board committee met in Duluth with Board staff and representatives from St. Louis County to review and discuss the Plan Update. Those in attendance were Darrell Bruggman, and Ginny Imholte of the Board; Ron Shelito and Mark Nelson of the Board regional staff; St. Louis County Water Plan Coordinator Mark Johnosn. The water plan review committee met to determine whether all relevant law and rule requirements had been met and to hear comments from the county on the planning process.

17. On July 13, 2001, the BWSR water plan review committee recommended that the Board of Water and Soil Resources approve the St. Louis County Plan Update.

CONCLUSIONS

1. All relevant requirements of law and rule have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Water Plan Update of St. Louis County pursuant to Minnesota Statutes 1990, 103B.311, Subd. 4, and Minnesota Rules 9300.0170, Subp. 4.

2. The St. Louis 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 Minnesota Statutes 1990, 103B.301 and Minnesota Rules Chapter 9300.

ORDER

The Board hereby approves the attached Plan as the Comprehensive Water Plan Update of St. Louis County, dated at St. Paul, Minnesota, this twenty fifth day of July, 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Leland D. Coe

BY: Leland Coe, Chair

Committee Recommendations

1. Grass Lake Watershed Management Organization Plan
   DECISION

approved 1/23/01

OVERVIEW
Grass Lake Watershed Management Organization Plan

Background

On June 15, 2001, the BWSR Metro Subcommittee recommended approval of the Grass Lake Watershed Management Organization Plan to the BWSR Board. The BWSR Metro Region Staff also recommends approval of the Grass Lake Plan.

Summary of Plan Review Process and Plan Strengths

In a letter dated December 15, 2000, the BWSR commented on possible additional municipal evaluation standards that could be incorporated into the evaluation "report card" such as existence of detailed stormwater infrastructure maintenance schedule and clear avenues for public involvement with WMO and Cities. In response, the GLWMO stated that the management standards table in the Plan is not the evaluation checklist; rather, it is a listing of all the "official controls" that cities will need to develop and/or revise to comply with the GLWMO plan. The GLWMO will be developing the evaluation checklist as one of its first implementation tasks. The GLWMO Board is counting on the continued cooperation of the member cities, coupled with the proposed evaluation process to provide enough oversight such that a GLWMO permit or review program will be unnecessary.

In a letter dated May 3, 2001, the BWSR stated: 1) The wetland protection and management ordinance should be integrated with other local controls, 2) The GLWMO should develop a mechanism to ensure regular reporting of the report card results to member communities, citizens and review agencies, 3) The WMO should consider including education into the annual list of expenditures by incorporating it into the implementation section of the plan. The GLWMO final Plan dated June 5, 2001, included changes in the Plan related to issues defined in final draft plan review letter. The Plan does fundamentally comply with Minnesota Rules 8410 and the fundamental planning expectations articulated by BWSR.

Highlights of the Plan include: 1) definition of specific projects, responsible parties and set time line, 2) identification of priority issues determined through citizen involvement and agency participation, 3) concise implementation section with identified management standards and activities, 4) communication partnership with cities on management and monitoring programs.

Watershed Description

The Grass Lake Watershed Management Organization (GLWMO) is approximately 8.6 square miles in size and includes part of the Cities of Roseville and Shoreview (See enclosed executive summary with map). The GLWMO is a near fully developed watershed and includes the highly used water bodies of Snail, Grass and Owasso Lakes in northern Ramsey County. The GLWMO has provided a valuable forum for the member communities to evaluate and solve the drainage issues within the watershed.

DRAFT

DRAFT

Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, Minnesota 55107

In the Matter of the review of the Watershed Management Plan for the **Grass Lake Watershed Management Organization** pursuant to Minnesota Statutes Section 103B.231, Subdivision 9

ORDER APPROVING WATERSHED MANAGEMENT PLAN

Whereas, the Board of Managers of the Grass Lake Watershed Management Organization (GLWMO) submitted a Watershed Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) pursuant to M.S. 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. **District Establishment.** The GLWMO was established by an executed joint powers agreement on December 27, 1983. The GLWMO provides the forum for the cities to systemically prioritize and address intercommunity drainage issues.

2. **Requirement to Plan.** The Metropolitan 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 GLWMO Plan provides the forum for the cities to systemically prioritize and address intercommunity drainage issues. The GLWMO also protects and preserves water resource, establishes policies for water resources management, prevents soil erosion, promotes groundwater recharge and protects wildlife habitat all while minimizing public capital expenditures.

3. **Nature of the Watershed.** The Grass Lake Watershed Management Organization (GLWMO) is approximately 8.6 square miles in size and includes part of the Cities of Roseville and Shoreview (See enclosed executive summary with map). The GLWMO is a near fully developed watershed and includes the highly used water bodies of Snail, Grass and Owasso Lakes in northern Ramsey County.

4. **Local Review.** The GLWMO circulated a copy of the draft Plan to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7, prior to submittal to the Metropolitan Council.

5. **Metropolitan Council Review.** In a letter dated November 22, 2000, the Council suggests that the GLWMO consider starting a permit or review program, and conduct a watershed-wide wetland functions and values assessment and wetland management plan. The Council also believes that the "GLWMO should work with both member cities to help them to develop stormwater management ordinances consistent with the Met Council's Interim Strategy." In a letter dated April 2, 2001, the Council stated, "The GLWMO has put together a watershed management plan that has the potential to be an excellent tool for local units of government to use in writing their local water management plans".

6. **Department of Agriculture Review.** The MDA did not provide comments on the GLWMO Plan.

7. **Department of Health Review.** In a 45-day final review letter dated April 12, 2001, the MDH asked for corrections on language describing MDH's responsibility in management/ administering various groundwater protection programs. The MDH also commented on the need of the WMO to be cognizant of sensitive groundwater recharge areas in implementation of the Plan. In response, the GLWMO made corrections to Section 3.8 regarding groundwater management and protection and revised its goals to be more consistent with the goals and policies presented in the goals section. Language was added to relevant policies regarding sensitive groundwater recharge areas. Also, new policies were added and revisions made to the goals section regarding sensitive groundwater areas, abandoned wells and the GLWMO support of the Ramsey County Groundwater Plan.

8. **Department of Natural Resources Review.** In a 45-day final comment letter dated May 7, 2001, the DNR provided general comments concerning that the executive summary doesn't seem to capture the essence of the Plan in meaningful detail. The DNR also commented that the WMO should make it a policy to encourage the use of best management practices to reduce the amount of impervious surface and runoff in the watershed. The DNR also noted that Snail Lake has recently been found to contain a large population of Eurasian water milfoil. The GLWMO did not respond to the DNR comments.

9. **Pollution Control Agency Review.** In a letter dated December 15, 2000, the MPCA questions specifically what the GLWMO requires the cities to do versus what the GLWMO will do, the MPCA also requests an explanation for why the water quality guidelines in Table 5.1 appear to allow for quite a bit of degradation in the Category I lakes. The MPCA also asked when and how the cities would set goals for Category III and IV water bodies. In response the GLWMO stated that it has defined a successful cooperative approach and the GLWMO has provided effective guidelines and will continue to review cities stormwater management plan. The MPCA did not provide a 45-day comment letter.

10. **Board Review.** In a letter dated December 15, 2000, the BWSR commented on possible additional municipal evaluation standards that could be incorporated into the evaluation "report card" such as existence of detailed stormwater infrastructure maintenance schedule, ordinance structure for variable street widths linked to traffic counts, clear avenues for public involvement with WMO and Cities, and shoreland grades related to quality of shoreline using % of total length. In response, the GLWMO stated that the management standards table in the Plan is not the evaluation checklist; rather, it is a listing of all the "official controls" that cities will need to develop and/or revise to comply with the GLWMO plan. The GLWMO will be developing the evaluation checklist as one of its first implementation tasks. The GLWMO went on to state that city implementation tasks have deadlines, either direct or through the preparation of local plans. The GLWMO Board is counting on the continued cooperation of the member cities, coupled with the proposed evaluation process to provide enough oversight such that a GLWMO permit or review program will be unnecessary.

In a letter dated May 3, 2001, the BWSR stated: 1) The wetland protection and management ordinance should be integrated with other local controls, 2) The GLWMO should develop a mechanism to ensure regular reporting of the report card results to member communities, citizens and review agencies, 3) The WMO should consider including education into the annual list of expenditures by incorporating it into the implementation section of the plan. The GLWMO final Plan dated June 5, 2001, included changes in Plan related to issues defined in the final draft plan review letter. The Plan does fundamentally comply with Minnesota Rules 8410 and the fundamental planning expectations articulated by BWSR.

11. **Highlights of the Plan.** The critical elements included in the Plan are:

a. Definition of specific projects/actions, responsible parties and set time line,

b. Identification of priority issues determined through citizen involvement and agency participation,

c. Concise implementation section with identified management standards and activities,

d. Communication and partnership with cities on management and monitoring programs.

DRAFT

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 Grass Lake Watershed Management Organization pursuant to Minnesota Statutes Sections 103B.201, Subd. 9.

3. The Grass Lake Watershed Management Organization Plan attached to this Order defines water and water-related problems within the GLWMO 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 Plan dated June 2001 as the Watershed Management Plan for the Grass Lake Watershed Management Organization.

Dated at Saint Paul, Minnesota this 25th day of July, 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

DRAFT

BY: Leland Coe, Chair

New Business

3. Legislative Update
   INFORMATION

approved 1/23/01

GOVERNOR'S BILL REVIEW
Please Return to Minnesota Planning as soon as possible

DATE: June 29, 2001

TO: Ron Harnack, Executive Director,

BWSR

FROM: Director, Dean Barkley, Minnesota Planning

RE: REVIEW OF PRE-ENROLLED LEGISLATION;
RECOMMENDATIONS FOR SIGNING

BILL NO: HF 1 SF 13 CHAPTER 5

TITLE: Omnibus Tax Bill

CHIEF AUTHORS Senator Pogemiller Representative Abrams

CO-AUTHORS: Senators [Last names]
Representatives [Last names]

COMMENTS: Please indicate the purpose of the bill, who it affects, opponents, controversy:
Bill impacts all local units of governments and special purpose districts and the general public and business in the state.

*AGENCIES: Does this bill create any new boards, councils, commissions or task forces?
There maybe creations, however non that relate to BWSR.

_____ Yes _____ No

BWSR issues are primarily in Article 3 – Property Taxes: Sec 3 Clarifies the authority of counties to certify as a separate levy a special taxing district through the local water management authority vested with counties. This will make the process more efficient and the landowners receiving the benefits of the services and projects will be paying for the services and projects, rather than having the entire county pay for those specific or unique services and projects. The clarification is good public policy.

Article 3 – Sec 4 is primarily a inflationary adjustment for watershed districts. The bill adjusts the allowable levy cap and changes the name of the fund to more properly reflect the actual uses of the fund. The levy had not been changed generally for several years while the demands of the public have significantly increased. Many of the watersheds have come in one by one to have their levy limit increased and this change deals with the districts statewide in a consistent way. This will allow the watershed districts to better address the increasing expectations for improved water management in their watershed. In addition the section eliminates some outdated language relating to petitioning the watershed districts for activities. Originally limited to municipalities the change extends the petition authority to citizens and other local units of government within the watershed. This will enhance responsiveness to the water management needs of the watershed.

Return to: Susan Eichhorst
Governor's Legislative Relations Office
G-27 Capitol
FAX: (651) 215-1288; PHONE: 297-4281; PAGER: (612)640-8033

Article 3 – Sec 82 provides the Minnehaha Watershed District with specific authority to levy up to $50,000 for enforcement of adopted rules and permitting programs. With the large growth and number of lakes and streams and wetlands in the watershed this authority will ensure that the watershed has the necessary resources to more effectively enforce the protection of these valuable resources.

Article 3 – Sec 84 provides the Red River Watershed Management Board the authority to compensate townships and counties for lost tax revenues resulting from the construction of flood mitigations projects that put land in public ownership and reduce or eliminate property taxes. With increasing efforts to reduce flooding in the Red River valley more land is taken off the tax roles for the benefit of the rest of the watershed and community and the state, this discretionary authority will provide a practical way for the watershed board to work with townships and counties on the property tax issue.

The levy limits for local governments may be constraining for some as they try to provide the services the public is demanding and there will be a significant variation in the allowance under the levy limits for some communities.

Generally this bill is a reasonable compromise for all sides and I support signing of the bill.

XXX	Recommend Approval	_____	Recommend Veto or Line Item Veto (include Draft Veto Message)	_____	Not Applicable

Ron Harnack
(Commissioner's Signature)

BWSR
(Agency)

Return to: Susan Eichhorst
Governor's Legislative Relations Office
G-27 Capitol

FAX: (651) 215-1288; PHONE: 297-4281; PAGER: (612)640-8033

GOVERNOR'S BILL REVIEW
Please Return to Minnesota Planning as soon as possible

DATE: June 30, 2001

TO: Ron Harnack, Executive Director,

BWSR

FROM: Director, Dean Barkley, Minnesota Planning

RE: REVIEW OF PRE-ENROLLED LEGISLATION;
RECOMMENDATIONS FOR SIGNING

BILL NO: HF 8 SF CHAPTER: 12

TITLE: BONDING BILL

CHIEF AUTHORS: Senator Langseth Representative Knoblach

CO-AUTHORS: Senators [Last names]
Representatives [Last names]

COMMENTS: Please indicate the purpose of the bill, who it affects, opponents, controversy

*AGENCIES: Does this bill create any new boards, councils, commissions or task forces?

Yes No

Section 4 relates specifically to BWSR:

Subdivision 1) CREP, Mn River Conservation Reserve Enhancement Program: The bonding bill includes full funding $ 51,487,000 for the Mn River CREP program as recommended by the Governor. This funding will allow the state to secure the 100,000 acres of easements in the Minnesota River basin; leverage the remaining $98,000,000 in federal commitment and significantly enhance water quality, wildlife habitat and recreational opportunities in the Minnesota River basin. In addition the funding will provide a significant economic boost to farmers in the area at a time when flooding from spring and early summer storms have been prevented planting of crops or destroyed the crops and stressed individual finances & local community economies. CREP funding is the most significant natural resources and environmental effort to come out of this session and will establish a long-term legacy for the citizens of the state. I want to thank Commissioner Wheelock and Paul and Joe for their persistence when some wanted to divert some of this funding to other activities.

Subdivision 3) Wetland Road Replacement Due to Public Road Projects: The bill provides $2,000,000 for the state's statutory obligation for wetland road replacement related to local government road maintenance & repair that causes wetland impacts. Without this funding new local projects would be delayed, existing projects would be interrupted and local governments would be required to perform the wetland replacement themselves. Although a few of projects are state aid highways, where costs are recoverable, most of the road maintenance and repair for safety purposes are not state aid roads and therefore do not have access to special funds and local taxes would have to be increased to move the projects forward at a greater public cost. This would be particularly difficult in the middle of local governments budget year. Although this was not included in the Gov's budget initiative, the state has a statutory obligation to perform this activity. The counties, cities and

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townships have indicated that they would likely take legal action to force the state to perform the state's obligation. I believe that the local governments would have a good chance to win without much debate since the statute is so clear on the state's obligation. Next year as part of the legislative process the state's statutory obligation should be discussed and if it determined the state should not have this obligation then let's propose changing the law. Therefore, I ask that we DO NOT VETO this provision.

Section 3) DNR – Flood Hazard Mitigation Grants: Flood damage reduction is also funded at $2,000,000. The flood disaster declarations of the past two years have had significant impacts on local government infrastructure and urban and rural well-being and in many cases recovery is beyond the local's capacity. State $'s will help match federal disaster relief and enhance recovery in these disaster areas. There needs to be continued commitment of state resources not only to assisting after a flood disaster, but also to accelerate the states' participation to preventing flood damages from occurring in the first place. The bill appears to fund current commitments for the coming year. I'm sure that DNR will also address this appropriation.

XX		Recommend Veto or Line Item Veto (include Draft Veto Message)			
_____	Recommend Approval	_____		_____	Not Applicable

Ron Harnack	BWSR
(Commissioner's Signature)	(Agency)

Return to: Susan Eichhorst
Governor's Legislative Relations Office
G-27 Capitol

FAX: (651) 215-1288; PHONE: 297-4281; PAGER: (612)640-8033

From: Tammy McGlone
To: #-Senior Managment Team
Date: 6/4/01 7:59AM
Subject: Environment and Ag Omnibus Finance Bill

Early Saturday morning our finance bill wrapped up. All things considered, it is a good package for BWSR but it did not come without a little excitement.

The agency received funding for BASE operations at the Governor's recommendation. This bill contains no CREP funding. It is all supposed to be included, $51.4 million which includes new funding and the 00 bonding bill shortfall, in the bonding bill that will be introduced in the special session. It is currently the only bonding item on the table for BWSR. As of 10 minutes ago, road replacement dollars were still not included in a package of bonding items for the special session.

Other Highlights

GENERAL FUND

No additional funding for NPEA joint powers base operations. No technical assistance dollars were provided for the new cost share money either.

General Services grants were increased for inflation in the biennium. $100,000 was provided for the first year and $170,000 for the second.

Red River Basin Board was not funded, additional soil survey funding was not provided, grazing land funding was not provided, the road replacement funds in the Senate bill were not provided, and no additional funding was provided for special projects cost share.

A $100,000 grant was appropriated in the first year for the St. George wastewater project to buy down the debt.

$1.225 million ($610,000 the first year and $615,000 the second year was provided for new feedlot cost share funding. Hugh effort on the part of Ron H. and Judy Erickson to defeat an amendment to move the entire feedlot cost share (base and new funding) to the Commissioner of Agriculture with transfer to BWSR so that the Commissioner of Ag would have better management input on the cost share program as the advocate for ag. The amendment failed on we think an 8 to 2 or 9 to 1 vote.

The North Shore Management Board, St. Louis River Board, MN River JPB and SE MN Resources Board were funded for one year and totally eliminated in the second year of the biennium. These organizations will have to work hard next session to restore funding or will have to find other funding sources for the future. This is a permanent base reduction.

LCMR

Local Water Planning Accelerated Grants were funded at $1.365 million for the biennium. Updating soil surveys received $500,000 for the biennium. We have not seen the rider language of the final bill but believe the continuation language requested for MN River and water plan projects is also included.

Other Agency Highlights

OEA survived.

PCA received bridge funding to cover this biennium and next. Their FTE reduction is at the Governor's budget level of 70. A lot of the bridge funding appears to come from the solid waste fund.

DNR has the reduced amount of Lottery in Lieu funding but their did allocate some of the money in the

base and increased the tails to assure more funding will be available.

Ag received funding for dairy diagnostics funding increases and they changed the program name to something very long. They also made some changes to the fees and the special revenue funds.

The water program evaluation study language and appropriation to MN Planning to do the study passed. It is to assess and report to the next Legislature in January on water programs, where they are, what they do, how they interact and how best to manage them in the future. One agency? Multiple agency? Outcomes? those are the focus questions.

CC: Miller, Mary; Zellmer, Wayne

August 2001

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
FIRESIDE SUPPER CLUB
HWY. 210/65
MCGREGOR, MINNESOTA
AUGUST 23, 2001

BOARD MEMBERS PRESENT: Lee Coe, Darrell Bruggman, Dwain Otte, Jerome Deal, Victor Ormsby, Jack Frost, Ginny Imholte, Karen Harder, Dan Wilson-MDH, Sharon Clark-MDA, Rod Massey-PCA, Wayne Edgerton-DNR, Clair Nelson, Char Kahler

BOARD MEMBERS ABSENT: Paul Krabbenhoft, JoAnn Coover, Jim Anderson-MES

STAFF PRESENT: Ron Harnack, Doug Thomas, Ron Shelito, Mary Jo Anderson, Jim Lemmerman, Jeff Hrubes, Debbie Anderson, Dan Steward, Keith Grow, Dan Eklund, Wayne Zellmer.

OTHERS:
Sandy Hooker, Minnesota Association of Townships
Mike Lentz, Aitkin SWCD

Chair Coe called the meeting to order at 9:00 a.m. Chair Coe thanked Darrell Bruggman for the excellent tour of Aitkin County. Chair Coe also extended the appreciation of the Aitkin County SWCD staff that prepared the tour. Ron Shelito thanked the board for taking the time to tour Aitkin County.

** 01-56 **Adopt Agenda** - Moved by Jerome Deal, seconded by Sharon Clark, to approve the agenda as presented. Motion passed on a voice vote.

Minutes of July 25, 2001 – Dan Wilson made a change on page four under his report, it should read, "Well samples that come into MDH are done by certified labs which are scattered around the state and information is available on the internet regarding certified labs." Moved by Jack Frost, seconded by Char Kahler, to approve the minutes of July 25, 2001, as corrected. Motion passed on a voice vote.

** 01-57

REPORTS

Chair Coe reported that he attended the Farm Bill meeting on August 15; Doug Thomas will present information on this later in the meeting today. Chair Coe attended the EQB meeting, which was an informational session. Issues included animal ag GEIS public meetings that will be held statewide; Minnesota Planning has additional information. If board members are interested in attending the public meetings, make note of the date and location on the information distributed. Chair Coe stated that Doug Thomas and Steve Woods represent BWSR on the EQB Technical Committee; Ron Harnack is BWSR's representative on the WRC. Chair Coe reported that an overview of power plant interim rules; and an overview of co-generation "Rapids Power" site were also addressed. If board members are interested in additional information, please contact Chair Coe.

Chair Coe reported that there is a new owner of the parking lot adjacent to the BWSR office. Parking tags will be issued; board members were asked to complete a form listing their vehicle information or contact Mary Jo Anderson.

Executive Director - Ron Harnack reported that it's good to be back to work after recovering from back surgery; he's hopeful that he will be in full-time status again soon. Ron commended staff on getting things done while he's been out. Ron stated that BWSR will continue the joint partnership with MASWCD regarding the State Envirothon. Kamal Alsharif is BWSR's coordinator on this effort. Ron reported that Governor Ventura has decided to hold a CREP tour on September 6, and hold is radio show in New Ulm on September 7, focused also on CREP. This is a great opportunity to show what BWSR and LGUs have done with partnership efforts. Board members need to let Mary Jo Anderson know if you plan to attend the bus tour. Ron stated that there are two new reissued Executive Orders: 1) wetlands/no net loss; and 2) water unification.

Copies of the Executive Orders will be available for board members next month. Ron stated that the BWSR Cost-Share/Soil Conservation Committee needs to revisit the feedlot issue regarding the diversion of water from buildings/feedlot facility. Doug Thomas distributed the publication "Private Lands, Public Benefits". Doug represented BWSR at a meeting in Washington, D.C. BWSR's monitoring program is acknowledged on page 31 of this document. Chair Coe thanked Doug for spreading the good word. The report is on the website for the Governor's summit. Ron Harnack has rescheduled some field office visits. Ron will be in Europe in September; Doug Thomas will be acting during Ron's absence. Ron reported that there is a potential strike with AFSCME and MAPE bargaining units; BWSR has a strike plan in place; potential for reassignment of staff. The all staff meeting scheduled for October 1-3, has been postponed due to the possible strike.

Dispute Resolution Committee (DRC) - Chair Coe reported that there are presently four appeals pending; all four appeals involve WCA. One appeal is of an exemption determination in McLeod County. The appeal has been remanded to the county to develop a better record including more technical analysis. Another pending appeal is in LaCrescent along the Mississippi River in Houston County. The replacement plan denial arose from a cease and desist order and a restoration order. The appeal has been accepted and at the pre-hearing conference resolution was explored. The appeal is pending while discussions occur with the landowner, the city and the county. Another pending appeal regards an exemption denial in Lake of the Woods County. A cease and desist order is involved in the appeal. No decision has been made yet to accept the appeal. Another pending appeal regards an exemption approval by the Lac Qui Parle-Yellow Bank Watershed District involving the federal exemption. The appeal has been accepted and a pre-hearing conference has not been set since resolution is being pursued. John Jaschke has been corresponding with Lac Qui Parle on this issue.

Wetlands Committee - Darrell Bruggman reported that a stakeholders meeting was held yesterday on rule revisions for WCA rule development. Dan Eklund reported that they are in the process of rewriting the WCA rule system. BWSR staff have initiated three LGU meetings. Dan stated that the stakeholders meetings' overriding theme was positive regarding the one application process. Although, there is still the sense of more process is better; however, it was the minority. When you change from a very prescriptive regulatory process to a conformative process there is a concern. Another stakeholder's meeting will be held after the proposed rules are drafted.

Education and Public Relations Committee - Jack Frost reported that the committee will now meet on a quarterly basis.

AGENCY REPORTS

Sharon Clark, Department of Agriculture (MDA), reported that Commissioner Hugoson will travel to Mexico to attend a trade meeting. Senator Wellstone's legislative liaison met with MDA regarding Farm Bill issues. MDA will have a State Fair booth. MDA is putting together technical legislative initiatives. Sharon encouraged agency attendance at the GEIS meetings, agency alliance on feedlots. MDA is working with Stearns SWCD on the legislative tour in September. Sharon reported that Farmfest attendance was down due to the heat. Sharon appreciated the opportunity to attend the Farm Bill meeting hosted by BWSR.

Dan Wilson, Minnesota Department of Health (MDH), reported that compliance rates remain high, and meet code requirements on well construction. MDH is approaching 150,000 abandoned well sealings in Minnesota.

Wayne Edgerton, Department of Natural Resources (DNR), distributed a fact sheet regarding the wildlife management area lands in northwestern Minnesota, and the Consolidated Conservation (Con-Con) unresolved issue, that will be presented to the legislature again this session. Additional information regarding this is on DNR' website. Wayne reported that bear hunting season started yesterday. There is a potential problem in northwestern Minnesota regarding the anthrax disease. Sharon Clark reported that MDA is working with DNR on this disease, which has not showed up for 70 years. Wayne reported that Tom Kroll, DNR private forest management, has moved to private industry; Larry Himunga is acting in his place. Wayne reported that the DNR building has significant changes at the State Fair this year. Wayne presented a five-minute informational CREP video, which will be distributed to all television stations statewide.

CONSENT AGENDA

** 01-58 Carlton County Request for Comprehensive Local Water Plan Extension – Moved by Ginny Imholte, seconded by Jerome Deal, to approve the Carlton County request for Comprehensive Local Water Plan extension to 2002. Motion passed on a voice vote.

** 01-59 Beltrami County Request for Comprehensive Local Water Plan Extension - Moved by Ginny Imholte, seconded by Victor Ormsby, to approve the Beltrami County request for Comprehensive Local Water Plan extension to 2002. Motion passed on a voice vote.

OLD BUSINESS

WCA Principles and Goals - Dan Eklund presented the WCA rule revision principles and goals. Discussion followed. Sandy Hooker asked to be included on the mailing list for the stakeholders meetings. Moved by Char Kahler, seconded by Darrell Bruggman, to approve the WCA principles and goals as presented. Motion passed on a voice vote.

** 01-60

FY02 Non-Point Engineering Assistance (NPEA) Grant - Wayne Zellmer presented background information and the proposed FY02 NPEA base grants and recommends
** approval. Moved by Dwain Otte, seconded by Char Kahler, to approve the
01-61 recommended FY02 Non-Point Engineering Assistance Grants. Discussion followed. Motion passed on a voice vote.

2002 Farm Bill Conservation Provisions - Doug Thomas acknowledged Karen Harder, Vic Ormsby, Wayne Edgerton, Sharon Clark, Lee Coe, Char Kahler, Joe Bagnoli, Doug has spreadsheet, if interested in a copy, contact Mary Jo Anderson. Doug presented the draft BWSR position statement on conservation provisions to the 2002 Farm Bill. Doug asked for board members to review this document and share their thoughts and ideas with him. He stated that the Governor's office is in support of this effort. Karst Pilot Project should be included in this draft as well. Doug appreciated the participation in this effort. Congressman Gutnecht will carry this back to Washington. Discussion followed. Doug will incorporate today's comments into this document and bring it before the Board again in September. Wayne Edgerton thanked Chair Coe and Doug for his initiation on the Farm Bill. Chair Coe appreciated Doug's efforts.

NEW BUSINESS

Soil and Water Conservation District Role in Private Forest Management - Ron Shelito presented a white paper which emphasized the SWCDs role in private forest management. A group of 20 participations put this white paper together; a need does exist for forestry technical assistance staff. Ron clarified that this is an informational item, he encouraged board members to review the white paper and asks for support to meet this need for forest management. Chair Coe stated that BWSR needs to partner with DNR to work with SWCDs on forestry issues. Discussion followed. Wayne Edgerton stated that DNR's is aware of the need, however, DNR is also mandated by law they are the lead agency in the state for forestry, and this effort is closely coordinated. Ron Shelito stated that this need comes from SWCDs and they are willing to work with DNR on this effort. Chair Coe stated that team work can make it happen. Chair Coe thanked Ron for his efforts.

Advisory Comments

Sandy Hooker, Minnesota Association of Townships (MAT), thanked BWSR for the invitation to the tour in Aitkin County, and to be a part of BWSR efforts. She saw the diversity of the state in driving up here today.

Upcoming Meetings

- Governor's CREP Tour and Radio Show, September 6-7, New Ulm. Contact Mary Jo Anderson if you plan to attend.

- Next BWSR Meeting, September 26, St. Paul
- Tour of Boise de Sioux Watershed District, August 28, Fergus Falls, North American Conservation Act
- LCMR Tour, Oct. 3-4 in the Red River Valley
- Tour in October of PL566 groundbreaking in Warren
- BWSR Tour and Meeting, October 24-25, Caledonia

** 01-62 Moved by Jerome Deal, seconded by Victor Ormsby, to adjourn the meeting at 12:45 p.m.

Respectfully submitted,

Leland Coe
Chair

COMMISSIONERS OFFICE

County of Carlton

Courthouse - Room 205
P.O. Box 130
Carlton, Minnesota 55718-0130
Telephone (218) 384-9134
Facsimile (218) 384-9116

FIRST DISTRICT
Dick Brenner, Cloquet
SECOND DISTRICT
Frank Liupakka, Esko
THIRD DISTRICT
Mel Tan, Cloquet
FOURTH DISTRICT
Gordon Aanerud, Carlton
FIFTH DISTRICT
Ted Pihlman, Moose Lake

*** RESOLUTION NO. 01 - 063 ***

BY COMMISSIONER: TAN ADOPTED: AUGUST 14, 2001

WHEREAS, 1995 amendments to the Comprehensive Local Water Planning Act, M.S. 103B.301 gave the Minnesota Board of Water and Soil Resources (BWSR) authority to extend the ending date of local water plans for a period not to exceed two years; and

WHEREAS, Carlton County has a current state approved and locally adopted Comprehensive Local Water Plan with an end date of December 31, 2001; and

WHEREAS, these other major planning efforts will result in information that will benefit the County during its Comprehensive Local Water Plan update efforts; and

WHEREAS, the Comprehensive Local Water Plan update for Carlton County will not be able to be completed prior to December 31, 2001.

NOW, THEREFORE BE IT RESOLVED, that the Carlton County Board of Commissioners request from the Minnesota Board of Water and Soil Resources (BWSR) a 6-month extension of their existing Comprehensive Local Water Plan until June 30, 2002.

BE IT FURTHER RESOLVED, Carlton County will insure continued public participation in the form of the Water Management Task Force and Public Information Meetings.

cc: Bruce Benson, Zoning

****

Upon motion by Tan, seconded by Brenner, and carried, the above resolution was adopted.

Yea votes: Aanerud, Brenner, Liupakka, Pihlman, and Tan
Nay votes: None
Absent: None

I, Paul G. Gassert, Auditor of the County of Carlton, do hereby certify that I have compared the foregoing with the original resolution filed in my office on the 14th day of August, 2001, and that the same is a true and correct copy of the whole thereof.

WITNESS MY HAND AND SEAL OF OFFICE in Carlton, Minnesota, this 17th day of August, 2001.

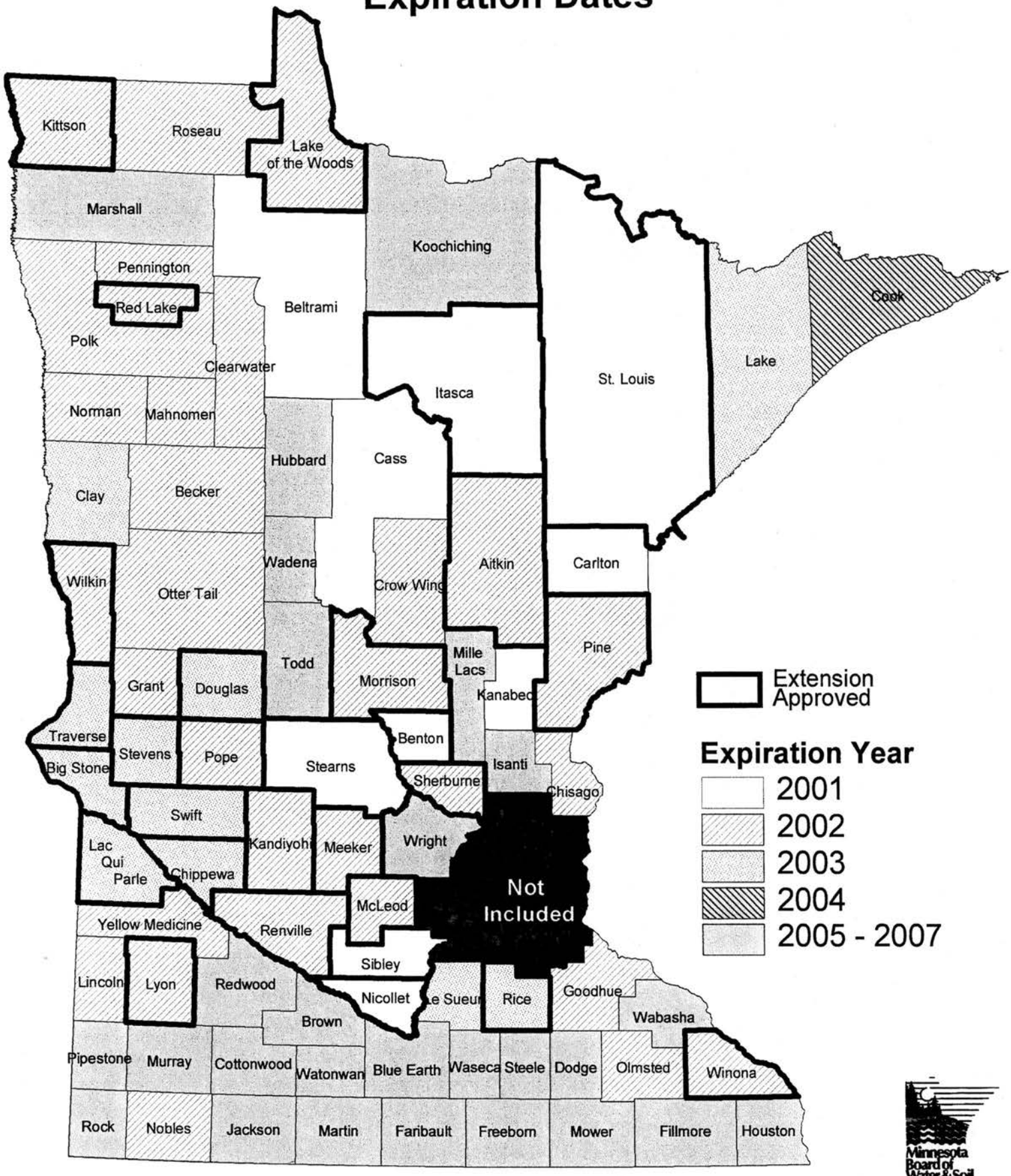
Paul G. Gassert
Carlton County Auditor/Treasurer

RECEIVED

AUG 20 2001

Bd. of Water & Soil Resources
St. Paul

County Water Plan Expiration Dates



Minnesota Board of Water & Soil Resources
WWW.BWSR.STATE.MN.US

Will Minnesota lose 100,000 WMA acres?

August 2001 Fact Sheet

If the 2002 Minnesota Legislature doesn't act next spring, wildlife enthusiasts could lose more than 100,000 acres of wildlife management area (WMA) lands in northwestern Minnesota. Here's why:

It all began in 2000, when the Minnesota Legislature approved DNR management recommendations for 260,000 acres of northwestern Consolidated Conservation (Con-Con) lands that had not previously been designated. That year, approximately 141,500 acres were designated as WMAs and approximately 118,500 acres were designated as state forest management units. That was good news for hunters and other wildlife enthusiasts.

At the same time, the Legislature authorized Beltrami, Marshall, and Roseau counties to request a review of 102,315 Con-Con acres that had been designated as WMAs by former DNR Commissioner Joe Alexander.

After extensive public meetings, those so-called "Joe Alexander lands" have still not been designated and remain in limbo. If the 2002 Legislature doesn't act to formally designate them as WMAs, it's likely the lands will never again have that status. As a result, they won't reach their full potential to produce wildlife for hunting, trapping, and wildlife watching.

At the heart of controversy over the future of the Joe Alexander WMAs are four myths:

MYTH 1: If the Con-Con lands are designated as WMAs, then ATVs will be banned.

FACT: That's not true. State statute mandates allowing corridor trails for ATVs in parts of the Joe Alexander lands to connect forest roads, trails, and public highways.

ATVs won't have the run of the place, as they do now, but they will be allowed in certain areas. Also, state law allows deer hunters to use ATVs to retrieve dead deer on WMAs in that part of northwestern Minnesota.

MYTH 2: The Con-Con lands would be more accessible and better managed for "multiple use" as state forest lands rather than as WMAs.

FACT: WMAs provide for multiple use. The DNR will continue to manage these Con-Con acres, as the agency does other WMAs, for a broad range of stakeholders. That includes loggers (timber harvest is common on northern WMAs) and the local governments that benefit from revenue sharing (PILT, see below)--not to mention hunters, bird watchers, snowmobilers, ATV riders, school groups and researchers.

It doesn't make sense to designate these lands as state forests. Only about one-third of the area is forested--and many of those areas are swamps containing little harvestable timber. The areas are much better suited to wildlife production and use.

MYTH 3: Payment in-lieu of taxes (PILT) for these lands are too low. The lands would be more valuable to the counties if they were privately owned and taxable.

FACT: Counties now get much more PILT money than in the past, and in many cases these payments exceed lost tax revenue. The 2000 Legislature amended the PILT formulas providing about a nine-fold

increase (from 37.5 cents to $3.54 per acre) for Con-Con WMA lands, in addition to continued 50/50 revenue sharing from timber sales. If all 102,315 acres of the Joe Alexander lands were designated as WMAs, the combined PILT payments to Beltrami, Marshall, and Roseau counties would increase by $317,000 per year.

MYTH 4: It's no big deal if these lands aren't designated at WMAs.

FACT: It is a big deal. This is roughly the same amount of wildlife land that Minnesota and federal governments are paying $244 million to protect as easements in the Minnesota River watershed under the Conservation Reserve Enhancement Program (CREP).

THE BOTTOM LINE: The DNR strongly recommends designating these final 102,315 Con-Con acres as WMAs. These are mainly open, unforested wetlands that have more value managed as wildlife habitat than as anything else. ATVs and snowmobiles will have access. And counties will receive additional money from the state for WMA payment in-lieu-of-taxes.

August 2001, Minnesota DNR. For more information, contact Wayne Edgerton at (651)297-8341 or wayne.edgerton@dnr.state.mn.us

Draft

MINNESOTA BOARD OF WATER AND SOIL RESOURCES
POSITION STATEMENT
ON
CONSERVATION PROVISIONS OF THE 2002 FARMBILL
8/21/01

The Minnesota Board of Soil and Water Resources (BWSR) is made up of 15 voting members representing counties, soil and water conservation districts, watershed districts, citizens, the MM Department of Agriculture, the MN Department of Health, the MN Department of natural Resources, the MN Pollution control Agency, and the University of Minnesota Extension. We believe this makeup provided a unique forum and mechanism to bring together thoughts and opinions on the farmbill and to formulate a position that is representative of many of the conservation organizations and state agencies within Minnesota.

The conservation title of the federal farm bill now be deliberated by congress impacts more privately owned lands than any pother federal legislation, and will determine how USDA agencies, states and local governments address private lands conservation for the next 10 years. This document outlines the various federal conservation programs and initiatives that we feel are important to a vital rural economy while protecting and enhancing the natural resources of Minnesota.

Because privately owned and managed farmland, ranchland, and forestland covers more than two thirds of Minnesota, agriculture and forestry dramatically impacts water quality, wildlife habitat and the pace of sprawl. Fortunately many farmers, ranchers and forest owners are implementing practices to meet these environmental challenges.

Farmers, ranchers and forest owners seeking federal assistance to improve water quality, enhance or create fish and wildlife habitat, or combat urban sprawl are being turned away at an alarming rate. In Minnesota alone the estimated conservation backlog for the Environmental Quality Incentive Program, Wetland Reserve Program, and Wildlife Habitat Incentive Program, in 2001 is over $57 million.

Today less than 10 percent of federal farm spending rewards farmers, ranchers, and forest owners who help clean up polluted rivers and lakes, save endangered species, reduce pesticide and fertilizer applications, or protect open space from encroaching development. On a national level because so little federal funding is dedicated to conservation programs administered by the U.S. Department of Agriculture:

- 70 percent of farmers, ranchers, and forest landowners seeking federal funds to improve water quality are annually rejected.
- More than 3,000 farmers offering to restore more than 500,000 acres of wetlands are currently being rejected.
- Nine out of ten farmers, ranchers and forest owners offering to preserve open space by selling development rights are currently being rejected.
- 3,000 farmers and ranchers offering to create habitat on their farms and ranches are being rejected.

- Half of the farmers, ranchers and forest owners seeking basic technical assistance are annually rejected.

In Minnesota we believe that the opportunity is here to make conservation a centerpiece of the next farmbill and used as way to help farmers, ranchers, and forest owners produce public environmental goods, such as clean air, clean water and fish and wildlife habitat, in conjunction with food and fiber. To that end we believe that the farmbill should be built around the goals of: 1) maintaining the existing successful conservation programs; 2) provide additional program options and incentives for those resources in need of additional protection on private lands; 3) support landowners who are maintaining and improving stewardship of their lands; 4) support development of alternative sources of sustainable energy on private lands; and 5) discourage urban sprawl into the rural landscape.

The following positions on the farmbill are organized into the following three themes; existing USDA programs; new programs, and general policy.

Support for existing and/or enhanced USDA programs

Conservation Reserve Program (CRP) – CRP has been a popular program in Minnesota and has had a tremendous impact on the environment through reducing erosion and sedimentation of water of the state and increasing fish and wildlife habitat. We fully support the reauthorization of the CRP program and would like to see enrollment cap raised to 45 million acres. Specifically we support:

- Giving state Farm Services Agency (FSA) offices flexibility to raise the 25% acreage limitation in counties on a case-by-case basis.
- Ensuring that CRP is targeted to only the most highly erodible, environmentally sensitive, and marginal agricultural cropland.
- Continue the use of the Environmental Benefits Index (EBI) as the means for determining land eligibility.
- Continuing the Conservation Reserve Enhancement Program (CREP) in the next farmbill.
- Allow the use of short term rotational grazing of CRP buffer strips, under an approved plan, as a mechanism for managing the vegetation cover.
  - biomass production

Wetland Reserve Program (WRP) – Reauthorize WRP and increase annual enrollment to 250,000 acres per year.

Environmental Quality Incentives Program (EQIP) - Reauthorize EQIP and fund at $1.8 billion per year. Specific recommendations include:

- Give state offices greater flexibility in how the program is administered and carried out at the state level.
- Allow for one year contracts with producers
- Allow funds to be used to support the development of on-farm energy from animal waste.
- Allow cost-sharing on low cost conservation practice options.
  - proportionate funding.

Wildlife Habitat Incentives Program (WHIP) – Reauthorize WHIP and fund at $100 million per year.

Farmland Protection Program (FPP) – Reauthorize FPP and fund at $200 million dollars per year. Minnesota has been unable to utilize this program in that FPP only supports purchase of development rights (PDRs). Minnesota's Ag land preservation program is just beginning to consider PDRs. Specifically we support:

- Allow FPP funds be used to support lower-cost strategies for farmland preservation such as tax incentives and planning and zoning.

Forest Incentive Program (FIP) - Reauthorize FIP and fund at $25 million per year

Forest Stewardship Program (FSP) – Reauthorize FSP and fund at $50 million per year
Stewardship Incentives Program (SIP) – Reauthorize SIP and fund at $50 million per year

Sustainable Agricultural Research and Education (SARE) – Reauthorize SARE and fund at $50 million dollars per year

Swampbuster and Sodbuster Provisions – Reauthorize

Conservation Technical Assistance (CTA) – With the increasing demand to improve water quality and wildlife habitat, from private lands conservation efforts, experts have estimated that the current federally funded technical experts will only be able to meet 30% of that demand. Minnesota supports increasing the availability of CTA through increased funding for USDA agencies and/or third party contracting with states and local soil and water conservation districts.

In Minnesota with private ownership of our state's forested land at 41 percent, coupled with the rapid fragmentation of those lands into tracts of less than 40 acres a huge demand exists for technical assistance to these landowners. This need is currently going unmet.

New Programs/Initiatives

Grassland Reserve Program – Minnesota supports the establishment of a grassland reserve program and that it allow for the enrollment of 1 million acres per year. Minnesota is not unlike some of the western states in that we have many areas in the western portions of the state where grassland areas that have never been tilled are not eligible for the current CRP program.

Conservation/Stewardship Incentives Program – Minnesota supports the establishment of a conservation/stewardship incentive program that would reward farmers and ranchers financially for practicing soil and water conservation thus producing the public benefits

of clean water, clean air, and quality fish and wildlife habitat. Specifically we support a conservation/stewardship incentive program that:

- Rewards those producers that have a history of practicing good soil and water conservation.
- Funding should not be taken from existing conservation programs
- The program should include financial resources fro monitoring and evaluation

Safe Harbor Program – Minnesota supports a safe harbor program within the farmbill. If farmers and ranchers follow a conservation plan prepared by a government agency they should be provided some protection against being held liable in the future, by another government entity, for unexpected or unanticipated environmental problems.

General Policy

Upper Mississippi River – Minnesota is supportive of federal efforts to coordinate and target efforts to address non-point source pollution with the upper Mississippi river watershed.

- Karst Pilot Project (include)
- caps / what was in the last Farm Bill
- inc. Red River Valley
- Context in Minnesota
- clear, concise, brief

AITKIN COUNTY TOUR AUGUST 22, 2001

WELCOME TO AITKIN COUNTY!!

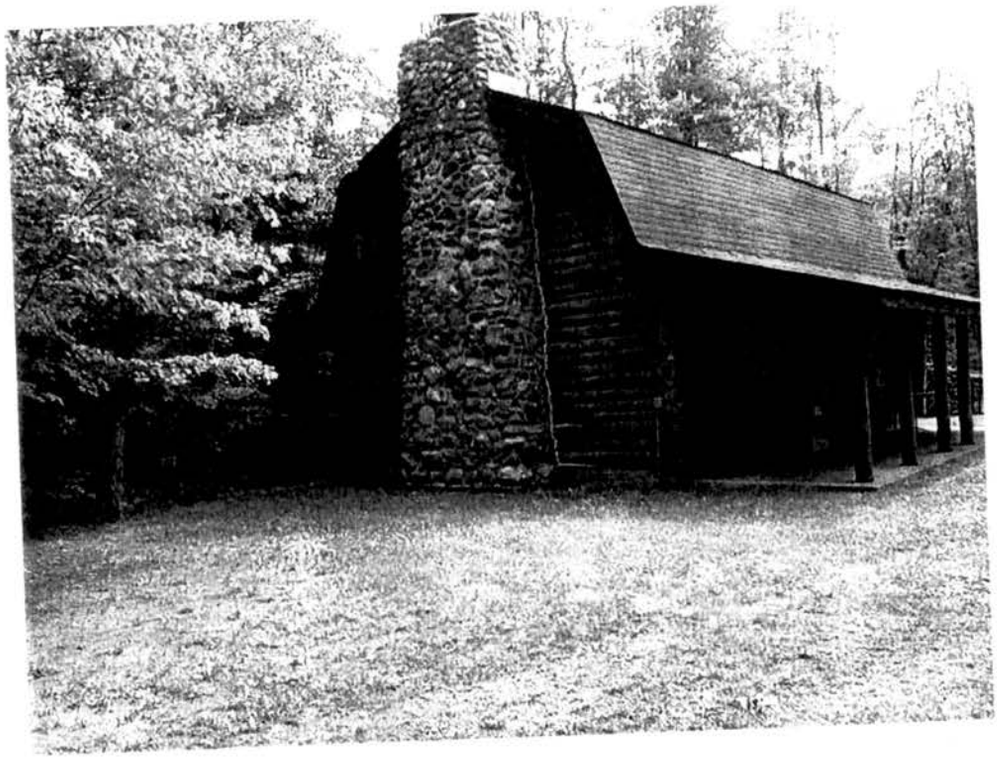
8:30-9:00 REGISTRATION @ FIRESIDE
9:00-9:30 INTRODUCTION TO AITKIN COUNTY
DARRELL BRUGGMAN, *COUNTY COMMISSIONER*
MIKE LENTZ, *SWCD SUPERVISOR*
STEVE HUGHES, *SWCD DISTRICT MANAGER*

9:30-9:45 ON THE BUS
9:45 TOUR BEGINS

STOP #1 (STAY ON THE BUS)

Believe it or not, this is NOT a wetland tour…

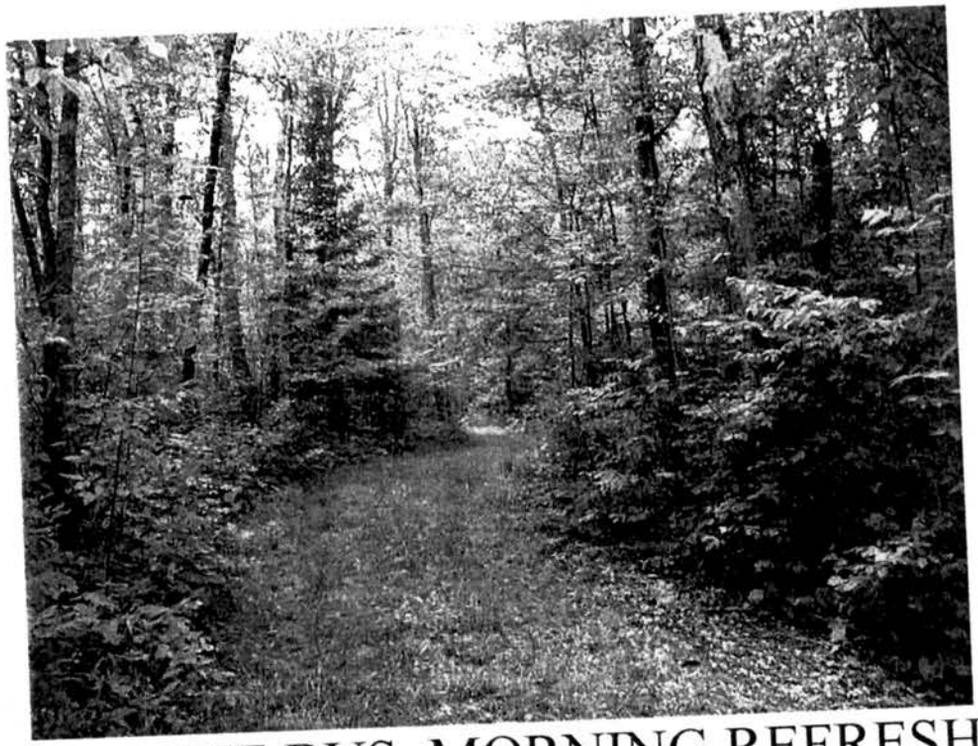
Aitkin County is blessed with more than 520,000 acres of wetland. This is approximately half of our total land area of 1.1 million acres. Aitkin County Planning and Zoning is the Wetland Conservation Act LGU and shares WCA duties with the SWCD. Expanded Technical Evaluation Panel includes: Army Corps of Engineers, DNR-Conservation Officers, Fisheries, Waters and Ecological Services, County Highway Dept., Land Dept., P&Z, SWCD and BWSR.



STOP #2 (STAY ON THE BUS)

This IS a recreational properties tour, both lakeshore and forests…

Property development continues at a fast pace. Demand for lakeshore and hunting land is driving up prices and creating a huge workload for natural resource professionals. Property owners need wetland information, building site evaluations, septic site and land clearing assistance.



STOP #3 (OFF THE BUS, MORNING REFRESHMENTS)

Think timber values, wildlife habitat, water quality…FOREST STEWARDSHIP!

Property owner Ed Kehn worked with SWCD Forester Dennis Thompson in the spring of this year to develop a management plan to meet the landowner's objectives. This 80-acre parcel contains aspen and northern hardwoods (red oak, basswood, red maple, and paper birch) it also contains 7 acres of type 7 (tamarack) wetland. Mr. Kehn and his family enjoy deer hunting, making maple syrup and harvesting timber products from this recreational land. This property is representative of hundreds of recreational properties in the county and thousands throughout northern Minnesota.

STOP #4

Lakeshore development continues at a feverish pace…

Most of the prime lakeshore properties are developed. The remaining lands are steep, wet, difficult to access, or a combination of factors that pose challenges to development and protection of natural resources. Personnel from the Aitkin County SWCD, and Planning & Zoning must meet with the new landowners to provide assistance and information. **Some of these properties should be prioritized through the Water Planning process and protected with a Conservation Easement!!! We are currently pursuing two very high priority riparian sites in the Big Sandy Watershed.**

LUNCH !!!

12:30-1:30 Lunch at Minnesota's first environmental learning center, Long Lake Conservation Center

1:30-3:00 Issues/Panel Discussion
Art Norton, SWCD Manager Itasca County, Water Plan Coordinator
Robert Janzen, Real Estate Appraiser, Realtor, Auctioneer
Richard Courtemanche, Planning and Zoning Wetland Specialist
Steve Hughes, Aitkin County SWCD Manager, Water Plan Coordinator

STOP #5 MINNESOTA WILD

Products made from wild berries and honey, Christmas gifts, WINE TASTING!...what a way to end the tour!!

3:00-4:30 The original Minnesota WILD
Jay Erckenbrack, owner will discuss and demonstrate wine-making, jams, jellies and other specialty products...

4:30- OR SO *THANK YOU FOR VISITING AITKIN COUNTY, WE HOPE YOU ENJOYED THE TOUR. HAVE A NICE EVENING. Staff and Supervisors of the Aitkin County SWCD.*

Supervisors:
Mike Lentz
Frank Turnock
Russ Ruud
Bob Janzen
Donna Rae Asp

Staff:
Steve Hughes
Lori Nelson
Janet Smude
Dennis Thompson

Aitkin County Water Planning Task Force

130 Southgate Drive Aitkin, MN 56431
(218) 927-6565 or 1-888-755-7923

Greetings to you from the Aitkin County Water Planning Task Force! Whether you are a long-time resident or new property owner, you share with each of us the joy and responsibility of good stewardship of our natural resources. With this flyer, we hope to raise awareness of simple steps that everyone can take to ensure that the natural beauty of Aitkin County will be enjoyed by all for generations. Thank You.

Did you know?

More than 350 lakes and 900 miles of streams and rivers are found in Aitkin County. We value these resources for their excellent recreational opportunities and high water quality. Wetlands protect ground and surface waters by filtering nutrients and pollutants, they also store runoff and reduce flooding.

INFORMATION	WHO TO CONTACT
_____ shoreland restoration assistance	EXT.
_____ wetlands are protected	SWCD
_____ steep slopes are fragile areas that deserve special protection	SWCD
_____ burning barrels are not a legal (or pleasant) means of garbage disposal	P&Z
_____ lawn chemicals may damage your lake	EXT.
_____ septic systems require approved designs and permits	P&Z

Trees and shrubs near lakes, rivers and wetlands are especially important for recreation, wildlife habitat, filtering runoff, and providing natural scenic beauty.

INFORMATION	WHO TO CONTACT
_____ building setbacks are 75 feet to 150 feet depending on the lake or river	P&Z
_____ building permits are required for improvements & new construction	P&Z
_____ permits are needed before earth moving projects are started (on land)	SWCD
_____ permits are needed before work is started in the water	DNR
_____ tree and shrub removal is limited to protect shoreland areas	SWCD
_____ permits are needed before making changes to aquatic vegetation	DNR
_____ any of the folks listed below can help you with additional information	

P&Z -- Aitkin County Planning & Zoning Office at (218) 927-7342
SWCD -- Aitkin Soil & Water Conservation District at (218) 927-6565
EXT. -- University of MN Extension Service at (218) 927-7321
DNR -- MN Department of Natural Resources at (218) 828-2636

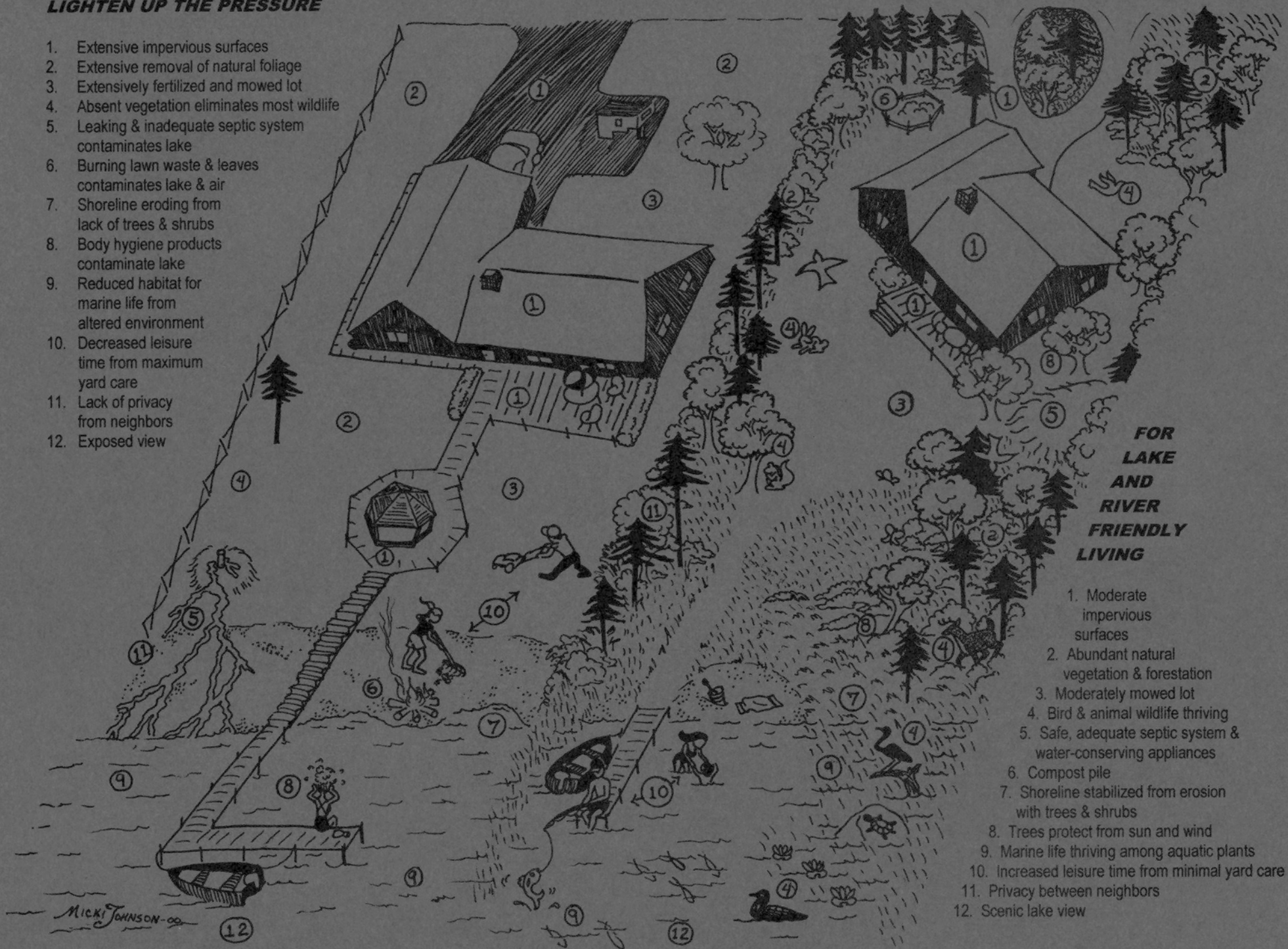
MAKE PLANS TO ATTEND THE

Annual "Rivers and Lakes Fair"

— COMING IN JUNE —

LIGHTEN UP THE PRESSURE

1. Extensive impervious surfaces
2. Extensive removal of natural foliage
3. Extensively fertilized and mowed lot
4. Absent vegetation eliminates most wildlife
5. Leaking & inadequate septic system contaminates lake
6. Burning lawn waste & leaves contaminates lake & air
7. Shoreline eroding from lack of trees & shrubs
8. Body hygiene products contaminate lake
9. Reduced habitat for marine life from altered environment
10. Decreased leisure time from maximum yard care
11. Lack of privacy from neighbors
12. Exposed view



FOR LAKE AND RIVER FRIENDLY LIVING

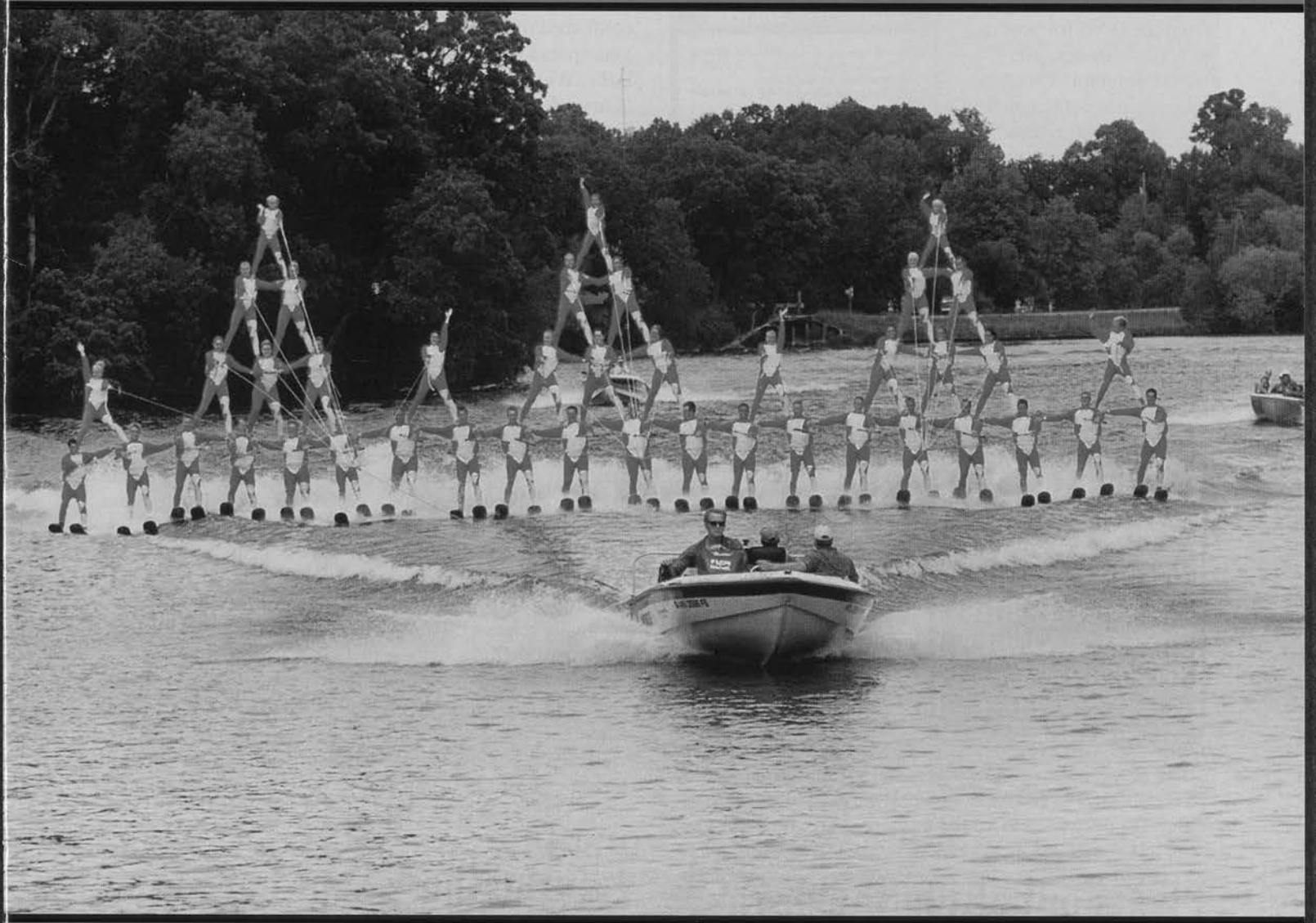
1. Moderate impervious surfaces
2. Abundant natural vegetation & forestation
3. Moderately mowed lot
4. Bird & animal wildlife thriving
5. Safe, adequate septic system & water-conserving appliances
6. Compost pile
7. Shoreline stabilized from erosion with trees & shrubs
8. Trees protect from sun and wind
9. Marine life thriving among aquatic plants
10. Increased leisure time from minimal yard care
11. Privacy between neighbors
12. Scenic lake view

AITKIN COUNTY INTRODUCTION SLIDE SHOW…AUGUST 22, 2001

Slide #	Description
1	Aitkin county is about 1.1 million acres (1.5X the size of Rhode Island)
2	we have hundreds of miles of river, including more than 100 miles of the Mississippi
3	520,000 acres of various wetland types
4	more than 300 lakes help provide the up-north adventure
5	we have about 6000 year-round and seasonal homes
6	numerous seasonal cabins and hunting shacks are appearing on lots, 20's, and 40's
7	with development comes a demand for services including water quality work
8	erosion control projects, this is bank erosion on the Mississippi
9	huge projects like this one on the Mississippi River require engineering (IMPACK6)
10	before and after
11	shoreland ordinance violation
12	rural county sometimes difficult access
13	as above
14	county carry-in access
15	2001 was a bad year for floods
16	high water levels cause damages
17	"Green Shores" livestock exclusion
18	as above
19	riparian buffers/CRP program fit together well
20	one of the critters to keep out
21	help from volunteers
22	program participant
23	we will talk about forestry on tour, about 500,000 acres private land
24	agriculture consists of beef, dairy, sheep, turkeys, wild rice, hybrid poplar
25	goal is to protect water quality and our quality of life

FOCUS
On The Waters

Vol. 12, No. 5 July 2001



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"On The Water Front"

The Exotic Species Update

Minnesota Department of Natural Resources **July, 2001**

Signs for water accesses

Three different signs related to harmful exotic species and infested waters are available free from the DNR for posting at water accesses. The signs help remind boaters to remove aquatic plants and animals from their boat and trailer, and to drain water from their boat, livewell, and bait buckets. The goal is to have signs posted at all public, commercial, and private water accesses. "Boaters who clean their boats and trailers, and drain the water before leaving the access, says Jay Rendall, DNR Exotic Species Program coordinator, "are Minnesota's best defense against the spread of these undesirable exotics such as Eurasian water milfoil, zebra mussels, spiny waterfleas, and ruffe." Signs at accessess have proven to be an important way to communicate this message to boaters. If you know of an access without signs, call Tiffanie Knapp at 651-284-3586 to determine the best way to obtain signs or to have signs posted in your area.

