

Minnesota Board of Water and Soil Resources. Minutes.

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Version 3
August 20, 2018

7/24/96

Minnesota Board of Water & Soil Resources

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DATE: July 15, 1996

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

FROM: Ronald D. Harnack, Executive Director

SUBJECT: July 24, 1996 BWSR Meeting

The Board of Water and Soil Resources (BWSR) will meet on Wednesday, July 24, 1996, beginning at 9:00 a.m. The meeting will be held at the Holiday Inn in New Ulm, in the Rhine-Elbe Room (see attached map). The following is some background information regarding the agenda items:

SUMMARY OF BOARD AGENDA

Consent Agenda:

1. The Comprehensive Local Water Plans of Kittson and Mille Lacs Counties were presented and reviewed by the committee of the Board and are recommended for approval. DECISION

2. Kanabec County Water Plan Extension: Kanabec County is requesting an extension of their current comprehensive local water management plan. The extension has been requested and reviewed pursuant to criteria adopted by the Board in September of 1995. The request for extension has been reviewed and approved by the respective Board Conservationist and is recommended for Board approval. DECISION

New Business

1. Minnesota River Basin: Hugh Valiant is the DNR Fisheries Supervisor in Waterville, Minnesota. Hugh and his staff are working closely with county water planners, SWCDs, and lake associations in the Blue Earth River Basin and Iosco Creek minor watershed. His presentation will describe why water itself is a major pollutant of the Minnesota River, and suggest ideas to address this problem. DISCUSSION

2. FY97 Special Minnesota River Basin Grants Allocation: This annual grant is to be used in the Minnesota River Basin for the accelerated application of water quality improvement practices. These grants are implemented via the State Cost-Share Program. Seven applications were accepted requesting $1,134,00. Up to 20% of this grant may be used for technical/administrative uses except for the $85,500 roll-over portion. A synopsis of these applications and staff funding recommendation is attached. DECISION

3. Conservation Easement Program 1997-98 Work Plan: This work plan was reviewed by the LCMR at their meeting on June 4, 1996, and met with their approval. Staff recommends board approval of the work plan. DECISION

4. CRP Land Transfer Program - Appropriation language for the RIM Reserve Program directed that some of the funds be used to enroll lands expiring from the federal Conservation Reserve Program into a limited duration RIM Reserve easement that would allow cropping and grazing carried out according to a conservation plan. BWSR staff are working with the Minnesota Department of Agriculture (MDA) staff to choose the pilot counties, acquire assistance through Interagency Position Agreements with NRCS and MDA, and develop the program plan. DISCUSSION

5. Video, "Keeping Our Shores" Best Management Practices (BMP): This video is funded through a BWSR challenge grant; this is the first in a series that illustrate Shoreland Best Practices. The videos accompany and expand on the fact sheet series. "Keeping Our Shores" introduces the concept of BMPs for shorelands and features award winning computer graphics and practical, inexpensive actions that property owners can take to protect water quality. The second video, "Water Conservation," stresses the need to conserve water, even in a state as water-rich as Minnesota, and the third is on proper septic system maintenance. Two copies of the first two videos (both funded through the challenge grant) were sent to each county water plan coordinator, with a revised packet of the Shoreland BMP fact sheets. INFORMATION

6. Lake Superior Association of SWCDs (LSA SWCDs): This is a watershed based organization covering the entire watershed of the Lake Superior Basin in Minnesota. Members are Carlton, Cook, Lake, and North and South St. Louis, Pine, Itasca, and Aitkin SWCDs. Additional information will be presented at the meeting. DISCUSSION

7. Minnesota River Basin Joint Powers Board Work Plan: The Minnesota River Basin Joint Powers counties seek to initiate and provide a coordinated effort to preserve and restore the Minnesota River. A presentation by the Minnesota River Basin Joint Powers Board will address their mission statement. DECISION

8. Legislative Initiatives: DISCUSSION

Accommodations have been made for you at the Holiday Inn in New Ulm. Attached is a list of reservations for sleeping rooms, which have been direct billed. If your name does not appear on the list and you need a room please call Mary Jo at 297-4290.

If you have additional agenda items or require additional information, please feel free to give me a call. Travel safely, I look forward to seeing you next week.

BOARD OF WATER AND SOIL RESOURCES
HOLIDAY INN
2101 SOUTH BROADWAY
NEW ULM, MINNESOTA 56073
JULY 24, 1996

PRELIMINARY AGENDA

9:00 a.m. **Call Meeting to Order**

Adopt Agenda

Approval of Minutes of June 26, 1996

Reports
- Chair - Barbara Cobb
- Executive Director - Ron Harnack
- Dispute Resolution Committee - Kathleen Roer
- Education & Public Relations Committee - Tim Hvidsten
- Feedlot Advisory Committee - Jim Rossman
- Cost-Share/Soil Conservation Committee - Barbara Cobb
- Wetlands Committee - Darrell Bruggman
- Administrative Advisory Committee - Barbara Cobb

Agency Reports
- Kim Benson-Johnson, Department of Health
- Wayne Edgerton, Department of Natural Resources
- Paul Burns, Department of Agriculture
- Jim Anderson, Minnesota Extension Service
- Marge Kelly, Pollution Control Agency

Consent Agenda
1. Local Water Plan Approvals - Recommendations of Review Committee
   Kittson and Mille Lacs Counties
2. Kanabec County Water Plan Extension

New Business
1. Minnesota River Basin - Hugh Valiant, DNR Fisheries - INFORMATION
2. FY97 Special Minnesota River Basin Grants Allocation - Wayne Zellmer - DECISION
3. Conservation Easement Program 1997-98 Work Plan - Tim Fredbo - DECISION
4. CRP Land Transfer Program - Tim Fredbo - DISCUSSION

New Business (Continued)

5. Video, "Keeping Our Shores" Best Management Practices - Barb Liukkonen - INFORMATION
6. Lake Superior Association of SWCDs - Mark Nelson - INFORMATION
7. Minnesota River Basin Joint Powers Board Work Plan and Grant - Jeff Nielsen and Steve Hansen - DECISION
8. Legislative Initiatives - Ron Harnack - DISCUSSION

Advisory Comments

- Bill Hunt, NRCS
- Jim Schafer, MASWCD
- Ray Bohn, MAWD
- Rick Reimer, MACDE
- Franklin Denn, MAT

Board Issues

- Next Board Meeting, August 28 in St. Paul

Noon **Adjourn**

1:00 - 3:00 p.m. Continue Strategic Planning

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2101 SOUTH BROADWAY
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- Cost-Share/Soil Conservation Committee - Dwain Otte
- Wetlands Committee - Darrell Bruggman
- Administrative Advisory Committee - Barbara Cobb
- Financial Oversight Committee - Ginny Imholte

Agency Reports
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- Wayne Edgerton, Department of Natural Resources
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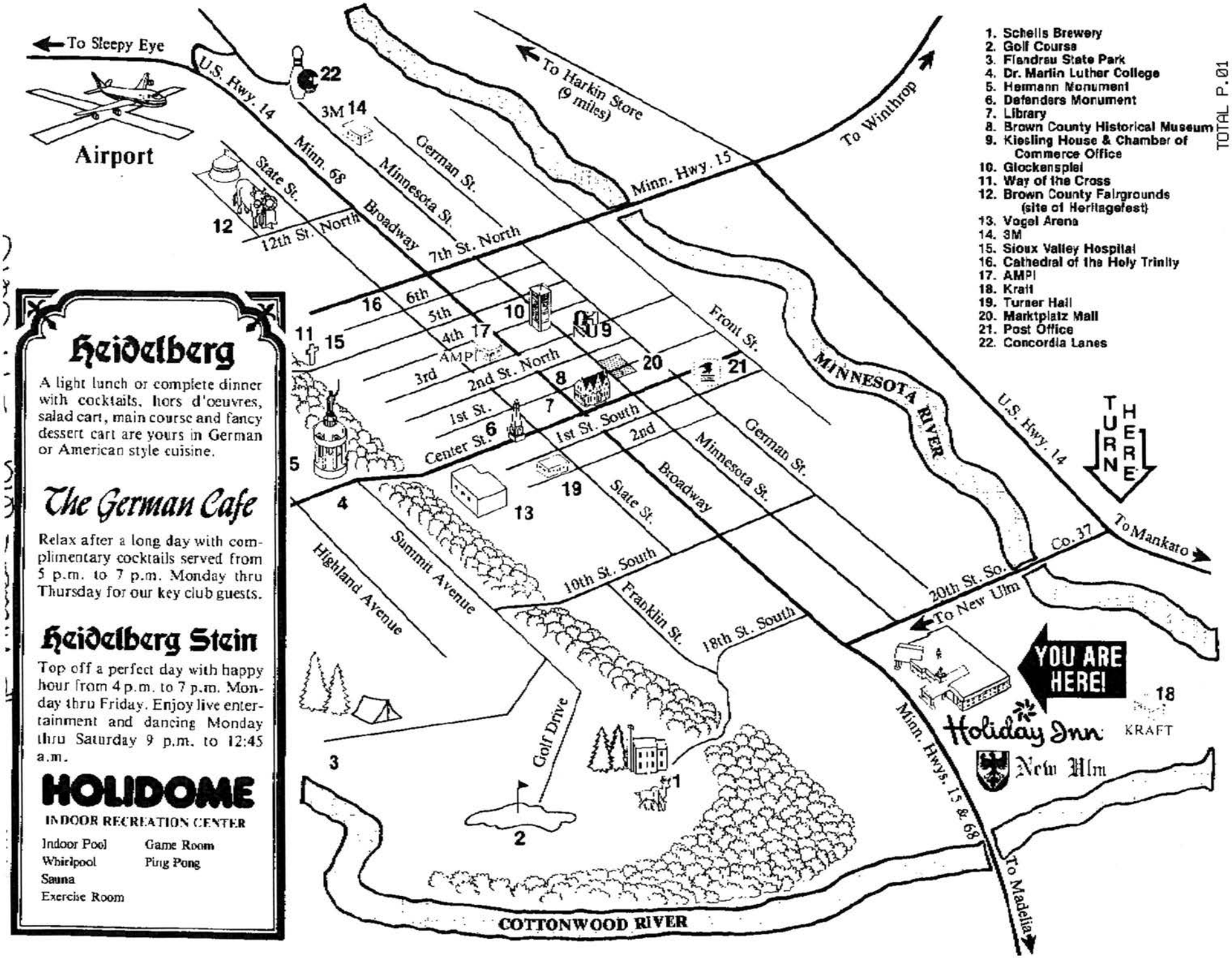
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1:00 - 3:00 p.m. Continue Strategic Planning



Heidelberg

A light lunch or complete dinner with cocktails, hors d'oeuvres, salad cart, main course and fancy dessert cart are yours in German or American style cuisine.

The German Cafe

Relax after a long day with complimentary cocktails served from 5 p.m. to 7 p.m. Monday thru Thursday for our key club guests.

Heidelberg Stein

Top off a perfect day with happy hour from 4 p.m. to 7 p.m. Monday thru Friday. Enjoy live entertainment and dancing Monday thru Saturday 9 p.m. to 12:45 a.m.

HOLIDOME

INDOOR RECREATION CENTER

Indoor Pool
Whirlpool
Sauna
Exercise Room
Game Room
Ping Pong

Sleeping Rooms at the Holiday Inn
to be Direct Billed to the
BOARD OF WATER AND SOIL RESOURCES

	Monday, July 22	Tuesday, July 23	Wednesday, July 24	Thursday, July 25
1.	Ted Lovdahl	Ted Lovdahl	Ted Lovdahl	Ted Lovdahl
2.	Ron Harnack	Ron Harnack	Ron Harnack	Ron Harnack
3.		Tabor Hoek	Tabor Hoek	
4.		David Sill	David Sill	David Sill
5.		Barb Luikkonen	Barb Luikkonen	
6.			Mark Nelson	Mark Nelson
7.		Barb Uppgaard	Barb Uppgaard	
8.		Mary Jo Anderson	Mary Jo Anderson	
9.				Bruce Sandstrom
10.		Barb Cobb	Barb Cobb	Barb Cobb
11.		Tim Hvidsten		
12.	Ginny Imholte	Ginny Imholte	Ginny Imholte	
13.			LeRoy Stensgaard	
14.		Dwain Otte	Dwain Otte	
15.		Mary Kells	Mary Kells	
16.		Dave Peterson	Dave Peterson	

h:rooms

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

KITTSON COUNTY **(FOR BOARD ACTION)**

COMPREHENSIVE LOCAL WATER PLAN

The Kittson County Comprehensive Local Water Plan (Plan) was approved by the Minnesota Board of Water and Soil Resources (BWSR) on February 28, 1990, and adopted by the Kittson County Board of Commissioners on April 17, 1990. Kittson County submitted a Plan Update (Plan Update), required in the Plan, to the BWSR on May 1, 1996, at which time the final ninety day state review process began. The final review period ended July 29, 1996.

A written overview of the Plan Update was prepared by BWSR staff on June 17, 1996, for information and review.

On July 19, 1996, the BWSR Water Plan Review Committee met with representatives of Kittson County and BWSR staff to review and discuss the Plan Update.

In addition to water planning requirements established under the Local Water Planning Statute MS 103B, counties updating their Plan must also include objectives for wellhead protection, sensitive groundwater areas, stormwater management, high priority wetland preservation areas designation and watershed assessment.

The Kittson County Plan Update includes the new requirements. This Plan Update has also incorporated more locally gathered data and information which reflects more accurately on the issues in Kittson County rather than that of a larger scale such as the Red River Valley. Based upon these assessments the Kittson County Plan Update identifies the need to develop a better understanding of its ground water resource (data collection), install a county wide data management system (GIS), and educate the citizens on how to better protect these resources from threat of contamination. Ground water, due to the reliance on it for a water supply and its potential for contamination has made it the county's highest priority resource. Actions that will be initiated to accomplish this will be to pursue some level of hydrogeology mapping, inventories of potential contaminant sources, use a data management system to assist in targeting limited resources, and have a strong educational campaign leading to the implementation of conservation and protection measures.

In addition to the ground water protection initiative Kittson County will put an emphasis on strategies that encourage proper land use practices in order to control erosion and runoff as well as strategies that will protect and improve the surface water quality.

BWSR staff has reviewed the Kittson County Plan Update and finds that all requirements of the law and rule have been satisfied under MS 103B and MCAR 9300.

OVERVIEW

Mille Lacs County Comprehensive Local Water Plan Update

BACKGROUND

The original comprehensive local water plan was developed from December 1989--with the passing of a resolution to develop a comprehensive plan--to June of 1992, when Mille Lacs County provided the Board of Water & Soil Resources (BWSR) with its final plan. In August of 1992, BWSR approved the plan. In September of 1992, the Mille Lacs County Board of Commissioners also approved the plan implementation.

LOCAL COMPREHENSIVE WATER PLAN UPDATE

Mille Lacs County passed a resolution to update their plan on November 22, 1994. After a series of task force meetings, they completed the plan and began the 60-day review on June 26, 1995. After reviewing their timetable, they requested an extension until March 20, 1996. The Mille Lacs Soil and Water Conservation District was delegated by the County to administer the Local Water Plan. The delay in the update process is the result of SWCD staff turnover (5), and the need to respond to 20 pages of DNR comments during the final comment period. The County received only two pages of comments during the preliminary comment period from the DNR.

COUNTY DESCRIPTION

Mille Lacs County is located in East-Central Minnesota; 54% of Mille Lacs County is in agricultural land uses. Agricultural land use is concentrated in the southern half of the county. The northern half of Mille Lacs County is dominated by forests and wetlands. The number of wetlands in the county put it in the 80+ range of presettlement wetlands remaining.

The south half of Mille Lacs Lake is located in Mille Lacs County. The remaining portion of the lake is primarily in Aitkin County and a small portion in Crow Wing County. Mille Lacs Lake is recognized as one of the premier lakes in Minnesota. With 207 square miles of surface water area, Mille Lacs Lake is the second largest lake in Minnesota. The watershed is approximately 188 square miles. This lake is acknowledged as one of the most prolific walleye producing lakes in the world. The lake serves as a source of water for the Rum River and, eventually, the Mississippi River. The County has relatively few lakes (19) compared to other transition area counties.

Revenue generated from fishing alone is estimated to have a $20 million dollar impact on the state and local economy.

Surface water drainage for most of the county is provided by the Rum River. About 10% of Mille Lacs County drains to the Snake River. A petition was filed in June of 1990 by residents in the Snake River Watershed for the establishment of a Watershed District. Fifteen hearings or continuances of hearing were conducted. Prior to the issuing of the administrative law judges' recommendation, a stipulated agreement was signed by the parties. The agreement provided that BWSR and all parties involved would put established proceedings on hold for one year, pending the completion of the county water planning process in the affected counties. Aitkin, Mille Lacs, Pine, and Kanabec Counties have approved water plans and are working under a joint powers agreement. Mille Lacs County has worked closely as a Joint Powers Board member to make Snake River JPB a success.

PLAN UPDATE REVIEW

The second generation of plans encouraged counties to develop and expand on partnerships, update goals, objectives, assessments, and take a strong role in implementation of practices on a watershed basis, which would be in terms of measurable results.

In addition to the requirements under local water planning Statute MS 103B, counties updating their plan must also address new mandates, including wellhead protection, sensitive groundwater areas, stormwater management, and high priority wetland areas.

The Mille Lacs County local water plan update includes the new mandates. The update reflects partnerships with neighboring counties, including Snake River JPB, and a

cooperative soil survey being conducted with Kanabec County. In cooperation with the Mille Lacs Band and the Mille Lacs Lake Association, they have applied for a challenge grant to focus watershed management on the Mille Lacs Lake watershed and have focused base grant funds toward septic systems, feedlots, wetlands, agriculture, municipalities and erosion and sedimentation. These goals and objectives addressing these land uses include ordinances and regulation, education, surface and groundwater monitoring, data collection and implementation of conservation practices. The Mille Lacs Lake watershed project will set the stage and direction of future challenge grants and base grant funding.

BWSR staff has reviewed the Mille Lacs County comprehensive local water plan update and found that the requirements of law and rule have been satisfied under MS 103B and 9300.
MIL.OER

RESOLUTION TO REQUEST AN EXTENSION TO THE UPDATING PROCESS OF THE COMPREHENSIVE LOCAL WATER 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, Kanabec County is continuing to participate in the update and revision process as required by the act, and

WHEREAS, the Kanabec County Board of Commissioners have been given commensurate evidence that the updating process will extend beyond the expiration of the original comprehensive local water management plan, and

NOW THEREFORE BE IT RESOLVED, that the Kanabec County Board of Commissioners requests that the Kanabec County Comprehensive Local Water Plan be extended until December 31, 1996.

BE IT FURTHER RESOLVED, that Kanabec County will insure continued public participation during the requested time period and will ensure that no projects, using the authority of Minnesota Statutes, Section 103B.331, subd. 3 and 4, will be ordered or commenced during the extension period.

Passed by the majority vote of all members of the Kanabec County Board of Commissioners this 10th day of July, 1996.

Tom Roeschlein, Chair
Kanabec County Board of Commissioners

ATTEST:

Alan Peterson, Coordinator
Kanabec County Board of Commissioners

CERTIFICATION: I, the undersigned, being the recording officer of the County of Kanabec, certify that the information above has been carefully compared with the original records of Kanabec County in my custody and is a correct copy of these minutes.

Certified this 10th day of July, 1996.

Alan B. Peterson, County Coordinator & Executive Secretary

New Business #1

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT of Conservation - Game & Fish

DATE: October 8, 1958

TO : C. R. Burrows

FROM : Donald Woods

SUBJECT: Cannon River Pollution at Faribault

Repeated instances of pollution of the Cannon River at Faribault have been noted since 1956, despite the installation of a municipal sewage treatment plant. This pollution has made the river unfit for most fishes, particularily Small Mouth Bass. Occasionally, pollution gets so bad that oxygen depletion results and fish are killed. The major offenders have been the Faribault Canning Company and Faribo Turkeys. Other industries have occasionally made impossible adequate treatment of sewage at the municipal plant and pollution has resulted.

On October 7, 1958, Mr. Johannes and Mr. Kiester of the Department of Public Health, Mr. Koch, manager of the sewage plant and myself inspected the industries in Faribault that had been causing the most trouble.

Minnesota Mercury, Inc., manufacturer primarily of metal cabinets and parts for I. B. M. in Rochester, occasionally dumped 1,000 gallon lots of 10% sulfuric acid into sewer lines, resulting temporarily in partial deactivation of treatment facilities at the municipal plant. This problem was temporarily corrected by notifying the treatment plant at the time of dumping so that the acid could be neutralized before entering the sewage treatment facilities. At the suggestion of Mr. Johannes, the acid will be drained on Saturdays over a six hour period to get adequate dilution before reaching the treatment plant. Previously, the 1,000 gallon tank was emptied in about twenty minutes. The suggested schedule is considered adequate for disposal of current wastes.

The Faribault Woolen Mills was visited and their present method of waste disposal was considered adequate. Wash water and dyes previously have caused trouble, but are now dumped in small enough quantities for the treatment plant to handle. The dyes still discolor the treatment plant effluent occasionally, but not enough to be harmful. Some dyes get directly into the river when the floors are washed down, but in very small quantities. Hot water from a boiler blowdown may tend to warm up the adjacent river enough to increase the production of algae, but not enough to be harmful.

A tour was made of Faribo Turkeys, Inc., to observe the disposal methods for feathers and offal. Most of the feathers are separated out at the defeathering machine and are loaded aboard trucks. Smaller feathers are screened out of the waste water by fine-mesh baffle screens. Turkey heads and offal are washed, drained, and ground up to be sold as mink food. The smaller bits of offal are caught also in the baffle screens. The scum collected by the baffle screens is removed periodically and trucked away. Further treatment of blood is necessary and methods are under consideration for improvements. Earlier this year, before installation of larger screens, the plant wastes were too much for the municipal plant to handle and had to be dumped directly into the river.

The Faribault Canning Company made provision for disposal of pea canning wastes by piping them out to a 29 acre field and dispersing them by sprayers. In 1957, however, the fermentation juices from a corn silage stack located at the factory were flowing directly into the Cannon River. The result was oxygen depletion and growth of large masses of sewage fungus. Fish, including Walleyes, were killed and drifting sewage fungus was carried as far as Northfield. Before the 1958 season, a sump was built too collect the silage juices, these juices to be diluted and piped out to the spray field. In actual practice, the sump was found to be overflowing into the river on one inspection trip, and as of about two weeks ago, the spray field was ponding the wastes and overflowing into the river. The river below this point is again carrying a heavy load of sewage fungus and suffers from an oxygen depletion. Means to alleviate this condition will be investigated by the Department of Public Health.

As of now, the Faribault Canning Company remains the only serious source of pollution to the Cannon River at Faribault. Progress has been made in disposal of their wastes, but more needs to be done before the river can be maintained in a satisfactory condition for fish life.

Donald Woods

Donald Woods, District Biologist

DW/gb

c.c. Conrad Ohman
Barney Jones

NEMO PROJECT
FACT SHEET 3

IMPACTS OF DEVELOPMENT ON WATERWAYS

Linking Land Use to Water Quality

Key Finding

Standard land development can drastically alter waterways. Increased stormwater runoff associated with development often begins a chain of events that includes flooding, erosion, stream channel alteration and ecological damage. Combined with an increase in man-made pollutants, these changes in waterway form and function result in degraded systems no longer capable of providing good drainage, healthy habitat or natural pollutant processing. Local officials interested in protecting town waters must go beyond standard flood and erosion control practices and address the issue of polluted runoff through a multilevel strategy of planning, site design and stormwater treatment.

Disruption of the Water Cycle

When development occurs, the resultant alterations to the land can lead to dramatic changes to the *hydrology*, or the way water is transported and stored. Impervious man-made surfaces (asphalt, concrete, rooftops) and compacted earth associated with development create a barrier to the percolation of rainfall into the soil, increasing surface runoff and decreasing groundwater infiltration (Figure 1). This disruption of the natural water cycle leads to a number of changes, including:

- increased volume and velocity of runoff;
- increased frequency and severity of flooding;
- peak (storm) flows many times greater than in natural basins;
- loss of natural runoff storage capacity in vegetation, wetlands and soil;
- reduced groundwater recharge; and
- decreased *base flow*, the groundwater contribution to stream flow. (This can result in streams becoming intermittent or dry, and also affects water temperature.)

Impacts on Stream Form and Function

Impacts associated with development typically go well beyond flooding. The greater volume and intensity of runoff leads to increased erosion from construction sites, downstream areas and stream banks. Because a stream's shape evolves over time in response to the water and sediment loads that it receives, development-generated runoff and sediment cause significant changes in stream form. To facilitate increased flow, streams in urbanized areas tend to become deeper and straighter than wooded streams, and as they become clogged with eroded sediment, the ecologically important "pool and riffle" pattern of the stream bed is usually destroyed (Figure 2).

These readily apparent physical changes result in less easily discerned damage to the ecological function of the stream. Bank erosion and severe flooding destroy valuable streamside, or *riparian*, habitat. Loss of tree cover leads to greater water temperature fluctuations, making the water warmer in the summer and colder in the winter. Most importantly, there is substantial loss of aquatic habitat as the varied natural stream bed of pebbles, rock ledges and deep pools

Also available:

NEMO **Fact Sheet #1**: *Project Brief*

NEMO **Fact Sheet #2**: *Nonpoint Source Water Pollution*

NEMO **Fact Sheet #4**: *Strategies for Coping with Polluted Runoff*

NEMO **Fact Sheet #5**: *How to Get Started: Protecting Your Town from Polluted Runoff*

The Total Picture: A System Changed for the Worse

The hydrologic, physical and ecological changes caused by development can have a dramatic impact on the natural function of our waterways. When increased pollution is added, the combination can be devastating. In fact, many studies are finding a direct relationship between the intensity of development in an area—as indicated by the amount of impervious surfaces—and the degree of degradation of its streams (Figure 3). These studies suggest that aquatic biological systems begin to degrade at impervious levels of 12% to 15%, or at even lower levels for particularly sensitive streams. As the percentage of imperviousness climbs above these levels, degradation tends to increase accordingly.

The end result is a system changed for the worse. Properly working water systems provide drainage, aquatic habitat, and a degree of pollutant removal through natural processing. Let's look at those functions in an urbanized watershed where no remedial action has been taken:

Drainage: Increased runoff leads to flooding. Drainage systems that pipe water off-site often improve that particular locale at the expense of moving flooding (and erosion) problems downstream. Overall systemwide water drainage and storage capacity is impaired.

Habitat: Outright destruction, physical alteration, pollution and wide fluctuations in water conditions (levels, clarity, temperature) all combine to degrade habitat and reduce the diversity and abundance of aquatic and riparian organisms. In addition, waterway obstructions like bridge abutments, pipes and dams create barriers to migration.

Pollutant removal: Greater pollutant loads in the urban environment serve to decrease the effectiveness of natural processing. Damage to bank, stream and wetland vegetation further reduces their ability to naturally process pollutants. Finally, the greater volume and irregular, "flashy" pulses of water caused by stormwater runoff impair natural processing by decreasing the time that water is in the system.

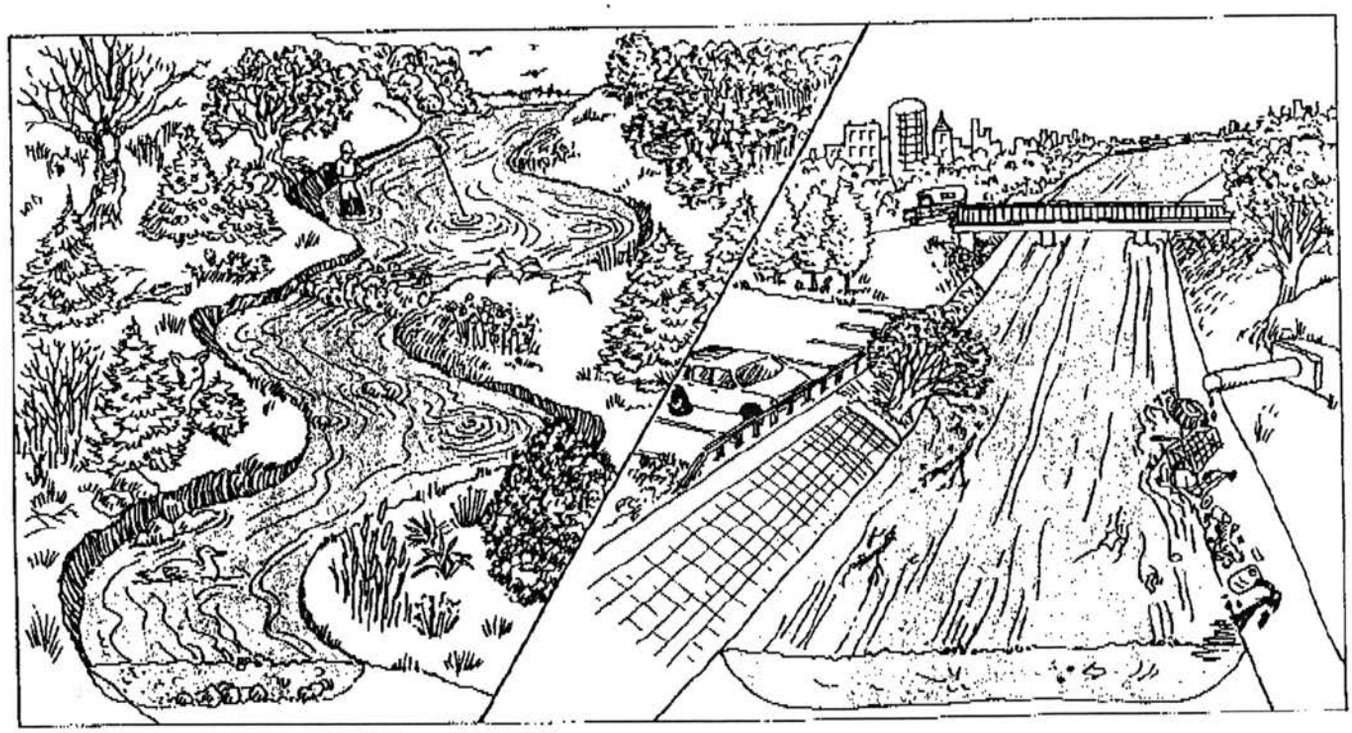


Figure 2. Changes in stream form associated with urbanization.

Hy·drol·o·gy: A science dealing with the properties, distribution and circulation of water.

Ri·par·i·an: Of or relating to or living or located on the bank of a watercourse.

