

Minnesota Board of Water and Soil Resources. Minutes.

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Version 3
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2/22/95

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET, CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
FEBRUARY 22, 1995

BOARD MEMBERS PRESENT:
Jim Nielsen, Ted Lovdahl, Jim Rossman, Barbara Uppgaard, Howard Peterson, Dwain Otte, Barb Cobb, Warren Rodning, Glenn Annexstad, Tim Hvidsten, and Kathleen Roer.

BOARD MEMBER ABSENT: Marvell Tripp

AGENCY MEMBERS PRESENT:
Wayne Edgerton, Department of Natural Resources
Jim Anderson, Minnesota Extension Service
Bob Patton, Department of Agriculture

AGENCY MEMBERS ABSENT:
Kim Benson-Johnson, Department of Health
Wayne Anderson, Pollution Control Agency

OTHERS PRESENT:
Franklin Denn, Minnesota Association of Townships
Vern Wilker, Minnesota Association of Soil and Water Conservation Districts

STAFF PRESENT:
Jim Birkholz, Al Kean, Greg Larson, Jim Lemmerman, Tom Wenzel, Marybeth Block, Wayne Zellmer, and Mary Jo Anderson.

Chairman Nielsen called the meeting to order at 9:00 a.m.

** 95-15 **Adopt Agenda** - Moved by Barbara Uppgaard, seconded by Dwain Otte, to adopt the agenda as presented. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Roer, Rossman, Uppgaard, and Nielsen. Opposed: None. Carried.

** 95-16 **Minutes of January 25, 1995** - Moved by Ted Lovdahl, seconded by Barbara Cobb, to approve the minutes of January 25, 1995, as circulated. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Rossman, Uppgaard, and Nielsen. Opposed: None. Carried.

Reports

Chairman's Report - Chairman Nielsen reported that he attended the National Association of Conservation Districts (NACD) annual meeting February 5-9 in New Orleans. He stated that the enthusiasm for conservation displayed by the people in attendance was very encouraging. There were many ideas and concerns regarding the 1995 Farm Bill. Chairman Nielsen said that there was a great deal of hope and desire to see reform in the area of taxation that affects the family farm and forester.

Chairman Nielsen announced the withdrawal of his application to be chair and a member of BWSR.

Executive Director's Report - Jim Birkholz reported that Ron Harnack is in Atlanta this week as an advisor for the National Association of State Conservation Agencies (NASCA) to the National Association of Conservation Districts, District Operations Committee meeting. The Committee is developing a revised memo of understanding between soil and water conservation districts and the reorganized U.S. Department of Agriculture (USDA).

Jim Birkholz reported on staffing issues. Marybeth Block is in her new role as special projects coordinator. The RIM Reserve position has been posted and interviews will be scheduled soon. The lead engineer for nonpoint technical assistance will be filled soon.

Jim asked members if they are interested in continuing to receive "Board Member Update". Board members agreed that they would like to continue receiving it.

Education Committee Report - Tim Hvidsten reported that the Education Committee will meet on February 23. Tim stated that environmental education is an issue being addressed by the Legislature this session.

Feedlot Advisory - Jim Rossman reported that the Feedlot Advisory Committee meets on Friday, February 24, to address permitting procedures and authority.

Soil Conservation Committee - Glenn Annexstad stated that the Soil Conservation Committee has not met for some time.

Dispute Resolution Committee (DRC) - Kathy Roer reported that no appeals have come up recently; therefore, the Committee will not meet in March. The DRC met last week to review guidelines for appeal procedures.

Pine County SWCD Request for Nomination District Boundary Change - Jim Birkholz stated that staff recommends approval of the request to change the nomination district
** boundary change. Moved by Ted Lovdahl, seconded by Dwain Otte, to approve the request
95-17 for the Pine County SWCD Nomination District Boundary Change. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Roer, Rossman, Tripp, Uppgaard, and Nielsen. Opposed: None. Carried.

Ecosystem Charter for the Great Lakes-St. Lawrence Basin - Jim Birkholz stated that staff
** recommends that BWSR be a signatory to the Charter. Moved by Dwain Otte, seconded
95-18 by Howard Peterson, that BWSR endorse the Charter for the Great Lakes-St. Lawrence Basin and be a signatory. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Roer, Rossman, Tripp, Uppgaard, and Nielsen. Opposed: None. Carried.

Legislative Update - Jim Birkholz briefed the board on legislative status.

Budget Status - Jim Birkholz summarized the BWSR's budget status.

WCA Bill Comparison - Greg Larson stated that House File #593 (authored by Representative Tunheim), is a companion to Senate File #483 (authored by Senators Stumpf and Moe). This is the Association of Minnesota Counties (AMC) bill. The bill changes BWSR's role in relation to WCA, giving the board virtually no oversight authority. This means that new classes of exemption could be established. Staff position on this bill is that BWSR should have some oversight responsibility. Discussion followed. Greg stated that AMC is aware of the BWSR's position on their bill.

BWSR/Administration Bill (authored by Representative Munger) - Greg Larson stated that Senate File and House File numbers have not yet been received. Staff recommends that BWSR be consistent with the Wetland Heritage Advisory Committee's recommendation, as acted on at the January BWSR meeting, to maintain the local planning process and the no
** net loss goal, with some oversight by BWSR. Copies of the bills and analysis will be
95-19 distributed to board members. Moved by Barb Uppgaard, seconded by Glenn Annexstad,

to support the BWSR/administration bill. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Roer, Rossman, Uppgaard, and Nielsen. Opposed: None. Carried.

Chairman Nielsen called for a break in the meeting at 10:30 a.m. The meeting reconvened at 10:40 a.m.

Appeals - Jim Birkholz suggested that BWSR look for ways and opportunities for the DRC to strengthen its role in informal dispute resolution and eliminate most formal appeals.

** 95-20 Discussion followed. Moved by Kathy Roer, seconded by Ted Lovdahl, to ask the governor's office to reexamine the role of DRC in WCA appeals, and ask the Governor to preserve the role of DRC in the interest of statewide consistency of WCA implementation. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Roer, Rossman, Uppgaard, and Nielsen. Opposed: None. Carried.

** 95-21 **State Revolving Fund Administrative Costs** - Moved by Dwain Otte, seconded by Jim Rossman, to accept the staff recommendation to authorize grant recipients to use up to five percent of the grant for related administrative costs. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Roer, Rossman, Uppgaard, and Nielsen. Opposed: None. Carried.

Grass Lake Project - Jim Birkholz stated that two items need to be addressed today: 1) general support for the project, 2) funding approval for the project. Tom Wenzel reported that the Kandiyohi SWCD requests that BWSR consider special funding through the RIM Reserve Program to facilitate a large wetland restoration project in their county. Tom introduced representatives of the Grass Lake Project: Loren Engelby, RIM Reserve Coordinator from Kandiyohi SWCD; Jim Leech and Steve Erickson, U.S. Fish and Wildlife Service (USFWS); Harland Madsen, Kandiyohi County Commissioner; and Mike McGinty, Minnesota Waterfowl Association (MWA). Loren Engelby and Steve Erickson presented and explained the Grass Lake Project. Jim Leech, USFWS, presented a possible funding source--a grant application to the North American Wetland Conservation Act (NAWCA). Jim Birkholz explained the special projects allocation/funding and also the RIM allocation. Chairman Nielsen stated that BWSR is asked to commit $410,000 from the RIM/Permanent Wetlands Preserve (PWP) the special projects fund and another $540,000 from the regular

** 95-22 RIM/PWP 1995-96 appropriation. Discussion followed. Moved by Kathy Roer, seconded by Dwain Otte to approve Kandiyohi SWCD's request for funding for the Grass Lake Project consistent with staff recommendation, which includes BWSR review and final approval in August. Affirmative: Annexstad, Cobb, Hvidsten, Lovdahl, Otte, Peterson, Rodning, Roer, Rossman, Uppgaard, and Nielsen. Opposed: None. Carried.

RIM Easement Violation Introduction - Jim Birkholz briefed the BWSR on a RIM easement violation in Grant County with the possibility of this being turned over to the Attorney General's office. More information on this will be available at the March BWSR meeting.

Advisory Comments

Minnesota Association of Townships (MAT): Franklin Denn stated that MAT has been working on annexation problems. A bill to dissolve townships has been dropped in the house and senate.

Minnesota Association of Soil and Water Conservation Districts (MASWCD): Vern Wilker stated that MASWCD is in support of the State Revolving Fund.

Minnesota Extension Service (MES): Jim Anderson is representing MES today in place of Fred Bergsrud. Fred has been appointed as acting associate director replacing Pat Borich. Fred has requested that MES designate his replacement on BWSR.

Chairman Nielsen adjourned the meeting at 12:10 p.m.

Respectfully submitted,

D. James Nielsen
Chairman

Ted Lovdahl, Jr.
Rt. 1 - Box 142
Effie, MN 56639

Phone (218) 743-3686
Fax (218) 743-3238

February 16, 1995

BWSR Board:

I would like to extend the invitation for the BWSR Board to have a meeting and tour in Duluth. The timing is just right for the board to meet there. Following are some of the natural resource issues facing Duluth and northeastern Minnesota at the current time:

Wetland Conservation Act and development

Much at the remaining undeveloped area in Duluth, Hermantown, and adjacent townships is wetland. The board can tour some of these areas and hear testimonials from local officials. Mitigation sites can also be viewed.