More milfoil infestations

Already this year five new infestations of Eurasian water milfoil have been identified. DNR Exotic Species Program staff have surveyed the following lakes and confirmed that that they contain widespread populations of milfoil: Eagle Lake, Wasserman Lake, and Parley Lake (Carver County); Galpin Lake (Hennepin County); and Sunset Lake (Washington County). This brings the statewide total to 119 milfoil-infested lakes which represents 1% of all the lakes in the state. "While it's disheartening each time new infestations of milfoil are reported, we believe that Minnesota has slowed the spread of this exotic," said Chip Welling, DNR Eurasian watermilfoil coordinator.

Loosestrife-eating beetles on the move

DNR Exotic Species Program staff have recently learned that, after eating most of the purple loosestrife in a wetland or along a lakeshore, leaf-eating beetles are flying considerable distances to other infested sites looking for more loosestrife to eat. These insects, intentionally released throughout Minnesota to control purple loosestrife, have been found up to nine miles away from where they were originally released. This is good news. In Ramsey County, it is difficult to find any loosestrife patch without insects. Another example is in Rice County, where leaf-eating beetles have been found on Kelly Lake, over 5 miles from where they were originally released. Insects have been released on 567 of the 2,000-plus loosestrife infestations in Minnesota. Biocontrol insects have significantly damaged 88 of 289 release sites assessed in 2000.

Plants out of Place video

A new 60-minute video, "Plants out of Place," about invasive plant problems throughout the country, is available from the DNR. It shows examples of terrestrial and aquatic plants including examples of problems and programs in Minnesota. Many key points and lessons about invasive species are included in the video. Contact the Exotic Species Program at (651) 296-2835 to check out the video.

Information about harmful exotic species

To obtain more information about harmful exotic species, call the Exotic Species Program at (651) 296-2835; the DNR Information Center toll-free at (888) 646-6367, or visit the DNR web site: www.dnr.state.mn.us/eco/exotics/.

Minnesota DEPARTMENT OF NATURAL RESOURCES

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FOCUS On The Waters

JULY 2001 VOL. 12, NO. 5

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Do you know what a dichotomous key is?

You would if had you been among the several hunded sixth graders from the Pine City area who were hosted to the Pokegama Lake Association's third Pine County Fresh Water Fair on May 10. Talk about organization! Talk about fun, and appreciation! National Fish and Wildlife Service Ranger Beth explained the dichotomous key method of identifying macroinvertebrates freshly captured from the nearby Snake River. Above, Sam Ting, a recently-arrive immigrant off the DMB ("dat's my boat") Lutefisk, hilariously explains how Norwegian bachelors do stuff, how not to apply for a job, and, incidentally, how mercury and other toxins bioaccumulate in the food chain. (This part required much full-body involvement by kids acting like minnows and northerns and river otters.) What a way to teach! Sam Ting, a.k.a. Tom Gibson, is looking for work, including lake association annual meetings. He's cheap, on time and sober, and can be reached at 701-228-5271 or tgibson@ndak.net.

• • • • • • • • • • • • • • •

About the cover: Whether one feels that surface water regulation is best undone, done through local governments or done in a statewide sweep, one has to wonder how waterfront communities are faring through this era of population densification. Certainly, there are the water quality issues, and then there is the close to the bone issue of whose use, where and when. Metro Correspondent Carl Swanson and Associate Editor Marcia Shepard take a look at water-skiing, its variations, and how well it fits into water users' society. Swanson asks the tough question: why did water-ski organizations object to proposed revisions to Statute 86B, concerning surface water use? They provided for skiers' exemptions to slow-no wake zones near shores. Shepard asks: is skiing compatible with water quality protection, with other near-shore use, with noise-sensitive neighbors? Listeners do *accommodate better to a constant motor sound than to the intermittent whine that Sea Grant research identified years ago as the irritating factor with jetskis. And look at the show of talent and color displayed here by the Little Crow Ski Team as they set a world record of 42 skiers at Neer Park in New London. Photo by Lori Asche.*

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Back patting from a young lake association

Wanted to let you know how much I enjoyed the May issue of *FOCUS on the Waters*. Several articles and letters were of particular interest to our efforts on Fleming Lake Water Quality Improvement Committee.

Joyce Fulton
Fleming Lake Association
McGregor

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Do you have a new address, too?

The urbanization of north central Minnesota has caused my address to change.

You do good work. Great magazine!

A.F. McKeown
Nevis

Ed. Note: Readers, we are bracing for a tough time with all the enhanced 911 address changes in lake country. Please avoid disruption of your subscription by contacting us with your new addresses. We'd be interested to hear your reaction to this exchange of rural character for safety's sake, too.

When planting under water upside down

I'm wondering if you were running some sort of quiz in the May issue. In the article on aquatic plant restoration, it appears as though the illustration on planting underwater might be upside down.

Bob Bromeland
Scuttlebutt Magazine

Sisseebakwet fun is in mastering an art

Our lakescaping project looks just great! Leliani *(Peterson, a DNR expert – Ed)* came up a couple of weeks ago and said we had more growth than any other project at that time of year, probably because we face straight south. We did lose some Black Eyed Susans although I replanted the seeds. Perhaps the thick mulch we put down prevented some seeds from getting into the soil. It looks like all the aquatic plants came back as well. This is the most fun.

Sharon Streetar
Cohasset

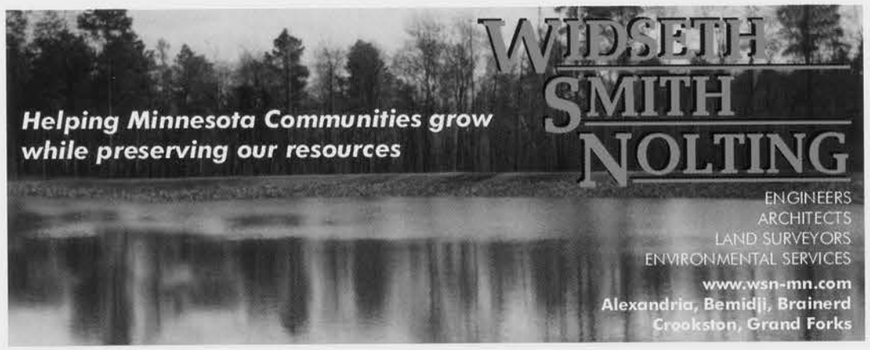
Help restore Minnesota's forests

Many of us cabin owners are concerned about what's happening to the forests surrounding our lakes. My cabin is near Superior National Forest where we hike, canoe and watch wildlife. Minnesotans are fortunate to have two national forests to enjoy.

The July 4th storm that blew down hundreds of thousands of acres dramatically changed our forests in a single hour. Windstorms, like fire, are natural and our forest and wildlife have adapted to them. But unnatural changes are happening less visibly as foresters implement their plans. Our forests are changed through 17 square miles of clear-cuts, every year, on our National Forests alone. The current forest management plans are taking the nature and wildness out of our forests and they impact an area many times bigger than that of the big storm.

I've watched logging near my cabin, trying to make sense of it. I found out that road building led to erosion and hurt wildlife habitat. I pointed this out when the Forest Service asked for public comment on a nearby timber sale. Later I received a report from them that showed they dismissed my comments because the forest plan called for logging the area. They went ahead as originally proposed.

Now is a great time for you to help shape the future plans for Superior and Chippewa National Forests. The Forest



Service is updating its plans and is listening to what the public wants. It is important that you speak up because an average of 30 acres of Minnesota's national forests are logged every day in a way that will change them into unnatural aspen farms. Your lake's watershed, the trails you hike, or the view from your cabin could become a clear-cut. Ugly, erosion-producing clear-cutting is used to favor aspen in the next generation of growth. Vast areas of our forests would no longer have a seed source for native pines. No seeds, no pines.

If this goes on, our children won't be able to experience the rich native forest that our parents enjoyed. And you are paying for this. Logging our 192 national forests is subsidized by taxpayers to the tune of $400 million every year.

You don't have to let this continue. The Forest Service is studying the "National Forest Recreation Alternative D," the Sierra Club's proposal for a new vision for our forests. It would protect the best of what's left and restore native trees to places where they once thrived, manage the forest for wildlife habitat and recreation, and reduce conflict by separating motorized and non-motorized trails. And it phases out commercial logging over the next decade, while allowing fire protection and private firewood gathering. But for this vision to be adopted, you'll have to let the Forest Service know you want it.

You're invited to a free open house to learn what is proposed in your area and how to influence forest decision-makers. Stopping by will help you become a more effective participant so you can help protect our wild forest heritage, for our future, for our families. For a listing of open houses in your area, call 612-379-3853.

Clyde G. Hanson, Conservation Chair
Sierra Club North Star Chapter

Ed. note: According to a U.S. Dept. of Agriculture report, of the 3.3 million jobs derived from the National Forests in 1999, 77.7% were in recreation, and 2.3% in timber harvesting. Of the Gross National Product from the National Forests, $145 billion in 1999, 74.7% was contributed by recreation, and 2.7% contributed by timber harvesting. Of the timber products used in the U.S., less than 4% are derived from National Forests.

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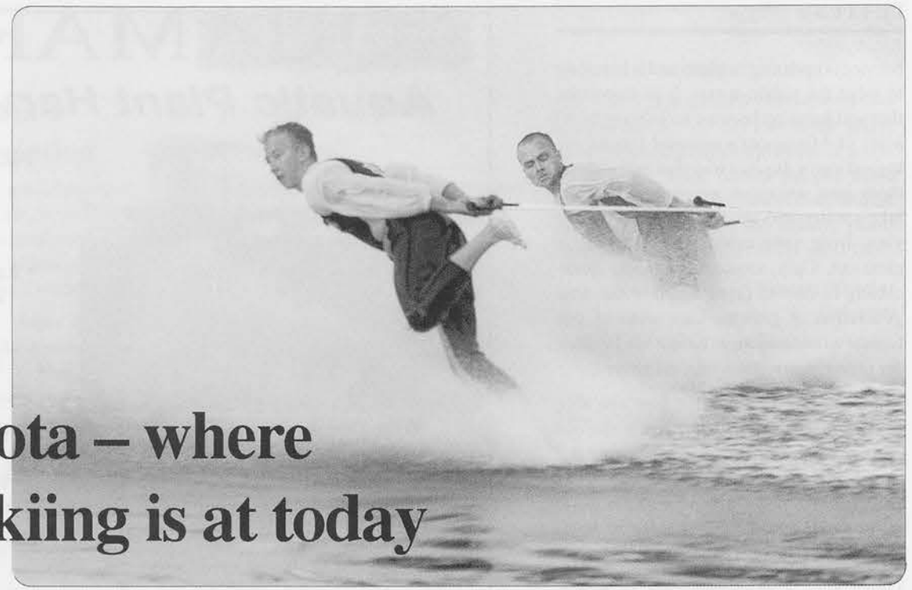

CARL SWANSON
METRO
CORRESPONDENT

Minnesota – where water-skiing is at today

Water-skiing is an all-inclusive term that covers many versions of the sport. It can mean slalom skiing, with one or two skis, on courses that are a far cry from anchored bleach bottles. They're submersible and can be pumped up and lowered at will. Some build jumping ramps, while others hang glide.

There are racers and tricksters, and Wisconsin Dells-type water shows. Some like to do tubing. No longer content with big inner tubes from local implement dealers, users can buy form-fitting tubes in psychedelic colors with sturdy handles. Boards at one time were made with plywood and a jigsaw. Today they're molded from composites with as much design moxie as a fighter plane.

If this sounds expensive, you can get down to the bare essentials. You can ski barefoot, or ski on your tush. There's an old saying among boat builders: "You can get a picnic table to plane if you have enough horsepower."

All this innovation would suggest a growing sport which could add up to more crowding and user conflict. The fact is that we do not know if the sport is growing or in remission. There are no licensing requirements which would give us any data. Many say there is no more skiing today than there was 50 years ago.

The demographics suggest that participants are in the 16- to 25-year old group. They embrace it enthusiastically during those years. Eventually the equipment stays on the beach, but years later another generation picks it up.

And there are some for whom the sport is all consuming. We have one Minnesota skier in his eighties. Pushing to the limit sometimes results in serious injuries.

Sometimes conflicts arise between user groups within the sport. Slalom skiers like smooth water, and their tow boats make as little wake as possible. Not so with the wake boarders. Their tow boats are designed to make wake. Ballast tanks create a low ride and a huge surf, way beyond ordinary wave wash. According to Kim Elverum of the DNR Water Safety Division, a boat is responsible for the wake it makes. Damage by slamming things against the shore or dock could lead to civil liability for the owner.

Slalom courses can be controversial. They are permitted by local units of government. Criteria and standards vary, but they must fall under DNR guidelines. Opposition from adjacent property owners is almost automatic. This can result in hearings and petitions. Once established, and if used properly, opposition tends to drop off.

In securing a permit, some jurisdictions are the "big easy" while others run from difficult to not at all. The City of Victoria in the metro does not issue permits. Usually permits are temporary and, with this in mind, owners go out of their way to keep neighbors from having a bad experience. They realize the last thing the permit issuers need is a lot of complaints.

In other parts of the country, ▶

If slalom courses on Natural Environment lakes, then *how*?

The fact that 51-year old competition skier Jim Martin chafes at the impacts that the slalom course ordinance has on him illustrates how tough it is to craft laws that make sense across the board. Martin bought property on tiny, Natural Environment McClain lake in Crow Wing County when there was only one neighbor, and Martin's was the only dock on this bog-encircled lake. He installed his floating course to hone his craft and even the addition of a few more neighbors has proven harmonious with that goal. What is incompatible is the portion of the County surface water ordinance that requires that all courses permitted on Natural Environment lakes be submersible.

Martin claims that submersible courses don't work well in lakes with mucky bottoms, that the ballasts get tangled up. It's certainly easy to imagine that the ballast weights that control the depth of the course's buoys would stir up clouds of suspended sediments each time they are raised and lowered, which can result in water quality degradation.

Given the acceptance Martin feels from his neighbors (sometimes his audience), social impacts appear unimportant for renewal of his permit. Martin says the course doesn't compromise emergent vegetation and figures the requirement addresses aesthetics, the feeling that Natural Environmental lakes should look, well, natural.

Lawmaking is messy business sometimes, surgery performed with blunt instruments. Crow Wing County passed a communications tower ordinance in spring of 2000, which requires that they be set back from lakeshore by a half mile. There's a tower close to the shore of McClain, grandfathered because it was there prior to the ordinance. It made sense to Miller to junk his cell phone because he perceived the contradiction between his usage of it and his resentment of the disruption of McClain's remote tranquility. The requirement to replace the floating slalom course with an bottom-disturbing submersible course doesn't make comparable sense to Martin.

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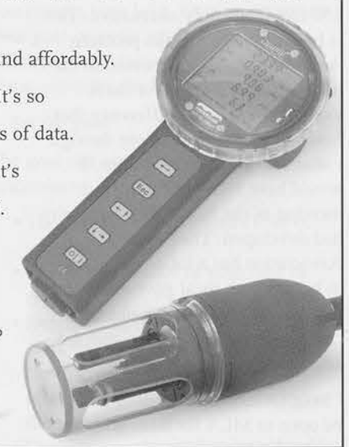

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(*continued from previous page*)

Wisconsin notably, clubs are creating artificial lakes. These lakes tend to be long and shallow. There are very pricey, and there can be opposition. According to Lance Fisher, Minnesota Water Skiers member, building an artificial lake is as difficult as siting on a natural lake. There is one under construction near Alexandria.

During this legislative session, Minnesota Lakes Association had a proposal for a statewide 150-foot slow/no wake zone around lakes. This was primarily for safety. There are too many cases of power boat operators buzzing docks and going too close to swimmers. Local units of government are empowered to create this zone, but for the most part they have not. One provision of the MLA proposal is that a ski tow can be initiated at greater speed than slow/no wake from this zone. A 150-foot zone has been in effect on Lake Minnetonka for over 15 years. Water-skiers who use Minnetonka and other lakes where this zone is in effect do not see this as a problem.

This legislation was strongly opposed by the Minnesota Water Skiers Association. There are cases, not very many, where siting a slalom course closer to shore than 150 feet is the only alternative. This is basically a small lake problem An example is Lake Owasso in the north metro suburbs. For these exceptions, this is a difference that could be easily worked out through variances or other exceptions. It would have taken just a little meeting of the minds. But a polarity had developed. The Skiers Association has a lot of experience in battles with local governments. It was positioned to start a phone campaign with legislators, and did so.

I have learned that the door could be open to MLA for talks with the water-skiers.■

Another summer of conflict over slalom course

A little lake and incompatibility between desired uses put Crow Wing County's Portage Lake resident Jeff Avelsgard and his water-skiing neighbors on a collision course. Skiers dropped near his dock, the noise bothered him, and then increased turbidity and weed growth in the disturbed shallow areas of the 65-acre west lobe of this two part lake. A clash of words began in '94 when Avelsgard asked the skiiers to move their slalom course to the east lobe, offshore from one of their properties. They refused, saying the course had "always been there."

Skiers prefer small, calm lakes, especially during the evenings. Unfortunately, this is when most of the work force is free to recreate as well, and the evening bite attracts anglers. It's possible to fish where the moored courses are, as long as you don't catch a fish to tangle lines in the structure.

Avelsgard's complaints to the County Water Patrol resulted in attempted remedies, including re-siting the course, which now ends so close to a patch of wild rice that it was unable to produce seeds last year. In 1999 the County created a Task Force, with Sheriff's Dept. representative Neal Gaalswyk, to develop a "consensus-based" ordinance. It went into effect in June, 2000. Avelsgard finds the ordinance and its enforcement lacking, and says he never signed off. His point-by-point critique follows. Ordinance excerpts are paraphrased in italics.

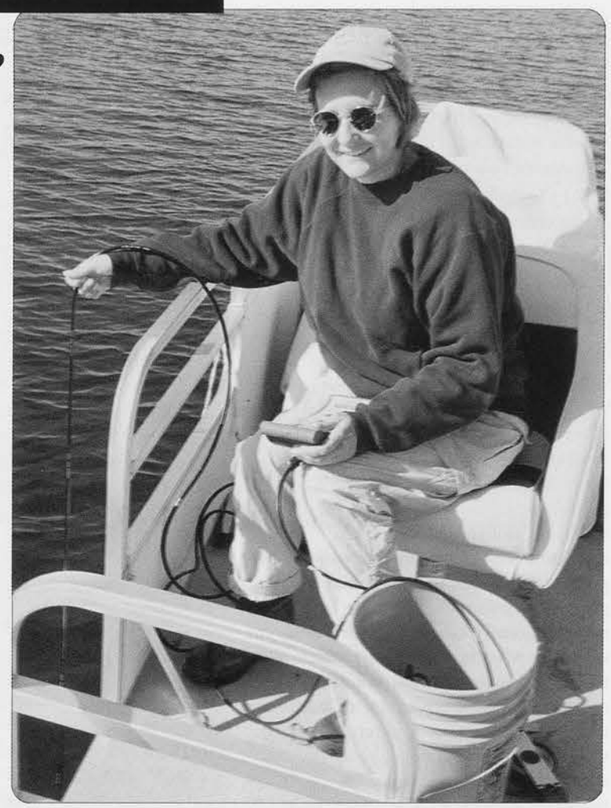
The Ordinance provides that *adjacent property owners (directly onshore and 200 feet on either end from the course) must be notified, and may comment.* Start-up and turn around areas are large, and all the residents and other lake users are affected, so those parameters are inadequate. *Non-sinkable courses may remain on the surface for 72 hours following the last use.* When the Portage Lake course was non-sinkable, the aspiring-to-be-pro skiers used it about 10 hours a summer, just enough to avoid having to remove it. *Sinkable courses must be submerged an hour past sunset.* The dawn to dark exclusive claim on one-tenth of the lake's east lobe when the now sinkable course is not in use (and up to half of the area when it is) is disproportionate to the rights of other lake users. The permit fee is $25 a year, with a $50 annual inspection. (Avelsgard jokes, "If this were to apply to fishing, I would lease the entire lake.") *Courses should not pose a threat to emergent vegetation.* Last year, Avelsgard's calls to the safety-concerned County Water Patrol regarding the besieged patch of rice went unheeded. The *150-foot distance from swim areas* are inadequate. A boat traveling 36 miles per hour can cover that distance in 3.5 seconds. Reaction time is about a second, leaving little protection for swimmers. *Courses should not threaten or adversely affect wildlife.* Avelsgard cites frantic loon calls and no hatchlings as evidence the course is too close to their nesting site. The ordinance provides for *permit renewal after review of compliance and complaints.* Over two dozen people phoned complaints about the Portage Lake course prior to the issuance of the 2000 permit. Avelsgard says Deputy Gaalswyk has dodged his questions about involving *DNR personnel in the onsite inspection provided for "where environmental degradation of the lake or adverse impact on aquatic vegetation or wildlife is an issue."* Gaalswyk and a representative of DNR Fisheries will visit the site in 2001 to check for environmental damage. Meanwhile, a conditional permit is in effect.

Avelsgard is steeling himself for another noisy summer with disrupted fishing, destruction to littoral spawning areas and vegetation and unanswered calls to Water Patrol. He muses darkly about making a donation of land for a Public Water Access and selling his property to more water-skiers, with a resulting metamorphosis of the lake into a churning, turbid, high decibel, lifeless and grim water-skiing mecca.

Task Force Chair Commissioner Ed Larson acknowledges exceptions to the general satisfaction with the ordinance. Unless Avelsgard and another conservation-minded member get the earlier meeting they seek to address these situations where the ordinance fails to quiet discontent, the Task Force meets again in September.

Group thinking on lake, river and stream sampling

ALAN CIBUZAR
AW RESEARCH LABORATORIES, INC.



Using a Hydrolab™ to check dissolved oxygen, temperature, pH and conductivity in one of Minnesota's lakes.

Over the past 30 years I have sampled a multitude of lakes, rivers and streams in Minnesota, New York, Florida, Georgia, Kentucky, Tennessee and the western states such as Washington. I've sampled these systems in the middle of January at -30°F and during the hot summer months. The only real difference in sampling lakes in the northern and southern United States is the "bite" (frostbite or snakebite).

Sampling/testing of lakes, rivers and streams consists of three basic methods:

1. Physical – sampling and testing for temperature, transparency, wind speed and direction, illumination, current flow, etc.
2. Chemical – sampling and testing for nutrients, metals, organic priority pollutants.
3. Biological – sampling and analysis for bacteria, phytoplankton, zooplankton, fisheries, etc.

A fourth method that is becoming increasing popular is remote sensing. There are two basic types of remote sensing:

1. Aerial remote sensing which determines biological, physical and chemical properties of lakes via spectrum analysis of specific targets.

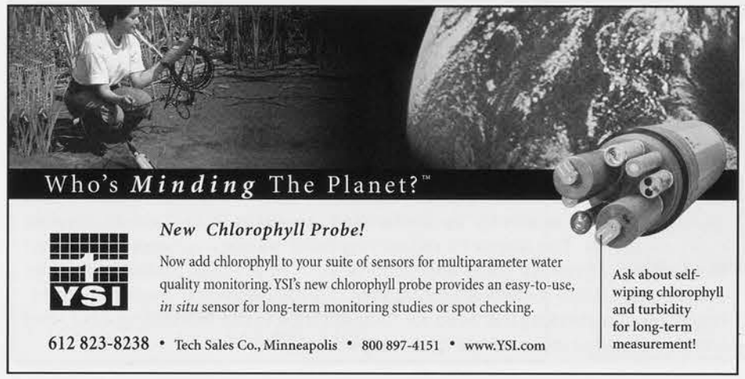
2. Telemetry data from a remote sensing systems stationed in the lake or river to be tested. A system such as RUSS (Remote Underwater Sampling Station) collects, stores and sends data to researchers off-site in real or near real time.

The primary factors determining how you sample your lake, river or stream are your goal or goals, and budget. To efficiently set your sampling system in place, consider the following steps:

1. Set the goal:

The goal can consists of such tasks as determining

- The Trophic Status Index (TSI) of your lake,
- The Mass Balance of your lake or river,
- Determining if your lake is monomictic, dimictic or polymictic (having one or two or nearly continuous mixing periods during the year),
- Determining the predominate food chains, etc. ▶



- Locating nonconforming septic systems,
- Determining the total loading from today's watershed.
- Determining the total loading when the watershed is developed to its current zoning potential.

2. Set a budget – specifically, what is the goal worth to the lake association, river group, unit of government or individual. Once the fiscal budget is set, a definition of the parameters to be measured and the collection frequency necessary to achieve the goal can be established.

3. Method – the method of sampling and testing needs to be determined. Nearly every state in the United States has a certification program for firms (laboratory, engineering) involved in environmental monitoring. The taxpayers' dollars are used to run inspection, certification and licensing programs to ensure that the data generated by these facilities and firms meets nationally acceptable levels of accuracy. Also, in nearly every state there are volunteer groups and students conducting a large percentage of data collection and testing. In determining what group should conduct your sampling and testing, simply ask yourself, "Will the data in determining the goal be subject to legal review?" If the data will be or if there is liability associated with decision-making based on the sampling and testing, certified staff, systems and analysis are recommended. If the tasks involved are basic and fundamental, such as Secchi disk reading or counting frogs, a legal review may determine that a non-certified entity (such as a volunteer group) is capable of taking an accurate measurement. In all cases, any method should include a quality assurance component.

4. Reporting – how should the goal be presented? The method of presentation is rarely thought of when determining a goal. Examples of this challenge: would you like your water quality data reported in a table, displayed on a graph or presented in a smart map (geographical information system map)? The answer lies in the expertise of the individual or agency making a decision with the sampling and testing data that you produce. For example, a county auditor would probably like to see a table; a Minnesota Pollution Control Agency (MPCA) water specialist may rather see a time-based graphic presentation of the data; a county or state planner may rather see a spatial distribution of the data on a map. The take-home message is: determine who you want to impress with your data and what format means the most in their decision-making process.

The following are some of the sampling goals fit to budgets that have been used over the last 30 years.

Limited budgets and a goal of tracking changes in lakes has led to sampling every few years in late January or early February. This is the time of the year when conditions are most reproducible. Sampling of the epilimnion and hypolimnion in the deepest hole in the lake are conducted and compared to previous years' data from the same site. Another technique is to sample the water column at one meter intervals at the deepest hole and then multiply the concentration by the volume of water at each interval and the total amount of measured nutrient estimated.

Trophic Status Index, calculated by measuring total phosphorus, chlorophyll *a* ▶

Benefits of unattended water quality monitoring

SARA HIPPENSTEEL
ENVIRONMENTAL INFORMATION SPECIALIST, YSI INC.

Unattended monitoring, also referred to as "*in situ* monitoring," has many benefits over the traditional spot-checking or laboratory analysis methods. *In situ* water quality monitoring is conducted by leaving automated water quality testing instrument deployed in a waterway, such as a lake or river, for a period of time. During this time, commonly a few weeks to a month, the equipment measures and records the water quality, which is stored in the instrument until the data is then downloaded to a personal computer.

A string of water quality monitoring "sondes" (options that measure individual parameters such as dissolved oxygen, turbidity, etc.) is giving scientists at the Metropolitan Water Reclamation District of Greater Chicago an unprecedented look at the complex dynamics of long reaches of waterways managed by the world's largest water reclamation district. Serving more than 150 communities, including the City of Chicago, with nearly 220 miles of natural and man-made waterways, the District is discovering the success of its pollution control efforts as well as the remarkable biology if its aquatic ecosystems.

"Grab sample collection will not provide adequate data for characterizing dynamic water quality conditions found in urban watersheds," comments District Biologist Irwin Polls. "If your objective is to assess water quality during different flow periods, I would strongly recommend continuous monitoring."

The most obvious benefit of *in situ* data collection is that it allows you to track ongoing events, such as storms or spills. This is especially important when trying to track the effects of stormwater runoff and nonpoint source pollution, because data collection needs to be done during or immediately following a storm event. Spot-checking may miss these events, especially when they come at inconvenient or unexpected times of the day. If you are trying to track these occurrences using spot sampling, the data collection relies on the flexibility and quick response of the person who is doing the data collection. Using *in situ* water quality monitoring equipment to record these events allows for more accurate planning and decision making to occur.

"We had a fish kill in the summer of 1999, related to an overflow at one of our pumping stations," Polls continued. "It happened in a reach of waterway with four monitors. We knew the time and size of the overflow, but the monitors helped us understand how the plug of diluted sewage moved downstream. If the District had first heard of the fish kill through a citizen complaint, with no monitors, the cause and extent of the damage would have been purely speculative."

In situ collection also saves considerable time and money. *In situ* field techniques have made field screening cost-and-time-effective. Advantages can be measured in dollars, sample turnaround time, off-site analytical costs, and program schedules.

Traditional methods of water quality monitoring entail the collection and transport of samples for off-site analysis at analytical laboratories. Such analysis is expensive and time-consuming. Since field operation decisions must often be made on the basis of water quality data information, time and cost savings can be achieved by performing analyses with field-deployable instrumentation. The needs for monitoring favor on-site instrumentation even more strongly because some applications, such as process control, cannot be satisfied by off-site analytical laboratories. This allows you to monitor hard-to-reach sites, eliminates the need for frequent trips to the monitoring sites, and lets you respond to events as they happen.

At right: Using a Secchi disk to check the transparency on one of Minnesota's many lakes.

Below: MPCA's Steve Heiskary collects a surface water sample with an integrated sampler.

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and Secchi disk, is taken once per month during the spring, summer and early fall. When tracked over time this data is valuable at identifying trends and loading influences from various nutrient sources influencing the lake.

The MPCA Phase I (of the Clean Water Partnership) sampling program consists of a basic, more intensive sampling and testing regime. Other intensive sampling programs may consist of the MPCA basic program with the addition of other chemical and biological measurements.

In summary, when determining sampling and testing of your lake, river or stream:

1. Set your goal
2. Set your budget
3. Developing the testing and sampling strategy to most efficiently attain your goal.■

Ed. note: Becker COLA is in the tenth year of a water monitoring program in which monthly Secchi disk and water quality sampling is done from May through September, yielding Trophic Status Indexes, surface temperatures, precipitation and water levels. This approach has standardized testing parameters across the county, allowing for comparison ranking. A grant from the SWCD helps keep lake association costs per sample down. Outgoing President Phyllis Onsgard is happy to share samples of the "Lake Water Quality Monitoring Report" which the COLA produces to summarize the data it collects. Phyllis can be reached at 218-439-6894 or 218-233-3709.

Otter Tail COLA's program is similar, producing TSI ratings for the 40 lakes involved and using two collection points for samples (saves on the driving). Each participating lake gets a report summarizing the data into TSI ratings, and including other pertinent information. To see how they do it, contact Gary Cruff, 218-342-3344.

Hubbard COLA also gets TSI data, and stores it on a spreadsheet, allowing consolidation of a great deal of data into one window. Associations pay $100 for five tests, and County Water Plan funds the remainder. To view their product, contact Frank T. Smith, 218-732-3703.

Why monitor streams?

JEFF HRUBES
MN POLLUTION CONTROL AGENCY

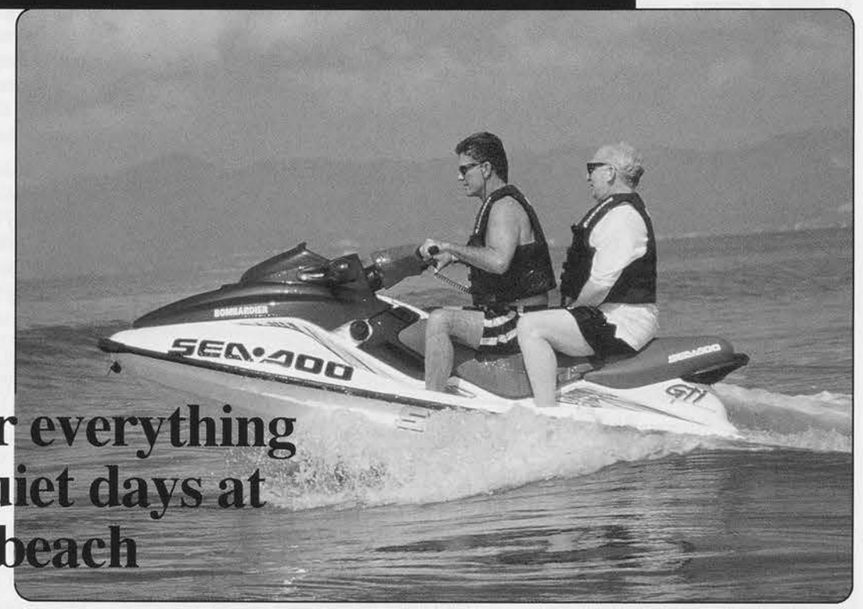
Monitoring lakes frequently has a different focus than monitoring streams. Lake data gathered by Secchi disk measurements, water chemistry or biological monitoring lets you know what's in the bowl (*lake*) and if the contents of the bowl are changing. But it doesn't necessarily tell you what's causing those changes. The sides of the bowl (*watershed*) contribute water, nutrients, sediments and other materials through a network of tributaries. Monitoring these streams requires an accurate accounting of the volume of water as well as concentrations of the parameters of concern.

Accurate measurements of the total volume of water requires understanding the characteristics of the watershed. Is the system "flashy"? That is, does it rise and fall quickly after storms? Sampling on Monday after a rainstorm on Saturday night in that situation is going to give a distorted view of the nutrient contribution of that stream to the system. Or is the watershed fairly flat with a lot of wetland storage causing the stream to react more slowly? Sampling on Monday after the Saturday storm may work out in that situation. How large is the watershed you're working with and how long does it take a drop of water to travel from the top of the watershed to your monitoring point? Small watersheds are more likely to be covered by a single rainstorm and will react differently than larger watersheds where only a portion of the watershed may receive rain.

A stream with relatively low phosphorus concentrations but steady flow is likely to contribute more pounds of nutrients to the lake it flows into than an intermittent stream with much higher concentrations. Concentrating on achieving small reductions in the phosphorus concentrations in the permanent stream may be more beneficial than achieving large phosphorus concentration reductions in the intermittent stream.

Monitoring (with appropriate quality assurance/quality control) allows a comparison between the body of water being monitored and other waterbodies with similar watersheds, land-uses, soils, geology and other factors. Any comparisons must come with a couple of caveats, however. There can be a significant amount of year-to-year variability in water quality and quantity based on climatic factors, recent weather patterns and even carry-over from prior years' rainfall and land-use activities. For instance, a high groundwater table may contribute to increased stream flows even if there hasn't been much rain in the recent past. Enough data points must be gathered so that the natural variation of a system is accounted for and any actual trends are identified. It is also important to avoid "apples to oranges" comparisons. Larger river systems will have different characteristics than smaller streams. Lakes with small littoral zones will be different from shallow lakes that are entirely littoral zone.

To protect or restore water quality, it makes sense to identify particular areas that are contributing more than their share of nutrients, sediments, or whatever parameter might be affecting water quality. This is done to prioritize the expenditure of precious resources – time, money, and intangibles such as community values and good will – to have the most benefit.



JEFF BROWN
EXECUTIVE DIRECTOR
MRR

A place for everything – even quiet days at the beach

Minnesotans for Responsible Recreation (MRR), known for its unique success in addressing the problems caused by motorized recreation, will be launching its new "Quiet, Safe, Clean Lakes Program" July 12 in Duluth. This event will coincide with the inaugural conference of the U.S. Society of Ecological Economics being held in Duluth July 11-13. To celebrate the launching of the new program, MRR has invited the Noise Pollution Clearinghouse (NPC) from Vermont to present its report "Drowning in Noise: The Noise Costs of Jet Skis in America" at both the conference and an evening fundraising reception. At MRR's request, NPC will present a sequel to its national study "Reducing the Noise Costs of Jet Skis in Minnesota" at MRR's evening reception.

MRR's "Quiet, Safe, Clean Lakes" campaign originates in its success in organizing diverse individuals and groups to address the noise, fumes, danger to others, and environmental damage caused by all-terrain vehicles and snowmobiles. It is the goal of this program to regulate high power watercraft on lakes throughout Minnesota so that every Minnesotan has access to quiet, safe and clean lakes for their enjoyment, use and recreation. One should not have to travel to the Boundary Waters for a little peace and quiet. There is a place for everything when everything is in its place.

NPC is a national nonprofit organization working to create more livable cities and more natural rural and wilderness environments by reducing noise pollution at the source. "There was a time when we could get away from it all but now that's impossible with the noise coming from the water," says Les Blomberg, Executive Director of NPC. "At a time when people are looking for peace and quiet, establishing quiet lakes is a simple solution to return the shores to the people and preserve a quintessential American experience – a day at the lake."

"Drowning in Noise" coauthor Dr. Howard Shaw, who will join Blomberg in Duluth on July 12 in presenting NPC's report, states, "It's the ▶

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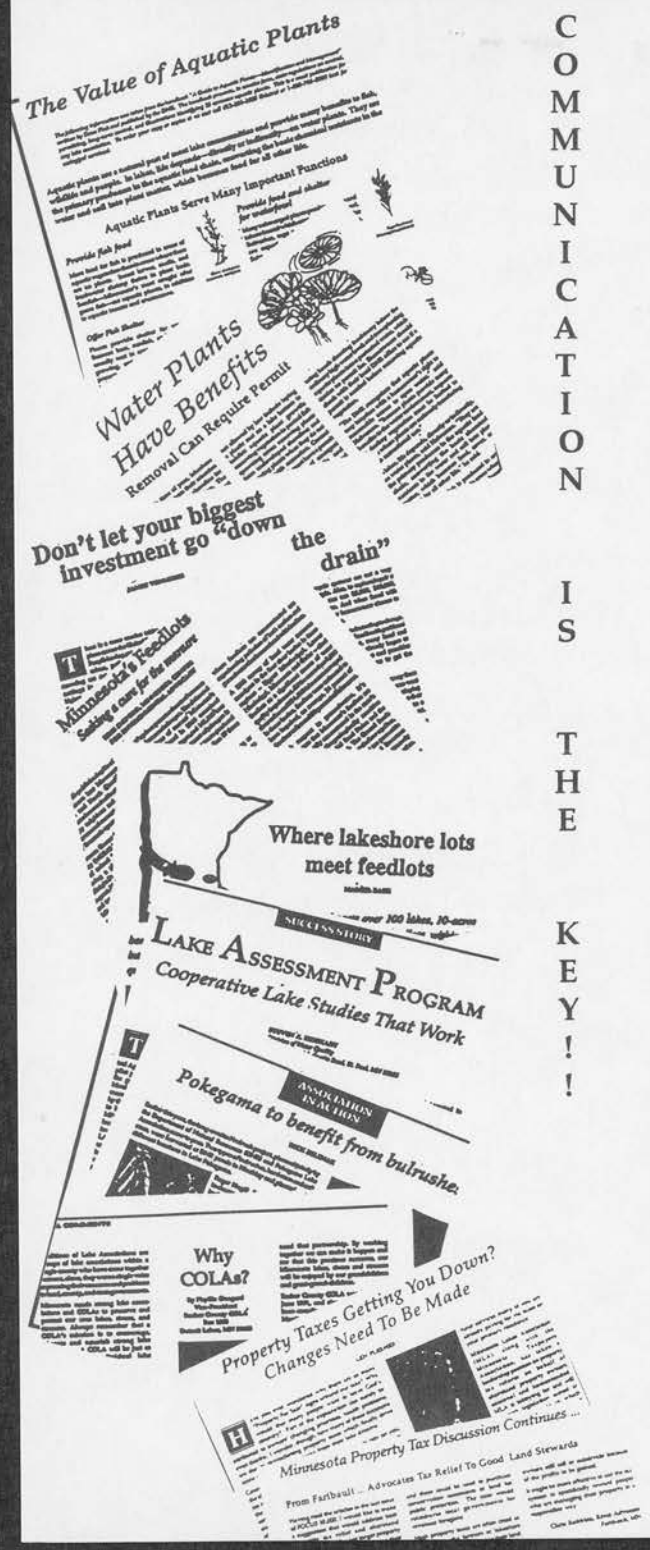

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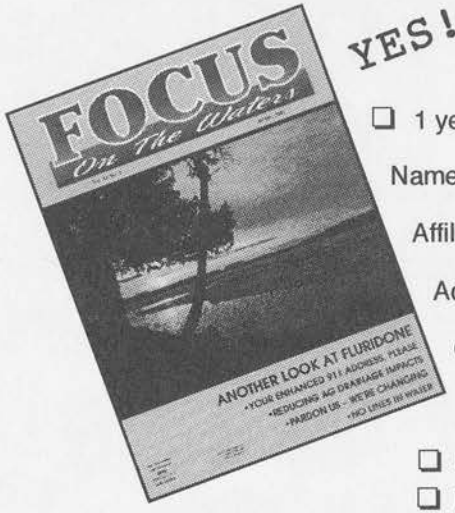

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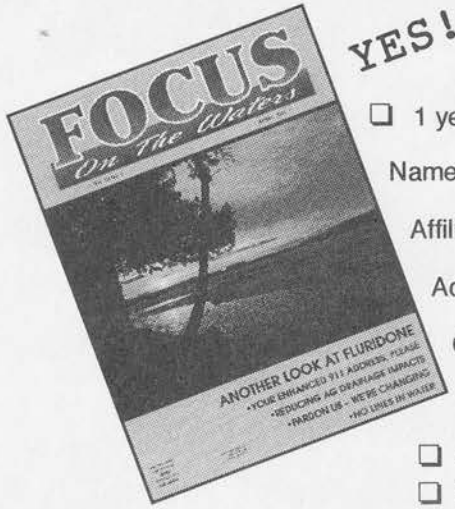

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continual jumping out of the water that makes jetski noise so much more intrusive than motorboats." Dr. Shaw will be presenting the national report findings which include the following points:

- Jetskis imposed an estimated $908 million of noise costs on beachgoers in 2000, or $700 per jetski.
- Quieting jetskis by five decibels will not keep up with the growth in use (an estimated 100,000 more jetskis each year).
- In five years, national noise costs would be 18% greater, even with quieter machines.
- "Minimum distance rules" are only modestly effective in curbing jetski noise because sound carries all too well across open water. Requiring jetskis to stay at least 500 feet offshore would reduce the noise by just 27%, and even a universal quarter mile limit (1,320 feet) would curb noise by only 48%. These improvements could be largely wiped out in a few years by growth in use.

Blomberg summarizes that "The only effective noise control measure is segregating jetskis to a few 'noisy' lakes and waters and protecting those remaining. Our study finds that this is the best method to reduce jetski noise costs."

In its jetski report, NPC found that Americans are ready to turn off the noise caused by these machines. MRR believes Minnesotans are especially ready to turn off the noise caused by jetskis, citing the following Minnesota studies that demonstrate this readiness:

- 60% of northeastern and 43% of other Minnesotans visit our lakes seeking "quiet." (1998 DNR/MN Sea Grant study)
- Seven out of 10 Minnesotans seek non-motorized experiences on our public lands. (1998 DNR "Border to Border" Trail Study)
- Over 60% polled agreed that "personal watercraft should be banned from small lakes – those less than 200 acres . . ." (1998 Minnesota State Fair poll)
- 42.7% of responding members in Minnesota's largest lake association, the Whitefish Area Property Owners Association, say "personal watercraft noise is a serious or very serious problem." (WAPOA's 1999 Sustainable Lakes Program survey)
- 35% of boaters asked whether they experienced problems with other boaters responded that use of personal watercraft is a "moderate" or more serious problem. Personal watercraft were the only problem with elevated numbers of "serious" or "very serious" responses. The next most frequently indicated problem was noise. The use of jetskis also led the list of problems in the Twin Cities metro area, though in a smaller percentage. ("Boating in North Central Minnesota: Status in 1998 and Trends since 1985" – MnDNR)

MRR is responding to this demand by launching its "Quiet, Safe, Clean Lakes Program." In the land of 10,000 wakes, the noise costs of jetskis is especially high. Minnesota paddlers, fishermen and shoreland owners are mourning the loss of peace and quiet on the waters. MRR has invited NPC to Minnesota to add to the findings that Minnesotans are ready to turn off the noise caused by jetskis. MRR invites the public to attend its July 12 fundraising reception to learn more about the "Quiet, Safe, Clean Lakes Program," to meet with NPC's Les Blomberg and Dr. Shaw and hear the results of NPC's new study, "The Noise Costs of Jet Skis in Minnesota." MRR encourages Minnesotans to help launch the program to quiet Minnesota lakes by attending its fundraiser or by sending contributions to MRR at P.O. Box 111, Duluth, MN 55804. MRR's fundraising reception will be held at 7 p.m. at the Lafayette Community Center on Park Point, 3026 Minnesota Ave., Duluth.To learn more about MRR, visit its website, www.mrr.tsx.org. Contact MRR, 218-525-0584 or email at mrr@cpinternet.com.

MRR also invites the public to hear Dr. Howard Shaw present NPC's final report at the inaugural conference of the U.S. Society of Ecological Economics being held in Duluth July 11-13. To obtain conference schedule, contact the Institute for a Sustainable Future, 218-525-4781, email info@isfusa.org, or visit www.isfusa.org. To learn more about the Noise Pollution Clearinghouse and to obtain a copy of its report, "Drowning in Noise: The Noise Costs of Jet Skis in America," call 888-200-8332 or visit www.nonoise.org.■

Ed. note: NPC and MRR prominently address jetskis in their quiet lakes efforts. Some jetski manufacturers have made progress in reducing machine noise. Motorboat exhaust systems exceeding legal noise limits, while not producing the intermittent whine that many shorelanders find mosquito-like, can also pose problems. We'll learn about other motor noise concerns in upcoming issues.

MRR seeks middle ground in OHV regulation

Bipartison legislative support for common sense restrictions of Off-Highway Vehicles (OHVs, including All-Terrain Vehicles, dirt-bike motorcycles, and four-wheel drive "mudder" trucks) in Minnesota's parks and forests continues despite legislation being officially "laid over" until the 2001 legislative session. OHV legislation crafted by MRR and supported by Minnesota Audubon would restrict OHVs to designated routes, provide adequate enforcement of OHV laws, monitor ongoing OHV impacts, and repair accumulating damage caused by these high impact machines. Bill sponsors, Sen. Joh Hottinger (DFL-Mankato) and Rep. John Tuma (Rep.-Northfield), have expressed intentions to convene hearings and/or on-site inspections of OHV impacted areas around the state over the summer months. Both sponsors have committed to securing early committee hearings for MRR's bill next session.

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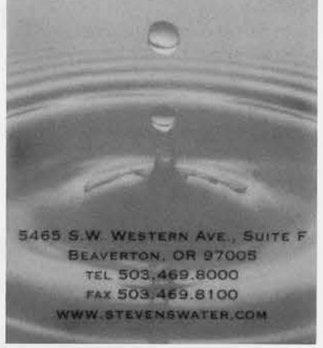

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Regional wastewater projects on big lakes

High growth Walker looks at far future

MARCIA SHEPARD

Among the City of Walker, the Leech Lake Band of Ojibwe (currently planning a new casino and hotel complex), and shoreline residents, growth is starting to fill in lots of little nooks and crannies around Walker Bay of huge Leech Lake. Fortunately, Cass County is led by some of the most progressive local politicians in the state, who have often demonstrated their understanding that the abundant water resources and rural ambiance is the goose that lays the golden egg of economic well-being. About a year ago County Environmental Health's Craig Gilbertson applied to the Legislative Commission on Minnesota Resources for grant money to develop a regional plan. Very shortly, a number of affected local governments and people expressed support for developing same with or without this funding (which was not forthcoming) and representatives met a few times for early discussions.

Gambling has been very, very good to the Leech Lake Band. Expansion of casino operations in the "Y" area, where Highways 371 and 210 intersect, gave rise to negotiations with the County over trading land for County land for a lagoon system. Local residents opposed the siting and the pond technology and the County pushed forward by launching "round two," a Task Force charged to consider wastewater treatment options for a limited time. This group developed criteria for the County in making land available for such use via trade or permanent lease, such as for the Ten Mile Lake cluster project.

Following that, Gilbertson revved up another group to look at long-term solutions. Prominent among the options under consideration is a regional sewer district. A number of legal structures exist: sewer districts, subordinate service districts, Lake Improvement Districts, for example. With Co. Board oversight, Tri-County Leech Lake Project, the Band, Shingobee Twp., Turtle Lake Twp. and Breezy Point representatives are thinking "subwatershed." The federal EPA has encouraged such an approach since about 1997, when its official line mutated from "on-site wastewater treatment is a temporary fix" to "rural, decentralized systems can afford permanent solutions."

A group of about 20 people meets every other Friday in a commitment to this innovative, multi-entity approach to protecting the big lake and the local watersheds. The involvement of the Leech Lake Band of Ojibwe, which is negotiating with the City of Hackensack over an eight mile connection to its municipal plant, is a major variable. Planning is too germinal yet to address specific technologies, but what is certain about this proactive effort is the provision of operation and maintenance services, for fee, by whatever new governing entity is crafted.

New regional wastewater treatment plant to serve west Mille Lacs Lake community

ROBERT B. SZROT, P.E., PRINCIPAL ENGINEER
MILLE LACS BAND WASTEWATER TREATMENT PLANT

Mille Lacs Lake in southcentral Minnesota is widely known for its serenity, fishing and recreational opportunities. But those of us who call the Mille Lacs Lake area home also know about the challenges related to maintaining clean lake- and groundwater today and in the future. In 1999, the Mille Lacs Band of Ojibwe Indians and a newly formed organization known as the Garrison Kathio West Mille Lacs Lake Sanitary District decided to face these challenges together. Through partnership and cooperation, a joint wastewater treatment solution will help preserve the beauty and bounty of Mille Lacs Lake for generations to come.

The problems in our area stem from a combination of fine soil, a high water table, a growing amount of wastewater, and inadequate treatment systems both on and outside the reservation. Insufficient treatment can lead to problems with lake- and groundwater quality.

On-reservation issues begin with the existing Mille Lacs Band wastewater treatment system already operating near capacity levels. As job opportunities have increased since Grand Casino Mille Lacs was built in 1991 and other new businesses have opened, the reservation population and infrastructure have grown and put a strain on this system. Given the Band's plans for housing growth and economic diversification, the demand for wastewater treatment will continue to increase.

The off-reservation communities that have formed the Sanitary District currently have no centralized wastewater treatment system, and individual septic systems can sometimes have difficulty treating waste before harmful nutrients and bacteria filter through the earth and enter our waters – the most significant being Mille Lacs Lake. This common need to protect our valuable water resources has joined the Band and its neighbors in a partnership, which is one of the first of its kind in the nation between an Indian tribe and its neighboring communities.

The Mille Lacs Band Corporate Commission, an entity separate from the tribal government that oversees the Band's business enterprises, has created a stand-alone, not-for-profit corporation to build, own and operate this regional wastewater treatment facility.

The Sanitary District, consisting of the City of Garrison and the townships of Garrison and Kathio, will create a collection system of its own and contract with the new corporation for continued and uninterrupted wastewater treatment.

Groundbreaking on the wastewater treatment facility, located 10 miles south of Garrison on the west side of Mille Lacs Lake, is planned for July 18. Outdoor work on the buildings is set to be completed before winter; the facility is anticipated to open by mid-2002.

The state-of-the-art treatment system will send wastewater through a sequencing batch reactor process that treats far more waste in much less time than treatment ponds do and works more efficiently than conventional flow-through technologies. After successfully meeting stringent discharge limits, the water is further purified as it is diverted away from Mille Lacs Lake.

The relationship between the Mille Lacs Band and the Garrison Kathio West Mille Lacs Lake Sanitary District is evidence that Mille Lacs Lake has forever connected the people who live near it. It is our responsibility to protect this shared, treasured resource.

Collection system cleans up problems from Duluth to Two Harbors

PETE WEEDMAN, AYRES ASSOCIATES

The North Shore of Lake Superior is one of the last truly undeveloped coastlines in America. Pristine and rugged, the rocky shoreline stretches from the City of Duluth, Minnesota, to the Canadian border. Of these 147 miles of coastline, the highest density of development is between the cities of Duluth and Two Harbors. In this area, 98% of the homes and businesses are serviced by individual onsite wastewater treatment systems (ISTS) and private drinking water wells.

In 1981, the Western Lake Superior Sanitary District (WLSSD) evaluated the effectiveness of ISTS and their possible impact on private drinking water wells. WLSSD conducted a survey of septic systems in the project area and determined that several were failing. Unfortunately, state and federal funds to correct the problem were not available.

In 1991, local initiatives requested another look at the project. With state money now available, the project area was resurveyed. Using infrared aerial photographic technology, a low level photo scan was conducted of 32 miles of coastline from the city limits of Duluth to Encampment Island (north of the City of Two Harbors). The results indicated heavy nutrient loading into Lake Superior, originating from residential and business septic systems located along the shore. In 1992, testing verified the contamination: 56% of homes surveyed had failed ISTS, and 7% of the drinking water samples did not meet the State of Minnesota drinking water code, according to the 1994 WLSSD study.

With these results, representatives from the City of Duluth and the townships of Lakewood and Duluth met to solve their communities' water quality concerns, forming the North Shore Alternative Wastewater Committee. Ayres Associates, an engineering firm, provided a feasibility study and facility plan, which included construction of a pipeline from the City of Duluth's collection system to Knife River, in Lake County.

Special considerations have been mandated by local units of government for engineering the collection system. For example, the North Shore collection system is required to retain 24 hours of flow during heavy rain or high snow melt events. This requirement presents a tank storage size and location issue that requires sensitivity to the residents in the area. Construction, scheduled to begin in the spring of 2001, will eliminate more than 450 on-site wastewater systems along the North Shore of Lake Superior.

Residents along Lake Superior's North Shore will benefit with wastewater conveyance and treatment now available. Property values will increase, which is especially important to residents who had neither a compliant septic system nor adequate property to install a new one, and consequently were unable to transfer property. The imminent health concerns will begin to lessen as the contaminated water supplies become cleaner, and the wastewater odors begin to fade. Perhaps most importantly, 100 years of wastewater contamination to one of the earth's great freshwater lakes will end.■

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Tailoring lake (and fish) management strategies to individual lakes

ROB MERILA
AQUATIC ECOSOLUTIONS

Fishin' ain't what it used to be," the old-timer scowled as he responded to kids at the boat landing when asked if he had caught anything. "We used to catch dozens of sunfish so big you couldn't get your hand around; now all we catch are these little runts."

While winching his boat onto the trailer, the old-timer wondered if the kids would ever experience catching the nice bluegills that were once commonplace. He was also puzzled about how the large pike he used to catch were now mysteriously replaced by 18-inch "hammerhandles." As he reflected on these things he thought, "Is there any way to turn back the clock?"

This story has repeated itself across the different types of waters in Minnesota. Without realizing it, anglers who keep the larger fish they catch within a given species contribute to *lowering* the average size of fish within that population (for naturally reproduced fish).

The basis of this statement came from a conversation in the mid-1980s with Mr. Denny Schupp, longtime DNR Fisheries expert. Since that time, scientific studies on bluegills and pike have formally documented this phenomenon. Unfortunately, I have also contributed to size degradation on several lakes before I knew better.

If fish populations shift to a smaller-sized-but-more-abundant structure, it can be difficult to restore. The good news is that it is not impossible to reverse the negative trend.

In order to maintain healthy fish populations, or reverse the size degradation within a lake or stream, two key principles have been developed and implemented across North America over the past 15 years. The first principle is that *certain* sizes *of fish are best to be released while other sizes are good to keep for a meal* (in order to retain good population structure).

The second principle is that *some* species *are best to be released while other species are good to keep.* (Other management strategies include habitat and watershed improvements, but these are not within the context of this discussion.)

Both of these principles include the paradigm of releasing "keeper-sized" fish. Until the 1970s and 1980s, anglers kept *all* "keeper-sized" fish they caught (up to their legal limit) without much thought of the resource. Larger fish were desired because they provided more meat per fish and gave the angler something about which to brag. Anglers thought that hook-and-line angling could not deplete the "unlimited" volume of fish from natural reproduction.

During the spring of 1979, an event in Minnesota caused anglers to rethink their previous beliefs about fisheries management. With a late ice-out and early fishing opener date, walleye were still concentrated in spawning areas when the fishing season opened. At select locations, it was literally "like catching fish in a barrel."

On the Seagull River, a spawning river that flows into Saganaga Lake, many anglers kept limits of walleye that averaged over 10 pounds each. Since these fish pack into shallow water like cordwood at night, no one knows how many were illegally taken by spears, dip nets, or snagging hooks. Even if legally taken, removing hundreds of trophy walleyes per weekend on a periodic basis can quickly deplete even the most productive waters.

During the late 1970s and early 1980s, another situation highlighted the need to put back "keeper-sized" fish. Effective angling methods were used by more anglers on Lake Mille Lacs at this time than ever before. Anglers noticed a sharp drop in overall walleye size. Something had to be done.

Anglers around Lake Mille Lacs started a voluntary "keep only one fish over 20 inches" rule in the early 1980s to protect spawning female walleye.

In the mid-1980s, DNR Fisheries managers met with anglers in an open meeting to discuss new regulations that would protect walleye in Sagana and

Mille Lacs while allowing angler harvest of "eater-sized" fish. Even though there was some angler opposition, the new "keep only one fish over (a certain size)" regulations were accepted and implemented on these waters. In addition, concentrated spawning areas on Saganaga were also protected during the spring season.

Both waters responded well to the new regulations. Mille Lacs rebounded quickly and currently is in excellent condition with strong year classes of good-sized fish. Saganaga continues to produce trophies, as well as keep its good average size per fish.

Because of these events, spawning area protection and size restriction regulations were placed on other lakes where fish were vulnerable to over-harvest.

As with walleye, other fish species can benefit from additional restrictions. Because there are so many lakes, it is hard for DNR to regulate each one.

This article is designed to help you voluntarily regulate your favorite waters in order to keep them in good condition, and to help shift fish populations back into a more desirable size structure. These are general principles and may not apply to every lake or stream. Therefore, it is wise to receive input regarding the specifics of your lake or stream from a fisheries specialist.

Species specific

Bluegills are willing biters, feisty fighters, tasty on the dinner plate. Because of this, even the most sophisticated anglers enjoy catching them. Want to ensure that your lake does not turn into a lake full of small sunfish? Put back the larger ones! For a meal, keep the medium-sized ones. It is tempting to keep the larger ones (fewer fillet strokes for more meat). But the long-term benefit far outweighs the short-term "loss" of releasing the largest bluegills.

Crappie management is similar to that of bluegills. A good strategy is to release the largest ones and keep the medium-sized ones, especially in smaller lakes. This strategy has allowed "secret" lakes to consistently produce two-pound crappies to anglers who have wisely managed them in this way.

Walleye and perch are highly desired table fare. Perch size and population structure appears to be driven more by predator species and lake type than by anglers. It is important, however, that over-harvest not take place. Population crashes have been documented on waters such as Sturgeon Bay in northeastern Wisconsin.

Veteran walleye anglers enjoy eating walleye in the 14- to 19-inch range. Smaller fish require more of them per meal, while fewer of the larger fish need to be kept for a meal. On the lower end of this range, serving size is around one fish per person; on the upper end of this range, one fish provides a meal for two or three people.

The problem with keeping walleye smaller than 14 inches is that more need to be removed from the lake for the same size of a meal. On lakes where small fish are overabundant, however, it is beneficial to keep smaller ones.

Walleye larger than 20 inches are typically prime spawners and keep the population trending toward the nicer sized fish. This is the reason for protection of these fish.

Most anglers want to keep large pike and release the small ones. Unfortunately, this practice has been found to result in lakes dominated by small pike. Actually, the best fish to keep from a given body of water are smaller pike (18 to 21 inches). Pike of this size compete with other gamefish for food and space, therefore *lowering* the numbers of other gamefish within that waterbody.

Larger pike are best to release because they keep the small pike numbers down, and they feed on larger forage such as suckers, ciscoe/whitefish, and adult perch. Larger pike (and muskies) benefit the waters by keeping the larger forage populations in proper balance.

Species best to release include largemouth bass, smallmouth bass, and muskies. These are considered "fun fish" by many. By recycling these fish, many anglers enjoy catching them repeatedly, and the fish have the chance to get larger. In addition, these fish keep the forage populations in proper balance within a waterbody.