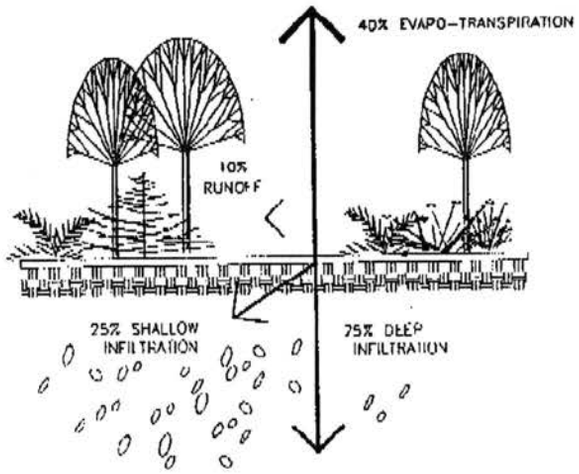
Hab·i·tat: The place where a plant or animal species naturally lives and grows.

is covered by a uniform blanket of eroded sand and silt.

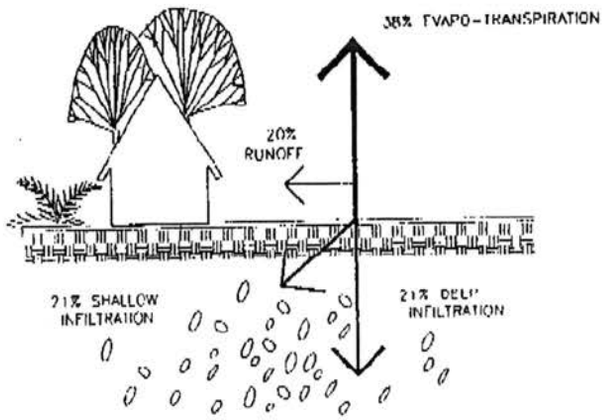
All this, of course, assumes that the streams are left to adjust on their own. However, as urbanization increases, physical alterations like stream diversion, channelization, damming and piping become common. As these disturbances increase, so do the ecological impacts—the endpoint being a biologically sterile stream completely encased in underground concrete pipes. In addition, related habitats like ponds and wetlands may be damaged or eliminated by grading and filling activities.

Then There's Water Quality...

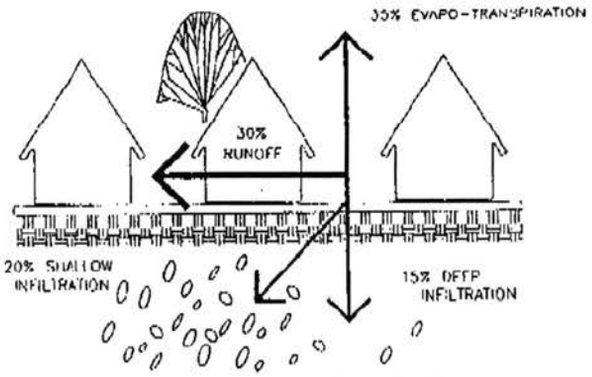
With development comes more intensive land use and a related increase in the generation of pollutants. Increased runoff serves to transport these pollutants directly into waterways, creating *nonpoint source pollution*, or *polluted runoff*. Polluted runoff is now widely recognized by environmental scientists and regulators as the single largest threat to water quality in the United States. The major pollutants of concern are pathogens (disease-causing microorganisms), nutrients, toxic contaminants and debris. Sediment is also a major nonpoint source pollutant, both for its effects on aquatic ecology (see above), and because of the fact that many of the other pollutants tend to adhere to eroded soil particles. NEMO Fact Sheet #2 provides more detail on polluted runoff and its effects.



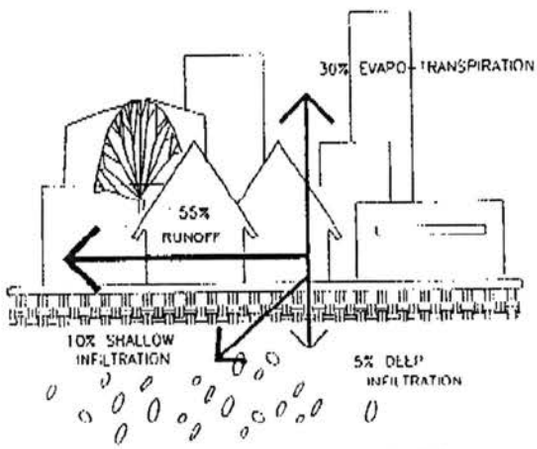
NATURAL GROUND COVER



10-20% IMPERVIOUS SURFACE



35-50% IMPERVIOUS SURFACE



75-100% IMPERVIOUS SURFACE

Figure 1. Water cycle changes associated with urbanization (after Tourbier and Westmacott, 1981).

For more information, contact the NEMO Project c/o Chester Arnold, Sea Grant Marine Advisory Program, University of Connecticut CES, 43 Marne Street, Hamden, CT 06514. Tel: (203) 789-7865. FAX: (203) 789-6461.

Written by Chester Arnold and Jim Gibbons. Figures 1 and 3 by Dr. John Alexopoulos, Plant Science Department, University of Connecticut.

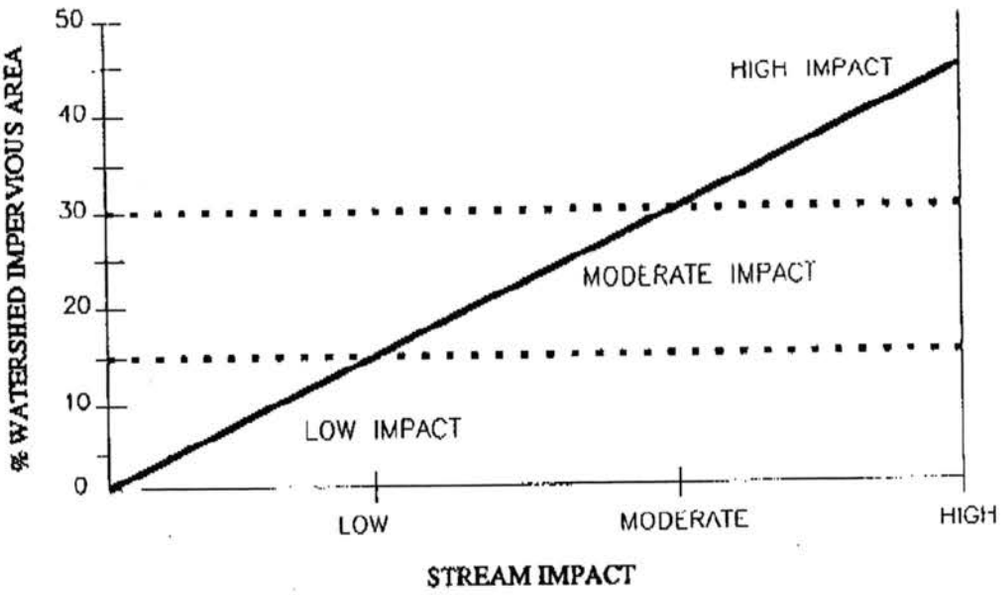


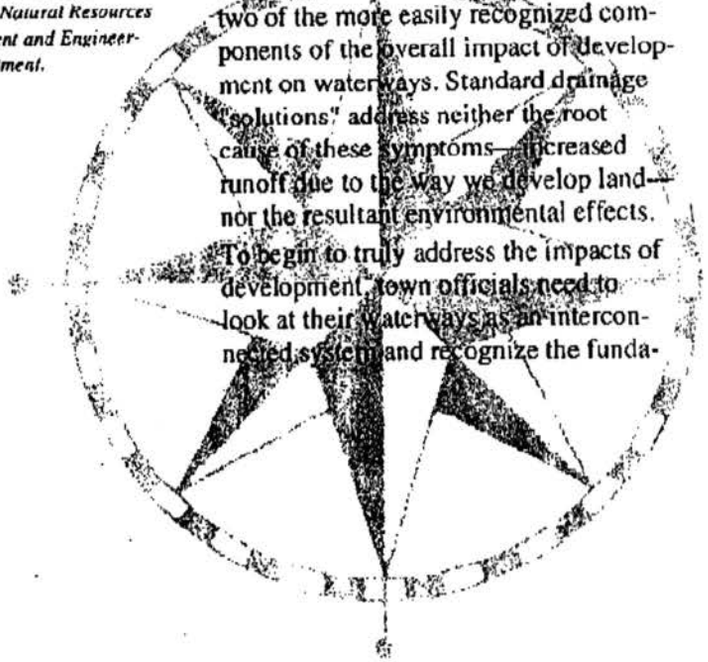
Figure 3. Stylized relationship between watershed imperviousness and receiving stream impacts (adapted from Schueler, 1992).

What Towns Can Do

Flood and erosion control have long been part of the municipal land use regulatory process, and are usually addressed with engineered systems designed to pipe drainage off-site as quickly and efficiently as possible. Flooding and erosion, however, are only two of the more easily recognized components of the overall impact of development on waterways. Standard drainage "solutions" address neither the root cause of these symptoms—increased runoff due to the way we develop land—nor the resultant environmental effects.

To begin to truly address the impacts of development, town officials need to look at their waterways as an interconnected system and recognize the fundamental changes that development brings to the water cycle, stream form and function, aquatic ecology, and water quality. Incorporating this understanding into local land use decisions can help to guide appropriate development (see NEMO fact sheet #5). There are a number of options that can be employed to reduce the impacts of development on water quantity and quality. Preventing such impacts in the first place is the most effective (and *cost* effective) approach and should always be emphasized. To this end, town officials should consider a three-tiered strategy of natural resource based planning, appropriate site design and stormwater treatment. NEMO fact sheet #4 goes into this strategy in more detail.

Funding provided by a grant from USDA Extension Service. NEMO is a cooperative project of the University of Connecticut's Cooperative Extension System, Connecticut Sea Grant College Program, and Natural Resources Management and Engineering Department.



UNIVERSITY OF CONNECTICUT
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FY 97 SPECIAL MINNESOTA RIVER BASIN STATE COST SHARE APPLICATION
SUMMARY / FUNDING RECOMMENDATION

Reviewed 6/27/96 by G-Team members Tom Fischer, David Sill, Pete Waller; others participating were Jeff Nielsen, Chris Hughes, Tabor Hoek. Final review 7/10/96 by Wayne Zellmer, Tom Fischer, Jeff Nielsen.

AVAILABLE FUNDS
500,000 MN River Fund (up to 20% may be for Technical/Administrative)
85,500 Roll-Over Funds (NO Technical/Administrative use allowed)
585,500 Total

	FUNDING REQUEST PROJECTS, T/A, TOTAL	FUNDING RECOMMENDATION
BLUE EARTH RIVER BASIN INITIATIVE	240,000	100,000
"Implementation of Conservation Practices	60,000 (20%)	25,000
to reduce Sediment Runoff"	300,000	125,000 plus 25,500 (No T/A) = 150,500

- Water Quality Problem: Heavy loads of sediment throughout MN River Basin...MRAP.

- Project Objectives/Solutions: Reduce sediment amounts through implementation...provide technical assistance to find solutions/design/complete the project...financial incentives to landowners. Areas of priority established are within 1,000 feet of surface water or floodplain, within 1,000 feet of surface tile intake, or a local priority.

- Public benefit: improved water quality in the Blue Earth River; better fish and wildlife habitat and recreational opportunities, reduction of nitrogen and phosphorus in the water, improved drinking water for 50,000 Mankato residents...benefits water quality of Blue Earth River Basin and Minnesota and Mississippi Rivers...state and national clean water objectives.

NOTE: BERBI specifying that 1/2 of technical/administrative (T/A) funds to be divided equally between the six SWCDs for technical (T) usage; the remaining 1/2 to be used for BERBI coordinator, clerical and fiscal agent. BWSR staff recommendation is that a workplan be developed by BERBI to specify utilization of T/A funds and reviewed/approved by board conservationist.

SWCDS IN REDWOOD RIVER WATERSHED	200,000	40,000
"Redwood River Watershed Project"	50,000 (20%)	10,000 (20%)
	250,000	50,000 plus 10,000 (No T/A) = 60,000

- Water Quality Problem: It is estimated that the Redwood River carries 140,000 tons of sediment annually down river to Lake Redwood. Several factors contribute: drained wetlands, drainage activities; inadequately protected highly erodible lands (>2T); feedlot runoff; sediment and nutrient transport accelerated by the 900 feet elevation drop from river source to the outlet in the Minnesota River.

- Project Objectives/Solutions: Primary objectives include restore 5,000 acres of wetlands with emphasis on sites within one-mile of each side of the river; permanent buffer strips established; minimum and no-till practices on 90% of the cropland in the designated corridor; 40 ag-waste management systems. Numerous secondary objectives including develop county policies to promote/set standards for minimum tillage, nutrient management, buffer strips, livestock management; demonstration, education, restoration, monitoring, information activities.

- Public Benefit: The General public is inended to be the principal beneficiary...project goals established in sediment/nutrient reduction; fisheries and recreation; hydrology...summary laid out for a six-year project.

NOTE: Three prior grants approved with a total of 141 projects encumbered...16 completed. weather and contractor problems have made project completion difficult. Granting full request would add to existing completion problems. Granting $60,000 would keep the program going.

BROWN SWCD	42,500	42,500
"Mound Creek Watershed"	7,500 (15%)	7,500 (15%)
	50,000	50,000

- Water Quality Problem: 90,150 feet of open channel dissecting the Mound Creek Watershed...sedimentation from wind and water erosion...pollution from feedlots.

- Project Objectives/Solutions: Continue downstream the cooperative multi-agency effort already underway upstream to correct problems. Install BMPs to reduce sedimentation, fertilizer, pesticides and feedlot wastes from entering the channel and tile lines that outlet into the Minnesota River.

Public Benefit: Restoration of Minnesota River; revitalize aquatic population, reduction of bacteria, feasible/swimmable goal, viable economic/recreational asset to the State and citizens.

NOTE: The SWCD is good at implementing existing/standard programs. This project will add to other existing efforts in the watershed and initiate SWCD targeting efforts. Upper 1/3 of Mound Creek has BMPs installed. SWCD and others now starting on remaining 2/3 of watershed.

CHIPPEWA/SWIFT/DOUGLAS/POPE SWCDs	200,000	102,400
"Chippewa River Watershed"	50,000 (20%)	25,600 (20%)
	250,000	128,000 plus 15,000 (No T/A) = 143,000

- Water Quality Problem: 2,080 sq. mile watershed...intensive agricultural area...bacteria, sediments, nutrients and oxygen demanding substances traced back to land-use practices, improperly controlled runoff, >2T erosion, feedlots, drainage activities which reduced numbers of wetlands...MPCA study cites the Chippewa River as having habitat quality well below tributary average for the Minnesota River Basin and having the lowest macro-invertebrates of any tributary in the basin.

- Project Objectives/Solutions: To help fund the first-of-a-long-term plan to improve water quality in the river and tributaries...encourage landowners to increase conservation practices that address sediment and nutrient amounts...promotion/application of BMPs on agricultural lands with emphasis on committee established priority areas.

- Public Benefit: Dollars saved by reducing sedimentation and phosphorus...public costs are real when addressing maintenance of private and public drainageways...economic loss of communities when recreation and tourism cannot succeed due to poor water quality and aesthetic appeal.

NOTE: Douglas and Pope SWCDs are doing a good job of targeting efforts. This project could initiate targeting and increased work efforts by Chippewa and Swift SWCDs.

LAC QUI PARLE / YELLOW MEDICINE SWCDs	170,000	80,000
"Lac qui Parle River Sub-basin Project"	42,500 (20%)	20,000 (20%)
	212,500	100,000 plus 15,000 (No T/A) = 115,000

- Water Quality Problems: Information obtained from 639 Study of the sub-basin...flash floods due to escarpment slope drop of 380 feet in 4.9 miles...in steep sections, the fall is as much as 100 feet per mile followed by flat, glacial outwash sections of less than 5 feet per mile...sheet, rill and wind erosion is exceeding tolerable soil loss levels on nearly 314,000 acres (60% of total cropland in the sub-basin)...ephemeral gully erosion on 158,000 acres...37,000 acres having wind erosion rates in excess of 10T/A/Y...downstream flood damages, sediment damages to roads, drainage ditches, fish/wildlife habitat, water quality impacts to streams/lakes...Lac qui Parle River delivers 87,600 tons of sediment annually.

- Project Objectives/Solutions: Promote the use of BMPs to reduce the amounts of sediment and pollutants entering ditches, streams and main body of the Lac qui Parle River Sub-basin...install 20,000 feet of grassed waterways, 12,000 feet of terraces/diversions/sediment control basins, 10,000 feet of field windbreaks, 2 ag-waste systems.

- Public Benefit: Improve the water quality in the Minnesota River by reducing sediments and nutrients entering the river; improve habitat for fish/wildlife. Each SWCD has a list of projects not funded due to limited cost-share funds...this project would install needed projects in a more timely manner. Minnesota River clean-up efforts would progress more quickly.

NOTE: SWCDs do a good job with existing programs and staff. This project could initiate targeting efforts by both SWCDs.

RENVILLE SWCD	40,000	40,000
"Birch Cooley Sediment Reduction Project"	7,500 (14.9%)	7,500 (14.9%)
	47,500	47,500

- Water Quality Problems: Surface water runoff is currently eroding the banks at several locations along a private drainage ditch...erosion is making it necessary for maintenance every 3 - 4 years...sediment makes its way to the Minnesota river.

- Project Objectives/Solutions: Reduce the amounts of sediment due to improper ditch construction. (Renville County currently has over 1,100 miles of drainage ditches with similar problems.) Re-sloping portions of the ditch to proper grade, install control structures, re-vegetation, terrace blocks, waterways, permanent 16.5 feet grass buffer strips along entire ditch (conservation tillage currently done on ag-land adjacent to ditch). Another goal would be to create a model to demonstrate to county residents how ditches properly constructed combined with proper ag BMPs look and function.

- Public Benefit: The ditch outlets into Birch Cooley Creek which outlets into the Minnesota River less than 2-miles away. A county park is 1.5 miles downstream of the ditch. A reduction in sediment/nutrients can only improve the water quality of the Minnesota River.

NOTE: Small watershed project involving 10 landowners (one owns land adjacent to ditch, others contribute water via tile systems) on one private ditch. BWSR staff recommends that a watershed plan (including BMPs, hydro study) be completed as part of the overall project to limiting new/increased tile drainage into the ditch so not to have a failure of this project in the future.

SCOTT SWCD	20,000	-0-
"Lawrence Jabs / City of Jordan Critical Area Stabilization	4,000 (16.7%)	-0-
	24,000	-0- plus 20,000 (No T/A) = 20,000

- Water Quality Problems: Sediment and other pollutants entering Sand Creek from very steep and unstable hillside...erosion is occurring along 250 feet of bank, 50 feet in height...project site is within 50 feet of creek...Sand Creek is DNR protected watercourse...Sand Creek Watershed is largest watershed in county, 171,560 acres in size.

- Project Objectives/Solutions: To eliminate NPS pollution to Sand Creek and Minnesota River from this project site... stabilization includes land shaping, seeding/fertilization and geo-textile mulch...bio-engineering practices will be incorporated...side hill seeps controlled by tile drainage system.

- Public Benefit: Approximately 150 T/A/Y of soil loss occurring. Primary benefit--to improve water quality. Secondary benefit--stabilize a highly visible erosion problem along Highway 21 and the City of Jordan.

NOTE: This application probably should have been a Special Project Application, but it does impact the Minnesota River. Individual landowner and City of Jordan project involving in-kind and partial funding from city and partial funding from Met Council. BWSR staff recommend using roll-over funds for this project, no T/A.

STEVENS SWCD

NOTE: Application came in after the announced deadline. No funding recommended.

	REQUESTED	RECOMMENDED
	912,500	404,900
	221,500 (19.5%)	95,100 (19%)
TOTAL	1,134,000	500,000 plus 85,500 (No T/A) = 585,500

July 10, 1996

To: Board Members

Fr: Tim Fredbo
Easement Program Manager

Re: Easement Program Work Plan

Enclosed please find the conservation easement program work plan for FY 97-98. I will be seeking your approval of this plan at your July 24th meeting in New Ulm. This work plan was reviewed by the LCMR at their meeting of June 4, 1996, and met with their approval.

Minnesota laws 1996 Chapter 463, Sec. 11, Subd. 3 appropriated $11.5 million to BWSR for conservation easement acquisition and the establishment of permanent cover on easement areas. Subdivision 3, paragraph (c) set aside up to $1.5 million for the establishment of a pilot program for land coming out of the federal CRP program. As a result, there is $10 million available for the traditional RIM and PWP easement programs. The work plan breaks out these two separate program areas:

A. $10 million for RIM Reserve and PWP
B. $1.5 million for CRP land Transfer Pilot Program

Anticipated acreage goals and costs for wetland restoration easements and PWP easements reflect the additional $3 million that was granted to the program in the waning hours of the '96 legislative session as a result of concessions agreed to in WCA. This amount is often referred to as "Willard's Wetlands" in honor of Rep. Munger who was instrumental in securing the additional funding for wetland restorations and "at risk" PWP wetlands. In prior years approximately 40% of our easement dollars went into wetland restorations and in this work plan 54% of the available funds are targeted for wetland restoration easements. PWP easements in the past couple years made up only 5% of our easement expenditures and this work plan targets approximately 9%.

If you have any questions prior to the meeting please feel free to contact me at 296-0880. I look forward to our meeting on the 24th.

DECISION -

Page 4, FY 97 Easement Acquisition

Attachment 3, State Resource Protection Priority Assessment Guidelines (has been modified slightly to better deal with fish and wildlife habitat biodiversity issues, and existing wetlands which are exempt from WCA)

Board of Water and Soil Resources

CONSERVATION EASEMENT PROGRAMS

Fiscal Years (FY) 97-98 Work Plan

5/96 Report Prepared by: Tim Fredbo, Easement Coordinator as per Minnesota Laws 1996 Chapter 463, Section 11, Subd. 3

I. Program Authority, History and Accomplishments

Authority

The Board of Water and Soil Resources (BWSR) administers two conservation easement programs, the Reinvest in Minnesota Reserve program and the Permanent Wetlands Preserve program. (Minnesota Statutes sections 103F.501 - 103F.531.) Administrative rules (Minn. Rules parts 8400.3000-8400.3930) for RIM Reserve were initially promulgated as emergency rules in 1986, and as permanent rules in 1988. The rules were revised in 1990, and again in October 1994.

These programs are administered by the state and implemented at the county level by soil and water conservation districts (SWCDs).

History

In 1984, Governor Rudy Perpich's concern for the future of tourism in Minnesota lead him to appoint a citizen's commission to report on ways to improve and promote hunting and fishing in Minnesota. The commission recommended that the sales tax revenues generated from the state's one billion dollar outdoor recreation industry be reinvested in the resources that sustain those activities. Their recommendations prompted the formation of a large and diverse coalition of organizations whose members supported the passage of the RIM Program in 1986. The RIM Coalition continued to support the program by developing innovative promotion programs and seeking stable funding sources. One of the four programs under the "RIM umbrella" was the RIM Reserve Program which focuses on retiring marginal lands from crop production via conservation easements. The program also assists landowners establish grass, trees or wetlands on the easement area (i.e., establish conservation practices).

The Permanent Wetlands Preserve (PWP) Program was enacted in 1991 in conjunction with the Wetland Conservation Act (WCA). PWP allows for the acquisition of easements on existing type 1,2 or 3 wetlands and wetlands where permits for WCA exemptions are denied. In 1994 program eligibility was broadened to include type 6 wetlands and wetlands expiring from state waterbank contracts.

Accomplishments to Date

Since 1986, over $45 million have been appropriated to the BWSR easement programs. RIM Reserve has secured 2,065 easements that protect over 57,924 environmentally sensitive acres. Over 590 wetland basins have been, or are currently being, restored encompassing 6320 acres, along with approximately 16,275 acres of adjacent uplands. The average size of a wetland restoration easement is 36 acres, with the average wetland basin covering about 10 acres. The average wetland restoration easement payment is $567 per acre and the average practice establishment costs are $209 per acre. Other easements (nonwetland restoration) average 23 acres in size at a cost of $592 per acre for the easement payment and $127 per acre for practice establishment.

In 1991, $7 million was appropriated for PWP easements. Approximately $6.5 million of that appropriation was expended through FY 96 to secure 264 easements protecting over 10,640 acres of existing wetlands and adjacent upland. The balance is being reserved to acquire easements where permits for WCA approvals are denied.

Attachment #1 illustrates the location of easements across the state along with acres and numbers associated with the various eligible land types.

Many partnerships have formed to assist in the successful implementation of the conservation easement programs. BWSR has received $1.6 million in matching funds from the North American Wetlands Conservation Council (NAWCC) to restore wetlands through easements. BWSR continues to seek grants from NAWCC to fund easements in priority watersheds. The willingness of private groups to provide financial assistance to landowners to establish conservation practices, along with technical and financial assistance from state and federal agencies, has allowed the BWSR to target program appropriations towards the acquisition of more easement acres.

The historical demand for program dollars continues to exceed program appropriations by a large ratio. In 1995, landowners submitted over $8 million of requests for easements. **Attachment 2** illustrates, by year, the landowner demand and the bonding appropriation.

II. Program Priorities and Enrollment Goals

A. RIM Reserve and PWP (ML 1996, Ch. 463, Sec. 11, subd. 3(a) and (b)

Statewide Priorities

BWSR's strategic plan sets forth program priorities for the conservation easement programs. The RIM Reserve and PWP programs conform with BWSR's strategic plan by providing an incentive that local resource managers can use to protect and improve their water and soil resources. Resource protection and improvement priorities established by BWSR for the RIM Reserve and PWP program are:

1. Protect and improve **water quality**
2. reduce **soil erosion**
3. enhance **fish and wildlife habitat**

RIM promotes the retirement of marginal intensive use lands by paying landowners to stop cropping and grazing and to establish conservation practices. This conserving use reduces runoff and erosion, and benefits land, water, fish and wildlife resources.

The PWP strives to protect the state's remaining wetland resources. The PWP program seeks to discourage the conversion of wetlands that are exempt from the regulatory restrictions of the Wetland Conservation Act (WCA), and offsets the financial burden that may result when individuals are denied WCA approvals.

In light of these priorities the BWSR has given highest priority to the acquisition of wetland restoration and riparian easements with the RIM Reserve. Existing wetlands which are being used for agricultural production are given highest priority for PWP easement acquisition. For both RIM Reserve and PWP, priority is given to perpetual easement applications.

Local and Regional Prioritization

Each easement application is prioritized as to how well it achieves local resource protection goals as set forth in the county water plan, SWCD comprehensive plan and by a local screening committee. The screening committee is made up of representatives from conservation and environmental groups, farming organizations and various federal and state agencies. In addition to identifying resource protection priorities, this committee often reviews each application and assists the SWCD with prioritizing the applications.

Each easement application is subsequently assessed by one of the BWSR's 15 regional board conservationists (BCs) to determine how well (high, medium or low) it meets the BWSR's resource protection priorities listed above. Draft guidelines for this assessment are presented in **Attachment**

3. The BWSR's goal for FY 97-98 is to enroll at least 75 percent high resource protection priority easements, and no more than 25 percent medium priority easements. No low priority easement areas are included in the enrollment goals.

Anticipated Goals or Results

Anticipated acreage enrollment goals for FY 97-98 reflect the 1996 bonding appropriation amount and are based on projections of prior easement acquisition results. FY 97-98 goals include:

Easement Type	Acres	Cost
wetland restorations	6,300	$5,035,000
riparian lands	3,400	$2,440,000
marginal ag. lands	800	$ 610,000
sensitive groundwater	400	$ 305,000
PWP	1,000	$ 805,000
TOTALS	11,900	$9,195,000

B. CRP Land Transfer Pilot Program (ML 1996, Ch. 463, Sec. 11, subd. 3(c)

This is a new program initiative that allows up to $1.5 million of the 1996 appropriation to be used to acquire 20 year easements on land that has been, or is currently, enrolled in the federal Conservation Reserve Program (CRP). BWSR will offer landowners a small payment in return for an easement requiring that they will abide by a conservation plan that reduces soil loss within tolerable limits for the duration of the easement. In addition, landowners will be eligible to receive cost-sharing to establish permanent conservation practices, livestock watering systems, or permanent fence for grazing systems. If a landowner wishes to convey a "CRP Land Transfer" easement to the state they will be required to place a minimum of 10 percent of the most marginal CRP contract area into a perpetual RIM Reserve easement. Priority for enrollment will be given to beginning farmers and to land that would contribute to excessive soil loss and water quality degradation should it be brought back into crop production.

Approximately 4-6 counties from 4 regions of the state (NW, SW, SE, and west central) will be chosen to participate in a pilot of this program. The BWSR and Dept. of Ag. will work cooperatively to choose the pilot counties using the criteria outlined in paragraph (c) of the bonding bill. Up to 20 percent of the $1.5 million will be used to hire a resource conservationist who will assist the SWCD's in developing conservation plans and to cost-

share some of the SWCD staff time required to design and implement conservation plans on the easement areas.

Anticipated Goals or Results
Results reflect the appropriation amount and are quite subject to change based on program demand.

Easement Type	Acres	Cost
cropland	3,600	$ 285,000
pasture/hayland	3,600	$ 465,000
permanent RIM	720	$ 450,000
TOTALS	7,920	$1,200,000

III. Easement Acquisition Procedures

Once an application has been approved for funding, the local SWCD gathers the information necessary to develop an agreement between the state and the landowner to enter into a conservation easement. During this process, land ownership is verified, a legal description and map of the easement area are prepared and a conservation plan is developed. Once the agreement is signed by the landowners and the state, the easement and conservation practice funds are encumbered.

The state purchases a title insurance policy on each proposed easement area. This allows for the resolution of any title problems that the state determines may pose a threat to the legal interests the state acquires upon conveyance of the easement (i.e., the cropping and grazing rights and the requirement that the conservation practices agreed to by the landowner and the state will be established and maintained). Upon the recording of the conservation easement and the state's approval of the final title policy, and upon the landowner's certification that cropping and grazing have ceased, the state will issue the easement payment. The easement payment is based on the Assessor's Township Average Market Value (ATAMV) as provided by the Minnesota Department of Revenue.

TYPE OF LAND	PERPETUAL	LIMITED
LANDS WITH CROP HISTORY	90% of the ATAMV	75% of the ATAMV
LANDS WITHOUT CROP	60% of the ATAMV	45% of the ATAMV
Wetland W/out Crop	50% of the ATAMV	N/A

Where ATAMV is not available, the current tax year's estimated market valuation of the land only (as documented by the assessor) will be used.

The general procedure to acquire a conservation easement is illustrated in a flowchart found in **Attachment 4**. Once the easement acquisition is complete the SWCD assists the landowner to establish the conservation practices as documented in the conservation plan. Engineering assistance is provided to the SWCD and the landowner by the BWSR where needed (e.g., wetland restoration projects). Expenses incurred to install conservation practices will be reimbursed up to the statutory limits when the SWCD certifies that the practice has been adequately installed and submits an itemized expense voucher to the BWSR.