Watershed Planning

Several watershed planning efforts are underway including the St. Louis River Remedial Action Plan, St. Louis Plan, North Shore Management Board, Coastal Zone Management, Lake Superior Association of SWCDs, Nemadji River Project, and Onanegozie R & D. Updates on these projects would be very interesting.

County Water Planning

Most of the counties in northeastern Minnesota have active county water planning efforts. Lake monitoring, well monitoring, septic system research, etc., can be reviewed for the board by local water planners.

Lakeshore Engineer

Projects along the north shore have been completed by BWSR working through the local SWCDs. The board can tour these sites with expert commentary by Gene Clark.

Other items of local interest

Lake Superior barrels, the infiltration and inflow problem in Duluth, Arrowhead Water Quality Team, Knife River Watershed, EPA lab, Sea Grant, NRRI, Park Point erosion problem, forestry issues, Potlatch landfill leakage, iron mining industry, ect.

I have the support of the Area III Association for coordinating a Duluth BWSR meeting. Feel free to contact me should you have further questions. I hope you accept my offer!

Sincerely,

Ted Lovdahl, Jr.
Board Member

GRASS LAKE PARTNERS LETTERS OF SUPPORT

Kandiyohi Soil and Water Conservation District (SWCD)	
Kandiyohi County Environmental Services	
Kandiyohi County Commissioners	
City of Willmar	(est.) $1,500,000
MN Department of Natural Resources (DNR) - Wildlife	
MN Department of Natural Resources (DNR) - Waters	
MN Department of Transportation (MN DOT)	
United States Department of Ag - Natural Resources Conservation Service (NRCS)	
United State Fish & Wildlife Service (USFWS)	$150,000
Big Kandiyohi Lake Association	
Ducks Unlimited	
Izaak Walton League	
MN Waterfowl Association	$50,000
Prairie Pothole Chapter	
Pheasants Forever (PF)	$1,500
Willmar School District	
Willmar Sportsman's Club	
Blomkest Sportsman's Club	
Williams Pipeline Company	
Kandiyohi Township Board	
Willmar Township Board	
Kandiyohi Area Conservation Association (KACA)	
Kandiyohi Lakes Associations	

Note: Financial committments have not been received from all of the Grass Lake Partners. There are still several of these partners that will be confirming financial obligations for the project.

MPLS. Star/Tribune 8/8/93

'It's gotten so bad that I just plant crops to watch them disappear . . . each year the flooding just gets worse.'

Some decide to let wet land be wetland

By Dean Rebuffoni
Staff Writer

Elton Sletta planted corn and soybeans this spring on 70 acres of his farm near Willmar, Minn.

As of Friday, 69½ acres were under water.

"Really, it's all gone," Sletta said. "It's gotten so bad out here that I just plant crops to watch them disappear. There's water everywhere, and each year the flooding just gets worse."

Of course, he's not the only farmer w[illegible] has seen his land inundated this s[illegible]ner. More than 16,000 square miles, mostly farmland, have been under flood waters in the Midwest.

And he isn't the only farmer who is looking to the federal government for help.

In Sletta's case, however, he's seriously considering a federal program that would pay him to return a big chunk of his property to its original condition: a marsh. Almost certainly, thousands of other farmers will do the same.

The program is the Wetlands Reserve, a three-year-old effort to restore and preserve rural wetlands. Although the program has been hampered by a lack of federal funds, Congress provided a fresh infusion of money last week, and more is coming.

Renewed interest in the Wetlands Reserve stems partly from the floods. Environmentalists and other program boosters have long argued that draining wetlands exacerbates flooding by allowing storm waters to surge more rapidly into rivers such as the Mississippi. Wetlands are natural sponges that detain flood waters and provide other benefits, such as filtering out waterborne pollutants and providing habitat for waterfowl and other wildlife.

"We've known all along that wetlands can provide storage for flood waters," said Doug Inkley, a National Wildlife Federation official in Washington, D.C.

"But nature has given us a wakeup call: 'Don't destroy wetlands and don't live in the floodplain.' A natural disaster has been made worse by our own actions, and we need to look to ecological solutions to avoid a future loss of lives and private property to floods. That includes protecting and restoring wetlands."

Still, it's a delicate situation. Wetland proponents don't want to alienate farmers and other landowners who have been hit hard by the floods.

"Taking part in wetland restoration has to be a voluntary effort, and farmers have to be provided incentives," said Kenneth Cook of the Environmental Working Group, a Washington-based organization.

"After all, farmers and other landowners are looking for help to recover from a terrible situation," he said. "It's tragic that the case for wetlands has been made this way, but many of the levees we built along our rivers drained wetlands and put that land into crop production, in many cases into producing crops of which we now have a surplus."

Cook's organization is one of many environmental groups that have been urging the federal government to pump more funds into the Wetlands Reserve. Until recently, they weren't having much luck.

The program, enacted as part of the

Wetlands continued on page 5B

Wetlands/ Land restored; farmers retain ownership

Continued from page 1B

1990 farm bill, originally called for the U.S. Agriculture Department to enroll 1 million acres of wetlands by 1995. Despite his reputation for being somewhat less than enthusiastic about conservation programs, President George Bush sought $124 million for the program in 1992.

Environmentalists backed his request, and more than 2,300 farmers offered to enroll a total of 462,000 acres of wetlands in the nine pilot states chosen for the program. That includes Minnesota, where 224 farmers — including Sletta — offered 33,000 acres.

To enroll, farmers submit bids, based on the land's value. In return for federal funds, they give the government easement rights on the land, although it remains private property. Conservation agencies then restore the wetlands, sometimes by plugging drain tiles and ditches or building small dams to create ponds.

Congress, citing a tight budget, rejected most of Bush's request. It approved $46.4 million for the program in 1992, or enough to enroll 50,000 acres — about one-ninth of what farmers had offered. And Congress provided no program funds for this year.

Then, as part of his budget request, President Clinton proposed spending $370 million on the Wetlands Reserve in 1994 to enroll 450,000 acres. While his proposal was winding its way through Congress, the devastating floods hit the Midwest, encouraging program backers to believe that Clinton would get much of what he sought.

It didn't happen. Although Congress last week expanded the program to a total of 20 states, it provided $67 million — enough to protect and restore wetlands on 75,000 acres next year. That will be in addition to the 50,000 acres already enrolled.

"That's a fair amount of land, although only a smidgen of what once existed. Officials of the U.S. Fish and Wildlife Service estimate that more than 17 million acres of wetlands have been drained, largely for farming, in the basins of the Mississippi and Missouri rivers.

Still, environmentalists were encouraged by the congressional action.

"Although short of the 1 million-acre goal set by the 1990 Farm Act, this increase in appropriations will allow wetlands previously left out of the Wetlands Reserve to be restored," said Maureen Hinkle, agricultural policy director for the National Audubon Society.

And more help is coming. The disaster relief package approved by Congress on Friday will provide funds — the exact amount is unclear — to enroll damaged farmland in the program.

Also, bills are pending in Congress that would expand wetland-restoration programs. Given the intense concern about the floods, those bills are likely to get more attention than they would have gotten in drier years.

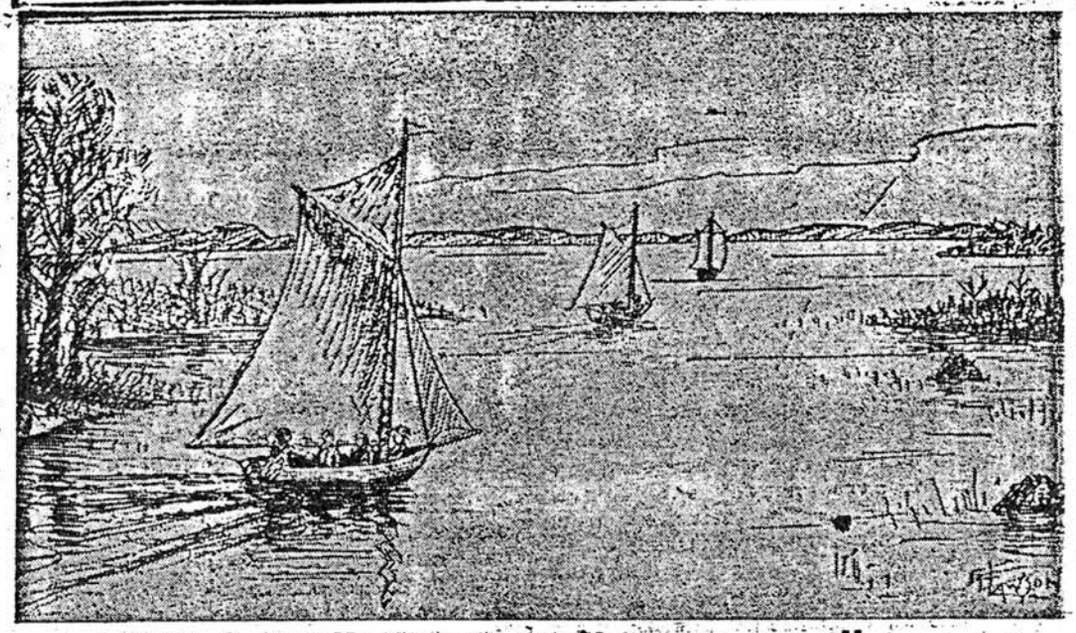
Sletta, the Kandiyohi County farmer, wasn't able to enroll any of his land in the Wetlands Reserve two years ago, even though 146 acres of his property were eligible. The new funds could change that.