It *is* possible to be part of the solution to continued good fishing. Following these themes you can maintain desirable fish populations as well as reverse the bad trends.

You *can* have your fish and eat them too!

As an Aquatic Ecologist, Rob Merila has performed full-time ecological work for more than 10 years. This combined with experience as a fishing guide, outdoor adventure equipment sales consultant, and fishing book researcher bring a full perspective to help solve lake, stream and wetland issues.■

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News & Notes

KEVIN GUSTAFSON

Torpedo the dams

The Little Cannon River at Cannon Falls is free-flowing again, since a winter demolition of a concrete dam almost destroyed in June 1998 flooding. The League of Women Voters publicized the upstream flooding and public safety problems of the dam, built in 1856 to power a woolen mill and adapted later for flour. Public support was furthered by MnDNR's offer to pay 100% of removal costs which, at $176,000, were less than one-fifth of the estimated cost of making the dam safe and functional.

Along Minnesota's 92,000 miles of rivers and streams, there are approximately 900 dams of varying styles and sizes; 26 provide hydropower. Of 400 mill dams in the early 1900s, about 75 remain. Fifteen years ago the average age was 50 years; now it is 65.

Not all dams equate with water quality problems, result in water quantity problems being passed downstream, pose danger of drownings, or prevent natural migration in fish populations. However, for the most part, they are leftover technologies from an era when water powered industries, and, with periodic repair needed, are generally financial and legal liabilities. In the last decade, a dozen have been removed, for the most part yielding more natural and healthy riverine ecology.

Dam removal, or conversion to rapids (providing a well aerated "scour hole" which helps fish to overwinter) has been the purview of DNR's Dam Safety Unit. While there is often initial, sentimental local opposition, concern over safety and inevitable degradation of dams generally builds to public support. DNR's well-publicized funding woes and a fiscally conservative mood in the Executive and Legislative branches of state government (as well as dwindling federal dollars) have been largely responsible for reductions in the Unit's funding and staff in recent years. The Dam Safety Unit conducts inspections, issues permits, undertakes repairs where needed and provides technical assistance to the local governments who, by and large, are the dam owners. In their spare time, they remove or alter dams, usually at 100% of the cost.

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A clean Minnesota River, in our lifetime!

The sixth Annual Minnesota River Summer Conference, cosponsored by Minnesota River Basin Joint Powers Board and Clean Up the River Environment, will be held in Montevideo on Thurs., Aug. 2, 12:30 p.m., adjourning mid-afternoon on Fri., Aug. 3.

Land- and river-based tours for Thursday afternoon will include canoeing the River and "Fish with a Commish" on Lac qui Parle Lake, opportunity to see and experience firsthand the beauty and problems of the basin. A bonfire, music and food are planned for Smith Park in the evening. To volunteer (to help with the canoe trip) and to plan to attend, contact CURE, 320-269-2984 or cure@info-link.net.

Vindication for "Chainsaw" Hasskamp?

Former State Rep. Kris Hasskamp served District 12A, a sizeable portion of the Brainerd Lakes area, for six terms, and spearheaded a campaign to set standards for operating jetskis safely; provide funding for enforcement; protect loons and other nesting waterfowl and wildlife; limit nearshore speeds (for all watercraft), operating times and time spent in a given area; and to restrict use on lakes smaller than 200 acres (82.5% of Minnesota lakes, but only 17.6% of our surface acreage). In the bill that passed in 1998, a little progress was made in hours of operation, the 150-foot slow-no wake zone, a requirement for operator education and supervision of 13 to 16 year old drivers, display of rule decals (no excuses!), and the $50 license surcharge to fund enforcement. The big losses (which *FOCUS* metro correspondent Carl Swanson attributed to the "silence of the lake associations") were in the "dwell time" issue, the civil penalty provision, the citizens' ability to file Sworn Complaints and the small lake ban. (In 1999 the Governor threw his weight behind gutting the enforcement-funding surcharge on jetskis.)

In the 2000 election, Hasskamp was defeated by challenger Dale Walz, who has received financial and political support from the Jetsporters Association of Minnesota (JAM). The defeat left Hasskamp, a past winner of the Crow Wing County Lakes and Rivers Alliance's Ted Soteropolos Water Warrior Award, mystified and looking for work. The role that JAM played in ousting Hasskamp has been formally questioned in complaints filed by Rep. Matt Entenza with the State Campaign Finance and Public Disclosure Board, Hennepin County prosecutors, the IRS and the State Department of Revenue. According to Entenza, in a membership drive underwritten by Polaris Industries, JAM touted its effectiveness in wielding political influence. A June 3 *Star Tribune* article quoted the January issue of the JAM newsletter: "When Dale, an outdoor enthusiast and friendly toward (personal watercraft), asked for our help, JAM jumped at the chance. Could JAM members raise and contribute enough money to help Dale in his bid for Hasskamp's seat? You bet it can! JAM quickly put together a mailing asking our members to contribute. JAM members responded enthusiastically . . ." Contributions covered a major portion of Walz' campaign expenditures.

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Setting the Standard

Tax-exempt, nonprofit organizations are not permitted to engage in political activity. Rep. Walz paid privately for a mailing to JAM's contacts, has denied meeting with JAM members, except for President Carl Bullen, and denies that JAM fundraising or the personal watercraft issue was significant in his election. Bullen was a boardmember of Minnesota Lakes Association from May 1998 to 2001, and served on the MLA Task Force addressing revisions to Statute 86B, Surface Water Use.

Mille Lacs' slot ups concern over DNR counts, economic impacts

Three weeks into the fishing season, DNR Fisheries tightened up the "16-20 inch, keep one over 28 inches" slot for walleye on that large lake. DNR had anticipated a harvest of under 100,000 pounds; a 135,000 pound take would have triggered tightening the slot; and 174,000 pounds were estimated harvested by then.

DNR's 1837 and 1854 Treaty Biologist, Large Lake Specialist and other Fisheries personnel use complicated formulae to estimate the walleye population, mortality rates (both natural and as a result of catch and release) and harvests. Despite involvement of the 20 citizen representatives on the Mille Lacs Fisheries Input Group, there is some skepticism among stakeholders over accuracy of those estimates and the move to a tighter slot. Federal court orders gave rise to co-management between the Great Lakes Indian Fish and Wildlife Commission (GLIGWC) and DNR, and a harvest limit of 24% of the population. If state management of the harvest fails to stay within that guideline, DNR participation in setting harvest limits can be curtailed in future court action. The DNR role is pivotal in addressing federal oversight, the conservation-centered approach of the Indian bands involved in the Treaties' settlement, and the interests of tourism-based businesses.

One fisherman's observations using an underwater viewing camera raised his concerns over accuracy in fish mortality estimates. (DNR and GLIFWC harvest estimates and allowances figure a 6-10% hooking mortality. The Recreational Boating and Fishing Foundation estimates mortality can be as high as 30%.) Ten days into the season, Crosby-Ironton science teacher Bob Kuschel used his underwater camera on a fishing trip near Malmo, through popular spots hit hard in the first two weekends. Rough water made it unlikely that he was drifting over the same territory on his repeated half-mile trips across water eight to 20 feet deep (though underwater currents could explain a concentration of fish bodies near a shore). Kuschel reports that on each drift, while he saw the occasional live walleye, he saw about a half dozen recently-killed, still white and intact walleye littering the bottom. He cites a commonly-held perception that fishing techniques like use of Lindy rigs and night fishing with bobbers result in hooks being lodged deep in fish mouths and gullets, where, whether removed or left to dissolve as per DNR suggestion, they leave fish too wounded to survive.

Regulations are subject to review and revision over the open water season, based on estimates of harvest. Kuschel numbers among skeptics of population and harvest count methodology and cites conversations with Fisheries staff who acknowledged that "the picture is very mushy." (A recent *Outdoor News* article concerned new developments in estimating fish populations. Underwater infrared cameras have the potential to facilitate greater accuracy.)

Whether mortality among released walleye is due to angler ignorance, fishing techniques or ill-will (treaty rights bitterness), Kuschel reflects a sentiment that catch and release of fish outside the narrow slot may be wasting rather than protecting the fishery. He numbers among a faction of anglers and businesspeople who advocate, instead, for allowing anglers to keep the first one or two fish they catch (current limit is six), regardless of size, believing that launch, resort and bait business would rebound with anglers willing to settle for that deal. DNR's Large Lake Specialist Tom Jones defends DNR's population, harvest and mortality estimates and regulations, contending that more fish would die with a bag limit as small as one or two than as a result of catch and release mortality. Treaty Biologist Rick Bruesewitz adds, " Catch and release is resulting in a continuing high catch rate as fish are recycled."

Reports on early economic impacts of slot changes vary widely among resort and launch operators. Jones says business, fishing, and public access use were up during the first weekend of the new regs. Garrison Sports reports one launch trip cancellation since the new regs and owner Kari Hough expresses willingness to sacrifice in the short run to ensure abundant harvest in future years and a squeaky clean record of observing federally imposed harvest limits prior to the next phase of post-treaty assignment of jurisdiction and Indian and non-Indian harvests. He observed a drop in the number of boats on the lake but explains it as possibly due to storms and the annoying Mayfly hatch. Terry Thurmer, another west side launch operator, countered with his estimate that his and other launch business had dropped off by as much as 95%. Typically, his boats are full to capacity (452-passenger trips) following the end of the early season night ban. This year 32 passengers fished in the same time frame. (However, this year's return to more normal turbidity may be enhancing day-fishing, making night-fishing less necessary.) Thurmer opinionates that, "Before you should be able to shut down peoples' businesses and incomes based on a harvest of 24% of the population, that 24% should be based on an exact number." One of his drivers suggested that if regulations were modified to foster fish *and business* survival, launch operators would more willingly keep records of customers' catches, to contribute to accuracy of DNR estimates of the take from the lake.

Many variables affect business: fishing success, the spin businesspeople put on the new regs, service, customer satisfaction. The Input Group continues to meet; regulations may be adjusted by July.■

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In passing

So many of the lake and river stewardship leaders are retirees, making their last careers their best. Wally Christensen retired as a Pressman for the Star Tribune and turned avocational interests into a career in conservation and exemplary citizenship. He influenced the evolution of statewide tax and water quality oriented groups into the Minnesota Lakes Association, and was instrumental in getting initial exotic species legislation passed, and the Department of Natural Resources' Exotic Species Program underway. He served as president of Child, Girl & Woman Lake Association, and the Association of Cass County Lakes, served on zoning boards, ordinance committees and the Tri-County Leech Lake Watershed Project, which put together a huge funding package for the sewering of little Federal Dam on that large lake. Wally was cited for leadership excellence by several Governors of the State, legislators, fellow volunteer water activists and businesses.

Wally retired to Florida for good several years ago, and passed away on May 3 while on a family vacation. He is survived by his wife Lee (whose support and partnership Wally truly relied on), a son and daughter and four grandchildren.

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September 2001

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET
LOWER LEVEL CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107

SEPTEMBER 26, 2001

BOARD MEMBERS PRESENT: Lee Coe, Darrell Bruggman, Jerome Deal, Paul Krabbenhoft, Victor Ormsby, Dwain Otte, Jim Anderson-MES, Dan Wilson-MDH, Karen Harder, Jack Frost, Sharon Clark-MDA, Char Kahler, JoAnn Coover, Wayne Edgerton-DNR, Rod Massey-PCA, Ginny Imholte

BOARD MEMBER ABSENT: Clair Nelson

STAFF PRESENT: Doug Thomas, Mary Jo Anderson, Jeff Nielsen, Kevin Lines, Jim Haertel, John Jaschke, Al Kean, Dave Peterson

OTHERS:
Sandy Hooker, Minnesota Association of Townships (MAT)
Tim Gieseke, Minnesota Association of Conservation District Employees (MACDE)
LeAnn Buck, Minnesota Association of Soil and Water Conservation Districts (MASWCD)
Ray Bohn, Minnesota Association of Watershed Districts (MAWD)
Michael Tietz, Environmental Quality Board (EQB)
Elena Doucet-Biw, Minnesota Center for Environmental Advocacy
Jim McGreevy, Larkin Hoffman
Mark Doneux, Washington SWCD
Richard Hoffman, Freeborn County
Anthony Trow, Fountain Lake Association

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

** 01-63 **Adopt Agenda** - Moved by Char Kahler, seconded by Jerome Deal, to adopt the agenda as presented. Motion passed on a voice vote.

** 01-64 **Minutes of August 23, 2001** - Moved by Sharon Clark, seconded by Jerome Deal, to approve the minutes of August 23, 2001, as circulated. Motion passed on a voice vote.

Reports

Chair Coe reported that he attended the Governor's CREP Tour on September 6. He thanked board members for attending. Sharon Clark rode on the tour bus with the Governor; she stated that the Governor was very impressed with the tour. Sharon stated that Congressman Kennedy is in support of CREP at the federal level. Sharon stated that Congressman Kennedy will be contacting BWSR. Chair Coe thanked BWSR staff for their efforts in planning.

Chair Coe reported that the Administrative Advisory Committee met on September 13. Chair Coe attended the EQB meeting on September 20. EQB approved the Great River Energy's request for a minor route alteration construction permit of a transmission line in Maple Grove. EQB approved the request to locate wind turbines closer to the project boundary than the permit allows for the Chanarambie Power Partners. EQB approved the request to authorize commencement of rulemaking on proposed wind rules. EQB discussed the Xcel Energy's consideration of a new transmission line from Sioux Falls, South Dakota, to Jackson County, Minnesota.

Chair Coe stated that he's pleased to see the country pulling together after the September 11th attack. Chair Coe would like the Board to "Pledge of Allegiance" at each monthly meeting. He stated that it's good to see prayer coming back into the forefront.

Executive Director – Doug Thomas stated that Ron Harnack sends his greetings from Italy! Ron and his wife are vacationing in Europe; Ron will be back in the office on October 1st.

Doug reported that LCMR has begun their process of hearings to set their agenda and priorities for next year's LCMR funding. The LCMR Citizen Advisory Committee (CAC) meeting will be held October 15-16, 2001. Doug reported that Comprehensive Local Water Management Plans and RIM will be on CAC's agenda; as well as a joint-agency water overview presentation by EQB/WRC. LCMR will be touring next week and meeting with the Flood Damage Reduction Work Group (FLDWG) on October 3, in Crookston. Doug reported that the capital bonding process has started. Two meetings

have been held with the Environmental Cluster Group. Doug thanked the Minnesota Department of Agriculture (MDA) for their strong support of RIM. BWSR submitted three proposals including RIM, road replacements, and SLR.

Doug reported that BWSR has received a citizen petition from Hennepin County for dissolution of the Hennepin Conservation District. Staff are meeting with the Attorney General's office to assist with this issue.

Doug reported that a case in the Court of Appeals relating to the matter of the enlargement and increasing the number of managers of the Brown's Creek Watershed District and the Valley Branch Watershed District has been reversed. The decision came back against BWSR stating BWSR does not have authority to enlarge a watershed district to include territory already within a functioning joint powers water management organization (WMO). BWSR staff will continue to work with Washington County on this process. Copies of the appeal decision will be distributed to board members.

Chair Coe thanked Doug for his efforts in Ron's absence.

Dispute Resolution Committee (DRC) - Jim Haertel reported that there are presently six appeals pending. All six appeals involve WCA. The most recent appeal is of a no-loss decision in Mower County. Since the decision was made by a staff individual with no public hearing, the appeal will be held in abeyance until the Mower SWCD Board makes a decision. Two other pending appeals involve the same exemption determination by the Rice Creek Watershed District. The appeals have been accepted and a pre-hearing conference will be scheduled. The other appeals have been reported to board members previously. One pending appeal is of an exemption determination in McLeod County. The appeal has been remanded to the county to develop a better record including more technical analysis. Another pending appeal is in LaCrescent along the Mississippi River in Houston County. The replacement plan denial arose from a cease and desist order and a restoration order. The appeal has been accepted and at the pre-hearing conference resolution was explored. The appeal is pending while discussions occur with the landowner, the city and the county. Another pending appeal regards an exemption approval by the Lac qui Parle – Yellow Bank Watershed District involving the federal exemption. The appeal has been accepted and a pre-hearing conference has not been set since resolution is being pursued.

Wetlands Committee - Darrell Bruggman reported that the Wetlands Committee will meet on October 12, 9:30 a.m., in St. Cloud.

Cost-Share Committee/Soil Conservation Committee - Chair Coe welcomed Dwain Otte back from his trip in Europe. Dwain did not have a committee report.

Education and Public Relations Committee - Paul Krabbenhoft reported that Childrens Water Festival is being held today at the State Fairgrounds.

Administrative Advisory Committee – Chair Coe reported that the committee met on September 13 to review and discuss two items that are on the agenda later today.

Agency Reports

Sharon Clark, Department of Agriculture (MDA), reported that MDA is busy with capital bonding budget requests. MDA has received $1M from the legislature for dairy diagnostic study. Seven teams will be formed to work with dairy farmers statewide. Business planning grants are also included in that $1M, for matching grants, applications are currently being accepted. Sharon reported that there has been a large outbreak of gypsy moth in Hennepin County; MDA staff are planning a strategy to keep this under control. Sharon distributed two publications for information, "Composting Animal Mortalities" and a "Guide to Feedlot Rules". Sharon reported that she just returned from a bio-terrorism conference in Vermont. States need to have an emergency plan in place and be on alert. Also, a plan is being put together for animal diseases, with a five-state conference scheduled. Sharon reported that these meetings have been scheduled due to the September 11th event. Char Kahler asked for an anthrax report. Sharon stated that MDA is still in the process of evaluating anthrax through blood testing on sick animals and animal carcasses. She will continue to update the Board as the evaluation process moves forward and will circulate the anthrax report when it is finalized.

Dan Wilson, Department of Health (MDH), reported that within a day of the attack on September 11, MDH was in contact with every water system in the state. Dan stated that a huge change has happened regarding increased surveillance and security on water systems since the threat of attack on water systems. MDH is at the top in the nation for its state-of-the-art biosecurity systems. A lot of work has been done on biochemical security, although the resources have not been there, but now greater resources will be available for preparedness.

Wayne Edgerton, Department of Natural Resources (DNR), distributed two informational publications "Commonly Asked Question and Answer About Consolidated Conservation (Con-Con) Lands Listed in DNR Commissioner's Orders of 1991" and also the "2001 Minnesota Hunting and Trapping Regulations Handbook". Wayne reported that DNR issued a new release regarding anthrax. A conservation officer should be contacted if anthrax is questioned regarding sick and/or dead animals.

Jim Anderson, Minnesota Extension Service (MES), reported that Minnesota is the recipient of funding for two new projects through USDA grants. The lower Mississippi River Basin conservation activities with the Basin Alliance of the lower Mississippi River; and the Minnesota River Basin conservation changing practices regarding water quality. Jim reported that MES is working with Steve Woods and Kevin Lines putting together a survey for RIM participants to evaluate the RIM program.

Rod Massey, Pollution Control Agency (PCA), distributed a "Reductions Summary" and presented information on PCA's budget reductions, issues and impacts. Rod stated that most of the reductions have been made, all of the reductions need to be completed by the first of the year. Rod reported that PCA is involved in an investigation of an allegation of a feedlot officer in Rock County. This is a federal investigation; PCA is involved with the civil issues. Chair Coe thanked Rod for the information he presented; this information was requested by Ron Harnack to see how the PCA reductions would impact BWSR.

Committee Recommendations

Brown's Creek Watershed District Revised Watershed Management Plan - Jack Frost reported that the Metro Subcommittee met on September 11, to review this plan and recommends approval. Jerome Deal stated that a correction is needed on page two of the draft Order. The last sentence should read, "The MPCA did not provide a 45-day comment letter". Moved by Jack Frost, seconded by Karen Harder, to approve the Brown's Creek Watershed District Revised Watershed Management Plan. Motion passed on a voice vote.

** 01-65

Heron Lake Watershed District Revised Watershed Management Plan – JoAnn Coover reported that the Southern Subcommittee met to review the plan and recommends approval. Moved by Joann Coover, seconded by Victor Ormsby, to approve the Heron Lake Watershed District Revised Watershed Management Plan. Motion passed on a voice vote.

** 01-66

Upper Minnesota River Watershed District Revised Watershed Management Plan - JoAnn Coover reported that the Southern Subcommittee met to review the plan and recommends approval. It was noted that there was good citizen input in this plan. Moved by JoAnn Coover, seconded by Sharon Clark, to approve the Upper Minnesota River Watershed District Revised Watershed Management Plan. Motion passed on a voice vote.

** 01-67

Chair Coe called for a break in the meeting at 10:05 a.m. The meeting reconvened at 10:20 a.m.

Old Business

2002 Farm Bill Position Statement – Doug Thomas thanked MDA and DNR for their comments. Doug asked for questions and/or comments from board members. Discussion followed regarding BWSR's policy consistency and legislative intent relating to two bulleted items that pertain to EQIP eligibility. Moved by Jim Anderson, seconded by Paul Krabbenhoft, to refer this issue back to the committee. Jim Anderson asked for clarification on the commodity approach for blufflands and CRP community tax-based. Jim would like it conveyed what we really want. Wayne would like to see some urgency on this as HF2646 may be up next week in the House. The two bulleted items under EQIP were eliminated. The Safe Harbor Program was revised to read, "Minnesota supports a safe harbor program within the farm bill. If farmers follow a conservation plan prepared by USDA/NRCS or its authorized agent, they should be provided some protection against being held liable in the future, by another government entity, for unexpected or unanticipated environmental problems resulting from the implementation of the conservation plan." Discussion followed. The original motion was amended by

** 01-68 Jim Anderson, seconded by Paul Krabbenhoft, that the committee meet to review the BWSR's position statement on conservation provisions of the 2002 Farm Bill – to clarify policy consistency and legislative intent of EQIP eligibility; and to include the Safe Harbor Program revision, clarification of the Upper Mississippi River Blufflands Pilot Project, and clarification of CRP. Motion passed on a voice vote. Chair Coe thanked everyone for their work on this. Doug Thomas was commended for his efforts on the BWSR's position statement.

New Business

Order Public Hearing in City of Wyoming Petition for Withdrawal of Territory from Comfort Lake Forest Lake Watershed District - Jim Haertel reported that BWSR has proper jurisdiction in the matter of ordering a watershed district withdrawal of territory

** 01-69 public hearing. Moved by JoAnn Coover, seconded by Jerome Deal, that the Board hereby orders that the public hearing on the Petition for Withdrawal of Territory in the Comfort Lake Forest Lake Watershed District be heard by the Metropolitan Water Planning Subcommittee on November 13, 2001, at the City of Wyoming City Hall, in Wyoming, Minnesota. Motion passed on a voice vote.

Thirty Lakes Watershed District Boundary Change - Jim Haertel reported that staff

** 01-70 recommends approval of the boundary change. Moved by Jerome Deal, seconded by Dwain Otte, that the Board hereby orders that the Thirty Lakes Watershed District boundary is changed to include the portion of the Brainerd International Raceway that is not already in the watershed district. Motion passed on a voice vote.

Shell Rock River Watershed District Establishment Petition - Jim Haertel reported that there was a typographical error in the draft Order that has been corrected. Jim stated that in July 2000, the Board authorized the executive director to enter into a one-year agreement with Freeborn County, Freeborn SWCD and the City of Albert Lea to hold the decision in abeyance on the establishment petition for the Shell Rock River Watershed District. Jim stated that staff recommends the Board enter into an agreement with Freeborn County to continue the establishment petition being held in abeyance for one year and four months, per the draft Order and agreement. Harley Miller, resident of Freeborn County, spoke on behalf of the petitioners. Mike Klukow, spoke on behalf of Freeborn County. Discussion followed. Chair Coe said it's imperative that wounds be healed; everyone involved needs to make things happen to resolve the conflict and move forward. The Chair of the Freeborn County Board stated that they are in agreement and willing to move forward on this project. Chair Coe thanked both groups for providing information today, they now need to work as a team. Discussion followed regarding the dates on the signed agreement. Jerome Deal stated that the internal friction needs to be eliminated. Moved by Char Kahler, seconded by Ginny Imholte, to change item "B" on the Agreement from January 1, 2002, to October 1, 2001; to change "C" from August 1, 2002 to June 1, 2002; to change "D" from February 1, 2003 to August 1, 2002; and to change "E" from February 1, 2003, to August 1, 2002. Motion was defeated. Discussion followed. Moved by Dwain Otte, seconded by Jim Anderson, to approve the signed Agreement and approve the Order as recommended by staff, that the proceedings on the Establishment Petition for the Shell Rock River Watershed District be held in abeyance up to February 1, 2002, subject to the successful and timely completion of the conditions listed in the Agreement and made a part of the Order. Motion passed on a voice vote. Ginny Imholte opposed the motion. Chair Coe stated that timelines are important, as well as a team effort to move this forward. Chair Coe thanked the Freeborn County delegation and Harley Miller, on behalf of the petitioners, for presenting their information.

** 01-71

Low Phosphorus Lawn Fertilizer - Woody Love, Mayor of Shorewood, distributed "Better Water Quality with Proper Lawn Fertilizers", draft language for a legislative bill, a sample resolution. He also presented additional information on phosphorus. Mike McGreevy, attorney for Larkin, Hoffman, and lobbyist working with Woody on this legislative initiative that provides for limitations in the use and sale of phosphorus lawn fertilizers; requiring rule making; appropriating money; and amending Statutes. Discussion followed. Sharon Clark commends Woody and Mike for their efforts. Sharon stated that MDA is willing to work with them on the legislative initiative. Chair Coe appreciated the information provided. Chair Coe asked for updates and revisions as this initiative moves forward.

CREP Grants to SWCDs - Kevin Lines presented the SWCD CREP staffing grants which would cover special staffing to further the implementation of CREP. Four SWCDs would receive a combined total of $41,500 for implementation of CREP beginning July 1, 2001 to June 20, 2002. Kevin presented the CREP Specialist Administrative Grant that staff recommend be provided to 19 SWCDs to support BWSR CREP specialist positions located in their SWCD office. This grant is for a total of $76,000 ($4,000 to each SWCD office), and would be awarded upfront rather than as a reimbursement. This grant would cover CREP expenses (office space, copying, and misc.) from July 1, 2001 to June 30, 2002. Kevin presented the third grant for the 14 SWCD CREP technicians. Staff recommend that the SWCD CREP technicians grant recently received from BWSR be amended to achieve a total of $36,000 per SWCD, grand total of $509,000 This grant amount more accurately reflects the actual costs needed to support a CREP technician employed at the district office. It's also the intent that this supplemental grant be used to compensate the CREP staff from July 1, 2001 to June 30, 2002. Moved by Jerome Deal, seconded by Victor Ormsby, to approve the SWCD CREP Staffing Grant allocation of $41,500; the CREP Specialist Administrative Grant allocation of $76,000; and the CREP Technician Grant allocation of $509,000. Motion passed on a voice vote.

** 01-72

Process for Removal of SWCD Supervisor - Jim Birkholz presented information and five recommendations: 1) Amend existing statute – modernize and standardize; 2) Who may petition; 3) Qualifying petitions; 4) Cost considerations; and 5) Office of Administrative Hearings. Discussion followed. Jim stated that these interim procedures will be in place; any additional information from the Attorney General's office will be incorporated. Jim stated that this process for removal of SWCD supervisor will be presented to the 2002 legislature as a legislative initiatitive. Moved by Darrell Bruggman, seconded by Jerome Deal, to move forward on the five recommendations as presented. This process for removal of SWCD Supervisors will be submitted as a legislative initiative for 2002. Motion passed on a voice vote. Chair Coe thanked Jim for his work and efforts on this project.

** 01-73

Legislative Initiatives - Doug Thomas reported that the deadline for submitting technical and housekeeping preliminary proposals for legislative initiatives was September 21. BWSR submitted four legislative initiatives to Minnesota Planning: 1) Water Planning Tax Levy Authority; 2) Clarifications to 103B.101; 3) Water Planning Statutes Unification; and 4) Modernize and Standardize SWCD Statutes regarding Removal of Elected Supervisor and Discontinuance of SWCDs.

Advisory Comments
Tim Gieseke, Minnesota Association of Conservation District Employees (MACDE), reported that MACDE will meet on October 12. The MACDE is encouraging district employees to attend regional and national conferences by paying for their registration fee. Tim will attend the MACDE 2002 Annual Conference.

LeAnn Buck, Minnesota Association of Soil and Water Conservation Districts (MASWCD), thanked Jim Birkholz for his work on the governance issue for removal of SWCD supervisors, and also his work on the District Capacity issues. A survey was sent out to SWCDs regarding their input on governance and authority issues. LeAnn reported that conservation provisions will be on the agenda for their annual meeting in December. MASWCD is working on their legislative agenda for the upcoming 2002 Legislative Session.

Ginny Imholte, Minnesota Association of Watershed Districts (MAWD), reported that administrators met yesterday. MAWD's annual meeting will be held November 29 – December 1, in Alexandria.

Upcoming Meetings
-BWSR Tour and Meeting, October 24-25, Caledonia.

Doug Thomas reported that a potential strike by MAPE and AFSCME bargaining units may happen on October 1st. The original strike date was scheduled for September 17, but due to the events on September 11, the strike was averted until October 1st. BWSR has taken the appropriate steps and has a plan in place should the strike occur. If the bargaining units strike, a notification letter will be sent out to our clientele. Doug stated that BWSR is hopeful that the bargaining units can come to a compromise through the negotiation process.

** 01-74 Moved by Jerome Deal, seconded by Victor Ormsby, to adjourn the meeting at 1:20 p.m.

Respectfully submitted,

Leland G. Coe
Chair

Composting Animal Mortalities

Minnesota Department of Agriculture
Agricultural Development Division

in cooperation with
Minnesota Board of Animal Health
University of Minnesota Extension Service

Composting Animal Mortalities

Acknowledgments

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July 2001

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Introduction

The management of animal mortalities is an important aspect of livestock farming since even the best livestock farmers lose some of their animals each year. Rendering, burial, and incineration have been the typical carcass disposal methods. However, these options are becoming less practical for many farmers because of decreasing availability and higher costs of rendering, biosecurity concerns, and potential adverse effects on groundwater and air quality. For these reasons, composting is becoming more widely used as a method of mortality disposal. A properly managed mortality composting system is low cost, environmentally sound, biosecure, and virtually odor free.

While there is much in favor of composting, you must decide whether or not it fits into your operation. Minnesota Board of Animal Health regulations allow composting of poultry, swine, sheep, and goats without a permit, and cattle can legally be composted if a permit is obtained. Like any other farm operation, successful composting requires a commitment to managing it well.

This publication describes mortality composting, answers commonly asked questions, outlines what is needed to compost on your farm, explains how to compost step-by-step, and outlines applicable regulations. It also contains resources for more information.

The Mortality Composting Process

Composting is an aerobic, natural process in which microorganisms convert organic material into a stable product called compost.

Composting is a naturally occurring process in which bacteria, fungi, and other microorganisms convert organic material into a stabilized product termed compost. This means that microorganisms do the composting work for you. Your role in managing the composting process is to make sure that the microorganisms have the environment they need in order to do their work quickly and effectively.

In mortality composting, the animal carcass is placed in a composting bin. A bulking agent such as sawdust or straw that is high in carbon is placed around the carcass to completely surround it.

Within the carcass, anaerobic microorganisms work to degrade it, releasing fluids and odorous gases such as hydrogen sulfide and ammonia. These diffuse into the surrounding bulking agent. In this bulking agent, aerobic microorganisms degrade these materials to odor-free carbon dioxide (CO_2) and water (H_2O). The aerobic process produces considerable heat, causing the temperature of the compost pile to rise. The active bacteria in both the aerobic and anaerobic zones are heat tolerant. However, the heat kills common viruses and bacteria that may be present in the carcass. Odor is controlled by having an adequate quantity of bulking agent around the carcass.

Composting produces
- ***Carbon dioxide***
- ***Water***
- ***Heat***
- ***Fertilizer***

The compost pile is usually left undisturbed until the temperature has subsided, meaning that the aerobic microorganisms are working less efficiently because they have exhausted much of the food and air in their environment. At this point the flesh and small bones will have decomposed. After this first heat cycle, the pile is turned, introducing air into the pile. This increases aerobic activity and the temperature rises again. After the temperature subsides a second time, the compost should be finished, with no flesh, hide, or small bones present, although some large bones may remain.

How the Mortality Composting Process Works on the Farm

On the farm, at least three composting bins are used:
1. A primary bin in the process of being filled
2. Another primary bin in the first heat cycle of composting, and
3. A secondary bin in the second heat cycle

When you first start composting, new carcasses and bulking agent are added to the first bin until the bin is full. This pile is then left to compost and new carcasses are layered with bulking agent into a second bin. When the first pile has completed the first heat cycle, the pile is turned by moving it to a third empty bin, and it is left to compost for the second heat cycle. By this time, the second bin is usually full and is left to compost. A new pile is started in the first bin, which is now empty. When the first pile has gone through the second heat cycle, it is removed from the bin and either stored or spread on crop fields. This on-going process ensures that carcasses can be disposed of continuously.

It takes from 7 to 24 weeks for carcasses to degrade and for the compost to reach the finished stage. The amount of time required depends on the bulking agent used, temperature, moisture, management, and the size of the animal (large animals can take longer to decompose than small animals).

The Animal Mortality Composting Process

First Heat Cycle
- Carcasses and bulking agent layered in pile
- High rate of anaerobic and aerobic activity
- Temperature increases
- Breakdown of flesh and small bones
- Temperature subsides

Second Heat Cycle
- Turning the pile initiates increased aerobic activity
- Temperature increases
- Breakdown of long bones, skull and pelvis
- Stabilization of compost material

Changes in Materials During Composting

Finished compost is
- ***Consistent and soil-like***
- ***Dark brown to black***
- ***Reduced in volume and weight***

By the time composting is complete, the material becomes more uniform and less active biologically. The material (humus) becomes dark brown to black in color. The particles reduce in size and become consistent and soil-like in texture. The volume and weight of materials are reduced due to loss of carbon dioxide and water to the atmosphere and to bulky raw materials changing into crumbly, fine-textured compost.

Why Composting is a Good Choice

Composting is
- ***Biosecure***
- ***Environmentally sound***
- ***Cost effective***
- ***Easy***

Biosecure
Composting allows immediate year-round disposal of carcasses so that disease is not spread. There is no entry of off-farm vehicles that can bring disease onto the farm from other operations, and the high temperatures in the compost pile kill pathogens.

Environmentally sound
A properly functioning compost pile gives off little odor and does not harm or affect groundwater. Composting turns a waste into a beneficial fertilizer and soil amendment, resulting in on-farm nutrient recycling.

Cost effective
Composting has low to moderate start up costs and minimal operating costs.

Easy to accomplish
Composting requires only good management and minimal training. It utilizes readily available organic materials.

Commonly Asked Questions About Composting

Will I have problems with odor?

No. A properly managed compost pile with enough bulking agent will not produce offensive odors. Farmer cooperators in three Minnesota demonstration projects found that the layer of sawdust or bedding on top of the pile greatly reduced odor and, once the compost heated up, offensive odors were essentially absent.

Will the composting piles attract flies and rodents?

No. Flies are not a problem because internal temperatures above 130° F will kill existing fly larvae. Also, when piles are covered by at least 12 inches of bulking agent, flies and rodents are not attracted to the area. If manure is used in the pile and not covered adequately by a bulking agent, some flies may be present on the surface but they will not be able to reproduce.

Will the compost spread diseases?

No. The high temperatures of proper composting will destroy most harmful bacteria and viruses associated with livestock. Viruses that cause avian influenza, Newcastle disease and pseudorabies are completely inactivated by the end of the second heat cycle. Bacteria such as *Salmonella enteritidis, Pasteurella multocida, Erysipelas rhusiopathiae* and *Salmonella cholerasuis* will be successfully destroyed by the composting process.

Will composting work with all animals?

Yes. Poultry, swine, sheep, and goats can all be composted without a permit. The Minnesota Board of Animal Health regulations require a permit for cattle. With larger animals such as sows and larger cattle, some of their large bones may take longer to decompose than with smaller animals. These bones can be removed from the finished compost and returned to an active pile for further composting. Note that while any species can be composted, Minnesota Board of Animal Health regulations do not allow composting of any animals that died from anthrax or toxic materials.

Will I recognize animal parts in the compost when I turn it?

No. Farmer cooperators in three Minnesota demonstration projects found that when the piles were ready for the first turning, the only recognizable parts were larger bones, teeth, and pieces of hides. These bones were rubbery and decalcified, and could be broken easily. There were even fewer after the second turning.

Is composting costly?

No. The main cost is in building a composting structure. Some farmers in Minnesota have renovated existing buildings for little cost. Another cost may be a front-end or skid steer loader to handle the mortalities and compost. The only on-going cost is the bulking agent and the skid steer. Your farm may have bulking agents (such as straw, litter, bedding, or corn stalks) available at no cost. If not, you will have to purchase bulking agent. This cost should be minimal.

Will composting take a lot of labor?

No. The labor involved is minimal, consisting of placing any new mortalities in the bin every day and covering them with bulking agent, checking the temperature of the pile every day, moving the pile between the primary and secondary stages of composting, and moving the finished compost to storage. One Minnesota farmer who had a composting demonstration site on his farm estimated that it took about ten minutes each day to manage.

Are there uses for the compost when it's done?

Yes. The finished compost can be used in your next compost pile to replace part of the bulking agent and provide a large microbial population right away. It can also be spread on crop fields to provide beneficial organic matter and nutrients to the soil and the crops.

Can composting be done in the winter in Minnesota?

Yes. Active piles will continue to heat during the winter. New piles should not be started during the winter unless active, hot compost is available as the bulking agent.

Can any size operation use composting?

Yes. However, if small operations use a seasonal livestock production cycle, they may have trouble composting in winter if the input of carcasses is small and inconsistent. Small compost piles do not heat as fast or as hot and are not self-insulated, and therefore may not reach ideal temperatures in winter.

Can varmits be a problem around the compost pile?

Yes. Visiting dogs, coyotes, raccoon, skunk and fox can become problems. A very hot and active compost pile where the carcasses are adequately covered is the best solution.

The Mechanics of Composting

Your job in managing the compost pile is to provide the right food and environment for the microorganisms so that they can get their composting work done quickly and effectively. There are four aspects of the compost pile that are important to microorganisms and that are important in your management of the process.

Compost microorganisms need
- ***Carbon***
- ***Air***
- ***Water***
- ***Elevated temperature***

1. Carbon: Because animal carcasses are very high in nitrogen, you must add large amounts of carbon (in the form of a bulking agent) to the pile in order to provide the right environment and food for the composting microorganisms. The carbon to nitrogen ratio (C:N ratio) describes the amount of carbon compared to the amount of nitrogen in the pile. Minnesota Board of Animal Health regulations require that the C:N ratio of the pile be between 15:1 and 35:1. However, you don't need to be too worried about measuring the exact C:N ratio, since the composting process is fairly forgiving and will occur under a range of C:N ratios, as long as you keep the overall carbon to nitrogen balance in mind. If there is too little carbon (low C:N), the high nitrogen supply is converted to ammonia and is emitted from the pile, resulting in odors. If there is too much carbon (high C:N), the low nitrogen supply can limit microbial activity resulting in slow carcass decomposition and cool temperatures.

2. Air Flow: Since aerobic microorganisms need oxygen to work, oxygen must be able to move into the pile and carbon dioxide and water vapor must be able to escape. This means that the bulking agent must have a particle size that allows air to move freely. Bulking agents, such as newsprint, can pack down, inhibiting air flow to the microorganisms, which will slow or even stop the composting process and produce odors. Large particles, such as branches, can let too much air in, cooling the pile and slowing down the work of the microorganisms.

3. Moisture Content: Microorganisms require water as a medium for chemical reactions, to transport nutrients, and to move about. Compost with too little moisture will not supply sufficient water for microorganisms to survive. Too much moisture inhibits oxygen flow through the pile, causing aerobic microorganisms to slow down, which can lead to odors.

4. Temperature: Temperature is both a necessity for and a result of microorganisms' work. The warmer the pile, the faster the microorganisms work, the more heat they produce, the warmer the pile, and so on. If the temperature is too low (less than 120°F), microorganisms are not very active, which means decomposition will occur at a slow rate and pathogens and weed seeds will not be

destroyed. The temperature should reach 130° to 150° F for several days or weeks because at this temperature, microorganisms are active, decomposition proceeds quickly, and pathogens are destroyed.

What You Need To Get Started

Bulking Agent

Bulking agent considerations
- ***Availability***
- ***Cost***
- ***Particle surface area***
- ***Carbon to nitrogen ratio***

Many organic materials can be used as bulking agents, but different materials vary in their availability, cost, and physical characteristics. Sawdust has been widely used and has excellent odor-absorbing potential. Hay and straw will also work. Greener hay or hay with more legumes will have less carbon (lower C:N ratio) while drier hay or hay with more grass will have more carbon (higher C:N ratio). Crop residues such as wheat straw or corn stalks can be used but may require shredding or some form of particle size reduction.

Common Composting Materials

Substance	*Carbon to Nitrogen Ratio (Weight to Weight)*
Sawdust[1]	200 - 750 :1
Straw[1]	48 - 150 :1
Corn stalks[1]	60 - 73 :1
Finished compost[1]	30 - 50 :1
Horse manure[1]	22 - 50 :1
Turkey litter[1]	16 :1
Animal carcass[2]	5 :1
Swine manure[2]	1 - 3 :1

[1] *On-Farm Composting Handbook, NRAES-54, Natural Resource, Agriculture, and Engineering Service, Ithaca, New York.*

[2] *Compost Materials, 1996, EBAE172-93, North Carolina Cooperative Extension Service, Raleigh, North Carolina*

You can also use finished compost as part of the bulking agent in a new pile. This has the advantage of inoculating the new pile with microorganisms. Some typical bulking agents and their characteristics are shown here.

When choosing a bulking agent, you should also consider:

1. Availability: You must have access all year to enough bulking agent to make sure your piles compost well. Check out both on-farm and off-farm sources and make sure the bulking agent you decide to use will be available consistently and in high enough quantities from one or more sources throughout the year.

2. Cost: While the cost of on-farm materials is low, it is possible to find bulking agents from other sources that may also be low cost. This is especially true for materials that are considered waste products such as sawdust or wood shavings.

3. Physical Characteristics: The physical characteristics of the bulking agent will affect how well your compost piles work. In addition to choosing a bulking agent with the appropriate C:N ratio, you want to find a bulking agent with a large enough particle size to let air flow, but not to the point that it cools the pile. It should have enough surface area for the microorganisms to grab onto.

Whatever bulking agent you decide to use, you can calculate the annual volume needed based on your annual death loss. Using sawdust as an example to estimate the bulking agent volume you will need for one year of composting, first determine the pounds of death loss you have per year (use tables on pages 12 and 13), and then multiply by .0067 yd^3 per pound of dead animal. This will give you an estimate for planning purposes only. Other bulking agents may differ. If you will use finished compost to replace part of your bulking agent, remember to factor that into your estimates.

Water

Composting happens most ideally when the pile is moist. This means that you may have to add water to your compost pile. The amount of water you will add will depend on the moisture content of your compost ingredients, especially of your bulking agent. In general, you can judge the proper moisture content by feeling the compost. It should be moist and leave your hand feeling moist, but you should not be able to squeeze any water out of it.

Other Ingredients

Manure can also be used in the compost pile but is not necessary. Manure tends to be high in nitrogen and low in carbon . The advantages of using manure are that it adds microorganisms to the pile, adds nitrogen which can help speed up the composting process, and adds moisture. The disadvantage is the danger of excessive nitrogen in the pile resulting in odor, flies and other composting problems. You may have to add more bulking agent to compensate for the increased nitrogen.

Liquid manure has very little carbon (low C:N ratio), while manures cleaned from stalls may include bedding material which will increase the carbon (higher C:N ratio). Turkey litter has been used in some composting piles in Minnesota.

Other Supplies

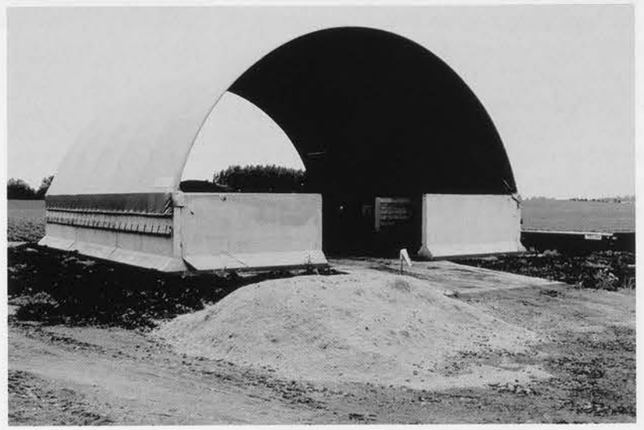
Thermometer: A probe-type thermometer with a minimum 36-inch stainless steel stem is needed to monitor the pile. Suppliers of thermometers are included in Further Resources.

Composting Log: A logbook is needed where you can record dates and weights of carcasses placed in the composter, temperature readings, amounts of bulking agent used, dates when compost is turned, and dates and amounts of finished compost.

Front-End or Skid Steer Loader: The loader is needed to move carcasses from the production buildings to the composter, place carcasses in the compost pile, cover the carcasses with bulking agent, mix and turn compost, and move finished compost.

Manure Spreader: A manure spreader should be available for field spreading finished compost.

Hoop structure with six bins; note concrete apron and sawdust pile in foreground.



Composting Structures

A wide range of structures is possible, including new or existing facilities, and stand-alone units or add-ons to an existing building. For new facilities, poured concrete, pole construction, and hoop houses have all been used in Minnesota. Existing facilities, such as machine sheds, corn cribs, or cattle sheds can be adapted if the ceiling is high enough to allow the front-end or skid loader to lift and turn the compost. This can be a low cost option. One Minnesota farmer adapted a Cargill open-front unit for composting with no remodeling costs.

Composting structure regulations
- ***Impervious weight bearing pad***
- ***Covered***
- ***Rot resistant building materials***

Minnesota State Board of Animal Health regulations recommend that the structure be:

- ***built on an impervious weight-bearing pad that is large enough to allow the equipment to maneuver.*** A concrete pad or other surface prevents seepage of nutrients and bacteria to groundwater. An 8-foot apron to at least support the front wheels of the loader is the minimum recommended; concrete to support the entire tractor is recommended.

- ***covered with a roof or other water-repelling materials to prevent excessive moisture on the composting material.*** A roof excludes rainwater and snow from the compost piles. The roof overhang should minimize rain blowing into the bins.

- ***built of rot resistant material that is strong enough to withstand the force exerted by the equipment.*** Possible construction materials for the bins include preservative pressure-treated lumber and concrete. To avoid corrosion, ventilation is needed and hot-dipped galvanized nails should be used.

Multiple bin composting structure; note gates on fronts of bins.

Bins should be located close to each other to facilitate moving compost from bin to bin. Consider snow and wind loads in the design. If you find you have problems with dogs or other animals that dig in the piles, you might want to add a removable gate. Opposite are some photos of typical composting structures used in Minnesota.

Hoop structure for composting with three bins.

A Cargill unit converted for composting.

New three bin composting structure.

Size of the Composting Structure

The size of your composting structure will depend on the size and amount of dead animals to be composted on a daily basis. The adjacent table lists average death losses for different animals. The primary bin volume averages three to 20 cubic feet for every pound of death loss. The table on the next page gives the ratio by size of animal. Secondary bins (those used to turn piles into for the second heat cycle) should be the same number and volume as the primary bins. The three steps described on the next page in the text box will help you calculate the size and number of your composting bins.

Composting structures that are too small may force movement of material through the bins before the composting process is complete. This can increase management problems.

Bin Size

Your goal in determining the bin size is to maximize the efficiency of the composting process and make it easy to manage the mortalities and the composting materials. All bins should be equally sized. Bin size depends on the size of equipment you will be using to turn the compost and the type of animal you will be composting. Bin width should be at least twice the width of the bucket on the equipment you will be using. The size of the structure you might be renovating must also be considered when determining bin size. Experts recommend that the bin area (width x length) should be 100 to 400 square feet to ensure proper heating and for ease of filling and emptying over a short period of time.

Number of Bins

The number of bins will depend on the bin size and your total composting volume of carcasses and bulking agent. The minimum number of bins is three, two for composting and one being filled. Larger operations may require more than three. Your goal in determining the number of bins is to be able to successfully compost all of your animal mortalities. Minnesota State Board of Animal Health regulations require that the composting structure be large enough to handle each day's normal mortality through a minimum of two heat cycles to the endpoint of the composting. You will also need to consider where you will store the bulking agent and finished compost. Having extra bins available for this can be helpful.

Mortality Estimates

Species	*Average Weight (lbs)*	*Loss (%)*
Swine[1]		
wean to nursery	10	10-12
nursery	30	2-4
grow finish	150	2-4
sows	300	2-5
Poultry[2]		
broiler	3	5
layer	3	10
turkey hens	10	7
turkey toms	17	13
Beef[3]		
pre-wean	90	8-10
young stock	600	2-3
yearlings	850	1
cows	1250	1
Dairy[4]		
pre-wean	90	8-10
heifers	600	2-3
cows	1400	1
Goats and Sheep		
pre-wean	8	8-10
lambs	50	10-12
mature	170	6-8

[1] Pork Industry Handbook PIH 100
[2] Composting Poultry Carcasses in Missouri WQ205
[3] A. Deconstanzo, Dept. of Animal Science, U of MN
[4] H. Chester-Jones, Dept. of Animal Science, U of MN

Designing the Compost Structure

Step One: Estimate the Weight of Average Daily Death Loss.
You can use your own farm records or estimate the loss using industry average loss rate. See the table on preceding page for industry averages. Take the total pounds of dead animals for the year and divide by 365 days per year. This is the pounds of dead animals that need to be composted each day.

Step Two: Estimate the Volume for the Composting Bins.
Multiply the pounds of dead animals per day from Step One by the cubic feet per pound listed in the adjacent table for the average size of the animals to be composted. This is the required volume for the primary composting area. Add an equal volume for the secondary composting bins.

Multiplier Factor to Estimate Bin Volume by Animal Size

Carcass Size (lb)	*Multiply Death Loss by*
0-10	3 ft^3/lb
10-25	5 ft^3/lb
25-300	10 ft^3/lb
300-750	14 ft^3/lb
750-1400	20 ft^3/lb

Example: You average 100 lb/day of death loss. Average size of dead animal to be composted is about 400 lb. The adjacent table lists the bin volume of 14 ft^3/lb of death loss for animals of that size. (100 lb/ day death loss) x (14 ft^3/lb) = 1400 cubic feet of primary bin space and an equal amount of secondary bin space.

Step Three: Design the Bins.
Start with the bucket width on the loader you will be using. Multiply that width by 2 and round the number up a couple of feet to allow some maneuvering room. For example, if the bucket is 4 ft. wide, you might start your bin design with a width of 10 ft. Depth of the pile should be between five to eight feet. Bins should be at least eight feet long to obtain good pile heating. Try various bin dimensions and number of bins so that the volume available equals the volume calculated above. Bin area (width x length) should fall between 100 and 400 square feet. Include the same number of secondary bins of the same volume and consider adding additional bins for bulking agent storage.

Example: (10 ft. wide to accommodate loader bucket) x (14 ft. long) x (5 ft. deep) = 700 ft^3 per bin. As calculated above, 1400 cubic feet of primary bin space is required to compost daily death loss. 1400 ft^3 divided by 700 ft^3 per bin = 2 primary bins needed. Add two secondary bins of the same size and one bin for bulking agent storage gives a total of 5 bins

Factors in Site Selection of the Composting Structure

Site selection considerations
- ***Water quality***
- ***Biosecurity***
- ***Public view***
- ***Traffic flow***
- ***Water source***

Besides the following factors, Minnesota State Board of Animal Health regulations require that Minnesota Pollution Control Agency and local rules also be followed in siting your structure.

Water quality
Avoid wet areas or flood plains. The facility must be high and dry. Locate at least three feet above high water table and at least 300 feet from streams, ponds, or lakes in the same drainage area. Divert clean water and provide for runoff collection and treatment or storage areas.

Biosecurity
Avoid locating the compost structure directly next to production units and use appropriate cleaning procedures on transportation vehicles.

Public perception
Minnesota State Board of Animal Health regulations require that consideration be given to prevailing winds and public view in choosing a site. Provide limited or appealing view for neighbors or passing motorists and consider aesthetics and landscaping.

Traffic flow
Consider access and traffic patterns required for moving mortalities and bulking agent to the composter and removing finished compost, as well as other farm traffic. Minnesota Board of Animal Health regulations require that carcasses be transported over public roads only in vehicles or containers that are leakproof and covered. Ensure all weather access. Locate safe distances from buried and overhead utilities.

Availability of water
Consider the distance between a water source and the bulking agent storage or the composting bins. If you need to add moisture to your composting materials, either to the bulking agent or to the piles, consider locating the structure within one hose length of a water source.

How to Compost Step by Step

Building the compost pile
- ***Bulking agent base***
- ***Layer carcasses***
- ***Cover with bulking agent***
- ***Record information in log book***

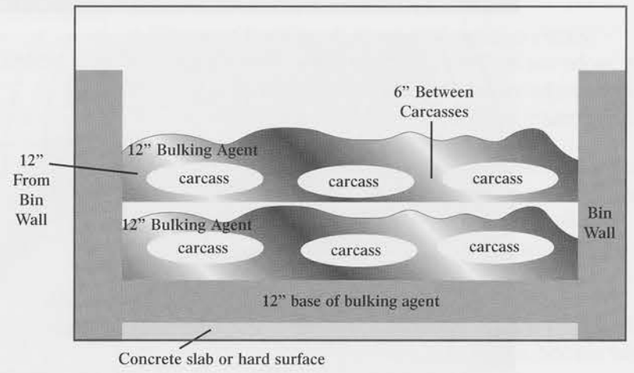
Building the Compost Pile

Before you start composting, review the Board of Animal Health Regulations found at the end of this publication.

• Place at least 12 inches of bulking agent on the floor of the composting bin. This layer will insulate the composting material from the outside environment, provide carbon to fuel the composting process, and absorb liquids.

• Place the carcasses in a single layer on top of the bulking agent one foot from the wall of the bin and at least six inches apart. This allows air to circulate around the carcasses and insulates them from the environment. Depending on the size of the bin and of your loader, you may not want to build a whole single layer first, because your loader may not be able to reach the back of the bin when you want to add more carcasses later. You can avoid this by building the pile from the back, building it up and forward simultaneously.

• Cover the carcasses with about 12 inches of bulking agent. Add water as needed to maintain the proper moisture level. Because it is difficult to add water evenly, you might want to consider adding it to the bulking agent before it goes on the pile. Caution: If the pile dries out (25% to 45% moisture) and if piles are too large, spontaneous combustion can occur, just as with hay or silage. Attention to moisture, temperature, and pile size is the best protection. An accessible water supply is a good safety precaution. If you are going to use manure, add it either beneath the bulking agent or incorporated with the bulking agent. The pile is now ready for the next layer.



• Record the species, class, and weight of the carcasses, and the amount and type of bulking agent and into the compost log.

• Place additional carcasses as they become available on the pile in layers following these same steps, allowing 6 to 12 inches of bulking agent between layers. Minnesota Board of Animal Health regulations require that animal mortality be processed daily. You can compost more than one species in the same bin. It may be necessary to use the loader bucket to dig a depression to hold the fresh carcass in place before covering it with bulking agent, especially if it is a large animal. Continue adding carcasses until the pile is close to the top of the bin. Cover the top of the pile with 12 inches of bulking agent to reduce odor and protect against pests. Minnesota Board of Animal Health regulations require that flies, rodents, and vermin be controlled so as not to be a health hazard to human or animal populations.

• After the bin is full, start a second bin following these same steps. Leave the first bin to compost. This first bin has carcasses at various stages of decomposition from largely decomposed (first one in) to just beginning (last one in).

Transporting dead sow to composting structure.

One thousand pounds of pigs added in two layers.

Dead sow placed in depression formed in bulking agent.

Covering with bulking agent; note that skid loader fits into bin.

Monitoring the First Heat Cycle

Monitoring
- ***Record temperature daily***
- ***Check odor and moisture***
- ***Troubleshoot and adjust***

• Monitor the pile daily to make sure that all carcass parts stay completely covered by bulking agent. The pile will settle, so you may need to add additional bulking agent over the top.

• Check the temperature daily and record it in the compost log. The temperature should be taken at multiple locations in the pile, especially near the last animal that was added. Temperatures should be increasing and should soon be between 130° and 150° F.

Primary Composting Times

Carcass Size (lb)	*Estimated Primary Composting Days*
0-10	15
10-25	22
25-300	45
300-750	60
750-1400	90

• If it seems that the pile is not composting correctly because of the temperature or because there are odors, you will need to do some troubleshooting and make adjustments. See the section on troubleshooting for more information.

• Once the pile reaches at least 130°F, it should stay above that temperature for at least one week. Do not start counting the days until the area that you added to the pile last reaches this temperature. When the temperature drops, the pile is ready to be turned.

• The typical primary composting time is approximately 45 days for carcasses weighing from 25 to 300 lbs. See the table of estimates for primary composting times by carcass weight.

Turning the Pile

• Layer the bottom of an empty bin with 12 inches of bulking agent.

• Use a front-end or skid loader to move the material from the primary bin to the secondary bin, one bucket at a time. This aerates the pile. Minimal flesh or soft bones should be present, but long bones, skulls, teeth, and pelvis, and some hide, feathers, and fleece may remain. There may be some odor while turning due to disturbance of the anaerobic zones. Look to see whether you need to add water. If you do, add it to the existing pile as needed before or while you turn it, so that it gets evenly incorporated.

Compost Bin Management

Example for a 3-bin, 2-turn system with 15 days in primary heat cycle.

Days	*Primary Bin 1*	*Primary Bin 2*	*Secondary Bin*
1-15	filling	empty	empty
16-30	1st heat	filling	empty
31-45	filling	1st heat	2nd heat (#1)
46-60	1st heat	filling	2nd heat (#2)
61-85	filling	1st heat	2nd heat (#1)

Caution: High temperatures created by the composting material could lead to burns of the skin if caution is not exercised during compost handling.

• Cover the fresh pile with another 12 inches of bulking agent to prevent odor and visits by scavenging animals.

• Record the date turned and bulking agent type and volume used in the compost log.

Appearance of carcasses after first heat cycle.

Monitoring the Second Heat Cycle

• Monitor and record the temperature of the turned pile daily. Since the composting materials are more consistent now, you don't need to be as careful about taking the temperature in multiple locations.

• Once the pile maintains a temperature in excess of 130° F for seven days and then drops, the compost may be finished.

• Secondary composting times will be similar to the number of days in the primary cycle.

Finishing the Composting

Inspect the pile. If you can no longer see any flesh, the compost can be termed "finished." It should be dark, humus-like material with very little odor. At this stage, any bones should be so brittle that they can be easily crushed. Minnesota Board of Animal Health regulations require that the finished product contain no visible pieces of soft tissue. If there is still some flesh visible, you need to turn the pile again and let it go through another heat cycle. With larger animals such as cattle and sheep, more time is needed to completely compost their larger and denser bones. If the compost is finished other than the bones, remove them and place in a new pile for further decomposition.

Notes on Winter Composting

In order to compost in the winter, the compost pile must never be allowed to go cold. New carcasses should not be allowed to freeze and should not be added to a pile that has dropped below 60° F, which is too cool for microbial activity to start. The compost pile must be large enough to provide self-insulation. A thick layer of bulking agent between the carcasses and the floor and walls of the bins will insulate the microbial activity from cold air. Turning on extremely cold days should be avoided. You can also do your composting in or next to a heated area in the winter.

Notes on Emergency Composting

If you suffer a catastrophic death loss, you may have too many carcasses to compost in your bins. If this occurs, call the Minnesota Board of Animal Health for advice and to obtain a permit for emergency composting.

Finished compost.

Monitoring and Troubleshooting

Troubleshooting Guide for Carcass Composting

Adapted from the National Pork Producers Council Swine Mortality Composting Module

Problem/Symptom	Probable Cause	Suggestions
Improper Temperature	• Too dry • Too wet • Improper C:N ratio or bulking agent used is too porus. • Adverse environment	• Add water. • Add bulking agent and turn pile. • Evaluate bulking agent and adjust amount as necessary. • Ensure adequate cover with bulking agent to provide insulation.
Failure to Decompose	• Improper C:N ratio • Carcasses layered too thickly • Carcasses placed on the outside edge of the pile	• Turn pile and adjust amount of bulking agent. • Single layer the carcasses. • Maintain one foot of space between carcasses and outside edge of bins.
Odor	• Too wet • Too low C:N ratio • Air flow restricted • Inadequate cover over carcasses • Extended periods of low temperature	• Add bulking agent and turn pile. • Evaluate type of bulking agent used. Add bulking agent. • Maintain one foot of bulking agent near outside of bin. Turn pile. • Cover carcasses with one foot of bulking agent. • Follow steps in temperature section.
Flies	• Inadequate cover over carcasses • Poor sanitation conditions • Failure to achieve proper temperature • Too wet	• Cover carcasses with one foot of bulking agent. • Avoid leaching from pile. Maintain a clean, debris free area near the pile. • Follow steps in temperature section. • Open/remove pile contents and add additional bulking agent.
Scavenging Animals	• Inadequate cover over carcasses	• Maintain one foot of cover. Avoid initial entry by establishing a fence or barrier.

Use of Compost on the Farm

Once the compost is finished, it may be used for some of the bulking agent in a new composting pile. A rule of thumb is 50 percent, but you may want to use more or less depending on how degraded the bulking agent is in the finished compost. Using finished compost in new compost piles reduces the amount of bulking agent you need in the new pile and provides microbial inoculant.

Compost may also be applied to your fields. This should be considered part of your current manure management plan.

Since there are no state rules or regulations that specifically address land application of mortality compost, you should use the application requirements for manure as guidelines. Compost nutrient estimates are 15 lb of N, 5 lb of P_2O_5 and 10 lb of K_2O per ton of compost. Nutrients would be higher if manure or turkey litter were used in the compost. In order to determine the proper application rates for your compost, you will need to determine its nutrient content and availability. Most soil and manure testing labs will do this.

Regulations

Minnesota Board of Animal Health Rules

Composting structure

- built on an impervious weight-bearing pad that is large enough to allow the equipment to maneuver. An 8-foot apron to support the front wheels of the loader is the minimum recommended though concrete to support the entire loader is recommended.
- covered with a roof or other water-repelling materials to prevent excessive moisture on the composting material. The roof overhang should minimize rain blowing into the bins.
- built of rot resistant material that is strong enough to withstand the force exerted by the equipment. Possible construction materials for the bins include preservative pressure-treated lumber and concrete. To avoid corrosion, ventilation is needed and hot-dipped galvanized nails should be used.
- large enough to handle each day's normal mortality through a minimum of two heat cycles to the endpoint of composting.
- sited with consideration to prevailing winds and public view.

Compost Pile

- C:N ratio between 15:1 and 35:1.
- 12" base of bulking material.
- carcasses six inches from edges.
- reach a minimum of 130° F.
- carcasses covered and sealed with litter as they are added to pile.
- flies, rodents, and vermin controlled so as not to be a health hazard to human or animal populations.
- temperature taken and recorded daily.
- minimum of two heat cycles.

Livestock

- permit required for composting cattle.
- no composting of any animals that died from anthrax or toxic materials.

- animal mortality processed daily.
- carcasses transported over public roads only in vehicles or containers that are leak proof and covered.

Finished Compost
- minimum of two heat cycles have reached 130°F.
- finished product must not contain visible pieces of soft tissue.
- finished product must be handled and stored according to Minnesota Pollution Control Agency and Department of Agriculture regulations.

Protocol
The owner of the compost facility should have a written protocol for the operation containing at least the minimum steps outlined above in the composting process and should instruct and be responsible for all employees to follow the protocol.