IV. Distribution of Program Funds

FY 97-98 Appropriation:

The Laws of 1996, Ch. 463, Sec. 11, subd. 3 appropriated $11.5 million to the BWSR for conservation easement acquisition and the establishment of perennial cover on easement areas. Subd. 3 (c) allows up to $1.5 million of the appropriation to be used for the acquisition of limited duration easements (20 yr) that allow cropping or grazing on lands that currently are or within the last two years have been enrolled in the federal Conservation Reserve Program(CRP).

The bonding appropriation will be broken down as follows:

A. $10,000,000 to acquire RIM and PWP conservation easements pursuant to Subdivision 3, paragraphs (a) and (b).

B. $1,500,000 for pilot CRP Land Transfer Program pursuant to Subd. 3, paragraph (c)

A. RIM Reserve and PWP
(ML 1996, Ch. 463, Sec. 11, subd. 3(a) and (b)

$10,000,000 to be allocated as follows:

Personnel:	$ 710,000	for the professional services necessary to acquire easements and provide technical assistance to SWCD's and landowners. (Engineering, Real Estate Specialist, Processing Specialist)
Acquisition & Development:	$ 9,195,000	to acquire easements and establish associated conservation practices
Other:	$ 95,000	for obtaining title insurance policies
Total for A:	$10,000,000	

The personnel, and other expenses listed above are referred to as "program obligations". Of the $10 million appropriation, approximately $9.2 million is available for RIM and PWP conservation easement acquisition and associated conservation practice establishment in FY 97-98.

***FY 97 Easement Acquisition*:**

- 50 percent of the available funds (≈$4.6 million) will be used to secure conservation easements from applications submitted for funding consideration in December 1996.

Target allocations for the 1996 sign-up will be provided to the BWSR Board Conservationists (BC's) as a financial guideline to use when determining how many applications they should recommend for funding, **Attachment 5.** A minimum of 50% of the available funds will be allocated to easement acquisition within the Minnesota River Watershed which is targeted as a high priority area by the BWSR.

FY 98 Easement Acquisition:

- the balance of the available funds (≈$4.6 million) will be allocated to applications submitted for funding in December 1997.

B. CRP Land Transfer Pilot Program
(ML 1996, Ch. 463, Sec. 11, subd. 3(c)

$1,500,000 to be allocated as follows

Personnel:	$ 150,000	for BWSR professional services including a new position to assist SWCD's with required conservation plans.
	$ 150,000	for SWCD professional services required to design and implement conservation plans.
Acquisition & Development:	$1,200,000	to acquire easements and establish associated conservation practices
Total for B:	$1,500,000	

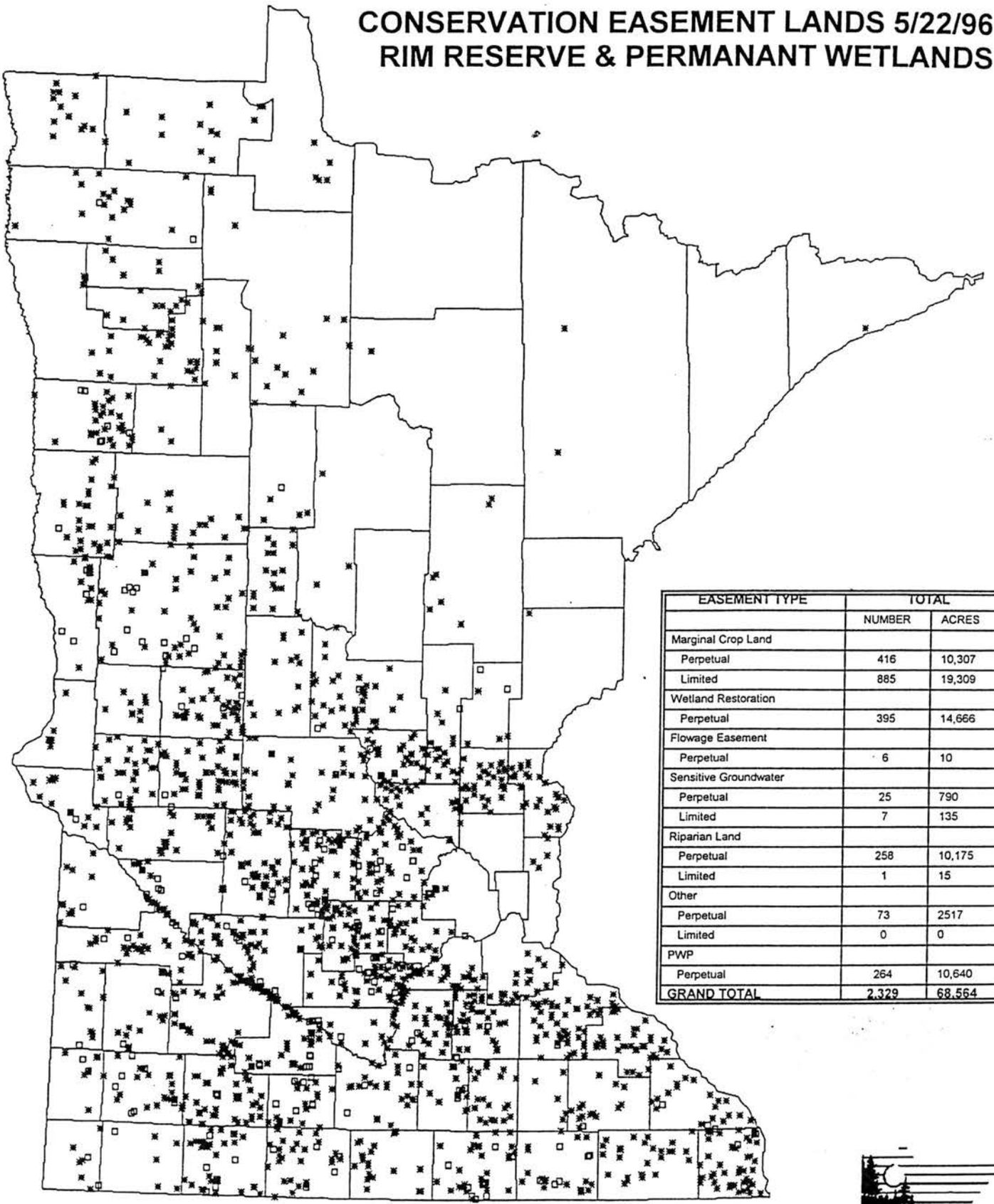
The entire $1.2 million available for easement acquisition in the CRP Land Transfer Program will be used to secure easements from applications submitted for funding consideration during FY 97.

V. Reporting Requirements

The BWSR will provide semi-annual work program update reports to the legislative commission on Minnesota resources by March 15 and September 15 of each year.

ATTACHMENT 1

CONSERVATION EASEMENT LANDS 5/22/96
RIM RESERVE & PERMANANT WETLANDS



EASEMENT TYPE	TOTAL	
	NUMBER	ACRES
Marginal Crop Land		
Perpetual	416	10,307
Limited	885	19,309
Wetland Restoration		
Perpetual	395	14,666
Flowage Easement		
Perpetual	6	10
Sensitive Groundwater		
Perpetual	25	790
Limited	7	135
Riparian Land		
Perpetual	258	10,175
Limited	1	15
Other		
Perpetual	73	2517
Limited	0	0
PWP		
Perpetual	264	10,640
GRAND TOTAL	2,329	68,564

✳ **RIM Easements**

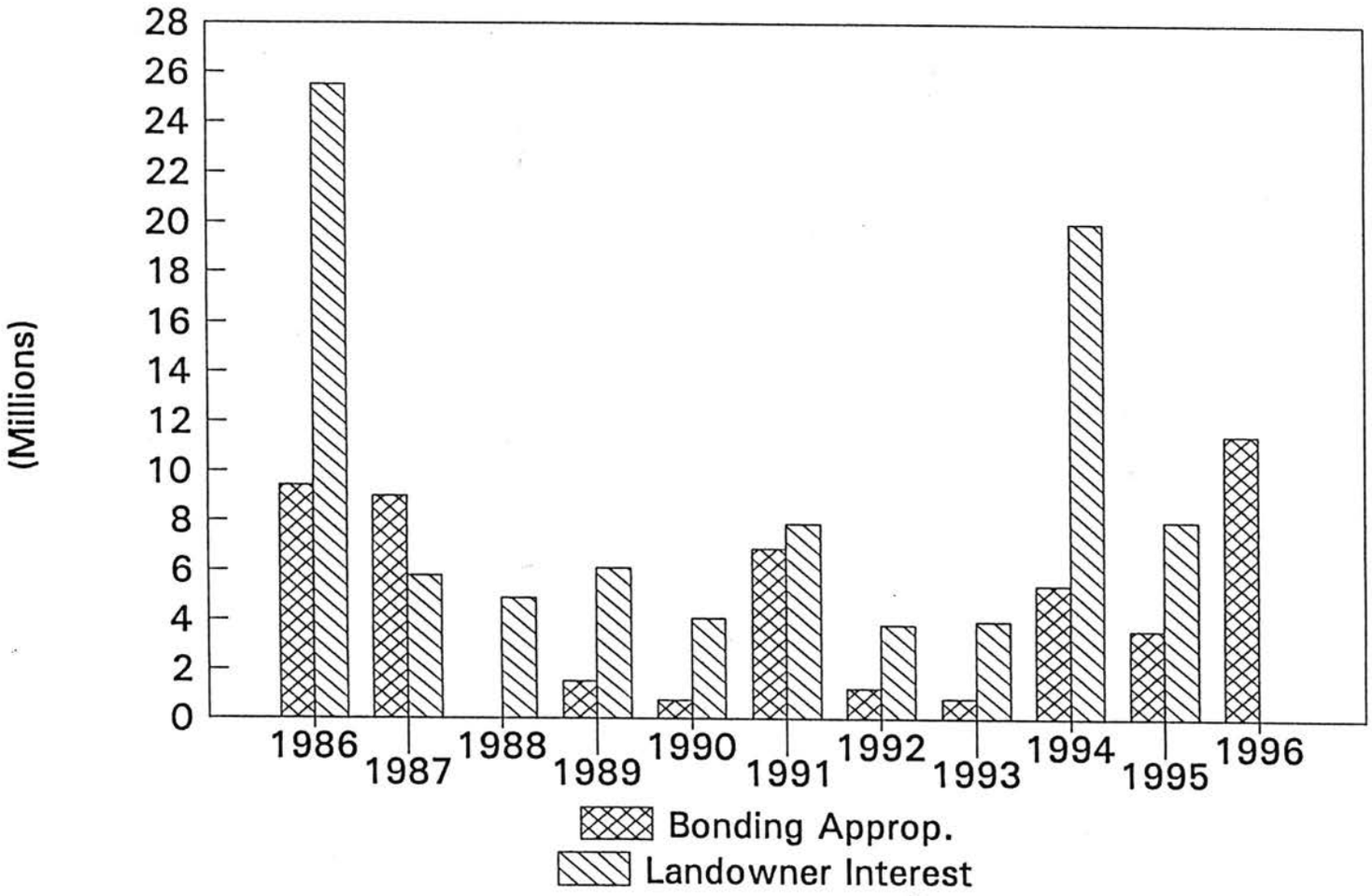
□ **PWP Easements**

Minnesota Board of Water & Soil Resources

ATTACHMENT 2

CONSERVATION EASEMENT FUNDING

Supply and Demand



ATTACHMENT # 3
STATE RESOURCE PROTECTION PRIORITY
ASSESSMENT GUIDELINES - JUNE 1996

Resource Protection Assessment Matrix

[Note: numbers in parentheses represent priority weighting factors]

	PRIORITY RATING		
PARAMETER	HIGH (5)	MED. (2)	LOW (0)
WATER QUALITY PROTECT. (5)	10	7	5
SOIL EROSION REDUCTION (3)	8	5	3
FISH & WILDLIFE HABITAT (1)	6	3	1

OVERALL PRIORITY RATING: 24- 20 = HIGH 19-14 = MEDIUM 13-0 = LOW

Assessment Guidelines: **The following considerations are meant to guide SWCD's and board conservationists (BCs) in ascertaining to what degree the resource protection priorities of the state would be met if the RIM or PWP application were approved and an easement was acquired on the area.**

1. Water Quality Protection

A. the area is located in a sensitive groundwater area, is contributing runoff to a sinkhole or is located in a designated wellhead protection area; **[high]**

B. where high rates of nutrients, sediment or pesticides are being directly conveyed from the easement area into a lake, river, stream, priority wetland, or drainage system, with little or no filtering of runoff by natural vegetation, **and**

the area is currently in row crop production or a hay/row crop rotation[1] ; or in a limited duration conservation contract at high-risk of being converted to row crop production or a hay/row crop rotation; or is an over-grazed pasture with denuded, bare soil areas, and/or excessive animal waste accumulations; **and**

B.1. a majority of the easement area meets the above definitions **[high]**
B.2. some of the easement area meets the above definitions **[medium]**
B.3. a minority of the easement area meets the above definitions **[low].**

C. where wetlands will be restored **[high]**

D. where existing wetlands have a crop history; **or** where existing wetlands are not protected by state or federal laws (e.g., WCA, DNR Protected Waters, US Clean Water Act, Swampbuster, etc.) and a substantial risk of conversion can be demonstrated (e.g., conversion by drain or fill activities is physically possible, practical, and economically feasible) **[high]**

---

[1] hay/row crop rotation means at least two years of row crops are planted within previous 5 years.

2. Soil Erosion Reduction

A. fifty percent or more of the easement area is presently in row crop production or a hay/row crop rotation; or is presently in a limited duration conservation contract and at high-risk of being converted (potential for conversion) to row crop production or a hay/row crop rotation; **and**

A.1 shows evidence of (or potential for) excessive erosion (e.g., 2XT; Land Capability Class, if known, is erosive; ephemeral erosion is occurring, or gullies are present across the majority of the easement area) **[high]**

A.2 erosion is occurring (or potentially will occur), but not excessive (e.g. >T but <2XT; little or no evidence of ephemeral or gully erosion) **[medium]**

A.3 no significant evidence of (or potential for) erosion on the easement area **[low]**

B. less than fifty percent of the easement area is presently in row crop production or a hay/row crop rotation **[low]**

3. Fish and Wildlife Habitat

A. contains threatened or endangered species habitat **[high]**

B. is located in a priority landscape area or high priority conservation site as identified by the DNR's Natural Heritage Program **[high]**

C. existing wetland habitat is not protected by state or federal laws and a substantial risk of conversion can be demonstrated **[high]**

D. wetlands will be restored on the easement area; and currently the

D.1 basin is fully drained and the majority (e.g., 75% or more) is cropped **[high]**
D.2 basin is partially drained and partially being cropped **[medium]**
D.3 drainage system is no longer functioning and the basin is not being cropped **[low]**

E. wetlands will be restored on the easement area; and

E.1 the upland to wetland ratio will be 3:1 or greater **[high]**
E.2 the upland to wetland ratio will be less than 3:1 but greater than 1:1 **[medium]**
E.3 the upland to wetland ratio will be less than 1:1 **[low]**

F. the easement area and surrounding land use:

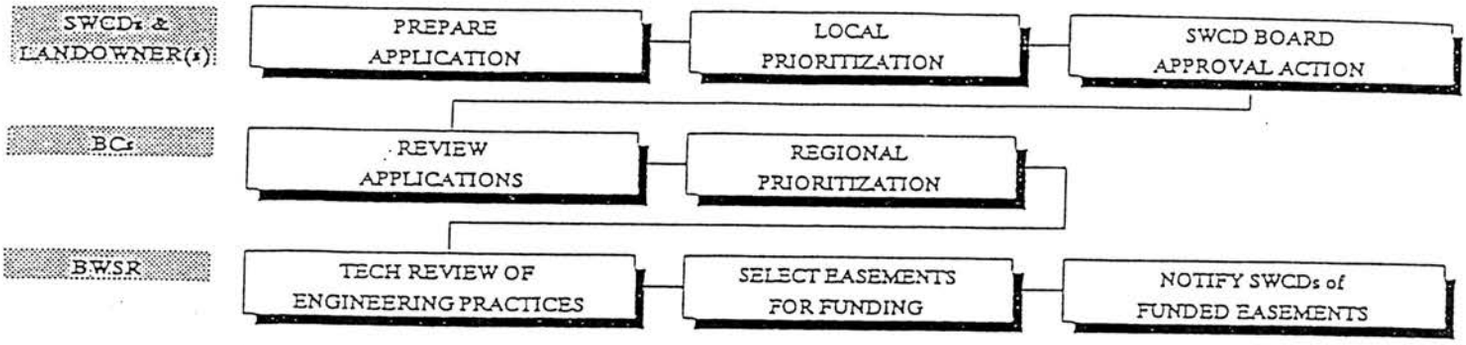
F.1 is predominantly in agricultural use and in row crops or a hay/row rotation **[high]**
F.2 has some area in agricultural use or residential use **[medium]**
F.3 is predominantly undisturbed land or recreational land **[low]**

G. the easement area will be established to:

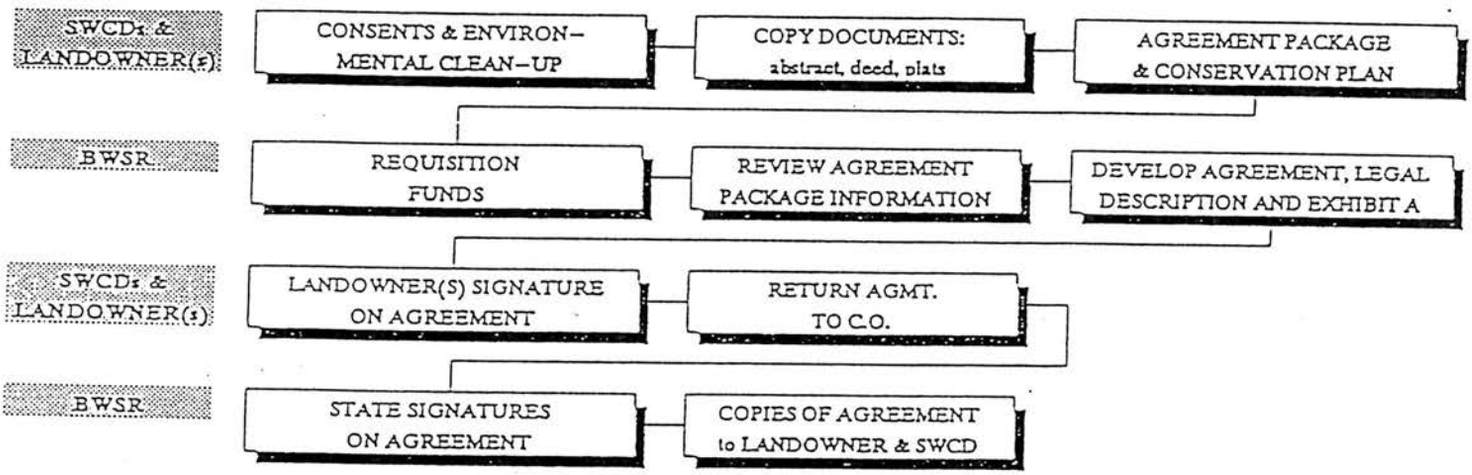
G.1 a mixture of native grass/trees; or introduced grass/native grass; or introduced grass/trees/native grass (i.e., substantial addition to biodiversity) **[high]**
G.2 a mixture of introduced grass and trees; or native grass **[medium]**
G.3 a monoculture of introduced grass or trees **[low]**

ATTACHMENT 4

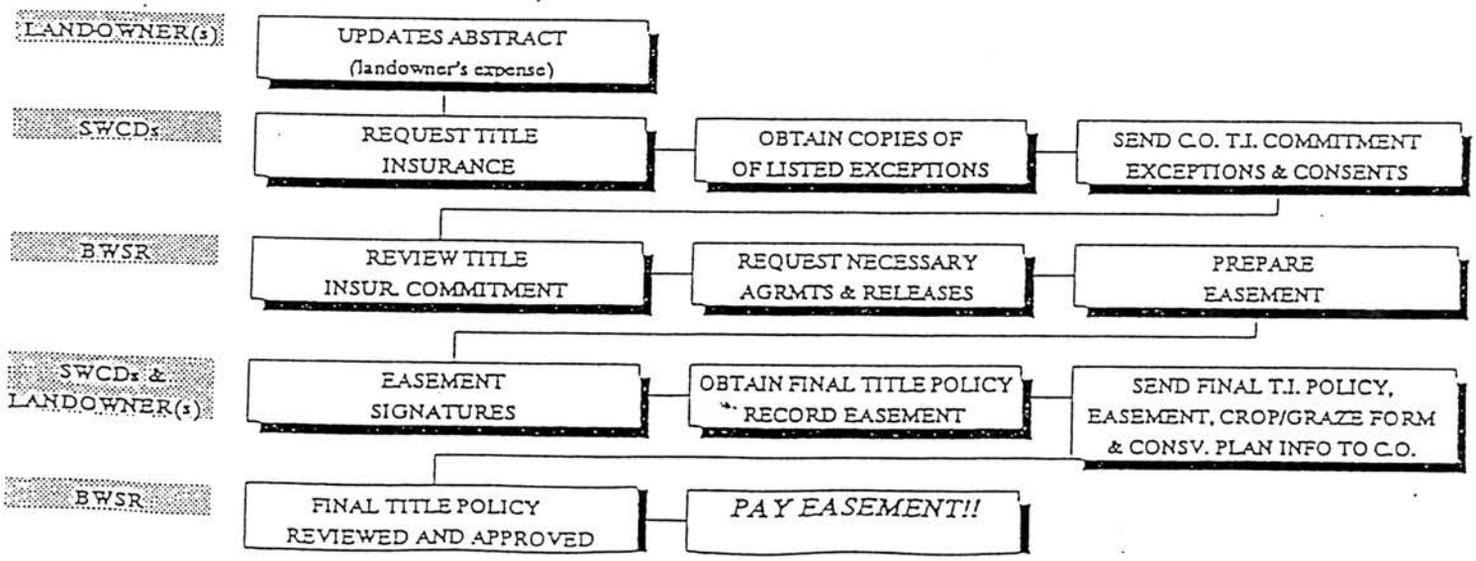
APPLICATION STAGE



AGREEMENT STAGE



EASEMENT STAGE



ATTACHMENT 5

BC	HISTORY		BASE		TOTAL	MNR %	TOTAL IN MNR
Brian Dwight	52,662.72	+	10000	=	63,000.00	0.00%	0.00
Bill Best	92,159.76	+	10000	=	102,000.00	0.00%	0.00
Mark Nelson	0.00	+	10000	=	10,000.00	0.00%	0.00
Dale Krystosek	171,153.84	+	10000	=	181,000.00	5.00%	9,050.00
Dan Steward	131,656.80	+	10000	=	141,500.00	0.00%	0.00
Keith Grow	210,650.88	+	10000	=	220,500.00	0.00%	0.00
Peter Waller	236,982.25	+	10000	=	247,000.00	36.00%	88,920.00
David Johnson	197,485.20	+	10000	=	207,500.00	40.00%	83,000.00
Barbara Ohman	26,331.36	+	10000	=	36,500.00	10.00%	3,650.00
David Sill	408,136.09	+	10000	=	418,000.00	95.00%	397,100.00
Tom Fischer	961,094.66	+	10000	=	971,000.00	65.00%	631,150.00
Tabor Hoek	631,952.66	+	10000	=	642,000.00	65.00%	417,300.00
Chris Hughes	697,781.06	+	10000	=	708,000.00	95.00%	672,600.00
Dave Peterson	368,639.05	+	10000	=	378,500.00	15.00%	56,775.00
Mary Kells	263,313.61	+	10000	=	273,000.00	0.00%	0.00
TOTALS	4,449,999.94	+	150000	=	4,599,999.00		2,359,545.00

History is based on activity in the work area for the past two fiscal years.
MNR % is the percent of the BC's work area within the Minnesota River Basin

CRP Land Transfer Program

Background

The 1996 Legislature earmarked $1,500,000 of the RIM Reserve program funding for a pilot program to acquire limited duration conservation easements on lands that are in the Conservation Reserve Program (CRP) or were in CRP within the past two years. The easements acquired under this pilot program will be unique from the traditional RIM Reserve easements in that much of the eligible land will not be marginal (CRP lands largely fall into land capability classes II and III). The CRP Land Transfer easements will:

- → allow cropping or grazing;
- → be in effect for 20 years;
- → receive ten annual payments of **5 percent** of the per acre payment rate for limited duration easements where the land will be **grazed or hayed**;
- → receive ten annual payments of **2.5 percent** of the per acre payment rate for limited duration easements where the land will be **cropped**; and
- → receive 75 percent of the cost to establish permanent conservation practices (up to a maximum of $75 pr/ac), including permanent livestock fencing and permanent livestock watering systems.

To be eligible for an easement the landowner must be willing to put 10 percent of the CRP acres (s)he wishes to enroll into a permanent RIM Reserve easement. The landowner must agree to abide by a conservation plan specifying management activities that will keep soil loss within tolerable limits for the duration of the easement. Priority will be given to landowners who meet Minnesota Department of Agriculture's (MDA) definition of a beginning farmer and to lands most likely to provide water quality protection, soil loss reduction and wildlife habitat benefits.

Selecting the Pilot Counties

The appropriation language set forth six criteria that the BWSR and MDA must consider when selecting pilot counties to participate in the program. Tim Fredbo and Marybeth Block met with Mary Hanks and Barbara Weismann of MDA on May 23. The selection criteria looked at were: 1) the number of CRP acres; 2) the number of whole-farm CRP acres; 3) the number of highly erodible CRP acres; 4) local soil conservation initiatives in place; 5) the potential for negative water quality impacts from CRP acres converted to agricultural crop production; and 6) the potential to complement public wildlife lands and other conservation lands.

Based on these criteria, the counties invited to submit a proposal to participate in the pilot program by region are:

Northwest - Becker, Clay, Kittson, Norman, East and West Polk
West Central - Douglas, Kandiyohi, East & West Ottertail, Pope and Stearns
Southwest - Lac Qui Parle, Lincoln, Lyon and Yellow Medicine
Southeast - Fillmore, Freeborn, LeSeuer, Olmsted, Rice and Steele.

The SWCD proposals to participate will be due to the BWSR by July 24, 1996. BWSR and MDA staff will be reviewing the proposals on July 30, 1996.

Carrying out the program responsibilities

The appropriation language allows 20 percent of the 1,500,000 to be earmarked for professional services. BWSR staff is pursuing an Interagency Position Agreement with NRCS to hire an Individual with strong conservation planning skills will be available to assist SWCDs with the preparation of the conservation plans. Also, an Minnesota Department of Agriculture staff member will provide assistance with the grazing/haying component of the conservation plans. SWCD staff will be the primary liaison with the landowner and will be the principal planner. Tentative plans are to reimburse SWCDs approximately $1,500 to $2,000 per conservation plan developed, in addition to the RIM Reserve services grant. Because this is a voluntary program with limited funding it is impossible to know how many plans a district will be required to complete, a reasonable guess would be between 6 and 12 plan per district, with a total of 30 to 50 plans/easements in the state. The district will be required to monitor and enforce the easement for the twenty-year duration of the easement. The payment mentioned above would be in addition to the RIM Reserve services grant, which will help defray the costs of processing the easements.

Lake Superior Association of SWCDs

Presentation to the BWSR Board

July 24, 1996

Background

The Lake Superior Association of Soil and Water Conservation Districts (LSA SWCDs) are a watershed based organization covering the entire watershed of the Lake Superior Basin in Minnesota. Members are Carlton, Cook, Lake, and North and South St. Louis, Pine, Itasca, and Aitkin SWCDs.

The Mission Statement is as follows: *To coordinate, support, and implement conservation efforts in the Lake Superior Watershed that will improve water quality by controlling soil erosion and non-point pollution. The LSA SWCDs will expand the technical and financial resources of the member districts to accomplish these tasks.*

The Problem

Lake Superior is unique among the Great Lakes. It has not experienced the same amount of development and pollution that the other four lakes have. It has received special protection status from both the Federal Government and Minnesota. Shoreline erosion threatens water quality, fish habitat, homes, and recreational facilities all along the periphery of the Lake. Existing priority issues are shoreline erosion, non-point pollution from tributaries of Lake Superior, and inadequate septic systems.

Future problems will center on inappropriate development of the north shore area. This is occurring because of the reasons outlined below:

-the north shore is beautiful and very accessible from the Twin Cities. Tourism, seasonal homes, and full time dwellings will continue to increase.

-full time population of the north shore counties is relatively small. Therefore, local government staff , including SWCDs, are severely understaffed to handle the seasonal workload of development oversight. An example is the full time population of Lake County is 10,000 people.

-Most of the development is near the shore of Lake Superior. This occurs for two reasons. One, the view from the Lake is important. Two, the Superior National Forest begins not too far inland.

-Many people have a newfound financial wealth in their land holdings. Land is being developed by these inexperienced landownerws without the best knowledge of how to protect water quality.

-Local customs of residents generally resist government intervention. The area was settled by rugged individualists.

The LSA SWCDs requests BWSR to enjoin in a joint effort to energize the SWCD effort in the Lake Superior Basin. In order to best protect the North Shore resources, now is the time to act. Two major needs can be highlighted today. One is financial support for the LSA SWCDs to hire a Water Quality Specialist. Two, is to advance a legislative initiative to accelerate existing BWSR/SWCD/County efforts.

Financial support for the LSA is needed due to the fact that the SWCDs along the north shore do not have enough staff time to assist in the LSA SWCD watershed effort. A recently developed LSA strategic plan identified staff assistance as a high priority. A staff person can pursue grants, manage the LSA SWCD organization, and provide an interface for the SWCDs with other units of government. Typically, SWCD budgets along the north shore are limited due to the lack of agricultural history and overlap with planning and zoning authorities. A state infusion of cash will create the inertia needed to make the LSA SWCDs self sustaining.

A legislative initiative is needed to assess the completed planning efforts and accelerate implementation of conservation practices. This is a very opportune time to increase program assistance in the Lake Superior watershed because of engineering assistance now available. The LSA SWCDs have the bulk of the Lakeshore Engineer's effort, SRF/SWCD group #3 Engineer and Technician, and some grant and loan funding available. An increase in grant and loan funds to targeted areas in the watershed will be important to protect Lake Superior.

The LSA SWCDs will work with the state to show that sustainable development is crucial to the economics of the Lake Superior watershed. The LSA SWCDs are the only watershed wide group that also have the capability to treat problems from the watershed perspective. We look forward to your partnership.

Presented by: Bob Pigeon, Vice-Chair LSA SWCDs

LAKE SUPERIOR POSITION STATEMENT

Lake Superior is unique among the Great Lakes. It has not experienced the same amount of development and pollution as the other four lakes have. It is a treasure worthy of the best preservation efforts of the two nations that share in its bounty. Because of its relatively pristine state, both the International Joint Commission and the Lake Superior Binational Program have recommend it be given special protective status.