Also working in his favor is the fact that much of his farm lies within a drained wetland basin called Grass Lake. State and federal officials have targeted the 1,200-acre basin for restoration, using funds from a variety of conservation programs.

"We have the natural terrain here for ducks and geese," said Sletta, who is 75 and looking forward to retiring from active farming. "A few years ago I got tired of having my land flooded, so I went the other way: I flooded it myself and planted some wild rice.

"Then it was just black out there with ducks and geese. They got their share of the rice, but that was OK — I got some, too. Now, if I can get enough compensation, I would be interested in enrolling about 180 acres in this Wetlands Reserve."

TH_ OLD TIMERS -- B. BEN E. LAWSON



Lake Lillian To Willmar In Sailboat

In the good old days of plenty of water it was possible to sail from Lake Lillian to Willmar. In the spring time, especially, when the marshes and sloughs were clear of rushes, it was fairly easy to make this trip by sailboat for those who knew the art of sailing.

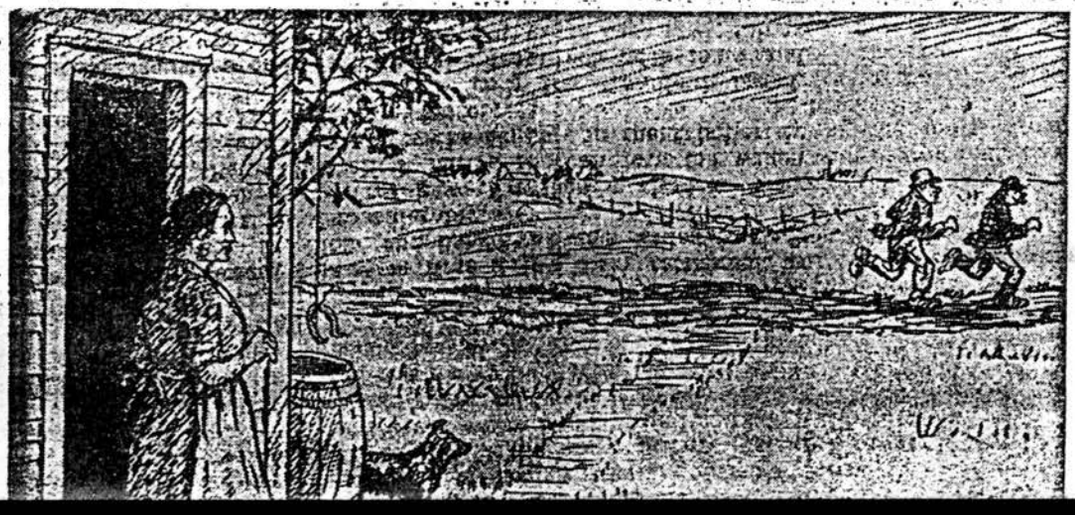
James W. Hanson, Willie Gabrielson and Lars Johnson, better known as "Lille Lars," were three wellknown Vikings of Lake Lillian, who were noted for their skill in handling a sailboat. They were not only experts in sailing, but they made their own boats and rigging as well. James was really the captain of the gang. Many a thrilling adventure did he have in crossing either Lake Lillian or Big Kandiyohi Lake. The rougher the weather, the more his joy.

Once in a while races across the lake would be staged, and, according to the stories told, James would generally win.

On their trips to Willmar often a large group would go along for a merry excursion. They would start at Lake Lillian, enter the creek to the west, follow it to Big Kandiyohi Lake, cross to the Johnson creek, then follow the big sloughs to Lake Fanny, from there to Lake Waconga, crossing to the north into Grass Lake, and from there following the sloughs until they reached Willmar, making their landing about where the Zim's cabins are now located. After having seen all the sights of Willmar, they would return home by the same route, maybe doing some fishing along the way.

Hemming S. Nelson told us that back in 1883 he and Hans Larson sailed from Big Kandiyohi Lake to Willmar. They tied their boat to a pasture fence on the Glarum farm (now John Gesch's place). Only at one place did they have to drag their boat across—the road by the southeast shore of Lake Waconga.

EDITOR'S NOTE — The above story and others in this series were cartooned and written by the late Eben E. Lawson in the 1920's and 1930's. Names and places are of that period. Many persons mentioned have passed away but the stories remain interesting.



A GRASS LAKE NARRATIVE (revised 12/15/94)

BY STEVE ERICKSON
U.S. FISH & WILDLIFE SERVICE
OCTOBER 7, 1994

The Grass Lake basin is a natural but very large depressional area that resulted from the Wisconsin Glaciation approximately 10,000 years ago. During the time of European settlement, prior to man-made drainage projects, Grass Lake proper was approximately 1,200 acres in size and average water depth was probably about four feet throughout much of the basin. The basin had a natural high water outlet on its southeast shore. It was, and still is, within the Crow River drainage system which is tributary to the Mississippi River. (See attached location maps.)

During European immigration and settlement of the Minnesota prairies in the mid-1800's, a small village took root in the Kandiyohi Lakes Region--just to the northwest of Grass Lake. With the coming of the railroads the village grew rapidly and became the town of Willmar. As the population of Willmar and rural Minnesota grew during the turn of the century large scale ditching projects to drain prairie lakes and wetlands began in earnest. From the best information available, Grass Lake was initially ditched and drained by a public works project in the early 1900's. Branch ditches, both public and private, were added to the main stem in subsequent years. The primary intents and purposes of draining Grass Lake were to facilitate agricultural production and, increasingly, to provide an adequate drainage outlet for the ever growing City of Willmar. Ditch cleanouts and improvements to the system were undertaken numerous times in attempts to provide more rapid and thorough drainage.

During the 1970's and early 1980's agricultural land values in Minnesota escalated sharply and provided a strong incentive for farmers to do additional wetland drainage to facilitate cropping. In the Grass Lake watershed this additional drainage was extensive and dramatically increased the peak flows into the Grass Lake ditch system during periods of heavy runoff. Up until this time the Grass Lakebed was being used as pasture, at best. However, high land values made it economical for some lakebed landowners to install extensive subsurface drainage tile networks which fed into central pump stations which then lifted the drainage water and delivered it into the County Ditch system. Through these private tile and pump projects, hundreds of acres within the basin were converted to cropland.

Concurrently, the City of Willmar was experiencing a period of major growth with most of the building and development occurring in the portion of the city limits that is within the Grass Lake watershed. As a result, Willmar, through it's storm water runoff system, was discharging increased flows into the Grass Lake ditch system.

The terrain to the southeast of Willmar, from Grass Lake and beyond, is quite flat and drainage, whether natural or man made, generally is slow. The gradient of the Grass Lake ditch system is inherently flat and increased peak flows during the 70's and 80's indicated that the system was inadequate to handle flows during periods of heavy runoff. With increasing frequency, the Grass Lake basin flooded, destroying hundreds of acres of growing crops and forcing water to back up into Willmar's storm water drains. Property damages have resulted from flooded basements, streets, and other properties.

The fall (gradient) from the outlet of one of the City's major storm water drains to the controlled outlet of Lake Wagonga, about five miles downstream, is only one foot. There is no wonder why Grass Lake is flooding more frequently than ever before and resulting in large economic losses.

It is unanimously understood that it is not feasible to significantly improve the drainage functions of the Grass Lake ditch system. With this understanding, especially by the Grass Lake landowners and the county ditch authorities, there currently is a tremendous opportunity to accomplish one of the largest and most environmentally beneficial lake restorations in Minnesota's history. Landowners/farmers who have been trying to crop the lakebed realize that their efforts to do so are a loosing battle. Almost all of them have either enrolled their lands into conservation programs such as the Federal Conservation Reserve Program and the State's ReInvest in Minnesota (RIM) Program or they are trying to do so.

The City of Willmar is facing the likelihood of stricter Federal and State mandates regarding storm water management and sees the restoration of Grass Lake as compatible to their plans. The City fully supports the concept of the restoration project and likely will be a major financial partner in the endeavor. The City also sees the Grass Lake restoration as a project that will have aesthetic and environmental benefits for its residents.

Kandiyohi County Government and it's county ditch authority have given preliminary support to the Grass Lake Restoration Project.

The concept of restoring Grass Lake initially was discussed by some agency officials in the early 1970's but concerted discussions and efforts to push the project forward really began in 1990. Since that time several local meetings have drawn

together representatives from numerous Federal, State and Local agencies. Landowners have been consulted and informed of the various incentive programs available to them if they desired to enroll their lakebed property into a restoration program. In addition, agency officials have performed extensive surveys and other restoration feasibility investigations. Although additional investigations have yet to be completed it appears to be fully feasible to restore the entire 1,200 Grass Lake basin to an average water depth of 2.5 to 3.5 feet.

The highlights of the project are the multiple environmental and economic benefits that will be derived by restoring the water holding capability of the Grass Lake basin. With a proposed average water depth of 2.5 to 3.5 feet, Grass Lake will once again be a high quality shallow lake or marsh of Type IV character. Most likely, it will be a tremendous haven for large numbers of wildlife. Numerous species of water birds such as herons, egrets, grebes and waterfowl will quickly and productively colonize the new habitat. It is likely that large numbers of migrating ducks, geese, and swans will use the lake. As a result, the project area will have tremendous aesthetic and nature viewing appeal to the public. The project area would likely be incorporated into the area's environmental education curriculums. (Willmar, with a population of 18,000 and a large drawing area to it's school systems is immediately adjacent to the project area. Also, two major truck highways, U.S. 71 and MN 23, skirt the west edge of the project.)