Inspection
Representatives of the Board may inspect a composting facility and may review the operation protocol at any reasonable time.

Penalties
Construction or operation of a compost facility in violation of the rules results in penalties pertaining to improper disposal of dead animals as well as possible charges for violations of the rules of other state or local agencies.

Local Rules and Regulations

In addition to state regulations, most counties will require a building permit to construct or modify an existing building for composting. Before construction, contact your local zoning office to obtain the necessary permits. Local governments may have ordinances that are stricter than state regulations, or they may not have ordinances that cover animal mortality composting. In this case, local feedlot rules governing animal waste are generally used as guidelines for building the composting structure. Special or conditional use permits may be needed on a local level for composting. County feedlot ordinances may have carcass disposal requirements as part of the feedlot permit.

Further Resources

Publications and Web Sites

Animal Disposal Web Page.
Minnesota Department of Agriculture.
Web: mda.state.mn.us/DOCS/AGDEV/composting/composting

Composting Animal Mortality Resource Notebook.
Lynn Carpenter-Boggs, editor. 1999. Miscellaneous publication number 100-1999. Minnesota Agricultural Experiment Station. St. Paul, MN. Available from the West Central Research and Outreach Center, State Highway 329, Box 471, Morris, MN 56267-0471. (320)589-1711. Fax: (320)589-4870.
Web: wces.agri.umn.edu/

Composting Web Page.
Minnesota Board of Animal Health
Web: bah.state.mn.us/composting.htm

Dis-Solving Swine Mortality Problems.
2001. Iowa State University. Available from ISU, Department of Agricultural and Biosystems Engineering, Ames, IA 50011.
Web: ae.iastate.edu/pigsgone

Guidelines: Land Application of Manure for Water Quality Protection.
1996. Minnesota Pollution Control Agency (MPCA). Available from MPCA-Nonpoint Source Compliance Section, 520 Lafayette Road N, St. Paul, MN 55155-4194. (651)296-6300.

Manure Management Planning Guide for Livestock Operators.
2001. Available from the Minnesota Dept. of Agriculture, Ag Development Division, 90 W. Plato Blvd., St. Paul, MN 55107. (651)296-3820. Fax: (651)297-7678.
Web: mda.state.mn.us/AgDev/

Minnesota Board of Animal Health Rules.
Available from the Minnesota Board of Animal Health, 90 West Plato Blvd., St. Paul, MN 55107. (651)296-2942. Fax: (651)296-7417.
Web: revisor.leg.state.mn.us/arule/1719/4000.html

On-Farm Composting Handbook.
Robert Rynk, editor. 1992. NRAES-54. Available from the Natural Resource, Agriculture, and Engineering Service, Cooperative Extension, 152 Riley-Robb Hall, Ithaca, NY 14853-5701. (607)255-7654. Fax: (607)254-8770. E-mail: NRAES@cornell.edu.
Web: nraes.org/publications/nraes54.html

Swine Composting Facility Design.
1997. Ohio State University. Factsheet AEX-713-97. Available from OSU Department of Food, Agricultural and Biological Engineering, 590 Woody Hayes Dr., Columbus, OH 43210.
Web: ohioline.ag.ohio-state.edu/aex-fact/0713.html

Swine Mortality Composting Module.
Kellie McGuire, editor. NPPC-04329 Available from the National Pork Producers Council, 1776 NW 114th Street, Clive, IA 50306.
(515)223-2600.
Fax: (515)223-2646.
Web: nppc.org/catalog/eap.html

Minnesota State Agencies and Other Key Organizations

Animal Mortality Composting Demonstration Sites.
For farmer demonstration sites, contact the Minnesota Department of Agriculture, Agricultural Development Division, 90 W. Plato Blvd., St. Paul, MN 55107. (651)296-7673.

Board of Animal Health.
119 Agriculture Building, 90 West Plato Blvd., St. Paul, MN 55107.
(651)296-2942. Fax: (651)296-7417.
Web: bah.state.mn.us/

Department of Biosystems and Agricultural Engineering.
University of Minnesota Extension Service. Room 213 Agricultural Engineering Building, 1390 Eckles Avenue., St. Paul, MN 55108.
(612)625-7733 Fax: (612)624-3005.
Web: bae.umn.edu/

Minnesota Department of Agriculture, Ag Development Division.
90 West Plato Blvd., St. Paul, MN 55107.
(651)296-7686. Fax: (651)297-7678.
Web: mda.state.mn.us/AgDev/

Minnesota Department of Agriculture, Energy and Sustainable Agriculture Program.
90 West Plato Blvd., St. Paul, MN 55107.
(651)296-7673. Fax: (651)297-7678.
Web: mda.state.mn.us/esap/

Minnesota Pollution Control Agency, Regional Offices.
To find the regional office closest to you, contact the MPCA at 520 Lafayette Road, St. Paul, MN 55155. (651)296-7327.
Web: pca.state.mn.us/about/regions/index

University of Minnesota North Central Research and Outreach Center.
A composting demonstration site using swine and cattle. 1861 Highway 169 East, Grand Rapids, MN 55744.
(218)327-4490. Fax: (218)327-4126.

University of Minnesota Southern Research and Outreach Center.
A composting demonstration site using swine, cattle, and sheep. 35838-120th Street, Waseca, MN 56093.
(507)835-3620. Fax: (507)835-3622.

University of Minnesota West Central Research and Outreach Center.
A composting demonstration site using swine and cattle. Headquarters Building, Morris, MN 56267-0471.
(320)589-1711. Fax: (320)589-4870.

Thermometer Suppliers

Suggested: a bimetal composting thermometer with a 20-36 inch, heavy duty 3/8 inch diameter stem, with a back connected, three inch dial with a temperature scale of 0 to 200° F. Cost varies from $11 to $90.

Nasco Farm & Ranch.
901 Janesville Ave., P. O. Box 901, Fort Atkinson, WI 53538.
(800)558-9595. Web: nascofa.com/prod/Home. *Product number C14312N, baled hay and compost thermometer, 20 inch stem for about $11.50.

Reotemp Instruments Corp.
10656 Roselle St., San Diego, CA 92121.
(800)648-7737.
Web: reotemp.com

Tel-Tru Manufacturing Co.
P. O. Box 144, Rochester, NY 14601. (800)232-5335.
Web: teltru.com

Trend Instruments, Inc.
1000 Wiegand Blvd., Lawrenceville, GA 30043. (888)WIKA-USA.
Web: wika.com

Weksler Instruments.
250 E. Main St., Stratford, CT 06614-5145. (800)788-5080.
Web: dresserinstruments.com/weksprodpage.html

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Carpenter-Boggs, Lynn, editor. 1999. Composting Animal Mortality Resource Notebook. Miscellaneous Publication Number 100-1999. Minnesota Agricultural Experiment Station. St. Paul, MN.

Carter, Thomas A., et al. 1996. Composting Poultry Mortality. Publication Number PS&T-47. North Carolina Cooperative Extension Service. Raleigh, NC.

Collins, Eldridge R., Jr. 1996. Composting Dead Poultry. Publication Number 442-037. Virginia Cooperative Extension. Blacksburg, VA.

Fulhage, Charles. 1996 (Reprint). Composting Dead Swine. Publication WQ351.University of Missouri Extension Service. Columbia, MO.

Glanville, Thomas D. 2001. Dis-Solving Swine Mortality Problems. Iowa State University, Ames, IA. ae.iastate.edu/pigsgone/

Glanville, Thomas D., and Darrell W. Trampel. 1997. Composting Alternative for Animal Carcass Disposal. Journal of the American Veterinary Medical Association. Vol. 210, pages 1116-1120.

Langston, John, Karl VanDevender, and Jack C. Boles, Jr. Undated. Disposal of Poultry Carcasses in Arkansas. Cooperative Extension Service, University of Arkansas. Little Rock, AR.

McGuire, Kellie, editor. Undated. Swine Mortality Composting Module. National Pork Producers Council. Clive, IA.

Mescher, Terry, et al. 1997. Swine Composting Facility Design. Publication AEX-713-97. Ohio State University Extension. Columbus, OH.

Minnesota Board of Animal Health Rules.
Chapter 1719.0100 - 1719.4600.

Walker, Roger, and Bill Crawford. 1997. Composting Swine Mortality in Minnesota. Presented at 1997 University of Minnesota Pork Conference. University of Minnesota. St. Paul, MN.

Notes

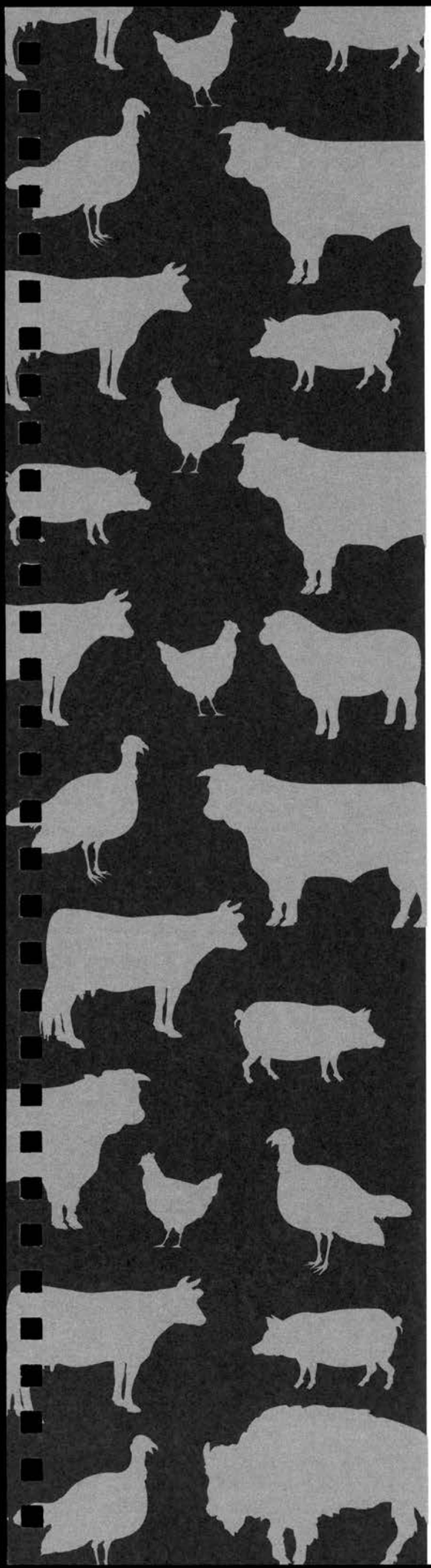
The management of animal mortalities is an important aspect of livestock farming since even the best livestock farmers lose some of their animals each year. Rendering, burial, and incineration have been the typical carcass disposal methods. However, these options are becoming less practical for many farmers because of decreasing availability and higher costs of rendering, biosecurity concerns, and potential adverse effects on groundwater and air quality. For these reasons, composting is becoming more widely used as a method of mortality disposal. A properly managed mortality composting system is low cost, environmentally sound, biosecure, and virtually odor free.

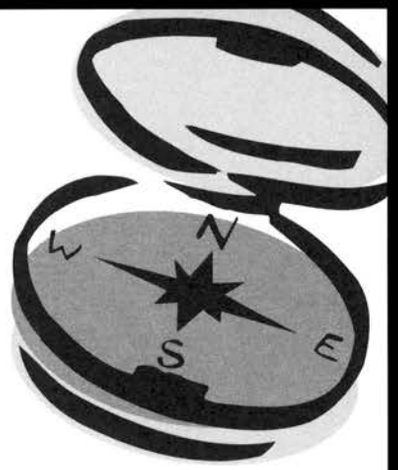
While there is much in favor of composting, you must decide whether or not it fits into your operation. Minnesota Board of Animal Health regulations allow composting of poultry, swine, sheep, and goats without a permit, and cattle can legally be composted if a permit is obtained. Like any other farm operation, successful composting requires a commitment to managing it well.

This publication describes mortality composting, answers commonly asked questions, outlines what is needed to compost on your farm, explains how to compost step-by-step, and outlines applicable regulations. It also contains resources for more information.

Minnesota Department of Agriculture
Agricultural Development Division
90 West Plato Blvd., Saint Paul, MN 55107

www.mda.state.us





The Minnesota Livestock Producer's

Guide to Feedlot Rules

Overview of the Feedlot Rules,
Minnesota Rules, Chapter 7020
and Environmental Review Rules,
Minnesota Rules, Chapter 4410

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The Minnesota Livestock Producer's Guide to Feedlot Rules

Overview of the Feedlot Rules, Minnesota Rules, Chapter 7020
and Environmental Review Rules, Minnesota Rules, Chapter 4410

The Minnesota Livestock Producer's Guide to Feedlot Rules was prepared by Earth Tech, Inc., Minneapolis, Minnesota, under contract with the Minnesota Department of Agriculture. Significant contributions were made by staff of the Agricultural Development Division of the Minnesota Department of Agriculture, with technical assistance from the Feedlot Unit of the Minnesota Pollution Control Agency. Additional input was provided by Minnesota livestock producers.

This guide is intended to help livestock producers better understand environmental regulations that could impact their operations– the Feedlot Rules and Environmental Review Rules. It is not intended to substitute for the Rules, nor address every section or provision of them. The guide does not alter the Rules or change their meaning. If any inconsistencies arise between this guide and the Rules, the Rules will prevail. Please refer to the Minnesota Department of Agriculture website at *www.mda.state.mn.us/feedlots/default.htm* or the Minnesota Pollution Control Agency website at *www.pca.state.mn.us/hot/feedlots.html* for any updates or corrections, or call the Minnesota Department of Agriculture at 1-800-967-2474.

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Regulations that apply to feedlots:

- *Township Regulations*
- *County Regulations*
- *Feedlot Rules, Minnesota Rules, Chapter 7020*
- *Environmental Review Rules, Minnesota Rules, Chapter 4410*
- *Federal Regulations 40 CFR 122*
- *Federal Regulations 40 CFR 123*

Introduction

If you raise livestock in Minnesota, there are a variety of federal, state, and local environmental regulations that may apply to you. Which regulations apply to you depends on:

- whether your operation meets the definition of a feedlot;
- the number of animals in the operation (measured in "animal units"– see definition on page 5);
- the location of buildings, structures, and lots in relation to water bodies or environmentally sensitive features in the landscape;
- whether the facility has the potential to affect the environment because of the way it is designed, built, or managed; and
- if you are planning to make any changes in your animal facilities.

Recently, changes have been made to Minnesota's environmental regulations for feedlots, most notably, the Feedlot Rules (Minn. Rules, Part 7020).

The purpose of this guide is to provide you with information on how these new requirements apply to you and where to look for additional information, beginning with basic information that applies to all livestock producers, followed by more specific information that applies to fewer producers. This document will help you answer the following questions:

- Do I have a feedlot?
- What requirements apply to me even if I don't need to register or obtain a permit?
- Do I need to register?
- Do I need to apply for a permit and if so, what type of permit do I need to apply for, and when?
- When do I need a manure management plan, who needs to be licensed to apply manure, and when do I need to keep records?
- Do I have a "confined animal feeding operation" (CAFO– see definition on page 14 and in Glossary)?
- Will an "environmental assessment worksheet" be required for my feedlot (see discussion of environmental review and environmental assessment worksheets on page 15)?

Some Quick Definitions

Registration: Owners of certain feedlots are required to provide general information to the Minnesota Pollution Control Agency or "delegated county" about their livestock operation or manure storage area. See page 5 for more information.

Permits: There are five types of feedlot permits: interim, construction short-form, State Disposal System, general National Pollution Discharge Elimination System (NPDES), and individual NPDES. Permits are required for a relatively small number of livestock facilities. See page 9 for more information.

CAFO: Any feedlot with a capacity of 1,000 animal units or more or as designated by the MPCA on a case-by-case basis based on site conditions. An NPDES permit is for the construction and/or operation of a CAFO. See page 14 for more information.

Environmental assessment worksheet (EAW): A document used in "environmental review". "Environmental review" refers to examination of the environmental effects of projects, conducted under the Minnesota Environmental Review Program (Minnesota Rules, Chapter 4410). Environmental review applies to a relatively small number of feedlots. See page 15 for more information.

Refer to the glossary for other unfamiliar terms.

- What contacts and documents will help guide me through the permitting and environmental review process?

This guide gives you the basic information that you need to know about feedlot regulations, permitting, and the environmental review process. A number of other documents and resources have also been developed to help you with more specific questions that you may have about feedlot regulation in Minnesota. Descriptions of these documents may be found at the end of this guide, in the section, "Where can I get more information?"

The majority of existing livestock operations in Minnesota will not have to make changes to their feedlots, manure handling, or manure storage facilities as a result of the recent changes to Minnesota's environmental regulations. And, although there are technical standards in the revised Feedlot Rules that apply to all feedlot owners, there are many exemptions to the registration and permitting process.

For example:

- Operations defined as pastures are generally not considered feedlots and are exempt from the Feedlot Rules (however, pastures must not pollute water. See "Is my operation considered a feedlot or pasture?" below).
- Many facilities are exempt from the registration process, including:
  - small livestock facilities of less than 50 animal units not located in a shoreland area (50 animal units is equivalent to 36 large cows, 125 mature swine, or 2,778 mature turkeys); and
  - livestock facilities of less than ten animal units when in a shoreland area.

Permits are required for a relatively small number of livestock facilities in Minnesota. These permits range from an "interim permit" to an individual National Pollution Discharge Elimination System (NPDES) permit, which generally applies to facilities with 1000 animal units or more (see descriptions of permits on page 9). NPDES permits are federal permits, under the authority of the United States Environmental Protection Agency (USEPA) that have been delegated to the Minnesota Pollution Control Agency (MPCA) to administer. Additionally, an environmental assessment worksheet, under the Minnesota Environmental Policy Act, will be required for very few facilities that are proposing construction or expansion.

The following sections should answer frequently asked questions about Minnesota's revised Feedlot Rules and Environmental Review Rules.

Is my operation considered a feedlot or a pasture? (Minn. Rules, Part 7020.0300)

If your current or future operation consists solely of pastures, you are exempt from the Feedlot Rules (Minnesota Rules, Chapter 7020). This includes site restrictions, registration, permitting, manure management requirements, and restrictions from access to waters of the state (see sidebar). However, pastures must operate in a manner that does not result in water pollution, and state water quality standards still apply. Local ordinances may impose additional restrictions.

If only a portion of your operation is considered a feedlot, only that portion of the operation is regulated under the Feedlot Rules. This includes location restrictions, registration, permitting, manure management requirements, and restrictions from access to waters of the state. Additional fact sheets and information are available from the MPCA online at *www.pca.state.mn.us/hot/feedlots.html* or by contacting your "responsible governmental unit" (RGU–see definition on page 4), or your local University of Minnesota Extension educator. According to the Rules, the definitions of feedlots and pastures are as follows:

Animal Feedlot: a lot or building or combination of lots and buildings intended for the confined feeding, breeding, raising, or holding of animals and specifically designed as a confinement area in which manure may accumulate, or where the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure. Open lots used for the feeding and rearing of poultry (poultry ranges) shall be considered animal feedlots.

Pasture: areas where grass or other growing plants are used for grazing and where the concentration of animals is such that a vegetative cover is maintained during the growing season except in the immediate vicinity of temporary supplemental feeding or watering devices. Those areas of supplemental feeding or watering devices within a pasture do not constitute a feedlot.

In a pasture, small areas that border watering devices that do not support vegetation are not considered feedlots. However, confined winter shelter areas are considered feedlots where manure accumulates and stocking densities prevent reestablishment of grasses or forage vegetation during the growing season.

Exemptions from registration:

- *pastures, livestock facilities with less than 50 animal units not located in shoreland*
- *livestock facilities with less than ten animal units located within shoreland*

Access to Water

Animals from CAFOs and feedlots that are over 1,000 AUs are prohibited from entering waters of the state, including lakes and streams. Animals on all feedlots, regardless of size, are restricted from entering any general development (GDS), recreational development (RDS), and natural environment (NES) lake. Access to streams is not restricted for facilities under 1000 AUs. Livestock access to waters is allowed for pasturing operations with less than 1000 animal units, unless that portion of the facility is found to have conditions consistent with the definition of a feedlot. However, all livestock operations must operate in a manner that does not result in water pollution, and state water quality standards still apply.

All feedlots must comply with technical requirements regardless of other exceptions and exemptions.

What technical requirements affect all feedlots? (Minn. Rules, Parts 7020.2000 through 7020.2225)

The Feedlot Rules (Minn. Rules, Chapter 7020) contain specific technical requirements that apply to all owners of feedlots and all persons involved in handling of manure—not just those required to register or obtain a permit. A feedlot or operation where manure is handled that does not meet technical requirements may be required to make improvements (see section, "What if I need to make improvements to my feedlot in order to comply with the Feedlot Rules?" on page 8). These technical requirements apply to:

- general operation and management practices;
- feedlot and manure storage area closure;
- liquid manure storage areas;
- poultry barn floors;
- manure stockpiles;
- manure composting; and
- application of manure on crop or pasture land.

Requirements include:
- location and size restrictions;
- construction specifications;
- reporting requirements; and
- operation and management specifications.

Specific information regarding the technical requirements of Minn. Rules, Parts 7020.2000 through 7020.2225 is available online at *www.pca.state.mn.us/hot/feedlots.html*, or by contacting your RGU.

Contacts for Determining Your "RGU"

• Online list of delegated counties at www.pca.state.mn.us/hot/fl-countyoff.html

• MPCA Feedlot Helpline: 1-877-333-3508

• Your county planning and zoning, environmental services, or soil and water conservation district office.

Many counties and townships have more restrictive local requirements. You should contact your local planning and zoning or environmental services office for information about local requirements.
Some soil and water conservation district offices may also be able to provide you with information on local requirements.

Who is in charge of feedlot regulation, permitting, and environmental review? (Minn. Rules, Part 7020.1600)

The MPCA, and county governments that are involved with feedlot registration, permitting, and environmental review, are referred to as "responsible governmental units" (RGUs) in this guide. Your RGU, whether the MPCA or a county that has been delegated permitting authority by the MPCA, will be your resource, and available to answer questions on the Feedlot Rules and Environmental Review Rules.

In addition to Minnesota's Feedlot Rules and Environmental Review Rules, many counties and townships have more restrictive local requirements, and other permits may be required, such as conditional use permits or building permits. You should contact your local planning and zoning or environmental services office for information about local requirements.

If your existing or proposed facility is less than 1000 animal units, and is located in a county that participates in the MPCA's Delegated County Program, the county is the RGU. You can find a list of counties

delegated by the MPCA to administer the feedlot program, and contact information for the respective County Feedlot Officers (CFO), online at *www.pca.state.mn.us/hot/fl-countyoff.html*. You can also obtain this information from the MPCA Feedlot Helpline at 1-877-333-3508, or by calling your county planning and zoning, environmental services, or soil and water conservation district office.

If your existing or proposed facility is not located in a delegated county, contact the MPCA Feedlot Helpline at 1-877-333-3508 to determine the individual at the MPCA who will be responsible for the registration, environmental review, and permitting of your facility.

If your facility is a CAFO (see definition on page 12 and in Glossary), or has 1,000 animal units or more, your RGU is the MPCA, even if your county is in the Delegated County Program.

Your RGU will help you determine what actions are necessary prior to constructing, expanding, or modifying your facility. Contacting your RGU as soon as possible will allow adequate time for the permitting and environmental review processes.

Animal unit (AU)
A standard of measurement of the quantity of manure produced, based on size and manure production, used in the permitting, registration, and environmental review process. One animal unit is generally equivalent to a 1,000 pound animal. Also see definition in Glossary.

How many animal units does my operation have? (Minn. Rules, Part 7020.0300)

The term "animal unit" (AU) refers to a standard of measurement used in the permitting, registration, and environmental review process. It allows equal standards for all animals based on size and manure production. An AU is calculated by multiplying the number of animals by an animal unit factor for the specific type of animal. When more than one type of animal is planned for a feedlot, the number of AUs is the sum of the AUs for each type of animal. Use the worksheet on page 6 to calculate the number of animal units your operation holds.

Do I need to register my facility and how do I register? (Minn. Rules, Part 7020.0350)

Registration is a simple process that eliminates the need for permits for the majority of facilities in Minnesota. The registration program was created to:

- identify location, size, and ownership of feedlots subject to the Rules;
- help identify those operations where pollution problems may be most likely; and
- provide the state with accurate information to help determine what financial impact complying with the Rules will have upon producers.

You are required to register your facility with your RGU by January 1, 2002 if:

- you have 50 or more animal units; or
- you have 10 or more animal units and your feedlot is within

Animal Unit Calculation Worksheet

Instructions:

1. Determine the total number of animals by type (column 1) and record that number in column 2.
2. Multiply the number in column 2 by the "animal unit factor" in column 3 to give the number of animal units by animal type. Record this number in column 4.
3. Add all the numbers from column 4 to get the total number of animal units for your facility.
4. Federal "animal unit factors" apply to CAFOs. More information is available online at www.epa.gov/npdes/afo/ or by contacting your RGU.

1. Animal Type	2. Number of Animals	3. MN Animal Unit Factor	4. Number of Animal Units
A. Dairy Cattle			
1. Mature cow over 1,000 pounds		1.4	
2. Mature cow under 1,000 pounds		1.0	
3. Heifer		0.7	
4. Calf		0.2	
B. Beef Cattle			
1. Slaughter steer or stock cow		1.0	
2. Feeder cattle or heifer		0.7	
3. Cow and calf pair		1.2	
4. Calf		0.2	
C. Swine			
1. Over 300 pounds		0.4	
2. Between 55 and 300 pounds		0.3	
3. Under 55 pounds		0.05	
D. Horse		1.0	
E. Sheep and lambs		0.1	
F. Chickens			
1. Laying hen or broiler (if you have a liquid manure system)		0.033	
2. Chicken over 5 pounds (dry manure system)		0.005	
3. Chicken under 5 pounds (dry manure system)		0.003	
G. Turkeys			
1. Over 5 pounds		0.018	
2. Under 5 pounds		0.005	
H. Ducks		0.01	
I. Animal not listed in item A to H		*Average weight of the animal in pounds divided by 1,000 pounds*	
Total Number of Animal Units (Add up all the numbers in column 4)			**Animal Units =**

a shoreland (less than 300 feet from a river or stream, or 1,000 feet from a lake, pond, or flowage).

If you are an owner of a feedlot under 300 animal units, registration by January 1, 2002 is a prerequisite to applying for "open lot certification." Open lot certification can provide you with additional time to meet certain requirements, and a waiver from civil penalties for certain past violations (see section, "What is 'open lot certification'?" on page 11).

Registration information includes:

- name and address of all owners;
- location of facility by county, township, range, section, and quarter section;
- permit or certificate number (if one has been issued);
- types of animal holding and manure storage areas and the distance of these areas to the nearest well;
- maximum number and types of animals the facility can accommodate;
- identification of surface waters within 1,000 feet of the facility; and
- name of the person who completes the form and the date completed.

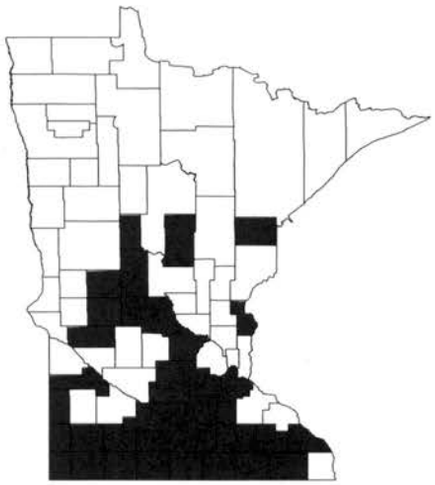
How to Register

The first step to registration is to determine whether the county in which your feedlot is located has conducted a feedlot inventory. Many county feedlot inventories contain information that fulfills initial feedlot registration requirements. The map to the right highlights counties that have conducted a feedlot inventory as of the date of this publication. However, additional counties are conducting inventories that may be completed in time for registration. Check with your county planning and zoning or environmental services office.

- If your feedlot is located in a county that has conducted an inventory, your feedlot is most likely registered, and you should receive a notification within the next several months confirming your registration. If you have not received a registration confirmation notice by October 31, 2001, you should contact your RGU to determine your registration status.
- If your feedlot is not located in a county that has conducted a feedlot inventory that has resulted in registration, you must obtain, complete, and submit a registration form to the RGU by January 1, 2002. You may obtain a registration form online at *www.pca.state.mn.us/hot/feedlots.html*, by contacting your RGU, or by contacting the MPCA toll free at 1-877-333-3508.
- A feedlot owner that has applied for a feedlot permit after October 23, 2000 does not need to register.
- Feedlot owners located on county fairgrounds and pasture-only operations are not required to register.

Registration information will be updated once every four years after

Feedlot Inventories That Fulfill Registration Requirements



You will receive notification that your feedlot has been registered if your feedlot is listed on a feedlot inventory that fulfills registration requirements and that has been submitted to the MPCA. If you have not received notification by October 31, 2001, check with your RGU.

Registration forms and additional information are available online at www.pca.state.mn.us/hot/feedlots.html (access to the internet may be available at your local library), or by contacting the MPCA Feedlot Helpline at 1-877-333-3508.

January 1, 2002. At that time, your RGU will notify you at least 90 days before your registration update is due. After you submit your updated information, your RGU will acknowledge receipt of your information.

What if I need to make improvements to my feedlot in order to comply with the Feedlot Rules?

You may need to make changes to your feedlot if a pollution hazard exists. According to Minnesota Rules, Part 7020.0300, a "pollution hazard" means an animal feedlot or manure storage area that:

- does not comply with technical the requirements of Minn. Rules, Parts 7020.2000 through 7020.2225 and has not been issued the appropriate permit; or
- presents a potential or immediate source of pollution to waters of the state as determined by inspection by a county feedlot officer or an MPCA staff member.

Pollution hazards may result from many different types of practices, including:

- discharge from an open lot;
- discharge of milkhouse waste, silage leachate, or other process wastewaters;
- releases of manure or manure contaminated runoff from manure storage areas;
- facilities or practices that do not meet the technical requirements of Minn. Rules, Parts 7020.2000 through 7020.2225, including:
  - manure storage areas that do not meet the specific requirements in Minn. Rules, Part 7020.2100;
  - unpermitted or noncertified manure storage areas that fail to meet the requirements in Minn. Rules, Part 7020.2110 by the specified dates;
  - manure stockpiling practices that do not meet the requirements in Minn. Rules, Part 7020.2125; and
  - land application of manure practices that fail to meet the nutrient rates standards, setbacks from waters and other requirements in Minn. Rules, Part 7020.2225.

If you think a pollution hazard may exist, you should contact your RGU immediately to determine what steps need to be taken.

If your RGU determines that a pollution hazard exists, you will be notified and, if required to apply for an interim permit (see discussion of permits in next section), given at least 15 calendar days to submit an application. Interim permits are valid for up to two years, during which the pollution hazard must be corrected. If the pollution hazard is not corrected during the interim permit timeline, a state disposal system (SDS) permit is required, or enforcement action may be considered. After the pollution hazard has been corrected, no other permits are needed until a modification or expansion is proposed, except that local permits may be required.

A "pollution hazard" is:

• a feedlot or manure storage area that does not comply with Minnesota Rules, Parts 7020.2000 to 7020.2225, and has not been issued a SDS or NPDES permit establishing an alternative construction or operating method; or

• presents a potential or immediate source of pollution to waters of the state based on size, amount of pollutants, location, means of runoff, and other factors.

A "discharge" is:

the addition of a pollutant to waters of the state, including a release of animal manure, manure- contaminated runoff or process wastewater. See the complete definition in the Glossary.

What types of permits are applicable to feedlots and manure storage areas? (Minn. Rules, Part 7020.0405)

There are five different permits administered by the State that can be issued for a feedlot or manure storage area:

Interim: For facilities that have been determined by the RGU to be a pollution hazard, or facilities with more than 300 animal units planning to apply manure on any one of the following:

- extremely high phosphorus soils;
- soils within 300 feet of waters and with slopes exceeding 6%,; or
- in a drinking water supply management area where the aquifer is vulnerable.

Construction Short-Form: For facilities constructing or expanding that do not pose a pollution hazard with 300 to 999 animal units. Your county feedlot officer or MPCA field staff will notify you if your feedlot is a pollution hazard.

State Disposal System (SDS): For facilities proposing to use new or different technologies, facilities where pollution hazards exist that were not fixed under an interim permit timeframe, and feedlots with 1,000 or more animal units that are not CAFOs.

General National Pollutant Discharge Elimination System (NPDES): For the construction and/or operation of a CAFO.

Individual NPDES: For CAFOs where the owners have agreed to permit conditions not covered by general permit conditions, and certain other CAFOs with past rule violations or pollution hazards, or that have been determined to require individual public noticing.

The table on page 10 lists the permit types and when they are required based on animal units. The table also outlines when an environmental assessment worksheet is required. The environmental review process will be discussed in more detail in later sections. Check with your local planning and zoning office to see if your county or township requires additional permits. If applicable, a permit will not be issued until the environmental review process is complete. Construction activities cannot begin until all of the appropriate permits are issued. Application forms are available online at *www.pca.state.mn.us/hot/feedlot.html* or by contacting your RGU.

Summary of Registration, and Environmental Review Process

	Registration	*Recordkeeping*	*Manure Management Plans*	*Construction Short-Form Permit*	*Interim Permit*	*State Disposal System (SDS) Permit*	*General NPDES Permit*	*Individual NPDES Permit*	*Environmental Assessment Worksheet*
Pasture or grazing with no building or open lots	NR	NR	NR	NR	NR	NR		NR	NR
Less than 10	NR	○[1]	NR	NR	○[2]	○[3]	○[4]	○[5]	NR
10 to 50	○[6]	○[1]	NR	NR	○[2]	○[3]	○[4]		NR
50 to 299	●	○[7]	○[8]	NR	○[2]	○[3]	○[4]	○[5]	○[9]
300 to 999									
• Existing	●	●[10]	●[8, 11]	NR	●[12]	○[3]	○[4]	○[5]	○[9]
• Expansion or New Construction	●	●[10]	●[8, 11]	●[5]	●[12]	○[3]	○[4]	○[5]	○[9, 14]
1,000 or more	●	●[10]	●[8]		NR	●[15]	●[16]	●[17]	●

Key: NR = Not required. ○ = May be required. See notes. ● = Required. See notes.

Notes:

1. *Recordkeeping is required for poultry barn floors, stockpiles, and manure composting.*
2. *An interim permit is not required unless a pollution hazard has been determined.*
3. *An SDS permit is required when owners of facilities are unable to fix a problem under an interim permit timeframe, or where new technology, construction, or operational methods are being used.*
4. *A general NPDES permit is not required unless the facility is a CAFO and meets criteria for general NPDES permit.*
5. *An individual NPDES permit is not required unless the facility is a CAFO and does not meet the criteria for general NPDES permit.*
6. *Registration is required only if the feedlot is located in a shoreland area.*
7. *In addition to poultry barn floors, stockpiles, and manure composting, recordkeeping is required for land application of manure or wastewater for feedlots of 100 animal units or greater.*
8. *A manure management plan is required if your feedlot has a capacity of 100 animal units or more upon completion of NPDES, SDS, interim, or construction short form permit.*
9. *An environmental assessment worksheet is required only when a governmental action, such as a local, state, or federal permit, is involved. An EAW is not required for existing feedlots unless there is modification proposed that requires governmental approval. An EAW is not required for feedlots under 1,000 animal units, or feedlots in a sensitive area of 500 animal units or less, unless through citizen petition or required at the discretion of the responsible governmental unit.*
10. *Detailed recordkeeping is required for land application of manure/wastewater for facilities of 300 animal units or greater, or 100 animal units or greater if the feedlot is located in a sensitive area. See the definition of "sensitive area" in glossary.*
11. *A manure management plan is required to be completed by Jan. 1, 2005 for feedlots of 300 animal units to 1000 animal units that do not need a NPDES, SDS, interim, or construction short form permit, unless manure is applied by a certified commercial or private applicator.*
12. *An interim permit is required if a pollution hazard exists, or if the manure or process wastewater of 300 or more animal units is to be applied:*
    (a) on land where the soil phosphorus test levels exceed the levels in Minn. Rules, Part 7020.2225, subpart 3, item C;
    (b) on land in special protection areas with slopes exceeding six percent; or
    (c) in a drinking water supply management area where the aquifer is designated vulnerable under Minn. Rules, Chapter 4720;
13. *If pollution hazard exists, an interim permit is required.*
14. *An EAW is not required unless more than 500 animal units in sensitive area. See definition for "sensitive area" in Glossary.*
15. *An SDS permit is required if the feedlot is not a CAFO.*
16. *A general NPDES permit is required if the facility is a CAFO and meets criteria for general NPDES permit.*
17. *An individual NPDES permit is required if the facility is a CAFO and does not meet the criteria for general NPDES permit.*

Who is exempt from State-administered permitting? (Minn. Rules, Part 7020.0405)

If your feedlot falls into one of the following categories, you do not need to obtain a state permit:

- feedlots located on county fairgrounds;
- your feedlot is "open lot certified" as described below;
- if there has been a change of ownership of the feedlot and no modifications have been made (however, you must notify your RGU of the change in ownership. Forms are available online at *www.pca.state.mn.us/hot/feedlots.html* or by contacting your RGU); or
- if you have a short-term manure stockpile or manure compost site using manure from other feedlots.

What is "Open Lot Certification"? (Minn. Rules, Part 7020.2003)

If you are a feedlot owner with less than 300 animal units and have an open lot that does not meet runoff discharge standards for feedlots (see sidebar), you have two options:

Option 1:
- apply for and obtain an interim permit and fix the problems within 24 months; or

Option 2:
- sign an agreement at the time of registration (or no later than October 1, 2005) to complete corrective measures under the 2005/2010 Open Lot Agreement. "Open lot certification" provides you additional time to correct problems on an open lot to meet runoff discharge standards. However, your open lot must meet certain eligibility requirements, including registration of the feedlot by January 1, 2002.

If you select the option of open lot certification, you must install interim measures by the year 2005 to reduce manure runoff (as specified in Minnesota Rules, Chapter 7020), and have until the year 2010 to install final measures needed to fully meet the runoff discharge standards for feedlots. If all conditions of the agreement are met, the MPCA will waive civil penalties for past violations of runoff discharge standards and failure to obtain a permit. Your facility is eligible for open lot certification if all the following conditions are satisfied:

- you have less than 300 animal units;
- your facility was operating before October 23, 2000;
- one or more open lots have manure-contaminated runoff discharging to waters of the state (see definition of "discharge" in Glossary);
- the facility is not designated a CAFO;
- the facility is registered by January 1, 2002; and

Runoff Discharge Standards

In general, feedlot facilities or manure storage areas discharging pollutants to surface waters must comply with water quality limitations given in Minn. Rules, Part 7050.0215; namely, five day biochemical oxygen demand (BOD_5) of the discharge must be less than 25 milligrams per liter (monthly arithmetic mean).

The Feedlot Rules (Minnesota Rules, Chapter 7020) are available online at www.revisor.leg.state.mn.us/hot/arule/7020/ or by contacting your RGU.

Manure Management Plan, Manure Applicator Licensing & Recordkeeping

• A person may not manage or apply animal waste for hire without a valid commercial animal waste technician license from the Minnesota Department of Agriculture (MDA).

• Feedlot facilities that are required to obtain a state or federal feedlot permit must have an updated manure management plan that meets the requirements of MPCA rules. If the feedlot facility is not required to obtain a state or federal feedlot permit, beginning January 1, 2005, manure from feedlots with a capacity of 300 animal units or more, must be applied according to one or more of the following options:
- by a MDA-licensed commercial waste technician;
- by a MDA-certified private manure applicator; or
- by a non-certified or non-licensed applicator using an updated manure management plan that meets the requirements of MPCA rules.

• Recordkeeping is required:
- for any person who applies or receives manure or process wastewater from a feedlot with a capacity of 100 or more animal units;
- when you test poultry barn floors as a permit requirement;
- for short-term and permanent stockpiling sites; or
- for analysis results of manure composting for which NPDES or SDS permits are required.

- you complete and sign the Open Lot Certification Form.

Certification forms and additional information are available by contacting your RGU, or online at *www.pca.state.mn.us/hot/feedlots.html*. Owners of certified open lots are required to minimize discharges by implementing corrective measures, such as regularly removing manure from open lots. Owners with open lot certification must also complete one of the following interim measures by October 1, 2005:

- install diversions that prevent precipitation and snowmelt from building roofs and upslope land from coming in contact with the feedlot or manure storage area; and plant vegetated buffer areas or filter strips of native perennial grasses or forages within 100 feet or more of nonchannelized flow for all runoff from the open lots; or
- install corrective and protective measures that have been designed to achieve a 50 percent or greater reduction in discharges of pollutants, as demonstrated by the model entitled "An Evaluation System to Rate Feedlot Pollution Potential" (FLEVAL). This must be completed by a person who has been trained to use the model. Additional information regarding FLEVAL is available by contacting your RGU, or online at *www.bwsr.state.mn.us/programs/minor/fleval/fleval.html*.

When do I need to prepare a manure management plan? (Minn. Rules, Part 7020.2225 Subp. 4)

Feedlot facility owners must prepare a manure management plan when:
- an interim, construction short-form, NPDES or SDS permit is submitted for a facility with 100 or more animal units; or
- manure from a feedlot capable of holding 300 or more animal units is applied after January 1, 2005, by someone other than a certified commercial animal-waste technician or certified private manure applicator.

You must keep a copy of the manure management plan on file at your facility. You must also review and update the plan yearly to address any changes. Any person receiving manure to apply on their land from a feedlot of 300 or more animal units must comply with the manure management plan and complete any portions of the plan that are specific to the land/crops where the manure is to be applied.

All feedlot facilities must meet the nutrient rate standards for land-applied manure and meet all applicable setbacks and management requirements when applying manure near waters and other sensitive features. The Feedlot Rules also provide other specific requirements based on the capacity of your feedlot (including manure and soil sampling, recordkeeping and development of a manure management plan).

Who needs to be licensed to apply manure?

A person may not manage or apply animal waste for hire without a valid commercial animal waste technician license from the Minnesota Department of Agriculture (MDA). In addition, after January 1, 2005, unless you are a licensed commercial waste technician, a person applying manure from a feedlot facility over 300 animal units must either have an updated manure management plan or be certified as a private manure applicator.

A license or certification from the MDA is required in the following situations:

- if you charge money to apply animal manure; or
- if you operate a business that manages the application of animal manure, any employee who supervises field work must have a license. A person who works for a licensed commercial animal waste technician does not need a license, provided he or she works under the supervision of his or her licensed employer.
- Beginning January 1, 2005, unless you are a commercial waste technician, only a certified private manure applicator may apply animal waste from a feedlot that:
  - has a capacity of 300 animal units or more; and
  - does not have an updated manure management plan that meets the requirements of MPCA rules.

Additional information on commercial manure applicator licensing or private manure applicator certification through the MDA is available online at *www.mda.state.mn.us/appd/cawt/default.htm*, or by contacting the MDA at 651-297-7175.

When do I need to keep records? (Minn. Rules, Part 7020.2225 Subp. 5)

Recordkeeping is required:

- for any person who applies or receives manure or process wastewater from a feedlot with a capacity of 100 or more animal units;
- when you test poultry barn floors as a permit requirement;
- for short-term and permanent stockpiling sites; or
- for analysis results of manure composting for which NPDES or SDS permits are required.

The Feedlot Rules list what records need to be kept and what information is needed for recordkeeping, based on the size of the feedlot and where the manure will be applied.

I know my operation is a feedlot, but is it considered a confined animal feeding operation (CAFO), which needs a federal permit? (40 CFR Part 123.23)

A CAFO is any feeding operation with a capacity of 1,000 or more animal units according to federal animal unit calculations. The MPCA can also define a facility with less than 1,000 animal units as a CAFO on a case-by-case basis, depending on site conditions, and if manure or process wastewater is directly discharged to waters of the state. Facilities that are CAFOs must comply with both federal regulations and state rules. Two or more feedlots under common ownership are considered a single facility if they adjoin each other or use the same manure storage or disposal system. Feedlots that are considered CAFOs are required to obtain National Pollution Discharge Elimination System (NPDES) permits from the MPCA.

What happens to permits issued before the Rules were revised? (Minn. Rules, Part 7020.0355)

If you have a SW-A permit, a certificate of compliance, or an expired interim A or B permit, you may need to update your registration information. You should contact your RGU to find out if your registration information is current. You must comply with all the revised permitting and technical requirements. NPDES, SDS, and unexpired interim permits remain in effect until the original date of expiration. After your permit expires, you may be required to apply for a permit under the Revised Rules. Contact your RGU for more information.

What location restrictions are there for new and expanding feedlots and manure storage areas? (Minn. Rules, Part 7020.2005)

You cannot construct a new feedlot of any size in any of the following areas:

- on shoreland (within 300 feet of a river or stream, or less than 1,000 feet from a lake, pond, or flowage);
- in a 100-year floodplain;
- within 300 feet of a sinkhole;
- within 100 feet of a private well; or
- within 1,000 feet of a water supply well for a community, public or private school, or licensed daycare center that has been determined to be vulnerable, unless these conditions are met:
    1) the Minnesota Department of Health has approved a drinking water supply management area under Minnesota Rules, Part 4720.5360; and
    2) the proposed feedlot or manure storage area is located outside the designated drinking water management supply area and is a minimum of 200 feet from the water supply well.

Information about drinking water supply management areas, including maps of vulnerable wells by county, is available by calling the Drinking Water Hotline at 1 800-818-9318, or online at *www.health.state.mn.us/divs/eh/dwp/swp/wellhead_protection/wellsintro.html*.

If you want to expand your existing feedlot or manure storage area, the following limitations apply:

- If you have a unused feedlot in shoreland, you may resume operation after obtaining a permit from the agency or county, regardless of the number of years that the feedlot was unused.
- a feedlot or manure storage area located within shoreland as described above cannot be expanded to service more than 1,000 AU.
- A feedlot or manure storage area located within a floodplain cannot be expanded.

Your county or township may have other location and expansion restrictions. Check with your local planning and zoning office to determine if any additional restrictions exist before finalizing your construction plans.

NOTE: You must follow all of the requirements that apply to your facility even if you don't have to obtain a permit for construction or operation. Specific information regarding the requirements listed in Minn. Rules, Parts 7020.2000 through 7020.2225 is available online at *www.pca.state.mn.us/hot/feedlots.html* or by contacting your RGU.

What are the key deadlines that I need to keep track of in the Feedlot Rules (Minn. Rules, Chapter 7020)?

Key deadlines for registration and permitting are provided in a table in the Appendix of this guide. Deadlines are also provided for complying with the technical standards.

What is "environmental review" (Minn. Rules, Chapter 4410)?

Although feedlot expansion and new construction often involves some review by local and state agencies for environmental effects, the term "environmental review" refers to the environmental review process conducted under the Minnesota Environmental Review Program (Minnesota Rules, Chapter 4410). Environmental review applies to a relatively small number of feedlots.

The Minnesota Environmental Review Program works to achieve a better understanding of the impacts that projects can have on the environment. Information gathered during the environmental review process is provided to government agencies and citizens to aid in the decision-making process for a project. The two major documents used in the environmental review process are the environmental assessment worksheet (EAW) and the environmental impact statement (EIS).

What is an "environmental assessment worksheet"? (Minn. Rules, Part 4410.1000)

The EAW is a document prepared by the RGU with the help of the producer proposing the project. It is meant to be a brief document, prepared in a worksheet format, to be used by the RGU to determine whether more detailed environmental analysis should be performed (in the form of an EIS), and any permit conditions needed to protect the environment.

When is an EAW required? (Minn. Rules, Part 4410.4300)

Whether an EAW is required is largely based on the location and size of a feedlot. For some feedlots, an EAW is mandatory. For most feedlots, however, an EAW is not mandatory, but can be required at the discretion of the RGU if a permit or governmental decision is required. Additionally, for a petition for an EAW to be filed, at least 25 individuals must sign the petition. The RGU determines whether to grant a petition. The table on page 10 outlines when an EAW is required. Additional information, sample EAW forms, and instructions are available online at *www.mnplan.state.mn.us/eqb/review.html,* or by contacting your RGU.

Things to Consider

- ❑ Is my operation a feedlot or a pasture?
- ❑ What requirements apply to my feedlot, even if I don't have to register or obtain a permit?
- ❑ Does my feedlot meet those requirements?
- ❑ Who is my local feedlot contact? Is it the county or the MPCA?
- ❑ How many animal units do I have?
- ❑ Is my feedlot operation located near a stream, lake, or wetland?
- ❑ Do I need to register?
- ❑ Will I be expanding or modifying my feedlot in the near future?
- ❑ How close are my neighbors to my feedlot?
- ❑ Will I need to get additional permits from my county (conditional use permits and building permits)?
- ❑ What is my water usage per day? Do I need to acquire a DNR water appropriation permit?
- ❑ Is my operation considered a CAFO?
- ❑ Do I need to be licensed to apply my manure?

What is an "environmental impact statement", and when is an EIS required? (Minn. Rules, Part 4410.1700)

An environmental impact statement is a detailed document describing and analyzing the project, alternatives to the project, potentially significant environmental effects of the project, and ways to mitigate those effects. An EIS may be required when the RGU determines, after completing the EAW process, that the project has the potential for significant environmental effects. An EIS is a much more extensive analysis than an EAW, and can be costly. To date, very few EISs have been ordered for feedlots.

Where can I get more information?

This guide is intended to provide basic information regarding the year 2000 revision of the Feedlot Rules (Minnesota Rules, Chapter 7020) and requirements of the Minnesota Environmental Review Program (Minnesota Rules, Chapter 4410) as they apply to feedlot operations. Other helpful documents include:

- ***The Minnesota Livestock Producer's Directory of Feedlot Resources (MDA)***
  A directory of addresses, phone numbers, e-mail addresses, and web addresses of resources associated with feedlots and manure management.

- ***The Minnesota Livestock Producer's Feedlot Planning and Operations Manual (MDA)***
  A comprehensive manual addressing: manure management system options including production, collection, storage, treatment, transfer, and land application; environmental considerations; neighbor relations; safety; environmental regulation and permitting; closure; and financial assistance.

- ***The Minnesota Livestock Producer's Decision-Making Tool to Feedlot Rules (MDA)***
  A web-based resource that allows you to "navigate" through the Revised Feedlot Rules and Environmental Review Rules to find information, based on the size of your feedlot facility, its location, and what types of construction or expansion activities are planned. The Decision-Making Tool is available on the MDA website, or in CD-ROM format.

- ***Revised Feedlot Rules at a Glance: Minn. Rules, Chapter 7020 (MPCA)***
  A section-by-section, plain-language summary of the Revised Feedlot Rules.

These documents are available from your RGU, soil and water conservation district, or University of Minnesota Extension Service office. They also may be obtained directly from the Minnesota Department of Agriculture or Minnesota Pollution Control Agency. Other publications and resources are also available.

Minnesota Department of Agriculture
90 West Plato Boulevard
St. Paul, MN 55107
1-800-967-2474
www.mda.state.mn.us/

Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155
1-877-333-3508
www.pca.state.mn.us

For a specific part of the rule cited in this document, reference the Minnesota Rule citation numbers that have been provided after each section heading. Copies of Minnesota Rules, Chapters 7020 and 4410, are available online at *www.revisor.leg.state.mn.us/forms/getrulechap.shtml*, or by contacting your RGU.

Glossary

Abandoned Well
There may be as many as 1,600,000 abandoned wells in Minnesota. These wells are paths for nitrates, bacteria, and other pollutants to enter ground water that could become drinking water. Abandoned wells must be properly sealed to prevent contamination.

Animal Unit
A unit of measure used to compare differences in the production of animal manure that employs as a standard the amount of manure produced on a regular basis by a slaughter steer or heifer for an animal feedlot or a manure storage area, calculated by multiplying the number of animals of each type by its respective multiplication factor, and summing the resulting values for the total number of animal units.

County Feedlot Officer
County staff that administer the program in the county designated by MPCA to issue feedlot permits when a feedlot has less than 1,000 animal units and is not a CAFO.

Discharge
The addition of a pollutant to waters of the state, including a release of animal manure, manure-contaminated runoff, or process wastewater from an animal feedlot, a manure storage area, or an animal manure land application site by leaking, pumping, pouring, emitting, emptying, dumping, escaping, seeping, leaching, or any other means. Discharge includes both point and non-point source discharges.

Environmental Assessment Worksheet (EAW)
A document providing basic information about the environmental effects of a project. The EAW is prepared by the responsible governmental unit to determine whether an environment impact statement (EIS) should be prepared.

Environmental Impact Statement (EIS)
A thorough study of a project with potential for significant environmental impacts, including evaluation of alternatives and mitigation.

Environmental Quality Board (EQB)
State agency that adopts environmental review rules; monitors their effectiveness, and revises as appropriate; and provides technical assistance to interpret and applies rules.

Expansion
Construction or any activity that has resulted or may result in an increase in the number of animal units that an animal feedlot is capable of holding or an increase in storage capacity of a manure storage area.

Feedlot
A lot or building or combination of lots or buildings intended for the confined feeding, breeding, raising, or holding of animals specifically designed as a confinement area in which the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure. Open lots used for feeding and rearing poultry are considered feedlots. Pastures are not considered animal feedlots.

Floodplain
The areas adjoining a watercourse that have been or could be covered by a 100-year flood.

Intermittent Streams
Discontinuous streams that are continuous periodically. This includes all watercourses identified as intermittent streams on US Geological Survey quadrangle maps.

Manure
The fecal excretions of livestock and poultry. Manure can include bedding material and water used for livestock. Types of manure have descriptive names such as liquid, slurry, and solid. Manure that has a content of more than 96 percent moisture is liquid. Manure with a moisture content between 90 and 96 percent is referred to as slurry. A moisture content of less than 84 percent is considered solid.

Manure Management Plan
A manure management plan is a written description of how manure generated at the facility is going to be utilized during the upcoming cropping year(s) in a way that protects surface-water and ground-water quality, while also being beneficial from an agronomic and economic standpoint. Manure management plans are required when an NPDES, SDS, interim, or construction short-form permit application is submitted from an operation with 100 or more animal units, or manure from a feedlot capable of holding 300 or more animal units is applied after January 1, 2005 by someone other than a certified commercial animal-waste technician or certified private manure applicator.

Manure Storage Area
An area where animal manure or process wastewaters are stored or processed. Short-term and permanent stockpile sites and composting sites are manure storage areas. Animal manure packs or mounding within the animal holding area of an animal feedlot that are managed according to Minn. Rules, Part 7020.2000, subpart 3, are not manure storage areas.

Pastures
Areas where grass or other growing plants are used for grazing and where the concentration of animals is such that a vegetative cover is maintained during the growing season, except in the immediate vicinity of temporary supplemental feeding or watering systems.

Phased Actions
Two or more projects by the same applicant that will have environmental effects on the same geographic area and will occur sequentially over a limited time period.

Pollution
The presence of a substance in a body of water, the soil, or the air, in such quantities that it impairs the water, soil, or the air and its usefulness, or makes it offensive to sight, taste, or smell.

Pollution Hazard
According to Minn. Rules, Part 7020.0300, "pollution hazard" means an animal feedlot or manure storage area that: does not comply with the requirements of Minn. Rules, Parts 7020.2000 through 7020.2225 and has not been issued the appropriate permit; or presents a potential or immediate source of pollution to waters of the state as determined by inspection by a county feedlot officer or an MPCA staff member.

Process Wastewaters
Waters and/or precipitation, including rain or snow, which comes into contact with manure, litter, bedding, or other raw material or intermediate or final material or product used in or resulting from the production of animals, poultry, or direct products, such as milk, meat or eggs.

Runoff
Water that flows from buildings or across land and eventually appears in surface streams or water bodies.

Sensitive Area
A shoreland area; a defined flood plain with the exception that the sensitive area includes only land within 1,000 feet of the ordinary high water mark in the floodplain of the Red River of the North; a state or federally designated wild and scenic river district; the Minnesota River Project Riverbend area; the Mississippi River headwaters area; an area within a drinking water supply management area delineated under Minn. Rules, Chapter 4720 where the aquifer is identified in the wellhead protection plan as vulnerable to contamination; and within 1,000 feet of a known sinkhole, cave, resurgent spring, disappearing spring, Karst window, blind valley, or dry valley.

Shoreland
Land located within the following distances from public water: 1,000 feet from the ordinary high water level of a lake, pond, or flowage; and 300 feet from a river or stream, or the landward extent of a flood plain designated by ordinance on a river or stream, whichever is greater. The limits of shorelands may be reduced whenever the waters involved are bounded by topographic divides which extend landward from the waters for lesser distances and when approved by the Commissioner of Natural Resources.

Sinkhole
A surface depression caused by a collapse of soil or overlying formation above fractured or cavernous bedrock.

Waters of the State
All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, that are contained within, flow through, or border upon the state or any portions of the state.

Appendix: Summary of Compliance Dates for the Revised Feedlot Rules (Minn. Rules, Chap. 7020)

The table below provides key deadlines for registration and permitting of feedlots, for installing corrective measures for open lot agreements, and for complying with technical requirements of the Feedlot Rules (Minn. Rules, Parts 7020.2000 through 7020.2225). Many of these deadlines may not apply to your feedlot. Registration and permitting of feedlots, and open lot certification are discussed in the guide on pages 5-12. Technical requirements are not discussed in detail in this guide (see page 4 for a brief overview). Specific information regarding the technical requirements of Minn. Rules, Parts 7020.2000 through 7020.2225 is available online at *www.pca.state.mn.us/hot/feedlots.html*, or by contacting your RGU.

AU = Animal unit

Description	*Deadline*
In general, feedlot facilities or manure storage areas discharging pollutants to surface waters must currently comply with water quality limitations given in Minnesota Rules, Part 7050.0215; namely, five day biochemical oxygen demand (BOD_5) of the discharge must be less than 25 milligrams per liter (monthly arithmetic mean).	**Current requirement, except for feedlots less than 300 AUs that are not CAFOs and are eligible for the open lot agreement for interim corrective measures.**
All manure and processed wastewater (milk house waste, egg washing water, etc.) that is applied within 300' of an open tile intake must be injected or incorporated in some manner within 24 hours (Minn. Rules, Part 7020.2225 Subpart 7)	**October 23, 2000**
Any feedlot operation that is a CAFO or AFO with 1,000 or more AUs that existed before October 23, 2000 must submit a permit application. An extension is available to September 1, 2001 provided that an application for an extension was made by June 1, 2001 (Minn. Rules, Part 7020.0505 Subpart 2A)	**June 1, 2001**
SDS permits that regulate a feedlot with a capacity of 1,000 or more AUs or holds enough manure for 1,000 AUs are required to pay the same permit fee requirements of an NPDES permit (Minn. Rules, Part 7002.0310, subpart 2, B)	**July 2, 2001**
Any non-CAFO feedlot must be fenced from any NES, RDS, or GDS (DNR classification) lake to prohibit the access to a lake (Minn. Rules, Part 7020.2015 Subpart 2)	**October 1, 2001**

Description	*Deadline*
For feedlots of 1,000 or more AUs that have an unpermitted or noncertified manure storage area constructed after June 3, 1991, one of the following steps must be undertaken (Minn. Rules, Part 7020.2110 Subpart 1): • reconstruction of the manure storage area according to standards; • complete closure of the manure storage area; • submit original plans of manure storage area in order for it to be certified; • if plans not available, have the local NRCS office responsible for the manure storage area certify it; or • conduct testing of the manure storage area to prove that it achieves a 1/56 of an inch seepage rate or less.	**October 1, 2001**
All permanent stockpile sites must comply with the following (Minn. Rules, Part 7020.2125 Subpart 4): • Comply with section 7020.2005. • Have a stockpile liner that meets defined standards. • Diversion structures and elevated platform structures must be constructed to prevent surface waters from leaving the stockpile. • Stockpile site must be maintained to promote its structural integrity. • Feedlot operator will notify the State or delegated county three days. before constructing stockpiling site. • The base of the stockpile must be 2' higher than the seasonal high water table.	**October 1, 2001**

Description	*Deadline*
All short-term stockpiling sites of manure are to (Minn. Rules, Part 7020.2125 Subpart 2): • land apply manure within one year of establishing the stockpile; • vegetative cover must be established at the stockpiling site for one (1) year before its reuse, with the exception of those sites located within the confines of a hoofed-animal open lot at a facility with a capacity of less than 100 animal units and sites are where manure is stockpiled for less than ten consecutive days and no more than six times per calendar year; • be 300' (also, 50' horizontal distance) from waters of the state, sinkholes, rock outcroppings, open tile intakes, road ditch and uncultivated wetlands; • be 100' from a private water supply and unsealed-abandoned wells. Must be 200' from private wells with less than 50' of water tight casing and that is not cased through a confining layer that is 10' thick; • base of stockpile 2' higher than seasonal high water table; • be 100' from a field drain tile that is located less than 3' from the surface of the soil; • be prohibited on soils with slopes over 6% and 2-6% where water diversions are not present. Also, other site-specific soil criteria apply	**October 1, 2001**
Feedlot operators that are required to register must update their registration at least once every four years after the deadline. The deadline for the next phase of registration (updated registrations) would be January 1, 2006. The State or delegated county is required to notify producers 90 days in advance of the start date of the registration process and to notify the producer of successful registration within 30 days of receiving the registration (Minn. Rules, Part 7020.0350 Subparts 3 and 4).	**January 1, 2002**
A feedlot with a capacity of 300 AUs that is not required to obtain a permit must prepare or update a manure management plan, unless manure is applied by a certified commercial or private applicator (Minn. Rules, Part 7020.2225 Subpart 4A (1)).	**January 1, 2005**
Feedlots less than 300 AUs that are not CAFOs and are eligible for the open lot agreement for interim corrective measures must complete the following by October 1, 2005: • Install diversions to direct water away from open lot areas. • Create vegetative buffers to reduce flow of water through open lot areas or, use other methods to correct the pollution problems using the FLEVAL model.	**October 1, 2005**

Description	*Deadline*
Feedlots certified as open lots and meeting the October 1, 2005 requirements must be in compliance with the requirements of the runoff discharge standards contained in Minn. Rules, Part 7050.0215 by October 1, 2010.	**October 1, 2010**
For feedlots less than 1,000 AUs that have an unpermitted or noncertified manure storage area, the feedlot must meet one of the outlined criteria (Minn. Rules, Part 7020.2110 Subpart 2): • reconstruction of the manure storage area according to standards; • complete closure of the manure storage area; • submit original plans of manure storage area in order for it to be certified; • if plans not available, have the local NRCS office responsible for the manure storage area certify it; or • conduct testing of the manure storage area to prove that it achieves a 1/56 of an inch seepage rate or less. Also extensive soil testing by October 1, 2005 to certify the manure storage area.	**October 1, 2005**
For open lot feedlots less than 300 AUs that have an unpermitted or noncertified manure storage area, a letter must be sent to the State (MPCA) or the delegated county explaining that the manure storage area will be reconstructed or closed. By **October 1, 2010**, the manure storage area must be reconstructed to meet current standards or closed permanently (Minn. Rules, Part 7020.2003 Subpart 4).	**October 1, 2005**
All manure and processed wastewater (milk house waste, egg washing water, etc.) that is applied within 300' of an open tile intake must be injected or incorporated in some manner within 24 hours (Minn. Rules, Part 7020.2225 Subpart 7).	**October 1, 2005**
Feedlots less than 300 AUs that are not considered CAFOs and are eligible for the open lot agreement for final corrective measures must be in compliance with 7050 rules (7050.0215) with regards to discharge standards (Minn. Rules, Part 7020.2003 Subpart 4).	**October 1, 2010**
For open lot feedlots less than 300 AUs that have an unpermitted or noncertified manure storage area, the manure storage area must be reconstructed to meet current standards or closed permanently (Minn. Rules, Part 7020.2110 Subpart 3).	**October 1, 2010**

In accordance with the American with Disabilities Act, an alternative form of communication is available upon request. TTY: 1-800-627-3529

Commonly Asked Questions (and answers) About Consolidated Conservation (Con-Con) Lands Listed In DNR Commissioner's Orders of 1991

What are Consolidated Conservation lands?