In addition to the dangers of point-source pollution, Lake Superior is also subject to the more subtle environmental deterioration of non-point pollution. Shoreline and dune erosion threaten water quality, fish habitat, and homes and recreational facilities along the periphery of the lake. Urban runoff and streambank erosion carry unwanted chemicals and suspended solids into the lake and its tributaries with every rainfall. Overloaded, antiquated septic systems leach contaminants into the soil near the lake where groundwater migration and runoff carry them into the largest of the Great Lakes. We are fortunate that agricultural runoff, a very serious problem for the lakes further down the basin, is not a serious issue here.

The Soil and Water Conservation Districts and Conservation Authorities of Michigan, Minnesota, Ontario, and Wisconsin are in a unique position to deal with these threats to Lake Superior. We recommend that action plans be developed and priority in funding requests be given to efforts dealing with the following non-point pollution issues in the Lake Superior basin:

1. Shoreline erosion protection programs/projects.
2. Programs/projects to reduce streambank erosion and treat urban runoff entering Lake Superior and its tributaries.
3. Information and financial assistance programs to improve or replace inadequate septic systems that threaten the lake.

Revised Part

Endorsed....June, 1996:

Lake Superior Association of Conservation Districts,
Duluth, Minnesota
Lakehead Region Conservation Authority,
Thunder Bay, Ontario
Michigan Association of Conservation Districts,
Lake City, Michigan
Minnesota Association of Soil & Water Conservation Districts,
St. Paul, Minnesota
Sault Ste. Marie Region Conservation Authority,
Sault Ste. Marie, Ontario
Wisconsin Land Conservation Association,
Madison, Wisconsin

one page

To: Mary Jo
From: Mark N., Duluth BWSR
Please get this to Mary Jo ASAP as it pertains to board mtg material

Minnesota River Basin Joint Powers Mission Statement

The Minnesota River Basin Joint Powers counties seek to initiate and provide a coordinated effort to preserve and restore the Minnesota River.

The Minnesota River Basin Joint Powers counties realize that preservation and restoration of the Minnesota River can only be achieved by local entities - governments, agriculture, business, individual citizens - working in cooperation with each other, and with the support and assistance of all available resources at the local, state and federal level.

Specifically, the Minnesota River Basin Joint Powers counties seek to:

- Ensure the preservation and restoration of Minnesota River recreation, fish and wildlife habitat, and scenic beauty.
- Leverage existing resources at the local, state and federal level - both private and public - to preserve and restore the Minnesota River to ensure a swimmable, fishable river with recreational and economic development opportunity available to all.
- Reduce the societal costs associated with river degradation.
- Provide leadership to address the cumulative impact of many causes of river degradation over past years with a cooperative effort between all of the parties with an interest in the Minnesota River.

MINNESOTA RIVER BASIN JOINT POWERS BOARD
FACT SHEET

The Minnesota River Basin drains over 10 million acres of land within Minnesota and an additional 2 million plus acres in South Dakota and Iowa. The Minnesota River is severely polluted and, as a result, has been designated as one of the 20 most threatened rivers in the United States. The river contains high levels of sediment, bacteria, and nutrients. The total basin drains some of the most productive farmland in the United States with almost 90% of the acreage in the drainage basin used for farming. Several studies have identified significant amounts of non-point source pollution from agricultural and urban sources within the basin. Other sources of nutrients and bacteria are from wastewater treatment plants and failing septic systems in the basin.

Over the past several years, many agencies have collaborated on water quality assessments of the Minnesota River. During 1989-1993, the Minnesota Pollution Control Agency completed the Minnesota River Assessment Project (MNRAP) to determine the extent of the pollution. The Citizen Advisory Committee (CAC) was also created to make recommendations for implementing the findings in the MNRAP study. In response, the 39 counties within the Minnesota River Basin created a Joint Powers Board. On July 12, 1995 the Minnesota River Basin Joint Powers Board (MRBJPB) was created to fulfill the recommendations of the CAC while sustaining the economy of the Minnesota River Basin. The newly created MRBJPB set out to implement these recommendations to reduce point and non-point source pollution in the river.

The GOALS of the MRBJPB for 1996 are as follows:

* Restore Floodplains and Riparian Areas: This CAC recommendation focuses the MRBJPB's efforts in the summer of 1996 to assist American Rivers and others to analyze and implement restoration measures that will begin to make improvements in the health of the Minnesota River. The MRBJPB will collaborate with the Minnesota Rural Partners (MRP) to convene all interested parties to ensure that the implementation will indeed have a beneficial impact upon the water quality of the basin and that the landowners will be offered economically sound options for growing alternate crops or otherwise restore the floodplain. The MRBJPB will be involved in identifying areas in the floodplain that are amenable to planting Short Rotation Woody Crops and to coordinate with state agencies for technical assistance.

* Coordinate Education and Information Activities in the Basin: The MRBJPB will coordinate and assist in the development of a Minnesota River Basin River Conference in the summer of 1996. This conference will bring together citizen's groups, agencies, producers and others to a comprehensive educational conference focusing upon the improvement of the Minnesota River Basin and will be held on July 25 and July 26, 1996 in New Ulm, MN at the Holiday Inn.

*Determine Priority for Water Quality Project Implementation in the Basin: The Technical Advisory Committee (TAC) of the MRBJPB will solicit from their respective counties and watersheds five (5) top priority projects that, once implemented, will yield measurable improvement(s) in the water quality of the receiving stream. These projects will focus upon the 12 major watersheds within the basin and will be ranked accordingly.

* Enhance Cooperation Among Agencies and Others Working in the Basin: The CAC recommended the creation of a "Minnesota River Commission" to oversee the cleanup of the river. The MRBJPB will efficiently manage this function through its local members. The cooperation at the grass roots level, within a statutory entity such as the MRBJPB, will use the clearly stated directives established by agency and citizens groups to deal open and honestly with the farmers and other landowners in the basin to accomplish the goals of the CAC. Only County Commissioners are delegates to the MRBJPB and, as such, have broad authority within their counties to activate resources and direct the implementation of projects that have positive impacts on the community. The 1996 State Legislature passed the Minnesota River Basin Bill that authorizes the MRBJPB to coordinate the clean up activities in the Minnesota River Basin.

The focus then of the MRBJPB will be to improve the water quality of the Minnesota River Basin by implementing the CAC recommendations, function as the coordinating group within the basin overseeing the river cleanup, and collaborate with all groups and entities focusing their energies on improving the overall health of the Minnesota River. No one group contributed solely to the degradation of the Minnesota River Basin over time. It will take all of us to restore it to an acceptable level of use for this and future generations. You can contact Steve Hansen, Executive Director of the MRBJPB at 612-224-3344 with questions.

May 1996

PROJECT SUMMARY

The Minnesota River Basin drains over 10 million acres of land within Minnesota and an additional 2 million plus acres in South Dakota and Iowa. The Minnesota River is severely polluted and, as a result, has been designated as one of the ten (10) most endangered rivers in the United States. The river contains high levels of sediment, bacteria, and nutrients. The total basin drains some of the most productive farmland in the United States with almost 90% of the acreage in the drainage basin used for farming. Several studies have identified significant amounts of non-point source pollution from agricultural and urban sources within the basin.

Over the past several years, many agencies have collaborated on water quality assessments of the Minnesota River. During 1989-1993, the Minnesota Pollution Control Agency completed the Minnesota River Assessment Project (MRAP) to determine the extent of the pollution. The Citizen Advisory Committee (CAC) was also created to make recommendations for implementing the findings in the MRAP study. The Board of Water and Soil Resources (BWSR) was active in the CAC and helped to make several recommendations for implementation. In response , the 37 counties within the Minnesota River Basin created a Joint Powers Board. On July 12, 1995 the Minnesota River Basin Joint Powers Board (MRBJPB) was created to fulfill the recommendations of the CAC and to sustain the economy of rural Southern Minnesota. The newly created MRBJPB set out to implement these recommendations to reduce point and non-point source pollution in the river.

The GOALS of the MRBJPB for 1996 are as follows:

* **Restore Floodplains and Riparian Areas:** This CAC recommendation focuses the MRBJPB's efforts in the summer of 1996 to assist American Rivers and others to analyze and implement restoration measures that will begin to make improvements in the health of the Minnesota River. The MRBJPB will collaborate with the Minnesota Rural Partners (MRP) to convene all interested parties to ensure that the implementation of the restoration will indeed have a beneficial impact upon the water quality of the basin and that the landowners will be offered economically sound options for restoring the floodplain. Options may be but are not limited to, planting and harvesting Short Rotation Woody Crops such as hybrid poplar clones, by restricting certain land uses through easements or other means, or govenment purchasing of land. Many options will be discussed with the landowners and a mutually beneficial solution will be identified involving BWSR and the local units of govenment.

* **Coordinate Education and Information Activities in the Basin:** The MRBJPB will coordinate and assist in the development of a Minnesota River Basin River Conference in the summer of 1996. This conference will bring together citizen's groups, agencies, producers and others to a comprehensive educational conference focusing upon the improvement of the Minnesota River Basin and will be held on July 25 and July 26, 1996 in New Ulm, MN at the Holiday Inn.

***Determine Priority for Water Quality Project Implementation in the Basin:** The Technical Advisory Committee (TAC) of the MRBJPB will solicit from their respective counties and watersheds five (5) top priority projects that, once implemented, will yield measurable improvement(s) in the water quality of the receiving stream. These projects will focus upon the 12 major watersheds within the basin and will be ranked accordingly.

* **Enhance Cooperation Among Agencies and Others Working in the Basin:** The CAC

recommended the creation of a "Minnesota River Commission" to oversee the cleanup of the river. The MRBJPB will efficiently manage this function through its local members. The cooperation at the grass roots level, within a statutory entity such as the MRBJPB, will use the clearly stated directives established by agency and citizens groups to deal open and honestly with the farmers and other landowners in the basin to accomplish the goals of the Joint Powers. Only County Commissioners are delegates to the MRBJPB and, as such, have broad authority within their counties to activate resources and direct the implementation of projects that have positive impacts on the community. The 1996 State Legislature passed the Minnesota River Basin Bill that authorizes the MRBJPB to coordinate the clean up activities in the Minnesota River Basin through the Board of Water and Soil Resources and others. The focus then of the MRBJPB will be to improve the water quality of the Minnesota River Basin by implementing the CAC recommendations, function as the coordinating group within the basin overseeing the river cleanup, and collaborate with all groups and entities focusing their energies on improving the overall health of the Minnesota River. The MRBJPB then, respectfully requests that the Board of Water and Soil Resources review and approve the attached Work Plan to allow the MRBJPB to receive the $125,000.00 earmarked for the MRBJPB by the State Legislature and passed by the Governor of Minnesota by affixing his signature on April 2, 1996.

DESCRIPTION OF PROJECT AREA

Location	**Minnesota River Basin**
Watershed Size(acres):	**10,688,000**
Stream Length	**335 Miles**
Downstream Water	**Mississippi River**

Other Information: The Minnesota River Basin includes 1,208 minor watersheds in 12 major watersheds. A total of 1,113 are in Minnesota, 18 in Iowa, and 77 in South Dakota. Over 89% or 9,527,877 acres are actively farmed in the basin.

PROJECT BUDGET

The following information describes the MRBJPB's anticipated budget for administrative needs. It must be noted from the outset that several sponsoring organizations have pledged funds to assist the MRBJPB in implementing plans as identified throughout the life of the organization. Each county in the Minnesota River Basin has agreed by signing the Joint Powers Agreement, to provide assistance carrying out the work plan as accepted by the Board. The counties will provide "In-Kind" matching efforts to assist the MRBJPB in realizing its goals. The "In-Kind" match to be provided by the counties will be in the donation of time of County Commissioners and staff, travel expenses to and from meetings, consulting with various groups during project implementation, assisting in the grant writing process, providing supervision for educational groups and efforts in the basin, determining if land acquisitions are feasible, training and leadership development, and, in general, to assist in implementing the work plan. Discussions with BWSR Managers has identified the types of "In-Kind" matches that are available to offset the $75,000.00 as stated in the Minnesota River Basin Bill and the additional $20,000 as identified in the first BWSR grant of $20,000.

PROJECT WORK PLAN

Goal #1: Restore Floodplains and Riparian Areas. This CAC recommendation will focus the MRBJPB's efforts beginning in August, 1996 to assist American Rivers, the Minnesota Pollution Control Agency, Department of Natural Resources, and others to analyze and identify the floodplain management and restoration measures that will begin to make improvements in the health of the Minnesota River. The MRBJPB will collaborate with the Minnesota Rural Partners (MRP) to convene all interested parties to ensure that the implementation of the restoration will indeed have a beneficial impact upon the water quality of the basin and that the landowners will be offered economically sound options for growing alternate crops on the floodplain.

Riparian and Floodplain Restoration- Project Budget

Staff Resources: Stephen C. Hansen
Time Commitment: Part-time for 6 months

Staff Expenditure:	$35.00 per hour X 120 hours	$4,200.00
Equipment Cost:	Fax, Copier, and Printing	500.00
Telephone Cost:	$80.00 per month @ 6 months	480.00
Mileage Cost:	2,000 miles/month X 6 months @ .30/mi	1,800.00
		$6,980.00

Goal #2: Coordinate Education and Information Activities in the Basin: The MRBJPB will coordinate and assist in the development of a Minnesota River Basin River Conference in the summer of 1996. This conference will bring together as many of the citizen's groups, agencies, producer groups and others to a focused information exchange of river issues.

MINNESOTA RIVER BASIN SUMMER BASIN-WIDE CONFERENCE

Staff Resources: Stephen C. Hansen
Time Commitment: Part-time for 3 months

Staff Expenditure:	$35.00 per hour X 60 hours	$2,100.00
Equipment Cost:	Fax, Copier, and Printing	1,500.00
Telephone Cost:	$80.00 per month @ 3 months	240.00
Mileage Cost:	2,000 miles/month X 3 months @ .30/mi.	1,800.00
Mailings:	3 Mailings @ $.274 each X 10,000 pieces	8,220.00
		$13,860.00

Goal #3: Determine Priority for Water Quality Project Implementation in the Basin: The Technical Advisory Committee (TAC) of the MRBJPB will solicit from their respective counties and watersheds five (5) top priority projects that, once implemented, will yield measurable improvement(s) in the water quality of the receiving stream. These projects will focus upon the 12 major watersheds of the basin and will be ranked according to their ability to improve water quality and their fundability.

WATER QUALITY PROJECT PRIORITIZATION
Staff Resources: Stephen C. Hansen
Time Commitment: Part-time for 3 months

Staff Expenditure:	$35.00 per hour X 60 hours	$2,100.00
Equipment Cost:	Fax, Copier, and Printing	1,500.00
Telephone Cost:	$80.00 per month @ 3 months	240.00
Mileage Cost:	2,000 miles/month X 3 months @ .30/mi.	1,800.00
		$5,640.00

Goal #4: Enhance Cooperation Among Agencies and Others Working in the Basin: The CAC recommended the creation of a lead group to oversee the cleanup of the river. The MRBJPB can perform this function better than any other group since it has local input, has a statutory basis for existing, has a clear set of directives established by agency and citizens groups, and has the ability to deal open and honestly with the farmers and other landowners in the basin. Only County Commissioners can be delegates to the MRBJPB and, as such, have broad authority within their counties to activate resources and direct the implementation of projects that will have a positive impact on the community.

LOCAL WATER PLAN AND COORDINATION

The proposed project area is the Minnesota River Basin in its entirety. The MRBJPB will use the Local Water Plans, Clean Water Partnerships, and any other local/state/landowner relationships that add value to the water quality of the basin. In short, all projects will be implemented per the suggestions stated in approved Local Water Plans as much as feasible and are to be consistent with generally accepted practices. The Minnesota Board of Water and Soil Resources (BWSR) is a co-sponsor of the MRBJPB as identified by the grant of $125,000 from the State Legislature and will be updated on a monthly basis on the accumulated totals of local match monies as stated in the Minnesota River Basin Bill. The MRBJPB will coordinate with BWSR in the implementation of projects to ensure their consistency with Local Water Plans and other planning documents and tools.

SUMMARY

The Minnesota River Basin Joint Powers Board is created to direct activities to abate, control or otherwise prevent nonpoint source pollution from reaching the Minnesota River Basin. The vast majority of the land within the basin is agricultural in nature and, as such, represents a potential for nonpoint source runoff to enter into the Minnesota River from farm land (9,527,877 acres out of 10,688,000 total acres in the Minnesota portion of the basin). The technical projects that will be implemented through the MRBJPB will produce positive impacts upon the riverine system throughout the basin. The MRBJPB will prioritize and assist in the implementation of water quality projects throughout the basin to improve the water quality at the confluence of the Mississippi River in St. Paul, Minnesota.

The Minnesota River Basin Joint Powers Board will also direct and manage activities to prevent point source and urban sources of pollution from reaching the Minnesota River by collaborating with cities and towns, industrial dischargers to the basin, and all agencies and groups working to restore the water quality of the river from urban, industrial, and other sources.
It is very difficult to establish a "before" and "after" picture of water particular basin. In its 1996 Legislative Update the Minnesota Pollution Control Agency stated that Minnesota has one of the most inadequate systems for assessing ambient water quality in the nation. Only about 4% of the 92,000 river miles in the state are being monitored for their overall water quality and the MPCA has determined that ambient monitoring is essential to measure and assess water-quality trends in a given stream system. The MPCA is proposing to add 10 monitoring stations on the Minnesota River to determine flows, water chemistry, and relationships of pollutant loadings with factors such as soil types, climate, and land-use patterns. All of this should yield some baseline data to determine if BMPs and other land-use changes positively impact the water quality of the river.

The University of Minnesota, under contract with the Department of Agriculture, is also researching the question of where the sediment loadings come from in the basin that are eventually deposited in the tributaries and main stem of the Minnesota River. Aglommed onto the sediment are significant amounts of nutrients contributing to excessive algae growth in warm weather and other nuisance vegetative growth along and within the river. The University is requesting more funding to determine the source of the sediment loadings from a specific watershed, the Blue Earth Watershed, and will research how the heterogeneous agro-ecoregions within then basin react differently to storm induced events.

Other groups too numerous to mention are also working on niche problems within the basin targeting what they consider are the greatest needs in their particular locale. Essentially, all groups are working to improve upon the water quality of the Minnesota River from a stream-segmented but not a basin approach. It is obvious that no one group can improve upon the water quality of the Minnesota River by administering the traditional top-down agency response to a mosaic of water quality impacting land uses. It is also obvious and recounted in the research, that nonpoint source pollution is not significantly reduced by the implementation of BMP's on agricultural and urban lands if there is not a large percentage of participation of the landowners within the basin. Taking into account these two factors: **approach and participation**, it becomes clear that the partnership developed among the MRBJPB and BWSR, the Department of Agriculture, MPCA, DNR, and others, must align the goals of improved water quality within a realistic and potentially successful framework of local leadership and high participation in the implementation of agreed upon water quality improvement projects.

Reductions in total phosphorus reductions of 40% can only be realized by coordinating the land-use improvement practices and other potential sources of pollution upstream. The literature clearly states that a minimum participation rate of 75% within a given watershed is necessary for improved water quality (Wolf, Aaron T., 1995. Water Resources Bulletin, American Water Resources Association. Pages 1009-1022.). The local ownership of the problem that nonpoint source, both urban and rural, pollution contributes to the degradation of the total riverine system

must lead citizens to greater local support of projects that will improve the water quality of the watershed and hence the main stem. The Minnesota River Basin Joint Powers Board and affiliates is the best administrative model for accomplishing these goals since it can manage:

1. Critical levels of local participation to be achieved in each watershed, county, and throughout the basin in an organized and efficient manner;

2. "Bottom-Up" project identification and implementation approach using agency's expertise when needed; and

3. A total basin-wide approach that, as much as possible, focuses upon the implementation of practices that, when taken ***in total***, represent the greatest gain for the downstream users of the river.

Respectfully Submitted:

Stephen C. Hansen
Executive Director

Minnesota River Basin
Joint Powers Board

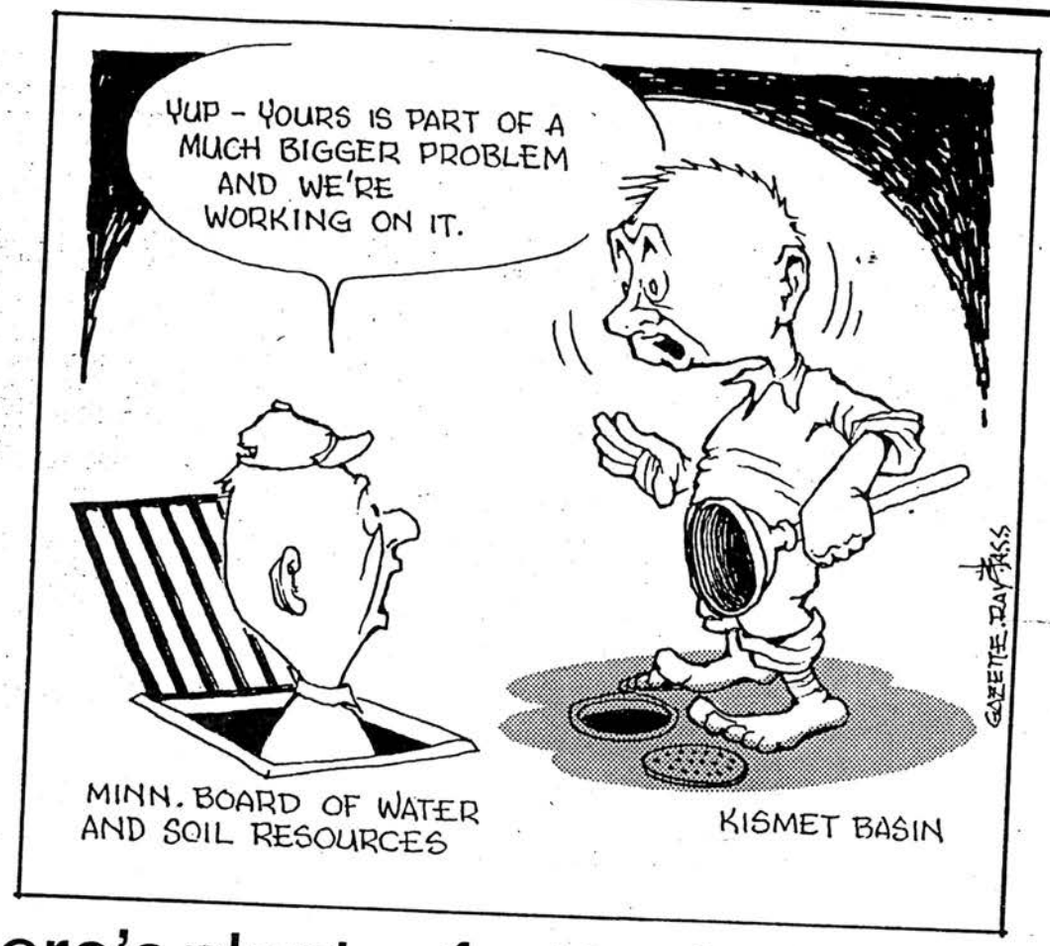
TOTAL EXPENSE ALLOCATIONS AND MATCH
November, '95 - June 30, '97

EXPENSES	DIRECT CASH	IN-KIND MATCH	CASH MATCH	TOTAL
Personnel:				
Administrative	175,950			175,950
Technical		35,200		35,200
Delegate Expense		45,800		45,800
Rent	6,600			6,600
Operation & Supplies	34,300	6,000		40,300
Capital/Equipment	3,900			3,900
Travel/Food/Motel	6,300	4,000		10,300
Meetings	22,650	2,000		24,650
Basin Conference	12,000	2,000		14,000
Dedicated: Fund	0			0
Project *	12,000			12,000
Program	0			0
Other (List)	0			0
Non-Dedicated (List)	0			0
Carry-Over After June 30, 1997	716			716
TOTALS	**274,416**	**95,000**		**369,416**

* Each of the 12 major watersheds will receive $1,000 to act as seed money for implementing top priority projects throughout each major watershed.

TOTAL REVENUE SOURCES AND MATCH
November, '95 - June 30, '97

REVENUE	SOURCE Ending Date	GRANT AMOUNT	IN-KIND MATCH	CASH MATCH	OTHER	TOTAL
	BWSR-1 FY 97	20,000	20,000	0		40,000
	BWSR-2 FY 97	125,000	75,000	0		200,000
	MET COUNCIL	98,420	0	0		98,420
	MDA	4,996	0	0		4,996
	OEA	10,000	0	0		10,000
	McKnight	16,000	0	0		16,000
TOTALS		**274,416**	**95,000**	**0**		**369,416**



There's plenty of water for everyone

"Put your back into it!" yelled my brother from the back of the canoe, half-laughing and half-annoyed at the predicament in which we found ourselves. The light rain had now turned into a downpour and we were still a long way off from our destination: a seldom-used cabin tucked away on an island where he thought we could find shelter to wait out the storm.

My arms and shoulders were aching from not having paddled yet this season, but the rain that began to soak through my jeans and sweatshirt prompted me to forget about the pain and stroke even harder. Meanwhile, my girlfriend, who was duffing in the middle of the canoe, was complaining about how her hair was being transformed into a sticky mess.

Last Sunday's Twin Cities weather forecast had correctly called for scattered thunderstorms, but we decided to risk that conditions in northwestern Wisconsin would be more favorable. A friend of my brother's was going to be out of town for the summer, and he generously offered us the use of his canoe until he returned. All we had to do was drive up to Spooner, Wis., and pick it



KEVIN OLSON

chance to see one of the bears that the campground owner had warned us about, should one decide to wander down to the shore.

The only sounds were of frogs chirping, an occasional loon beckoning its mate to its side, the light rain that fell and the sound the canoe made as it cut through the water. I mentioned to the canoe's other occupants how this scene reminded me of the trip I took to the

canoeists paddle around without wakes from passing boats capsizing them, the noise polluting an otherwise serene environment and the stench of burnt fuel overpowering them. There's plenty water for everyone.

I used to think that powerboating was the most exciting thing to do in the summer. Our 15-foot runabout moved right along with a 70-horse Evinrude providing the power, and many sunny afternoons of waterskiing. I'd jump at the chance for an outing on a relative's yacht or a day of jet skiing. I still enjoy those things once or twice a summer, just for the novelty of it.

As a kid, canoeing was about the most boring thing I could do on the water. I yearned to be on board the speed boats that flew past us. But my idea of fun has come full circle, and now I appreciate the advantages of canoeing. I can't think of anything more relaxing. And you get some exercise at the same time.

We made it to the island and the screened-in porch of the "mad trapper's cabin," as my brother creatively dubbed it. My sweatshirt was heavy with water and my pants were drenched. The rain lasted only

OVERVIEW
OF
BELTRAMI COUNTY
COMPREHENSIVE LOCAL WATER PLAN

County Description

Beltrami County is located in North Central Minnesota. Major land uses of the County are: forested 46%, non-forested wetland 21%, open water 18%, and cultivated 7%. The Southern half of the County contains the majority of the open water area or lakes which has lent itself to major development pressure particularly in the last two decades. The Northeastern portion of the County which is comprised of large masses of bog area has very little development other than some rice paddy activity. The Northwestern portion of the County is predominately a mixture of forested and open fields where there have been major attempts to drain and bring the land into agricultural production. Approximately 60% of the land in Beltrami County is in public ownership with 30% of the total land mass being owned by the State. The land use, coupled with the ownership, lends itself to many recreational opportunities within the County and that, in conjunction with forestry related activities, makes up the economic base for Beltrami County.

Beltrami County is situated in the upper reaches of two major river systems; the most popular being the Mississippi River. The Southern one-third of Beltrami County is contained in the Upper Mississippi Watershed. Over two-thirds of the population of Beltrami County live within this watershed area (25,000 people) and has been a major emphasis area for past Water Plan implementation activities. The other major river system that Beltrami County contributes to is the Red River of the North. Watersheds within Beltrami County contributing to this system are the Thief River, Red Lake River, Upper and Lower Red Lake, and the Clearwater River. The land uses within these watersheds is mostly forestry related activity with some agricultural activity in the Thief River Watershed where surface drainage activities have been installed.

Staff Review

The Plan Update has done an excellent job of assessing, by watershed, the water quality concerns and the activities that may impact it. The watersheds that exist in Beltrami County range from inconsequential land use (limited agricultural and recreational) to very intense land use (shoreland development). Because of this, individual watershed based implementation plans were developed. For watersheds experiencing major development identified issues are: **surface water**; shoreland development, recreational water use, urban stormwater runoff. **groundwater**; old town dumps, septage disposal, wellhead protection. For watersheds experiencing less intense land use identified issues are: **surface water**; timber harvesting, agricultural activities, and road construction. **groundwater**; old town dumps, septage disposal, and natural sediment sources.

When developing strategies to address these issues, the County Task Force did so with these guiding principles:

> Strategies should be cost effective and practical.
>
> Strategies will be developed and implemented with a wide variety of organizations and individuals, as well as other counties and tribal governments, where appropriate.
>
> Emphasis will be placed on strategies that use information sharing, increased understanding, incentives and voluntary measures.
>
> There will be a minimization of the need for new regulations.
>
> Strategies will be designed with sensitivity to the challenges faced by a variety of economic activities in the county that could be affected by the plan.

The updated Comprehensive Local Water Plan for Beltrami County was submitted for final review on May 24. 1996. Staff will continue to assist the County in its updating process by providing final review comments and coordinating any needed resolution to concerns identified by others reviewing this plan.

8/28/96

Minnesota Board of Water & Soil Resources

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DATE: August 19, 1996

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

FROM: Ronald D. Hamack, Executive Director

SUBJECT: August 28, 1996 BWSR Meeting

The Board of Water and Soil Resources (BWSR) will meet on Wednesday, August 28, 1996, beginning at 9:00 a.m. The meeting will be held in the BWSR conference room at One West Water Street, St. Paul. The following is some background information regarding the agenda items:

Consent Agenda

1. The Riley-Purgatory-Bluff Creek Watershed District Watershed Management Plan is recommended for approval by the BWSR Metropolitan Water Planning Subcommittee and BWSR staff.

2. County Water Plan Extensions - The Counties of Blue Earth, Clearwater and Rock have submitted resolutions requesting that the Board extend the effective date of their existing water plans pursuant to M.S. 103B.311, Subd. 4, which allows the Board to grant up to a two-year extension of an existing local water plan. Each of the requests for extension have been recommended for Board approval by the respective board conservationist.