The Grass Lake restoration proposal is cited several times in Kandiyohi County's Comprehensive Water Management Plan (Plan). This Plan cites the water quality improvement and flood water retention benefits that will be realized if Grass Lake is restored.

Two major recreational lake improvement projects are currently underway just downstream from Grass Lake: The Big Kandiyohi Lake Association, through it's contracted scientific consulting firm, recently completed Phase I of a U.S. Environmental Protection Agency grant project. Phase I included a diagnostic study of Big Kandiyohi Lake and it's watershed and, in part, concluded that the restoration of Grass Lake would provide major water quality improvement benefits to Big Kandiyohi. In addition, the Minnesota Department of Natural Resources, Sections of Wildlife and Fisheries, has targeted Lake Wagonga as a lake improvement project. That agency has developed a "Lake Wagonga Cooperative Management Plan" to address the requirements needed to restore the fisheries and wildlife resources of Lake Wagonga. In September 1994, as a first step, the State approved DNR's application to install a winter aeration system in Lake Wagonga. In the Lake Wagonga Cooperative Management Plan the restoration of Grass Lake is identified as being critical for the improvement of water quality in Lake Wagonga and the project's overall success.

Croplands downstream from Grass Lake, like Grass Lake itself, have been prone to more frequent flooding and extensive crop losses. Farms downstream from Grass Lake will benefit from the Grass Lake Restoration Project because floodwaters from rapid spring snowmelt and major storms will be more efficiently retained in the restored Lake and "metered out" through a water control structure that is designed according to the flowage capacity of the existing outlet ditch (C.D. 23-A). A restored Grass Lake will have tremendous storm water storage capacity and will significantly reduce downstream surges that currently occur.

As stated earlier, numerous public agency representatives have been meeting over the past four years to cooperatively work for the restoration of Grass Lake. In addition, several private wildlife conservation organizations, of state and national scope, have been involved in the project. It would be a long list to list them all but suffice it to say for now that these groups can be counted on 100% to continue to support the project, financially, technically, and politically.

Right now there is an extraordinary window of opportunity to realize the restoration of Grass Lake: Currently, most of the landowners within the basin are ready to enroll their land in the State's RIM Reserve Program if they have not already done so. Several landowners who have land enrolled in the Federal Conservation Reserve Program are facing the possibility that their ten year contracts will not be renewed as they expire over the next three years. They don't want to go back to trying to crop the lakebed. If their CRP contracts are renewed they may want to "sit on them" and continue to reap the financial benefits of that program without the need to restore the lake itself.

The project has great momentum and the full support of numerous private and public partners. Major financial backing is assured by the project partners but the primary thrust must come from the State of Minnesota through the RIM Reserve Easement Program.

MN PLANNING

2/15 MJ

MJ -
copy for MT
& return —

FEB 16 1995

Maybe we can get copies for Board also. I'll need this back for Budget leg.
RH

February 14, 1995

To: Ron Harnack
Board of Water & Soil Resources
155 S. Wabasha Street

From: Deborah Pile
Strategic Planning Specialist
Phone: 297-2375; Internet: pile@lmic.state.MN.us

Subject: Final Draft *Environment and Natural Resources Working Paper*

Attached is a copy of the final draft of the Budget 2001 *Environment and Natural Resources Working Paper*. I hope you will find it useful and informative.

The paper was based on Minnesota biennial budget documents, US Census reports and other data sources, as well as interviews with state agency directors and program managers and ideas expressed at the August 31 focus-group meeting. It has been presented to the House Environment and Natural Resources Finance Committee and provided to the Legislative Water Commission.

You should have received a copy of the Budget 2001 project final report, *Within Our Means*. If you have not, or would like another copy, feel free to contact me.

Thanks for your help on this project.

658 CEDAR STREET, ST. PAUL, MN 55155 612 296-3985 FAX 612 296-3698
TDD 612 297-5353 OR 800 627-3529

Board Member Update

February 1995

The mission of the Board of Water and Soil Resources is to provide leadership enabling local governments to properly manage water and soil resources and to help all citizens be stewards of our irreplaceable natural resources.

Southern Region

- County water plan meetings, Wetland Conservation Act (WCA) Technical Evaluation Panel meetings, State Revolving Fund (SRF) joint powers board establishment, local government annual plan reviews, BWSR staff meetings, and answering questions have made for a heavy schedule this month.

- Southern board conservationists (BCs) provided initial review and comments on draft Natural Resource Block Grant applications submitted by counties. The finalized applications were submitted to BWSR - St. Paul by January 16. BCs will now be busy conducting final reviews and granting approvals so that grant agreements can be sent out to the counties.

- Counties will be updating and revising their comprehensive local water plans in 1995. Several counties have begun this process; many are just getting started. BWSR sent out a recommended time schedule for counties to use so that required deadlines are met. Counties will be conducting public information meetings up through March. By July, counties are to have copies distributed for public and agency review and comment.

- The Minnesota DNR is participating with the county update process. The DNR has established a committee of DNR staff for each county with one DNR staff person acting as the contact person. BWSR staff Jeff Nielsen, Chris Hughes, and Tom Fischer participated in an informational meeting conducted by DNR for Region 4 DNR staff. Several DNR staff have already been attending local water plan task force meetings and providing assistance and input.

- Local water plan coordinators from the Minnesota River basin recently met in Sleepy Eye for a conference: "Creating a Shared Agenda for Water Quality." Water planners from the south central, southwest, mid-Minnesota, and upper Minnesota River water planning groups participated. The session was a working meeting where participants addressed water planning, in general, and water quality, specifically. A major theme was "What should water planning look like and accomplish in the next five years?" Sharon Roe Anderson of the University of Minnesota Humphrey Institute Reflective Leadership Center facilitated the meeting. The conference was

planned by several water plan coordinators, BWSR, the Minnesota Pollution Control Agency (PCA), and Extension staff.

- Even though it's the winter season, WCA still continues to require some of the BCs' time. BC Tom Fischer has participated in two technical evaluation panel meetings, both involving drainage violations. The DNR conservation officers have been involved right from the start and continue to offer their assistance.

- The long-awaited joint training committee meeting was held at the BWSR office to discuss and coordinate Natural Resource Conservation Service (NRCS)/SWCD/BWSR training opportunities in Area VII. Joint training scheduled for 1995 includes: (1) an all staff meeting on March 1 to discuss wetland policy, SRF, the Conservation Reserve Program (CRP), and other programs; (2) area wetland delineation (soils, hydrology, vegetation) field training for SWCD/NRCS and local government units (LGUs) this summer; (3) supervisor orientation - March 15; and (4) engineering training.

- Marshall BC Tabor Hoek reports progress of the conservation technician training program sponsored by the Southwestern Technical College. In a recent meeting with the state technical college board, the program was approved and will move on to the next level for consideration. As always, funding will be a big factor in the program's approval.

- Sara Johnson, SWCD accounting coordinator, completed her close out training sessions for the SWCD bookkeepers in all seven areas of the state. Sara also visited a few districts to provide one-on-one assistance and has been answering many year-end questions over the phone.

Engineering and Technical Services Section

Lakeshore Engineering

- The contractor for the Two Harbors Campground project quietly shut down and removed his equipment from the site in early February. We have since learned that his business has gone "belly up," much to the dismay of the city and us. The project is in a state of partial completion, with some reaches essentially complete and others half complete or less. Gene Clark, lakeshore engineer, is providing technical assistance to the city to evaluate the status of the construction and how to try to work with the contractor's surety company to complete the project. We are concerned about the stability of the excavated but unarmored reaches, particularly with the spring thaw on its way. We'll keep you posted.

- Gene recently provided technical assistance for a number of lakeshore projects and problems in northern Minnesota, including:

  1. Erosion protection design at the outlet of a stormwater drop pipe along the shores of Lake Itasca (Clearwater SWCD). This project intends to control runoff down a 40-

foot high bank that has severe gully erosion.

2. General design guidance for shoreline erosion/runoff control at a site on Lake Vermillion (N. St. Louis SWCD).

3. Lakeshore engineering perspective for the initial phases of a bio-engineering demonstration project along the shoreline of Big Sandy Lake.

- Gene is currently taking a computer-aided design (CAD) night course at Duluth Technical College to better utilize the software equipment we purchased last year.

- LHB Engineers, Inc., out of Duluth, was hired by the Sewalls to perform the structural engineering for a retaining wall that is part of a shoreline stabilization cost-share project design for their property. Gene is working with LHB and will complete the other civil engineering for the project, with geotechnical engineering assistance from Al Kean, chief engineer, as needed.

Area II

- Representatives of the Area II joint powers group of counties and HDR Engineering recently met with Corps of Engineers, DNR, US Fish and Wildlife Service and PCA staff to discuss the RW-22 floodwater control project. The intention was to reach a consensus about how to define baseline conditions for the Shelburne Wildlife Management Area and surrounding wetlands in the proposed reservoir area. Review of the draft Environmental Assessment Worksheet (EAW) completed by HDR Engineering in December 1994 has apparently raised some issues in this regard.

- Area II intends to hold a public involvement meeting for landowners in and around the proposed RW-22 reservoir site on February 24, in Marshall. Two expected topics of discussion are development of an easement acquisition plan and proposed roadway modifications for landowner access.