Con-Con lands, as they are often called, are state-owned property held in the public trust specifically for conservation purposes. The Minnesota Department of Natural Resources has been given the responsibility by law to manage these lands for the public.

How did Con-Con lands come about?

During the late 1800s and early 1900s, a number of counties in Minnesota issued bonds to pay the cost of ditching millions of acres for the purpose of draining the land for agricultural use. Land was sold to individual property owners and ditches were dug. Not all of these efforts resulted in the creation of suitable farmland, however. Those difficulties combined with the economic depression of the 1930s caused many landowners to default on their property taxes, which, in turn, put the counties at risk of defaulting on the ditch bonds. The State of Minnesota interceded, paying off the county ditch bonds in exchange for accepting full state ownership and management of those lands.

Three legislative acts in the late 1920's and early 1930's paid off the bonds and transferred the land to state ownership. All income from these lands was "consolidated" into one fund, hence the name Consolidated Conservation (Con-Con) lands. The Con-Con lands were placed under the management of the then Department of Conservation, now known as the Department of Natural Resources.

There were originally about 1.9 million acres of Con-Con lands in seven counties (Aitkin, Beltrami, Koochiching, Lake of the Woods, Mahnomen, Marshall, and Roseau). About 400,000 acres were reclassified as agricultural land and sold to private parties during the late 1930s through the 1990s. Some of these lands went tax-forfeit again and were re-sold.

What are we doing now with Con-Con lands and why?

Lands reviewed during 1999: After a series of public meetings and discussions with local officials, the DNR made recommendations on thousands of individual land parcels to be designated into management units, mostly as state forests and wildlife management areas. The 2000 Minnesota Legislature passed a comprehensive bill to finalize management designations for approximately 260,000 acres.

Lands reviewed in 2000 and under consideration in 2002 legislative session: In 1991, then DNR Commissioner Joe Alexander issued Commissioner's Orders to designate 102,314.74 acres as state Wildlife Management Areas (WMAs). In August 1999, the Attorney General's Office determined that the WMA designation in the 1991 DNR Commissioner's Orders required legislative approval. The 2000

legislation provided for county boards in Beltrami, Marshall, and Roseau Counties to request a DNR review of the 1991 Con-Con designations in their county. All three counties passed resolutions before the June 30, 2000 deadline. Public input meetings were held and written comments were taken by U.S. mail, fax, e-mail, and hand delivery. The deadline for input was September 1, 2000. The 2001 legislature did not act on designating these acres as recommended by the DNR.

Which counties and how many acres are involved?

Beltrami County:	68,455 acres
Marshall County:	25,240 acres
Roseau County:	8,620 acres
TOTAL:	102,315 acres

How will these lands be designated?

The DNR considered all constructive advice and information received in the review process. The DNR strongly believes that these lands are best managed as formally designated Wildlife Management Area (WMA) lands, consistent with the 1991 classification. The DNR urges the 2002 legislature to designate these lands as WMA lands.

Will WMA designation affect timber harvesting, hunting, or other activities?

These acres were managed as Wildlife Management Areas (WMAs) from January 1991 until the August 1999 Attorney General ruling. WMAs are managed primarily for wildlife, perpetuation of natural plant communities, protection of rare and distinctive native plants and animals, public hunting and trapping, and other compatible outdoor recreational uses. Habitat management is a major activity on WMAs and is accomplished by prescribed burning of brushlands and grasslands, logging of commercial timber stands, and other habitat management techniques. Watershed protection and flood control are additional important benefits provided by some WMAs.

Will ATV use be banned from these lands if designated as WMA?

State statute (Chapter 97A Subd. 3) mandates allowing corridor trails in corridors of disturbance to connect trails, forest roads, and public highways to provide reasonable travel for all terrain vehicles. The DNR has until January 15, 2003 to identify these corridor trails. State law presently allows ATV use during the firearms deer season to retrieve harvested deer on WMAs in part of northwestern Minnesota.

Could any of this land be sold or exchanged?

Isolated parcels of Con-Con land of 40 acres or less that are not contiguous with other public land may be made available for sale or exchange if they are not appropriate for conservation or recreation purposes. A report titled "ISOLATED CONSOLIDATED CONSERVATION LANDS REPORT" dated January 15, 2001 describes the 14 parcels that meet the above definition and outlines the

recommended disposition of the parcels. This report recommends selling a total of 10 land locked acres in Roseau County, and designating or exchanging the remaining parcels. The DNR will also consider additional opportunities for land exchanges with local units of government that will enhance conservation outcomes.

What are the financial impacts of designating these lands?

Commercial revenues: The percentage of revenue currently received by counties (50%) for the sale of timber, mineral leases, etc., on these lands is not affected by the WMA designation.

Tax revenues: The 2000 Minnesota Legislature increased the Payment-In-Lieu-of-Taxes (PILT) to counties from the state general fund on WMAs, Scientific and Natural Areas, and State Parks on Con-Con lands. The rate was increased from the previous 37.5 cents per acre to over 3 dollars per acre, with annual adjustments for inflation. The payment rate for Con-Con lands in State Forests was left at 37.5 cents per acres and annual adjustments for inflation were added. Refer to detailed county-by-county fact sheets prepared by the DNR Division of Lands and Minerals for more information on financial impacts.

Where can I get more information?

Maps and background information is posted on the DNR web site at http://www.dnr.state.mn.us
If you do not have access to the Internet, contact your local library for assistance.

Additional questions can be directed to Wayne Edgerton at:

Fax: 651-296-4799
E-mail: wayne.edgerton@dnr.state.mn.us.
U.S. mail: Wayne Edgerton, Agriculture Policy Director
MN Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4013

Revised 9/18/01

REDUCTIONS SUMMARY

9/26/01

Program	Current FTE	FTE Redux
AIR		
- Indirect Source Permits	1.5	1.5*
- Air Point Source Regulation	73	2
- Air Quality Monitoring	14	1
		4.5
Land		
- SW, HW, Tanks	94	17
- Listed Metals	1	1*
- Salvage Yards	3	3*
- Tires	0.5	0.5*
- Remediaton (SF, LUST, HW)	89	16
- Emergency Response	12	1
		38.5
Water(Surface and Ground)		
- Wellhead Protection	1	1*
- Source Water Protection	0.25	0.25*
- Biocriteria Development	7	1
- Ground Water Monitoring	5	3
- ISTS (Septic Tanks)	8.5	4
- Sludge/Biosolids	4	2
- 401 Certification	2	1.9
- Sanitary District Formation	0.5	0.5*
		14.65
Admin		
- Managers/Supervisors	115	12
- Admin Support Services	112	12
		24

WQ INCREASES

- WQ Point Source	67	6 (reallocation)
- Storm Water	10	3 " "
- Watershed/Basin Planning	22	4 " "
- Feedlots	22	9 (new)
		22

This is a fairly gross consolidation of information. W/O context and does not reflect latest EPA grant since it is not completely finalized. It does, however, represent the ~~the~~ current situation fairly well.

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* = eliminated program w/PCA

MINNESOTA BOARD OF WATER AND SOIL RESOURCES
POSITION STATEMENT
ON
CONSERVATION PROVISIONS OF THE 2002 FARM BILL
9/26/01

The Minnesota Board of Soil and Water Resources is made up of 15 voting members representing counties, soil and water conservation districts, watershed districts, citizens, the Minnesota Department of Agriculture, the Minnesota Department of Health, the Minnesota Department of Natural Resources, the Minnesota Pollution Control Agency, and the University of Minnesota Extension Service. We believe this makeup provides a unique forum and mechanism to bring together thoughts and opinions on the farm bill and to formulate a position that is representative of many of the conservation organizations and state agencies within Minnesota.

The conservation title of the federal farm bill now being deliberated by Congress impacts more privately owned lands than any other federal legislation, and will determine how USDA agencies, states and local governments address private lands conservation for the next ten years. This document outlines the various federal conservation programs and initiatives that we feel are important to a vital rural economy while protecting and enhancing the natural resources of Minnesota.

Because privately owned and managed farmland and forestland covers more than three fourths of Minnesota, agriculture and forestry dramatically impact water quality, wildlife habitat and the pace of sprawl. Fortunately, many Minnesota farmers and forest landowners are implementing practices to meet these environmental challenges.

Nationwide, farmers, ranchers and forest landowners seeking federal assistance to improve water quality, enhance or create fish and wildlife habitat, or combat urban sprawl are being turned away at an alarming rate. In Minnesota alone, the estimated backlog this year for the Environmental Quality Incentives Program, Wetlands Reserve Program, and Wildlife Habitat Incentives Program, combined, exceeds $57 million.

In Minnesota, we believe the opportunity is here to make conservation a centerpiece of the next farm bill and use the conservation title to help farmers and forest landowners produce public environmental goods such as clean air, clean water, and fish and wildlife habitat, in conjunction with food and fiber. To that end we believe that the farm bill should be built around the goals of 1) maintaining the existing successful conservation programs, 2) providing additional program options and incentives for those resources in need of additional protection on private lands, 3) supporting landowners who are maintaining and improving stewardship of their lands, 4) supporting development of alternative sources of sustainable energy on private lands, and 5) discouraging urban sprawl into the rural landscape.

The following positions on the farm bill are organized into two themes: existing USDA programs and new USDA programs.

Existing USDA Programs

Conservation Reserve Program (CRP) – CRP has been a popular program in Minnesota and has had a tremendous impact on the environment by reducing erosion and sedimentation and increasing fish and wildlife habitat. We fully support reauthorization of CRP and would like to see the enrollment cap raised to at least 39.5 million acres. Specifically we support:

Jim Anderson community for based

- Giving state Farm Services Agency offices flexibility to raise the 25 percent acreage limitation in counties on a case-by-case basis.
- Ensuring that CRP is targeted to only the most highly erodible, environmentally sensitive, and marginal cropland, by emphasizing the Continuous CRP Signup and continuing to use the Environmental Benefits Index to rank bids in the General CRP Signup.
- Continuing the Conservation Reserve Enhancement Program.
- Allowing the use of short-term rotational grazing of CRP under an approved plan, as a mechanism for managing the vegetation, with a corresponding reduction in the CRP rental rate.
- Allow up to 15% of CRP acres to be used to grow multi-year (perennial) cover crops to be used for renewable energy.

Wetland Reserve Program (WRP) – Reauthorize WRP and increase annual enrollment to at least 150,000 acres per year.

Environmental Quality Incentives Program (EQIP) - Reauthorize EQIP and fund at a level of at least $1 billion per year. Specific recommendations include:

- Give states greater flexibility in how the program is administered and carried out at the state level.
- Allow for one-year contracts with producers.
- Allow funds to be used to support the development of on-farm energy from animal waste.
- Allow cost-sharing on low-cost conservation practice options.
- Continue the existing mandate that 50 percent of EQIP funds be targeted toward livestock producers.
- Eliminate the size limitation for EQIP eligibility.
- Give higher priority to EQIP offers that aid producers in complying with federal and state environmental laws.
- Increase the payment limitation from $10,000/year to $50,000/year, and from $50,000 to $200,000 per multi-year contract.
- Require the Secretary of Agriculture to establish a system for certification of third parties to provide producers with technical assistance in carrying out conservation plans.

BWSR policy consistency legislative intent

1,000 units or more C-S

OK

Wildlife Habitat Incentives Program (WHIP) – Reauthorize WHIP and fund at a level of at least $50 million per year.

Farmland Protection Program (FPP) – Reauthorize FPP and fund at a level of at least $200 million per year. Minnesota has been unable to utilize FPP because this program only supports purchase of development rights (PDRs), whereas Minnesota's Agricultural Land Preservation Program is just beginning to consider PDRs. Specifically we support allowing FPP funds to be used to support lower-cost strategies for farmland preservation such as tax incentives and planning and zoning.

Forest Incentive Program (FIP) - Reauthorize FIP and fund at a level of at least $25 million per year.

Forest Stewardship Program (FSP) – Reauthorize FSP and fund at a level of at least $50 million per year.

Stewardship Incentives Program (SIP) – Reauthorize SIP and fund at a level of at least $50 million per year. Minnesota also supports the US Forest Service request to authorize a new non-industrial private forest cost-share program titled "Sustainable Forestry Assistance Program" as an alternative to SIP.

Sustainable Agricultural Research and Education (SARE) – Reauthorize SARE and fund at a level of at least $50 million per year. Consideration should be given to expanded research and development assistance programs related to carbon sequestration and bio-mass energy production.

Wayne clarify —

Swampbuster and Sodbuster Provisions – Minnesota supports reauthorization.

Conservation Technical Assistance (CTA) – With the increasing demand to improve water quality and wildlife habitat from private lands conservation efforts, experts estimate that the current level of federal funding for technical assistance will only be able to meet 30 percent of that demand. Minnesota supports greater availability of CTA through increased funding for USDA agencies and/or third-party contracting with states, local soil and water conservation districts, and the private sector.

New USDA Programs

Conservation/Stewardship Incentives Program – Minnesota supports the establishment of a conservation/stewardship incentives program that rewards farmers and ranchers financially for establishing and/or maintaining soil and water conservation practices that produce the public benefits of clean water, clean air, and high-quality fish and wildlife habitat. Specifically we support a program that:

- Rewards not only producers who establish a conservation practice for the first time, but also those with a history of practicing effective soil and water conservation.

- Does not take funding from existing conservation programs.
- Includes funds for monitoring and evaluation.

Grassland Reserve Program – Minnesota supports the establishment of a federal grassland reserve program that allows for the enrollment of one million acres per year. The western part of Minnesota is similar to certain western states in that we have many areas where grassland that has never been plowed is ineligible for the existing CRP. The program should exclusively focus on grasslands that have never been plowed or inter-seeded.

Jim Anderson commodity approach - consider bluffland activity of hay - conservation provisions for grassland.

Upper Mississippi River Blufflands Pilot Project – Minnesota strongly supports the creation of a pilot project for treating hay as a program in a tri-state karst region that includes parts of Minnesota, Iowa, and Wisconsin. Analysis of land use trends in the 31,000 square mile region, indicates that hay and pasture acreage declined by about 20 percent from 1982 to 1997, with the area planted to soybeans increasing by 60 percent, corn declining by 13 percent, and forestland increasing by about 7 percent. This unprecedented change in landuse coupled with the highly erodible silt loam soils and steep topography of the region has led to increased water quality impairments of the streams and rivers, sedimentation of fish and wildlife habitat, and increased flooding.

USDA/NRCA or its authorized agent

Safe Harbor Program – Minnesota supports a safe ~~harbor program within~~ the farm bill. If farmers follow a conservation plan prepared by a government agency, they should be provided some protection against being held lia~~ble in the future, by another~~ government entity, for unexpected or unanticipated environmental problems, resulting from the implementation of the conservation plan. – Add

Red Massey liability gov't clarify

Upper Mississippi River – Minnesota supports federal coordination and targeting of efforts to address non-point source pollution within the upper Mississippi River watershed including, but not limited to, the hay pilot project described above.

Better Water Quality with Proper Lawn Fertilizers

The waters of the Land of Lakes are valuable and precious resources. Residents throughout Minnesota have a vital interest in having good water quality – for economic vitality, public health, recreation, and controlling public expenditures.

A web of factors affects the quality of our waters – our lakes, streams, and wetlands. A many-faceted approach is needed to maintain and improve water quality; there is no single "silver bullet" panacea. Preventing chemical compounds from entering the surface water system is the most cost-effective way to improve water quality.

Phosphorus ("P"): Phosphorus occurs in abundance in Minnesota soils. It is estimated that 70 to 80 percent of the soils in the state have sufficient Phosphorus for healthy plant growth. Phosphorus is also a nutrient usually included in lawn fertilizers. The vast majority of the state's consumers are paying for something they don't need – a limited resource mined and transported from Florida.

Soils can hold only so much phosphorus. Excess amounts are carried by rain and lawn sprinkling into stormwater systems and ditches. Fertilizers spilled on hard surfaces, such as sidewalks and driveways, are washed directly into the stormwater system – and then directly to wetlands, lakes, and streams.

What are the effects of Phosphorus on our wetlands, lakes, and streams?

- One pound of phosphorus produces 300 to 500 pounds of algae.
- Studies have shown that 50 percent of the phosphorus in stormwater runoff comes from residential lawns.
- The cost to cities and watershed districts to remove phosphorus before it enters a water body is at least $200 per pound. This translates into millions of dollars in taxes and stormwater utility charges.

To give some indication of the magnitude of this issue, six million pounds of phosphorus fertilizer are applied to turf areas in the seven-county Metro area every year.

More Effective Regulation: While public education is an important and on-going strategy, decades of education have resulted in little behavior change in consumer habits or what is produced by the fertilizer industry. Non-phosphorus lawn fertilizers are not made by national manufacturers, Minnesota manufacturers of non-phosphorus fertilizers have not been able to compete, retailers find it difficult to stock these fertilizers, and they are usually available only at a premium price.

Simply and most effectively, the use and sale of lawn fertilizers needs to be regulated by the State. Fertilizers containing phosphorus should be allowed where they have been shown to be needed. Except in those instances, the State should restrict the use and sale of lawn fertilizers containing phosphorus. The State is the appropriate level of government – it has the needed resources and expertise, and natural watersheds don't pay attention to local political boundaries. Cities do not have the capacity to be "fertilizer police".

There are many Minnesota companies already producing phosphorus-free lawn fertilizers. With effective new regulations, these companies can fill the demand. This creates jobs in Minnesota, eliminates subsidies to national manufacturers and, ultimately, reduces the cost to the public for clean up of our wetlands, lakes, and streams.

06/01

DRAFT

A bill for an act

relating to the environment; providing for limitations in the use and sale of phosphorous lawn fertilizers; requiring rulemaking; appropriating money; amending Minnesota Statutes 2000, section 115.01, by adding a subdivision; proposing coding for new law in Minnesota Statutes, Chapter 115

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. Minnesota Statutes 2000, section 115.01, is amended by adding a subdivision to read:

Subd. 21a. [TURF.] "Turf" means land planted in closely mown, managed grasses and includes, but is not limited to, residential and commercial residential property; private golf courses; and property owned by federal, state, or local units of government, including parks, recreation areas, and public golf courses.

Sec. 2 [115.175] [PHOSPHOROUS TURF FERTILIZER.]

Subdivision 1. [PHOSPHOROUS USE PROHIBITION.] (a) Effective August 1, 2003, a person may not apply a fertilizer containing the plant food phosphorous to turf, except:

(1) when a soil test by a laboratory certified by the agency and performed within the last three years indicates that the levels of available phosphorous in the soil are insufficient to support healthy turf growth;

(2) when the property owner or an agent of the property owner is first establishing turf via seed or sod procedures during the first growing season; or

(3) when using organic turf fertilizer derived primarily from animal or compost waste that does not exceed a natural phosphorous content of two percent by weight.

(b) applications of the plant food phosphorous done under paragraph (a), clause (1), must not exceed rates adopted by the agency in rule.

Subd. 2. [RULES.] The agency shall adopt rules governing the application of lawn fertilizer containing phosphorous and standards for the containment and cleanup of the release of lawn fertilizers containing phosphorous.

Subd. 3. [POINT OF SALE INFORMATION.] A person offering for sale or selling at retail a fertilizer containing the plant food phosphorous after August 1, 2002, must:

(1) conspicuously post consumer information pertaining to the lawful sale, prohibited uses, and recommended best management practices for fertilizers containing the plant food phosphorous for residential uses; and

(2) provide printed and free-of-charge consumer information, as described in clause (1), to persons purchasing fertilizer containing the plant food phosphorous.

Subd. 4. [RESTRICTIONS ON SALE AND DISTRIBUTION OF PHOSPHOROUS LAWN FERTILIZERS.] Effective August 1, 2003, no person, firm, corporation, franchise, or commercial establishment may sell lawn fertilizer, liquid or granular, that contains any amount of phosphorous or other compound containing phosphorous, such as phosphate, except as provided in subdivision 1.

Subd. 5. [PENALTY.] After August 1, 2003, the agency may assess an administrative penalty of $ for a violation of this section.

Sec. 2. [APPROPRIATION.]

$ is appropriated from the general fund to the pollution control agency for the 2002-2003 biennium for the purposes of section 1.

RESOLUTION NO. _____

A RESOLUTION RELATING TO RESTRICTIONS ON THE USE AND SALE OF PHOSPHOROUS LAWN FERTILIZERS

WHEREAS, the (Watershed, County, Agency of . . .) _____ is tributary to significant fresh water resources; and

WHEREAS, there has long been established a well-documented relationship between the use of phosphorous lawn fertilizers and the degradation of water quality; and

WHEREAS, as a matter of policy, the (Watershed, County, Agency of . . .) _____ desires to reduce the consumption and use of phosphorous lawn fertilizers; and

WHEREAS, subject to unique circumstances, regional soil conditions have an abundance of natural phosphorous; and

WHEREAS, industry leading fertilizer manufacturers and retailers have failed to produce and market low phosphorous lawn fertilizers to the public; and

WHEREAS, over two decades of public education has had minimal effect when in competition with corporate advertising and their refusal to formulate to local needs; and

WHEREAS, the (Watershed, County, Agency of . . .) _____ finds it important to encourage the reduction in the use of phosphorous lawn fertilizers within the _____; and

NOW, THEREFORE, BE IT RESOLVED that the Board of _____ declares its commitment to phosphorous lawn fertilizer reduction by encouraging the adoption of regulations regarding restrictions of use and sale of phosphorous lawn fertilizers within the _____.

BE IT FURTHER RESOLVED, the (Board of . . .) _____ supports legislation restricting the sale of any lawn fertilizer, liquid or granular, that contains any amount of phosphorous or other compounds containing phosphorous, such as phosphate, except, small quantities may be sold when a soil test indicates added phosphorous is needed to support healthy turf growth, or during the first year when new area or turf is being established. In addition, displays of lawn fertilizer containing phosphorous shall be limited to ten percent of the quantity of non-phosphorous lawn fertilizer on display at any given time.

BE IT FURTHER RESOLVED, such legislation should require that displays of such fertilizer must be clearly marked as containing phosphorous, and must be separated from the display of other fertilizers, and that for each sale of such fertilizer the seller must provide the buyer with a copy of the appropriate printed consumer information.

BE IT FURTHER RESOLVED, the (Board of . . .) _____ does request and encourage its state legislative delegation to consider and enact legislation to regulate and limit the use and sale or phosphorous lawn fertilizers.

ADOPTED by the (Board of . . .) _____ this _____ day of _____, 2001.

_____

_____, Chair

ATTEST:

_____

_____, Administrator

City of **Shorewood**
08.22.01
Status on action re: Resolution supporting legislation restricting use and sale of lawn fertilizers containing phosphorus

Apple Valley	Resolution under consideration by Council
Arden Hills	Supports, but not prepared to state so in a resolution; will do education
Bloomington	Adopted Resolution
Burnsville	Adopted Resolution
Board of Water & Soil Resources	Will await direction of MN Dept of Agriculture
Chanhassen	
Coon Rapids	Adopted Resolution
Cottage Grove	Adopted Resolution
Dayton	Adopted Resolution
Deephaven	Adopted Resolution
Detroit Lakes	Supports (per e-mail from city administrator)
Eagan	Adopted Resolution
Eden Prairie	Adopted Resolution
Edina	Referred to its Health Advisory Committee
Elk River	Adopted Resolution
Excelsior	Adopted Resolution
Faribault	Adopted Resolution
Golden Valley	Adopted Resolution
Greenwood	Adopted Resolution
Hastings	
Hennepin County Board	Several commissioners are supportive
Hennepin Parks	Adopted Resolution
Hopkins	
Hutchinson	Adopted Resolution
Lake Mtka Conservation District	Adopted Resolution
Lakeville	Referred to Env'l Affairs Cmte; will be at City Council May 7
Litchfield	Adopted Resolution
Little Canada	Adopted Resolution
Little Falls	Adopted Resolution
Long Lake	Adopted Resolution
Mendota Heights	Supports clean water; did not support resolution (enforceability)
Minneapolis	Adopted Resolution; considering ordinance
Minnehaha Creek Watershed Dist.	Adopted Resolution
Minnesota Association of WSDs	Adopted Resolution
Minnetonka	Adopted Resolution
Minnetonka Beach	Adopted Resolution
Minnetrista	Supports legislation, provided local ordinance is not necessary
Monticello	Adopted Resolution
Morris	Adopted Resolution
Mound	Council approved motion of support on March 13, 2001
New Hope	Adopted Resolution
Oakdale	Environmental Committee supports
Orono	Adopted Resolution
Pioneer-Sarah Creek Water Mgmt Cmsn	Adopted Resolution
Plymouth	Supportive Resolution -- in 2001 Resolution of legislative priorities
Prior Lake	Adopted Resolution
Ramsey-Washington Metro WSD	
Riley-Purgatory-Bluff Creek WSD	
Robbinsdale	Adopted Resolution
Rosemount	
Saint Louis Park	Its water management plan supports restrictions for such fertilizers
Saint Paul	Considering ordinance
Spring Park	Adopted Resolution
Stillwater	Adopted Resolution
Tonka Bay	Is supportive of resolution
Victoria	Is supportive of intent
Wayzata	Some Council members indicate support of resolution
Woodland	Adopted Resolution
Worthington	Adopted Resolution

Elm Creek WMO

October 2001

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
AMERICINN
State Hwys. 44 & 76
CALEDONIA, MINNESOTA
OCTOBER 25, 2001

BOARD MEMBERS PRESENT: Lee Coe, Jerome Deal, Clair Nelson, Char Kahler, Dwain Otte, Jack Frost, Ginny Imholte, Dan Wilson-MDH, Wayne Edgerton-DNR, Karen Harder, Mark Dittrich-MDA, Victor Ormsby

BOARD MEMBERS ABSENT: Paul Krabbenhoft, Darrell Bruggmann, Jim Anderson-MES, Rod Massey-PCA, JoAnn Coover

STAFF PRESENT: Ron Harnack, Doug Thomas, Jeff Nielsen, Mary Jo Anderson, John Jaschke, Mary Kells, Wayne Zellmer

OTHERS PRESENT:
Ralph Tuck, District Manager, Root River SWCD
Adolph Heimerdinger, Chairman, Root River SWCD
Ervin Barth

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

Chair Coe thanked the Root River SWCD for the great tour yesterday. Chair Coe stated that it's amazing to see the diversity in the state.

** 01-75 **Adopt Agenda** - Moved by Jerome Deal, seconded by Clair Nelson, to approve the agenda as presented. Motion passed on a voice vote.

** 01-76 **Minutes of September 26, 2001** - Moved by Char Kahler, seconded by Dwain Otte, to approve the minutes of September 26, 2001, as circulated. Motion passed on a voice vote.

Reports

Chair's Report – Chair Coe reported that he attended the Wetlands Committee meeting, October 12, in St. Cloud. Chair Coe attended the EQB meeting on October 18. The EQB granted an exemption request for the Fibrominn Biomass Power Plant. Granting the exemption request would mean that Fibrominn and the City of Benson would proceed to obtain approvals for the project from local governmental bodies with jurisdiction, which is the City itself, and from various state and federal agencies, including PCA which has to issue an air permit. EQB adopted the draft amendments to the power plant siting rules as interim guidance for processing site and route permits under the new Energy Security and Reliability Act.

Executive Director - Ron reported on the 2002 bonding narratives. Ron anticipates agency budget reductions. Ron stated that he looks to the BWSR Administrative Advisory Committee as an oversight for agency budget adjustments. Ron reported that BWSR has two legislative policy initiatives: WCA and local water planning authorities. BWSR has submitted four legislative initiatives: water planning tax levy authority; water planning statutes unification; modernize and standardize SWCD statutes; and clarifications to M.S. 103B.101. Ron stated that the strike is over; he's happy to have staff back in place. There are some backlogs, but things will get caught up. Conclusions of the contract negotiations will be absorbed by agencies. Ron commented on a letter from the Joint Powers Board in Bemidji regarding their grant allocation. Ron stated that the Administrative Advisory Committee will review this and make a recommendation to the full Board. Ron recommends that the December BWSR meeting be held on December 19. Ron said it's good to be back after his back injury and trip to Europe. Chair Coe commended Doug Thomas for his good work while Ron was out.

Dispute Resolution Committee (DRC) - Chair Coe reported that there are eight appeals pending. All eight appeals involve WCA. This is the most appeals BWSR has ever had

pending. The most recent appeals are of two exemption determinations in the City of Maple Lake. Both appeals are being remanded to the city for the city to develop a better record that includes a technical evaluation panel report and findings that support their decision. There was a pending appeal involving a cease and desist order in the City of East Bethel. The appeal was denied since cease and desist orders cannot be appealed to BWSR. The applicant will probably follow the restoration order and apply for an exemption or replacement plan. That decision could then be appealed. The rest of the appeals have been reported to the Board previously. There is an appeal of a no-loss decision in Mower County. The appeal was remanded since the decision was made by a staff individual with no public hearing. The Mower SWCD Board plans to hear the matter in early November. Two other pending appeals involve the same exemption determination by the Rice Creek Watershed District. The appeals have been accepted and a prehearing conference will be scheduled once the record is received. The hearing before the DRC will probably be in early January. Another pending appeal is of an exemption determination in McLeod County. The appeal has been remanded to the county to develop a better record including more technical analysis. At a recent county board meeting, the county affirmed their previous decision. Another pending appeal is in LaCrescent along the Mississippi River in Houston County. The replacement plan denial arose from a cease and desist order and a restoration order. The appeal has been accepted and at the prehearing conference resolution was explored. The appeal is pending while discussions occur with the landowner, the city, and the county.

Char Kahler asked about the DRC viewing appeal sites. Ron Harnack stated that viewing a site can give you a better idea of seeing what's involved, which can be beneficial in the dispute resolution process. Ron stated that Jim Haertel and John Jaschke need to be involved in scheduling sites reviews with the parties involved. Ron stated that it's not a good idea to view the site if the appeal has been remanded back, but otherwise, to review the site is appropriate.

Agency Reports

Mark Dittrich, Department of Agriculture (MDA), reported that MDA is working with NRCS on organic production. A survey was sent to organic producers asking how the state can help. Mark commented on MDA's work and programs regarding apple growing; plant pesticides, and soybean aphids. Mark distributed a directory of feedlot resources and feedlot rules.

Dan Wilson, Department of Health (MDH), reported that the strike effects were handled well by their division, they got through the strike pretty well. Dan reported that MDH has a hotline set up for the public to call regarding questions relating to anthrax. Dan stated that there is much public interest in anthrax, MDH is receiving hundreds of calls with

questions. Dan reported that Minnesota is one of the best in epidemiology in the world. Dan stated that we're in a new era, relationships now exist between epidemiology and criminal investigations. Dan reported that MDH has a legislative initiative relating to bioterrorism. Dan stated that the threat of risk to most community water systems is quite low, surveillance and preparedness are in place.

Wayne Edgerton, Department of Natural Resources (DNR), stated that DNR is glad the strike is over. Wayne reported that DNR had a problem with a mailing during the strike which involved the antlerless permit applications, corrections were made and things are moving forward. Wayne reported that DNR produced another CREP informational video on the Dambroten farm; with the exception of the metro area, this video is televised statewide. Wayne reported that a DNR legislative initiative relating to the ~~petition~~ partition fence law for deer and elk will affect many. DNR will hold meetings with various agencies and organizations regarding the fence law, BWSR will be included in those discussions.

CREP Update - Doug Thomas reported that just over 80,000 acres have been enrolled in CREP. The money limit will be reached before the 100,000 acres. Updates are available at the end of every month. Ron Harnack stated that there's interest in an interstate CREP in the Red River Basin.

Ron Harnack reported that Craig Johnson, PCA's legislation liaison, is now in the Governor's office as BWSR's contact.

Chair Coe called for a break in the meeting at 10:15 a.m. The meeting reconvened at 10:30 a.m.

Committee Recommendations

Proposed WCA Rules - John Jaschke presented the draft timeline for adoption of amendments to WCA and PW rules. John reported that the Wetland Committee met on October 12 to review details of the proposed rule. John gave an overview of the proposed rules. Discussion followed. Ron Harnack stated that a major state policy change is the exemption listed on page 15 regarding the U.S. Army Corps of Engineers. John will clarify and explain the language in the Sonar. Ron stated that we need to be upfront, identify and clarify in each area that is affected. Moved by Char Kahler, seconded by Jerome Deal, to approve the resolution as presented, that BWSR adopts the proposed Wetland Conservation Act Rules (with any changes as noted to the 10/19/01 version and authorizes the executive director to (i) make further changes recommended by the Office of the Revisor of Statutes or the Office of Administrative Hearings, (ii) coordinate rule development and procedures with the parallel Department of natural Resources rule adoption process for Chapter 6115, (iii) correct editing errors,

** 01-77

(iv) complete the processes necessary to publish said rules for public comment – including development of the Statement of Need and Reasonableness (SONAR), (v) convene staff, local government and public information, meetings to provide a greater understanding of the proposed rule and solicit ideas for improvements, and (vi) carry out all other responsibilities to adopt the rule and make it effective no later than July 30, 2002. Motion passed on a voice vote. Ron encouraged board members to attend the stakeholders meeting. Chair Coe commended John Jaschke and thanked him for his hard work on this.

Comfort Lake-Forest Lake Watershed District (CLFLWD) Revised Watershed Management Plan - Jack Frost reported that the Metro Subcommittee met on
** September 11, to review the plan and recommends approval. Moved by Jack Frost,
01-78 seconded by Dwain Otte, to approve the Comfort Lake-Forest Lake Watershed District Revised Watershed Management Plan. Motion passed on a voice vote.

Order Enlargement of Carnelian-Marine Watershed District - Karen Harder reported that the Metro Subcommittee met via conference call on Oct. 11. The Metro Subcommittee recommends inclusion of German Lake only, with the number of
** watershed district managers to remain at five. Moved by Karen Harder, seconded by
01-79 Dwain Otte, to order the expansion of the Carnelian-Marine Watershed District to include German Lake only, and the number of watershed district managers remain at five. Discussion followed regarding contiguous area. It was reported that Jim Haertel is working on this with the Carnelian-Marine Watershed District. Motion passed on a voice vote.

New Business

2002-2003 Natural Resources Block Grants (NRBG) - Wayne Zellmer reported that the NRBG is an annual grant formulated to assist local governmental units in implementing state mandated programs. These programs are: Comprehensive Local Water Planning, the Wetland Conservation Act, DNR Shoreland Management, the MPCA County Feedlot, and the MPCA County Individual Sewage Treatment Systems (ISTS). Wayne stated that the staff of BWSR, MPCA, and DNR request that the Board authorize staff to implement the 2002-2003 biennial NRBG Program and recommend
** approval - subject to final numbers from PCA. Moved by Dwain Otte, seconded by
01-80 Ginny Imholte, to approve the 2002-2003 Natural Resources Block Grants, subject to final numbers from PCA. Motion passed on a voice vote.

Upcoming Meetings

- November 14, 1:00 p.m., the Administrative Advisory Committee will meet in St. Paul.
- The next BWSR Meeting will be held December 19, in St. Paul.
- MAT Annual Meeting, November 16-17, St. Cloud.

- MAWD Annual Meeting, November 29 – December 1, Alexandria
- MASWCD Annual Meeting, December 2-4, Bloomington
- AMC Annual Meeting, December 3-5, St. Paul

Ron Harnack asked board members to contact Mary Jo Anderson with their plans to attend the annual meetings. Board members are encouraged to attend one or two annual meetings. Ron stated that there will be limited staff attendance at the annual meetings due to the fiscal constraints.

** 01-81 Moved by Jerome Deal, seconded by Victor Ormsby, to adjourn the meeting at 12:50 p.m. Motion passed on a voice vote.

Respectfully submitted,

Leland Coe
Chair

MINNESOTA PLANNING ENVIRONMENTAL QUALITY BOARD

Lee Cox

October 11, 2001

TO: EQB Members

FROM: Michael Sullivan
Telephone: 651-296-9027

RE: **ANNOTATED AGENDA FOR**
October 18, 2001 Board Meeting

General
This month's meeting will be at the State Office Building, Hearing Room 5. The meeting will begin at 2:00 p.m. Staff will be available for briefing and questions at 1:00 p.m.

Attention: ** Denotes an agenda item that may require Board action.

I. **Adoption of Consent Agenda****
-Adoption of Proposed Agenda for October 18, 2001

II. **Chair's Report**

III. **Executive Director's Report** Water Resources Committee final draft to Legislature in Dec.

IV. **Committee Reports**
-None

Caledonia mtg in Tom
34 Tom
38 mtg

V. **Legal Counsel Report**

VI. **Agency Reports**

VII. ****Decision on Whether to Grant an Exemption for the Fibrominn Biomass Power Plant**

9-0 in favor

Presenters: Suzanne Steinhauer, 651-296-52878 and Alan Mitchell, 651-296-3714

Materials:
1. Staff Memorandum
2. Sample Findings of Fact, Conclusions, and Order Granting Exemption
3. Proposed Resolution
4. Application to Exempt the Fibrominn Biomass Power Plant
5. Public Comments Received (25 separate comments)

658 Cedar St.
St. Paul, MN 55155

Telephone:
612-296-3985

Facsimile:
612-296-3698

TTY:
800-627-3529

www.mnplan
state.mn.us

Background
Fibrominn LLC and the City of Benson, Minnesota, have applied for an Exemption from the requirements of the Power Plant Siting Act for a 62 megawatt power plant to be located in the City of Benson. The plant will burn approximately 525,000 tons of poultry litter (primarily turkey manure) and another 200,000 tons of other biomass materials (like sunflower hulls) per year.

Prior to August 1, 2001, when the new Energy Security and Reliability Act went into effect, the Power Plant Siting Act provided that the proposer of a large electric power generating plant of less than 80 megawatts could apply to the EQB for an exemption from the permitting requirements of the PPSA. After August 1, the exemption provision no longer exists. Fibrominn and the City of Benson applied for an exemption on July 31, 2001, so the old law applies to this proceeding.

The standard for granting an exemption is whether the project will create significant human or environmental impacts. If the Board finds that the project will not create such impacts, the Board may grant an exemption, in which case the project proposers must seek approval from other state and local governmental bodies with jurisdiction over the project.

In accordance with the requirements of the EQB's power plant siting rules, Minnesota Rules chapter 4400, notice of the application was prepared and given to the public and an opportunity to submit written comments was provided. Twenty-five written comments were submitted. Only two of the comments raised any objections to the granting of the exemption. Those two commenters requested that the Board investigate the issue of the effect of the burning of the turkey litter on organic farmers who use the litter as fertilizer and the resulting use of chemical fertilizers. They also requested that the Board consider the potential for the emission of mercury from the plant.

The rules require the Board to evaluate a number of factors in determining whether to grant an exemption. The application addresses these factors, and the staff has prepared a set of proposed findings of fact and conclusions that address each of the factors. The staff is of the view that the project will not create significant human or environmental impacts. The question of whether the state should sanction the burning of turkey litter, that could be used for fertilizer instead is an important question, but one which seems beyond the scope of the impacts considered by the Board in exemption proceedings.

Staff Recommendation. The staff recommends that the Board grant the exemption request. Granting the request would mean that Fibrominn and the City of Benson would proceed to obtain approvals for the project from local governmental bodies with jurisdiction, which is the City itself, and from various state and federal agencies, including the Pollution Control Agency which has to issue an air permit.

VIII **Adoption of Draft Amendments to Power Plant Siting Rules as Interim Guidance for Processing Site and Route Permits Under the New Energy Security and Reliability Act

Presenter: Alan Mitchell, EQB Staff, 651-296-3714

Materials Enclosed

1. Staff Memorandum
2. Draft Rule Amendments

Resolution

Background

The Minnesota Legislature passed the Energy Security and Reliability Act in May 2001. The law went into effect on August 1, 2001. The staff has advised the Board at past meetings about the changes made by this new law.

Because of the substantial changes made in the Power Plant Siting Act by the new law, it is necessary for the EQB to amend its power plant siting rules, which are found in Minnesota Rules chapter 4400. The staff has prepared draft amendments to these rules and they have been made available to the utilities, to various interest groups, and to the general public for the past several months. A copy was presented to the Board at its August Board meeting. The staff has begun the rulemaking process to amend the rules by publishing notice in the State Register on September 10 that the EQB was intending to amend its chapter 4400 rules and that the public was invited to comment on that intention. The notice and the draft rules are both available on the EQB webpage.

It is going to take a period of time before the EQB can complete the rulemaking process and formally adopt amendments to the chapter 4400 rules. In the meantime, the EQB is likely to receive applications for site permits for large electric power generating plants and for route permits for high voltage transmission lines. Rapids Power LLC has indicated it will submit a permit application in November for a 225 megawatt cogeneration facility in Grand Rapids, Minnesota, and Xcel Energy, Inc. has announced a new 345 kilovolt transmission line in southwestern Minnesota. Other applications for projects are likely too.

It seems advisable to provide guidance to the utilities and the general public on how the Board intends to process these permit applications that are submitted before the rule amendments are effective. The draft rules provide a reasonable and appropriate mechanism for administering the permit program. The draft rules incorporate those parts of the existing rules that are still pertinent to the process. Also, much of what is contained in the draft rules is taken directly from the new statutory language. The draft rules provide for an extensive evaluation of the environmental and human impacts of any proposed project and provide ample opportunities for the public to participate in the matter.

Recommendation. The staff recommends that the Board adopt the draft power plant siting rules as interim guidance for administration of the power plant siting program.

The specific action recommended is to adopt the draft rules as interim guidance until such time as the EQB completes the rulemaking process or until the Board shall take further action to revise the draft rules.

Testimony re. Fiberman – Mr. Carl Strickler + Terry Wambsley – Fiberm.

Mercury – Terry Wambsley stated that Fiberman has evaluated 37 samples of turkey manure + have not found any mercury of the 40-50 part per billion.

Odor – Mr Strickley – They have had no complaint during the 8 years of service in the U.K.

Odor + Mercury – Mayor + City Mgr of Benson – 33 people visited the plants in the U.K. – none detected odor problem – They also talked to many people with no public concern for the odor in the U.K.

Greg Langmo – strong proponent for the plant and for the protection of the environment. Been to the plant in the U.K. 4 times – no odor.

David Morse – Mpls – Against –

Dispute Resolution Report
October 22, 2001

There are presently eight appeals pending. All eight appeals involve WCA. This is the most appeals BWSR has ever had pending.

The most recent appeals are of two exemption determinations in the City of Maple Lake. Both appeals are being remanded to the city for the city to develop a better record that includes a technical evaluation panel report and findings that support their decision.

There was a pending appeal involving a cease and desist order in the City of East Bethel. The appeal was denied since cease and desist orders cannot be appealed to BWSR. The applicant will probably follow the restoration order and apply for an exemption or replacement plan. That decision could then be appealed.

The rest of the appeals have been reported to you previously.

There is an appeal of a no-loss decision in Mower County. The appeal was remanded since the decision was made by a staff individual with no public hearing. The Mower SWCD Board plans to hear the matter in early November.

Two other pending appeals involve the same exemption determination by the Rice Creek Watershed District. The appeals have been accepted and a prehearing conference will be scheduled once the record is received. The hearing before the DRC will probably be in early January.

Another pending appeal is of an exemption determination in McLeod County. The appeal has been remanded to the county to develop a better record including more technical analysis. At a recent county board meeting, the county affirmed their previous decision.

Another pending appeal is in LaCrescent along the Mississippi River in Houston County. The replacement plan denial arose from a cease and desist order and a restoration order. The appeal has been accepted and at the prehearing conference resolution was explored. The appeal is pending while discussions occur with the landowner, the city and the county.

BOARD RESOLUTION # 01-77

Minnesota Board of Water & Soil Resources

Wetland Conservation Act (WCA) Proposed Rule Adoption for publication and public comment – Minnesota Rule Chapter 8420

WHEREAS, the Board of Water and Soil Resources is required by 2000 Laws of Minnesota, Chapter 382, Section 20, to adopt permanent WCA rules, replacing the current rule enacted through the exempt proceedings, by July 30, 2002; and

WHEREAS, the proposed Rules include changes necessary to: i) incorporate the revisions required by 2000 Laws of Minnesota, Chapter 382 and 2001 Laws of Minnesota, Chapter146; and ii) link to separate rules being adopted by the Department of Natural Resources in Chapter 6115; and iii) incorporate clarifications, updates to recent scientific information, and process changes needed to reflect and improve current implementation of the WCA; and

WHEREAS, the proposed Rules have been developed in conjunction with the Department of Natural Resources and have the input of stakeholders who participated in the development of the legislation and thus the proposed rules have had input from a majority of those using and affected by them.

NOW, THEREFORE, the Board of Water and Soil Resources hereby adopts the proposed Wetland Conservation Act Rules (with any changes as noted to the 10/19/01 version) and authorizes the Executive Director to; (i) make further changes recommended by the Office of the Revisor of Statutes or the Office of Administrative Hearings, (ii) coordinate rule development and procedures with the parallel Department of Natural Resources rule adoption process for Chapter 6115, (iii) correct editing errors, (iv) complete the processes necessary to publish said rules for public comment -- including development of the Statement of Need and Reasonableness (SONAR), (v) convene staff, local government and public information meetings to provide a greater understanding of the proposed rule and solicit ideas for improvements, and (vi) carry out all other responsibilities to adopt the rule and make it effective no later than July 30, 2002.

By: Leland G Coe
Leland Coe, Board Chair

Date: October 25, 2001

Committee Recommendations

1. Wetland Committee
   Proposed WCA Rules
   DECISION

DRAFT TIMELINE FOR ADOPTION OF AMENDMENTS TO WCA & PW RULES

Reviewed by: John Jaschke, John Linc Stine, Bruce Gerbig, and Kathy Lewis on 5-02-01
Updated by: John Jaschke on 9-28-01

Informal Stage *(incomplete)*

May 1, 2001: Internal DNR Statewide Interdisciplinary Review Service (SIRS) begins

June 5, 2001: Second DNR Statewide Interdisciplinary Review Service (SIRS) meeting

June 21, 2001: BWSR Board Wetland Committee meeting to establish proposed rulemaking goals and principles and endorse schedule

July 3, 2001: Third DNR Statewide Interdisciplinary Review Service (SIRS) meeting

July 16, 2001: LGU staff meeting to provide input/ideas, Waite Park

July 25, 2001: BWSR Board meeting to discuss rulemaking goals & principles

July 16, 2001: 2nd LGU staff meeting to provide input/ideas, Waite Park

August 22, 2001: Initial Stakeholders Meeting, MNDOT Arden Hills

October 10, 2001: Final Stakeholders meeting to review draft proposed rule and explain formal rulemaking processes.

October 12, 2001: BWSR Wetland Committee meeting to review draft proposed rule and SONAR for WCA.

Formal "Dual Notice" Rulemaking Process

By Monday, June 11, 2000 – memo to Governor's Office announcing rule amendment

By Monday, June 25, 2001 – Publication Order for Request for Comments to State Register

Monday, June 25, 2001 – Request for Comments published in State Register (at least 60 days prior to Dual Notice per Minn Stat 14.101)

Thursday, October 25, 2001 – **WCA Proposed Rules and SONAR approved by Board. PW Proposed Rules and SONAR approved by Commissioner.** Rules sent to Governor's Office. Copies of proposed rules to Commissioner of Agriculture (at least 30 days prior to Dual Notice per Minn Stat 14.111)

Monday, October 29, 2001 – Revisor's certificate approving rules for publication

By Monday, November 26, 2001 – Receive Governor's Office approval

Wednesday, December 19, 2001 – Submit Dual Notice, Rules, SONAR, and Notice Plan to OAH (at least five working days prior to Dual Notice because ALJ has five working days to review per Minn R 1400.2080, subp. 5 and Minn R 1400.2060, subp 3)

Wednesday, December 19, 2001 – BWSR Board Resolution authorizing Executive Director to give Dual Notice

Tuesday, January 8, 2002 – publication order to State Register (by Wednesday noon a week and a half before publication date)

Monday, January 7, 2002 – Dual Notice mailed to all on BWSR and DNR rulemaking mailing lists (at least 30 days prior to end of comment period per Minn.R.1400.2080, subp.6) and notice per notice plan including notice to legislature (chief authors and committee chairs) and web site publication. Rules and SONAR also to legislative reference library.

Tuesday, January 22, 2002 – Dual Notice published in State Register (day after holiday)

Monday, February 25, 2002 – End of comment period (30 days after Dual Notice published)

Anticipate that Hearing will be Requested (otherwise formal process is reduced by about 3 months)

Tuesday - Thursday, March 5-7, 2002 – Hearings if more than 25 request (not sooner than 40 days after Dual Notice per Minn Stat.14.22, subd.2 with at least one hearing in an agricultural area of state (per Minn Stat 14.14, subd.1b)

Wednesday, March 27, 2002 – Agency's and public's comments to the hearing record (comment period lasts five working days, may be extended to 20 calendar days if ordered by ALJ. Minn.Stat.14.15, subd.1: Minn.R.1400,.2300,2530,.2540)

Wednesday, April 3, 2002 – Agency response to comments and information submitted during comment period (five working days)

Wednesday, May 15, 2002 – Chief ALJ issues hearing report (within 40 days of close of response period but can be extended upon request by ALJ. Minn.Stat.14.15, subd.2).

Friday, June 14, 2002 – Agency decides if changes to proposed rule are needed in three categories: i.) technical only, notice to Governor and ALJ, ii.) recommended by ALJ, notice to Governor only, or iii.) substantive, then must notice to Governor and ALJ which have 30 days to respond.

Wednesday, June 26, 2002 – BWSR Board passes resolution to authorize Executive Director to sign Order Adopting Rules, DNR Commissioner signs order Adopting Rules.

Wednesday, June 26, 2002 – Order Adopting Rules (at least five working days after approval from ALJ or Chief ALJ)

Wednesday, June 26, 2002 – File rules with Secretary of State.Minn.Stat.14.16, subd.3

Wednesday, June 26, 2002 – Give notice of filing (on same day file with Secretary of State)

Wednesday, June 26, 2002 – Secretary of State forwards approved rule to Revisor

Monday, July 1, 2002 – Revisor sends BWSR/DNR Notice of Adoption and BWSR/DNR sends Notice of Adoption of State Register.

Monday, July 15, 2002 – Notice of Adoption published in State Register (Monday, July 22, 2002 would be last possible date for publication)

Monday, July 22, 2002 – rules effective five working days after published in State Register per Minn.Stat.14.27 (Must be effective on or before July 31, 2002)

F:\LanWData\WCA\Rules 2002\WCA and PW rules schedule 2001.doc

Wetland Conservation Act (Ch 8420) Rule Amendments
Some Highlights

Overall: incorporate statute changes (2000, 2001), reduce some of the details, re-order the sections to follow the on-the-ground process, link with DNR PW program.

Exemptions: address SWANCC v. USCOE Supreme Court lawsuit (requires statute change).

Local Ordinance (CoWProMP): Provide greater incentive and ease for carrying out WCA via ordinance based on Water/Watershed/Wetland Plans.

LGU capacity: include minimum requirements for staff expertise.

Exemptions: Clarify deminimis, silviculture, ag-land, farm program participation.

No-loss: refine stormwater maintenance and address conversion to non-wetland via excavation.

Notice: eliminate notice for all determinations <10,000 sf impact, require notice of application for all determinations >10,000 sf

Enforcement: add "responsible party" in addition to landowner.

Replacement credit: some additional flexibility by developing a matrix of replacement credit type, amount and method.

Banking: allow some (15%) credit before waiting period ends, allow transfers to an account for future use without land ownership/easement required.

Department: NATURAL RESOURCES
Division of Ecological Services

STATE OF MINNESOTA
Office Memorandum

Date: October 17, 2001

To: John Jaschke
BWSR

From: Doug Norris, Wetlands Program Coordinator

Phone: 296-0779

Subject: Wetland Buffers

RECEIVED
OCT 19 2001
Bd. of Water & Soil Resources
St. Paul

John – attached are a few documents related to wetland buffers. From a water quality standpoint, a 50 foot buffer may be sufficient. However, for all functions, the more the better. For *optimum* wildlife habitat, the literature indicates that buffers exceeding 500 feet might be appropriate. Buffers of this size would adequately provide for breeding waterfowl and amphibians. Concerning waterfowl, it's important to note that narrow buffer strips become a buffet for predators and can actually become a local population sink for ducks. Whether it's realistic to require a 500 foot buffer is another matter. However, as Sue Galatowitsch indicates in her book (excerpt attached), 100 feet should be the minimum width considered. In the context that we're discussing, i.e., awarding NWC for restoration of partially drained basins, I believe that a 300 foot buffer requirement would not be unreasonable, but it's your rule.

From a habitat standpoint, it may be more desirable to have a contiguous block of upland habitat adjoining the wetland rather than a concentric band around the entire perimeter. So another option to explore would be to require some ratio of upland to wetland, which could be distributed around or adjacent to the wetland as circumstances dictate. The standard recommendation among wildlife managers for optimum wildlife habitat is 4 acres of upland for every acre of wetland (I'd have to do some more digging for the justification for this). As a regulatory requirement, there would probably have to be some upper cap on the total acres of upland required. Also, although the majority of the required upland may be "clumped" in one area, a narrow (25-50 ft.) buffer around the entire perimeter should still be required for water quality purposes.

Possible rule language:

8420.0540, Sub. 2.D.(2) restoration of the natural hydrology regime and vegetation of jurisdictional wetlands that have been degraded by prior drainage, diversion of the natural watershed, or filling may:

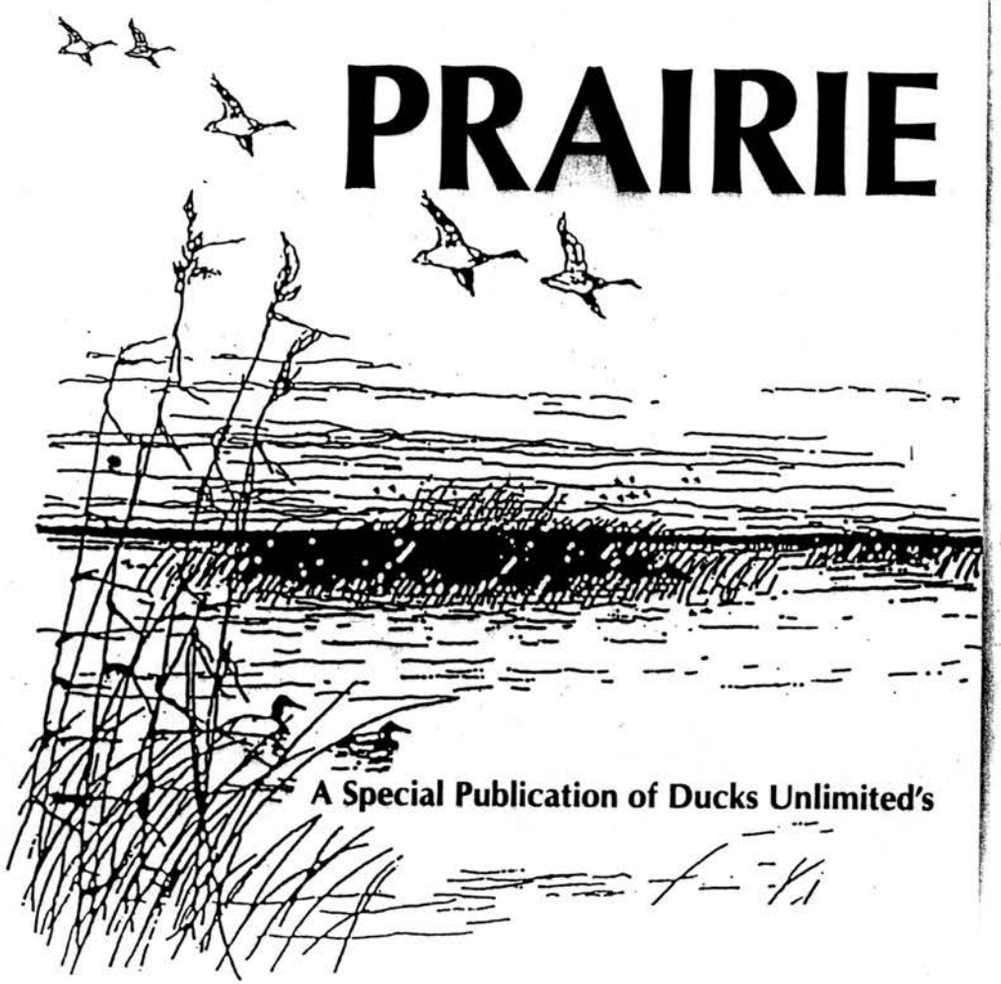
Option 1: *a. in a less than 80 percent area receive ~~public~~ new wetland credit in an amount up to _x_ percent of the degraded wetland area provided that a buffer of permanent native, non-invasive vegetation is established or preserved on upland adjacent and contiguous to the wetland. The width of the buffer must average 300 feet, but must not be less than 50 feet wide at any point.*

Option 2: *a. in a less than 80 percent area receive ~~public~~ new wetland credit in an amount up to _x_ percent of the degraded wetland area provided that a buffer of permanent native, non-invasive vegetation is established or preserved on upland adjacent to the wetland in a ratio of four acres of upland buffer for every acre of restored wetland. The upland buffer may be distributed around or adjacent to the wetland in any manner except that there must be a minimum buffer width of 50 feet*

around the entire periphery of the wetland.

This may be more than you asked for, but here it is. Also, I should note that this doesn't necessarily constitute an endorsement of awarding NWC for restoration of partially drained wetlands. I'm still not sure that this is the route we want to go under a regulatory program.

C: (w/out attachments)
Steve Colvin
Ray Norrgard



PRAIRIE

A Special Publication of Ducks Unlimited's

RESTORING WETLANDS

An Ecological Approach

Susan M. Galatowitsch
and Arnold G. van der Valk

Institute for Wetland and Waterfowl Research

IOWA STATE UNIVERSITY PRESS / AMES

WATERSHED LAND USE

Soil erosion from surrounding hillsides has resulted in the gradual filling of prairie wetlands with sediment since the melting of the glaciers. Since European settlement and the plowing up of the prairies, soil erosion rates have increased dramatically. Many drained basins that are being restored, especially those in rolling terrain, are today much shallower than they were 100 years ago because they have been partially filled by sediment from surrounding farm fields. Although wetlands are often touted as sediment traps, wetlands are not an ideal solution for soil erosion problems. Natural and restored wetlands are severely degraded by inputs of sediment and associated nutrients and pesticides. The potential life span of natural and restored wetlands will also be significantly reduced in watersheds with severe erosion problems. Farm practices that reduce soil erosion on-field are good for both farms and wetlands. The key to maximizing life spans of restored wetlands is reducing sediment inputs. Site evaluations should include a consideration of potential sediment inputs into the restored basin, i.e., the potential life span of the basin. All else being equal, basins with lower potential inputs should be given higher priority for restoration. Sites with significant soil erosion problems do not have to be eliminated from consideration for restoration, but as part of the restoration project suitable adjustments in the design of the project need to be made and possibly in the farming practices in the basin.

The size of watershed, kind of land cover, and steepness and length of slopes leading to the restored basin are used to calculate sedimentation rates into the basin. See Table 4.2 for soil loss rates and sediment values to be expected for most conditions typically found in the region, and Table 4.3 for how to calculate sedimentation rates. Soil loss rates used in these calculations are based on estimates from the USDA Universal Soil Loss Equation. Local SCS personnel can help with calculating soil loss estimates for specific projects. If sedimentation is likely to have been excessive in the past, excavating some of these sediments during construction may be appropriate (see previous section).

The amount of sediment entering a wetland can be reduced by having a perennial grass buffer around the restored wetland and by implementing appropriate soil conservation practices in the watershed. All restored wetlands should have a buffer of permanent, close-growing vegetation, such as prairie grasses, around the basin to reduce sediment inputs as well as nutrient and pesticide inputs. Permanent grassland (e.g., hay fields, pastures, prairies) is the most effective way to reduce

TABLE 4.2. Selected soil erosion estimates for a range of conditions commonly encountered within the southern prairie pothole region. Soil Conservation Service state office staffs in Iowa, Minnesota, and South Dakota made these calculations from the Universal Soil Loss Equation.

Location	Situation	Soil Loss Rate (Tons/Acre/Year)
CENTRAL MINNESOTA Kandiyohi County Typical Soil: Sundburg-Wadenhill Slope: 7-10%	Corn-soybean rotation, fall moldboard plow.	10.5
	Corn-soybean rotation mulch till with 30% residue after planting corn and 40% residue cover after planting soybeans.	5.3
	Grazed pasture.	0.3
	Unharvested permanent grass pasture.	0.1
SOUTH-CENTRAL MINNESOTA Cottonwood County Typical Soil: Clarion-Nicollet Slope: 2-5%	Corn-soybean rotation fall mulch till/moldboard plow leaving 10% residue cover after planting corn and 10% residue cover after planting soybeans.	3.7
	Corn-soybean rotation mulch till leaving 25% residue cover after planting corn and 30% cover after planting soybeans.	2.6
	Grazed pasture.	0.2
	Unharvested permanent grass cover.	0.04
SOUTHEASTERN SOUTH DAKOTA Brookings County Typical Soil: Poinsett-Buse-Waubay Slope: 7-10%	Corn-soybean rotation fall moldboard plow.	18.2
	Corn-soybean rotation leaving 20% ground cover after planting corn and 35% ground cover after planting soybeans.	9.7
	Grazed pasture.	0.6
	Unharvested permanent grass pasture.	0.1
SOUTHEASTERN SOUTH DAKOTA Brookings County Typical Soil: Poinsett-Buse-Waubay Slope: 2-5%	Corn-soybean rotation, fall moldboard plow.	8.0
	Corn-soybean rotation leaving 20% ground cover after planting corn and 35% ground cover after planting soybeans.	4.3
	Grazed pasture.	0.3
	Unharvested permanent grass pasture.	0.05
NORTHWESTERN IOWA Dickinson County Typical Soil: Clarion-Nicollet Slope: 7-10%	Corn-soybean rotation, fall moldboard plow.	21.0
	Corn-soybean rotation mulch till with 30% residue after planting corn and 40% residue cover after planting soybeans.	15.0
	Grazed pasture.	1.0
	Unharvested permanent grass cover.	0.2
NORTH-CENTRAL IOWA Pocahontas County Typical Soil: Clarion-Nicollet Slope: 2-5%	Corn-soybean rotation, fall moldboard plow.	7.0
	Corn-soybean rotation mulch till with 30% residue after planting corn and 40% residue cover after planting soybeans.	5.0
	Grazed pasture.	0.3
	Unharvested permanent grass cover.	0.1

onditions commonly
il Conservation Serv-
ı made these calcula-

	Soil Loss Rate (Tons/Acre/Year)
ird	10.5
ith 30%	5.3
	0.3
re.	0.1
	3.7
sidue esidue	
ving rn and	2.6
	0.2
	0.04
rd	18.2
ground round	9.7
	0.6
re.	0.1
rd	8.0
ground und	4.3
	0.3
	0.05
	21.0
0%	15.0
	1.0
	0.2
rd	7.0
h 30%	5.0
	0.3
	0.1

TABLE 4.3. Sample calculations for estimating project life span. A 2-acre restored basin in Brookings County, South Dakota, is within an 18-acre watershed. Approximately 6.5 acres of the watershed are in corn-soybean rotation, leaving 20%–35% residue; 9.5 acres are in permanent cover (Conservation Reserve Program). The slope gradient of the crop field was 5% and the slope gradient of the CRP area was 8%.