   In the case of Blue Earth and Rock Counties, lead staff for the water plan had resigned in early 1996 and new coordinators have just recently been appointed. Due to these staff changes the counties lost valuable time in 1996 and are requesting the Board to grant them an additional 12-month extension making the new effective date for their current plans December 31, 1997. DECISION

   In the case of Clearwater County, they are requesting an additional 6-month extension which would make the new effective date of their plan December 31, 1996. With conclusion to the wetlands debate this past spring, the county staff have been able to shift their focus back to the update of the county's local water plan. The county is requesting the additional time to fully utilize the water planning task force as a mechanism to establish the counties priroity objectives for the next five years and to develop a measureable implementation program. DECISION

New Business

1. Declaration of Failure to Implement a Plan by Brown's Creek WMO - In accordance with M.S. 103B.231, Subd. 3(b), the Brown's Creek WMO has failed to implement its plan, through failure to update its Joint Powers Agreement to provide the powers to do so. DECISION

2. Complaint of Failure to Implement by Sunrise River WMO - In accordance with Minnesota Rules Chapter 8410.0180, a resolution is needed by the Board to establish just cause for the determination of failure to implement by the Sunrise River WMO, and authorization for staff to undertake the investigation of the issues relating to the alleged failure to implement. DECISION

3. FY97 Non-Point Engineering Assistance Grant - This is a non-competitive annual grant allocated to the eleven SWCD Joint Powers Boards (JPBs). It is to be used by each JPB to employ an engineer and technician to assist landowners to implement erosion control and water quality improvement practices. The first and second appropriations in Fys 95 and 96 were allocated by dividing them equally between the eleven JPBs. Starting dates of engineer and technician employment have varied greatly statewide resulting in a wide range of remaining previous grant funds in these JPBs. The proposed FY97 Grant is formulated to reflect the amount of additional funds JPBs will need in FY97 based on employment costs to date. This allocation procedure also allows for a challenge grant opportunity in the fall of 1996 to provide additional needed engineering assistance. DECISION

4. CRP - RIM Reserve Limited-Use Easement Program - The Board received nine requests from the 22 SWCDs invited to submit proposals to be considered for one of the five pilot counties to administer the CRP to RIM Reserve pilot program. Staff will present their recommendation of SWCDs to participate in this pilot program. DECISION

5. Sinkhole Protection Project - INFORMATION

6. LGU Annual Reporting System (LARS) - This system has been designed by BWSR in cooperation with the Pollution Control Agency and the Department of Agriculture. LARS is intended to make local government reporting of program accomplishments both easier and more useful. INFORMATION

7. Legislative Initiatives - DISCUSSION

If you have additional agenda items or require additional information, please feel free to give me a call. Travel safely, I look forward to seeing you next week!

BOARD OF WATER AND SOIL RESOURCES
CONFERENCE ROOM, ONE WEST WATER STREET
ST. PAUL, MINNESOTA 55107
AUGUST 28, 1996

AGENDA

9:00 a.m. **Call Meeting to Order**

Adopt Agenda

Approval of Minutes of July 24, 1996

Reports
- Chair - Barbara Cobb
- Executive Director - Ron Harnack
- Dispute Resolution Committee - Kathleen Roer
- Education & Public Relations Committee - Tim Hvidsten
- Feedlot Advisory Committee - Jim Rossman
- Cost-Share/Soil Conservation Committee - Dwain Otte
- Wetlands Committee - Darrell Bruggman
- Administrative Advisory Committee - Barbara Cobb
- Financial Oversight Committee - Ginny Imholte

Agency Reports (priority issues both policy and fiscal for coming year)
- Kim Benson-Johnson, Department of Health
- Wayne Edgerton, Department of Natural Resources
- Paul Burns, Department of Agriculture
- Jim Anderson, Minnesota Extension Service
- Marge Velky, Pollution Control Agency

Consent Agenda
1. Local Water Plan Approval - Riley-Purgatory-Bluff Creek Watershed District Watershed Management Plan - Jim Haertel
2. County Water Plan Extensions (Blue Earth, Clearwater, and Rock Counties) - Doug Thomas
3. Beltrami County Local Water Plan Approval - Darrell Bruggman

New Business
1. Declaration of Failure to Implement a Plan by Brown's Creek WMO - DECISION - Barbara Ohman
2. Complaint of Failure to Implement by Sunrise River WMO - DECISION - Matt Moore
3. FY97 Non-Point Engineering Assistance Grant - DECISION - Wayne Zellmer

4. CRP - RIM Reserve Limited-Use Easement Program - DECISION - Marybeth Block
5. Sinkhole Protection Project - INFORMATION - Eric Mohring
6. LGU Annual Reporting System (LARS) - INFORMATION - Wayne Zellmer

Noon — Break for Lunch

1:00 p.m.
7. Legislative Initiatives - DISCUSSION - Ron Harnack
8. Role of Board Members in Legislative Process - DISCUSSION

Advisory Comments
- Bill Hunt, NRCS
- Jim Schafer, MASWCD
- Ray Bohn, MAWD
- Rick Reimer, MACDE
- Franklin Denn, MAT

Board Issues
- Next Board Meeting, September 25 in St. Paul

2:00 p.m. — Adjourn

DRAFT DRAFT DRAFT

BOARD OF WATER AND SOIL RESOURCES
HOLIDAY INN
2101 SOUTH BROADWAY
NEW ULM, MINNESOTA 56073
JULY 24, 1996

BOARD MEMBERS PRESENT: Barbara Cobb, Jim Rossman, Barb Uppgaard, Ted Lovdahl, LeRoy Stensgaard, Glenn Annexstad, Marvell Tripp, Ginny Imholte, Tim Hvidsten, Dwain Otte,

BOARD MEMBERS ABSENT: Kathleen Roer and Darrell Bruggman.

AGENCY MEMBERS PRESENT:
Paul Burns, Department of Agriculture
Wayne Edgerton, Department of Natural Resources
Art Persons, Department of Health

AGENCY MEMBERS ABSENT:
Marge Kelly, Pollution Control Agency
Jim Anderson, Minnesota Extension Service

STAFF PRESENT: Ron Harnack, Jeff Nielsen, Tom Fischer, Carla Swanson, Jeff Hedtke, Chris Hughes, Bill Best, Barb Liukkonen, Tim Fredbo, Mark Nelson, Wayne Zellmer, and Mary Jo Anderson.

OTHERS PRESENT:
Jim Schafer, MASWCD

Chair Cobb called the meeting to order at 9:05 a.m.

** 96-49 **Adopt Agenda** - Moved by Marv Tripp seconded by Ginny Imholte, to approve the agenda as presented. Motion passed on a voice vote.

Minutes of June 26, 1996 - Glenn Annexstad stated that a correction needs to be made on page three, referring to the Consent Agenda #1, the third sentence delete "rules". Barb Uppgaard stated that on page five, third line "their" should replace "there." Barb also stated that the minutes need to be brief, simply state the business and action taken, leave out the detail, as discussed at the board retreat. Moved by Bard Uppgaard, seconded by Marv Tripp, to adopt minutes of June 26, 1996, as corrected. Motion passed on a voice vote.

** 96-50

Reports
Chair's Report - Barb Cobb attended the MASWCD Area II meeting in Little Falls.

Executive Director's Report - Ron Harnack spent two days in Brainerd, meeting with staff and local units of government in that area of the state; discussion on RIM issues and reorganization. Staff are working on legislative initiatives. Ron reported that Susan Tsakakis is now working one a day week preparing the budgeting report.

Feedlot Advisory Committee - Jim Rossman reported on an article in the "PCA Update" referring to permit by watershed. More information and background is desired.

Cost-Share/Soil Conservation Committee - Dwain Otte reported on the new cost-share process.

Financial Oversight Committee - Ginny Imholte reported that the committee has met, developing better appreciation, understanding and expectation of audits, staff of the auditor's office have been very informative. A draft will be distributed to members soon.

Chair Cobb attended the Local Water Planning Conference, an excellent conference. The Minnesota River Basin Conference is the end of this week; this has been a great opportunity to meet in New Ulm this month to attend these conferences.

Agency Reports
Department of Health: Art Persons stated that he works with the Wellhead Protection Program and is attending the Local Water Planning Conference. Wellhead protection is key to protection of public water supplies and local water plans can play an important role in helping delineate areas and target programs and resources to these areas.

Department of Agriculture: Paul Burns reported that MDA is currently holding statewide workshops for planning and zoning animal agriculture. This will help local governments more effectively address the highly emotional and controversial sentiments relating to feedlots in some counties.

Department of Natural Resources: Wayne Edgerton reported a generic EIS relating to impoundments in the Red River Valley is ready for public review. Ron Harnack stated that the EIS has not been without controversy. There is substantial debate over the EIS, particularly between the state and federal and local governments. There may be an opportunity for the BWSR to facilitate some further discussion between the local governments and the state and federal agencies in an attempt to bring more closure to some the hotly debated issues. Ron thought that the BWSR has some clear statutory authority to provide a forum and to facilitate discussions towards resolution of issues. Chair Cobb stated that board policy should be set on issues such as this; guidelines. Chair Cobb will work with Kathy Roer and Matt Seltzer regarding a workshop on dealing with disputing and mediation issues. Tim Hvidsten is interested in working on this. Wayne Edgerton stated that DNR staff could update the board on this program at an upcoming meeting.

Wayne reported that DNR is moving ahead on ecosystem based management on the community aspect; using the Whitewater Project as a model, addressing resource needs at the local level.

Consent Agenda

** 96-51 Local Water Plan Approvals - Barb Uppgaard reported that the Kittson County and Mille Lacs County Comprehensive Local Water Plans were reviewed by the committee. Moved by Barb Uppgaard, seconded by Ted Lovdahl, to approve the Kittson County and Mille Lacs County Comprehensive Local Water Plans. Motion passed on a voice vote.

** 96-52 Kanabec County Water Plan Extension - Ron Harnack reported that this is part of the Snake River project, more time needed to prepare a good plan; consistent with board criteria. Moved by Marv Tripp, seconded by Glenn Annexstad to approve the Kanabec County water plan extension. Motion passed on a voice vote.

** 96-53 **Minnesota River Basin Joint Powers Board Work Plan and Grant** - Jeff Nielsen introduced Ken Albrecht, chair; and Steve Hansen, executive director, of the Minnesota River Basin Joint Powers Board. Ken Albrecht and Steve Hansen reported that the Minnesota River Basin Joint Powers Board has been in existence since July 12, 1995; and explained the work plan and addressed initiatives to clean up the Minnesota River. Board members were invited to attend the first annual Minnesota River Basin conference, July 25-26. Ron Harnack was thanked for his efforts and support of the Minnesota River Basin Joint Powers Board. Moved by LeRoy Stensgaard, seconded by Dwain Otte, to approve the Minnesota River Joint Powers Board work plan. Motion passed on a voice vote.

Chair Cobb called for a break in the meeting at 10:30 a.m. The meeting reconvened at 10:45 a.m.

Minnesota River Basin - Chris Hughes introduced Hugh Valiant, Department of Natural Resources/Fisheries from Waterville. Mr. Valiant presented findings of pollutants in the Minnesota River and how wetland restoration and water detention can reduce erosion to rivers.

FY97 Special Minnesota River Basin Grants Allocation - Wayne Zellmer presented the annual grant to be used in the Minnesota River for the accelerated application of water quality improvement practices. Wayne gave a brief overview of the applications and recommendations for funding.

** 96-54 Moved by Dwain Otte, seconded by Glenn Annexstad, to accept the staff funding recommendations and approve the FY97 Special Minnesota River Basin State Cost-Share Grant Allocations of $585,500. Motion passed on a voice vote.

Video, "Keeping Our Shores" Best Management Practices - Barb Liukkonen presented the video and explained water resource protection projects on shoreland. Barb also announced that she will be leaving BWSR effective October 1, and will be taking a new position with the Minnesota Extension Service.

Chair adjourned the meeting for lunch at 12:00 p.m. The meeting reconvened at 1:00 p.m.

Lake Superior Association of Soil and Water Conservation Districts (SWCDs) - Mark Nelson introduced Bob Pigeon, vice-president of the Lakes Association of SWCDs. Bob Pigeon explained that the Lake Superior Association of SWCDs is a watershed based organization covering the entire watershed of the Lake Superior Basin in Minnesota. Members include Carlton, Cook, Lake, Pine, Itasca, Aitkin, and North and South St. Louis SWCDs. Jim Erckel, Minnesota Nature Conservancy, explained biodiversity protection. Discussion followed. Ron Harnack said that this is for information, and possibly a legislative initiative to protect and enhance a unique resource in Minnesota.

Conservation Easement Program 1997-98 Work Plan - Tim Fredbo presented the work plan, which is two separate program areas: 1) $10 million for RIM Reserve and PWP; and 2) $1.5 million for CRP Land Transfer Pilot Program. Tim stated that the Legislative Commission on Minnesota Resources (LCMR) has approved of this work plan.

Tim presented the Conservation Reserve Program (CRP) Land Transfer Program; which is appropriation language for the RIM Reserve Program directing funds to be used to enroll lands expiring from the federal CRP into a limited duration RIM Reserve easement that would allow cropping and grazing carried out according to a conservation plan. Staff have been working with the Department of Agriculture and the Natural Resources Conservation Service (NRCS) to choose

** 96-55 pilot counties, and to develop the program plan. Moved by Tim Hvidsten, seconded by Jim Rossman, to accept the work plan for the 1997-98 Conservation Easement Program and to approve continuation of the CRP land transfer program. Motion passed on a voice vote.

Legislative Initiatives - Ron Harnack said that there are eight legislative initiatives that staff are working on and will be presented to the board next month.

Advisory Comments
Minnesota Association of Soil and Water Conservation Districts (MASWCD): Jim Schafer distributed a copy of MASWCD's 1997 legislative agenda for information.

Chair Cobb adjourned the meeting at 2:10 p.m.

Respectfully submitted,

Barb Cobb, Chair

Consent Agenda #1

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M E M O R A N D U M

August 14, 1996

TO: Board Members

FR: Jim Haertel, Water Management Specialist

RE: APPROVAL - Riley-Purgatory-Bluff Creek Watershed District Watershed Management Plan

---

The Riley-Purgatory-Bluff Creek Watershed District (RPBCWD) started preparing the above referenced Plan over three years ago. BWSR and agency staff reviewed a draft Plan in early 1994 and had many, many comments. The RPBCWD responded to all the comments, however, the District then did a major revision which incorporated, among other items, ecological and physical classifications for all streams in the District and individual lake assessments for each significant lake in the District. BWSR staff reviewed the revised Plan and forwarded comments to the District. The RPBCWD made some amendments and then met with the BWSR Metropolitan Water Planning subcommittee and staff. The result of that meeting was a final draft Plan which was reviewed by all the agencies and the Metropolitan Council.

The final draft Plan received few significant comments from the agencies. The RPBCWD revised the final draft Plan consistent with all of the significant comments. The RPBCWD provided written responses to all of the minor comments that were not incorporated in the revised final draft Plan. The RPBCWD presented their revised final draft Plan to the BWSR Metropolitan Water Planning subcommittee and BWSR staff.

BWSR staff have commended the RPBCWD for incorporating the Rosgen physical classification methodology for District streams. The Rosgen methodology is widely regarded as THE physical stream classification methodology. Further, the District's approach to lake management with the individual lake assessments contained in the Plan should be very useful.

The BWSR Metropolitan Water Planning subcommittee and BWSR staff recommend approval of the RPBCWD Watershed Management Plan consistent with the enclosed Findings of Fact, Conclusions and Order.

Please contact me at (612) 297-2906 if you have any questions.

Enclosure

c: Ron Harnack
Doug Thomas
Bruce Sandstrom
Conrad Fiskness, RPBCWD
Paul Haik

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 **Riley-Purgatory-Bluff Creek Watershed District** pursuant to Minnesota Statutes Section 103B.231, Subdivision 9.

ORDER APPROVING WATERSHED MANAGEMENT PLAN

Whereas, the Riley-Purgatory-Bluff Creek Watershed District (RPBCWD) 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. **District Establishment.** The RPBCWD was established by order of the Water Resources Board on July 31, 1969 for the primary purposes of protecting the public health and welfare and providing for the prudent use of natural resources. The District is located in the southwestern portion of the Twin Cities metropolitan area. The municipalities of Minnetonka, Deephaven, Shorewood, Chanhassen, Eden Prairie, Bloomington, and Chaska are partially located within the District.

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 RPBCWD is approximately 47.3 square miles in size with 32.8 square miles in Hennepin County and 14.5 square miles in Carver County. The District is mostly developed with little agricultural use remaining. Of the 15 MDNR protected waters present in the watershed district, 12 are considered to be significant lake resources. The RPBCWD has defined the control of flooding, the enhancement of water quality, wetland protection, and erosion control as some of its major policy goals and concerns.

4. **Local review.** The RPBCWD 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.** On July 15, 1996 the Metropolitan Council provided written comment on the RPBCWD Plan and recommended the Plan be approved contingent on amendments to include:

   a. showing existing dams and control structures for streams in the District, and
   b. reference the Carver County Soil Survey, and
   c. information on existing and proposed parks, preserves, wildlife areas, recreation areas, canoe routes, and water accesses, and
   d. District encourage that all municipalities develop acceptable shoreland ordinances, and
   e. maximum allowable peak runoff rates, and
   f. correction of error in Table FS1.

   On August 7 and 8, 1996 the RPBCWD responded in writing to the Council's concerns.

6. **Department of Health Review.** On July 25, 1996 the Department of Health provided written comment on the RPBCWD Plan and recommended several amendments related to the groundwater component of the Plan, including groundwater quality, quantity, use, and contamination.

   On August 7 and 8, 1996 the RPBCWD responded in writing to the Department of Health's concerns.

7. **Department of Agriculture Review.** On July 18, 1996 the Department of Agriculture provided written comment on the Plan and recommended a couple of minor changes.

   On August 7 and 8, 1996 the RPBCWD responded in writing to the Department of Agriculture's concerns.

8. **Pollution Control Agency Review.** On July 19, 1996 the Pollution Control Agency provided written comment on the Plan and recommended Board approval. Some minor changes were noted, as follows:

a. include information about storm water construction permits, and
b. properly cite reference for Table WQD1 and WQD2, and
c. correct date on reference to *Clean Water Act Report to the U.S. Congress*, and
d. store water quality data in STORET.

On August 7 and 8, 1996 the RPBCWD responded in writing to the Pollution Control Agency's concerns

9. **Department of Natural Resources Review.** On July 19, 1996 the Department of Natural Resources provided written comment on the Plan and recommended amendments to include:

a. change floodplain policy from *lowest finished floor* to *lowest floor*, and
b. specify how fish surveys will be done, who will conduct, and permit requirements, and
c. note that Duck Lake may be stocked in the near future, and
d. proposed analyses may indicate streams will not support classic fishery, and
e. plan to make public accesses for anglers on Purgatory Creek, and
f. Red Rock Lake may support only certain fish species, and
g. Bloomington, Chaska, and Shorewood also have Flood Insurance Studies, and
h. addition of more water quantity information such as ordinary high water elevations, regional flood elevation, and historical water levels, and
i. caution against complete eradication of Eurasian watermilfoil, and
j. more specific goals and policies, and
k. more information on wetlands.

On August 7 and 8, 1996 the RPBCWD responded in writing to the Department of Natural Resources concerns.

10. **Board Review.** On August 9, 1996 the RPBCWD submitted an amended Plan that addressed many of the above noted agency concerns. A subcommittee of the Board and Board staff met with the RPBCWD on August 9, 1996. The RPBCWD made a presentation of the amended Plan and requested it be considered for approval by the Board at the next Board meeting.

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

a. the implementation of national and state goals and policies and goals and policies unique to the RPBCWD;

b. inclusion of a strong permit program for floodplain development, work in water areas, land alteration, appropriation of waters, and discharge of waters;

c. ecological and physical classification of streams;

d. individual inventory, assessment, and analysis of attainable uses for the 12 significant lakes;

e. uniform MPCA and MDNR lake classifications;

f. monitoring of chemical, biological, and ecological criteria;

g. permitting by the RPBCWD continues after local plan approval;

h. ultimate development conditions used for floodplain management program.

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 Riley-Purgatory-Bluff Creek Watershed District pursuant to Minnesota Statutes Sections 103B.201, Subd. 9 and 103D.405.

3. The Riley-Purgatory-Bluff Creek Watershed District Plan attached to this Order defines water and water-related problems within the RPBCWD's boundaries, possible solutions thereto, general objectives and policies of the RPBCWD, and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251 and 103D.405.

ORDER

That the Board hereby approves the attached Plan dated May 1996 as the Watershed Management Plan for the Riley-Purgatory-Bluff Creek Watershed District.

Dated at Saint Paul, Minnesota this 28th day of August, 1996.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Barbara Cobb
Chair

Board of Water and Soil Resources

Metro Region

Date: August 19, 1996

To: Ron Harnack, Executive Director

From: Barbara W. Ohman, Board Conservationist BWO by BH

RE: Agenda Item for August 28 BWSR Meeting/Declaration of Failure to Implement a Plan by Brown's Creek WMO

Action Sought: Resolution regarding Brown's Creek WMO Failure to Implement a Plan, in accordance with M.S. 103B.231, Subd. 3(b)

Attached with this request is a copy of the Final BWSR Staff Report - Kismet Basin Dispute Resolution Request regarding the Brown's Creek WMO (BCWMO). Since the submission of this report, the County, in cooperation with the Soil and Water Conservation District, have begun the necessary steps for undertaking a project to resolve the flooding in Kismet Basin.

With regards to the BCWMO, efforts have been made to update the Joint Powers Agreement (JPA), and these have failed. On June 10th, the City of Oak Park Heights passed a resolution to proceed with the steps, as outlined in the JPA, for dissolution of the BCWMO. The BCWMO scheduled a public hearing on July 31, 1996 at which to vote for dissolution. As required in the existing JPA, in order for the dissolution to occur, six of the eight members were required to vote. Only four votes were received for dissolution, so the BCWMO failed to dissolve. No movement toward updating of the JPA is being made, nor is it considered likely by any of the parties involved.

Discussions have been held between BWSR staff and Washington County and SWCD staff regarding water management options throughout the county. The County and SWCD are prepared to take on the responsibility for water management in this and other areas of the county. Direction from the BWSR, including BWSR action on the BCWMO failure to implement, is needed before the County can assume its responsibilities.

Action Sought: Resolution by the BWSR, in accordance with M.S. 103B.231, Subd. 3(b), that the Brown's Creek WMO has failed to implement its plan, through failure to update its Joint Powers Agreement to provide the powers to do so.

cc: Metro Staff
Doug Thomas

h:bcwmfail.imp

Minnesota Board of Water & Soil Resources

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May 10, 1996

Mr. Klayton Eckles, Chair
Brown's Creek Watershed Management Organization (BCWMO)
c/o Washington Soil and Water Conservation District
1825 Curve Crest Boulevard, Suite 101
Stillwater, MN 55082

RE: Final Report - Kismet Basin Dispute Resolution Request

Dear Mr. Eckles:

Attached you will find the Board of Water and Soil Resources **Final Staff Report** in the matter of the request for dispute resolution assistance from the BCWMO relating to the Kismet Basin flooding. I am also sending, by copy of this letter, the final report to the attached list of affected and interested parties. Some minor changes have been made to the April 30, 1996 draft to incorporate input and discussion from the interested parties, including discussion during the May 6 meeting. In order that you will not have to reread the entire report, the changes are in boldface type.

I plan to attend the May 15, 1996 board meeting of the BCWMO. I understand that this meeting will also serve as the public meeting to develop a formal course of action in response to the aforementioned report, in accordance with MN Rules Chapter 8410.0180, Subp. 3(C). Therefore, I will be available to answer questions or provide assistance in the BCWMO's decision process.

Thank you for the opportunity to provide assistance in this matter. I realize that the outcome and recommendations in the report are along a different tack than your board had anticipated. We are hopeful that an effective, long-term solution to the Kismet flooding problem as well as the overall water management in the Brown's Creek watershed will result from this course of action. If I can be of any further assistance, or if you have any questions, please do not hesitate to contact me at 297-1894.

Sincerely,

Barbara W. Ohman

Barbara W. Ohman
Metro Board Conservationist

Attachment: Final Staff Report

c: List of Interested Parties
Select BWSR Staff

In the Matter of the Request for Dispute Resolution Assistance from the Brown's Creek Watershed Management Organization Relating to the Kismet Basin Flooding, Washington County

Interested Parties

BCWMO Members
David Francis, Stillwater Township
David Schaaf, Oak Park Heights
Klayton Eckles, Stillwater
David Truax, Hugo
Art Welander, Grant Township
Rebecca Johnson, May Township
Michelle Ulrich, Attorney

Grant Township
Gary Erichson, Chair
Art Welander (sent c/o BCWMO)
Pamela Magadance
Debbie Graul, Town Clerk
Gregory Galler, Town Attorney

Kismet Basin Landowners
Craig and Nina Leiser
Jack and Judith Johnson
Lauren and Jennifer Fariss
Bernard and Diane Rappa
Catherine Whaley
Heidi Rosebud and Dean Wallace
Stanley and Bonnie VanderVegte
Richard and Sandra Gruber
Terrence and Janet Jones

Washington County
Board Members - Mary Hauser
David Engstrom
Wally Abrahamson
Dennis Hegberg
Myra Peterson
Jim Shug, Administrator
Mary McLothlin, HELM
Don Wisniewski, Public Works
Bob Turrentine, County Attorney

Washington Soil and Water Conservation District
George Rydeen, Chair
Konrad Koosman, Manager
Mark Doneux, Water Resource Specialist

Attorney General
Matt Seltzer

Member Communities to BCWMO
William Nelson, Chair, Baytown Township
Fran Miron, Mayor, City of Hugo
Wyn John, Mayor, Lake Elmo
Mike Munson, LMC (for Lake Elmo)
Barbara O'Neal, Mayor, Oak Park Heights
Tracy Mazanec, Chair, May Township
Town Board Chair, Stillwater Township
Jay Kimble, Mayor, Stillwater

Downstream Landowners
William Johnson
Richard A. and Sally McKenzie

MN DNR
Peter Leete, Metro Waters
Molly Shodeen, Metro Waters

BWSR
Board Members
Staff - Harnack
Haertel
Thomas
Metro Staff

Board of Water and Soil Resources
Final Staff Report

In the Matter of the Request for Dispute Resolution Assistance from the Brown's Creek Watershed Management Organization Relating to the Kismet Basin Flooding, Washington County

Findings Conclusions & Recommendations

Background

On January 4, 1996, the Board of Water and Soil Resources (BWSR) received a letter from the Brown's Creek Watershed Management Organization (BCWMO) requesting assistance in resolving a dispute involving a number of landowners, the BCWMO, and Grant Township. In this request, the BCWMO asked that three questions be answered:

1. What political entity, agency, group or individual(s) is responsible for the removal of excessive flood waters from the Kismet Basin?

2. What political entity, agency, group or individual(s) is responsible for the payment of costs for the removal of excessive flood waters from the Kismet Basin?

3. What are the reasonable assurances and protection that downstream landowners and water resources should be provided to achieve item #1 above?

BWSR staff undertook a fact finding effort in order to compile a report to respond to this request. This report is the result of that investigation.

Findings

1. In 1995, a number of landowners living on Kismet Lane in Grant Township, Washington County experienced problems relating to flooding of land adjacent to DNR public water basins numbers 82-333W and 82-334N. The water basins are unnamed water bodies but because the basins are connected to each other at high water, the basins are collectively called Kismet Basin. Some of the affected properties are within a subdivision that was approved by Washington County on September 3, 1974. The plat was approved by Washington County and Grant Township. **One of the homes on the west side of the basin was in what is known as the "Muggs Addition". The Opel property and the Rosebud/Wallace property were both out of the platted area, but satisfied all requirements for building when they were approved**. Most of the homes were built during 1974 and 1975 with at least one of them being built in the early 1980's. Building permits for each of the homes were approved by Grant Township.

2. A hydrographic survey was completed on September 20, 1995 by staff of the DNR. This survey estimated the Ordinary High Water (OHW) elevation of these basins to be elevation 943.5. The highest recorded water surface elevation, recorded during this survey, was 946.02. These basins are considered to be landlocked **by the DNR, because the runout elevation is above the OHW**. The report stated that the runout elevation was at 946.7. The highest known elevation recent elevation was 946.4 based on a stain on a tree. The basin outlets at the northeast corner of the basin. DNR gage records indicate the water level in the basin ranged from 946.23 to 945.95 from Sept. 16 to Nov. 22, 1995. DNR staff feel that the high water levels are due in part to high ground water levels, documented by the groundwater monitoring "Withrow Obwell" nearby, in the area and that, consequently, pumping to achieve relief may not be a good solution.

3. The location of the outlet for Kismet Basin was viewed during a site inspection of the area on March 21, 1996 attended by Barbara Ohman and Bruce Sandstrom of the BWSR, Mark Doneux of the Washington SWCD and Peter Leete of the MDNR, Division of Waters. It was uncertain where the exact location of the natural outlet was of two sites within 100 feet of each other or where the 946.7 elevation was taken from. The southerly of the two possible outlet locations appeared to be the natural outlet location. There was evidence that said channel had been improved slightly by digging with a hand shovel during the fall of 1995 to the point that water had flowed by gravity from the lake at least at the time of the formation of ice late in 1995. It appeared that the outlet may have been lowered by about 6 inches but **this** may be difficult to document by a level survey. **This spring, water is discharging by gravity flow according to local residents. On March 21, the basin was still frozen and no outflow was occurring**.

4. In 1985, the Brown's Creek Watershed Management Organization (BCWMO) was formed through the execution of a Joint Powers Agreement (JPA) between the Townships of Baytown, Grant, May and Stillwater, and the Cities of Hugo, Lake Elmo and Stillwater.

5. In 1986, high water levels in the Kismet basin area prompted landowners to apply for a DNR permit to pump landlocked basin. In January, 1987, Barr Engineering provided technical information on behalf of the landowners to be used with the DNR application. Barr also provided cost estimates for three alternatives for outletting the basin:
   a. Install flexible PVC pipe using a trenching contractor - $17,200
   b. Install rigid PVC storm sewer pipe - $20,900
   c. Install a pump station with 2 300 gpm pumps and a 6-inch discharge line along the same route as the gravity alternative - $24,400. This alternative would also involve annual pumping costs of approximately $750.

   This information did not include the costs for flowage easements over downstream properties to handle the outflow. Additional costs to prepare a preliminary feasibility study and application totaled about $2,160. This involved field surveys of the outlets and

drainage-way and an hydrologic analysis of the watershed tributary to the basin area to determine the discharge capacity needed for the outlet.

6. Beginning in 1987 and continuing through 1988, a severe drought affected much of the Upper Midwest. The high water levels experienced in 1986 in the Kismet Basin then abated naturally.

7. January 24, 1990, the BCWMO Watershed Management Plan (Plan) was approved by the BWSR. The Plan had initially been drafted in 1987. All final plan revisions and additions were submitted to the BWSR office in October, 1990. In the Plan's Management Plan section, the Plan asserts that the "overriding goal of the BCWMO is to maintain as much authority as possible at the local level."