- Darrell Apelgrain, BWSR Area II engineer, continues to work on a feasibility report for the proposed Lazarus Creek reservoir project. His current focus is a hydrology and hydraulics report and definition of a methodology for evaluation of a wetland restoration alternative.

- Darrell also continues to work on guidelines for road retention projects in Area II watersheds, in cooperation with participating county engineers, DNR dam safety staff and Al Kean, chief engineer.

Conservation Easements

- Marybeth Block, our former easement program coordinator, completed the application funding selection for the recent program sign-up in late January before taking a little time off and moving to her new position and office. After we obligated available state funding from previous years' appropriations and approximately $5 million from the FY 95-96 appropriation, the portion obligated to easements in the Minnesota River Basin for this sign-up stood at 52 percent.

- We are proceeding with steps to fill the vacant easement program manager position. In the interim, we

have assigned various roles of the position to other program team members. This will surely slow us up a bit, so we'll work diligently to fill the position as soon as possible.

- Tom Wenzel, design engineer, has been providing technical assistance to Kandiyohi SWCD and other project partners to help define technical issues and strategies for the restoration of Grass Lake adjacent to Willmar. This project will be the subject of a funding request at the February board meeting.

SRF Staffing

- Job announcements for Joint Powers Board (JPB) engineers and technicians hit the street in late January and early February. BWSR staff developed application forms, background information and position descriptions for these jobs, and are currently sending application packets to interested people. Over 150 packets have been sent out to date. Al Kean also sent these materials to the chairs of the eleven JPBs and the managers of the host SWCDs, and encouraged local advertisement by the JPBs. Applications are being directed to the host SWCDs of the JPBs. We expect interviews to occur primarily in March.

- Jeff Nielsen, southern region supervisor, recently orchestrated a meeting with JPB chairs, host SWCD managers and fiscal agents for SRF technical staffing grants to discuss grant management, engineer and technician staff hiring procedures and future staff management. BWSR staff members Wayne Zellmer, Al Kean, Sara Johnson and Jim Birkholz, as well as the Minnesota Association of Soil and Water Conservation District's (MASWCD's) D'Wayne DeZiel, participated in these presentations and discussions. We trust that this meeting helped establish common understandings of how to proceed with this technical staffing initiative.

- Al Kean has been orchestrating the purchase of total station surveying equipment, computers, printers, computer-aided design software and other software for the JPB engineers and technicians. We have encountered a number of obstacles in the procurement path, but have managed to overcome all of them to date and proceed with this equipment acquisition. We expect the equipment to be delivered in late March or April. Bryan Alpaugh, data management specialist, and Al are looking into how to provide computer specialist assistance to the JPBs for installation of the computers and software.

- Al is also working with the Natural Resources Conservation Service (NRCS) to "rent" one of their staff to serve as a BWSR training and design (consulting) engineer for the SRF program. The NRCS is very interested in this opportunity for increased partnering in the technical training area, which the Technical Advisory Committee identified as a high priority for BWSR staffing and partnering.

Northern Region

- January marks the official beginning to the "meeting season." This year as in other years, field staff are spending a lot of time at staff meetings, clientele board meetings,

planning for training sessions, and on special BWSR work assignments. Some specifics: Staff are starting to plan for this year's round of new supervisor orientation sessions. A second round of water plan update sessions is being planned for northern Minnesota in March. The Reporting Team has been meeting to develop a new improved system to report BWSR and clientele accomplishments. The Cost-Share Team has been hard at work pulling together a revised cost-share rule. SRF clusters continue to meet to fine tune their agreements and put together their budgets. BWSR has scheduled a meeting with the SRF host districts to clear up many of the administrative questions remaining regarding the tech assistance grants. And, finally, the Training Team has been meeting to plan this year's round of clientele training efforts. It truly is the meeting season, but since the advent of WCA, we find that there is even more pressure to get this type of administrative work finished in the winter before the heaviest WCA workload hits during warmer times.

- But don't misunderstand me, WCA is still with us even at 20 below zero. BC Pete Waller spent a couple of days in Douglas and Pope counties reviewing banking sites. BC Dan Steward has been caught in the middle of a county vs. SWCD debate over administration of the WCA in Crow Wing county. Dan has done a great job of staying neutral in this discussion. As a result of these discussions the true workload associated with administering the WCA has come to light in Crow Wing County. Brian Dwight, Bemidji BC, has been busy reviewing replacement plans in particular a road project in Kittson County and a juvenile training center in the city of Bemidji. BC Bill Best has been working with West Polk SWCD and the Army Corps of Engineers to identify drained wetland sites for deposit in the state wetland bank.

  WCA marches on.

- Water Plan Updates are a priority for BCs these days. With update drafts due July 1 counties are busy with task force meetings and drafting their updates. Pete met with two local task forces in January to help get them started on the update process. Reviewing annual water plan work plans and budgets to qualify for base grant funding has also kept BCs busy.

- Barb Liukkonen, water resource education coordinator, says that planning for the Shoreland Information Volunteer training got underway in January. Five workshops will be held in May and June. A grant of $6,750 from Extension's Creative Grants Program will cover the costs of participants' manuals and speakers for the workshops. Water plan dollars are also being used to support the sessions. Barb also worked with the Reporting Team using her talents to draft up some initial forms that we hope to finalize for use by counties, SWCDs and WDs to report program information to BWSR.

- Bill Best wore his computer hat in January. He spent two days in BWSR central loading EPPL 7 data sets for the northern half of the state. Bill is also working at hiring a student worker from Bemidji State to

help install the EPPL 7 data sets in individual counties. This computer land use information will be invaluable to county water planners.

- Mark Nelson (Duluth BC) and Ron Shelito (northern regional supervisor) spent time doing a district evaluation in So. St. Louis SWCD. The district was struggling with its budget last year and Mark thought that an evaluation might help point out some areas where the district could improve its management capabilities. Mark has drafted a letter of recommendation. Mark and Ron hope to met with the district board this spring to discuss the recommendations.

Minnesota Association of Watershed Districts

1995 Legislative Day at the Capitol
Kelly Inn, St. Paul
March 2 & 3, 1995

Legislative Briefing
Gilbert Room

7:00	Welcome Vern Johnson, President, Minnesota Association of Watershed Districts
7:15	Department of Natural Resources Ecosystems Based Managment Initiative Ron Nargang, Deputy Commissioner
8:00	Wetland Conservation Act Amendments Ron Harnack, BWSR
8:30	MAWD Legislative Update • Watershed Act Amendments • Metro Water Planning Amendments • Ditch Law Amendments • Other
9:00	Adjourn

* * * * *

9:00 - 10:00 pm MAWD Committee Meetings, Gilbert Room, Kelly Inn

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March 3, 1995
Legislative Breakfast
Capitol Hall
7:30 am

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Other meetings of interest:

10:00 - 12:00	House Environment Committee Meeting Topic to be announced Room 200 State Office Building
10:00 - 4:00	Senate Envionment Committee Meeting Topic to be announced Room 112 State Capitol

3/22/95

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET, CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
MARCH 22, 1995

BOARD MEMBERS PRESENT:
Jim Nielsen, Warren Rodning, Dwain Otte, Barb Cobb, Ted Lovdahl, Barbara Uppgaard, Howard Peterson, and Jim Rossman.

BOARD MEMBERS ABSENT:
Glenn Annexstad, Tim Hvidsten, Kathy Roer and Marvell Tripp.

AGENCY MEMBERS PRESENT:
Wayne Anderson, Pollution Control Agency
Kim Benson-Johnson, Department of Health
Wayne Edgerton, Department of Natural Resources

AGENCY MEMBERS ABSENT:
Jim Anderson, Minnesota Extension Service
Paul Burns, Department of Agriculture

OTHERS PRESENT:
Jim Schafer, Minnesota Association of Soil and Water Conservation Districts (MASWCD)
Rick Reimer, Minnesota Association of Conservation District Employees (MACDE)
Dave Benner, Natural Resources Conservation Service (NRCS)
Franklin Denn, Minnesota Association of Townships (MAT)

STAFF PRESENT:
Ron Harnack
Jim Birkholz
Mary Jo Anderson

Chairman Nielsen called the meeting to order at 9:05 a.m.

** 95-23 **Adopt Agenda** - Moved by Rodning, seconded by Lovdahl, to approve the agenda as presented. Affirmative: Cobb, Lovdahl, Otte, Peterson, Rodning, Rossman, Uppgaard and Nielsen. Opposed: None. Carried.

** 95-24 **Minutes of February 22, 1995** - Moved by Peterson, seconded by Otte, to approve the minutes of February 22, 1995, as circulated. Affirmative: Cobb, Lovdahl, Otte, Peterson, Rodning, Rossman, Uppgaard, and Nielsen. Opposed: None. Carried.

Reports

Executive Director's Report - Ron Harnack stated that the governor has not yet made any board member appointments to BWSR. Ron attended a National Association of State Conservation Agencies (NASCA) meeting in Atlanta in February to discuss restructuring USDA and state/local units of government. Jim Birkholz will be going to Washington, D.C., next week with Minnesota Association of Soil and Water Conservation Districts (MASWCD) to meet with the congressional delegation to discuss farm programs and legislative issues.

Budget Update - Ron Harnack and Barb Cobb attended the Senate budget meeting; significant issues and concerns on the BWSR budget were addressed. The Senate and House received the administration's recommendations for environmental allocations, which are a three to five percent reduction for environmental agencies.