Crop Area: 6.5-acre	CRP Area: 9.5-acre
Soil Loss Rate (from Table 5.1): 4.3 tons/acre/yr	Soil Loss Rate: 0.1 tons/acre/yr
Sediment Volume (loss rate x 21.73): 93.44 cu ft/acre/yr	Sediment Volume: 2.17 cu ft/acre/yr

Sediments from Crop Area per year = 6.5 acre x 93.44 cu ft/acre = 607.4 cu ft
Sediments from CRP Area per year = 9.5 acre x 2.17 cu ft/acre = 20.6 cu ft

Total Sediments from watershed = 607.4 + 20.6 = 628 cu ft/year
Volume of Basin (from topographic survey): 44612 cu ft.

PROJECTED LIFE SPAN OF BASIN (if current land use persists):
44612 cu ft (volume of basin) / 628 cu ft/ year = 71 YR

soil erosion because a tight grassland sod will has 95% less soil erosion than a cropfield (U.S. Soil Conservation Service, 1983). If the grassland is grazed, soil erosion will be greater. Proper grazing management is essential for maintaining adequate vegetative cover. Grassland buffers are also important for many species of wildlife such as dabbling ducks who make their nests in uplands. The wider this buffer, the better. The minimum buffer width that should be considered is 100 feet.

Particularly in watersheds with steeps slopes and in row crops efforts should be made as part of the wetland restoration plan to introduce soil conservation practices in the watershed. These practices include contour farming and terracing. Contour farming involves planting crops perpendicular to the direction of the slope, whereas terracing involves creating step-like gradations along the slope face. In both cases, soil is trapped on the field and not permitted to travel far from its point of detachment. Contouring is most effective on slopes of 2%–7%, reducing erosion 40%–50% (U.S. Soil Conservation Service, 1983). When combined with conservation tillage, soil erosion can be reduced by 70%–80%. Contour farming is much less effective on steeper slopes. Terraces are appropriate in these situations and will have an equally dramatic effect on limiting soil erosion by 60%–90%. Changes in tilling practices should also be encouraged. Conventional tillage results in practically bare soil much of the spring and fall, generally the periods of highest rainfall in the region. In contrast, conservation tillage, including chisel

planting, strip tillage, till planting, plow planting, or wheel track planting, leaves crop residues on the field. This protective cover minimizes soil erosion by allowing more water to infiltrate rather than run off and reducing raindrop impact soil detachment.

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WETLAND BUFFERS: Use and Effectiveness

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for

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Shorelands and Coastal Zone Management Program
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EXECUTIVE SUMMARY

This report was developed to assist efforts by Washington State agencies and local governments developing policies and standards for wetlands protection. The report summarizes and evaluates scientific literature, an agency survey, and a recent field study on wetland buffer use and effectiveness. Published literature was obtained from several sources and contains information from throughout the country on the concept of wetland buffers, their important functions, effective buffer widths, and buffer determination models. The agency survey reviewed buffer requirements of several states throughout the U.S. and for counties and cities in Washington. The field study reviewed the current state of buffers at several sites in King and Snohomish counties.

Scientific Literature Review

Wetland buffers are areas that surround a wetland and reduce adverse impacts to wetland functions and values from adjacent development. The literature indicates that buffers reduce wetland impacts by moderating the effects of stormwater runoff including stabilizing soil to prevent erosion; filtering suspended solids, nutrients, and harmful or toxic substances; and moderating water level fluctuations. Buffers also provide essential habitat for wetland-associated species for use in feeding, roosting, breeding and rearing of young, and cover for safety, mobility, and thermal protection. Finally, buffers reduce the adverse impacts of human disturbance on wetland habitats including blocking noise and glare; reducing sedimentation and nutrient input; reducing direct human disturbance from dumped debris, cut vegetation, and trampling; and providing visual separation. Wetland buffers are essential for wetlands protection.

Scientists generally agree that appropriate buffer widths are based on several variables, including:

- existing wetland functions, values, and sensitivity to disturbance;
- buffer characteristics;
- land use impacts; and
- desired buffer functions.

Wetland functions, values, and sensitivity are attributes that will influence the necessary level of protection for a wetland. Those systems which are extremely sensitive or have important functions will require larger buffers to protect them from disturbances that may be of lesser threat to a different site. Where wetland systems are rare, or irreplaceable (e.g., high quality estuarine wetlands, mature swamps, bogs), greater buffer widths will ensure a lower risk of disturbance.

Buffer characteristics influence their ability to reduce adverse effects of development, most importantly in relationship to slope and vegetative cover. Buffers with dense vegetative cover on slopes less than 15% are most effective for water quality functions. Dense shrub or forested vegetation with steep slopes provide the greatest protection from direct human disturbance. Appropriate vegetation for wildlife habitat depends on wildlife species present in the wetland and buffer. Effectiveness is also influenced by ownership of the buffer.

Land uses with significant construction and post-construction impacts need larger buffers. Construction impacts include erosion and sedimentation, debris disposal, vegetation removal, and noise. Post-construction impacts are variable depending on the land use, but residential land use, in particular, can have significant impacts. Residential land use is associated with yard maintenance debris, domestic animal predation, removal of vegetation, and trampling. Wetland areas and their buffers should not be included in residential lots.

Appropriate buffer widths vary according to the desired buffer function(s). Temperature moderation, for example, will require smaller buffer widths than some wildlife habitat or water quality functions. Buffer widths for wildlife may be generalized, but specific habitat needs of wildlife species depend on individual habitat requirements.

Buffer effectiveness increases with buffer width. As buffer width increases, the effectiveness of removing sediments, nutrients, bacteria, and other pollutants from surface water runoff increases. One study found that for incrementally greater sediment removal efficiency (e.g., from 90 to 95%), disproportionately larger buffer width increases are required (e.g., from 100 to 200 feet). As buffer width increases, direct human impacts, such as dumped debris, cut or burned vegetation, fill areas, and trampled vegetation will decrease. As buffer width increases, the numbers and types of wetland-dependent and wetland-related wildlife, that can depend on the wetland and buffer for essential life needs, increases.

In western Washington, wetlands with important wildlife functions should have 200 to 300-foot buffers depending on adjacent land use. In eastern Washington, wetlands with important wildlife functions should have 100 to 200-foot buffers depending on adjacent land use. To retain wetland-dependent wildlife in important wildlife areas, buffers need to retain plant structure for a minimum of 200 to 300 feet beyond the wetland. This is especially important where open water is a component of the wetland or where the wetland has heavy use by migratory birds or provides feeding for heron. The size needed would depend upon disturbance from adjacent land use and wetland resources involved. Priority species may need even larger buffers to prevent their loss due to disturbance or isolation of subpopulations.

Buffer widths effective in preventing significant water quality impacts to wetlands are generally 100 feet or greater. Sensitive wetland systems will require greater distances and degraded systems with low habitat value will require less. The literature indicates effective buffers for water quality range from 12 to 860 feet depending on the type of disturbance (e.g., feedlot, silviculture) and the measure of effectiveness utilized by the author. For those studies that measured effectiveness according to removal efficiency, findings ranged from 50 to 92% removal in ranges of 62 to 288 feet. Studies that measured effectiveness according to environmental indicators such as levels of benthic invertebrates and salmonid egg development in the receiving water generally found that 98-foot buffers adjacent to streams were effective. These latter buffer distances may be conservative for wetlands, where lower water velocities and presence of vegetation result in increased sediment deposition and accumulation.

Studies indicate that buffers from 50 to 150 feet are necessary to protect a wetland from direct human disturbance in the form of human encroachment (e.g., trampling, debris). The appropriate width to prevent direct human disturbance depends on the type of vegetation, the

slope, and the adjacent land use. Some wetlands are more sensitive to direct disturbance than others.

Various methods are used for determining buffer widths in a regulatory context. Regulatory agencies often establish a rating system, commonly of three or four categories, assessing a given wetland's functional value, sensitivity, rarity, or other attributes. Accordingly, the amount of protection afforded to each type differs.

Agency Survey

A survey conducted of regulatory requirements for wetland buffers indicated that of 16 states surveyed, ten require wetland buffers and eight incorporate wetlands rating, either adopted or proposed. Of five Washington counties with adopted wetlands protection ordinances, all five require buffers and four utilize wetlands rating systems (the fifth is currently proposing an amendment that incorporates rating). Of 28 identified cities with wetlands protection ordinances, 27 contain specific buffer standards and 20 utilize wetlands rating systems. The one city without specific standards has adopted an interim policy statement for wetlands protection.

Specific buffer requirements vary widely at the state and local level. State buffer requirements range from 0 to 300 feet; Washington county buffer requirements range from 0 to 200 feet; and Washington city buffer requirements range from 0 to 300 feet.

Field Study

A field analysis of the current state of buffers in King and Snohomish counties found that effectiveness of the buffer was determined by the type of buffer in place, the type of alteration to the buffer and surrounding area, the width of the buffer, the time elapsed from development, and the ownership of the buffer and adjacent wetland.

Buffer function was found to be directly related to the width of the buffer. Ninety-five percent of buffers smaller than 50 feet suffered a direct human impact within the buffer, while only 35% of buffers wider than 50 feet suffered direct human impact. Human impacts to the buffer zone resulted in increased impact on the wetland by noise, physical disturbance of foraging and nesting areas, and dumping refuse and yard waste. Overall, large buffers reduced the degree of changes in water quality, sediment load, and the quantity of water entering the adjacent wetland. As a rule, buffers were subjected to a reduction in size over time. Of 21 sites examined, 18 were found to have reduced buffer zones within one to eight years following establishment.

IV. SUMMARY AND CONCLUSIONS

- Wetland buffers are essential for wetlands protection. No scientific study, no government agency, and no recommendations made during any communications with wetlands specialists nationwide suggested otherwise.

- Wetland buffers reduce the adverse impacts of adjacent land uses to wetlands. Wetland buffers also provide important habitat for wildlife which utilize wetlands and buffer areas for essential life needs. Buffers reduce wetland impacts by moderating impacts of stormwater runoff including stabilizing soil to prevent erosion; filtering suspended solids, nutrients, and harmful or toxic substances; and moderating water level fluctuations. They reduce the adverse impacts of human disturbance on wetland habitat including blocking noise and glare; reducing sedimentation and nutrient input; reducing direct human disturbance from dumped debris, cut vegetation, and trampling; and providing visual separation. They also provide essential habitat for wetland-associated species for use in feeding; roosting; breeding and rearing of young; and cover for safety, mobility and thermal protection.

- Buffer effectiveness increases with buffer width. As buffer width increases, the effectiveness of removing sediments, nutrients, bacteria, and other pollutants from surface water runoff increases. However, for incrementally greater sediment removal efficiency (e.g., from 90 to 95%), disproportionately larger buffer width increases are required (e.g., from 100 to 200 feet).

  As buffer width increases, direct human impacts, such as dumped debris, cut or burned vegetation, fill areas, and trampled vegetation, will decrease.

  As buffer width increases, the numbers and types of wetland-dependent and wetland-related wildlife that can depend on the wetland and buffer for essential life needs increases.

- Appropriate buffer widths are based on four variables: (1) existing wetland functions, values and sensitivity to disturbance; (2) buffer characteristics; (3) land use impacts; and (4) desired buffer functions.

- Wetlands with important functions and values or wetlands which are sensitive to disturbance will require greater buffers to reduce the risk of disturbance. Wetland functions, values, and sensitivity are attributes that will influence the necessary level of protection for a wetland. Those systems which are extremely sensitive or have important functions will require larger buffers to protect them from disturbances, which may be of lesser threat to a different site. Where wetland systems are rare or irreplaceable (e.g., high quality estuarine wetlands, mature swamps, and bogs) larger buffer widths will ensure a lower risk of disturbance.

- The uplands immediately adjacent to the wetland vary in their ability to reduce adverse effects of development, most importantly in relationship to slope and vegetative cover. Buffers with dense vegetative cover on slopes less than 15% are most effective for water

quality functions. Dense shrub or forested vegetation with steep slopes provide the greatest protection from direct human disturbance. Appropriate vegetation for wildlife habitat depends on wildlife species present in the wetland and buffer. Effectiveness is also influenced by ownership of the buffer.

- Land uses associated with significant construction and post-construction impacts need greater buffers. Construction impacts include erosion and sedimentation, debris disposal, vegetation removal and noise. Post-construction impacts are variable depending on the land use, but residential land use, in particular, can have significant impacts. Residential land use is associated with yard maintenance debris, domestic animal predation, removal of vegetation and trampling. Wetland areas and their buffers should not be included in residential lots.

- Appropriate buffer widths vary according to the desired buffer function(s). Temperature moderation, for example, will require smaller buffer widths than some wildlife habitat or water quality functions. Buffer widths for wildlife may be generalized, but specific habitat needs of wildlife species depend on individual habitat requirements.

- Buffers of less than 50 feet in width are generally ineffective in protecting wetlands. Buffers larger than 50 feet are necessary to protect wetlands from an influx of sediment and nutrients, to protect wetlands from direct human disturbance, to protect sensitive wildlife species from adverse impacts, and to protect wetlands from the adverse effects of changes in quantity of water entering the wetland.

- In western Washington, wetlands with important wildlife functions should have 200 to 300-foot buffers based on land use. In eastern Washington, wetlands with important wildlife functions should have 100 to 200-foot buffers based on land use. To retain wetland-dependent wildlife in important wildlife areas, buffers need to retain plant structure for a minimum of 200 to 300 feet beyond the wetland. This is especially the case where open water is a component of the wetland or where the wetland has heavy use by migratory birds or provides feeding for heron. The size needed would depend upon disturbance from adjacent land use and resources involved. Priority species may need even larger buffers to prevent their loss due to disturbance or isolation of subpopulations.

- Buffer widths effective in preventing significant water quality impacts to wetlands are generally 100 feet or greater. Sensitive wetland systems will require greater distances and degraded systems with low habitat value will require less.
The literature indicates effective buffer widths for water quality range from 12 to 860 feet depending on the type of disturbance (e.g., feedlot, silviculture) and the measure of effectiveness utilized by the author. For those studies which measured effectiveness according to removal efficiency, findings ranged from 50 to 92% removal of specific pollutants in ranges of 62 to 288 feet. Studies which measured effectiveness according to environmental indicators, such as levels of benthic invertebrates and salmonid egg development in the receiving water, generally found that 98-foot buffers adjacent to streams were effective. These latter buffer distances may be conservative for wetlands where lower water velocities and presence of vegetation result in increased sediment deposition and accumulation.

- Buffers from 50 to 150 feet are necessary to protect a wetland from direct human disturbance in the form of human encroachment (e.g., trampling, debris). The appropriate width to prevent direct human disturbance depends on the type of vegetation, the slope, and the adjacent land use. Some wetlands are more sensitive to direct disturbance than others.

- Some state agencies and many local governments rely upon wetlands rating systems to establish buffer widths. These rating systems are typically based upon perceived wetland value and upon acceptable levels of risk to the wetland from adjacent land uses. Of 16 states surveyed, ten require wetland buffers and eight incorporate wetlands rating, either adopted or proposed. Of five Washington counties, with adopted wetlands protection ordinances, all five require buffers and four utilize wetlands rating systems (the fifth is currently proposing an amendment which incorporates rating). Of 28 identified cities with wetlands protection ordinances (or interim ordinances), 27 contain specific buffer standards and 20 utilize wetlands rating systems. The city without specific standards has adopted an interim policy statement.

- Specific buffer requirements vary widely at the state and local level. This has resulted in differing buffer requirements and levels of wetland protection that are not necessarily effective. For example, the buffer requirements of many agencies are less than those that are reported in the literature to be effective.

  State buffer requirements range from 0 to 300 feet; Washington county buffer requirements range from 0 to 200 feet; and Washington city buffer requirements range from 0 to 300 feet.

(195)

National Wetlands Newsletter 23(4)

(195)

Core Habitat, Not Buffer Zone

While the terms "buffer zone" and "riparian buffer" are commonly understood, areas surrounding wetlands and streams are more than just zones to protect aquatic resources. Two conservation biologists describe these areas as core habitat for semi-aquatic species and call for new criteria to evaluate, protect, and manage these critical areas.

by Raymond D. Semlitsch and John B. Jensen

The terrestrial habitats adjacent to and surrounding wetlands are critical for the management of natural resources. Most conservationists and land managers understand that this land and water interface protects adjoining aquatic resources by filtering chemical pollutants, moderating temperature, and ameliorating siltation and other pollution caused by human activities such as timber harvesting, road building, agriculture, and urbanization. Furthermore, scientists and others generally agree that patches or strips of terrestrial habitat ranging from 30 to 60 meters wide can function as essential barriers around core aquatic habitats to protect them from surrounding land-use practices.[1] These upland "buffer zones" (also called "buffer strips" and "riparian buffers") receive much attention for their value in protecting aquatic resources. For example, the Natural Resources Conservation Service introduced its National Conservation Buffer Initiative in 1997 to help farmers and ranchers to improve aquatic resources, and it instituted a national goal of installing two million miles of buffers by 2002.

But what about the upland itself? These terrestrial zones of upland habitat surrounding wetlands serve another critical but often overlooked function. Rather than simply a buffer, they are core habitat for many semi-aquatic and terrestrial "ecotone" species. They are therefore essential for the survival of a number of species and for the preservation of biological diversity.

Use of Adjacent Uplands by Semi-Aquatic Species

Biologists who study semi-aquatic species have long understood the importance of uplands adjacent to wetlands to numerous species of turtles, salamanders, dragonflies, plants, and other organisms for their survival. But the regulations to protect these areas and management strategies to maintain them lag far behind. Although these areas should be regulated for both water resource protection and biodiversity conservation, only the aquatic portion of the resource receives federal oversight (unless threatened or endangered species are present). Biodiversity criteria have minimal, if any, regulatory oversight, especially for areas associated with isolated wetlands.[2] At the state and local level, natural resource managers who strive to protect biodiversity face further challenges in regulations or ordinances skewed toward protecting water resources rather than protecting biodiversity or the inhabitants of these core areas.

Criteria for maintaining biodiversity are different from criteria for maintaining water resources. For example, water resource protection criteria primarily are based on water temperature, siltation rates, and contaminant levels within aquatic habitats. Biodiversity protection criteria are based on use by target species for life history functions such as feeding, mating, nesting, and over-wintering. Numerous studies over the past decade document the use of terrestrial habitat adjacent to streams and wetlands by a broad range of taxa, including mammals, birds, reptiles, and amphibians. Of these studies, two examine uplands associated with wetlands to reveal the close dependence of semi-aquatic species on both habitats. They also illustrate the criteria needed to define the size of core habitats.

The first study demonstrates the use of terrestrial habitats surrounding a natural wetland for nesting and hibernation by freshwater turtles.[3] Nesting and hibernation are crucial for the reproduction and survival of turtles, and hence for maintaining viable populations. Scientists used radio-telemetry to monitor the nesting, egg deposition, and hibernation of three species of turtles (mud turtle, *Kinosternon subrubrum;* Florida cooter, *Pseudemys floridana;* and yellow-belly slider, *Trachemys scripta*). By plotting each nest and hibernation site location onto an aerial photograph of the upland habitats surrounding the wetland, the scientists

Raymond D. Semlitsch is a professor of ecology at the University of Missouri. His research focuses on developing a framework for amphibian conservation that includes landscape connectivity. John B. Jensen is a wildlife biologist with the Georgia Department of Natural Resources' Nongame-Endangered Wildlife Program and specializes in reptile and amphibian conservation.

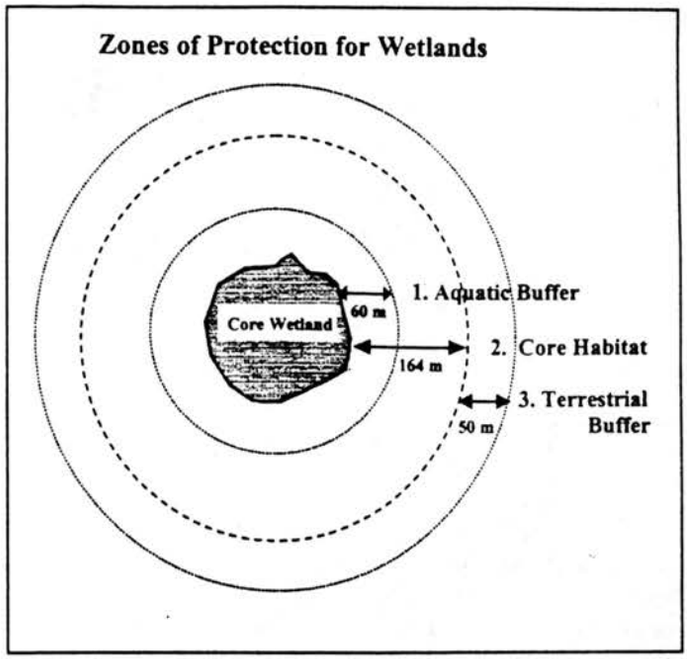
generated a distribution of locations and established the size of the core terrestrial habitat used by the turtles. All three species in the study nested and hibernated in the upland within a 275-meter radius of the associated wetland (calculated from the outer edge of the wetland at the high-water mark). To fully protect 100 percent of the turtles' nesting and hibernation sites and to ensure the integrity of this turtle community, an upland zone of protection measuring 275 meters would be needed around the wetland. On a more conservative note, the authors of the study found that exclusion of the most distant 10 percent of the nest and hibernation sites would reduce the size of this core terrestrial habitat to a 73-meter zone around the wetland.

The second study examined the use of upland habitats by pond-breeding salamanders.[4] This study summarized data from several other studies indicating that salamanders, after breeding in wetlands, emigrated to upland habitats and spent 86–99 percent of each year in rodent and shrew burrows and other subterranean refuges. Although the wetland is critical to these species for breeding, the surrounding terrestrial habitat is critical for feeding, growth, maturation, and maintenance of the entire juvenile and adult population. The study also documented the emigration of adults and post-metamorphic juveniles of six species of salamanders (Jefferson salamander, *Ambystoma jeffersonianum;* spotted salamander, *A. maculatum;* marbled salamander, *A. opacum;* mole salamander, *A. talpoideum;* small-mouthed salamander, *A. texanum;* and tiger salamander, *A. tigrinum*). Adult salamanders were found up to 625 meters from the edge of wetlands, and juveniles were found as far as 247 meters. The study reveals that on average, an upland zone 164 meters wide surrounding the wetland would encompass 95 percent of the sample population—constituting the salamanders' core terrestrial habitat.

Implications for Protection and Management

The terrestrial ecology of semi-aquatic species is often underappreciated or overlooked by managers and conservationists. Semi-aquatic reptiles make only brief visits to terrestrial habitats when nesting, and hibernation sites are very rarely seen by the untrained observer. Many pond-breeding amphibians spend the vast majority of their lives in uplands, but they live mostly underground and are therefore infrequently seen in uplands. Observations and studies of these animals are consequently concentrated in streams and wetlands, where they are found more easily (in the right season), rather than in terrestrial habitats where they elude detection, yet where much of their life plays out. In fact, semi-aquatic species can survive without water for extended periods, including between breeding seasons and during droughts. For example, in a study of a population of striped newts *(Notophthalmus perstriatus)* in northern Florida, a drought relegated the newts to predominantly terrestrial activity for five years.[5] Semi-aquatic organisms therefore depend on both wetland and associated upland habitats during their entire life cycle. Both constitute core habitat and should be regulated and managed together for biodiversity protection.

The chicken turtle depends on terrestrial habitats immediately surrounding isolated ponds for its core habitat needs.



In this diagram of zones of protection for wetlands, both core habitat and aquatic buffer requirements are met within a 164-meter zone. An additional 50-meter buffer is recommended to protect core habitat.

Can One Size Fit All?

Buffer zones—in the traditional sense of the term—continue to be a valuable concept, and they are still needed. Buffer zones should surround the upland portion of the core habitat to protect the terrestrial and aquatic habitats from surrounding land-use practices that could damage these areas. While core habitat for maintaining viable populations of species is not the same as a buffer zone for protecting water resources, some may ask whether core habitat for maintaining biodiversity also can be used to protect water resources.

continued on page 11

CORE HABITAT, continued from page 6

The answer is yes, but only if the criteria for the size and use of the terrestrial habitat fully satisfies the needs of both functions.

Ideally, one could develop a single universal size for core terrestrial habitat around wetlands and streams, which would simplify adoption of regulations and management strategies. We doubt, however, that one value can be used for all wetlands and streams, because of local differences in stream size, topography, climate, and surrounding land-use practices. Likewise, requirements of semi-aquatic species vary from species to species and region to region.

The species or group with the largest terrestrial core habitat needs could be the base for a universal terrestrial core habitat (for example, for the turtles and salamanders in the wetland studies, the 164-meter terrestrial core would protect both sets of species). Alternatively, scaled criteria could accommodate specific wetland attributes—such as diversity of fauna using the wetlands—and major factors impacting habitat quality, such as land-use practices in the surrounding areas. For example, a study of streams associated with timber harvesting called for criteria to be adjusted for attributes including stream width, intensity of logging, and slope adjacent to the stream.[6] The same study also recommends a two-tiered approach to regulating adjacent habitats, where the terrestrial habitat closest to the water enjoys full protection, while an outer area retains limited protection but allows certain minimal-impact land uses to take place. For more complete protection, a third "transition zone" would encircle the buffer zone.[7] The transition area would be used explicitly for compatible land-use practices. This set of protection zones follows the traditional reserve principle adopted by biosphere reserves and many other protected areas across the country and around the world.

By applying biologically relevant criteria and bolstering the biological value of core terrestrial habitats, land managers could develop stratified habitat zones that guide associated protection and management, resulting in more effective biodiversity conservation. We propose the use of stratified criteria that would include at least three terrestrial zones adjacent to core aquatic and wetland habitats:

(1) starting from the wetland edge, a first terrestrial zone would buffer the core aquatic habitat and protect water resources;

(2) starting again from the wetland edge and overlapping with the first zone, a second terrestrial zone would comprise the core terrestrial habitat defined by semi-aquatic focal species or species-group use; and

(3) starting from the outward edge of the second zone, a third terrestrial zone would buffer the core terrestrial habitat from edge effects and surrounding land-use practices.

It is not our intent to protect more habitat than is needed nor to exclude all activities from terrestrial areas around wetlands. It is our intent, however, to ensure managers and regulators recognize these upland habitats are absolutely essential for maintaining biodiversity and should be managed and regulated as such. We hope this discussion generates more research on the effect of land-use practices on plants and animals and that studies begin testing the effectiveness of various criteria for protecting the core habitats of species. A sustainable balance between continuing economic development and protecting natural resources absolutely depends on setting realistic criteria to attain the ultimate goal of conserving biodiversity. ■

We thank R. Bodie, M. Boone, T. Green, and B. Rothermel for thoughtful comments and suggestions on the manuscript. Preparation of this article was supported by grants from the U.S. Environmental Protection Agency, the National Science Foundation, and the U.S. Geological Survey.

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1 For a few examples, see J.D. Phillips, "Nonpoint source pollution control effectiveness of riparian forests along a coastal plain river," *Journal of Hydrology* 110 (1989): 221–238; G.F. Hartman and J.C. Scrivener, "Impacts of forestry practices on a coastal stream ecosystem, Carnation Creek, British Columbia," *Bulletin of Fisheries and Aquatic Sciences* 223 (1990); P.E. Davies and M. Nelson, "Relationships between riparian buffer widths and the effects of logging on stream habitat, invertebrate community composition and fish abundance," *Australian Journal of Marine and Freshwater Research* 45 (1994): 1289–1305; and K.D. Brosofske, J. Chen, R.J. Naiman, and J.F. Franklin, "Harvesting effects on microclimatic gradients from small streams to uplands in western Washington," *Ecological Applications* 7 (1997): 1188–1200.

2 For example, see R.D. Semlitsch and J.R. Bodie, "Are small, isolated wetlands expendable?" *Conservation Biology* 12 (1998): 1129–1133. See also the recent *Supreme Court case of Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 121 S.Ct. 675 (2001).

3 V.J. Burke and J. W. Gibbons, "Terrestrial buffer zones and wetland conservation: a case study of freshwater turtles in a Carolina bay," *Conservation Biology* 9 (1995): 1365–1369.

4 R.D. Semlitsch, "Biological delineation of terrestrial buffer zones for pond-breeding salamanders," Conservation Biology 12 (1998): 1113–1119.

5 C.K. Dodd Jr., "Use of living in an unpredictable environment: the ecology of the striped newt *Notophthalmus perstriatus* during a prolonged drought," *Copeia* 1993 (1993): 605–614.

6 P.G. deMaynadier, P.G., and M.L. Hunter Jr., "The relationship between forest management and amphibian ecology: a review of the North American literature," *Environmental Review* 3 (1995): 230–261.

7 R.T.T. Forman and M. Godron, *Landscape Ecology* (John Wiley & Sons, New York, 1986).

Committee Recommendations

2. Metro Subcommittee
   Comfort Lake-Forest Lake
   Watershed District Revised
   Watershed Management Plan
   DECISION

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OVERVIEW
Comfort Lake – Forest Lake Watershed District Overall Plan

Background

At the September 11, 2001, watershed management public hearing the BWSR Metro Water Planning Subcommittee heard testimony from CLFLWD Board of Managers and BWSR Staff in support of Plan approval. After receiving the testimony, the Subcommittee recommended approval of the Comfort Lake - Forest Lake Watershed District Overall Plan to the BWSR Board contingent on the positive review from any future plan comment letters received before the comment deadline of September 18, 2001.

Summary of Plan Review Process and Plan Strengths

In a letter dated June 20, 2001, the BWSR commented on the draft CLFLWD Overall Plan. The BWSR staff commented that the District Plan should focus on two primary issues that have surfaced in the planning process: 1) addressing the concerns along the abandoned Judicial Ditch 1, and 2) a inter-governmental jurisdiction strategy to manage water resources in this heavily urbanizing area. It was recommended that an intergovernmental work team be assembled to assist in the planning, design and funding of the comprehensive strategy to address the issues related to the abandoned JD1. The BWSR also warned the District of the revenue limitation defined in Statute 103D and the need to further consider establishment of a water management district to finance projects.

In response to the BWSR comments, the CLFLWD has started to implement assembly of an intergovernmental workteam to develop a comprehensive strategy to address the issues related to abandoned JD1. The Board of Managers has also drafted a position paper that recognizes their leadership role in addressing the issues related to the Upper Sunrise River (abandon JD1) system. The Plan incorporated many of the concepts defined at our previous presentations to the Board of Managers and does comply with the fundamental planning expectations articulated by BWSR.

The Plan does define a framework to allow the CLFLWD to implement the Plan towards the goals of water management, lakes, streams, wetlands, natural resources, biotic diversity and interagency and public coordination. The District is planning capital improvements to address the water management issues associated with abandoned JD1 in 2003. The other high priority issues in the District include properly managing storm water runoff from Forest Lake, minimizing flood damage to land along the abandoned waterway, and improving the water quality of Big Comfort Lake by reducing nutrient loads. The District's mission is also to use sound scientific water management approaches, technologies and methods to develop a uniform, integrated approach to water management within a rapidly changing and urbanizing area.

Watershed Description

The Comfort Lake - Forest Lake Watershed District (CLFLWD) is approximately 47 square miles in size and is located in southwestern Chisago County and northwestern Washington County. The CLFLWD has five major lake systems including Bone, Comfort, Forest, Shields and Sylvan Lakes. The outlet is to the Sunrise River, which flows northeasterly through Chisago County before flowing into the St. Croix River.

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Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, Minnesota 55107

In the Matter of prescribing a Revised Watershed Management Plan for the **Comfort Lake- Forest Lake Watershed District** pursuant to Minnesota Statutes Section 103D.401

ORDER PRESCRIBING WATERSHED MANAGEMENT PLAN

Whereas, the Board of Managers of the Comfort Lake - Forest Lake Watershed District (CLFLWD) filed a proposed Watershed Management Plan (Plan) dated April 10, 2001 with the Minnesota Board of Water and Soil Resources (Board) pursuant to M.S. Section 103D.401, 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. **District Establishment.** The CLFLWD was established by the Minnesota Board of Water and Soil Resources on September 23, 1999.

2. **Requirement to Plan.** The Plan does define a framework to allow the CLFLWD to implement the Plan towards the goals of water management, lakes, streams, wetlands, natural resources, biotic diversity, and interagency and public coordination. The District is planning capital improvements to address the water management issues associated with abandoned JD1 in 2003. The other high priority issues in the District include properly managing storm water runoff from Forest Lake, minimizing flood damage to land along the abandoned waterway, and improving the water quality of Big Comfort Lake by reducing nutrient loads. The District's mission is also to use sound scientific water management approaches, technologies and methods to develop a uniform, integrated approach to water management within a rapidly changing and urbanizing area.

3. **Nature of the Watershed.** The Comfort Lake - Forest Lake Watershed District (CLFLWD) is approximately 47 square miles in size and is located in southwestern Chisago County and northwestern Washington County. The CLFLWD has five major lake systems including Bone, Comfort, Forest, Shields and Sylvan Lakes. The outlet is to the Sunrise River, which flows northeasterly through Chisago County before flowing into the St. Croix River.

4. **Local Review.** The CLFLWD circulated a copy of the draft Plan to local units of government for their review pursuant to Minnesota Statutes Section 103D.405.

5. **Department of Natural Resources Review.** The DNR did not provide comments on the draft CLFLWD Plan.

6. **Metropolitan Council Review.** In a letter dated June 14, 2001, the MCES noted that the Plan will need to be amended as the District develops specific work plans to address the issues presented in the Plan by implementing the appropriate goals/objectives and action items. The Council also advised against the use of natural wetlands for stormwater treatment, for a policy on on-site stormwater treatment, and on the need to coordinate with the Washington County Groundwater Plan.

7. **Washington County Review.** Washington County's comments focused on the land use, groundwater and capitol improvement sections of the Plan. The major comment noted that the Plan lacked information relating to future land use of the communities in the watershed and policies that would mitigate for the development impact on the surface and groundwater. The District response stated that permitting and inter-governmental jurisdiction issues would be addressed in the implementation phase as specific work plans are developed.

8. **Minnesota Pollution Control Agency Review.** In a letter dated September 14, 2001, the MPCA encouraged the CLFLWD to implement and enforce an ordinance that will help local governments deal with stormwater and construction site erosion. The MPCA recommended the District adopt the newly updated "Protecting Water Quality in Urban Areas BMP" manual in lieu of a locally developed BMP manual. Lastly, the MPCA recommended that the Plan clarify that the National Pollutant Discharge Elimination System (NPDES) Construction Permit requires runoff to be treated prior to entering waters of the State.

9. **Board Review.** In a letter dated June 20, 2001, the BWSR commented on the draft CLFLWD Overall Plan. The BWSR staff commented that the District Plan should focus on two primary issues that have surfaced in the planning process: 1) addressing the concerns along the abandoned Judicial Ditch 1, and 2) an inter-governmental jurisdiction strategy to manage water resources in this heavily urbanizing area. It was recommended that an intergovernmental work team be assembled to assist in the planning, design and funding of the comprehensive strategy to address the issues related to the abandoned JD1. The BWSR also warned the District of the revenue limitation defined in Statute 103D and the need to further consider establishment of a water management district to finance projects.

In response to the BWSR comments, the CLFLWD has started to implement assembly of an intergovernmental workteam to develop a comprehensive strategy to address the issues related to abandoned JD1. The Board of Managers has also drafted a position paper that recognizes their leadership role in addressing the issues related to the Upper Sunrise River (abandoned JD1) system. The Plan incorporated many of the concepts defined at BWSR staff's previous presentations to the Board of Managers and does comply with the fundamental planning expectations articulated by BWSR.

7. **Highlights of the Plan.** The critical elements included in the Plan are:

   a. Definition of specific projects/actions, responsible parties and set time line,

   b. Identification of priority issues determined through citizen involvement and agency participation,

   c. Concise implementation section with identified management standards and activities,

   d. Communication and partnership on management and monitoring programs.

8. **Publish Notice of Filing.** The legal notice of filing was published in the Forest Lake Times on August 23, 2001, and August 30, 2001, and in the Chisago County Press on August 23, 2001, and August 30, 2001. Further, a letter containing the legal Notice of Filing was sent from Jim Haertel dated August 16, 2001, to several addressees including the affected county auditors, county SWCD's and cities.

9. **Watershed Management Public Hearing.** On September 11, 2001, the BWSR Metro Water Planning Subcommittee heard testimony from CLFLWD Board of Managers in support of Plan approval. The BWSR Staff also recommends approval of the Comfort Lake - Forest Lake Overall Plan. After receiving the testimony the Subcommittee recommended approval of the Comfort Lake - Forest Lake Watershed District Overall Plan to the BWSR Board contingent on the positive review from any future plan comment letters received before the comment deadline of September 18, 2001.

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 Overall Watershed Management Plan for the Comfort Lake - Forest Lake Watershed District pursuant to Minnesota Statutes Section 103D.401.

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

4. The attached Plan is in conformance with the requirements of Minnesota Statutes Section 103D, BWSR guidelines for Watershed District Plan content and is consistent with the affected county comprehensive water plan.

ORDER

The Board hereby prescribes the attached Plan as the Watershed Management Plan for the Comfort Lake - Forest Lake Watershed District.

Dated at Saint Paul, Minnesota this 25th day of October 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

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BY: Leland G. Coe, Chair

Committee Recommendations

3. Metro Subcommittee
   Order Enlargement of
   Carnelian-Marine Watershed
   District
   DECISION

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Minnesota Board of Water and Soil Resources
One West Water Street, Suite 200
St. Paul, Minnesota 55107

In the Matter of the Enlargement and Increasing the Number of Managers of the Carnelian-Marine Watershed District in Washington County pursuant to Minnesota Statutes §§ 103D.261 and 103D.305

ORDER ENLARGEMENT OF CARNELIAN-MARINE WATESHED DISTRICT

Whereas, Washington County filed a Petition dated November 28, 2000 with the Board of Water and Soil Resources (Board) on December 6, 2000, to enlarge the Carnelian-Marine Watershed District pursuant to Minn. Stat. § 103D.261, and increase the number of managers of the Carnelian-Marine Watershed District pursuant to Minn. Stat. § 103D.305, 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. **Petition.** The Petition (Exhibit 2) to enlarge and increase the number of managers of the Carnelian-Marine Watershed District dated November 28, 2000, was filed by Washington County with the Board on December 6, 2000.

2. **Property Description.** The territory to be included in the watershed district, the Petitioned Area, is located in Washington County entirely within the metropolitan area and is approximately 39 square miles contiguous to the Carnelian-Marine Watershed District, which includes land in the City of Marine on St. Croix and the towns of May, New Scandia and Stillwater, and further depicted on a map attached to the Petition as Exhibit A. The Petitioned Area includes the Marine on St. Croix Watershed Management Organization (WMO) and two other areas in New Scandia Township, one north of the Marine on St. Croix WMO and one around German Lake.

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3. **District Name.** The Petition specifies the name of the enlarged district shall remain the "Carnelian-Marine Watershed District".

4. **Number of Managers.** The Petition specifies the number of managers shall be increased to seven (7) for two years, then return to the present number of five (5).

5. **Petition Service.** The Petition was served on the Board and the Carnelian-Marine Watershed District Board of Managers pursuant to Minn. Stat. § 103D.261, Subd. 1 (b).

6. **Reasons for Change.** The Washington County Board authorized a Water Governance Study to identify and evaluate the best governance structure for water management in the County. The resulting report was adopted by the Washington County Board. The Petition is a direct result of the report and specifies the following:

   A. Washington County has a relatively large number of watershed management organizations of small size compared to other metropolitan counties.

   B. The ineffectiveness of some joint powers agreement watershed management organizations in Washington County.

   C. Insufficient budget due to small size and limited tax capacity of some watershed management organizations.

   D. Joint Powers Agreement Watershed Management Organizations have not established offices or a clear point of communication.

   E. Washington County has coordinated issues relating to the enlargement such as financing policies, watershed management plans, and board manager representation.

7. **Hearing Order.** At its regular meeting on January 24, 2001, the Board determined that the Petition met the requirements of Minn. Stat. §§ 103D.261 and 103D.305, and consequently ordered a public hearing to be held on the Petition for the Carnelian-Marine Watershed District Enlargement and Increase Number of Managers. (Exhibit 6)

8. **Hearing Notice.** Legal notice of the public hearing on the proposed watershed district enlargement and increase number of managers, pursuant to Minn. Stat. § 103D.261, Subd. 1 (c) and 103D.305, Subd. 4, was published in the St. Croix Valley Press on February 8 and 15, 2001, the White Bear Press on February 7 and 14, 2001, and the Country Messenger on February 7 and 14, 2001. (Exhibits 9, 10 and 11) Further, a copy of the hearing notice was mailed to approximately 25 addressees including the Washington County Auditor, Washington County Attorney, Washington County Administrator, legal counsel for the watershed district, all of the cities in the proposed watershed district, all of the towns in the proposed watershed district, the SWCD, and the DNR. (Exhibit 7)

9. **Public Hearing.** A public hearing was held on the enlargement and increasing the number of managers of the Carnelian-Marine Watershed District on February 26, 2001, at the Marine on St. Croix City Council Chambers, 121 Judd Street, Marine on St. Croix, Minnesota. The proceedings were tape recorded. The hearing panel was the Metro Water Planning Subcommittee which consisted of Board members Dwain Otte, Jack Frost, and Kathleen Roer as chair.

   Jim Haertel, Board staff, entered Exhibits 1 through 12 into the record by reading a brief description of each exhibit.

Exhibit 1. Letter dated November 28, 2000, from Linda Krafthefer, Washington County Assistant Attorney, forwarding the Petition, which is Exhibit 2.

Exhibit 2. Petition dated November 28, 2000, from Washington County to enlarge the Carnelian-Marine Watershed District and increase the number of managers.

Exhibit 3. Attachment to Petition labeled "Exhibit A" which is a map of the proposed enlargement.

Exhibit 4. Attachment to Petition labeled "Exhibit B" which is a document entitled "Report for Water Governance Study, Washington County, Minnesota" dated May, 1999.

Exhibit 5. Acceptance of Service of Petition signed by Raymond Marshall, Carnelian-Marine Watershed District Counsel, dated November 30, 2000.

Exhibit 6. Order dated January 24, 2001, from the Board of Water and Soil Resources for a Public Hearing on the Petition.

Exhibit 7. Letter dated February 6, 2001, from Jim Haertel to approximately 25 addressees notifying them of the public hearing, including copies of the legal notice (Exhibit 8) and map (Exhibit 3).

Exhibit 8. Legal Notice of Public Hearing dated January 24, 2001, signed by Jim Haertel.

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Exhibit 9. Affidavit of Publication dated February 15, 2001, of Legal Notice in the St. Croix Valley Press on February 8 and 15, 2001.

Exhibit 10. Affidavit of Publication dated February 14, 2001, of Legal Notice in the White Bear Press on February 7 and 14, 2001.

Exhibit 11. Affidavit of Publication dated February 21, 2001, of Legal Notice in the Country Messenger on February 7 and 14, 2001.

Exhibit 12. Letter dated February 21, 2001 from the Square Lake Association generally opposing the proposed enlargement.

Exhibit 13. Washington County testimony dated February 27, 2001, which was given at the hearing.

Exhibit 14. Washington County Implementation Strategy report for the Water Governance Study dated July, 1999.

Exhibit 15. Washington County Water Management Study tax impact levy table.

Exhibit 16. Washington County supplemental information explaining revised strategy and time line.

Exhibit 17. Table showing area of enlarged watershed district by community.

Exhibit 18. Washington County Water Governance Study table showing number of WMO's affecting LGU's.

Exhibit 19. Watershed District terms of office for Washington County.

Exhibit 20. Washington County Water Governance Study participation process documentation, July, 1998 to December, 2000.

Exhibit 21. Comparative Review of watershed management plans and rules for northern Washington County WMO's, dated September, 2000.

Exhibit 22. Letter dated January 28, 2001, from Jim Shaver to Jim Haertel forwarding minutes of November 16, 2000 Marine on St. Croix WMO meeting.

Exhibit 23. Marine on St. Croix WMO meeting minutes of November 16, 2000.

Exhibit 24. Letter dated February 26, 2001 from John Bower to Jim Haertel and letter dated October 4, 2000 from John Bower to Washington County Commissioners.

Exhibit 25. Mill Stream Natural Resource Inventory Interim Report dated May, 2000.

Exhibit 26. Twin Lake High Water Study dated August, 1999, by OSM and Associates.

Exhibit 27. Clean Water Partnership Study for Square Lake, Draft Final Report dated October 18, 2000.

Exhibit 28. Letter dated February 26, 2001 from Bill Voedisch to Jim Haertel.

Exhibit 29. Letter dated October 17, 2000 from Bill Voedisch to Washington County Commissioners.

Exhibit 30. Letter dated February 26, 2001 from John Bower to Jim Haertel.

Exhibit 31. Letter dated August 8, 2000 from the Carnelian Marine Watershed District to Washington County Commissioners including two District resolutions dated August 7, 2000.

Exhibit 32. Letter dated October 18, 2000 from Dennis Seefeldt to Washington County Commissioners.

After all people present at the public hearing were given an opportunity to speak, the hearing record was left open for three weeks until 4:30 PM on March 19, 2001, for receipt of written comments. The following exhibits were received while the record was open.

Exhibit 33. Letter dated October 13, 2000 from Jerry Hicks to John Bower.

Exhibit 34. Letter dated March 14, 2001 from Bill Voedisch to Jim Haertel.

Exhibit 35. BWSR Metro Region staff report dated March 19, 2001.

10. **Board Staff Report.** The Board's metro region staff report dated, March 19, 2001 (Exhibit 35) supported the proposed enlargement be approved and the number of managers remain at five.

11. **Hearing Panel.** The hearing panel met on October 11, 2001. The panel discussed the September 11, 2001 Minnesota Court of Appeals decision, File C0-01-322, which regarded two very similar petitions and previous decisions by the Board. The Court of Appeals decision ruled that a watershed district could not be enlarged to include territory already within a joint powers agreement WMO. Based on the oral and written record in this matter,

and the Court of Appeals decision, the panel decided with a unanimous vote to recommend to the full Board that the Carnelian-Marine Watershed District only be enlarged in the German Lake area and that the number of managers remain at five. The enlargement in the German Lake area would be for the public welfare and public interest and the purpose of Minnesota Statutes Chapters 103B and 103D would be served. The increase in number of managers would not benefit the public welfare, public interest and the purpose of Minnesota Statutes Chapters 103B and 103D. Further, the enlargement is only a small portion of the Petitioned Area and the increase in number of managers is not justified. The enlargement in the Marine on St. Croix WMO cannot be done under the Court of Appeals decision. The other remaining part of the Petitioned Area, which is north of the Marine on St. Croix WMO, is not contiguous to the Carnelian-Marine Watershed District and thus cannot be part of the district enlargement. The hearing panel also recommended that the Watershed Management Plan for the Carnelian-Marine Watershed District be amended within two years to include the enlargement area.

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CONCLUSIONS

1. The Petition for the enlargement and increasing the number of managers of the Carnelian-Marine Watershed District is valid in accordance with Minn. Stat. §§ 103D.261 and 103D.305.

2. Proper notice of hearing was given and the public hearing was held in accordance with applicable laws.

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

4. The Board has proper jurisdiction in the matter of ordering a watershed district enlargement.

5. The enlargement of the Carnelian-Marine Watershed District as proposed in the Petition cannot be ordered in two of the areas, however, enlargement in the Petitioned Area around German Lake would be for the public welfare and public interest and the purpose of Minnesota Statutes Chapters 103B and 103D would be served.

6. The Carnelian-Marine Watershed District cannot be enlarged into the area of the Marine on St. Croix Watershed Management Organization due to the Court of Appeals decision C0-01-322.

7. The Carnelian-Marine Watershed District cannot be enlarged into the Petitioned Area north of the Marine on St. Croix Watershed Management Organization since the area is not contiguous to the Carnelian-Marine Watershed District.

8. The Carnelian-Marine Watershed District Watershed Management Plan should be amended within two years to include the enlargement area.

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ORDER

The Board hereby orders that the Carnelian Marine Watershed District be enlarged only in the German Lake area in New Scandia Township of the Petitioned Area per the Washington County Petition (Exhibit 2) dated November 28, 2000, according to Exhibit A of said Petition (Exhibit 3) attached and made a part of this Order hereof; that the number of managers remain at five; and that the Watershed Management Plan be amended within two years to include the enlargement area.

Dated this 25th day of October, 2001.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

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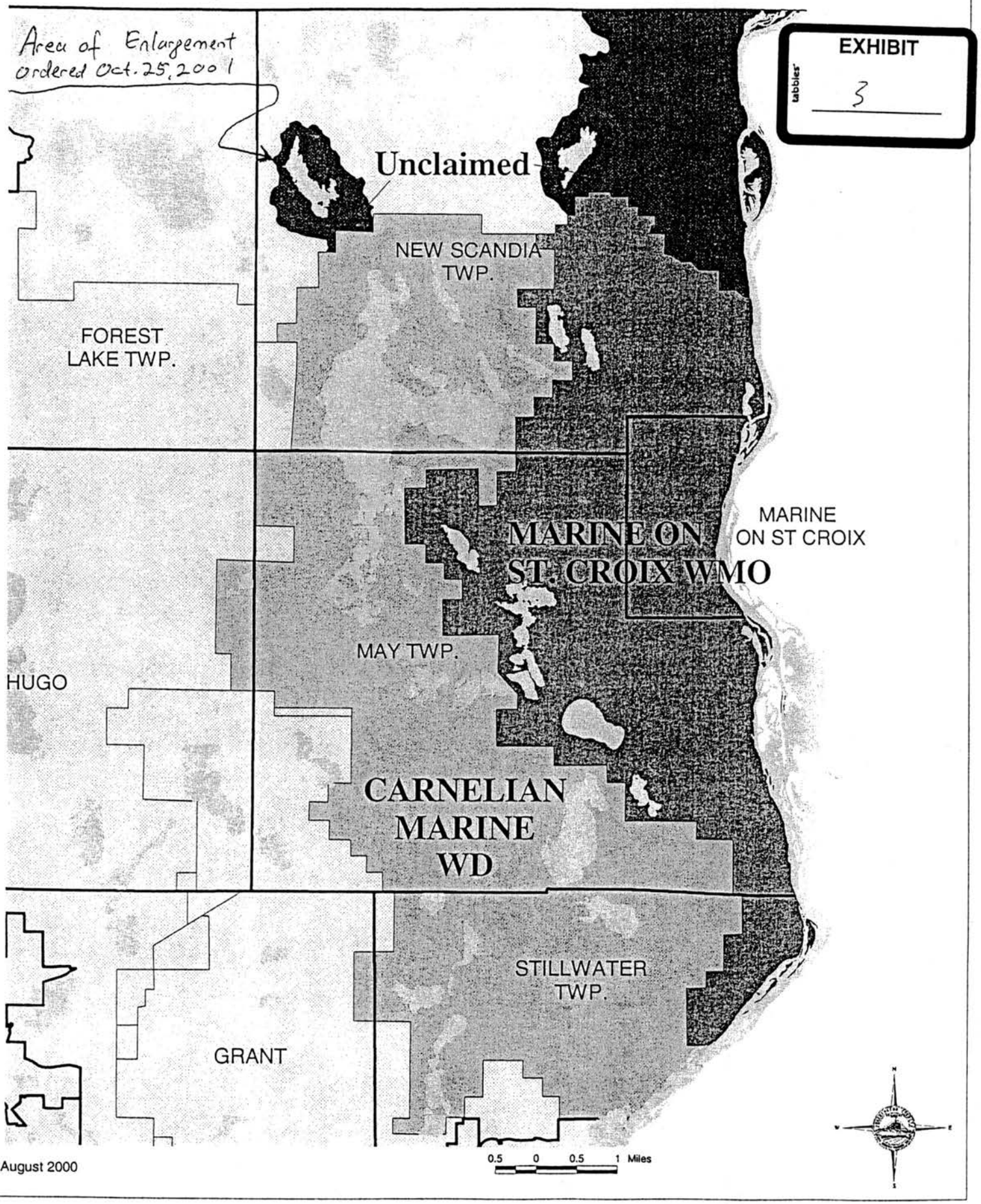
By: _____

Leland G. Coe, Chair

Exhibit A
Washington County
Enlargement of Carnelian Marine Watershed District

DRAFT



August 2000

New Business

1. 2002 – 2003 Natural Resources Block Grants
   DECISION

2002 - 2003 NATURAL RESOURCES BLOCK GRANT

BACKGROUND

The Natural Resources Block Grant (NRBG) provides assistance to local governments to implement state natural resource programs. These programs are: Comprehensive Local Water Planning, the Wetland Conservation Act, the DNR Shoreland Management, the MPCA County Feedlot, and the MPCA Individual Sewage Treatment Systems (ISTS).

The NRBG is a composite base grant generally formulated to reflect need/activity of these programs in all counties. This grant is not competitive and all counties are eligible to apply. A county may apply for any or all of the five grant program components.

2000 - 2001 NRBG Schedule

October 25, 2001	BWSR requested to authorize the 2002 - 2003 NRBG
November 12, 2001	NRBG Program announced in the State Register
	NRBG Application sent to all counties
February 1, 2002	NRBG Applications due to Board Conservationists
March 2002	Grant Agreements sent to counties
February 1, 2003	Resolutions and CY 2002 reports due
February 2003	Second payment

Selected Program Highlights of the 2002 - 2003 NRBG:

Comprehensive Local Water Planning - $2,638,756 Annually

This component is for implementing comprehensive local water plans. A local levy match is required. This levy is determined from a county's equalized taxable net tax capacity. The grant amount is derived from the formula of $37,500 - local levy, but all counties are eligible for a minimum of $18,750.

Wetland Conservation Act - $1,744,790 Annually

This component is for the local administration of the WCA. A local 1:1 cash and/or in-kind match is required. The grant amount is derived from a base estimated amount of county WCA activity. SWCDs are entitled to receive at least $5,000 of this grant for performing mandated WCA activities.

DNR Shoreland - $518,000 - 2002, $433,000 - 2003

This component is for the administration of state approved shoreland management programs. It is administered at the state level by the DNR. A local 1:1 cash and/or in-kind match is required. The grant amount is derived from a base estimated amount of county Shoreland activity. The 2001 legislature did not approve FY 03 funding for the St. Louis River and North Shore Management Boards.

MPCA County Feedlot Program - Up to$2,341,000 Annually

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. Level 1

amounts are calculated at $50 per feedlot. Counties that have conducted a Level 2 inventory are eligible to receive an amount calculated at $80 per feedlot. A local 1:1 cash and/or in-kind match is required. The 2001 legislature increased this appropriation from $1,841,000.

MPCA County Individual Sewage Treatment Systems Program - $86,000 Annually
Based on 1997 changes to Minnesota Statutes, all counties are required to pass ordinances regulating ISTS county-wide. All county ordinances were required to be in compliance by January 1, 1999. All counties that have enacted county-wide ordinances are eligible to receive this grant. No local match is required.

Proposed base grants for the 2002 - 2003 NRBG are itemized on the enclosed spreadsheet.

Application Revision
In addition, last summer a staff committee was convened to accomplish a comprehensive revision of the NRBG application under the following Guiding Principles:

- Implement the legislature's and agencies' intent of the Programs.
- Provide standards for flexibility of LGU Program implementation.
- LGU accountability will be incorporated into their implementation activities.
- Provide standards for documentation of compliance and accountability to meet the standards of the Office of the Legislative Auditor and State Auditor.
- Increase the efficiency of the allocation process (simple and consistent, reduction of paperwork and staff time for agencies and LGUs).

The extent of this revision for this grant cycle will depend on the length of the employee strike.

Recommendation
On behalf of the BWSR, DNR, and MPCA staffs, the Board is requested to authorize the BWSR staff to allocate these grants to counties meeting the NRBG Program requirements.

H:02NRBGBM

PROPOSED 2002 AND 2003
BWSR ANNUAL NATURAL RESOURCES BLOCK GRANT:
BASE GRANT BREAKDOWN BY PROGRAM

	2002 AND APPROX. 2003		2002 AND 2003	2002 AND 2003	2002 AND 2003 (est.#)		2002 AND 2003
	LOCAL WATER PLANNING		WETLAND CONSERVATION ACT	DNR SHORELAND	MPCA COUNTY FEEDLOT PROGRAM		MPCA COUNTY ISTS PROGRAM
COUNTY	REQUIRED LOCAL LEVY	CLWP BASE GRANT	WCA BASE GRANT	SHORELAND BASE GRANT	MPCA BASE GRANT LEVEL 1 INVENTORY	MPCA BASE GRANT LEVEL 2 OR 3 INVENTORY	MPCA BASE GRANT
AITKIN	$5,329	$32,171	$19,200	$12,375	$6,500		$988
ANOKA	$85,586	$18,750	$40,500	$3,000	$2,500		$988
BECKER	$7,221	$30,279	$24,200	$12,321	$15,850		$988
BELTRAMI	$5,792	$31,708	$36,000	$6,317	$9,250		$988
BENTON	$6,758	$30,742	$36,000	$3,771	$16,650		$988
BIG STONE	$1,108	$36,392	$10,000	$3,087	$2,800		$988
BLUE EARTH	$14,282	$23,218	$19,200	$3,722	$9,050	$38,240	$988
BROWN	$5,921	$31,579	$10,000	$3,070	$14,600	$45,360	$988
CARLTON	$6,579	$30,921	$19,200	$4,506	$4,950	$22,720	$988
CARVER	$22,422	$18,750	$36,000	$3,000	$14,850	$36,160	$988
CASS	$13,173	$24,327	$51,000	$12,275	$10,050		$988
CHIPPEWA	$3,030	$34,470	$10,000	$3,012	$3,250		$988
CHISAGO	$11,456	$26,044	$26,700	$5,671	$5,600		$988
CLAY	$8,144	$29,356	$16,700	$3,378	$5,450		$988
CLEARWATER	$2,161	$35,339	$19,200	$3,630	$8,400		$988
COOK	$3,143	$34,357	$12,200	$4,814	$0		$988
COTTONWOOD	$3,115	$34,385	$10,000	$3,181	$6,400		$988
CROW WING	$23,651	$18,750	$36,000	$21,946	$7,300		$988
DAKOTA	$122,980	$18,750	$41,000	$3,000	$8,450	$26,800	$988
DODGE	$3,948	$33,552	$16,700	$3,069	$7,500	$31,520	$988
DOUGLAS	$9,524	$27,976	$19,200	$9,803	$15,550	$35,520	$988
FARIBAULT	$3,796	$33,704	$10,000	$3,138	$6,850	$42,000	$988
FILLMORE	$4,425	$33,075	$10,000	$3,089	$60,550		$988
FREEBORN	$7,109	$30,391	$10,000	$3,602	$10,250	$41,040	$988
GOODHUE	$15,650	$21,850	$16,700	$3,181	$24,500		$988
GRANT	$1,589	$35,911	$13,980	$3,507	$3,350		$988
HENNEPIN	$448,429	$18,750	$36,000	$0	$4,450		$988
HOUSTON	$3,451	$34,049	$12,200	$3,127	$17,750		$988
HUBBARD	$6,820	$30,680	$26,700	$9,677	$3,750		$988
ISANTI	$6,804	$30,696	$26,700	$4,595	$3,600		$988
ITASCA	$13,301	$24,199	$36,010	$11,596	$4,250		$988
JACKSON	$3,411	$34,089	$10,000	$3,455	$7,550	$40,000	$988
KANABEC	$2,588	$34,912	$26,700	$4,693	$8,100		$988
KANDIYOHI	$9,651	$27,849	$19,200	$7,748	$13,900		$988
KITTSON	$2,109	$35,391	$16,700	$3,038	$2,550		$988
KOOCHICHING	$2,696	$34,804	$19,200	$3,123	$2,250		$988
LAC QUI PARLE	$1,704	$35,796	$10,000	$3,017	$4,900		$988

PROPOSED 2002 AND 2003
BWSR ANNUAL NATURAL RESOURCES BLOCK GRANT:
BASE GRANT BREAKDOWN BY PROGRAM

	2002 AND APPROX. 2003		2002 AND 2003	2002 AND 2003	2002 AND 2003 (est.#)		2002 AND 2003
	LOCAL WATER PLANNING		WETLAND CONSERVATION ACT	DNR SHORELAND	MPCA COUNTY FEEDLOT PROGRAM		MPCA COUNTY ISTS PROGRAM
COUNTY	REQUIRED LOCAL LEVY	CLWP BASE GRANT	WCA BASE GRANT	SHORELAND BASE GRANT	MPCA BASE GRANT LEVEL 1 INVENTORY	MPCA BASE GRANT LEVEL 2 OR 3 INVENTORY	MPCA BASE GRANT
LAKE	$3,367	$34,133	$16,700	$5,295	$50		$988
LAKE OF THE WOODS	$881	$36,619	$26,700	$4,007	$1,250		$988
LE SUEUR	$6,225	$31,275	$16,700	$5,643	$8,300	$25,920	$988
LINCOLN	$1,625	$35,875	$10,000	$3,176	$7,700	$38,480	$988
LYON	$5,790	$31,710	$10,000	$3,141	$10,800		$988
MCLEOD	$8,216	$29,284	$16,700	$3,429	$13,100	$32,000	$988
MAHNOMEN	$812	$36,688	$12,200	$3,855	$3,450		$988
MARSHALL	$2,770	$34,730	$19,200	$3,000	$5,000	-	$988
MARTIN	$5,773	$31,727	$10,000	$3,470	$10,750	$58,880	$988
MEEKER	$5,095	$32,405	$19,200	$5,433	$11,750		$988
MILLE LACS	$4,233	$33,267	$19,200	$5,517	$10,700	$10,700	$988
MORRISON	$5,975	$31,525	$26,700	$4,526	$39,650		$988
MOWER	$7,278	$30,222	$12,200	$3,746	$12,200	$63,040	$988
MURRAY	$2,638	$34,862	$10,000	$3,696	$11,300		$988
NICOLLET	$7,025	$30,475	$16,700	$3,077	$10,050	$33,520	$988
NOBLES	$4,138	$33,362	$10,000	$3,054	$12,800	$54,600	$988
NORMAN	$1,502	$35,998	$12,200	$3,011	$3,150		$988
OLMSTED	$34,284	$18,750	$26,700	$3,614	$15,650		$988
OTTER TAIL	$14,744	$22,756	$33,200	$20,362	$43,950		$988
PENNINGTON	$1,965	$35,535	$16,700	$3,251	$2,900		$988
PINE	$5,408	$32,092	$36,700	$6,768	$14,050		$988
PIPESTONE	$2,181	$35,319	$10,000	$3,000	$11,700	$46,080	$988
POLK	$6,303	$31,197	$16,700	$3,967	$7,550		$988
POPE	$2,534	$34,966	$15,200	$4,877	$10,750	$27,360	$988
RAMSEY	$158,198	$18,750	$26,700	$0	$250		$988
RED LAKE	$770	$36,730	$12,200	$3,297	$4,250		$988
REDWOOD	$3,977	$33,523	$10,000	$3,000	$11,000		$988
RENVILLE	$4,960	$32,540	$10,000	$3,055	$8,750		$988
RICE	$13,277	$24,223	$19,200	$4,806	$12,350	$66,400	$988
ROCK	$2,347	$35,153	$10,000	$3,000	$11,000	$57,280	$988
ROSEAU	$2,449	$35,051	$26,700	$3,095	$7,350		$988
ST. LOUIS	$37,919	$18,750	$36,700	$22,873	$3,800		$988
SCOTT	$31,065	$18,750	$36,000	$3,000	$8,450		$988
SHERBURNE	$22,791	$18,750	$36,000	$5,591	$3,250		$988
SIBLEY	$3,647	$33,853	$12,200	$3,098	$13,200	$52,560	$988
STEARNS	$28,231	$18,750	$51,500	$10,330	$74,800	$229,280	$988
STEELE	$8,638	$28,862	$12,200	$3,290	$9,050	$43,920	$988

PROPOSED 2002 AND 2003
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BASE GRANT BREAKDOWN BY PROGRAM

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COUNTY	REQUIRED LOCAL LEVY	CLWP BASE GRANT	WCA BASE GRANT	SHORELAND BASE GRANT	MPCA BASE GRANT LEVEL 1 INVENTORY	MPCA BASE GRANT LEVEL 2 OR 3 INVENTORY	MPCA BASE GRANT
STEVENS	$2,047	$35,453	$10,000	$3,130	$4,400		$988
SWIFT	$2,637	$34,863	$12,200	$3,149	$4,700	$15,440	$988
TODD	$3,504	$33,996	$19,200	$5,660	$47,200		$988
TRAVERSE	$1,398	$36,102	$10,000	$3,218	$1,950		$988
WABASHA	$4,662	$32,838	$12,200	$4,037	$20,500		$988
WADENA	$1,851	$35,649	$21,700	$3,539	$21,840		$988
WASECA	$4,442	$33,058	$12,200	$3,450	$6,800	$24,640	$988
WASHINGTON	$75,359	$18,750	$36,000	$3,000	$3,600		$988
WATONWAN	$2,502	$34,998	$10,000	$3,136	$5,300	$21,600	$988
WILKIN	$2,216	$35,284	$10,000	$3,021	$1,050		$988
WINONA	$10,057	$27,443	$12,200	$3,043	$25,050	$64,240	$988
WRIGHT	$26,315	$18,750	$36,000	$10,716	$18,400	$27,760	$988
YELLOW MEDICINE	$2,347	$35,153	$10,000	$3,017	$7,000	$29,680	$988
MARSHALL-BELTRAMI SWCD			$5,000				
ST. LOUIS RIVER BD. *				$35,000			
NORTH SHORE MGMT. BD. *				$50,000			
TOTALS	**$1,497,224**	**$2,638,756**	**$1,744,790**	**$518,000**	**$967,340**	**$1,382,740**	**$85,956**

NOTE: THE LOCAL WATER PLANNING BASE GRANT REQUIRES A LOCAL LEVY MATCH. THE WETLAND CONSERVATION ACT, DNR SHORELAND, AND MPCA FEEDLOT BASE GRANTS REQUIRE A 1:1 CASH/IN-KIND MATCH. THE MPCA COUNTY ISTS PROGRAM BASE GRANT DOES NOT REQUIRE A MATCH.