8. The Plan established a Water Management Classification System, which separates waters of the BCWMO into three classifications: waters of regional, district and local importance. According to the Plan, the classifications of waters is to "provide a logical method of assigning planning and management responsibilities and assignment of costs for improvement projects."
   a. Waters of regional importance within the BCWMO are waters considered highly valuable from a recreational standpoint. Funding for certain projects within this classification could be funded from other sources such as federal, state, region or county. The St. Croix River is a water of regional importance.
   b. Waters of district importance are waters which will be regulated by the local community and reviewed by the BCWMO. Funding for project waters within this classification could be considered on a tributary basis. Waters of district importance have been defined as:
      i. Brown's Creek
      ii. All lakes, ponds and wetlands greater then 2.5 acres and which are tributary to Brown's Creek
      iii. All perennial and intermittent streams which are tributary to Brown's Creek
      iv. All waters of local importance that, through water control projects, will be drained or outletted to Brown's Creek
   c. Waters of local importance are waters that are not tributary to waters of regional or district importance and small ponds and wetlands. Funding for projects on these waters should be primarily from local funding sources. Waters of local importance are streams or ditches that are not tributary to waters of regional or district importance and lakes, ponds and wetlands that are not directly tributary to Brown's Creek

In the BCWMO Water Resources Inventory, the basins in the Kismet area were listed as waters of local importance (G11-4, G11-5 and G11-6). (emphasis added)

9. In the Plan, **Section IV GOALS, OBJECTIVES AND POLICIES, A. Water Quantity Management**, Policy 1B states that "For all waters of local importance, each unit of government shall be responsible for the correction of flooding, excessive flows and volumes with its own funds."

10. The existing joint powers agreement for the BCWMO does not define a specific process that would allow the WMO to require a member community to implement its local plan or to execute a needed project. The authority of its members does not automatically default to the BCWMO. When the BWSR determines that a WMO plan is not being implemented, the responsibility for water planning and implementation shifts to the county(ies) the WMO lies within (MS 103B.231, Subd. 3).

11. In Spring of 1995, high water levels returned to the Kismet basin area. **On July 20, 1995, the Kismet area landowners provided the first official written notification to Grant Township regarding the high water situation**.

12. August 13, 1995, flooding of Kismet Lane blocked access to properties of Vander Vegte, Rosebud, Rappa, Fariss, Johnson, Leiser, Opel and Whaley. Driveways also flooded for Vander Vegte, Rosebud, Rappa, Fariss, Johnson, and Leiser properties. On March 4, 1996, the BWSR, through staff of the Attorney General's office, requested specific, quantitative information regarding the existing and potential conditions and alleged monetary costs resulting from the flooding of the area. The March 27, 1996 response, through the attorney for the landowners, was not complete, and did not include details on the physical effects of the flooding. The following lists information gleaned from records, discussions and field reviews of the alleged effects of the flooding:
    i. Water in at least two of the basements of the homes adjacent to the basin,
    ii. Cracking and heaving of cement foundations in basements, on patios and in some garages,
    iii. Certain areas of lots temporarily inundated, and,
    iv. A number of trees lost due to inundation**, (on the order of 1000's of trees, according to one landowner)**.

13. At the end of August, 1995, Grant Township spent about $10,000 on raising Kismet Lane to provide emergency access and school bus access. Landowners also added gravel to driveways (some up to 18"). The amount spent by the landowners **was reported to have been in excess of $20,000**.

14. September, 1995, was a very busy month with on-site visits, meetings, negotiations and extensive correspondence between the Kismet area landowners, Grant Township, BCWMO, Washington SWCD, and DNR. In addition, the Kismet area landowners provided information on the proposal to the McKenzies and their attorney, Richard

Galena. Between September 10-13th, prior to issuance of the DNR permit, Kismet area landowners took action to relieve water problems, by installing a plastic pipe through a low rise in the gravel pit area of the outlet and laying sandbags to direct water, and began to outlet water by gravity flow. This action was halted within 2 days. Downstream landowner, Bill Johnson, gave express written permission to outlet water over his property on September 15, 1995. Downstream landowners, Richard and Sally McKenzie, gave express written denial to outlet water over/onto their property on September 14, 1995.

15. On September 18, 1995, the DNR appropriation permit #96-6047 was issued for two weeks of pumping. Pumping must stop if any downstream impacts are noted. The pumping could be extended if no downstream impacts were determined. No pumping was undertaken upon issuance of the permit.

16. At the regular meeting of the board of the BCWMO on September 20, 1995, the BCWMO board declared an emergency under M.S. 103B.252 and ordered Grant Township to take action within 48 hours. An emergency meeting was held by the BCWMO on September 25. Township agreed to take action, as long as landowners agree to pay for costs. The township developed a proposal which the landowners were not comfortable signing**, based upon a clause which would have required the landowners to take on all liability for any damages which may have arisen**.

17. In early October, 1995, the Washington County Dept. of Health and Environmental Land Management (HELM) staff reported on an inspection of the wells and septic systems for nine properties adjacent to the Kismet basin. According to the report, all the septic systems, with the exception of the Johnson residence, "were located and judged not to be seriously affected by elevated groundwater conditions." Four of the wells tested positive for total coliform bacteria, but were negative for E. coli, which indicates that there has been no sewage contamination. Only one well was actually in standing water at the Vander Vegte property. The drainfield at the Johnson residence is non-conforming as it does not meet the horizontal and vertical setback and elevation from water**, however, the drainfield did conform at the time of building**.

18. In late October, 1995, the Kismet area residents petitioned Grant Township to undertake the project to relieve the flood levels in the basin. The landowners **initially** agreed to the responsibility to pay 100% of the associated costs for the project, distributed equally among the landowners. This petition also included a waiver of the right to object to the costs and the right to appeal.

19. On October 20, 1995 Grant Township requested the BCWMO to look into a permanent solution to the matter.

20. On January 4, 1996 the BCWMO requested the BWSR for assistance in dispute resolution. BWSR staff began investigation for preparation of a report.

21. On January 8, 1996 nine property owners (Johnson, Gruber, Whaley, Fariss, Leiser, VanderVegte, Jones, Rappa and Rosebud and Wallace), filed a Notice of Claim through attorney Joshua J. Kanassatega, of Leonard, Street and Deinard. The claim was made against the Town of Grant, the Brown's Creek WMO, Washington County and the Board of Water and Soil Resources. All of the foregoing governmental agencies deny any monetary liability to the landowners.

22. During March, 1996, **BWSR staff made** requests for information from the landowners adjacent to the Kismet Basin and from the downstream landowners. Some general information was received from the Kismet landowners. No information from the downstream landowners (McKenzies) was received by the writing of this report.

23. A field site review was conducted on March 21, 1996, by Barbara Ohman and Bruce Sandstrom, BWSR, Mark Doneux, Washington SWCD and Peter Leete, DNR. Photographs were taken of water levels, outlets (frozen solid on Kismet basin), downstream outflow areas and damage to some of the properties. A short piece of video was also shot of an apparent blow-out of the outlet of a pond on William Johnson's property. This pond was outletting directly onto the McKenzie property.

24. On Monday, April 15, Gary Erichson, Grant Town Board Chair, met with Bruce Sandstrom and Barbara Ohman to provide input from the Township's perspective. Mr. Erichson stated that the township lacks **the staff and ability** to remedy the Kismet Basin problem. Grant Township says that if appropriate legal means can be arranged, the Township would be willing to transfer its taxing and project authorities to the BCWMO to enable the BCWMO to affect a solution. **Grant Township wishes to and will cooperate in efforts to enhance the current Joint Powers Agreement (JPA) to affect a solution.** Grant Township also advocates the creation of a watershed district if BCWMO fails to resolve the problem.

25. Kismet Basin is a landlocked area that has experienced high water levels in 1986 and again in 1995. The landowners adjacent to this basin want to protect their properties and relieve the flood situation to return the basin back to the OHW elevation of 943.5. In order to get the project moving, they agreed with their October petition to Grant Township to take on all financial responsibilities with this project and to waive their right to object to project costs or to appeal. **However, the landowners do not want to take on the liability for such a project.**

26. Action was not taken to pump the excess flood waters following the issuance of the DNR appropriations permit on September 18, 1995. Based upon discussions and information in the file, the main problem appears to be with concerns about liability for potential damages to downstream properties. Grant Township does not want to take on what it views as a risk of liability by taking on a project to relieve the flood waters in the Kismet Basin. Grant Township is willing to and prefers to convey its authority to the BCWMO so that the WMO can sponsor a project to lower the water level of Kismet Basin

Conclusions

1. Kismet Basin has experienced high water levels in 1986 and 1995. In addition, Kismet basin is at or near its natural outlet level.

2. The high water has already impacted and has the potential to impact private property in the area and downstream, as well as the natural resources of the area.

3. The emergency declared on September 20, 1995 by the BCWMO in accordance with 103B.252 was valid based upon loss of basic and emergency access endangering health and safety. There are also potential health problems with the Johnson septic system and at least two of the wells. However, the BWSR staff are not certain that the BCWMO had the authority to order Grant Township to take action under this declaration.

4. According to the BCWMO Watershed Management Plan, Kismet Basin is a "water of local importance", and Grant Township is the responsible governmental unit. *This is responsive to Question #1 from the January 4, 1996 BCWMO request for assistance.*

5. There are many options for funding a project to relieve water level problems such as posed by the Kismet Basin. It appears that the use of special assessments to the benefited property owners is the most appropriate, since the landowners have stated a willingness to pay the costs and since other means such as using a township wide tax would lead to further delays in getting anything accomplished. *This is in response to Question #2 from the January 4, 1996 BCWMO request for assistance.*

6. To date, there has been no determination that the BCWMO has failed to implement its plan. Grant Township, has however, not implemented its local plan for various reasons. The BWSR would consider the failure of the BCWMO to implement its plan when it concludes that the BCWMO has been unsuccessful in obtaining implementation by Grant Township. If no resolution of the Kismet Basin problem proceeds within 45 days after a meeting of the affected parties to review this report, the staff of the BWSR would recommend that the BWSR Board make a determination that the BCWMO plan is not being implemented, in accordance with MN Rules Chapter 8410.**0180**.

7. The matter of potential liability for damages to downstream properties could be mitigated through establishment of flowage easements necessary to allow the passage of the overflow from the Kismet Basin. Adequate compensation for these easements must be determined and provided as part of the cost of the project. *This is in response to Question #3 from the January 4, 1996 BCWMO request for assistance.*

8. Grant Township could use a MS 429 proceeding to construct a project thereby assigning benefits and damages to the Kismet Basin landowners. Grant Township could alternatively set up a subwatershed taxing district under 103B.245 and levy a tax across the subwatershed and/or specially assess the benefitted landowners.

9. The BCWMO could only effect a solution to the problem if the WMO is vested with the authority to do such a project either by amending its' current joint powers agreement or possibly a joint powers agreement between Grant Township and the BCWMO to utilize Grant township's authorities to execute a project.

10. If the BWSR determines that the BCWMO is failing to implement its plan (ie. fails to obtain action by Grant Township or takes no action on its own), Washington County becomes the responsible unit for water planning and implementation under 103B.231, Subd. 3(b). The County could take action to implement a project and would likely assess the costs back to the benefitted landowners.

11. If nothing is done, more flooding is likely since it is conceivable that water levels could reach a foot or so higher than the highest recorded. This would cause a natural outflow that could damage downstream properties. To do nothing is an alternative but could result in increased loss in tax base, increased cost of road maintenance, and damages to downstream landowners by erosion and minor flooding of field and pasture.

Recommendations

1. Grant Township should act, **through its own authorities,** to resolve the flooding conditions in Kismet Basin. Before deciding on a course of action, the Township should review the possible alternatives. The alternatives should include a gravity outlet, a pumped outlet, the raising of roads and driveways, the raising of homes, or to do nothing. Grant Township may apportion the costs of the project to the directly benefitted properties through appropriate authorities provided in statute MS 429 or 103B.

2. The best solution and most cost effective option appears to be the construction of a permanent, gravity flow system. A project to solve the problem by pumping should not be considered unless there is an emergency.

3. If Grant Township is unwilling to pursue the project **on its own**, one possibility would be for Grant to seek a short-term joint powers or other appropriate legal agreement with BCWMO to do a project by transfer of existing authorities to the BCWMO. Another option would be to permanently amend the current JPA to give the BCWMO the authorities needed to address future similar situations. Both parties should consult with their legal counsel for implementation of such options.

4. The BWSR will hold a meeting to discuss the recommendations of this report at 7:00 p.m., Monday, May 6, at the Washington County Board Room in the Washington County Government Center in Stillwater. In accordance with MN Rules Chapter 8410.**0180**, Subp. 3(C), the BCWMO shall hold a public hearing to discuss this report within 30 days of the May 6, 1996 meeting sponsored by the BWSR. If the BCWMO does not come up with a means to implement a project under its plan and provide movement toward a resolution within 45 days (by June 21, 1996), BWSR staff will recommend to the BWSR Board to declare that the BCWMO is not implementing its plan. Upon such declaration, the BWSR would request that Washington County a) take appropriate action to implement the plan to remedy the problems on Kismet Basin and b) to take other appropriate action to effect a long term solution to the governance of water management issues of the Browns Creek watershed.

5. If Washington County petitions for the creation of a watershed district as part of the long term solution to the governance issue, such petition should include the consolidation of two or more existing Water Management Organizations and or Watershed Districts. The district petitioned for should include enough tax base to generate the revenue needed to support at least one full time administrator at a low cost to the average homeowner.

Draft report dated April 30, 1996. Minor revisions made based on input received at May 6, 1996 meeting on this matter.
Final report dated this 10th day of May, 1996

Report Prepared by Barbara Ohman and Bruce Sandstrom, BWSR Staff

Board of Water and Soil Resources

Metro Region

Date: August 16, 1996

To: Ron Harnack, Executive Director

From: Barbara W. Ohman, Board Conservationist

RE: Agenda Item for August 28 BWSR Meeting/Complaint of Failure to Implement by Sunrise River WMO

Action Sought: Resolution to establish just cause for Determination of Failure to Implement, with authorization for staff to undertake investigation, under MN Rules 8420.0180

On July 11, 1996, Bruce Sandstrom received a written complaint from Ms. Rita Harrington, resident of Stacy, MN, as an aggrieved party regarding the failure to implement by the Sunrise River WMO (SRWMO). In her letter, Ms. Harrington summarized the issues at dispute and the efforts that have been made to resolve the problem, in accordance with 8410.0180, Subp. 2. Ms. Harrington requests review by the BWSR on this matter.

At issue is the high water level on Fawn Lake, which is threatening private property of the lakeshore residents. Ms. Harrington has made a number of attempts to urge the SRWMO to take up its role in this matter. Representatives of the SRWMO state that this is not a role for the SRWMO, that they only become involved with issues which cross community boundaries. Ms. Harrington provides a number of citations from the SRWMO Plan which indicate very clearly that the SRWMO could provide assistance in resolving the high water problem on Fawn Lake.

Metro staff requested from the SRWMO Chair and the Linwood Township Chair a determination of their roles and responses to this situation. It appears that neither party is taking any responsibility. Direction from the Plan appears to indicate that the WMO is obligated to do a feasibility study and if it only impacts the Township, then the Township has the responsibility to do a project. If it is feasibile, benefitted parties will have to pay. It is unrealistic to expect property owners to do any kind of a ditching/water conveyance project on their own.

Related Facts:

- Tom Hovey, DNR Hydrologist, reviewed the lake situation, and presented a report to the Lynwood Township Board on Feb. 13th, 1996. Mr. Hovey indicated that the highest level of water on Fawn Lake was recorded and that the lake was in flood stage.
- Under the Objectives and Policies section of the current Plan for the SRWMO:

-"to maintain and improve lake level control projects that will solve high and low water problems on the various lakes within the WMO"
-"to minimize loss of public and private property due to high water conditions throughout the WMO".
-"to resolve the current conflict between high water levels and some of the previously established residential developments around the lakes."

With the experience which we hold with similar matters in Washington County, we are prepared to take on the investigation of this matter immediately. The lessons from other similar matters should provide incentive for a quick and timely resolve to this matter. We feel that there is just cause for the determination of failure to implement the Plan, and that an investigation under 8410.0180, Subp. 3 is appropriate. In order to move quickly on this matter, the BWSR must establish just cause and authorize the staff to begin the investigation. According to this part of the Rules, the BWSR staff are required to begin the investigation within 30 days of receiving the written complaint.

Action Sought: A resolution by the BWSR to establish just cause for the determination of failure to implement by the Sunrise River WMO, and authorization for staff to undertake the investigation of the issues relating to the alleged failure to implement, in accordance with Minnesota Rules Chapter 8410.0180.

Attachments: -Copy of the written complaint from Ms. Harrington, which includes the additional information which she provided
-Copy of letters from Bruce Sandstrom to SRWMO Chair and Linwood Twp Chair, requesting their response to the situation
-WMO and Twp responses to the situation

cc: Metro Staff
Doug Thomas
Jim Birkholz

h:sunfail.imp

New Business #3

August 28, 1996

TO : Board Members

FROM : Wayne Zellmer, Grants Coordinator

Subject : **FY 97 Non Point Engineering Assistance Grant**

BACKGROUND

Non Point Engineering Assistance Grant (NPEAG) funds were first appropriated to the BWSR for FY 95, coinciding with the launching of the State Revolving Loan Fund for non point pollution abatement. These funds were granted to the 11 newly organized SWCD Joint Powers Boards (JPBs). These funds were to be used by each JPB to employ an engineer and a technician to assist landowners to implement a variety of erosion control and water quality improvement practices. The BWSR originally estimated JPB annual costs to employ an engineer and technician at $105,800 (This estimate has proven to be a reasonably accurate statewide average).

Fiscal Year Funding History

FY 95 - The first NPEAG was $75,500 to each JPB in February of 1995, plus computer aided drafting and surveying equipment . With prompt hiring of staff, each JPB would spend approximately $26,500 during the remainder of the FY, leaving a balance of $49,000. Anticipating a legislative appropriation shortfall in FYs 96 and 97, the BWSR advised JPBs to utilize the $49,000 balance as follows:

$11,300 - To be reserved for FY 96 budget expenses
$11,300 - To be reserved for FY 97 budget expenses
$26,400 - To be earmarked for transportation and eligible "start-up" expenses

FY 96 - The second NPEAG occurred six months later, and was $94,545 to each JPB. The $11,300 reserved from the FY 95 NPEAG supplemented this grant to $105,845.

ISSUE

Because of several factors, the allocation procedure for the FY 97 NPEAG is proposed to be changed. Factors that have prompted this proposal include: the reluctance or difficulty in hiring or retaining JPB staff, the uneven statewide allocation of SRF loan funds and associated workloads, differences in fiscal management in the JPBs, the present surplus of NPEAG funds in some JPBs and the anticipated shortage of funds in others, legislative scrutiny of BWSR grant administration. The proposed change in the allocation procedure is expected to increase the efficiency and effectiveness of this appropriation by providing more engineering assistance in high workload areas.

ALLOCATION PROPOSAL

The FY 97 NPEAG is related to and based on the length of time a JPB has employed an

engineer and technician. BWSR estimated employment costs during this time period are compared to FY 95 and 96 NPEAGs allocated. Each JPB will receive a base grant to bring their cash balance to the annually needed $105,800. This base grant does not penalize JPBs with long employment periods who have exercised fiscal constraint in actual expenditures. In addition, each JPB will receive $20,000 for a two month operating reserve to provide cash flow between NPEAGs. Please refer to the enclosed table for the formulation of these grants. The FY 97 NPEAG Agreement will end August 31, 1997. The FY 98 NPEAG will be scheduled to be allocated at the June 1997 BWSR Meeting, allowing for a two month grant overlap.

FY 97 NPEA Challenge Grant

The above allocation proposal allows for a remaining $315,009 fund balance. This amount will be offered as a challenge grant opportunity for all JPBs to provide additional needed engineering assistance. Parameters of this grant will include the following:

* One-time grant only
* Competitive two month application period from November 1, 1996 - January 2, 1997; Board approval requested at January 1977 Meeting
* Grant agreement will be for two years
* Local match is not required
* Applications will be evaluated based on workloads and needs. Proposals will be developed between BCs and the JPBs and will be performance based.

ADDITIONAL CONSIDERATIONS

* Future grant agreements will be updated with additional detail of JPBs' duties for program compliance, including reporting.

* The BWSR staff will be conducting NPEAG program reviews of JPB fiscal performance and grant agreement compliance. It is intended that these reviews will provide valuable information to BWSR for an evaluation of the effectiveness of this program and determinations of future program improvements. (The implementation of the BWSR computerized reporting system (LARS) will also provide valuable information regarding program accomplishments.)

* The BWSR will be seeking additional legislative funding for FY 98. However, JPBs have been advised that without additional legislative funding, future NPEAGs will need to be augmented with local funds to bring annual funding to the $105,800 or beyond.

* For the FY 98 NPEAGs, all JPBs should be "on their feet" and SRF Loans generally allocated statewide, BWSR staff will investigate the need to relate grant amounts to statewide variations in the actual cost to employ staff.

RECOMMENDATION

Staff recommends that the Board approve the FY 97 NPEAGs and allocation procedures, and authorize staff to implement the FY 97 NPEA Challenge Grant.

(PROPOSED)

FY 97 NON POINT ENGINEERING ASSISTANCE GRANTS

JPB		A MONTHS EMPLOYED	B ESTIMAT. MONTHLY RATE	C EMPLOY. COSTS (A x B)	D ESTIMAT. TOTAL COSTS	E FUNDS GRANTED	F FUNDS REMAINING (E − D)	G BASE GRANT ($105,800 − F)	H OPERATING RESERVE	I TOTAL GRANT (G + H)
1	ENG	13	$5,375	$69,875	$97,411	$170,045	$72,634	$33,166	$20,000	**$53,166**
	TECH	8	$3,442	$27,536						
2	ENG	8.5	$5,375	$45,688	$45,688	$170,045	$124,358	($18,558)	$20,000	**$1,443**
	TECH	NONE								
3	ENG	15.25	$5,375	$81,969	$133,599	$170,045	$36,446	$69,354	$20,000	**$89,354**
	TECH	15	$3,442	$51,630						
4	ENG	16	$5,375	$86,000	$127,304	$170,045	$42,741	$63,059	$20,000	**$83,059**
	TECH	12	$3,442	$41,304						
5	ENG	15	$5,375	$80,625	$84,067	$170,045	$85,978	$19,822	$20,000	**$39,822**
	TECH	1	$3,442	$3,442						
6	ENG	14.75	$5,375	$79,281	$130,051	$170,045	$39,994	$65,806	$20,000	**$85,806**
	TECH	14.75	$3,442	$50,770						
7	ENG	13	$5,375	$69,875	$121,505	$170,045	$48,540	$57,260	$20,000	**$77,260**
	TECH	15	$3,442	$51,630						
8	ENG	15.75	$5,375	$84,656	$130,263	$170,045	$39,782	$66,018	$20,000	**$86,018**
	TECH	13.25	$3,442	$45,607						
9	ENG	15	$5,375	$80,625	$87,509	$170,045	$82,536	$23,264	$20,000	**$43,264**
	TECH	2	$3,442	$6,884						
10	ENG	15	$5,375	$80,625	$115,045	$170,045	$55,000	$50,800	$20,000	**$70,800**
	TECH	10	$3,442	$34,420						
11	ENG	15.5	$5,375	$83,313	$139,245	$170,045	$30,800	$75,000	$20,000	**$95,000**
	TECH	16.25	$3,442	$55,933						
	TOTALS							$504,991	$220,000	**$724,991**
	FY 97 CHALLENGE GRANT									**$315,009**
	TOTAL FY 97 APPROPRIATION − $1,040,000									**$1,040,000**

COLUMN

- A THE MONTHS EACH JPB HAS EMPLOYED AN ENGINEER AND TECHNICIAN, RESPECTIVIELY, SINCE 2/1/1995.
- B THE BWSR ESTIMATE OF MONTHLY COSTS TO EMPLOY AN ENGINEER AND TECHNICIAN, RESPECTIVELY.
- C COLUMN A MULTIPLIED BY COLUMN B − TOTAL COSTS TO DATE FOR AN ENGINEER AND TECHNICIAN, RESPECTIVELY.
- D THE BWSR ESTIMATED SUM OF THE ENGINEER AND TECHNICIAN COSTS TO DATE. ACTUAL COSTS MAY BE LESS.
- E THE SUM OF $75,500 AND $94,545 PREVIOUSLY GRANTED IN FY 95 AND FY 96, RESPECTIVELY.
- F FUNDS PREVIOUSLY GRANTED MINUS ESTIMATED TOTAL COSTS. (JPBs WHICH HAVE EXERCISED FISCAL CONSTRAINT MAY HAVE LARGER AMOUNTS REMAINING.)
- G $105,800 MINUS FUNDS REMAINING.
- H APPROXIMATE 2 MONTH OPERATING RESERVE TO PROVIDE CASH FLOW BETWEEN GRANTS.
- I BASE GRANT PLUS OPERATING RESERVE.

H:97NPEA1

To: ***board members***

From: ***Marybeth Block***

RE: ***CRP->RIM Reserve Limited-Use Easement Program***

The BWSR received nine requests from the 22 SWCDs invited to submit proposals to be considered for one of the five pilot counties to administer the CRP to RIM Reserve pilot program.

BWSR staff Marybeth Block and Tim Fredbo met with Minnesota Department of Agriculture staff Barbara Weisman and Doug Gunnick on July 30, 1996. They recommend the following SWCDs to participate in the pilot program:

REGION	SWCD SELECTED	OTHER APPLICANTS
Northwest	East Polk	Clay and Norman
West-Central	Pope	West Ottertail
Southwest	LacQuiParle	Yellow Medicine
Southeast	Fillmore	Olmstead
'At-large'	Clay	

Successful proposals outlined how existing partnerships and projects in their districts would compliment the CRP ->RIM Reserve limited-use easement program. Those districts that effectively demonstrated how they would market and implement the program also received high marks.

The districts have been notified that the board would be acting on this recommendation at the August meeting.

Background

Welcome to LARS, BWSR's computerized **L**GU **A**nnual **R**eporting **S**ystem. This system has been designed by BWSR in cooperation with the MPCA and MDA. The system is intended to make local government reporting of program accomplishments both easier and more useful.

Why LARS? BWSR and LGU staff and Board members have recognized the need for a user friendly system of reporting program accomplishments. The need to access and manipulate program data and report it in a variety of formats has also been identified. The intent of the LARS system is to give LGU's and BWSR an up to date method of reporting accomplishments using hard numbers rather than narrative formats.

The LARS system has been designed so that LGU's can enter site specific project and landowner information that can readily be used to generate reports showing annual and long term accomplishments.

What Will LARS Do For You

This first version of LARS is just a beginning. It will allow you to enter data and generate reports for BWSR's four major programs, Land and Water Treatment (cost-share), Water Planning, RIM, and WCA. In the future we hope to expand the use of LARS for reporting program accomplishments as well as the variety of reports than can be generated.

LARS is designed to give you readily accessible data regarding the status and success of your local conservation programs. By entering data on a regular basis into the LARS data base you will be able to track the landowners you have worked with, the location of projects within a minor watershed, the type of project, the source of funding and technical assistance, and in some cases the pollutant reduction achieved by practice. This information can be invaluable in showing locally elected officials where within the county projects are going in, how much state or federal money is being leveraged, and what difference it is making in terms of pollutant reductions. It will also aid local governments in targeting resource dollars and technical assistance to priority areas with in the county, and tracking installation of practices in these areas. The local government will be able to show, for instance, what projects have gone in a particular minor watershed over a 5 year period. On a statewide basis BWSR and local government affiliated associations will have more effective data to use as we lobby and apply for increased conservation funding at the state and federal level. By having all LGU program accomplishments in one easily accessible data base, we will be able to readily manipulate data to meet various needs. You, at the local level will also be able to readily access program accomplishments and report them in a variety of forms. For instance, you could report all conservation efforts installed for your entire county, or for a certain minor watershed in your county. You can show al projects where federal dollars were leveraged or where private dollars were used.

Overall, LARS should make reporting at the local level easier, more efficient, and give the local governments more ways of reporting their needs and accomplishments. In turn, the state will have easier access to the same information to report statewide trends.

FY 98-99 Legislative Initiatives

BUDGET

1. INFORMATION MANAGEMENT & COMMUNICATION

RATIONALE:

Maintaining the State's and BWSR's capability in electronic commutations, information management systems, and data base management will result in the most efficient use and allocation of state resources. Investing in technology will reduce long term expenditures in the area of fiscal oversight, communication and reporting by the State's 91 soil and water conservation districts, 42 watershed districts, and 87 county water planners. Improvements in BWSR's data base management and information management systems will allow for the reporting of resource protection efforts in measurable and quantifiable terms consistent with Minnesota Milestones. If this initiative is nor funded it is likely that the gap between BWSR's information management and communication capabilities and those of other public and private organizations will grow resulting in greater future expenditures than what are currently being requested.

PROGRAM OUTCOMES:

On-line electronic communication with 91 soil and water conservation districts, 42 watershed districts, and 87 county water plan coordinators.

Electronic repository and distribution of forms, eliminating printing and handling of paper forms.

Integrated program reporting and data base functions within BWSR allowing for the determination of measurable outcomes of local water resource protection and management programs supported by the state through the BWSR.

Development of an integrated accounting software package for the states 91 soil and water conservation districts, resulting in improved fiscal oversight and reduced personnel costs for both the soil and water conservation districts and
BWSR.

Provide additional staff support to BWSR's 50+ staff, improving the current ratio of 1:50 to 1:10. This change will allow BWSR staff to adopt and implement technological changes at a pace equivalent to our local government clientele, private industry and other state agencies, resulting in the most efficient and productive workforce possible.

LONG-TERM IMPACT:

This initiative will result in the ability of BWSR to maintain its information management and

communications systems at a level equivalent or just slightly behind current industry standards into the future. BWSR will also be able to report in measurable terms the natural resource protection and management measurable accomplishments of local units of government and BWSR in the state of Minnesota. Long term this accountability will assist BWSR in targeting limited state resources to those areas of the state where we will receive the most environmental protection for the resources spent.

2. EROSION DAMAGE DUE TO FLOODING IN THE RED RIVER VALLEY A PROPOSAL TO PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO REPAIR AG. RELATED SITES.

Recommendation: The BWSR temporarily recognizes an approved practice to the existing cost share program for the identified disaster counties in the FEMA-DR 1116-MN Mitigation Strategy Report 7/3/96. This practice would be the repair and reshaping of badly eroded areas due to floods of the Spring of 1996.

This practice would provide technical and financial assistance to landowners to repair and reshape these areas. The program would be administered locally by the Soil and Water Conservation Districts. Procedures, forms for application, and funding processing, along with project oversight would be that of the already existing state cost share program.

The practice would be comprised of two components:

1) Cost sharing on the repair and reshaping activities. Rates would be limited to an amount based on lineal feet of repair or on an acreage basis. I have attached a page of calculations, provided by Tim Finseth of the Marshall SWCD, which shows an average cost to repair an area based on $4/ft. basis cost shared at 75% which then could be converted to a per acre cost.