Legislative Update - Ron Harnack briefed members on legislation as it refers to the Wetlands Conservation Act (WCA); watershed districts (WDs); soil and water conservation districts (SWCDs) base funding; and water management organizations (WMOs). Reorganization is again back on the table; Senator Laidig introduced a bill to abolish BWSR and place responsibilities in the Department of Natural Resources or reconstituted Environmental Quality Board. Discussion followed.

Feedlot Advisory Committee Report - Jim Rossman reported that the Feedlot Advisory Committee met on February 24 and will meet again on March 31. The committee is addressing the following issues of concern: redefining permitting; an administrative plan needs to be structured for counties on the permitting process; how to deal with odor problems; and an overview of forestry EIS has been discussed.

Chairman Nielsen called for a break in the meeting at 9:55 a.m. The meeting reconvened at 10:05 a.m.

Timber Harvest in Minnesota, Generic Environmental Impact Statement (GEIS) - Mike Kilgore, Department of Natural Resources (DNR), updated the BWSR on GEIS on forest management. He explained that about a year ago the EQB chair and commissioner of DNR formed a roundtable group of 25 people who met every other week from May to November. The roundtable group issued a comprehensive strategy report for implementing forestry management. The governor's recommended budget allocates $4.25 million for this program. BWSR would administer cost-share assistance for forest stewardship under this program. Chairman Nielsen thanked Mike for informing the Board of this program.

Grant SWCD Reinvest In Minnesota (RIM) Easement Violation - Jim Birkholz explained that a landowner has been found to have willfully violated a RIM easement by harvesting hay from the parcel. Negotiations with the landowner by the Grant SWCD and by BWSR field staff have not been successful. Jim explained the flowchart of non-compliance/violation procedures. Staff recommends that the BWSR request action from the Attorney General to obtain a court order to prevent further haying and to continue to seek payment of damages. The law requires that the state receive treble damages and restoration of the easement. Moved by Otte, seconded by Rodning, that the BWSR accept staff's recommendation to request action from the Attorney General to obtain a court order. Affirmative: Cobb, Lovdahl, Otte, Peterson, Rodning, Rossman, Uppgaard and Nielsen. Opposed: None. Carried.

** 95-25

Advisory Comments

- Pollution Control Agency: Wayne Anderson briefly commented on the positive action taking place with cooperative agencies.

- Department of Natural Resources: Wayne Edgerton stated that DNR is developing a plan for sustainable agriculture practices and updated conservation plans for lands in the state. The overall plan must be submitted to the Legislative Commission on Minnesota Resources (LCMR) and the Environmental Quality Board (EQB) by September 1, 1995. BWSR is invited to participate in a planning meeting on April 19 at the Department of Agriculture.

Chairman Nielsen stated that he and Ron Harnack met with Dennis Anderson, outdoor writer for the Minnesota Star & Tribune, on concerns they share on local management and ecosystem based management.

Barb Cobb and Jim Birkholz asked DNR and PCA representatives to check the status of their respective agency comments regarding the Nine Mile Creek Watershed Management Plan. The agencies were asked to submit their comments on the plan by the end of this month.

•Minnesota Association of Soil and Water Conservation Districts (MASWCD): Jim Schafer reported that the theme for the 1995 state convention is "Conservation 2000." Jim thanked the BWSR for allowing Jim Birkholz to go to Washington, D.C., next week with MASWCD to meet with the congressional delegation. MASWCD is intending to form a marketing and public relations committee to assist the SWCDs to become visible and pro-active.

•Natural Resources Conservation Service (NRCS): Dave Benner stated that Bill Hunt reports for duty as the new state conservationist on March 23. He's been deputy conservationist in Pennsylvania.

•Minnesota Association of Townships (MAT): Franklin Denn stated that this is a busy time of year, during the legislative session. MAT is sponsoring fifteen short courses for township officers.

•Minnesota Association of Conservation District Employees (MACDE): Rick Reimer reported that MACDE from Area 5 and 6 met to exchange ideas. MACDE met on March 8. A two day training session will be held in Alexandria.

Upcoming Board Meetings

- Duluth (Comfort Inn), July 25-26. A tour will be held on Tuesday with the BWSR meeting on Wednesday.
- Marshall in September.
- April 26 in St. Paul.

Chairman Nielsen adjourned the meeting at 11:15 a.m.

Respectfully submitted,

Acting chair

D. James Nielsen
Chairman

3\20\95
Prepared by BWSR

HF: 787, as amended by authors amendments on March 17th

SUBJECT: WETLAND CONSERVATION ACT AMENDMENTS

AUTHORS: MUNGER, McCOLLUM, GIRARD, HAAS, I. ANDERSON

COMMITTEE: ENVIRONMENT & NATURAL RESOURCES

SUMMARY OF HF 787 BY SECTION

SECTION 1: **WETLAND REPLACEMENT: As amended,** this section begins with changes to M.S. 103F.612, wetland preservation areas. The amendment, which is new language to the bill, allows a county the option of enrolling lands in a wetland preservation area, which if enrolled are tax exempt. This change respects the counties decision on taxation issues and will allow the designation of high priority wetland areas to proceed with less county government concern of not being reimbursed for lost tax revenue. The next change, which is also new language to the bill, provides that the DNR will consult with the BWSR if rules are developed for state assumption of the U.S. Army Corps of Engineers 404 program. This change is consistent with the manner in which rules were promulgated for other parts of the Wetland Conservation Act. The final change amends previous language concerning the streamlining of the sequencing analysis. As amended, an on-site analysis may be done statewide for projects impacting less than 10,000 square feet. This simplifies the criteria by providing a uniform statewide standard and maintains the recognition that wetlands in shoreland areas are critical to the protection of the state's lake and river resources.

DOUBLE REPLACEMENT FOR VIOLATIONS: This section requires the replacement for a violation to be doubled. This provision is an incentive for individuals to contact the local government before conducting activities in a wetland.

SECTION 2: **EXEMPTIONS:** This section amends four exemptions:

* exemption 10 (iii) is changed to include private as well as public actions; experience this past year suggests that there is no reason to limit this to public actions;

* exemption 17 **is amended** to allow landowners an opportunity to repair or update existing individual sewage treatment systems as necessary to comply with local, state or federal law;

* exemption 18 is a technical change & does not change the meaning of the exemption;

* exemption 23 adds the word "agricultural" so that the exemption is consistent with the intent of other agricultural exemptions. The agricultural exemptions were intended to apply only to agricultural use. The experience of the past year has demonstrated however that the farm bill allows non-agricultural activities that would fill or drain wetlands. Some landowners have attempted to use this as an exemption. This amendment makes it clear that the exemption only applies to agricultural activities;

* exemption 25 modifies the amount of filling or drainage that can take place without mitigation. **As amended,** the amounts of deminimus apply to every impact and are deducted from the amount to be mitigated. Similar to the sequencing flexibility in section 1, the exemption is based on the percentage of presettlement wetlands remaining in a county or watershed and recognizes the significance of shoreland areas: Less than 50% = 400 square feet; 50 -80% = 1,000 square feet; greater than 80% = 7500 square feet; & in shoreland areas = 400 square feet. As in section 1, this change reflects the diversity of the state and the need for greater flexibility in those areas where most of the wetlands still remain.

This section also ensures that the exemption does not result in the gradual filling or draining of the entire wetland by limiting the total impact without replacement to 5% of the wetland area. This provision also counters the deminimus which as amended now applies to every mitigation plan.

SECTION 3: RULES: Allows the BWSR to approve as an alternative to the wetland rules, a comprehensive wetland protection & management plan developed by a local government unit. The plan would provide greater flexibility to the local government by allowing a classification of wetlands based on an assessment of the functions of the wetlands and resulting public value and allow the local government to vary the sequencing standards and replacement ratios for the 80% counties or watersheds. The wetland plans would be developed as part of the local water management plans. This again recognizes that not all areas are the same and additional flexibility can be afforded through local governments current water planning process.
This section also provides for emergency rule making for BWSR so that these 1995 amendments can be implemented within a few months. Without emergency rule making, the amendments would not be implemented before 6 months.

SECTION 4: APPLICATION NOTICE: This section streamlines the administrative process by changing the notice and publication requirement for replacement plan applications.

A new section: As amended, the bill provides a new section that provides an opportunity for aggrieved parties to appeal local government decisions to BWSR by petition. A filing fee is established which is returned if the appeal is denied.

SECTION 5: DECISION NOTICE: This section changes the notice requirements and eliminates the 30 day waiting period before a decision becomes effective. This has been a significant problem in the past year and has served only to delay projects. The change makes the process the same as other local land use decisions.

SECTION 6: REPLACEMENT CREDITS: This section provides that certain activities---currently not eligible for replacement--- are eligible for replacement credit.

* the reestablishment of permanent vegetative cover on a farmed wetland would be eligible for replacement credit; this provides an additional incentive to

landowners;

* **As amended,** buffer areas adjacent to replacement wetlands are eligible for credit of up to 50% of the replacement wetland area; this recognizes that wetland function is--- in part--- dependent on adjacent vegetative buffer.

* wetlands restored for conservation purposes under a terminated agreement would be eligible for replacement credit. Due to the lack of incentive to retain these restored wetlands, numerous acres have been re-drained. This provision provides an incentive to maintain the wetland and get a financial return.