BASED ON APRIL 2001 MPCA DATA. CURRENT DATA NOT AVAILABLE.

* ACCORDING TO THE LEGISLATURE, THIS GRANT WILL OCCUR IN FY 02 ONLY.

H.02NRBG

December 2001

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET
LOWER LEVEL CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
DECEMBER 19, 2001

BOARD MEMBERS PRESENT: Lee Coe, Jerome Deal, Jack Frost, JoAnn Coover, Wayne Edgerton-DNR, Paul Krabbenhoft, Jim Anderson-MES, Dwain Otte, Victor Ormsby, Dan Wilson-MDH, Karen Harder, Char Kahler, Ginny Imholte, Wayne Anderson-PCA, Mark Dittrich-MDA

BOARD MEMBERS ABSENT: Darrell Bruggman, Clair Nelson

STAFF PRESENT: Ron Harnack, Doug Thomas, John Jaschke, Steve Woods, Al Kean, Jeff Nielsen, Marybeth Block, Mary Jo Anderson, Jim Haertel, Wayne Zellmer

OTHERS PRESENT:
Tim Koehler, NRCS
Tim Gieseke, MACDE
LeAnn Buck and Richard Zupp, MASWCD
Lawrence Samstad, Itasca Engineering
Leigh Harrod, Hennepin SCD
Keefe Schunk, citizen
E.A. Schunk, citizen
Jim Main, MASWCD

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

Pledge of Allegiance

** 01-82 **Adopt Agenda** - Moved by Jerome Deal, seconded by Victor Ormsby to adopt the agenda as presented. Motion passed on a voice vote.

** 01-83 **Minutes of October 25, 2001** – Wayne Edgerton stated that a correction is needed on page four, under Wayne's DNR Report, the word "petition" fence law … should be "partition". Moved by Ginny Imholte, seconded by Jack Frost, to approve the minutes of October 25, 2001, as corrected. Motion passed on a voice vote.

Open Mike

- Keefe Schunk, citizen, thanked the Board for the opportunity to speak and read his letter to the Board regarding his petition for termination of the Hennepin Soil and Water Conservation District.

- Leigh Harrod, Hennepin Conservation District supervisor, stated that clarification is needed from the Attorney General's Office regarding the law, MN Statute 103C.225. Also, Leigh spoke to the dissolution petition of the District.

- Lawrence Samstad, Itasca Engineering; engineer for the Lower Minnesota Watershed District, commented on a wetland issue relating to Mr. Schunk.

Reports

Chair Coe reported that the BWSR Administrative Advisory Committee met on November 14. Items addressed were non-point engineering allocation; WCA rule; SWCD dissolution legislation and law change; and per diem legislation. These items are on the agenda today and will be discussed later. Board appointments have not yet been made by the Governor's office.

Chair Coe attended the EQB meeting on November 15. A decision was made to adopt the findings of fact and conclusions that grants the Great River Energy a minor alteration to their previous construction permit. Chair Coe reported that the EQB received information on Notice of Intent by MNDOT to remove land from agricultural preserve status through eminent domain action to improve Highway 14 in Waseca County. EQB also received an update on the power plant sighting.

Chair Coe attended the BWSR forestry committee meeting on November 19 in McGregor, to finalize a white paper regarding the SWCDs potential role in forestry.

Chair Coe attended a meeting in Thief River Falls on November 26, regarding Con-Con lands disposition. The main issue was trails for recreational vehicles. Each county will appoint a committee that will make a recommendation to their county, who will then make recommendations to the Legislature through DNR.

Chair Coe attended the AMC annual meeting in St. Paul, December 3-4. He attended various sessions, which included the Environment and Natural Resources Policy Committee meeting. He also spent a few hours in the BWSR booth.

Chair Coe attended a meeting on December 5 with the BWSR senior management team regarding the Governor's requested budget reductions.

Chair Coe participated with the BWSR northern water plan subcommittee in reviewing the Benton, Kanabec, and Sherburne Counties' comprehensive local water plans.

Chair Coe attended a public meeting on December 10 regarding the animal agriculture GEIS sponsored by EQB.

Executive Director's Report - Ron Harnack reported that he attended the MAWD, MASWCD, and AMC annual conventions. Ron stated that a common thread at each of these meetings was the budget. The Governor's requested five to ten percent budget reductions will impact local government as BWSR cannot realize a 10% reduction without cutting grants in one way or another.

Ron reported that he, Doug Thomas, and Steve Woods have been attending meetings with the EQB/Water Resources Committee. Discussions at the meetings addressed the state water plan and state water resources reorganization effort. Ron stated that agencies and local governments need to build on their established strengths; the successes in the relationships that have been built, and how the delivery systems meet goals and objectives.

Ron and Jim Lemmerman, BWSR forester, met with DNR forestry to discuss the role of SWCDs in forestry. Jim Lemmerman will be working with DNR and SWCDs to build a strategy and define issues and suggest options to address the issues. There is not a clear understanding of the landowner's request for assistance and the ability of the existing system to accommodate those requests in a timely manner.

Ron met with the FSA state committee. Ron reported that Elton Redalen is the new chair of the FSA state committee. Mr. Redalen is very interested in maintaining a strong working relationship with BWSR in delivering conservation to farmers. Ron will distribute a list of the new committee to board members.

Ron attended the Minnesota Agri-Growth meeting on December 17, and listened to Congressmen Gutknect and Kennedy; representatives from Senators Wellstone and Dayton talk about the Farm Bill issues. Although there was strong support for getting the Farm Bill done this year, there was not a lot of optimism that the Senate would be able to move the bill forward. They all agreed that if the Farm Bill did not pass this year, there would likely be less funding available next year for farm programs.

Ron attended the Red River Basin Board (R2B2) meeting on December 13 in Grand Forks. The R2B2 adopted a concept of a three-state Conservation Reserve Enhancement Program (CREP). R2B2 will coordinate with the interests in the three states to develop a proposal for submission to USDA. Ron stated that the Minnesota River CREP is making strides. We will meet the goal of 100,000 acres by April. Ron commended SWCDs, BWSR staff, DNR, NRCS, and FSA for their continued efforts with CREP.

Ron reported that the budget situation is the big issue in the coming months. This will be discussed on the agenda later today.

Dispute Resolution Committee (DRC) - Jim Haertel reported that there are presently nine appeals pending. All nine appeals involve WCA. This is the most appeals BWSR has ever had pending at one time. This year there have been more appeals filed than in any previous year.

The most recent appeal is of an exemption determination in Hennepin County. The appeal involves a horse barn that is already built. The main issue is whether or not the training and boarding of horses qualifies for the agricultural exemption. No decision has been made on accepting the appeal.

Another appeal involves a matter that was previously appealed in McLeod County. Under remand, the county held a public hearing and made the same decision that the county staff person had previously made, which was approval of an agricultural exemption. No decision has been made on accepting the appeal.

Another appeal is of an exemption determination in Blue Earth County. The appeal involves JD 1. The appeal involves wetlands that have been in existence more than 25 years and possibly some DNR protected waters. The appeal was remanded for a public hearing and more technical analysis.

Another appeal is of a replacement plan denial in Stearn's County. The appeal involves a single family dwelling site near the Mississippi River. The appeal has been accepted and is being held in abeyance since the landowner is exploring his options with the county.

Another appeal was recently filed involving the Lent wetland banking site in Chisago County. The project was started about four years ago. Both the TEP and the Corps have determined none of the site is eligible to be placed in the wetland bank yet. The appeal has been accepted and is being held in abeyance to see how the site looks this spring.

There is an appeal of a no-loss decision in Mower County. It involves Lansing Landfill. The appeal was remanded. The Mower SWCD Board heard the matter, made the same decision, and now the landowner plans to appeal again.

Two other pending appeals involve the same exemption determination by the Rice Creek Watershed District involving JD2 by Hugo. The appeals have been accepted, a prehearing conference was held Nov. 27, the briefing schedule starts after the first of the year, and a hearing is scheduled before the DRC on Feb. 6.

Another pending appeal is in LaCrescent along the Mississippi River in Houston County. The replacement plan denial by the county arose from a cease and desist order and a restoration order. The appeal has been accepted and at the pre-hearing conference resolution was explored. The appeal is pending while discussions occur with the landowner, the city and the county, mostly regarding flood control.

Cost-Share/Soil Conservation Committee - Dwain reported that he attended the MAWD and MASWCD annual conventions. Some items addressed at the MASWCD annual convention will come before the cost-share committee.

Education and Public Relations Committee – Paul Krabbenhoft reported that Pete Raeker, BWSR director of communications, presented BWSR's new letterhead, writing pads, thank-you notes and portfolios. BWSR now has a new updated website, which will continue to be a work in progress project. Paul reported that the University of Minnesota Extension Service (MES) is going through reorganization and budget cuts. MES is requesting BWSR's assistance and input as they go through restructuring. The education committee requests that BWSR's senior management team review the conceptual proposal, evaluating how BWSR and MES are utilizing staff and programs statewide. Paul stated that this is an opportunity for BWSR input. Paul reported that the Director of Extension, Chuck Casey, sent his vision to counties, focusing on nutrition and youth, a message needs to come from BWSR to include conservation. Since each of the agencies represented on BWSR have work going on with MES, it was suggested that the Committee pull together the agencies at the next Committee meeting to discuss issues, priorities, and actions. Ron will work with Ron Struss to schedule meetings with agencies.

Agency Reports
Mark Dittrich, Department of Agriculture (MDA), reported that Sharon Clark is representing the Governor in Duluth today. MDA is working with the American Farm Bureau; a conference will be held in Minnesota in June. MDA received $65,000 for southeastern Minnesota's biogas program. MDA reviewed 44 proposals for sustainable agriculture. Mark stated that the February forecast will provide more information on the budget situation.

Dan Wilson, Minnesota Department of Health (MDH), reported that the Governor's request for budget reduction is confined to the general fund, which means that the wellhead and well drinking program will not be affected. MDH may need to eliminate programs due to the budget reductions. Dan reported that security in water facilities are in place. A new automated messaging system sends alerts to water facilities quickly. MDH is recommending that the Legislative Water Commission be reinstated as an efficiency to the state water plan. Dan reported that the local well program delegation is on the third round of formal evaluations, all are operating effectively, they meet annually with state inspectors and drillers and have good communications. Dan reported that there is an 8% jump in housing sales - that does affect wells.

Wayne Edgerton, Department of Natural Resources (DNR), reported that the $1.9 billion budget deficit does affect DNR. DNR is looking at elimination of entire programs rather than shaving dollars. Wayne reported that the State won a case regarding a decision in Marshall, Beltrami and Roseau Counties regarding Con-Con lands ditch assessment. The State won the appeal that DNR pay $1.4M in ditch assessments. The three counties will appeal the decision to the Supreme Court. DNR held a meeting

on November 26 regarding Con-Con acres, and trail routes. Three work groups will be established with meetings held in January or February. Wayne reported that DNR met with the Board of Animal Heath regarding chronic wasting disease (CWD). CWD is transmitted through saliva to elk and deer. DNR strongly suggests strict enforcement of import across state lines to reduce susceptibility in Minnesota. Wayne reported that CWD is not in Minnesota and hopefully it won't be here. A plan is being established to review the wild deer population. There is no cure for CWD; all animals in the area are killed. Cases of CWD have been reported in southeastern Wyoming and Colorado.

Jim Anderson, Minnesota Extension Service (MES), distributed "MES's Plan for Change Executive Summary" documenting MES's reorganization process that is underway. Jim stated that eight districts have been reorganized into seven districts. The MES process started before the $1.9 budget deficit, so MES is facing cuts. Jim stated that MES will focus on three arenas of activity: Community Development and Vitality; Land, Food and Environment; and Youth Development and Family Living. Jim stated that student tuition Increased by 13%; however, these funds are off-limits for MES from the University of Minnesota's standpoint.

Wayne Anderson, Pollution Control Agency (PCA), distributed "Impacts on MPCA Downsizing Special Report" from last years reduction for the Board's information. Wayne reported that Lisa Thorvig, assistant commissioner, will be the MPCA representative to BWSR starting next month. Wayne stated that there is a need to get the word out regarding feedlot registration. PCA would like SWCDs and counties to notify producers that the feedlot program is designed to help them, not hurt them. Ron Harnack asked if the feedlot program in on the table as part of the PCA's budget reduction. Wayne said that this possible; however, feedlot permitting issues have deadlines. Ron said we need to understand where everyone is at with the goals and objectives of feedlots. Wayne indicated that there are some permits that have been extended an additional 60 days to complete the review and decision process.

Consent Agenda

Becker County Request for Comprehensive Local Water Plan Extension – Marybeth
** Block reported that the staff recommend the one year extension to 2003. Moved by
01-84 Dwain Otte, seconded by JoAnn Coover, to approve the extension of the Becker County Comprehensive Local Water Plan to December 31, 2003. Motion passed on a voice vote.

Committee Recommendations

Northern Subcommittee

Benton County Comprehensive Water Plan Update - Ginny Imholte reported that the northern subcommittee met to review the plan and recommends approval of the Benton

County Comprehensive Water Plan Update. The new review format was used for the water plans, which is more efficient. Ginny stated that this plan shows the diversity in
** the state. Moved by Ginny Imholte, seconded by Jerome Deal, to approve the Benton
01-85 County Comprehensive Water Plan Update. Motion passed on a voice vote.

Kanabec County Comprehensive Water Plan Update - Ginny Imholte reported that the northern subcommittee met to review the plan and recommends approval of the
** Kanabec County Comprehensive Water Plan Update. Moved by Ginny Imholte,
01-86 seconded by Jerome Deal, to approve the Kanabec County Comprehensive Water Plan Update. Motion passed on a voice vote.

Sherburne County Comprehensive Water Plan Update - Ginny Imholte reported that the northern subcommittee met to review the plan and recommends approval of the
** Sherburne County Comprehensive Water Plan Update. Moved by Ginny Imholte,
01-87 seconded by Jerome Deal, to approve the Sherburne County Comprehensive Water Plan Update. Marybeth Block, BWSR water plan coordinator, expressed how impressed she was in reviewing the plans. Motion passed on a voice vote.

Chair Coe called for a break at 10:52 a.m. The meeting reconvened at 11:10 a.m.

Joint Water Planning Committee

Water Plan Unification - Ginny Imholte reported that the joint water planning committee met on November 27, the committee meets again today. The development of guiding principles and expectations for the next generation water plans and looking at the various water planning and implementation authorities in an attempt to make them all more consistent in a role for the committee. Ron stated that the water planning authorities will probably be a legislative initiative for next year, clarifying roles and relationships. The committee discussion and recommendations will guide this effort.

Administrative Advisory Committee

NPEA Grants - Ron Harnack stated that the Non-Point Engineering Assistance (NPEA) grant allocation formula for FY01 and FY02 has not changed except that for FY01 some additional revenues were included in the distribution. The Administrative Advisory Committee decided that the reconciling balances with each new grant period, the criteria and allocation is fair and equitable and no change is warranted. The committee
** voted unanimously to keep the current allocation formula. Moved by Dwain Otte,
01-88 seconded by Jack Frost, to approve the Administrative Advisory Committee's recommendation. Motion passed on a voice vote.

WCA Rule - Ron Harnack reported that the Administrative Advisory Committee recommends, and voted unanimously, to remove the significantly controversial parts of

the rule as identified by the MAWD/AMC coalition and the environmental groups coalition; authorize staff to publish said rules according to the predetermined schedule; and seek legislation needed to enact non-controverisal parts of the rule if consensus can be achieved. Lacking consensus, seek a one-year extension of the exempt rule. Another meeting will be held tomorrow in St. Cloud with AMC, and all interest groups will meet in Shoreview on January 4. Ron encouraged board members on the wetlands committee to attend. This issue will be reviewed as BWSR looks at the budget reductions. This gives flexibility and Board oversight. This issue can be revisited again in January to see if there is a consensus, and through the hearing process an
** opportunity to review. Moved by Jerome Deal, seconded by Dwain Otte, to approve the
01-89 Administrative Advisory Committee's recommendation. Motion passed on a voice vote.

SWCD Law Change - Ron Harnack reported that the Administrative Advisory Committee felt no urgency in moving forward at this time on legislation relating to the petition for dissolution of an SWCD. Jim Birkholz is the agency liaison actively involved in working with SWCDs. BWSR will look at the clarification of the petition issue in 2003 as part of the modernization of the SWCD law. The MASWCD District Capacity Committee will work collectively with BWSR to reach the people and allow time for other
** organizations to move forward on this in the legislative process. Moved by Dwain Otte,
01-90 seconded by Victor Ormsby, to approve the recommendation of the Administrative Advisory Committee. Motion passed on a voice vote.

Information and Discussion

Budget - Ron Harnack reported that the budget will be tough this year, between 5-10% budget reduction, $3.7M reduction for BWSR for the biennium. Ron stated that budget information is considered confidential at this point. Ron presented general information. Staff has looked at competitive vs. non-competitive grants. Since most of the first year grants are already out, the full burden of the reduction will fall on the second years programs. This would have a significant impact on local governments capacity to implement mandated programs and maintain strong cost-share programs. Ron reported that he is meeting with the Department of Finance on Friday to discuss the budget cuts. Ron stated that it won't be an easy process; we're putting conservation on the ground in an effective and efficient manner. How do we give local government time to acclimate as we anticipate reductions in June; it will be challenging. Ron stated that all agencies are faced with some grants that have been frozen, because the local governmental unit didn't submit information on time. Ron will be looking to board members as a whole, and the Administrative Advisory Committee will be the sounding board as BWSR looks at reductions.

Electronic Reporting - Tim Ogg, information technology specialist, presented the progress on the new electronic reporting system. Tim stated that this process cannot

happen without the important assistance of LGU staff. Five workshops were held in June. Tim explained the goals and guidelines of the new system: web based; data accessible at the local level; LGU's involved in the design; structure the system by LGU work activity; provide some basic GIS and map making features; reporting data is a by-product of having used the system. Chair Coe thanked Tim for his presentation. Tim said this is a business tool that is generated by our clientele, the general public will not have access to this database.

Farm Bill Update - Doug Thomas distributed the House-Senate Farm Proposal Comparison. Doug acknowledged MASWCD for their efforts. He stated that "Renewable Agricultural Based Energy" has been added to the BWSR Position Statement on the Conservation Provisions of the 2002 Farm Bill. Questions/comments be submitted to Ron and/or Doug. Chair Coe thanked Doug for his efforts on pulling all this information together.

SWCD Capacity Project Update - Jim Birkholz introduced Richard Zupp, President of MASWCD. Richard presented the goals of the project and thanked Ron Harnack for allowing Jim to work with MASWCD on the District Capacity Committee. Jim Main was introduced as the new committee chair replacing Carl Annalora. Jim presented a report that he gave at the MASWCD annual meeting. Major goals of the district capacity project include: statute modernization by 2003; self-evaluation in all willing SWCDs within two years; outreach to state agency partners; enhance training opportunities; inform SWCDs on emerging issues; visibility; awareness/participation. Chair Coe thanked Jim for his presentation.

Advisory Comments

Tim Gieseke, Minnesota Association of Conservation District Employees (MACDE), distributed a listing of MACDE's direction. Tim reported that the MACDE state directors will meet January 3-4 to develop an agenda for 2002. Tim and Don Bajumpaa, North Central Representative, attended the NCDEA leadership conference. MACDE will participate in the NRCS State Technical Committee. Tim stated that MACDE will strive to communicate its role and abilities to MPCA, MDA, MDH, DNR, BWSR, and other relevant state agency partners. MACDE will hold its summer conference June 26-28 at Radisson Arrowwood in Alexandria. Tim stated that MACDE is interested in the Water Unification Plan being written by Minnesota Planning. One approach is to examine the document by envisioning what type of interagency coordination is necessary in the implementation of MPCA NPDES Storm Water Phase II. MACDE will encourage its members to attend regional and national conferences by paying registration fees for at least one representative from each area. MACDE will promote employee involvement on the national level committees. Tim stated that MACDE will strive to build its local implementation capacity to efficiently deliver conservation to Minnesota's soil, water,

land and its people; and to promote itself as "Minnesota's Blue Collar Conservationists". Chair Coe thanked Tim for his report.

Richard Zupp, President, Minnesota Association of Soil and Water Conservation Districts (MASWCD), reported that MASWCD will hold a retreat in January to become educated. MASWCD is planning their legislative trip to Washington, D.C. in March. LeAnn Buck stated that MASWCD is strategizing with the legislature for RIM and the shoreland easement protection program. LeAnn commented on the *Star Tribune* articles written by Dennis Anderson that proclaim negative comments regarding conservation issues. LeAnn suggested working collectively to get the word out that good things are happening, and we need to work together to let the Legislature become aware of this.

Ginny Imholte reported that Dean Oleson, Buffalo Creek Watershed District, is the Minnesota Association of Watershed Districts (MAWD) new president. Ginny stated that MAWD will meet on January 11. Jerome Deal reported that President Bush signed PL566. The Red River Valley in 2001 had ditch damages; FEMA said they weren't eligible for federal funding due to taxing authorities. The congressional delegation is currently working on this. Jerome reported that the Red River Water Management Board (RRWMB) is the pass through agency on the "River Watch Program" – which is a very successful program; school children will present this program to the Legislature.

Tim Koehler, Natural Resources Conservation Service, reported that Bill Hunt wants to make continued commitments to BWSR with NRCS representatives attending BWSR meetings. Tim will be attending, if he is unable to attend Roger Mussetter or Paul Flynn will represent NRCS. Tim stated that implementation is the next step to the continuous CRP contracts. Tim reported that NRCS received their 2002 budget; it looks tolerable, they are able to maintain their current staff. Tim reported that $6M in funding has been received for completion of project construction on the Snake River in Warren; and a $7M allocation for wetland reserves.

Chair Coe thanked board members for their assistance during his first year as chair. Chair Coe thanked staff for their responsive, professional, and high quality work. Jerome Deal also thanked staff for their work and attendance at annual meetings. The Board commended staff on a job well done.

Upcoming Meetings
The next BWSR meeting will be held January 23 in St. Paul.

Ron Harnack stated that the Board is looking at having a retreat in May, replacing the May meeting. Specific topics will be BWSR priorities, biennial legislation, etc.

** 01-91 Moved by Jerome Deal, seconded by Jack Frost, to adjourn the meeting at 1:10 p.m. Motion passed on a voice vote.

Respectfully submitted,

Leland Coe
Chair

December 18, 2001

I filed a petition exactly pursuant to the requirements of Minnesota Statute 103C.225 on August 24, 2001 for the termination of the Hennepin Soil and Water Conservation District. Your letter dated October 2, 2001 confirms that you received this petition. I want to make sure that you, the board have been made aware this has been filed.

I also want you to be aware your staff's letter asks for information not required by law. Your staff has been adding conditions beyond what is stated in the Statute before they will even consider this petition. The law reguarding the termination of a soil and water district is specific and the important points are emphasized in the attached copy of the law.

There is nothing in this law that gives officals a right to deny this petition. Your staff's letter indicates they want to interpret the intent of the Legislature rather than follow the letter of the law. That is not provided for by law, and is the Domain of the Judicial System.

For some reason, establishment of a Public Hearing is delinquent. This should have been done "within 60 days" after the petition was received. I simply request that you follow the law and place this issue on the next Hennepin Co. Ballot in the next General Election in 2002. Again I respectfully ask that you follow the letter of the Law.

Thanks,

Keefe Schunk
6705 Willow Dr.
Corcoran, Mn 55340
763-478-2322

Minnesota Board of Water & Soil Resources

Central Office: One West Water Street ▪ Suite 200 ▪ Saint Paul, MN 55107 ▪ Phone: (651) 296-3767 ▪ Fax: (651) 297-5615

October 2, 2001

Keefe Schunk
6705 Willow Drive
Corcoran, MN 55340

RE: Petition for Termination of the Hennepin Soil and Water Conservation District

Dear Mr. Schunk:

The Board is in receipt of the above referenced petition that you submitted on August 24, 2001. Presently, the petition is inadequate. Further information is necessary before the petition can be processed. You and the petitioners have 90 days from the date of this letter to provide the Board written, factual reasons why the Hennepin Soil and Water Conservation District should be discontinued. If such information is not received within 90 days, the petition will be dismissed in its entirety.

Please feel free to contact me at (651) 297-2906 if I can be of further assistance.

Sincerely,

Jim Haertel
Water Management Specialist

cc: Steve Hobbs, HCD
Matt Seltzer, A.G.O.
Ron Harnack
Jim Birkholz
Doug Thomas
John Jaschke
Steve Woods
Doug Snyder

Bemidji
3217 Bemidji Avenue N.
Bemidji, MN 56601
phone (218) 755-4235
fax (218) 755-4201

Brainerd
217 S. 7th Street
Suite 202
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
413 W. Stanton Avenue
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
40 16th Street S.E.
Suite A
Rochester, MN 55904
phone (507) 285-7458
fax (507) 280-2875

Saint Paul
One West Water Street
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fax (651) 284-0000

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==103C.225

103C.225 Discontinuance of districts.

Subdivision 1. Petition for termination. (a) After five years after the organization of a district, 25 occupiers of land in the district may file a petition with the state board asking that the operations and existence of the district be terminated.

(b) The state board may not receive a petition, conduct a referendum, or make a determination on a petition to discontinue a district more often than once in two years.

Subd. 2. Hearings. The state board may conduct public meetings and public hearings upon the petition as necessary to assist in consideration of the petition.

Subd. 3. Referendum. (a) Within 60 days after the petition is received by the state board, it shall give due notice of the holding of a referendum, supervise the referendum, and issue appropriate regulations governing the conduct of the referendum.

(b) The question shall be submitted by ballots, upon which the words "For terminating the existence of the ..... (name of the soil and water conservation district to be here inserted)" and "Against terminating the existence of the ..... (name of the soil and water conservation district to be here inserted)" shall be printed, with a square before each proposition and a direction to insert an X mark in the square before one or the other.

(c) Only land occupiers in the district may vote in the referendum.

(d) Informalities in the conduct of the referendum or matters relating to the referendum do not invalidate the referendum, or result of the referendum, if due notice has been given and the referendum has been fairly conducted.

(e) The state board shall publish the result of the referendum.

Subd. 4. Determination by state board. (a) The state board shall determine whether the continued operation of the district board is administratively feasible and give consideration to the public policy under section 103A.206, and:

(1) the attitudes of the occupiers of lands lying within the district;

(2) the number of land occupiers eligible to vote in the

referendum who have voted;

(3) the proportion of the votes cast in the referendum in favor of the discontinuance of the district to the total number of votes cast;

(4) the approximate wealth and income of the land occupiers of the district;

(5) the probable expense of carrying on erosion-control operations within the district; and

(6) other economic and social factors relevant to the determination.

(b) If the state board determines that the continued operation of the district is administratively feasible, the state shall record the determination and deny the petition.

(c) If the state board determines that the continued operation of the district is not administratively feasible, the state board shall record the determination and certify the determination to the district board. The state board may not determine that the continued operation of the district is administratively feasible unless at least a majority of the votes cast in the referendum have been cast in favor of continuance.

Subd. 5. Termination of district affairs. Upon receipt from the state board of a certification that the state board has determined that the continued operation of the district is not administratively feasible, the district board shall promptly terminate the affairs of the district. The district board shall dispose of all property belonging to the district at public auction and pay the proceeds into the state treasury.

Subd. 6. Application to secretary of state. The district board shall then file a verified application with the secretary of state to discontinue the district with the certificate of the state board setting forth its determination that the continued operation of the district is not administratively feasible. The application shall recite that the property of the district has been disposed of and the proceeds paid as provided in this section, and set forth a full accounting of the property and proceeds.

Subd. 7. Certificate of dissolution. The secretary of state shall issue to the district board a certificate of dissolution and record the certificate in the secretary of state's office.

Subd. 8. Effect of dissolution. Upon issuance of the certificate of dissolution, the ordinances and regulations in force in the district are of no further force. All contracts entered into, to which the district or district board were parties, shall remain in force and effect for the period provided in the contracts. The state board shall be substituted for the district or district board as party to the contracts and succeed to the district's rights and duties.

HIST: 1990 c 391 art 3 s 10

Keefe Schunk
763-478-2322

TO THE MINNESOTA BOARD OF WATER AND SOIL RESOURCES.

LELAND G. COE

I AM SUBMITTING TO YOU THIS PETITION. THE PETITIONERS AND I WOULD APPRECIATE YOUR EXPEDITIOUS HANDLING OF THIS MATTER. POSSIBLY THIS COULD APPEAR ON THE NOVEMBER 2001 BALLOT SAVING COSTS OF A SPECIAL ELECTION.

THANK YOU FOR YOUR ATTENTION

BEEFE SCHUNK
763-478-2322
6705 WILLOW DR. CORCORAN, MN. 55340

PETITION FOR TERMINATION OF THE HENNEPIN SOIL AND WATER CONSERVATION DISTRICT

To the Minnesota Board of Water and Soil Resources:

The undersigned Petitioners, by their signature affirm the following:

1) Petitioners are registered voters who occupy land and reside in Hennepin County, which is the jurisdictional boundary of the Hennepin County Soil and Water Conservation District; and

2) Petitioners request by their signature that the operations and existence of the Hennepin County Soil and Water Conservation District be terminated according to MN Statute 103C.225, and that the question be added to the ballot for local elections currently scheduled for November 2001.

NAME	ADDRESS
[illegible]	4221 BASSETT CREEK DR. GOLDEN VALLEY, MN 55422
Darlene Sehner	4221 Bassett Ck Dr. Golden Valley MN 55422
Caryl Hurwitz	1841 Toledo Av N Golden Valley, MN 55422
William Brass	12007 MISS DR. CHAMPLIN MN 55316
[illegible]	12001 Miss Dr. 55316

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NAME	ADDRESS
Steve Tibbetts	4975 Dogwood St Maple Plain 55359
Marty Sutrenpa	1101 Elmwood Ave Mound 55364
John Rancour	3311 York Ave Robbinsdale 55422
DOUGLAS A. ABBOTT	P.O. Box 131, Maple Plain, MN. 55359

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NAME	ADDRESS
Marcella Schunk	7612 Plymouth Ave Golden Valley
Elmer A. Schunk	7612 - Plymouth AVE. Golden Valley
Donald Klove	7512 Plymouth Ave N Golden Valley
Erin Klove	7512 - Plymouth ave N Golden Valley.
Carol Ann Kohloff	7624 Plymouth Ave. No. Golden Valley
Robert E. Holden	1108 Quebec Ave N, Golden Valley
Kathleen Hanswick	1224 N. Rhode Island Ave N. Golden Valley.
Carroll Workman	8316 - 36th Ave No Crystal Mn 55427
Harold R Kaufmann	3424 Wisconsin Ave. No Crystal Mn 55427
LaVada Fiedler	3416 Wisconsin Ave No. Crystal Mn 55427

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NAME	ADDRESS
Bill Reiss	12202 Horseshoe Trl Corcoran MN 55340
Shirley Reiss	12202 Horseshoe trail Corcoran MN 55340

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NAME	ADDRESS
Dr Karl R Martin	5708 Ewing Ave S. Edina MN
[illegible]	3501 Xenium Ln. #248 Plymouth, MN
[illegible]	4346 Douglas Dr. N. Crystal, MN
Sandra Doberstein	7801-66th Av. N Brooklyn Park, MN
Michael L Woodward	3441 36th Av S Mpls.
[illegible]	3301 33rd Ave S. MPLS
Scott Jameson	18 Crestwood Dr. Osseo, MN
[illegible]	3606 58th Ave. N. Brooklyn Center, MN
[illegible]	3860 Crystal Blvd, MPLS, MN
[illegible]	3860 Crystal Blvd MPLS MN
Michael P. [illegible]	4825 IDAHO Ave N Crystal, MN. 55428

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NAME	ADDRESS
DAVID J ZAEC	10805 39th Ave. No. Plymouth 55441
DELORES	
Kevin J Schunk	3022 Zenith Ave. N. Robbinsdale MN. 55422
Beverly J. Schunk	3022 Zenith Ave N Robbinsdale MN 55422

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NAME	ADDRESS
[illegible]	1525 Deer Hill Rd Long Lake Minn 55356
[illegible]	1525 Deer Hill Rd, Long Lake Mn 55356
[illegible]	6705 Willow Dr. Corcoran Mn 55340

CHAIR REPORT
Lee Coe

Met with the Administrative Advisory Committee on Nov. 14th . Some of the items discussed were:

Non Point Engineering Allocations -- We referred this item to the AAC during our meeting in Caledonia. The AAC has a recommendation and it is on our agenda for this meeting.

WAC Rule -- Ron reported on the climate in the legislature and recommended that the rule change be revisited by the Board. This item is also on today's agenda. The ABC after discussion and

SWCD Dissolution Legislation and SWCD Supervisor Law Change were discussed, recommendations made and are before us today also.

We also discussed Per Diem Legislation and pending Board Appointments.

Attended the EQB meeting on Nov. 15th --Decisions made were:

Approved a resolution which adopts the Findings of Fact and Conclusions, and Order that grants Great River Energy a minor alteration to their previous Construction Permit allowing the nominal operating voltage of the dc transmission line to be increased from plus or minus 400 KV to plus or minus 400 k V. This is the 435 mile line which runs from the Coal Creek Generating Station near Underwood, N.D. to the Mpls/St. Paul metro area. *This change provides only a 2.5% increase in voltage but results in a 30 megawatt increase in power transfer capabilities.* The change is made through adjustment of the converter control system. It may seem like a small change - but the converters are huge.

We also received information on Notice of Intent by MDOT to remove land from Agricultural Preserve status through Eminent Domain Action to improve Highway 14 in Waseca County.

In addition to Committee reports we received an update on Power Plant Siting.

Attended a meeting of the BWSR Forestry Committee in Mcgregor on Nov. 19th where we put together the finishing touches on a position paper.

Attended a meeting on the subject of Con-Con lands at Thief River Falls on Nov. 26th. The main issue was trails for RV's. It appears that each County will appoint a committee which will make a recommendation to their County which in turn would be recommended to the Legislature through the DNR.

Attended the annual meeting of the AMC in St. Paul on Dec. 3&4. Renewed a number of old friendships and sat in on some of the meetings including the Environmental & Natural Resources Policy Committee meeting. Also spent a few hours in the BWSR booth.

Being I was in St. Paul and was invited, I attended Ron's meeting on Dec 5 with his management team on the subject of the budget cuts which the Governor has requested. Ron will be covering this item when he provides his remarks. Under Info + discussion

On Monday December 10th I attended the Public meeting on the Animal Agriculture GEIS sponsored by the EQB. A number of comments were made about formatting and some about lack of content. My comment was to format the documentation for ease of access and user friendly application.

On Dec 6 I also participated in the review of the Benton and Sherburne water plan updates along with Kenny + Jerome. They were both very good + a decision for approval is before us today along with Hanober County

New web site

I'm glad to report that the new web site is about to go live. There's a bit of background work that'll need to be done first, but I thought you all should get a brief introduction before the actual switch is made (hopefully on Tuesday). This e-mail is intended to get you familiar with the web site.

What's new on it? Lots. First, you'll notice the look and navigation. When the web team started meeting last fall, two priorities included a new design and a new structure. We hoped to make it easier for clients to find things. Content was regrouped, and in some cases, expanded and deleted—no more links to staff bios. Some new features were added to make the site a bit more interactive (more on those later!).

The look. It's a minor detail, but the colors used for the web site include the blue and green used on the letterhead and other new identity pieces recently printed. That's on purpose. The web site is a key communications tool and needs to be consistent with our other pieces. That means the color scheme won't change from these basic colors (blue, green, grey, and black).

Also, we went with a typeface that's easier to read on screen. Again, that won't change. I've set up the system to default to a sans serif typeface.

The new features. Now, the fun stuff.

Photo gallery: If you move your mouse over the photos on the home page, the pictures will change. The photos there are just placeholders for now; thanks to a great idea from John Jaschke, I'm planning to feature various projects here (for example, a wetland restoration) through a series of photos.

"Quick Click" section: You can find a number links within one click on the home page. I've picked a few out that seem to be popular (CREP easements, WCA forms, etc.). Once we have the system running 100%, I'll be able to monitor hits to pages and the popular pages (6-8) with the highest hits will move to that section.

Staff contact area: This is a new feature also on the home page. Ever wonder who the BC is for Cook County? Click on the "field staff work area" and you'll find an interactive map. Click on any county, and you'll find the BC assigned to that county.

Directory information: I know that a lot of people get questions about the directory. The "directories" link on the home page provides files that were made from contact management. They are pdf files (just three for now), which means that users can print out the files from their own computers. It's a quick and convenient way to get our directory out there for folks to use.

Publications: The new site also includes many publications that people have requested. In the "About the Board of Water and Soil Resources" link on the bottom of the page, you

can go to a section called "publications." That section includes the strategic plan and the supervisor's handbook (both in pdf).

What's next? There are some technical issues that still need to be cleared up; one is the search function. It works, but some fine-tuning is needed. Additionally, there are some sections that need more content, but members of the web team are working on that. The web team will also regroup to do a post mortem and set new priorities.

I'm also going to be sending some e-mails out to our LGU contacts, letting them know when the switch is made. Part of the updating process is to change bookmarks for pages deeper in the site. Nearly 100% of the url's changed on the new site.

I invite you to get familiar with the site before it goes live. See http://156.99.126.212/index.html.

Finally: I'd like to acknowledge the many folks who helped along the way.

Thanks to members of the original web team: Marybeth Block, Derek Fisher, Jim Lemmerman, Doug Snyder, and Char Sokatch. Special thanks to Ron Struss (for providing content in Derek's spot after he left), Natasha DeVoe, and Michelle Lewis for providing input, content, and great ideas. Also, thanks to Tim Ogg and the IT staff for putting up with my questions.

Finally, I want to thank Andrew Koebrick, the webmaster from Minnesota Planning, for providing valuable technical assistance and guidance throughout this process.

EXTENSION: 2002 – 2005

University of Minnesota Extension Service
Plan for Change

Executive Summary

PREFACE

Extension's commitment to the people, communities and businesses of Minnesota remains as strong as ever. The 2002-2005 change plan reflects our commitment to connect the research of the state's land-grant university to the people. The intention is to implement a new knowledge model and a new business model to assure that we can meet critical state needs with high quality, relevant, and accountable educational programs. We must first and foremost address how we do our work in a time of changing demographics, changing technology, and changing resources. Therefore this plan introduces a new delivery system for the Extension of 2002-2005. Many of the specifics of implementation are yet to be decided, however the following pages describe the blueprint on which implementation will be based.

KEY ELEMENTS OF EXTENSION VISION 2005

The University of Minnesota Extension Service will:

- Have a solid reputation for high quality programs addressing critical issues consistent with the University's mission and responsibilities.
- Demonstrate value-added connections to University research, making knowledge applicable to critical issues across the state.
- Expand and diversify revenues dedicated to a critical investment pool supporting research and development of new programs.
- Make a difference with clearly documented impact and relevance.
- Demonstrate commitment to diversity in its workforce and populations served.
- Renew staff energy through incentives, job redesign and staff development.
- Develop a new, efficient and effective delivery system with optimal use of technology and much stronger campus-field connections.
- Maximize collaborative capabilities through partnerships within the University, other organizations and with neighboring states.

A NEW EXTENSION MISSION STATEMENT

Making a difference by connecting community needs and University resources to address critical issues in Minnesota.

Our new Extension mission statement goes beyond our previous statement of *connecting community needs and University resources* to more fundamentally explain why Extension exists. In our new statement, we clearly declare our purpose of *making a difference...to address critical issues in Minnesota.* This new mission challenges us to work for the public good and to continually define the 21st century meaning of our tradition. The mission calls for a new standard of accountability coupled with a market-based structure and process for continuing to define our programs.

THE NEW EXTENSION KNOWLEDGE MODEL

As we work toward our mission, Extension will offer a more focused portfolio of high quality programs which continue to evolve and improve in response to Minnesota's changing needs.

Extension will focus on three arenas of activity:

- Community Development and Vitality
- Land, Food and Environment
- Youth Development and Family Living

Our 2002 – 2005 plan continues University of Minnesota's strong links to agriculture while positioning it to better address the larger array of problems faced by children, youth and families, as well as natural resource management and economic and community development issues in Minnesota. The new Extension offers an outreach portfolio that more fully engages the total university with the people of the state.

The University of Minnesota will provide leadership for ensuring that our programs "address critical issues" and "make a difference" by instituting a more formal process of community assessments with involvement of regional educators and campus faculty. The University will provide leadership in selecting which local needs to address, given institutional strengths. We will also create new systems for program evaluation and commit to annually replacing at least 5% of programs in our existing portfolio.

A NEW EXTENSION BUSINESS MODEL

Extension 2002 – 2005 will require a significant investment to develop programs that address community needs, access a broader spectrum of expertise in the University's colleges, re-deploy and support our workforce, and develop the technology and other systems to more effectively deliver our services. We will achieve these goals by creating a strategic investment pool estimated at $5 million by FY2004. The strategic investment pool will be used to leverage resources across the University and will provide greater flexibility to address critical issues. This investment pool will be funded by generating external earned revenues (e.g. grants, contracts, fees, and gifts) coupled with internal savings from staff and expense reductions.

For some time, Extension has acknowledged that its current financial model is not sustainable. (See Attachment A) Declining public support is a budget reality that must be addressed. Centrally allocated state and federal funds are flat at best and there are no resources available to invest in the things we must do to remain relevant and viable. At the present time, nearly 90% of our state and federal resources are committed to Extension personnel costs, precluding vitally needed budgetary and organizational flexibility. Our 2002 – 2005 plan addresses this problem in concrete and specific ways. We have set a goal to commit 75% of our centrally allocated resources to personnel costs by the end of FY2005. To achieve this, we have also established detailed principles and procedures for generating and capturing earned revenues that will total $2.5 million annually by FY2004 and our expense reductions will total $4.5 million annually by FY2004.

A NEW DELIVERY SYSTEM

As we in the University of Minnesota Extension Service redirect our work toward a more focused agenda, we must also realign the organization to support focused programming. We will re-direct our human resources to the work that matters most and fully capitalize on the increasing role that technology plays in the lives of Minnesotans.

This 2002 – 2005 plan builds a new structure for Extension's field organization that forges a much closer partnership between field and campus. We will both deepen and broaden the field's access to the University's research base, allowing us to better serve the state's residents. We will access scholarship across more colleges, and we will call for greater expertise among our regional educators. Key structural elements include the following:

- New district boundaries for 7 districts, including one district exclusively focused on the needs of the seven-county metropolitan area. (See Attachment B)
- Programs delivered regionally by a field force of regional Extension educators who will work closely with campus faculty to design and deliver programs.
- Creation of a network of county Extension directors, who will assess critical needs, and access University of Minnesota resources to address priorities in local communities.
- Program assistants who support local programming, especially in the 4-H Youth Development and Family Nutrition Programs.
- Continued administrative leadership by district directors and programmatic leadership provided by capacity area leaders.
- An effective and efficient system of operational support at the system level with increased emphasis on building capacity in areas such as sales, marketing, communications, grant writing, and staff development.
- Continued use of formal Memoranda of Understanding with colleges across the University.

Technology offers an exciting 21st century opportunity to fulfilling our mission of connecting community needs and University resources. Our vision is to build on our award winning website to offer the public 24-hour self-service access to consumer information and to maximize the reach of Extension with increased efficiency. Similarly, our goal for educational programs is to make 20 percent of Extension programs accessible through information technology by 2005, building on successes such as our nationally recognized Master Gardener training program.

While we face immediate budget constraints that require change, these organizational changes proposed for Extension should be made because they will make Extension a more effective and flexible delivery system demonstrating the value of a research university to the people of the state.

Attachment B

University of Minnesota Extension Service
New Districts January 2002

UNIVERSITY OF MINNESOTA
Extension
SERVICE

Environmental Outcomes Division (EO)

This division monitors and evaluates the physical, chemical and biological conditions of Minnesota's environment; to identify environmental threats and impacts to human and ecosystem health; to help set environmental goals, establish standards and measure progress in achieving those goals; and to report results to agency management, staff, stakeholders and citizens.

This division is generally unchanged. Among its functions are to:

- Perform risk evaluation and modeling
- Conduct stream monitoring, including the Citizen Stream Monitoring Program
- Develop water quality standards affecting lakes and streams
- Implement the Citizen Lake Monitoring Program
- Establish and update a listing of impaired water bodies (TMDLs)
- Publish the Air Quality Index (AQI) daily
- Collect and analyze air samples for air toxics network
- Manage and report environmental data

Policy and Planning Division (P&P)

This division develops strategies and programs to address environmental problems. It leads efforts on program policy and strategy, and develops a framework for action. It will research issues that may shape the future environmental action agenda.

P&P works with other state agencies on statewide policy issues and provides program analysis and coordination with other agency divisions. This division is smaller than in the past. Many staff formerly in this division have been reassigned to the two service delivery divisions.

Its major areas of work include:

- Governmental relations (federal and state)
- Stakeholder research (gathering input from citizens and customers)
- Emerging issues analysis
- Liaison with Environmental Council of States (ECOS)
- Liaison with Minnesota Environmental Quality Board (EQB) and the Minnesota Office of Environmental Assistance (OEA)
- Rule-making
- Pollution prevention
- Environmental education
- Environmental justice
- Piloting agency "Smart Growth" initiatives in Brainerd, the North Shore and the Twin Cities

Media Leads and Program Managers

To clarify responsibilities, the MPCA has designated leads for air, water and land media, and program managers. A media lead is accountable for establishing program priorities and resolving major policy and budget issues. The program manager is responsible for program implementation and decision-making.

Air/Hazardous Waste/Remediation/Above-Ground Storage Tanks Media Lead: Jim Warner, MAR

	Program	Manager
AIR	State Implementation Plan	David Thornton 651/296-7265
AIR	Monitoring of air emissions	Gaylen Reetz 651/296-8856
AIR	Point source regulatory (permitting, compliance, enforcement)	Ann Foss 651/296-7512
AIR	Mobile sources	Leo Raudys 651/282-9884
HAZ WASTE	RCRA regulatory (permitting, compliance, enforcement, HHW, waste oil, PCBs)	Mike Tibbetts 651/297-8381
HAZ WASTE	Petroleum (LUST, above ground tanks, cleanup)	Michael Kanner 651/297-8564
REMEDIATION	Emergency reponse	Michael Kanner 651/297-8564
REMEDIATION	Closed landfill cleanup	Michael Kanner 651/297-8564
REMEDIATION	Superfund	Gary Pulford 651/296-7340
REMEDIATION	Insurance Recovery	Gary Pulford 651/296-7340

Water/Solid Waste/Underground Tanks/Environmental Review Media Lead: Rod Massey, REM

	Program	Manager
SOLID WASTE	Regulatory	Larry Landherr 507/285-7345
WATER	Monitoring -- ambient surface water, biocriteria, lakes assessment, ground water	Gaylen Reetz 651/296-8856
WATER	Nonpoint source -- basin planning, clean water partnership, stormwater, Lake Superior Management Plan, ISTS	Faye Sleeper 651/297-3365
WATER	Feedlots	Myrna Halbach 320/214-3794
WATER	Point source regulatory (permiting, compliance, enforcement, sludge/biosolids	Tim Scherkenbach 651/282-6243
WATER	Total Maximum Daily Loads (TMDLs)	Faye Sleeper 651/297-3365
OTHER	Environmental review	John Holck 651/297-7568
OTHER	Underground storage tanks	Reed Larson 218/825-3054

Minnesota Pollution Control Agency

MINNESOTA ENVIRONMENT

SPECIAL REPORT

MPCA Organizational Change, page 3

Impacts of MPCA Downsizing

This special report describes the impacts of recent funding reductions and program changes at the Minnesota Pollution Control Agency (MPCA). The reductions below represent 79.5 full-time equivalent positions (FTEs). Nine of these positions were reallocated to water quality point source and stormwater programs as directed by the Legislature.

In addition, since the March 6, 2001 report to the Legislature on "MPCA Staff and Environmental Work Reductions," the agency has received EPA funding for an additional 4.75 FTEs.

These reductions resulted from:

- Continuing inflationary erosion of federal funds to support environmental protection efforts in the state.
- State laws that "sunset" certain programs designed to accomplish specific tasks in specific timeframes.
- Increasing costs of environmental protection services while fees and taxes to support them have remained flat.

Although these cuts are significant, the MPCA is managing them by reducing or eliminating programs that are winding down to maintenance levels, have achieved substantial environmental results, will end when state laws sunset, or deal with less pressing health or environmental threats.

Some changes, such as discontinuing our work with listed metals in products and malformed frog research, have already occurred. Others, such as reductions in Superfund cleanup and septic system programs, will be implemented gradually.

Program Eliminations

Salvage Yards

The salvage yard program (3 FTEs), which provided technical assistance and training to help assure better environmental compliance by the state's 500 salvage yards, has ended. The program included training for operators and county environmental personnel, was designed to sunset in 2001. Of course, the MPCA will provide limited response to citizen complaints.

Waste Tires

Following major education and cleanup efforts over 10 years, waste tire management is no longer a serious problem and the program (0.5 FTE) has been eliminated.

Listed Metals in Products

Staffing for this program was discontinued and the 1 FTE staff position eliminated at the end of the year 2000 after meeting the goal of reviewing 224 specified products that contained four heavy metals — mercury, lead, cadmium and hexavalent chromium. The program was successful in promoting a voluntary reduction of products containing listed metals that are made or used in Minnesota. This will keep thousands of pounds of toxic metals out of the environment each year.

Malformed Frogs

As of July 2001, the MPCA is no longer funded by the Minnesota Legislature to conduct malformed frog research. Some federal agencies and universities are continuing the work. The MPCA Web site directs the public to places where they can report finding malformed frogs. The program staff consisted of 1.5 FTEs.

Programs receiving additional staff from state funds

The 2001 Minnesota Legislature allocated funds for the agency to expand air quality monitoring (1 FTE); the feedlot program (9 FTE); water quality point source (6 FTE); stormwater (3 FTE); and water basin management efforts (4 FTE).

Wetland, sludge and PCB work continue with EPA funds

Two FTE positions in wetland monitoring, 1.75 FTE to assist communities with sewage sludge management, and 1 FTE to work on control of toxic substances and PCBs were slated for elimination. However, the MPCA has received federal grants supporting this work through 2003.

For updates on the progress of these and other program eliminations and reductions, visit the MPCA Web site, **www.pca.state.mn.us/about/changes.**

Sanitary District Formation
MPCA staff will continue to review and approve petitions to create sanitary districts until the state statute is rescinded in FY 2003. As a result of reductions (0.5 FTE), staff time previously spent on reviews, technical assistance, and training will be eliminated.

401 Certifications
With this elimination (2 FTEs), the MPCA waives the right to review and certify state water quality standards for any project requiring federal permits, such as the Corps of Engineers 404 permit, Coast Guard permit, or any other federally permitted project, such as construction of dams, dikes or bridges.

Source Water and Wellhead Protection
These programs (1.25 FTEs) are designed to protect sources of drinking water from contamination. The Minnesota Department of Health (MDH) is the lead agency for these programs. The MPCA has provided MDH with information on potential sources of contamination. MDH will conduct database and file searches for this information in the future.

Air Indirect Source Permits
The reduction of 1.5 FTE for indirect source permitting means the MPCA will no longer review air pollution impacts of carbon monoxide from large construction projects, such as malls and arenas.

Program Reductions

Land Regulatory Programs
Support of solid waste, hazardous waste and above- and underground tank programs is being reduced by 17 FTEs (from 94 to 77). Impacts include no routine inspection at small facilities and less frequent inspection at large facilities. The agency will respond only to high-risk complaints. Technical assistance to businesses and facilities will be cut, and permits will be issued at a slower pace. Counties will have increased responsibility for inspections and complaints.

Remediation Programs
Staffing in the remediation programs which deal with leaking underground storage tanks, hazardous waste corrective actions, and Superfund sites, is being reduced by 16 FTEs. While Minnesota's cleanup programs have led the nation in finishing "worst sites first," these programs will be moving into a maintenance mode during the next five years. Seventy-three FTEs remain.

ISTS (Septic Systems) Program
Staffing for the statewide program helping local government, professionals and homeowners with individual sewage treatment systems (ISTS), commonly known as "septic systems," will lose 2 FTEs, with 4.5 FTE remaining. The MPCA will no longer provide training, technical assistance for contractors, permit review, a newsletter, review of local ordinances, help with submissions for new or alternative ISTS technologies, or assistance to individual homeowners. The agency's activities are now limited to licensing and enforcement of licensing violations and technical assistance for local units of government.

Groundwater Monitoring
Staffing in this program has been reduced by 3 FTEs (from five to two). The MPCA will no longer collect its own baseline groundwater monitoring data to support research needs of its programs or to define emerging issues. The remaining positions will gather and analyze monitoring data from other state and federal partners.

Biocriteria Development
The MPCA is reducing scientific staff working on biocriteria development by 1 FTE (from seven to six). This work involves assigning numeric values or narrative descriptions used to describe water quality, based on the condition of specific species common to aquatic systems.

Industrial Byproducts
Land application of industrial byproducts currently requires a permit from the MPCA. The MPCA will no longer review and approve site plans, nor storage and other facility designs, except to make sure the plans have been signed by a certified engineer. The program is reduced by 2.25 FTEs, leaving less than 0.5 FTE of work effort in this area. Sewage sludge (biosolids) management continues; see page 1 sidebar.

Emergency Response
The staff has been reduced by 1 FTE (from 12 to 11), resulting in fewer training and preparedness drills. The agency will make greater use of contractors in cleanups.

Air Quality Point Source
A reduction of 2 FTE (from 73 to 71) in point source regulation means reduced permit issuance rates, compliance and enforcement. (A 1.0 FTE reduction in air monitoring has been offset by new state funds for air monitoring; see page 1 sidebar).

Administration
To correspond with program eliminations and fewer line staff, the agency is reducing the number of support staff, executives, managers and supervisors, commensurate with the work reductions. Twenty-four FTEs are being eliminated. This number includes five program managers and seven supervisors.

MPCA Organizational Change

This special report describes recent organizational changes at the MPCA and who our partners, customers and regulated parties should contact about key issues.

What's different about the MPCA?

To many who work with the MPCA, the impact of the changes will be invisible. Most customers will be interacting with the same line staff people with whom they are familiar. The changes are intended to improve the quality of the service that we deliver and provide faster decision-making and clarity about where to go for assistance.

The new structure contains two service-delivery divisions — called Majors and Remediation (MAR) and Regional Environmental Management (REM) — that replace three previous divisions that were based on geographical regions (North, South and Metropolitan Twin Cities). The agency will continue to have eight offices located throughout Minnesota, but reporting relationships and services available in each office may change. There is no change in the number of staff located in Greater Minnesota.

Majors and Remediation Division (MAR)

This division runs core regulatory programs of the agency that address the major water discharges, air emissions sources and hazardous waste generators in the state. MAR works with large industries and municipalities, focusing on permitting, compliance and enforcement.

This division also implements the agency's clean up programs. Most of the MAR staff continue to be located in the MPCA offices in St. Paul.

Specific programs and functions in the MAR division include:

- Air quality, hazardous waste and remediation lead with EPA
- Air permitting, compliance and enforcement
- Hazardous waste permitting, compliance and enforcement
- Major water quality permitting, compliance and enforcement
- Large above ground storage tank regulatory program
- Superfund
- Closed landfill cleanup
- Leaking underground storage tanks
- Voluntary investigation and cleanup (VIC)
- Emergency response (spill cleanup)
- Small Business Assistance

Regional Environmental Management Division (REM)

The REM division works to solve or prevent environmental problems geographically, and to administer programs for smaller, dispersed pollution sources from small cities, businesses and individuals.

Its primary focus will be water and solid waste with lesser emphasis on air, hazardous waste and remediation activities with some region-specific exceptions. REM staff are distributed statewide in all eight regional offices. Among its programs:

- Water quality and solid waste lead with EPA
- Minor water quality permitting, compliance, and enforcement
- Environmental review
- Asbestos removal, disposal, compliance and enforcement
- Solid waste permitting, compliance and enforcement
- Mobile source air pollution
- Noise pollution
- Customer Assistance Center
- Individual sewage treatment systems (ISTS)
- Basin management planning
- Feedlots
- Local planning assistance
- Lake Superior initiative
- Clean Water Partnership program
- Mercury-free-zone program
- Total Maximum Daily Load (TMDL) studies

Management Indicators

To gauge the progress of the organizational change, the MPCA management has identified the following measures that will be reviewed monthly:

- Timeliness of NPDES (National Pollutant Discharge Elimination System) permit issuance
- Title V (federal air program) permit issuance
- Feedlot permit issuance timeliness
- Major NPDES permit compliance
- Major air facility compliance
- Hazardous waste treatment, storage and disposal compliance
- Enforcement activities

EXECUTIVE SUMMARY

The Comprehensive Local Water Management Planning (Water Plan) process is in it's third generation of planning and as such focused upon the implementation of goals and objectives – getting projects on the ground. The effective date of this Water Plan is December 31,2001. Once approved by the State of Minnesota, through the Board of Water and Soil Resources, it will remain in effect for five years.

The purpose of the Water Plan is to identify existing and potential problems and opportunities for the protection, management and development of water and related land resources. Once problems and opportunities are identified, goals, objectives and a plan of action can be developed.

This document is a ***supplement*** to the 1995 Comprehensive Local Water Management Plan written by Donald Bajumpaa, Benton County Water Plan Coordinator. That is to say, the information in this 2001 edition further explains and updates the information found in the previous Water Management Plan. Much of the information found in the 1995 document is still relevant to the present conditions of Benton County, and is therefore worthy of being ***part of*** this document.

Education is a very important role of Local Water Management. So much so that this 2001 Supplement to the 1995 Comprehensive Local Water Management Plan was written to act as another avenue to deliver the messages of water quality and quantity. It is the intent that this document fully explain the nature of Benton county resources, from the bedrock to the climate, to the land use. Readers who are not acquainted with the language of water resource management should find this document helpful in understanding the concepts.

A Water Resources Advisory Committee was formed in 1988 in response to the County Commissioners' concern over a lack of a plan to protect the water resources of Benton County. At that time, there was a need to inventory the water resources as completely as possible, collecting all of the information available on the water resources of Benton County – the first assessments. This was the foundation upon which a plan of action was built – the first goals, objectives and actions. The second-generation water plan (1995) placed more emphasis on the implementation of conservation measures. This, the third generation water plan (2001) places more emphasis still on the implementation of conservation measures in order to preserve and protect the quality and / or quantity of surface water and ground water. This third generation plan has also targeted more monitoring and inventories than have been targeted in the past. This is due to the fact that there is more of a demand on the part of project funding partners to show higher levels of prioritization and to demonstrate improvements in the physical properties of the water resources that are being managed.

The process of revising the water plan began with the Water Resources Advisory Committee as they offered water quality concerns with which they had become familiar through their experiences in Benton County. These were added to the water plan coordinators' concerns and a preliminary list of areas of concern was developed. A public information meeting was held and the list of concerns was lengthened. From this information, a list of possible objectives and action items was developed and reviewed by the WRAC and each action item that was retained was given a priority number. The water plan Coordinator then requested that the present water plan be extended for one year due to other commitments that his position required. Questionnaires were distributed to many community groups asking for any items to include in the new water plan. Local Units of Government were contacted, and more surveys were received from the public. The WRAC added technical representatives to it's membership in 2001. Objectives and action items pertinent to the Elk River Watershed were coordinated with the Sherburne County water plan committee and a final draft of the objectives and action items was generated.

In this plan, you will find a summary of objectives and action items found in the second-generation water plan and the progress that has been made in achieving those action items. In addition, the assessments section has been updated to include new information about the status of water related issues in Benton County. Finally,

the goals, objectives and actions section continues those action items from the second generation Water Plan and adds those concerns that have been brought to the attention of the Water Resources Advisory Committee. The plan identifies the major watersheds and evaluates each with respect to surface water flow, geology and the ground water system. Unique to the area is the presence of two distinct geological formations which greatly impact the surface water and ground water characteristics: the Outwash Plains (Crow Wing and Mississippi Valley) and the till areas (McGrath and Brainerd – Pierz Drumlin area).

Major Accomplishments

The following is a list of major accomplishments that the Benton County Water Plan has achieved by resource:

Ground water quantity

- The Benton SWCD actively lobbied to keep the University of Minnesota Extension to keep the **weather station** in Benton County to provide the area with accurate temperature and wind speed measurements in order to calculate an accurate evapotranspiration rate for those producers scheduling their irrigation.

Ground water quality

- The Department of Development (formerly Planning & Zoning) has surveyed many septic systems on Little Rock Lake since 1995. There has also been an initiative to **establish sewer service to the area around the lake** and some adjacent developments. The goal of having 90% updated septic systems by 2005 seems to be on track. In addition, the Department of Development provides new septic owners with a University of Minnesota pamphlet informing them of how the system works and the importance of maintenance.
- The Benton SWCD has maintained a list of cooperators interested in sealing abandoned wells, and to date only has low interest loan dollars to offer to those who want to seal abandoned wells. From 1990 to 1992, the Benton SWCD **sealed 66 abandoned wells** using cost share funds from the Board of Water and Soil Resources ($36,032). In 1995, the Benton SWCD, with the help of cost share funds from the Board of Water and Soil Resources **sealed 19 abandoned wells**. The USDA has **sealed 53 abandoned wells** with federal cost share (1995-1997). A **total of 138 abandoned wells** have been sealed with cost share since 1990. There are estimated to be between 2000 and 4000 abandoned wells in Benton County.
- 1998 - The SWCD, MDA, DNR, and other partners hosted a meeting in the Rice area to distribute information about **farming practices and groundwater quality.**
- 1998 - The MDA and the SWCD have partnered in a **'Central Sand Plains Monitoring Cooperative'** joint powers organization that will test the surficial aquifer and promote Best Management Practices (BMPs) in irrigated areas.