2) A temporary land retirement component to this practice. The purpose of the limited use and duration retirement is to allow time for these areas to stabilize and build up fertility. Based on a plan prepared by the local SWCD, the landowner would be required to establish a vegetative cover of this area which would include a buffer area on both sides of the eroded area. The length of time, cover type and the limited use (haying and/or grazing) of the area would be included in the management plan prepared by the local SWCD. The length of retirement would be 5 to 15 years. The payment rate for this acreage would be consistent with the RIM limited duration payment rate which would be pro rated based on the duration of the retirement. Again, estimated costs for this component have been prepared by Tim Finseth and are contained on the attached sheet. This is based on an average RIM payment for Marshall County.

3. SOIL AND WATER CONSERVATION DISTRICT FORESTRY/AGROFORESTRY INITIATIVE

Project Description

This program would ensure the natural resources management of non-industrial private forest lands on ownerships of 20 acres or less. It would also accelerate windbreak establishment and maintenance, and thereby enhance energy conservation and control soil erosion. The funds would be used to place a staff person in the local soil and water conservation district office to develop management plans on these smaller tracts of land and to assist with the implementation of the plans. In the areas of high wind erosion the staff person would provide technical assistance for both field and farmstead windbreaks. It would also provide an incentive program targeting landowners/occupiers in need of wind protection not eligible for other programs.

4. EDUCATIONAL COORDINATORS

PROJECT DESCRIPTION

Three educational coordinators will continue the effective partnership between BWSR and MES to strengthen water resource education at the local level. Coordinators will be located in the north, south, and metro regions to assist and expand the capacity of SWCDs, Extension offices, county water plan coordinators, WD's, and other local resources that provide water resource education.

The educational coordinators will address regional issues and maintain statewide coordination. They will enable the staff of Local government units to educate their target audiences in water quality issues. Implementing activities in county water plans is a priority. While some educational initiative such as those in the Minnesota River, Lake Superior Basin, and Red River Watershed have a specific regional focus, they often revolve around common themes and issues that have broad application across the state. Through increased communication and coordination, programs and projects developed in one area of the state will be applied elsewhere, reducing duplication and increasing efficiency. Educational programs will include erosion control and sedimentation, manure management, wetland functions and values, urban sprawl and development concerns, wastewater treatment, lake and river quality, and groundwater protection. Educational programs will be developed for both youth and adult audiences.

5. MINNESOTA RIVER BASIN INITIATIVE

The Minnesota River is severely polluted and, as a result, has been designated as one of the ten (10) most endangered rivers in the United States. The total basin drains some of the most productive farmland in the United States, with almost 90 percent of the acreage in the basin used for farming. Several studies have identified significant amounts of nonpoint source pollution from agriculture and urban sources within the basin.

Three areas of activity will accelerate the implementation of water quality practices: coordination and communication at the local government level, education and information activities, and financial assistance to landowners for installing water quality best management practices. A short explanation of each follows.

- Coordination and Communication at the Local Unit of Government Level: In 1995 the Minnesota River Basin Joint Powers Board (MRBJPB) was created to enhance cooperation at the local level and coordinate with other state and federal agencies. Continued financial support will ensure that the efforts started in 1995 will continue, with a strong emphasis placed on local government implementation.

- Education and Information Activities: An education specialist will be hired to assist local units of government in promoting the message of the importance of cleaning up the Minnesota River basin and how to accomplish it. There has been a great deal of experience and research done on water quality practices; what we need is to get the information out to the landowners.

- Financial Assistance to Landowners for Installing Water Quality Best Management Practices: Through the application of conservation practices, nutrients and sediment can be kept from entering the river system. The amount requested will increase the financial incentive to landowners through the BWSR/SWCD cost-share program. The cost-share rates and technical assistance will be administered consistent with the current rules and M.S. 103C.501.

6. LAKESHED COST-SHARE

PROJECT DESCRIPTION

This initiative will provide funding to apply land treatment practices to control sediment and nutrient loading in lake watersheds.

Since 1977 Soil and Water Conservation Districts have applied conservation practices to improve water quality. Additional funds are needed to accelerate the treatment of known critical impact sites in order to protect lake water quality; one of Minnesota's most valuable economic assets. Seventy-two of Minnesota's eighty-seven counties have identified lake water quality as an important issue in their local water plans.

Installation of riparian buffer strips, animal waste management systems, stormwater basins, shoreland stabilization, and grass waterways in targeted lake watersheds will reduce sediment and nutrient loading to Minnesota lakes. With the exception of animal waste systems, the great majority of conservation practices cost less than $10,000. The rate of financial incentives for landowners will be up to 75%. BWSR proposes that up to 205 of the allocation be used for the technical assistance necessary to survey and design the projects, which is consistent with M.S. 103C.501.

7. NONPT ENGINEERING

PROPOSAL:

To increase funding to cover 100% of costs of the engineer and technical team in each JPA.

8. POLICY LEG:

- Agency voting
- Gift and donation authority for BWSR
- Changing SWCD supervisor terms from 6 to 4 years

Minnesota Board of Water & Soil Resources

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July 1, 1994

TO: Soil Conservation Advisory Committee
Others interested in soil conservation in Minnesota

FROM: David H. Behm, committee facilitator
BWSR Programs & Policy Analyst

RE: Report of the Soil Conservation Advisory Committee

The attached document reflects the culmination of discussions of members of the Soil Conservation Advisory Committee convened by the Minnesota Board of Water and Soil Resources. The committee was initially convened in 1991 to prepare a model ordinance for adoption by counties and townships to address agricultural erosion. The BWSR was prompted to do so because of the numerous references made within county local water plans to either revise existing or adopt new local ordinances to address erosion and sediment control -- many counties have specifically identified agricultural sources as an immediate concern.

The model ordinance will be distributed to all counties, townships, and soil and water conservation districts later this summer.

In 1993, the committee reconvened to review available information regarding the status of erosion in Minnesota. Upon discussing the available information, specific recommendations were presented to the committee for its consideration. Those recommendations are contained within this report. The member organizations and agencies will review this document and individually report back to the BWSR regarding their degree of support for the recommendations contained therein.

During the summer and fall of 1994, the BWSR Board will discuss these recommendations amongst its members and develop a legislative initiative for the FY96-97 biennium. As a reader of this document, you are encouraged to submit written comments or suggestions to me which may assist the Board in its deliberations and preparation of this important legislative package. Please submit your written comments to me at the address listed above. Feel free to call me with any questions you may have; my phone number is 612-296-0880.

Thank you for your interest in sustaining the fundamental natural resources of Minnesota's diverse agricultural productivity: its soils and waters.

A REPORT OF THE SOIL CONSERVATION ADVISORY COMMITTEE
to the Minnesota Board of Water & Soil Resources

JULY 1, 1994



The following agencies and organizations participated on the Soil Conservation Advisory Committee. None of the members have endorsed this report or any specific recommendation contained herein.

- *Bret Anderson, Minnesota Department of Natural Resources*
- *Greg Anderson, USDA-Agricultural Stabilization & Conservation Service*
- *C. Merle Anderson, farmer*
- *Wayne Anderson, Minnesota Pollution Control Agency*
- *Julie Bleyhl, Minnesota Farmers Union*
- *Paul Burns and Mark Dittrich, Minnesota Department of Agriculture*
- *John Dooley, Minnesota Association of Townships*
- *Lowell Franzen, Minnesota Association of Conservation District Employees*
- *Rick Hanna, Minnesota Association of County Planning & Zoning Administrators*
- *Owen Knutson, Minnesota Association of Soil & Water Conservation Districts*
- *Roger Mussetter, USDA-Soil Conservation Service*
- *Howard Peterson, Minnesota Association of Watershed Districts*
- *Steve Reckers, Minnesota Planning*
- *Todd Rongstad, Minnesota Farm Bureau Federation*
- *Dave Weirens, Association of Minnesota Counties*

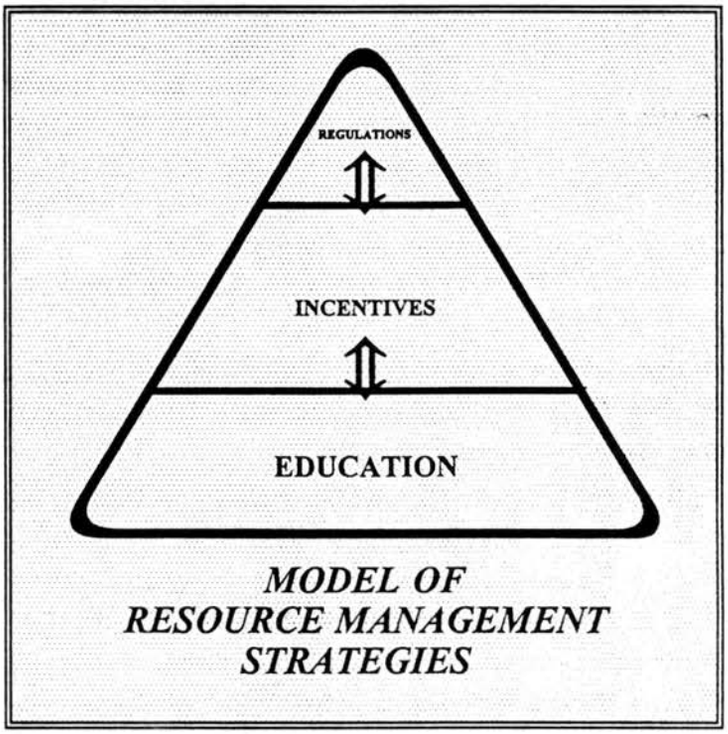
- *David Behm, Minnesota Board of Water & Soil Resources (staff facilitator)*

PREFACE

Maintaining high quality soil is fundamental to sustaining agricultural productivity. Society must continue to reinvest in the land management measures necessary to sustain the soil's productive capacity and overall quality in order to reap the public benefits of a safe and abundant food and fiber supply as well as prevent further degradation of our air and water resources. The reinvestment necessary in agriculture is not unlike similar private and public reinvestment in other industries.

Agricultural producers acknowledge their individual responsibilities to adequately protect the public's interest in soil and water resources for present and future generations. Similarly, the general public acknowledges the inherent and essential need for agricultural producers to have access to the tools and resources necessary to ensure the sustainability of agriculture.

To ensure the economic viability of agriculture while also providing the public goods of water quality protection and sustainability of soil productivity, the Soil Conservation Advisory Committee suggests that a clear restatement of the state's goals for soil protection be made and a balanced approach of resource management strategies (i.e., education-incentives-regulations) be employed in a comprehensive menu of options to address agricultural erosion. The recommendations build upon the voluntary program. The following figure illustrates a conceptual model of an appropriate balance of the recommended initiatives.



MODEL OF RESOURCE MANAGEMENT STRATEGIES

In response to many counties identifying the need to revise or adopt ordinances to address erosion and sediment control (especially on agricultural lands), the Minnesota Board of Water and Soil Resources (BWSR) convened an advisory committee in June 1991 to draft a "model" ordinance to assist interested counties. It was the initial intent of the BWSR to then encourage the adoption of the "model ordinance" by all counties, pursuant to their statutory planning and zoning authorities. BWSR staff believe that several counties will likely begin adopting such ordinances in the near future and that some guidance materials relating to existing planning and zoning authorities are needed as soon as possible to assist these counties in their deliberations.

The advisory committee met several times in 1991 and reconvened in 1993 to complete its review of the model ordinance. In late 1993, the BWSR requested the advisory committee to prepare a brief report outlining the fundamental needs of a comprehensive soil conservation program for Minnesota. Based on the recommendations contained in this report, the BWSR will seek a legislative initiative for the FY96-97 biennium to implement an improved and more comprehensive voluntary program to address agricultural erosion.

The BWSR anticipates distributing the model ordinance to all counties, townships and soil and water conservation districts (SWCDs) in the summer of 1994.

EXECUTIVE SUMMARY

Upon review of the information referenced herein or contained in the Appendix of this report, the Advisory Committee finds the following:

- Continuation of current trends of agricultural erosion threaten the long-term productive capability of the soil to provide an abundant food and fiber supply.
- Ample evidence suggests that agricultural erosion and off-site deposition of sediment have impacted (i.e., impaired and threatened) many of Minnesota's surface waters.

Consequently, the Advisory Committee recommends the following:

- An accelerated reduction of agricultural erosion and off-site deposition of sediment and, preferably, an improvement in the overall quality of Minnesota's soil resources must be achieved.
- The federal/state/local/private partnership of delivering soil and water conservation assistance to agricultural producers must be strengthened in the very near future by:
  (1) accelerating the availability of technical and financial assistance,
  (2) providing agricultural producers with current soil survey and erosion control information for specific soil types and crops,
  (3) enhancing statewide resource inventories to ensure that such information is statistically reliable on a countywide and minor watershed basis, and
  (4) promotion of the adoption of county ordinances to control agricultural erosion.
- Minnesota should establish a "nondegradation" policy for the protection and enhancement of the quality of its soil resources.
- Minnesota should identify the necessary components of a balanced and comprehensive voluntary program and to prescribe a reasonable timeframe for achieving the erosion rate goals identified in *Minnesota Milestones: A Report Card for the Future*.

FINDINGS AND RECOMMENDATIONS

A. Priorities of the State

(1) Soil Conservation for Soil Quality Protection & Improvement

As reported in *Minnesota Milestones: A Report Card for the Future* --

- Statewide average annual soil erosion rates must be reduced so as not to exceed 5 tons per acre per year by the year 2000.

As illustrated in the Appendix to this report, the Advisory Committee found --

- More acres of cropland need erosion control than are adequately protected (refer to "Erosion Control Needs on Minnesota's Cropland: 1967-1987"); and
- Average annual wind erosion on cultivated cropland exceeds the soil's capability to sustain long-term production to produce food and fiber (refer to "Soil Erosion on Minnesota Cultivated Cropland").

Therefore, the Minnesota Board of Water and Soil Resources is advised to:

- Consider legislative amendments to *Minnesota Statutes*, section 103A.209 ("soil and water conservation policy") to add a "nondegradation of soil quality" clause;

- Consider legislative designation of the Lester soil as a state symbol;
- Seek state and matching local funding to prepare updated county-level and minor watershed-level maps of high priority erosion areas; and
- In consultation with the Minnesota Department of Agriculture (MDA) and the U.S. Department of Agriculture-Soil Conservation Service (USDA-SCS), produce maps of highly productive agricultural areas most at risk of suffering reduced soil productivity due to soil erosion rates exceeding soil loss tolerances.

(2) Soil Conservation for Water Quality Protection & Improvement

As reported in *Minnesota Milestones: A Report Card for the Future* --

- 30% of river miles and 19% of lake acres will meet fishable and swimmable water quality standards by the year 2000 -- these will increase to 40% and 29%, respectively, in the year 2010 and to 50% and 39%, respectively, in the year 2020.

As illustrated in the Appendix to this report, the Advisory Committee found --

- Erosion and runoff from agricultural land impairs and threatens a greater number of river miles than any other source of nonpoint water pollution and is also a significant source which impairs or threatens several hundred thousand lake acres (refer to "Summary of Nonpoint Source Water Pollution Sources Impacting Minnesota's Surface Waters").

Therefore, the Minnesota Board of Water and Soil Resources is advised to:

- Encourage local governments to use watershed assessment and planning to develop implementation approaches that address local priority water quality protection and improvement goals;
- Seek state and matching local funding to prepare updated county-level and minor watershed-level maps of high priority sedimentation sources; and
- In cooperation with the USDA-SCS and the Minnesota Pollution Control Agency, establish an auditing process to conduct on-site reviews to determine where best management practices for the control of agricultural erosion and sedimentation are being properly installed/operated/maintained, and whether or not they are effective.

B. Accelerate Availability of Information and Technical Assistance

As illustrated in the Appendix to this report, the Advisory Committee found --

- While SWCD and USDA-SCS staffing levels have remained relatively stable throughout the 1980s, the availability of one-on-one technical assistance to landowners has declined over the last decade (refer to the compendium of staffing level graphs); and
- The state has contributed nearly $11 million for the preparation of soil surveys, yet not all counties have a published soil survey and those prepared initially are now in need of technical updating to improve their use for land use assessments of soils.

Therefore, the Minnesota Board of Water and Soil Resources is advised to:

- Establish an interagency technical advisory committee to evaluate and retool the delivery of technical assistance from the conservation partnership of federal/state/local agencies;
- Seek state funding to reestablish a soil and water conservation specialist position within the Minnesota Extension Service (MES) of the University of Minnesota (UofM);
- Upon reestablishing the MES/UofM soil and water conservation specialist position, seek state funding to:
  (a) develop (in cooperation with USDA) a minimum data set of soil quality indicators as suggested by the National Academy of Science, and
  (b) add regional education specialists (joint appointments with MES and the BWSR) to implement the strategies related to agricultural producers and the control of agricultural erosion, as described in *A Green Print for Minnesota* (state plan for environmental education);
- Seek state funding to ensure county-by-county coverage of soil conservation data items (including soil quality parameters) of high priority to the state for all future National Resources Inventories conducted by USDA-SCS, beginning in 1997;
- Seek state and matching local funding to ensure the availability of soil survey information to all agricultural producers in the state by:
  (a) preparing soil surveys for all counties,
  (b) updating existing soil surveys in high priority soil productivity areas, and
  (c) digitizing soil survey information in high priority soil productivity areas;
- Seek state and matching local funding to employ additional SWCD technicians to provide accelerated availability of one-on-one assistance to landowners necessary to achieve the soil erosion and related water quality goals identified in *Minnesota Milestones: A Report Card for the Future*; and
- Seek state funding to establish a certification/training program for erosion and sediment control specialists from state/local governments and a fee-based certification/training program for private consultants to ensure that the capability of the existing and accelerated technical assistance provided is adequate.

C. Accelerate Availability of Financial Assistance

The Advisory Committee found --

- Since 1978, inflation has reduced the purchasing power of the annual appropriation to the state cost-share program by approximately 50%; and
- Since 1980, Iowa and Missouri have each appropriated *nearly five times more than* the amount of funding appropriated for Minnesota's cost-share program.

Therefore, the Minnesota Board of Water and Soil Resources is advised to:

- Seek additional state funds for the cost-share program authorized by *Minnesota Statutes*, section 103C.501 to:
  (a) recover inflationary reductions that have occurred since 1978,
  (b) accelerate the application of best management practices to control agricultural

erosion and sedimentation for the purposes of meeting the anticipated increase in requests for assistance that will be necessary to achieve the soil erosion and related water quality goals identified in *Minnesota Milestones: A Report Card for the Future*;

- In cooperation with MDA and USDA, seek accelerated state funding to convert high priority Conservation Reserve Program contract acres to perpetual RIM Reserve conservation easements;
- Ensure the long-term availability of the new State Revolving Fund loan program to complement other existing and future incentive programs offered to agricultural producers to apply best management practices for the control of agricultural erosion and sedimentation; and
- Seek state funding for a local property tax credit program to encourage agricultural producers to apply best management practices to control agricultural erosion and sedimentation.

D. Accelerate Adoption of Local Official Controls

The Advisory Committee found --

- Forty-two Greater Minnesota counties have indicated in their comprehensive local water plans their intent to consider or propose a new ordinance to address erosion and sediment control;
- Twenty Greater Minnesota counties have indicated in their comprehensive local water plans their intent to propose revisions to existing ordinances which address, at least in part, erosion and sediment control;
- Six Greater Minnesota counties have an ordinance which specifically addresses erosion and sediment control; and
- No Greater Minnesota county or township has adopted an ordinance pursuant to *Minnesota Statutes*, section 103F.401 to 103F.455.

Therefore, the Minnesota Board of Water and Soil Resources is advised to:

- Consider legislative actions to:
  - (a) amend *Minnesota Statutes*, section 103C.405 ("duties of the state board -- program plan") to --
    - (1) identify the components of a comprehensive voluntary program,
    - (2) prescribe a reasonable timeframe for achieving the erosion rate goal identified in *Minnesota Milestones: A Report Card for the Future*, and
  - (b) repeal *Minnesota Statutes*, section 103F.401 to 103F.455;
- In cooperation with USDA and the Minnesota Association of County Planning and Zoning Administrators, assess landowners' compliance with existing federal, state and local regulations addressing agricultural erosion;
- Encourage counties (or townships) to voluntarily adopt the model agricultural erosion control ordinance prepared by the Advisory Committee -- seek state and matching local funding to provide an incentive to do so until the year 2000;
- Seek state and matching local funding to accelerate assistance to counties which have identified in their respective local water plan an intent to revise or develop ordinances

addressing agricultural erosion;

- Request biennial reports from those state agencies which own or manage agricultural land or that administer programs affecting the management of private agricultural lands regarding the compliance of those lands with the erosion rate goal identified in *Minnesota Milestones: A Report Card for the Future*; and
- Upon receipt of these reports, the BWSR should include an assessment of statewide soil conservation achievements and needs in its biennial report to the Governor (pursuant to *Minnesota Statutes*, section 103B.101, subdivision 9, clause (7).

Lastly, two organizations represented on the Soil Conservation Advisory Committee raised concerns about the following initiative. This potential initiative was retained in the body of this report because it was discussed by the committee and the Minnesota Board of Water and Soil Resources must further discuss and determine if it will consider incorporating the idea within its legislative initiative for the FY96-97 biennium.

- Consider legislative amendments to *Minnesota Statutes*, section 394.25, to enable counties to assess "excessive erosion fees" to agricultural lands on which average annual erosion rates exceed soil loss tolerances with the fees collected to be used exclusively for local education or incentive programs to encourage agricultural landowners to apply best management practices.

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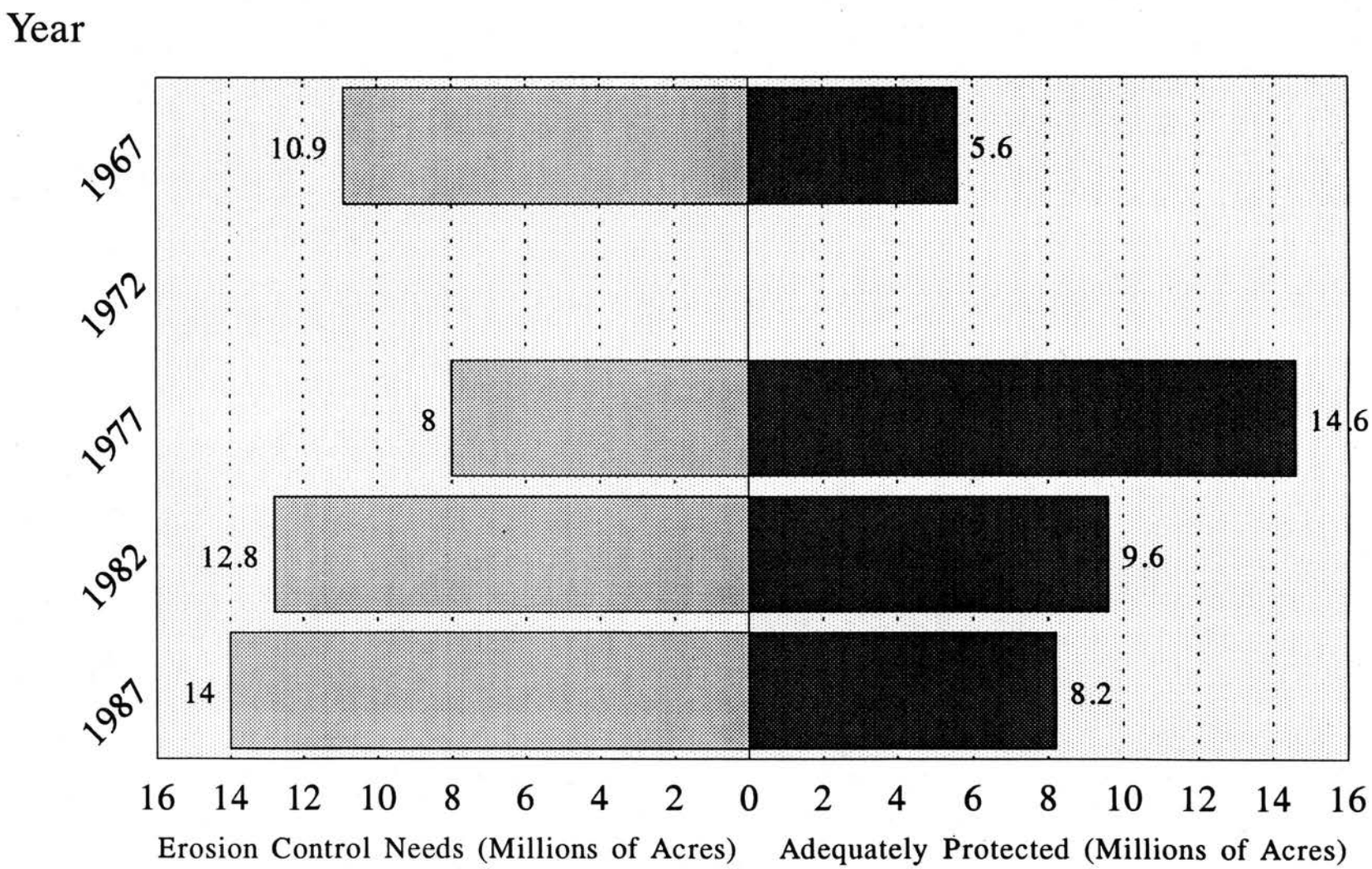
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APPENDIX

TO THE

REPORT OF THE SOIL CONSERVATION ADVISORY COMMITTEE
to the Minnesota Board of Water & Soil Resources

EROSION CONTROL NEEDS ON MINNESOTA'S CROPLAND:
1967 - 1987



NOTE: Since 1987, nearly 2 million acres have been enrolled in the federal Conservation Reserve Program and approximately 20% of all cropland is under conservation tillage in Minnesota.

SOURCE: USDA-SCS

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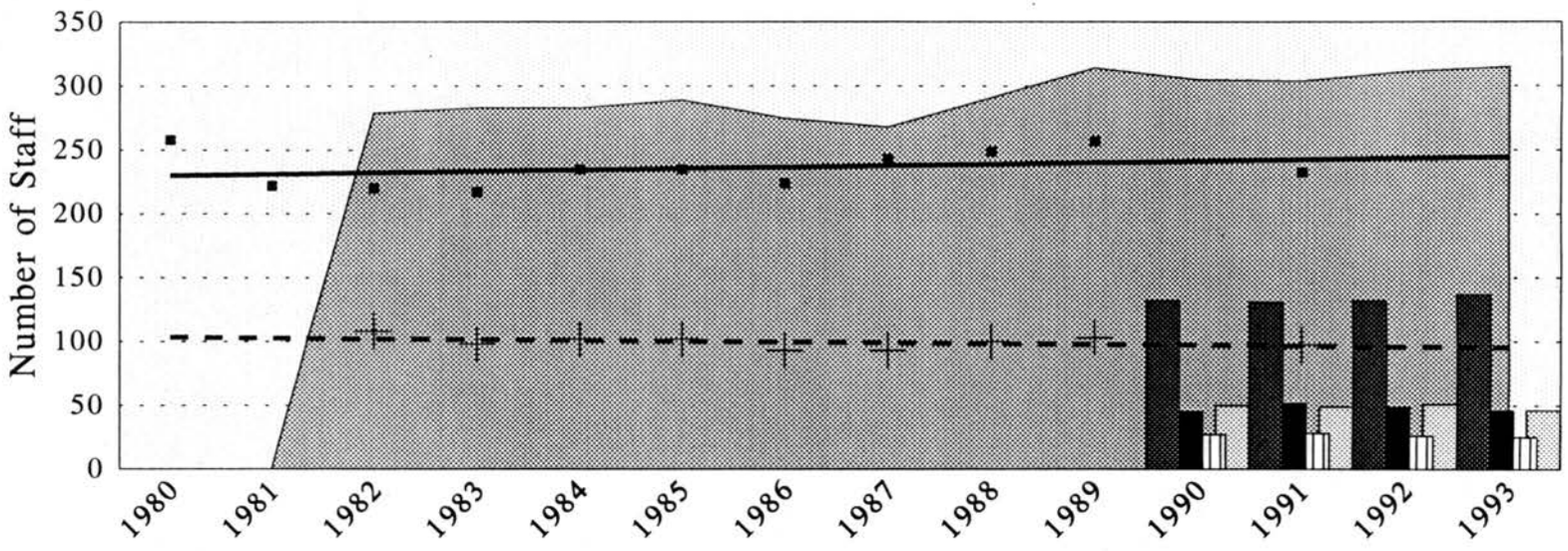
Conservation Tillage in Minnesota, 1987-1993
(All Crops)

YEAR	TOTAL PLANTED (acres)	NO-TILL (acres) [% of total planted]	RIDGE-TILL (acres) [% of total planted]	MULCH-TILL (acres) [% of total planted]	TOTALS (acres) [% of total planted] {U.S. rank}
1993	17,737,678	809,306 [5]	569,097 [3]	3,449,875 [19]	4,828,278 [27] {N/A}
1992	18,297,222	531,027 [3]	572,799 [3]	2,971,651 [16]	4,075,477 [22] {10}
1991	18,190,002	309,994 [2]	559,903 [3]	2,699,398 [15]	3,569,295 [20] { 8}
1990	18,258,603	230,100 [1]	535,904 [3]	2,597,012 [14]	3,363,016 [18] { 8}
1989	18,105,232	188,944 [1]	478,247 [3]	2,533,506 [14]	3,200,697* [18] { 9}
1988	17,410,093	164,953 [<1]	460,184 [3]	3,653,217 [21]	4,352,324* [25] { 6}
1987	22,990,000	20,600 [<1]	149,200 [<1]	2,068,800 [12]	2,701,100* [12] {N/A}
AVERAGE [%]	18,712,690	322,132 [2]	475,048 [3]	2,853,351 [15]	3,727,170* [20]

*Total also includes those crop acres under "strip tillage."