* **As amended,** allows water quality treatment ponds to be used for partial wetland replacement credit. The credit cannot exceed 50 percent and applies only above a 1:1 ratio thus ensuring that no-net loss is maintained. The change will provide an incentive to consider water quality issues in wetland projects.

SECTION 7: COMPENSATION: This provision addresses the concerns of LGU's and landowners regarding the takings issue. This section establishes who is liable for a court ordered award against the local government properly administering the wetland conservation act. This provision provides that the state will provide legal and technical support in defense of the WCA; provides that the state is liable for court awarded financial awards resulting from an inverse condemnation action; and provides a process by which the legislature would appropriate funds to satisfy such an award. It is reasonable for the state to assume this liability since the WCA is a state law and a mandate to local government.

SECTION 8: ENFORCEMENT: This provision requires local soil & water conservation districts to make appropriate decisions within 90 days of an enforcement order. This provision comes as a result of some isolated situations where inaction by the soil and water conservation district has extended for long periods. In general, local governments have been more responsive than their federal and state counterparts.

As amended, a new section will change the due date of the annual wetland report to March 1st. The current

date of January 1st needs correction because local governments cannot provide the data for the report until after January 15th.

SECTION 9: REPEALER: As amended, this provision only repeals the eligibility of replacement wetlands for RIM reserve.

Minnesota Board of Water & Soil Resources

Board Member Update

March 1995

The mission of the Board of Water and Soil Resources is to provide leadership enabling local governments to properly manage water and soil resources and to help all citizens be stewards of our irreplaceable natural resources.

Southern region

* Counties are busy getting underway with the revision process of their comprehensive local water plans. Many are beginning to hold local task force meetings to review and update the comprehensive plans. Most have scheduled public information meetings to be held late February through March. Board conservationists (BCs) are and will continue to be quite active in these public information and task force meetings. Working individually with water plan coordinators, multi-county and joint powers groups, and attending local county task force meetings is a major work commitment. Continued emphasis on providing information to coordinators and agency partners is a priority.

* Another major water planning time commitment came in the form of Natural Resource Block Grant (NRBG) review. BCs discussed a number of minor corrections and recommendations with counties after reviewing the applications. In most cases, final approvals of the NRBGs should be completed during March.

* BC Tom Fischer participated with county and state agencies and private citizens of one county in their efforts to convince the county to continue with local water planning. The county board was seriously considering dropping out of local water planning because of misunderstandings and misinformation. The local effort was successful! McLeod County will continue with its local water planning; they have held their first task force meeting and announced their public information meeting.

* Tom Fischer is also assisting Meeker County, Meeker SWCD, the Army Corps of Engineers, and the MN DNR Wetland Enforcement Office with the county's first major violation of the Wetland Conservation Act (WCA). Some wetland activities don't stop just because winter is here.

* Marshall BC Tabor Hoek continues to work with the Wellner-Hageman watershed treatment plan. Special Minnesota River Cost-Share and NRBG funding from BWSR--as well as Minnesota Pollution Control Agency (PCA) Clean Water Partnership funding--have been instrumental in completing land treatment of this sub-watershed that drains into the reservoir. By the end of this construction season, 14 abandoned wells will be sealed; 24 sewage treatment systems will be installed; 8 of 10 animal waste control facilities will be installed, with one more undergoing experimental treatment; identified terraces and waterways will be installed; and

conservation tillage will cover over 50 percent of the watershed. Watershed focus does work!

* The Blue Earth River Basin Initiative (BERBI), an implementation joint powers board, has encumbered most of their Special Minnesota River Basin Fund accelerated cost-sharing from the past two years and will be installing many practices this summer. The group is struggling to achieve its goal of becoming self-supporting; BC Chris Hughes believes they will reach this goal within one to two years.

* Southern Minnesota BWSR staff attended and participated in a recent conference in Mankato and Montevideo on sediment control solutions for the Minnesota River. The conference focused on information describing sediment delivery to the river, a review of University of Minnesota regional tillage guidelines for the basin, and local strategies for sediment reduction. BCs Chris Hughes and David Sill gave presentations on using county comprehensive local water plans as a vehicle to establish goals and actions for sediment reduction.

Northern region

BCs are getting busier with WCA as we move towards spring. BCs are getting more requests each week to go out on technical evaluation panels (TEPs) as project sponsors try to get their ducks in a row in preparation for the construction season. And yes, many of these TEPs have taken place in the snow and cold. This adds a new twist to making the wetland call. What does the manual say about frozen hydrology anyway?

* One notable WCA instance includes the LTV Mining proposal to impact 308 acres of wetland between now and 1999. Duluth BC Mark Nelson says that the proposed mitigation for this project is to restore an abandoned wild rice farm. Mark has been working with the Corps, the DNR, St. Louis county, and LTV Mining to put together a mitigation package that will please everyone.

* Another notable WCA incident: Brainerd BC Keith Grow and Water Resources Education Coordinator Barbara Liukkonen have been tied up in a cross-county WCA case involving a Wal-Mart store. It seems the Wal-Mart store was to be built in Washington County with replacement in Chisago County. The mitigation site ended up getting two cease and desist orders for fill and best management practices violations and the Wal-Mart store project was threatened as a result. Barbara and Keith did some mitigation of their own with all the players involved and at last report the cease and desist orders have been resolved and the project is back on track.

* North region BCs recently got together with the Brainerd Army Corps staff for a day. They had some good frank discussions regarding wetland banking, administration of WCA at the local level and other good stuff. However, our BCs came away from the meeting frustrated by the continued reluctance of Corps staff to trust local government administration of the WCA.

* Moving on to some other odds and ends: Brainerd BC Dan Steward's been doing yeoman's work with the Crow Wing County Board and water plan task force as they struggle with the direction the water plan should take in

the future. At one point the county was contemplating dramatically downsizing the water plan and its implementation in Crow Wing County. Through some very thoughtful discussions this attitude has swung around and they are again talking about making the best use of the plan to protect Crow Wing's valuable water resources. This kind of personal service (provided by Dan) is what BCs do best and often leads to strong, capable resource management at the local level.

* The cost-share retooling team is making steady progress and they hope to have a draft out for review this summer. The reporting team too, moves along and plans to test market the new process in six counties in April and May.

* Jim Lemmerman reports that about $250,000 in requests were made for Forest Stewardship grant monies this year. There is about $100,000 available. Jim has worked with several SWCDs in putting together their applications. He also serves on the committee that ranks and ultimately selects the successful applicants. The Forest Stewardship Program brings in easily accessible federal dollars for forestry activities. The program has provided an opportunity for many SWCDs to take a more active role in forest management and as a result, more forestry BMPs are being applied to private lands.

* Barb Liukkonen says that risk communication was a hot issue for her this month. Arsenic concentrations exceeding health guidelines have been found in the Traverse-Stevens-Grant county area and high levels of boron have been found in wells along the north shore. Trying to put the level of risk into perspective and provide research-based information on possible health effects and water treatment alternatives was an interesting challenge. Barb spent many hours working with local units of government and homeowners concerned about safe drinking water from their wells.

*

Engineering and Technical Services Section

Conservation Easements

* Candidates for our vacant conservation easement program manager position are being interviewed as this is written. We are using a state list of eligibles to fill the position. Only 7 of the 25 people on the initial list sought interviews. We hope to fill the position as soon as possible, with a very capable person. We are anxious to complete the retooling initiative and deal with ongoing program management issues and opportunities. Other program staff are covering critical program management roles until a new program manager is hired.

* Approximately 30 agreement packages for easements accepted during the recent sign-up have been received by the BWSR since early February. The retooled agreement package forms and procedures appear to be working well. We're working on finalizing the new agreement form generated from the program database, and the new method of generating legal description maps (Exhibit As) via computer-aided drafting and the state's Land Management Information Center data.

Lakeshore Engineering

* Gene Clark, lakeshore engineer, has been working closely with the city of Two Harbors to try to get construction

restarted on the municipal campground shoreline stabilization project. Recall that the contractor abandoned the project last month due to bankruptcy. Gene has provided technical assistance to the city and the contractor's surety company to help define the status of the project and the critical need to complete portions of it before the inevitable spring storms hit. Gene and Al Kean, chief engineer, have focused on giving the city project manager and attorney the technical information they need to work effectively with the contractor's surety company. The surety company seemed to drag its feet at first, but has recently taken some steps that appear to be the start of identifying a contractor to complete the project. City officials and Gene met with an attorney and engineer representing the surety company on March 13.

* Gene and Al recently met with the district manager of Carlton SWCD and the landowners involved in the Hanging Horn Lake shoreline stabilization project. The purpose was to discuss phasing and any other efforts by the landowners and SWCD that might give the project a better chance for special project cost-share funding. (The competition for funding during the upcoming funding period is expected to be stiff, based on the number of applications submitted but not funded during the recent rollover funding period.) The landowners intend to ask the county and lake association to become funding partners, and have prioritized the properties needing shoreline stabilization.

* Gene gave a presentation on March 10 at the annual Erosion Control Conference regarding shoreline stabilization methods and the developing SWCD/BWSR partnership for providing related technical assistance.

* A grant proposal for shoreline best management practice workshops for landowners and SWCD staff along Lake Superior was recently submitted to the Great Lakes Commission by Gene, in cooperation with Mark Nelson, Duluth BC, and Barb Liukkonen, water resources education coordinator.