Surface water quantity

- The Benton SWCD has secured several BWSR Challenge Grants and United States Fish and Wildlife Service Grants to implement low-cost feedlot and conservation practices - Two each for the Little Rock Lake Watershed and the Elk River Watershed (**24.7 acres of wetlands have been restored, created or enhanced**). Local funds were also raised to help achieve this goal.

Executive Summary

Comprehensive Local Water Management Planning evolved from the 1985 Comprehensive Local Water Management Act (Chapter 110B). This act later became law and is located in Minnesota Statutes 103B.301 to 103B.355.

The purpose of a comprehensive water plan is to identify existing and potential problems and opportunities for the protection, management and development of water and related land resources. Once problems and opportunities are identified, goals, objectives and a plan of action can be developed.

In 1988 the Benton County Board of Commissioners were concerned that a comprehensive plan and coordinated effort was not in place to preserve and protect the surface and ground water quality and quantity in Benton County. County water resources are vulnerable and require protection. A cooperative effort between all units of government and county residents is needed for water resources management. To meet these needs, a Water Resources Advisory Committee was established in 1988 to assist with development and implementation of the water plan.

Members of the Water Resources Advisory Committee are appointed by the Benton County Board of Commissioners and consist of one representative from each of the following agencies and groups. Benton County Public Health Department, Minnesota Extension Service, Benton County Highway Department, Benton County Planning and Zoning, Benton County Board of Commissioners, up to four citizen positions from the general public in Benton County, an Environmental Professional, one representative for all the Townships in Benton County and one representative for all the Municipalities in Benton County. Members length of term are two (2) years.

The Water Resources Advisory Committee Meetings are open to the public and are held on the fourth Tuesday of each month. Meetings are held in the City Council Chambers at Foley City Hall at 1:30 P.M.

In order to assist the general public in understanding the local responsibilities of local water management issues, a **Local Water Planning Resource Directory** was developed. This directory identifies what role each local entity has in local water management issues. The directory should serve to address most questions the general public may have regarding who is responsible for doing what at the local level. **This directory is located at the end of the executive summary.**

Benton County's first water plan was written in 1991. The plan provided a four year work plan to address priority issues. Priority issues identified in the first water plan included: sensitive geological areas; agricultural/ residential/industrial impacts on water quality and quantity; limited surface waters and their quality and quantity; improving water quality analysis; wetlands; land development, use and management; and fisheries and wildlife habitat.

Many of the priority issues identified in the first plan are still issues today. The revised water plan has identified the following priority issues: septic systems, storm water management, non-point source pollution, storm sewer discharge, irrigation, ground water sensitivity, abandoned wells, eroding lands, feedlots and livestock, wellhead protection, and wetlands. Included in the above priority issues are the new mandatory items that counties have to address in this revision.

A five year work plan has been developed to address the priority issues identified above. The work plan establishes specific goals, objectives and actions for each priority issue. Each year the Water Resources Advisory Committee prepares an annual work plan. This process provides an opportunity for the public to provide comments as the County annually redefines and adjusts it's priorities.

The Benton County Soil and Water Conservation District is the lead local agency for water planning in general.

The Benton County water plan is intended to be a useful working document in managing the County's major watersheds and ground water systems. The plan will be reviewed and modified as needed to meet new priority issues as they arise.

In the past priority issues were addressed on a major wateshed basis to address the Board of Water and Soil Resource's mandatory emphasis on watershed planning and prioritization. An effort is currently being made to address priority issues on a minor watershed basis, since not all minor watersheds within each major watershed are the same. Finally, once priority minor watersheds are identified, low-cost high-return conservation practices in riparian cooridors are being promoted.

This strategy has a number of advantages in that it is easier to communicate with landowners and local officials on a smaller scale, and it provides a high degree of accountability and efficiency.

The county believes that the local comprehensive water plan is a valuable tool in protecting and enhancing the county's water and related land resources now and for the future.

EXECUTION SUMMARY

The Kanabec County Comprehensive Local Water Plan update was coordinated with the assistance of a committee of eight members. Information and comments were obtained from surrounding counties. government agencies, lake associations. and public comment. A survey was distributed to City and Township officials, Lake Association members, and the general public. 134 responses from the survey were received. A public hearing was held on October 17, 2001 to receive additional comments. This plan will remain in effect until December 31, 2006.

KANABEC COUNTY WATER PLAN ACCOMPLISHMENTS 1996 – 2000

Since approval of the current Kanabec County Comprehensive Local Water Plan, the following items have been funded. Several of these are on-going items that will continue to be addressed in this updating of the plan.

Education and Information

The Kanabec SWCD and the NRCS have worked with local schools to establish a water quality education program called "River Watch". The program is conducted each spring and fall and includes Mora and Ogilvie schools.

In 1999, funds were used to prepare an informational newsletter that was sent to every property owner in Kanabec County. Since than several news articles have been printed in local newspapers.

During 2000 and 2001, the Water Plan Committee hosted a booth at the Mora Area Home Show. In 2001, surveys were distributed at the show to gather information for this revision.

Water plan funds have also been used to sponsor a "Knowledge Bowl" competition between schools. This program tests students' knowledge of the environment.

In 2000, the Water Plan Committee also participated in the Rural Living Expo by providing information about available water plan activities to expo attendees.

Inventory and Mapping

Water Plan funds have been used to assist with the completion of a soil survey for Kanabec County. As of the summer of 2001, the survey was approximately 72% complete. This is the first detailed soil survey of Kanabec County.

During 2000, septic system compliance inspections were completed for several residences around Lewis Lake. Water Plan funds were used to complete the inspections and will be available for cost-share assistance on required repairs or replacements.

1. EXECUTIVE SUMMARY

This is the **third version of the Sherburne County Comprehensive Local Water Plan.** The first version was adopted by the County in 1992 and was revised in 1995. This version of the Water Plan is in effect to February 28, 2007. The updated Water Plan consists of revised sections from the previous version that will replace those sections. Sections that were not revised are considered to be part of the third version of the Water Plan. Sections that were updated and revised for the third version are:

1. Executive Summary (entitled "Purpose of the Plan" in the former version)
2. Scope of the Plan
3. Planning Process
4. Existing Local Plans and Ordinances
5. County Resource Assessment
6. Goals, Objectives, Actions, Implementation Strategy
7. Implementation Program
8. Recommended Changes to State Programs
9. Conflict Resolution
10. Plan Amendment Process
11. Plan Review

Tables
Figures
Maps

The updated water plan differs from the former plan in that more emphasis is given to prioritizing issues and objectives in the context of major watersheds. The resource assessment also lists surface water quality data according to watersheds and provides a resource assessment of the major watersheds in the County. Goals and Objectives have been formulated which are clear, achievable in a reasonable time period and which will produce measurable results.

Some objectives and actions of the implementation plan of the previous Water Plan version represent recommendations to adopt and enforce ordinances and to formulate policies for water resource protection. Many of these have been implemented and continue to be important toward protecting water resources in Sherburne County on an on-going basis. These objectives and actions have been retained in Section 6.7, Policy Development and Assurance, of the Water Plan.

1.1 PURPOSE OF THE PLAN

The purpose of this Comprehensive Local Water Plan for Sherburne County is:

1. **To identify existing and potential problems or opportunities for the protection, management, and development of water resources and related land resources in the County**

2. **To develop and implement a plan of action to promote sound hydrologic management of water and related land resources in the County, and**

3. **To work toward effective environmental protection and management in the County**

FOR YOUR INFORMATION

December 19, 2001

- **"BWSR Update"**

- **Letter of October 29, 2001, to agencies regarding the 90-day review of the updated Kanabec County Comprehensive Local Water Management Plan**

Minnesota Board of Water & Soil Resources

Board of Water and Soil Resources
U·P·D·A·T·E

A publication of the Minnesota Board of Water and Soil Resources December 2001

METRO

Aside from generating a pile of appeal work for Jim Haertel in the Land & Water section, we have had some constructive things occur in the region in the last month. Foremost is the much-awaited receipt of the Coon Creek Watershed District watershed management plan. Review is commencing and should increase the amount of coordination work we do with them at this time when their WCA-related cease and desist order plays out. We are still unraveling the story behind their decision to apparently undertake a ditch improvement without following administrative procedures. Lynda Peterson is our lead on this.

Doug Snyder attended the PCA's TMDL road show and came away with the knowledge that plans for dealing with TMDLs will be a very tight fit with the existing requirements of local water planning. As the metro water planning (stakeholder) rule group chews on the shape of future rules, we will need to consider whether the TMDL can be addressed via plan amendment and forego a duplicative process.

Speaking of the rule group, the metro stakeholders have heard from an ad hoc water planning committee of the Board and tweaked some proposed rule language to align with it. The metro stakeholders have a (very) rough draft coming back out to them in the next few weeks and will not be meeting for another month at least as we allow time for digestion, holidays, and one missing piece to congeal. That piece is the critical linkage missing between city comp plans and the watershed plans. The Association of Metropolitan Municipalities has been requested to push themselves for language they can live with that takes us all in the right direction. Stay tuned.

Lastly, Phil Belfiori is splitting his time between helping L&W and aiding metro planning. The biggest development of the last month in metro plans is the decision by the Dakota commissioners to endorse a management structure for the 311 sq. mile Vermillion River watershed. The plan appears to be to link Dakota and Scott via JPA for planning purposes and implement on an individual basis. We've said from the start that we need a single entity at the top (vs. side-by-side separate county efforts) so the detailed structure of the JPA will be where the devil resides.

-Submitted by Steve Woods

NORTH

Wetlands

John Overland joined the North Region staff as a wetland specialist starting Oct. 22. With the addition of John to our staff, I feel that we're well equipped to handle the never-ending list of WCA-related activities that continue to come our way. John is already working with Dan Steward to clean up some WCA files in Stearns County that have languished do to frequent turnover of LGU staff. John has assisted Pete Waller in getting approvals for three Grant County wetland banks that needed a little push. Meanwhile, Dale continues to be the lead on the Arnold Ruther violation in Otter Tail County and the Gary Bailey violation in Lake of the Woods County. EPA is cooperating both of these violations and will likely result in federal penalties. There is plenty of work needed on our end to coordinate state WCA activities with the EPA investigation. Dale is also assisting Jeff Hrubes and Dan Steward in follow-up activities related to recent WCA audits in Hubbard and Itasca counties. Mark Nelson reports that Dale was instrumental in convincing the city of Hermantown to schedule regular monthly TEP meetings. Hermantown is yet another high growth rural community with lots of WCA issues. Monthly TEPs will reduce the risk of violation and improve the communication between the LGU and the state and federal agencies.

Water Planning

Third generation water plans are starting to come in for review on a regular basis. On Dec. 6 the North Region water plan review committee heard presentations from Benton, Sherburne, and Kanabec counties. Stearns is on

deck for January. Pete reports that he is working with Dave Sill to coordinate a five-county (Pope, Swift Chippewa, Big Stone, and Lac Qui Parle) area joint water plan update process.

Many counties are using the water-planning revision opportunity to coordinate with the county overall land use plan. Morrison, Itasca, Cass and Todd counties are a few examples of water plans that have been or are being revised in conjunction with the county's land use plan.
-Submitted by Ron Shelito

L & WS

Livestock producers are very interested in better pasture management. This has been expressed in the backlog of managed grazing system plans. Fifteen months ago the backlog was approximately 30 plans to do, and now it is at 70-80 requests for grazing plans.

The majority of the grazing system plan requests (approximately 70 percent) initially were from southeast Minnesota. The trend in the last year is markedly different, with the southwest and northwest areas of Minnesota indicating considerable interest. Only about 40 percent of the current backlog is from the southeastern part of the state.

Many farmers that have implemented managed grazing system plans are reporting more forage available, as well as better livestock performance. Several testimonies from beef cow/calf operations indicate a significant increase in calf weaning weight, from 50 to 100 pounds increase per calf. This is likely due to better quality water being made available to the herds in sufficient quantity. Better distribution of water facilities also allows for improved management of the forage resources.

Supplying water to grazing herds after pastures are subdivided for a managed grazing system is a major concern of producers. As technical agencies, BWSR and NRCS had very little experience with this prior to two years ago. Design criteria were developed to meet the needs of grazing operations. A field evaluation of an extensive livestock water system in Winona County in October this year indicates that the design criteria for pipeline systems meets the expectations we had during development of the design process.

During this past summer six requests were received for grazing systems as an integral part of animal waste pollution abatement systems. In some cases this has led to reductions in the costs of abatement systems. This will likely be a growing segment of the managed grazing systems workload in the future.
-Submitted by Howard Moechnig

A major effort is getting underway to review, and possibly revise, the various water management planning programs. Although the programs are all due for review, emphasis is being placed on determining the commonalities of the programs so links between programs can be explored. A key example would be to consider linking the county ground water management plans in the metro area to the metro surface water management plans.

Representatives from the three BWSR regional water planning subcommittees, along with the regional supervisors, have already met once to discuss the vision, goals, and objectives for this effort. More meetings are planned to finalize a set of guiding principles. Staff assisting are Marybeth Block, Phil Belfiori, Eric Mohring, and Jim Haertel.

Programs under review are Comprehensive Local Water Planning, Metropolitan Surface Water Management Planning, Watershed District Planning, Metropolitan Ground Water Planning, and Local Water Resources Protection and Management. Several meetings have already taken place in greater Minnesota to collect input on the comprehensive local water planning program. Similarly, in the seven county metro area a stakeholder group has met three times to discuss possible revisions to the metro surface water planning program. The Metro Area Ground Water Alliance has also been discussing new avenues to better implement the ground water planning program. It is almost certain that some rules will be revised, and legislation may be needed for some statute changes.

As the program reviews continue, more input will be sought from stakeholders, agency staff, and board members. If you have not already been contacted, there will be plenty of time for your comments.
-Submitted by Jim Haertel

BRIEFS

For the past two years, the Board of Water and Soil Resources has participated in the State of Minnesota's Combined Charities Campaign. Each agency is encouraged to host events in an effort to raise money for various charities throughout Minnesota. Last year the state raised $1,140,00 from employee contributions with this year's goal being $1,200,000.

It is my pleasure to say through the generosity of the BWSR staff, our agency's contribution this year will be **$318.**

This year's charity events included a Scavenger Hunt that involved the central and metro office staff searching for answers to 13 questions. In addition to that, the staff donated prizes for the raffles and delicious food we had at our luncheon. The Second Annual BWSR Combined Charities Event was held Nov. 13.

This year's event winners are:
(The staff purchases tickets and guessed the quantity within each jar.)
Hershey Pieces Raffle - John Jaschke
Twizzler Raffle - Tim Ogg
Assorted Candies Raffle - Helen Bohrer

The brave individual who purchased tickets for unknown prizes were:
Mystery Gift #1 Jig Saw Puzzle - Robyn Molina
Mystery Gift #2 Sieinfield Book - Mary Miller
Mystery Gift #3 Cook Book - Sheila Otte
Mystery Gift #4 Audio Cassette - Marybeth Block
-Submitted by Michelle Lewis

ENGINEERING

The extended fall weather has been a boon for topographic surveying and construction of CREP wetland restorations. BWSR, SWCD, and other partner technical staff have kept the survey equipment in heavy use. The Global Positioning System (GPS) equipment and 4-wheelers we acquired in August have greatly increased surveying productivity, particularly for very large wetland restoration projects. Although it was helpful for the snow to melt, the resulting mud at some sites has been a bit of a challenge.

We're in the process of hiring two more engineering technicians for CREP wetland restoration engineering. One will be on staff by early January and the other by mid to late January. Both will be located in the central office. The number of applicants was much larger this time than earlier this year, apparently due to current economic conditions. Introductions of these two new staff will be made as soon as they're on board.

BWSR engineering staff has coordinated with partners to develop and distribute a number of standard drawings to be used for many simple wetland restoration projects. These drawings will speed the design process and make it much easier for SWCD staff and other partners to increase their participation and productivity in wetland restoration engineering. We'll continue to improve these drawings based on the experience of users.

On the lakeshore engineering front, we've been working with the North Shore SWCDs, ProSource, Inc., Minnesota Coastal Program staff at the DNR, the Minnesota Geological Survey, UMD, and MPCA staff to develop several Lake Superior area grant applications. One is for shoreland BMP training for North Shore realtors, who are often the first professionals that new Lake Superior shoreline owners encounter when purchasing lakefront property. This proposal will be submitted to the MN Coastal Program. Another grant proposal is for developing a low-cost protocol for evaluating the suitability of North Shore rock for use as armor stone—because some rock looks good initially but does not hold up to the severe weather conditions along the North Shore. The third potential proposal is for runoff infiltration demonstration projects. The latter two proposals will be submitted to the Great Lakes Commission in January.

In November, BWSR staff worked with Carlton SWCD, MASWCD, MPCA, and DNR staff to develop a proposal to the Corps of Engineers for additional geographic information system and sediment transport model development in the Nemadji River Basin. This would be an extension of work previously done by the Corps under their Great Lakes Tributary Modeling Program. The goal is to have better GIS-based capability to prioritize assistance for forest management and other BMPs to reduce runoff and erosion in the Nemadji River Basin and sedimentation in Superior Harbor and Lake Superior. We also hope to steer efforts toward investment of more federal funding into nonpoint BMPs in the Nemadji basin for erosion control.

The final draft of the Animal Agriculture Generic Environmental Impact Statement (GEIS) was made available for review in late November. A public hearing on the final draft was held on Dec. 10 at a meeting of the EQB. BWSR Chair Coe and Al Kean attended the hearing. A number of comments focused on sorting, prioritizing, and clarifying the 77 recommendations of the Citizen's Advisory Committee. Other comments were on the organization and tone of the November draft. There seems to be some tension about the last chances to influence the presentation of summary information and recommendations, as well as some only partially fulfilled hopes for the document. Producer groups attended, but did not speak at the hearing. The cutoff for written comments on the November draft is Jan. 2. Al is seeking and consolidating input for BWSR comments.

-Submitted by Al Kean

Minnesota Board of Water & Soil Resources

Central Office: One West Water Street ▪ Suite 200 ▪ Saint Paul, MN 55107 ▪ Phone: (651) 296-3767 ▪ Fax: (651) 297-5615

October 29th, 2001

TO: Commissioner, Minnesota Department of Agriculture (MDA)
Commissioner, Minnesota Department of Health (MDH)
Commissioner, Minnesota Department of Natural Resources (DNR)
Commissioner, Minnesota Pollution Control Agency (PCA)
Chair, Minnesota Environmental Pollution Control Agency (PCA)
Director, Minnesota Geological Survey (MGS)

FROM: Mary Beth Block, Water Planning Coordinator MBB/da

RE: **Kanabec County Comprehensive Local Water Plan**

On Monday October 29th, 2001, the Minnesota Board of Water and So8il resources (BWSR) began the official 90-day state review of the updated Kanabec *Comprehensive Local Water Management Plan.* Pursuant to Minnesota Rules, Chapter 9300.0170 the BWSR is forwarding the county water plan for your agency's review and comment. You have 45 days from receipt of this letter to submit comments, in writing, to the BWSR identifying the portions of the plan that the agency has determined to be inconsistent with the state law.

The Kanabec County Comprehensive Local Water Management Plan is being sent to your agency's 103B Technical Review Committee Member under separate cover. The 103B Technical Review Committee Members are:

- MDA, Mark Zabel
- MDH, Art Persons
- DNR, John Fax
- PCA, Glenn Skuta
- EQB, Gretchen Sabel
- MGS, Barb Palen

Thank you for helping local resource managers protect and conserve their water resources through comprehensive local water management plans.

c: BWSR Board Members
BWSR Senior Management Team
Keith Grow, BWSR Board Conservationist
Greg Nikodym, County Water Plan Coordinator

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MINNESOTA BOARD OF WATER AND SOIL RESOURCES
POSITION STATEMENT
ON
CONSERVATION PROVISIONS OF THE 2002 FARM BILL
12/17/01

The Minnesota Board of Soil and Water Resources is made up of 17 voting members representing counties, soil and water conservation districts, watershed districts, citizens, the Minnesota Department of Agriculture, the Minnesota Department of Health, the Minnesota Department of Natural Resources, the Minnesota Pollution Control Agency, and the University of Minnesota Extension Service. We believe this makeup provides a unique forum and mechanism to bring together thoughts and opinions on the farm bill and to formulate a position that is representative of many of the conservation organizations and state agencies within Minnesota.

The conservation title of the federal farm bill now being deliberated by Congress impacts more privately owned lands than any other federal legislation, and will determine how USDA agencies, states and local governments address private lands conservation for the next ten years. This document outlines the various federal conservation programs and initiatives that we feel are important to a vital rural economy while protecting and enhancing the natural resources of Minnesota.

Because privately owned and managed farmland and forestland covers more than three fourths of Minnesota, agriculture and forestry dramatically impact water quality, wildlife habitat and the pace of sprawl. Fortunately, many Minnesota farmers and forest landowners are implementing practices to meet these environmental challenges.

Nationwide, farmers, ranchers and forest landowners seeking federal assistance to improve water quality, enhance or create fish and wildlife habitat, or combat urban sprawl are being turned away at an alarming rate. In Minnesota alone, the estimated backlog this year for the Environmental Quality Incentives Program, Wetlands Reserve Program, and Wildlife Habitat Incentives Program, combined, exceeds $57 million.

In Minnesota, we believe the opportunity is here to make conservation a centerpiece of the next farm bill and use the conservation title to help farmers and forest landowners produce public environmental goods such as clean air, clean water, and fish and wildlife habitat, in conjunction with food and fiber. To that end we believe that the farm bill should be built around the goals of 1) maintaining the existing successful conservation programs, 2) providing additional program options and incentives for those resources in need of additional protection on private lands, 3) supporting landowners who are maintaining and improving stewardship of their lands, 4) supporting development of alternative sources of sustainable energy on private lands, and 5) discouraging urban sprawl into the rural landscape.

The following positions on the farm bill are organized into two themes: existing USDA programs and new USDA programs.

Existing USDA Programs

Conservation Reserve Program (CRP) – CRP has been a popular program in Minnesota and has had a tremendous impact on the environment by reducing erosion and sedimentation and increasing fish and wildlife habitat. We fully support reauthorization of CRP and would like to see the enrollment cap raised to at least 39.5 million acres. Specifically we support:

- Giving state Farm Services Agency offices flexibility to raise the 25 percent acreage limitation in counties on a case-by-case basis.
- Ensuring that CRP is targeted to only the most highly erodible, environmentally sensitive, and marginal cropland, by emphasizing the Continuous CRP Signup and continuing to use the Environmental Benefits Index to rank bids in the General CRP Signup.
- Continuing the Conservation Reserve Enhancement Program.
- Allowing the use of short-term rotational grazing of CRP under an approved plan, as a mechanism for managing the vegetation, with a corresponding reduction in the CRP rental rate.
- Allow up to 15% of CRP acres to be used to grow multi-year (perennial) cover crops to be used for renewable energy.

Wetland Reserve Program (WRP) – Reauthorize WRP and increase annual enrollment to at least 150,000 acres per year.

Environmental Quality Incentives Program (EQIP) - Reauthorize EQIP and fund at a level of at least $1 billion per year. Specific recommendations include:

- Give states greater flexibility in how the program is administered and carried out at the state level.
- Allow for one-year contracts with producers.
- Encourage funds to be used to support the development of on-farm energy from animal waste.
- Allow cost-sharing on low-cost conservation practice options.
- Continue the existing mandate that 50 percent of EQIP funds be targeted toward livestock producers.
- Maintain the 1000 animal unit size limitation for EQIP eligibility.
- Increase the payment limitation from $10,000/year to $50,000/year, and from $50,000 to $200,000 per multi-year contract.
- Require the Secretary of Agriculture to establish a system for certification of third parties to provide producers with technical assistance in carrying out conservation plans.

Wildlife Habitat Incentives Program (WHIP) – Reauthorize WHIP and fund at a level of at least $50 million per year.

Farmland Protection Program (FPP) – Reauthorize FPP and fund at a level of at least $200 million per year. Minnesota has been unable to utilize FPP because this program only supports purchase of development rights (PDRs), whereas Minnesota's Agricultural Land Preservation Program is just beginning to consider PDRs. Specifically we support allowing FPP funds to be used to support lower-cost strategies for farmland preservation such as tax incentives and planning and zoning.

Forest Incentive Program (FIP) - Reauthorize FIP and fund at a level of at least $25 million per year.

Forest Stewardship Program (FSP) – Reauthorize FSP and fund at a level of at least $50 million per year.

Stewardship Incentives Program (SIP) – Reauthorize SIP and fund at a level of at least $50 million per year. Minnesota also supports the US Forest Service request to authorize a new non-industrial private forest cost-share program titled "Sustainable Forestry Assistance Program" as an alternative to SIP.

Sustainable Agricultural Research and Education (SARE) – Reauthorize SARE and fund at a level of at least $50 million per year. Consideration should be given to expanded research and development assistance programs related to carbon sequestration and bio-mass energy production.

Swampbuster and Sodbuster Provisions – Minnesota supports reauthorization.

Conservation Technical Assistance (CTA) – With the increasing demand to improve water quality and wildlife habitat from private lands conservation efforts, experts estimate that the current level of federal funding for technical assistance will only be able to meet 30 percent of that demand. Minnesota supports greater availability of CTA through increased funding for USDA agencies and/or third-party contracting with states, local soil and water conservation districts, and the private sector.

New USDA Programs

Conservation/Stewardship Incentives Program – Minnesota supports the establishment of a conservation/stewardship incentives program that rewards farmers and ranchers financially for establishing and/or maintaining soil and water conservation practices that produce the public benefits of clean water, clean air, and high-quality fish and wildlife habitat. Specifically we support a program that:

- Rewards not only producers who establish a conservation practice for the first time, but also those with a history of practicing effective soil and water conservation.
- Does not take funding from existing conservation programs.
- Includes funds for monitoring and evaluation.

Grassland Reserve Program – Minnesota supports the establishment of a federal grassland reserve program that allows for the enrollment of one million acres per year. The western part of Minnesota is similar to certain western states in that we have many areas where grassland that has never been plowed is ineligible for the existing CRP. The program should exclusively focus on grasslands that have never been plowed or inter-seeded.

Upper Mississippi River Blufflands Pilot Project – Minnesota strongly supports the creation of a pilot project for treating hay as a program in a tri-state karst region that includes parts of Minnesota, Iowa, and Wisconsin. Analysis of land use trends in the 31,000 square mile region, indicates that hay and pasture acreage declined by about 20 percent from 1982 to 1997, with the area planted to soybeans increasing by 60 percent, while corn declined by 13 percent. This unprecedented change in landuse coupled with the highly erodible silt loam soils and steep topography of the region has led to increased water quality impairments of the streams and rivers, sedimentation of fish and wildlife habitat, and increased flooding.

Safe Harbor Program – Minnesota supports a safe harbor program within the farm bill. If farmers follow a conservation plan prepared by the USDA Natural Resources Conservation Service or one of its authorized agents, they should be provided some protection against being held liable in the future, by another government entity, for unexpected or unanticipated environmental problems, resulting from implementation of the conservation plan.

Upper Mississippi River – Minnesota supports federal coordination and targeting of efforts to address non-point source pollution within the upper Mississippi River watershed including, but not limited to, the hay pilot project described above.

Renewable Agricultural Based Energy – A national comprehensive agricultural energy initiative holds great potential for Minnesota, because we are a leading state in wind and biomass energy development. Minnesota supports:

- Development of a national comprehensive initiative on agricultural based energy.
- Financial and technical assistance to producers, utilities, and educational and technical assistance providers to encourage the development and purchase of agriculture-based energy products.
- Full funding for existing research and development on biomass, biofuels, and energy crops, such as new crop development and advanced gasification technology.

House-Senate Farm Proposal Comparison

Funding levels for EQIP, WHIP & FPP updated Dec. 13, 2001

Comparison of Conservation and Forestry Provisions of H.R. 2646, Farm Security Act of 2001 (Combest/Stenholm), and S. 1731, Senate Ag Committee mark on new Farm Bill (Harkin); & Food Security Act of 1985, as amended (current law).

HR 2646 – Engrossed in House	S. 1731 – Senate Ag Committee approved	Food Security Act of 1985
Title II – Conservation		
Highly Erodible Land and Wetland Conservation		
No changes made.	No changes made.	Producers who farm HEL without a conservation plan or convert wetlands making the production of an agricultural commodity possible lose certain USDA program benefits until problem is fixed.
Conservation Security Program – S. 1628 only; no comparable provision in HR 2646/current law.		
Establishes a conservation security program to be carried out thru NRCS and funded thru CCC from FY02 through FY06. CSP is to provide incentive payments to all farmers for maintaining and adopting conservation practices on private working lands. The first contract payments are to be made in FY03. Eligibility covers all agricultural lands, including specified areas of forestland associated with farming/ranching operations. Producers develop conservation security plans based on local priorities and enter into contracts and choose from one of three tiers of conservation practices. Eligibility includes maintaining existing practices and/or implementing new ones. Tier I contracts are for five years, Tiers II and III are for 5-10 years and all may be renewed upon expiration. Renewal of Tier I contracts requires the producer to adopt new conservation practices or expand existing ones. Tier III level requires integration of a full complement of conservation practices to foster environmental enhancement, long-term sustainability, improved profitability and quality of life. Lands enrolled in CRP or WRP are not eligible for CSP. Newly broken out land is eligible only if it has three of 10-year prior cropping history. Purchase or maintenance of equipment not eligible for CSP. After entering a contract, a producer may request an advance payment in the amount of: • Tier I – $1,000 or 20% of the contract annual payment; • Tier II – $2000 or 20% of the contract annual payment; • Tier III – $3000 or 20% of the contract annual payment. Annual contract payments are based on a percentage (6%, 11% and 20%, respectively for Tiers I, II and III) of the average county rental rate for the 2001 crop year, **or other average county rate to ensure regional equity**, plus a percentage of the average county costs for adoption and maintenance of the practices, plus a bonus for practices that exceed minimum requirements, address national priorities and other conditions. Payments may not be made for purchasing or maintaining equipment or constructing animal waste storage facilities or associated transport devices.		

Maximum annual payments are up to: • Tier I – $20,000 • Tier II – $35,000 • Tier III – $50,000 Producers must make contributions land, labor, management, equipment and capital. Up to 20% of CSP funds may be used to provide technical assistance. Authorizes Secretary to establish Conservation Security Pilot Program to evaluate implementation by a state(s) beginning in FY05. Directs the Commodity Credit Corporation to "make available such sums as are necessary" to carry out the CSP.		
Environmental Conservation Acreage Reserve Program (ECARP)		
No comparable provision.	Renames ECARP as the Comprehensive Conservation Enhancement Program (CCEP) and extends authorization thru 2006. Adds technical assistance as a mandatory expense under Subtitle E, Funding and Administration	No comparable provision in existing statute.
Conservation Reserve Program		
Reauthorizes CRP thru 2011, increases acreage cap to 39.2 million acres and adds wildlife as a purpose in addition to soil and water conservation. Extends eligibility re-enrollment after contract expiration and provides equal priority for erosion control, water quality and wildlife habitat. Adds ground and surface water conservation to criteria.	Reauthorizes CRP thru 2006 and increases acreage cap to **41.1** million. Requires new CRP land to have three of six prior year cropping history. CRP contracts on lands devoted to hardwood trees can be extended to 15 years with a 50% reduction in rental payments. Authorizes the Farmable Wetlands Pilot Program thru 2006 as the Farmable Wetlands Program. Secretary may permit haying and grazing on	36.4 million acre cap; funded thru CCC.
Drops target of planting one-eighth of CRP acreage to trees and use of alley cropping. Extends the Farmable Wetlands Pilot Program to every state with a maximum enrollment of 150,000 in any one state. Secretary may allow managed haying and grazing on any CRP land with reduction in rental payments.	CRP buffers and CCRP lands under a conservation plan and permit use of wind turbines. (Wind turbines are not permitted on CCRP lands.) Retains ability to use program funds to pay for technical assistance. Restores provision preventing producers with new CRP contracts from breaking out new HEL for crop production, except under limited circumstances.	

Prohibits enrollment in CRP of crop for which environmental benefits can be accomplished thru EQIP. Retains ability to use program funds to pay for technical assistance.		
Wetlands Reserve Program		
Reauthorizes WRP at 150,000 acres annually thru 2011. Retains authority to use program funds to pay for technical assistance.	Reauthorizes WRP thru 2006 and increases acreage cap to 2.325 million acres with 250,000 acres to be enrolled annually. Directs the Secretary to provide technical assistance for WRP.	1.075 million acre cap; funded thru CCC.
Wetlands Reserve Enhancement Program		
No comparable provision.	Establishes a Wetlands Reserve Enhancement Program (WREP) within the WRP giving Secretary authority to enter into agreements with state or local governments and private organizations to develop wetland restoration activities in watershed areas. Number of acres covered by WREP agreements capped at 25,000 acres for each calendar year. (Part of overall WRP acreage cap.)	No comparable provision in existing law.
Environmental Quality Incentives Program		
Reauthorizes EQIP thru FY11. Changes contract periods from 5-10 years to 1-10 years. Establishes Conservation Incentive Payments as a separate component of EQIP. Non-industrial private forestland (NIPF) now eligible for enrollment in EQIP. Increases annual payment limitation from $10,000 to $50,000 and contract payment limitation from $50,000 to $200,000, lifts prohibition of same-year contract payments and limits cost share to 75%. Establishes ground and surface water conservation component in EQIP funded at $30 million in FY02 rising to $60 million in FY04 thru FY11.	Reauthorizes EQIP thru FY06. Changes contract periods from 5 to 10 years to 3 to 10 years. Payment limitation to a producer is capped at $50,000 annually and $150,000 for the period FY02 thru FY06. Allows 90 percent cost-share rate for limited resource livestock operations; 75% for all others. EQIP funding: **Total thru FY06 – $7.05 billion:** • **FY02 - $500 million** • **FY03 - $1.3 billion** • **FY04 - $1.45 billion** • **FY05 - $1.45 billion** • **FY06 - $1.5 billion** • **FY07 - $ 850 million** Removes 50% livestock water quality target. Retains delegation of program authority by the Secretary and to use program funds to pay for technical assistance.	$200 million annually (CCC); 50% targeted to livestock water quality.

EQIP funding: **Total thru FY11 – $12.84 billion:** • FY02-03 – $1.02 billion • FY04-06 – $1.2 billion • FY07-09 – $1.4 billion • FY10-11 – $1.5 billion Retains 50% livestock water quality target. Retains delegation of program authority by the Secretary and to use program funds to pay for technical assistance.		

EQIP Conservation Innovation Grants

– S. 1628 only; no comparable provision in HR 2646/current law.

Directs the Secretary to use up to $100 million of EQIP funds annually (FY03-FY06) to provide grants to stimulate innovative approaches to leveraging the federal investment in environmental enhancement and protection.

Grants are to be awarded to government agencies and NGOs to carry out projects involving producers that implement innovative projects such as market-based pollution credit trading, adoption of BMPs and carbon sequestration. Federal share of cost of such projects is capped at 50%.

Partnerships & Cooperation

– S. 1628 only; no comparable provision in HR 2646/current law.

New subsection under Subtitle E, Funding and Administration allows the Secretary to designate special projects to reflect local needs, as coordinated through state conservationists and state technical committees, to address environmental issues within specific areas. Secretary may enter into agreements with states to provide greater flexibility of eligibility requirements, approved practices, and innovative practices to better reflect unique local circumstances.

Projects are to help producers meet requirements of Clean Water Act, Safe Drinking Water Act and Clean Air Act.

Authorizes the Secretary to provide incentives to producers participating in these special projects.

Conservation of Private Grazing Land

Adds sustainable grazing systems to CPGL program. Funding is $600 million thru FY11 ($60 million annual authorization).	Authorizes CPGL thru FY06 to be carried out thru conservation districts. Secretary may establish grazing management districts on the basis of petitions from farmers or ranchers. Funding is authorized at $60 million annually.	1996 FAIR Act authorized $60 million annually as a new line item in the NRCS CO account. Never implemented.

Wildlife Habitat Incentives Program

Reauthorizes **WHIP at $385 million thru FY11**: • FY02 – $25 million • FY03, 04 – $30 million • FY05, 06 – $35 million • FY07 – $40 million • FY08, 09 – $45 million • FY10, 11 – $50 million	Authorizes **WHIP at $875.425 million thru FY07:** • **FY02 - $50 million** • **FY03 - $225 million** • **FY04 - $275 million** • **FY05 - $325 million** • **FY06 - $375 thousand** • **FY07 - $50,000**	$50 million CCC funds authorized 1996 thru 2002.

Retains ability to pay for TA from program account.	Operates using 30-year and permanent easements. 15% of WHIP funds are to be used for endangered and threatened species habitat and up to 15% for a Pilot Program for Critical Species and Habitat (CSH). CSH contracts are for 15 years. Retains ability to pay for TA from program account.	
Watershed Risk Reduction Program (WRRP) – S. 1628 only; no comparable provision in HR 2646/current law.		
No comparable provision.	Chapter 5 also includes a WRRP, directing the Secretary, thru NRCS, to carry out projects, including purchase of floodplain easements, to safeguard lives and property from floods. Authorizes $15 million annual appropriation from FY02 thru FY06.	No comparable provision in existing statute.
Great Lakes Basin Program for Soil Erosion and Sediment Control		
No comparable provision.	Authorizes Secretary to carry out Great Lakes Basin E&S Control Program. Authorizes $5 million annually FY02 thru FY06.	No comparable provision in existing statute.
Farmland Protection Program		
Reauthorizes FPP at **$500 million thru FY11; $50 million annually** with no acreage cap.	Establishes, as part of new Chapter 2 (the CSP chapter), a Farmland Protection Program, similar to the current FPP, to purchase conservation easements to protect agricultural land. Federal share of easement cost is limited to 50%. HEL enrolled in FPP must have a conservation plan. Up to $10 million may be used to provide participating producers with market viability grants. Funded at **$1.85 billion** thru **FY07**: • **FY02 - $150 million** • **FY03 - $250 million** • **FY04 - $400 million** • **FY05 - $450 million** • **FY06 - $500 million** • **FY07 - $100 million**	170,000 to 340,000 targeted for enrollment; $35 million in CCC funds.
Resource Conservation & Development Program		
Provides permanent authorization for the RC&D Program.	Provides permanent authorization for the RC&D Program with number of areas capped at 450 (limit under current law). Authorizes appropriations of such sums as necessary. USDA long-term loans to RC&Ds capped at $15 million annually.	1996 FAIR Act extended authorization thru 2002.

Grassland Reserve (Enhancement) Program		
Establishes a $254 million, 2 million-acre Grassland Reserve Program thru FY11 carried out thru FSA using 10, 15, 20-year contracts, and easements.	Establishes, also as part of new Chapter 2, a 2 million-acre Grassland Reserve Program using permanent, 30-year easements **and 30-year rental agreements. 500,000 acres are reserved for tracts of native grassland 40 acres or less.** NRCS-approved conservation plan required. Easements are to allow grazing and haying or mowing after the nest and chick-rearing season, both under a conservation plan. Restoration costs are cost-shared up to 75%. Payments for permanent easements are the fair market value of the land, less its grazing value. Payments for 30-year easements **and rental agreements** are 30% of the fair market value of the land, less its grazing value.	No comparable provision in existing statute.
Technical Assistance (TA)		
Authorizes third-party TA for all Farm Bill conservation programs. USDA must certify providers.	Authorizes third-party TA for any USDA conservation program. Secretary may enter into contracts directly with third-party TA providers or provide vouchers to producers. USDA must certify providers. Technical assistance is provided within each program account. Exempts "conservation technical assistance" from CCC Section 11 cap.	Third party technical assistance authorized for HEL conservation.
Requires the Secretary to re-evaluate provision of technical assistance for CRP, WRP and EQIP.	No comparable provision.	No comparable provision in existing statute.
Conservation Farm Option		
Repeals the CFO.	Not reauthorized.	CFO allows a producer with an AMTA contract to consolidate all Farm Bill payments into a single payment.
Farmland Stewardship Program		
Establishes a Farmland Stewardship Program to coordinate other conservation title programs with each other and with state, local and private conservation efforts.	No comparable provision.	No comparable provision in existing statute.

State Technical Committees		
No comparable provision.	Re-writes State Technical Committee language to, among other things, add state conservation agencies to membership and retain state associations of conservation districts. Exempts committees from Federal Advisory Committee Act (FACA) requirements to increase outside participation. Makes "local working groups" subcommittees of the State Technical Committee.	No comparable provision in existing statute.
Other		
Repeals: • Wetlands Mitigation Banking Program, • $50,000 payment limitation, • base history preservation, • Conservation Farm Option, and	Prohibits the Secretary (and other) federal agencies) from releasing information on conservation plans except in aggregate form. Lists of owners/operators/ producers and amounts of USDA funds they receive(d) are considered public information.	N/A
• National Natural Resources Conservation Foundation Act.	Requires the Secretary to issue a report describing plans to consolidate conservation programs, streamline administration of all conservation programs and report on the status of conservation programs in 18 months and every two years thereafter. Requires Secretary to develop National Conservation Plan as required by the 1977 Soil and Water Resources Conservation Act within 180 days of enactment of S. 1628.	

Title VIII – Forestry

Repeals FIP and SIP and establishes within NRCS a Forest Land Enhancement Program (FLEP) to provide financial, technical, educational and related assistance to state foresters to encourage long-term sustainability of nonindustrial, private forestlands (NIPF). FLEP provides cost-share of up to 75% forestry BMPs. Provides CCC funding of **$200 million from FY02 through FY11**. Establishes a Community and Private Land Fire Assistance Program (CPLFAP) to focus the federal role in promoting optimal firefighting efficiency and expand outreach activities. Authorizes **$35 million annual appropriation** through FY11 for CPLFAP.	Reauthorizes FIP thru FY06. Establishes a new program to be carried out through state foresters to provide financial assistance to nonindustrial private forest landowners. The program would allow states to address a variety of multiple forestry resource objectives. **Funded at up to $48 million annually.** Authorizes the Secretary to cooperate with state foresters in order to enhance community fire protection. Establishes the Community and Private Land Fire Assistance Program to focus the federal role in firefighting. Authorizes new program to provide technical and financial assistance to expand forest stewardship activities, prevent water quality degradation and address watershed issues on nonfederal forestland.	FIP provides cost-share assistance to landowners for implementing sustainable forestry practices. SIP provides technical assistance for forestry practices thru state foresters.

Committee Recommendations
Joint Water Planning Subcommittee
1. Water Plan Unficiation
   DECISION

MEMORANDUM

DATE: December 4, 2001

TO: Joint Water Planning Committee

FROM: John Jaschke
BWSR

SUBJECT: Joint Water Planning Committee Minutes - November 27, 2001
11:00 a.m. to 2:00 p.m.

Board members present: Ginny Imholte, Karen Harder, Char Kahler
Staff present: John Jaschke, Steve Woods, Phil Belfiori, Eric Mohring, Jim Haertel, Marybeth Block.

Agenda

1.) Purpose of meeting – John Jaschke
2.) History – background/status/future opportunities for:
    a. County (non-metro) – Marybeth Block
    b. Watershed districts (non-metro) Jim Haertel
    c. Metro surface water – Steve Woods
    d. Metro groundwater – Erick Mohring
3.) Discussion/endorsement of objective/timelines – John Jaschke
4.) Discussion of principles for the effort – Phil Belfiori

The next meeting will be held on Wednesday, December 19, 2001, 1:00 p.m. after the Board Meeting.

Attachments: Water Planning Components Summary
WD Map/WMO Map

F/LanWData/Metro Water Planning/Joint Water Planning Committee Minutes

Water Planning Integration

Proposed Process:

Action	Lead	Time – completed
Metro Stakeholder Meetings	Steve Woods, Jim Haertel	Nearly Completed
County Water Planner Meetings	Marybeth Block	Nearly Completed
Guiding Principles	Board/SMT: Marybeth, Jim, Eric	January 2002
Draft metro rules/guidelines	Jim, Eric Mohring, Phil Belfiori	August 2002
Draft county rules/guidelines	Marybeth	August 2002
Draft WD rules/guidelines	Jim Haertel	August 2002
Identify integration areas	Board/SMT: Marybeth, Jim, Eric	September 2002
Pursue needed statutory changes	Ron H, etc.	September 2002-May 2003
Integrate rules and adopt	Jim, Marybeth, Debbie Anderson	January 2003 – January 2004

Water Planning – Program Summary for:

Began: The Comprehensive Local Water Planning Program began in 1987.

Reason: In 1977 Minnesota was stricken by drought conditions that nearly rivaled the infamous drought of the 1930s. That crisis prompted the Legislature to look at how the state's water supplies were being managed. What they saw was fragmentation at the state level and disorganization at the local level.

Purpose: To protect water resources through the adoption and implementation of local water management plans based on local priorities.

Funding: The funding began as a pilot project when the Legislative Commission on Minnesota Resources appropriated money to 52 counties in 1987. Consequently in 1989 the Legislature passed an ongoing appropriation under the Local Water Resources Protection and Management Program (Minnesota Statutes 103B.3665 and Administrative Rules Chapter). This program awards base grants to each county, based on the tax capacity of a county. The minimum awarded is $18,750, the maximum is $37, 500.

LGU Staffing: Counties are responsible for water planning. Approximately one-third have delegated the program to soil and water conservation districts. Local water planners, whether employed by the county or the swcd, often have varied job responsibilities and most devote .5 or less FTE to water planning.

Board Role: Review and approve local water plans.

BWSR Staff Roles: Provide overall program guidance, process affiliated grants, and provide plan review and comments.

Current Strengths: Implementation focused; Citizen and Technical Water Planning Task Forces; a mechanism to define local priorities, as well as local and state roles managing water. Water planning has been successful because the state has provided money to support it, locals have land use authority, the process results in coordination of local efforts, and state-local efforts.

Current Issues:

- Need to change the emphasis from planning to management.
- Need additional financial assistance from the state.
- Confusion and frustration concerning multiple planning efforts: local, basin and sub basin, watershed, state (Watermarks).
- Lack of input from state agencies.
- Lack of respect for the plan or local priorities on behalf of some state agencies.
- Approval and amendment process to long and laborious.

Opportunities to do better:

- Regional and state planning and management efforts acknowledge and use the water county water plans.
- State input offered early in the process.
- Implementation plans done frequently.

Stakeholders: Out state counties (citizens and local governments), state governments.

Metropolitan Ground Water Planning

March 2001 Status Report

BACKGROUND

In 1987 Minnesota Statutes Chapter 473.8785 (now 103B.255) was enacted giving metropolitan counties authority to prepare and adopt ground-water plans.

In 1988, Hennepin County began ground-water planning with authority delegated to the Conservation District. In 1989 Washington County began the ground-water planning process, with the county planning department taking the lead. Dakota and Carver counties began ground-water planning in 1990 lead by the county planning departments. Ramsey and Scott Counties began ground water planning in 1992 and 1993 respectively, with Soil and water Conservation Districts in the lead.

The BWSR sent information and guidelines to counties for the metropolitan county groundwater plans in early 1990. The BWSR awarded matching grants of $15,600 to the 6 metropolitan counties preparing groundwater plans. Metropolitan counties with approved ground water plans are eligible for matching grants to implement items in the plans.

PLAN REVIEW

The plan review process which involves: 1) review by local units of government, concurrent with preliminary review by state agencies and the metropolitan council; 2) formal review by the metropolitan council and state agencies; and 3) BWSR review and approval.

COUNTY PROGRESS

Anoka

Anoka County, though not participating in the official metropolitan ground water planning process, has prepared a "ground water protection assessment." The county public health department coordinates the county groundwater planning and management activities.

Contact: Bart Biernat, Anoka Public Health Department, (612) 422-6985

Carver

The Carver county ground water plan was approved in August, 1992.

The plan identified the following as immediate planning and implementation issues: integration of ground water planning into comprehensive plans, adoption of ground water sensitivity maps, feedlot and septic system impacts, agricultural and urban chemical and fertilizer use, water quality monitoring, data collection and maintenance, abandoned wells, and land-spreading.

The county has prepared a comprehensive water plan dealing with both surface and ground water issues. It is in the final stages of review, and approval is expected within 3 months.

Contact: Paul Moline, Carver Planning and Zoning, (952) 361-1825

Dakota

The Dakota county ground water plan was approved in March, 1992.

The plan contained over 100 initiatives on various aspects of ground water protection. Primary objectives include: Information and education, abandoned wells, pesticide issues, industrial issues, aquifer and well head protection, and ground water supply.

An updated plan was approved in July, 2000.

The updated plan concentrated on a county groundwater inventory and on setting long-range management goals for groundwater-related issues. The plan provides a detailed implementation strategy to be administered by the Dakota County Office of Planning. The Plan was developed with the objective to parallel the goals and management actions from the Dakota County Comprehensive Plan 2020. The Plan also integrates groundwater management with the other aspects of natural resource and surface water planning.

Contact: Lisa Ring, Dakota Planning, 952-891-7018

Hennepin

Hennepin County was the first to start the ground water planning process. The Hennepin Conservation District (HCD) named

an advisory committee in 1989. HCD collected data from state agencies through 1990. They did an exhaustive cleanup of the county's well log data base, and have developed an exceptional GIS capability. The plan received state approval in March, 1994. The county board did not adopt the plan.

Plan goals for cities will include management according to geographic location and hazard potential, delineation of wellhead protection areas around public supply wells, applying existing zoning authority to protect ground water, ranking and management of hazardous land use activities according to risk, using a GIS system to manage ground water information, location of abandoned wells, and adoption of contingency plans for ground water.

Though the county has not formally adopted the plan, the county is proceeding with implementation of many aspects of the plan.

Contact: Joel Settles, Hennepin Environmental Management, (612) 348-6157

Ramsey

The Ramsey Soil and Water Conservation District (SWCD) has coordinated ground-water plan development since 1992. The plan received state approval in September 1995.

The plan focuses on developing protection programs that cities and other local units of government can use to protect ground water within their jurisdictions, and on creating a framework for coordinating ground water protection activities among local governments.

Contact: Matt Swanson, Ramsey SWCD, (651) 488-1476

Scott

The Scott SWCD coordinated ground water plan development since 1993. A draft plan was submitted for local review and preliminary state agency review in late 1996. In 1997 the ground water planner left the SWCD, and ground water planning functions were transferred to the county Planning, Inspections, and Environmental Health Dept. The plan underwent considerable revisions during 1998, and was approved in January 1999. It was the first plan to be published via the internet's world wide web.

Contact: Scott Allen, Scott County Water Planning, (952) 496-8054

Washington

A draft plan was submitted for preliminary review in late 1992. However the county has not submitted a revised draft for review and approval. The plan emphasized public input over technical considerations. County staff have put allot of effort into working with the advisory groups and subcommittees.

Washington County is currently updating their plan, with an expected completion date of summer, 2001.

Contact: John Micheals, 651- 275-7301

COUNTY COOPERATION

One successful result of the metropolitan ground water planning effort has been the cooperation between counties. Most recently this has resulted in the formation of the Metro Area Ground Water Alliance (MAGWA). MAGWA is an association of water resource professionals organized through the efforts of county ground water planners and managers in the 7-county Twin Cities metropolitan area. The organization's focus is ground water issues in the metropolitan area. Its purpose is to:

$ identify priorities for regional ground water quality and quantity protection
$ be a forum for considering regional ground water issues
$ be an organized advocate on regional ground water issues
$ provide information on issues that impact ground water resources in the region

METROPOLITAN GROUND WATER PLANS
Summary of Statute (103B.255) requirements

1. Voluntary program.
2. County may prepare or may delegate all or part of preparation and adoption to SWCD.
3. County will conduct meetings with local units and WMO's and may enter into agreements
4. County may contract with MGS, USGS, a SWCD, or other agencies.
   County may enter into agreements with other counties or LGUs.
   County will consult with advisory committee, MGS, MDH, DNR, MPCA, and other appropriate agencies.
5. County must name and consult with advisory committee of 15 members of various interests. (Requirements for composition of committee.)
6. Plan must specify period covered by plan (5-10 years). Must contain elements below. Level of detail according to local conditions, needs. Maximum use of available data, studies, existing plans.

7. **Contents:**
   (1) cover entire county area;
   (2) describe existing and expected changes to the physical environment, land use, and development in the county;
   (3) summarize available information about ground water and related resources in the county, including existing and potential distribution, availability, quality, and use;
   (4) state the goals, objectives, scope, and priorities of groundwater protection in the county;
   (5) contain standards, criteria, and guidelines for the protection of ground water from pollution and for various types of land uses in environmentally sensitive areas, critical areas, and previously contaminated areas;
   (6) describe relationships and possible conflicts between the ground water plan and the plans of other counties, local units of government, and WMO's in the affected ground water system;
   (7) set forth standards and guidelines for the implementation of the plan by WMO's and local units of government
   (8) include procedures and time lines for amending the plan.

8. **Review of Draft Plan**
   (a) Draft plan submitted for review to adjoining counties, metropolitan council, state review agencies and BWSR, to SWCDs, towns, cities, WMO's within county, as well as by other affected counties, WMO's, and districts. Substantially affected parties describe amendments that would be necessary and costs. **Reviewing entities have 60 days to review and comment.** Differences among governmental agencies mediated. Council reviews plan in same manner and with same authority as it reviews comprehensive plans of LGUs. Council comments on conformity with metropolitan system plan, and with the Council=s water resources plan, and advises BWSR.
   (b) County must respond in writing to concerns of reviewing agencies within 30 days.
   (c) County shall hold public hearing 30-45 days after 60-day review period.

9. Review by metropolitan council and state agencies
   After the review of draft plan (above - 8) the draft plan, any amendments, comments, hearing records, and a summary of changes must be submitted to the Met. Council, state review agencies, and BWSR for final review. State review agencies review plan for consistency with state law and rule. Comments forwarded to BWSR within 45 days.
10. BWSR review and (hopefully) approval.
11. Adoption and implementation of plan within 120 days of approval by BWSR.
12. Amendments must go through same local and agency review.
13. County may levy amounts necessary to administer and implement an approved and adopted ground water plan.

Other Statute Requirements

Watershed plans must be reviewed for consistency with county ground water plans.

Water Planning – Program Summary for: Watershed Districts (esp. greater MN)

Began: 1955

Reason: flooding and rate control mainly across county lines

Purpose: watershed districts more likely to resolve problems than multiple county boards and multiple cities, very project oriented

Funding: direct levy authority

LGU Staffing: staffing is optional and at the discretion of watershed district board of managers, at the minimum retain attorney and engineer as consultants

Board Role: water plan approval authority, watershed district establishment authority, boundary change authority, number of board managers authority

BWSR Staff Roles: upfront plan assistance, plan review, policy guidance

Current Strengths: direct levy authority fosters project implementation, excellent mechanism for resolving regional or watershed-wide issues

Current Issues: board of managers are appointed by county board, not elected, yet have taxing authorities

Opportunities to do better: use of advisory groups and citizen forums for consensus building could be better utilized by many districts

Stakeholders: MAWD, counties, cities, townships, state agencies, environmental groups, builders association, citizens

Water Planning – Program Summary for:

Began: The Metropolitan Surface Water Management Act was created in Ch. 509 of the laws of 1982. A substantial set of rules (MR 8410) was created between the first and second generations of plans. The program is mandatory for all areas within the seven-county area.

Reason: In no particular order, reasons included: growing flooding and quality problems connected with urbanization, as a means of defense against Metropolitan Council taking over stormwater systems, Watershed Districts already functioning in the metro were doing well, financing of stormwater projects was becoming to costly for conventional assessment process, and leading edge of national trend for watershed-based management.

Purpose: Minimize the expenditures necessary to manage water quantity and quality while utilizing natural systems to the extent practicable. Other purposes include more uniform policies and controls, groundwater recharge, prevent soil erosion, and enhance habitat. (MS 103B.201)

Funding: WD's have and use levy authority. Joint-Powers WMO's largely submit bills to member cities for payment. Unfortunate setbacks in carrying out intent of *ad valorem* sub-watershed financing by organizations and levying by joint-powers WMO's have left funding picture somewhat muddied.

LGU Staffing: WD's have administrators and inspectors in many cases. WD and WMO alike both utilize consultants or SWCD staff for majority of staffing due to the wide range of expertise desired for watershed management.

Board Role: Receive recommendations and act on plans submitted for review. Receive testimony at public hearings concerning jurisdictional matters.

BWSR Staff Roles: Work with funneling stakeholder input to organizations at front end of plan processes. Provide interpretation and perspectives of statute and rules based on knowledge of metro-wide activities.

Current Strengths: It has produced change with a trend toward better coordination., Financing of projects is becoming more widespread, BMP's are widely known and accepted by all facets of development and municipal workers, GIS is lowering plan costs finally, and opportunities for stakeholder involvement are better.

Current Issues: failed or failing WMO's result in attempts by the members to break away on their own to avoid intent of law. Some organizations living to plan.

Opportunities to do better: Linking city comp plans to the watershed and local water plans, removing ambiguity with groundwater roles, clarifying the discrepancies between general state water quality standards and detailed goals derived by local processes, and clarifying authority and standards for finding an entity to be "non-implementing". Some organizations still looking for niche or reason to exist.

Stakeholders: Metro MAWD, MAWD, League of Minnesota Cities, Association of Metro Municipalities, AMC, State review Agencies (MDH, MDA, MDNR, MPCA, and Metropolitan Council). Soil and Water Conservation Districts have generally been involved with WMO's from a staff assistance perspective, but have had less involvement with WD's. Non-profits have not historically been active in plan development or review processes. Mn/DOT is aware of program, but participation has generally been reactive and associated with specific projects.

Water Management Organizations & Watershed Districts in the Metropolitian Area

Integrating
BWSR Local Water Plan/Mgmt Programs

Water Planning/Management Statutes and Rules

Current

	Statutes			
103D	103B			
	.201	.255	.301	3369
Watershed Districts	Metro SWM	Metro GW	Co. LWPM	LWRPMP ($)
	Administrative Rules			
Chaper	8410	none	9300	8405

Future

Rule Advisory Committees

BWSR Water Management Programs

Integrated Core Elements

Vision:

Water management programs under BWSR's authority are located in the same statutory section and rule chapter, and where it makes sense they're integrated.

Goal:

Reduced duplicity/ Increased clarity

Heightened program awareness

Implementation focus

Benefit:

- Efficient use of resources staff and financial resources
- One local water management program can benefit from the experiences and strengths of another
- Facilitates possible integration of plans (e.g., watershed district and county water plans)
- State and regional water plans recognize and build upon local water plans
- Increased financial support of local water management
- Plans are used and integrated with other local plans
- Plans prioritize local issues and clearly communicate how they will be addressed and measured for success

Committee Recommendations

Administrative Advisory Committee

3. SWCD Law Change
   DECISION

BWSR Briefing

Issue: Statutory Process to Discontinue a Soil and Water Conservation District

Background

Minnesota Statutes 103C.225 specifies the process to discontinue a soil and water conservation district. It is largely unchanged from the original act that was signed into law in 1937. The basic process to discontinue a SWCD is as follows:

1. No sooner than five years after formation…
2. At least 25 occupiers of land may file a petition for termination of the district with the BWSR…
3. BWSR may conduct public meetings and hearings…
4. Within 60 days of receipt of the petition, BWSR must file due notice for holding a referendum on the matter of discontinuance…
5. In the referendum only land occupiers may vote…
6. After the referendum, the BWSR must determine whether the continued operation of the SWCD is administratively feasible and must consider the public policy purpose for SWCDs under section 103A and six additional criteria specified in the law…
7. The BWSR must certify its decision to the SWCD…
8. There is a bit more due process than is mentioned in this summary.

The procedure to discontinue a SWCD, like some other seldom used parts MS 103C is out-of-date and some of it, like who may vote in the referendum is not compliant with current election laws and is likely unconstitutional. The only recourse, a court directed election, would be prohibitively expensive. Change and modernization is needed.

Administrative Advisory Committee Review and Recommendations

At its November 14, 2001 meeting, the BWSR Administrative Advisory Committee studied this matter and developed the following recommendations:

1. BWSR should pursue a statutory change to MS 103C which would amend the discontinuance procedure for SWCDs as follows:

NOW:	Petition	→	Referendum	→	BWSR Decision
PROPOSED:	Petition [25% of legal voters]	→	BWSR Discretion [Due process required; discretion on referendum; discretion on assignment of costs]	→	Referendum [@next general election]

This approach would standardize the process with other units of government (like watershed districts) and would make it compliant with current election laws.

2. In all cases, "seamless coverage" for the provision of conservation services offered by the SWCD should be a consideration. A requirement for discontinuance would be that the core services delivered by the SWCD must be somehow continued.
3. The modernization of MS 103C.225 should be apart of a comprehensive modernization of SWCD law underway by the MASWCD District Capacity Initiative. This initiative is targeting the 2003 legislative session. BWSR should cooperate with the MASWCD in this comprehensive approach. If needed sooner than 2003, stopgap legislation can be pursued in 2002 with the support of the MASWCD.
4. County elections officials and the Office of the Secretary of State must also be involved in designing the solution to this modernization.

Compiled by Jim Birkholz

:BWSR Briefingdiscontswcd.doc

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The MACDE State Directors will meet January 3rd and 4th to develop an agenda for 2002. The outline below is to inform our partners, and also to request any input that would improve the delivery of conservation practices for the benefit of Minnesota's natural resources.

1. NCDEA Leadership Conference – Attended by Don Bajumpaa, North Central Representative (Wilkin SWCD) and Tim Gieseke, MACDE President (Carver SWCD).

2. MACDE will participate on the NRCS State Technical Committee.

3. MACDE will strive to communicate its role and abilities to the MPCA, MDA, MDH, DNR, BWSR, and other relevant state agency partners.

4. MACDE will hold its Summer Convention June 26th-28th at Arrowood in Alexandria.

5. MACDE is interested in the Water Unification Plan being written by Minnesota Planning with input by state agencies. One approach, for example, is to examine the document by envisioning what type of interagency coordination is necessary in the implementation of MPCA's NPDES Storm Water Phase II (MS4s).

6. MACDE will encourage its members attending Regional and National Conferences by paying registration fees for at least one representative from each area.

7. MACDE will promote employee involvement on national level committees. Currently Paul Kalass (Goodhue SWCD) serves on the NACD Agricultural Land Committee and Rick Reimer (Kandiyohi SWCD) serves on the NACD Forest Resource Committee. An appointed position will be available for an employee on the NACD Great Lakes Committee this coming year.

8. MACDE will strive to build its local implementation capacity to efficiently deliver conservation to Minnesota's soil, water, land and its people. And promote itself as "*Minnesota's Blue Collar Conservationists.*"

MACDE

Minnesota's Blue Collar Conservationists

Minnesota Association of Conservation District Employees

Topographical Survey

Construction Oversight

Tree Plantings and Designs

Manure and Nutrient Management

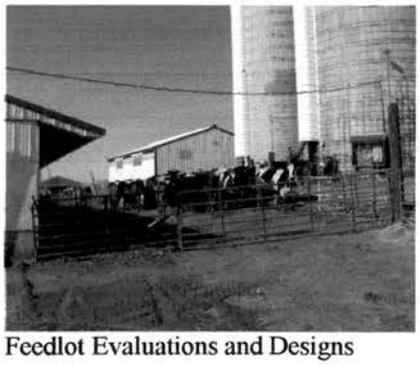
Water Quality Monitoring

Gully and Erosion Control

Native Grass Plantings and Design

Conservation Planning

Construction Site Erosion Control



Feedlot Evaluations and Designs

Envirothon and Education

Wetland Restorations

"Building our local implementation capacity to efficiently deliver Minnesota's State Agencies' Water Quality Goals to our soil, water, land and its people"