SOURCES:
Conservation Tillage Information Center
1987 National Resources Inventory, Soil Conservation Service

Staffing Levels:
Soil Conservation Service and Soil & Water Conservation Districts
1982 - 1993



SCS Technicians	N/A										50	49	51	46
SCS Engineers											27	28	26	25
SCS Soil Scientists											45	52	49	46
SCS Soil Conserv'ists											132	131	132	137
SCS Total Staff			279	283	283	289	275	268	291	314	305	304	311	315
SWCD Technicians			108	98	102	102	93	93	100	103	N/A	97.5	N/A	N/A
SWCD Total Staff	258	222	220	217	235	235	224	243	249	257		232.25		

Years

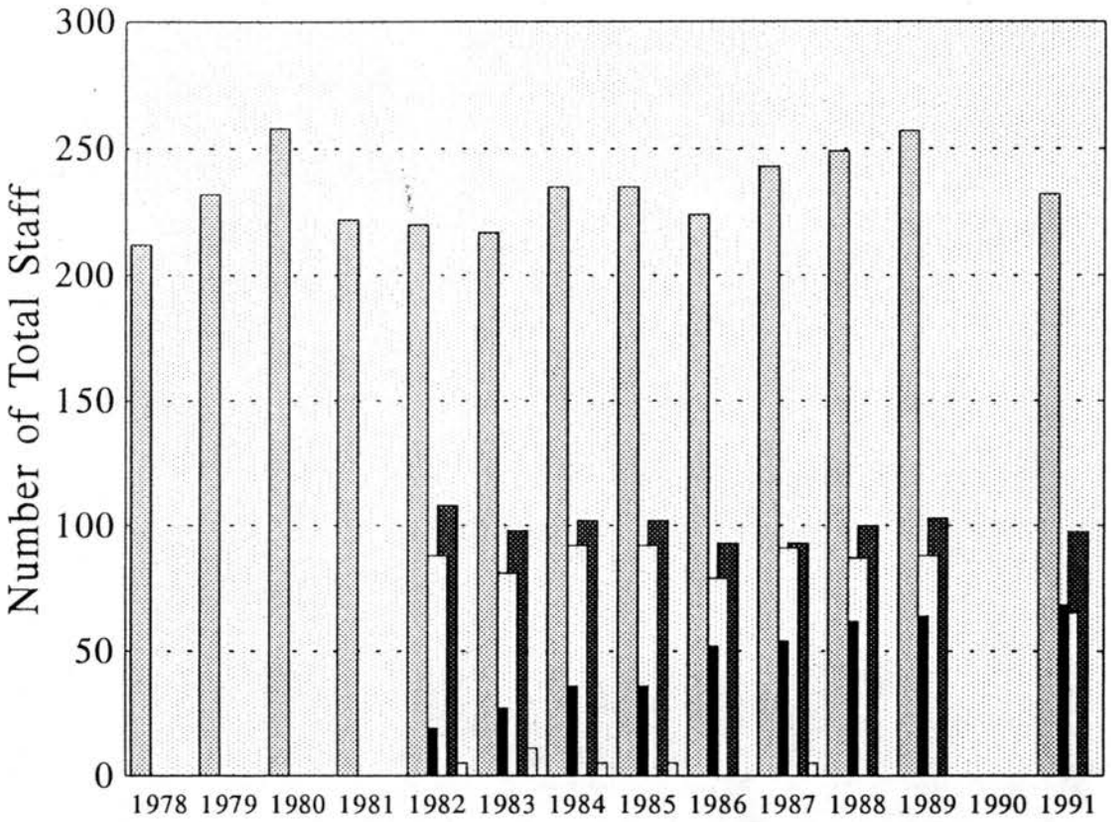
Type of Staff

SWCD Total Staff, SWCD Technicians, SCS Total Staff, SCS Soil Conserv'ists, SCS Soil Scientists, SCS Engineers, SCS Technicians

N/A = Not Available

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STAFFING LEVELS OF SOIL & WATER CONSERVATION DISTRICTS:
1978 - 1991



	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total Staff	212	232	258	222	220	217	235	235	224	243	249	257	N/A	232.25
Managerial	N/A	→	→	→	19	27	36	36	52	54	62	64	↓	68.5
Secretarial/Clerical	↓				88	81	92	92	79	91	87	88		65.25
Technical					108	98	102	102	93	93	100	103		97.5
Equipment Operators					5	11	5	5	0	5	0	0		0

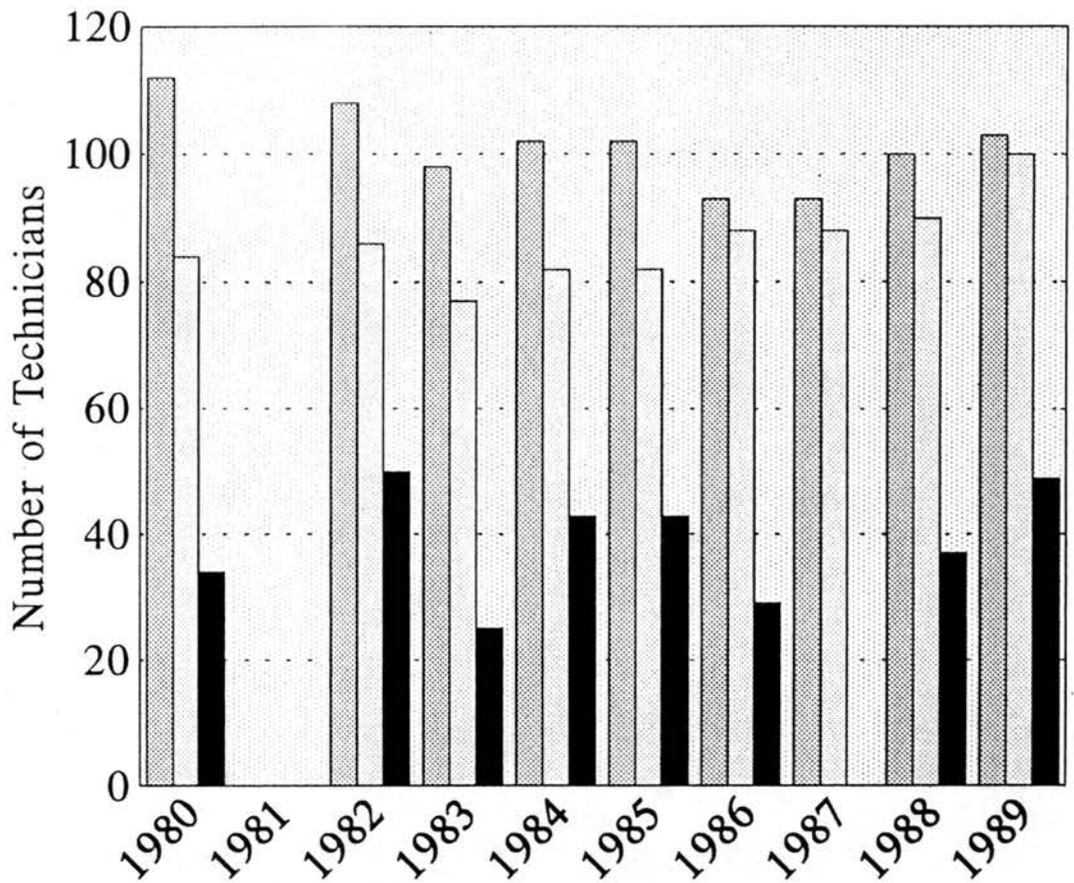
Years

Staffing Levels
- Total Staff
- Managerial
- Secretarial/Clerical
- Technical
- Equipment Operators

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N/A = Not available

TECHNICIANS EMPLOYED AND NEEDED BY SOIL & WATER CONSERVATION DISTRICTS:
1980 - 1989





	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Employed	112	N/A	108	98	102	102	93	93	100	103
Full-Time Employed	84	↓	86	77	82	82	88	88	90	100
Add'l Full-Time Needed	34	↓	50	25	43	43	29	N/A	37	49

Years

N/A = Not Available

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SOIL & WATER CONSERVATION DISTRICT
Expenditures on Personal Services:
1984 - 1993

Years	*Total Expenditures: Personal Services*	*Total Staff*	*Cost per Staff*
1984	*3,595,000*	*235*	*15,298*
1985	*3,766,000*	*235*	*16,026*
1986	*3,984,000*	*224*	*17,786*
1987	*4,599,000*	*243*	*18,926*
1988	*5,506,000*	*249*	*22,112*
1989	*6,054,000*	*257*	*23,556*
1990	*6,573,000*	*	*
1991	*7,083,000*	*232.25*	*30,497*
1992	*7,729,000*	*	*
1993	*8,187,000*	*252*	*32,488*

* = Not Available

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SOIL & WATER CONSERVATION DISTRICT
Expenditures on Personal Services:
1984 - 1993

- Soil and water conservation districts have increased their expenditures on personal services, yet overall staffing levels have remained relatively flat over the past 10-year period. There are several reasonable explanations for this apparent discrepancy between the relationship of the growth of expenditures and staffing levels. They are as follows:

- Double-digit inflation occurred during much of the mid- to late-1980s, which was largely responsible for the significant increase in overall personal services expenditures.

- Beginning in the late 1970s and early 1980s, soil and water conservation districts across the state began to increase the number of their employees to meet increasing demands from local landowners to apply soil and water conservation practices to control erosion and protect water quality. These entered the profession at relatively low wages, many without fringe benefits.

- Many of the employees hired in the late 1970s and early 1980s were retained by their respective SWCDs for many years. Consequently, these employees gained seniority within their positions which resulted in increased wages over time. Now, these employees are at or near the top of their respective payscales.

- Beginning in the mid-1980s, many SWCDs began to add employee benefit programs in efforts to retain these dedicated employees. Also, most SWCDs recognized the findings of comparable worth studies and incorporated payscale adjustments accordingly. These adjustments resulted in greater expenditures for personal services.

- Most SWCDs now have a manager directing the daily activities and programs of the district. These individuals are compensated at the highest payscale levels.

- Cumulatively, these actions are responsible for the significant increase in personal service expenditures by SWCDs and also explains why there has been no comparable increase in overall levels. It is also noteworthy to mention that as SWCDs have promoted from within, many of the technicians who previously provided one-on-one technical assistance to landowners are now less available to meet these requests. Consequently, as the SWCDs have increased their capacity to accept the delegation of many state (and federal) programs since 1984, their overall capacity to provide one-on-one technical assistance to their constituents has actually been reduced.

August 19, 1996

TO : ~~Mary Jo~~ Board Members

FROM : Wayne

RE : **August Board Meeting Agenda Item**

1997 Local Water Plan (LWP) Challenge Grant Program Applications - The purpose of the BWSR LWP Challenge Grant Program is to fund the implementation of action items of comprehensive local water plans. This Program is held during the second half of the biennium. The application period for the FY 97 Program ended July 12, 1996. The BWSR received 88 applications requesting $2,575,820. (Please refer to the enclosed spreadsheet.) Approximately $900,000 is available for allocation. Applications are currently being reviewed by the interagency review committee according to prescribed criteria and procedures of the Challenge Grant Rules. This committee is scheduled to submit a funding recommendation to the BWSR next month. **INFORMATION.**

1997 LWP CHALLENGE GRANT APPLICATIONS

MULTI	INDIV.	APPLICANT	DESCRIPTION/TITLE	$ REQUESTED	SCORE	COMMENTS
X		NORMAN CO/WILD RICE WD	WILD RIVE MARSH RIVER BASIN WATER QUALITY ASSESSMENT	$50,000		
	X	WILKIN CO.	EXP. BIO ENG DEMO PROJECT	$12,500		
X		SOUTH CENTRAL JPB	ESTABLISHING PRIORITY WETLAND RESTORATION SITES	$83,131		
X		MN RIVERS JPB	MN RIVER EDUCATION & PUBLIC OUTREACH PROJECT	$100,000		
	X	SCOTT CO.	GROUNDWATER PLAN/ABANDONED WELLS	$40,000		
X		ST LOUIS CO.	MN WATER LINE	$17,700		
X		BROWN/WATONWAN CO.	LAKE HANSKA WATER QUALITY	$62,000		
	X	MCLEOD CO.	WATER QUALITY PROTECTION	$20,000		
X		MARSHALL CO/MRSR WD	COST SHARE PROGRAM	$15,000		
	X	SIX CITIES WMO	SPRINGBROOK SUBWATERSHED INVESTIGATION	$37,150		
	X	SHERBURNE CO.	NUTRIENT AND IRRIGATION MGMT.	$26,000		
X		BENTON/MORRISON CO'S	LITTLE ROCK LAKE WATERSHED PROJECT	$19,000		
	X	RENVILLE CO.	CONSERVATION CREDIT INTIIATIVE	$40,000		
	X	FARIBAULT CO.	WATERSHED LAND USE ASSESSMENT	$16,400		
	X	FARIBAULT CO.	MN LAKE SHORELAND PROTECTION	$7,245		
	X	FARIBAULT CO.	BLUE EARTH RIVER BANK EROSION PROJECT	$4,750		
	X	FARIBAULT CO.	WETLAND EDUCATION	$6,100		
	X	MCLEOD CO.	BELLE LAKE IMPROVEMENT	$1,500		
	X	MCLEOD CO.	LAKE MARION WATER QUALITY IMPROVEMENT	$7,500		
	X	WRIGHT CO.	GROUNDWATER PROTECTION	$20,000		
	X	PIPESTONE CO.	ON-SITE SEPTIC EDUCATION/ORDINANCE	$9,366		
	X	ITASCA CO.	SHORELINE/EROSION STABILIZATION & SHORELAND LANDSCAPIN(	$30,500		
X		LYON CO.	FLOOD CONTROL STRUCTURES	$9,250		
	X	LYON CO.	SMALL IMPOUNDMENT STRUCTURE STUDY	$26,200		
X		NOBLES CO.	BMP COST-SHARE PROGRAM	$80,000		
	X	LYON CO.	WETLAND MAPPING	$15,000		
	X	PINE CO.	GIS	$19,200		
	X	ELM CREEK WMO	WETLANDS INVENTORY	$39,673		
	X	CARNELIAN/MARINE WMO	LAKE LOUISE WATER QUANITY	$40,000		
	X	PIONEER/SARA CREEK WMO	WETLANDS INVENTORY	$39,175		
	X	WADENA CO.	GROUNDWATER DEVELOPMENT	$40,000		
X		NORTH CENTRAL MN JPB	HYDROGEOLOGIC INFORMATION & GROUNDWATER SPECIAL PRO.	$58,650		
	X	WRIGHT CO.	WATERSHED RUNOFF MONITORING FOR COST-SHARE EFFECTIVE	$13,900		
	X	MARSHALL CO.	WETLAND INVENTORY DEVELOPMENT	$40,000		
	X	CLAY CO.	BUFFALO RIVER RIPARIAN LAND PROTECTION PROJECT	$21,620		
	X	DOUGLAS CO.	LAKE ANDREWS PROTECTION PROJECT	$14,639		

1997 LWP CHALLENGE GRANT APPLICATIONS

MULTI	INDIV.	APPLICANT	DESCRIPTION/TITLE	$ REQUESTED	SCORE	COMMENTS
	X	KANDIYOHI CO.	CONSERVATION CREDIT	$40,000		
X		JACKSON CO.	SEPTIC SYSTEM ORDINANCE	$43,200		
	X	RICE CO.	GIS IMPLEMENTATION	$39,000		
	X	CHIPPEWA CO.	CONSERVATION CREDIT INITIATIVE	$40,000		
X		PENNINGTON/MARSHALL CO'S	ISTS MONITORING PROGRAM	$10,620		
	X	FILLMORE CO.	SINK HOLE REMEDIATION PROJECT	$21,900		
	X	HUBBARD CO.	WESTERN LEECH LAKE ASSESSMENT & BMP IMPLEMENTATION	$30,240		
	X	HUBBARD CO.	GROUNDWATER MONITORING & FEEDLOT STUDY	$18,950		
	X	SWIFT CO.	CONSERVATION CREDIT INITIATIVE	$36,500		
X		ELK RIVER JPB	ELK RIVER WATERSHED PROTECTION	$48,000		
	X	LAKE OF THE WOODS CO.	RAINY RIVER SHORELINE PROTECTION	$6,870		
	X	LAKE OF THE WOODS CO.	SURFACE WATER QUALITY TESTING	$2,500		
	X	RENVILLE CO./BUFFALO CREEK WD	LAKE ALLIE SEDIMENT LOADING REDUCTION	$32,500		
	X	RENVILLE CO./BUFFALO CREEK WD	FECAL COLIFORM INDICATOR ANALYSIS	$20,000		
	X	OLMSTED CO.	CASCADE CREEK WATERSHED PROJECT	$39,484		
	X	POPE CO.	TRAPPERS RUN WATERSHED PROJECT	$40,000		
	X	CARNELIAN/MARINE WMO	LAKE LOUISE OUTLET STUDY	$10,000		
	X	CROW WING CO.	BRAINERD WELLHEAD PROTECTION	$2,400		
	X	CROW WING CO.	EROSION & SEPTIC SHORELINE INVENTORY	$4,000		
	X	MINNEHAHA CREEK WMO	MUNICIPAL STORMWATER GRANT PROGRAM	$30,000		
	X	GUN CLUB LAKE WMO	SEDIMENT ACCUMULATION RATE STUDY	$34,500		
	X	DAKOTA CO.	EGOSYSTEMS IDENTIFICATION ASSESSMENT & PROTECTION PROGI	$23,882		
X		MILLE LACS CO.	MILLE LACS LAKE WATERSHED PROTECTION	$34,070		
	X	VADNAIS LAKE WMO	ST PAUL WATER UTILITY WELLHEAD PROTECTION PROJECT	$26,900		
X		SE MN JPB	COUNTY WELLHEAD PROTECTION ASSISTANCE	$88,000		
	X	NORMAN CO.	INTERNET WEB PAGE PILOT PROJECT	$4,400		
	X	NORMAN CO.	USDA WETLAND DIGITIZATION	$17,740		
	X	STEARNS CO.	NITROGEN BMP'S	$19,700		
	X	BECKER CO./PELICAN RIVER WD	SEPTIC SYSTEM INVENTORY	$9,900		
X		SNAKE RIVER JPB	PLAN IMPLEMENTATION	$60,000		
	X	SIBLEY CO.	WELL SEALING/COST-SHARE PROGRAM	$20,000		
	X	ROCK CO.	SW MN ENVIRONMENTAL FAIR	$5,000		
	X	BELTRAMI CO.	MULTIJURISDICATIONAL NATURAL RESOURCE REGULATORY PRO	$16,000		
	X	ITASCA CO.	SHORELAND SEPTIC SYSTEMS & WATER QUALITY	$16,400		
	X	HUBBARD CO.	SHORELAND SEPTIC INVENTORY & EDUCATION	$145,580		
	X	CARLTON CO.	GIS DEVELOPMENT	$39,985		

1997 LWP CHALLENGE GRANT APPLICATIONS

MULTI	INDIV.	APPLICANT	DESCRIPTION/TITLE	$ REQUESTED	SCORE	COMMENTS
	X	LAC QUI PARLE CO.	CONSERVATION CREDIT INITIATIVE	$40,000		
X		REDWOOD CO./RCRCA	CITIZEN PARTICIPATION	$39,800		
X		MARTIN CO./BERBI	DUTCH YARD STICK MODEL	$75,000		
X		CLAY CO.	RED RIVER BASIN WATER PLANNING PROJECT	$20,000		
X		HUBBARD/BELTRAMI CO'S	TRAIN THE TRAINERS	$14,500		
	X	CLEARWATER CO.	LAKE PROTECTION FOR LONG LAKE	$7,500		
	X	CLEARWATER CO.	ROY LAKE ENVIRONMENTAL SUBORDINATE SERVICE DISTRICT	$10,000		
	X	STEARNS CO./NCR WD	WATERSHED IMPLEMENTATION	$28,250		
X		CLEARWATER CO.	MITIGATING URBAN RUNOFF	$20,000		
	X	COOK CO.	WATER PLAN IMPLEMENTATION	$19,000		
X		BELTRAMI/CLEARWATER CO'S	FOREST STEWARDSHIP PLANNING LAKE BEMIDJI WATERSHED	$12,500		
X		HOUSTON/FILLMORE CO'S	USE OF TREE REVETMENTS FOR STREAMLAKE STABILIZATION	$35,000		
	X	STEARNS CO.	VEGETATIVE FILTERSTRIP INCENTIVE PROGRAM	$40,000		
	X	RAMSEY/WASHINGTON WMO	DISTRICT PLAN TRACKING & EVALUATION DEVELOPMENT	$16,900		
X		WHITEWATER JPB	WATERSHED IMPLEMENTATION	$34,350		
	X	BEVENS CREEK WMO	COORDINATE RURAL & URBAN RELATIONS	$1,650		
		TOTAL		$2,575,820		

REVIEWER

AGENCY/ORGANIZATION

H:CHGRANT

TO: All Interested Parties

RE: FYI

RECEIVED
JUL 19 1996

7/21/96

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

Dear Matt Moore,

As a St. Paul citizen I have been pushing for a more active Central Ramsey Watershed Management Organization. We citizens have recently lobbied St. Paul unsuccessfully for one of the two seats as a "true" citizen seat on the board. The citizen seat is now filled by a St. Paul water department employee, Bill Tscheida.

I have personally attended the December 1995, June 1996 regularly scheduled meetings and the two subsequent visioning meetings. These visioning meetings were anything but visionary. They mainly consisted of deciding what was required by law and the minimum BWSR would accept for their plan. The (non-citizen) board seats are filled with non-visionary public works employees and one fiscally stretched city administrator.

I took the liberty to call Tom Eggum, St. Paul Assistant Director of Public Works to ask for an official mouth piece for the City of St. Paul to attend yesterdays vision meeting 7/11/96. Roger Puckwriter attended to fulfill this role. Yesterday it became crystal clear that none of the member cities have any inclination to have an active WMO. At one point during yesterdays "visioning" meeting the citizen representative, Bill Tscheida, turned to me and said, "I am sick and tired of you pointing out what this organization could be doing, should be doing and isn't doing. I have accepted the fact this organization is not going to be active." I found this very disheartening. (It is one thing to be attacked by member city public works employees, and quite another by your own citizen representative.) When I asked if they were going to have a citizen advisory committee. They replied, they have no intention of having a citizen advisory committee.

In all fairness Roger Puckwritter did put a qualifier on his, NO ACTIVE WMO. If I could show him specific projects and shortcomings not currently addressed by member cities he may reconsider. After the meeting I spoke with him briefly about the flooding potential from the undersized Godfrey pit and the sand deltas building up in Lake Como as a result of upstream stormwater flow from Roseville and Falcon Heights. Both of these cities make up approximately 35-40% of the flow into Lake Como. Another opportunity for the WMO are the St. Paul river front development and beautification projects currently going on. I had a much longer list of items but he had to attend another meeting and could not stay.

A copy of your letter to SWRWMO was circulated at the CRWMO meeting and it had absolutely no effect. I thought it was a well constructed letter. A final meeting is scheduled for August 8, 1996 3-5pm at the Dale street St. Paul Public Works garage 2nd floor to finish budget items. What can I do? District 10 do? What can BWSR do?

Sincerely,

Mike Perniel
487-3565 (H)
229-2052 (W)

FR: MMM

Minnesota Pollution Control Agency

Feedlot Rule Update

July 1996

Introduction

Over the next two years, the MPCA will revise the state of Minnesota's animal feedlot rules, (Minn. Rules Chapter 7020). This quarterly update will inform interested parties of major activities and issues related to the feedlot rulemaking process. *The Update* will include explanation of proposed changes to the rule and notifications of public participation events.

Policy Development For Earthen Storage Basins

Much of the research and policy work for construction code and proper use of earthen storage structures has been completed. The following criteria are being discussed and *may* become part of the revised feedlot rule. Many of these reflect current practice in feedlot permitting.

- Liners in earthen manure storage structures must be designed and constructed to limit seepage to no more than 0.018" (1/56 inch) per day. This guideline is the same as used for industrial and municipal wastewater storage facilities.
- Plans for all earthen liquid manure storage facilities, and for all other structures holding more than 500,000 gallons of manure, must be designed by a registered professional engineer or qualified NRCS staff. These plans must be reviewed and approved by MPCA staff *prior to* construction. In addition, a soils investigation study is required. The MPCA must be notified three days prior to construction completion to allow for inspection of the project.
- When construction is complete, the producer or engineer must send a report verifying that proper construction practices were used by the contractor during the building of the structure. Testing of the soils is required during the construction process and the results of these tests must be included in the final construction report.
- Additional proposals presently under consideration in the rule revision include self-auditing, periodic regulatory inspections and an operation and maintenance-management plan.

Several issues associated with basins, including odor concerns and storage capacity, will be incorporated with other parts of the rule revision.

Land Application Issues

The Land Application of Manure Task Force (which also recently completed manure application guidelines) has met on two occasions to discuss options for rule language pertaining to manure

For further information regarding the MPCA feedlot rule revision please contact Don Hauge, MPCA. Feedlot Unit at 612-296-8481 or by e-mail at: Don.Hauge@pca.state.mn.us.

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application. The issues being discussed include:

- Defining more specifically what must be included in a manure management plan;
- Winter application of manure on steep slopes;
- Winter application of manure within 300 feet of surface waters, channels and tile inlets;
- Defining maximum manure application rates and the basis for determining rates;
- Prevention of excessive phosphorus build-up in soils;
- Record keeping;
- Protection measures for application to unfrozen soil within 300 feet of surface waters.

Developments On Feedlot Odor

Odor was the number one issue expressed in the public comment process conducted in the summer of 1995. Two principal initiatives have been set in motion since the MPCA board gave authority to the feedlot program to pursue rule development regarding livestock odor issues:

- An odor task force made up of various interest groups began meeting in January, 1996. The task force is examining the issue from several perspectives, which include design and management to control odor, land use issues, and detection and measurement of odors.
- Some field monitoring of specific gases at a large livestock facility in Renville County was done in August, 1995. This work was conducted cooperatively by the Renville County Staff and the Air Quality Division of the MPCA. Results of this testing indicated that hydrogen sulfide emissions were at levels of some concern. An interagency work group headed by the Minnesota Department of Health, together with the Minnesota Department of Agriculture and the MPCA have been further studying this problem. Additional test results indicate that these emissions are a significant issue. Monitoring funded by concerned citizens as well as county efforts, have been key to this project. Several types of tests have been conducted. Although test results vary, some data caused enough concern to warrant continued investigation.

Odor management plans will be required in larger operations to effectively control odors. There are a wide range of site selection and management options that can affect odor production and emission. Technological solutions, such as lagoon covers and biofilters could also be considered, but are not expected to be prescribed in the rule. Minimum setbacks at a state level have not been ruled out, although jurisdiction for zoning to address land use conflicts has long been a responsibility of local government.

A third area, depending on speed of research, would be to establish an emissions limit based on a "marker compound." Theoretically, the marker compound would be a reliable indicator of an odor problem, and a facility would be considered in noncompliance if a certain emissions level were exceeded.

The goal is to ensure that the health and safety of rural Minnesotans is not impaired.

Rule Revision Completion Date

The original feedlot rule revision was scheduled for completion in April, 1997. Because of feedlot program personnel changes and a decision to address odor issues, the final rule adoption date will be approximately May, 1998.

These are the required rulemaking steps with target completion dates in parenthesis.

1. Solicitation of public comment. (Completed)

2. Drafting of new rule with continuing public participation. (January 1997)

3. Review of draft rules by the MPCA. (April 1997)

4. Adoption of the draft rule by the MPCA board. (May 1997)

5. APA (Administrative Procedure Act) Public hearings. (August 1997)

6. Additional revisions and further review. (March 1998)

7. Final version presented to the MPCA board for adoption.(May 1998)

The optimum time to impact any rule change is during the current drafting period, which will continue through December of 1996, though there will continue to be further opportunities to participate after that.

MPCA Re-evaluates Permitting Approach

Internal and external discussions of the MPCA feedlot rules have led to some fundamental questions about how the feedlot program operates in Minnesota. The evaluation has centered on the permitting part of the program and some of the questions being asked are:

- Does our current program focus on the most significant sources of pollution?
- Is the current regulatory system fair?
- Are those who cooperate rewarded or punished?
- Is everyone regulated under the current permit?

Some problems with the current system are obvious. It appears we will never be able to permit everyone due to the great number of feedlots. Presently, there are approximately 35,000 feedlots in the state and about 17,000 are permitted. State and county feedlot staff are issuing/reissuing about 1,500 permits per year. This falls far short of the approximately 4,000 - 5,000 permits that would be required to be issued annually to keep everyone permitted.

We are considering a range of options for regulation, including approaches similar to those the MPCA has used in the past, as well as alternative approaches from other programs and states. The following ideas have been proposed.

Feedlots greater than 300 animal units.
Feedlots greater than 300 animal units (AU) will continue to be permitted. Permitting this group addresses the correlation between the number of animal units and the pollution potential.

Often the largest facilities have the newest technology and operational practices available, however, because of the significant pollution potential it is vital that all available safeguards are in place to prevent any manure discharge to the environment.

Feedlots with less than 300 animal units.
Feedlots with less than 300 AU comprise more than 95% of Minnesota's feedlot facilities. Regulating this category is a complex task due to the diverse nature of operations, including operators planning to expand their facilities, operators ready to retire in five years, operators with limited economic means to make improvements or who are running a livestock operation on a part-time basis. A permit will affect each of these type of operations differently.

MPCA staff believe that the best way to regulate this group may be to use a permit-by-rule approach, which means that these facilities would be governed by general statutes and rules. In order to verify general compliance by this group, the MPCA would rely on random-inspection as well as complaints.

Other options.
The MPCA is also considering another option to reduce "red-tape" for those facilities that pose the

least pollution potential. This proposal would allow some farms in the 300 to 1,000 animal unit range the choice of either meeting certain environmental criteria or applying for a feedlot permit. Possible criteria include:

- The site is outside shoreland (more than 300' from a public water).
- The site provides 12 months of manure storage capability.
- The site has total confinement of livestock.
- The producer owns or has available adequate acreage to apply manure at agronomic rates.

Permit By Watershed

An innovative idea being considered for the rule revision is a permit-by-watershed program, which means livestock producers would join with their neighbors and obtain a community permit.

The permit by watershed goal would be two-fold:

1. To reduce the cumulative pollution load coming from a given area, and;
2. To reduce the amount of direct regulation of those participating in the Watershed Permit program.

The result is that both the environment and the Watershed Program participants would benefit.

A land area currently defined by sub-watershed boundaries would be the most likely candidate for this approach. The MPCA Clean Water Partnership program includes several of these sub-watershed areas that are currently monitoring surface and ground water quality.

The MPCA and the participating entity would need to have an agreement for this type of permitting arrangement to be viable. Performance standards and/or other types of measurements, agreeable to both parties, would be developed. Examples of a performance standard would be a measurable reduction in the amount of phosphorus loading discharged from the watershed and may include an agreement that all operations within the watershed would agree to implement specified best management practices. This idea may best be described as experimental, since to our knowledge it has not been done elsewhere. More work needs to be done before this concept could become a reality.

Public Participation In The Process

Numerous issues are associated with the revision of the state feedlot rules and individuals and groups will be affected. The MPCA has compiled a list of over 100 interest groups that may be potentially affected by feedlot rule revision changes.

The number of interest groups affected and the volume of issues make public participation a major part of the effort. The public has the perspective and obligation to inform the MPCA of the potential impacts of propositions being considered. For the rule revision process to work effectively, we need public involvement. This is a significant opportunity for direct public participation in the rule making process.

Public informational meetings will be scheduled in the fall of 1996. The MPCA also encourages the public to invite the feedlot rule-makers to their organization meetings or by continuing to comment by telephone or mail.

[copy to board members]