Area II

* The discussions have been continuing between Area II, the DNR and HDR Engineering, the project consultant, regarding the draft Environmental Assessment Worksheet for the RW-22 reservoir project. DNR staff are looking for more hydrologic and hydraulic information (e.g., water surface profiles and durations in the reservoir for frequent flood events) to better evaluate environmental impacts. The project is moving slowly but does appear to be progressing.

* Area II board members and staff hosted a public meeting in late February for the RW-22 project to update potentially affected landowners on project status. Area II and the project consultant were also seeking feedback on proposed methods for addressing farmstead and field access issues and draft flowage easement acquisition plans. The meeting reportedly went well. Some opposition was voiced, but apparently not to the extent that occurred last year, before the preliminary project designs were fully developed.

SRF Technical Staffing

* Grant agreements for State Revolving Fund (SRF) technical staffing went out to the Joint Powers Boards (JPBs) in mid-March. BWSR staff have sent out

over 300 application packages to potential applicants. JPBs have done and continue to do some local advertising, as well. At least a few JPBs are planning to interview engineers and technicians starting in late March or early April.

* Equipment purchases have been temporarily held up until we receive the EPA 319 grant that is part of the overall funding package. Wayne Zellmer, grants coordinator, and Al Kean have been working as fast as possible with PCA grant management staff to get the money in our coffers. EPA had been slow to get the funding to the PCA and now we have to work through the state system and paperwork to make the funding available for the SRF technical assistance program. The expected time frame is up to six weeks.

March 21, 1995

To: Ron Harnack

From: Bruce Sandstrom

RE; Status Report on Appeals

Audubon v. Nine Mile Creek WD

On Feb. 1, 1995 staff submitted comments on Nine Mile's draft 2nd generation plan. Our turn around was rather quick since our concerns paralleled our comments on the Riley-Purgatory-Bluff Creek WD 2nd generation plan. The due date for agency comments is fast approaching. (I believe the due date is 3/30/95.) The Board should obtain a commitment from the agency representatives on our board to expedite the comments from their respective agencies. Our agreement with the parties to this appeal calls for a meeting to redress the issues if we haven't approved the plan by April 1. It is obvious that this is not possible at this time. I suggest that the meeting should not occur until after agency comments are in. The law allows us to grant the review agencies an time extension. If we do, it should be for 30 days or less. In the event the agencies fail to comply with the time line, the Board should give staff direction as to how we should deal with it. The Smetana Lake project is one of the capital improvements in the plan that is of contention. Both the DNR and MPCA have permitting / certification authority over certain aspects of that project.

Spartz v. Minnehaha Creek WD

A pre-hearing was held on Feb. 28, 1995. A schedule for filing of briefs has been set and the hearing is scheduled for June 8, 1995. Depending upon the disposition of the 103D amendments at that time, certain aspects of the appeal may be narrowed. Currently, Spartz has three separate appeals on file with us, including one based on alleged failure to implement under Chapter 8410 rules. If time allows I may be able to bring the latter appeal to the Board in April for a determination as to whether there is just cause for staff to proceed further under the 8410 appeal. The June 8, 1995 hearing will deal with only the 103D aspects of the appeals.

Levine et. al v. Minnehaha Creek WD

This matter is currently scheduled for hearing before the DRC on April 13, 1995. The WD failed to file a transcript and record on time and this has affected the briefing schedule. Both parties still are intent on getting the preliminary documents to us to allow the DRC to review them at least 5 days prior to the hearing.

Fridley v. Rice Creek WD

The Court of Appeals recently ruled that the amendment process the WD used to amend its plan was valid even if the plans expiration date had passed but ruled that the District Court had valid jurisdiction over the matter. Fridley has requested the BWSR to join with them in urging the Supreme Court to review the jurisdictional matter over the appeal. Fridley believes that the dispute over the CIP should have been before the BWSR and the BWSR's decision should have been final. (See MS 103B.231, Subd. 9) If the Supreme Court agrees to hear the matter, then Fridley's appeal under Chapter 8410 should be continued further. If the Supreme Court decides to not hear the case, then we must begin processing the 8410 appeal. The matter should be reviewed by the AG's office for direction. If we do not side with Fridley the Supreme Court appeal, then we should attempt to amend MS 103B.231, Subd. 9 to remove the language that essentially says the BWSR has the final say over CIP disputes between counties. Attached is a copy of Fridley's March 10, 1995 letter regarding the Supreme Court appeal. Our involvement in this situation is kind of like one "where you can pay me now or you can pay me later." In my opinion, the Locke Lake matter evolved from solely a local policy dispute to a matter concerning state water policy when state funds went into the reconstruction of the Locke Lake dam. Now we have an expensive wetland being filled in by sediment instead of a lake!

Wallace v. Riley-Purgatory-Bluff Creek WD

Update. Ray Haik has advised me that the have advised the developer of their need to comply with the WCA law and rule as directed by the BWSR and will be keeping us informed of the progress towards achieving compliance.

Attachment

cc Jim Birkholz
Doug Thomas
Metro Staff

a:status.mar

CITY OF FRIDLEY

FRIDLEY MUNICIPAL CENTER • 6431 UNIVERSITY AVE. N.E. FRIDLEY, MN 55432 • (612) 571-3450 • FAX (612) 571-1287

March 10, 1995

PW95-032

Mr. Ron Harnack, Executive Director
Board of Water & Soil Resources
Southbridge Office Building
155 South Wabasha Street, Suite 104
St Paul MN 55107

Subject: District Court's Jurisdiction

Dear Mr. Harnack:

As you are aware, the Rice Creek Watershed District amended their Watershed Management Plan in December, 1992 to increase the amount and to provide for ad valorem assessment of the Locke Lake sediment removal project. In July, 1993, after public hearings, the District approved the project for construction. As a result of the cost distribution, the Ramsey County Commissioners appealed the decision of the District Managers and was presented to the Ramsey County District Court, File No. C9-93-9419. One of the major arguments the City and District attempted to make was the fact that the District Court was not the proper agency for appealing projects under Statutes 103B.251. The District Court ruled against that position. Accordingly, the City of Fridley appealed the case to the State Court of Appeals, File No. C5-94-1493. In that action, the Appellate Court upheld the District Court's decision that the courts do have jurisdiction on the appeal process to projects initiated under 103B.251 based upon their interpretation of Minnesota Statutes 103D.535.

The City is requesting the State Supreme Court to address the issues regarding remedial action through the Board of Water and Soil Resources versus the District Court process, maintaining the authority for an ad valorem tax for district wide projects as well as to substantiate that the Ramsey County appeal was invalid based upon the timeframes established under Statute 103B. In this process, we believe that the Board of Water and Soil Resources is materially involved in this action as the Appellate Court's decision impacts the process established by the Legislature in the Watershed Management Plan statute. Accordingly, we strongly urge the Board of Water and Soil Resources to join with the City of Fridley in requesting the Minnesota Supreme Court to accept this case and confirm the Legislative intent to provide for expeditious process for surface water management within the watershed management organizations and watershed districts.

Request you coordinate with the City's attorney, Mr. Virgil Herrick, of Barna, Guzy & Steffen, Ltd, at 400 Northtown Financial Plaza, 200 Coon Rapids Blvd, Coon Rapids, MN 55433, telephone number 780-8500, on this appeal.

If I can provide you any additional information, please contact me at 572-3506.

Sincerely yours,

William W. Burns

William W. Burns
City Manager

JGF\WWB:cz

cc: Bruce Sandstrom

The GEIS for Timber Harvesting:
A History and Implementation Update

What is the GEIS?

*The **Generic Environmental Impact Statement (GEIS) for Timber Harvesting and Forest Management in Minnesota** is one of the most comprehensive studies ever prepared to assess the potential environmental, economic, and social impacts of increased timber harvesting and forest management for an entire state. The GEIS was initiated by a citizens petition to the EQB in July 1989. The consulting firm hired by the EQB to prepare the study, Jaakko Pöyry Consulting, Inc., enlisted the services of over 60 scientists from many different disciplines. The EQB also established a 10-member citizen's advisory committee to provide overall direction and oversight in the preparation of the GEIS. The GEIS cost approximately $850,000 to prepare. Funding for the GEIS was provided by various sources, with the majority coming from the legislature through general appropriations and the Environment and Natural Resources Trust Fund. Public review of the study's draft findings and recommendations took place from June through September of 1993. The 600 page final report was unanimously approved by the EQB in April 1994. The study's findings and recommendations of the study are supported by five background and nine technical papers.*

What Were the GEIS's Findings?

The GEIS examined potential impacts of timber harvesting to a wide range of forest resources and values. To better understand the range of impacts that could occur, the GEIS looked at three harvesting scenarios (levels):

- **4 million cords** of wood per year: the estimated level of statewide harvest in 1990; the **base** scenario;
- **4.9 million cords** per year: an anticipated level of harvest in the near future based on announced or considered forest industry expansions; the **medium** scenario; and
- **7 million cords** per year: a level estimated to be the maximum sustainable harvest level; the **high** scenario.

At the current level of harvesting, the GEIS projected a number of potential significant impacts to occur over the study's 50 year planning horizon. Among those are changing patterns of forest cover and tree species mix; loss of genetic variability of plant and animal species; habitat loss for certain endangered, threatened, or special concern plant and animal species; increased susceptibility of forests to insects and diseases; loss of soil nutrients and increased soil erosion and compaction on certain sites; habitat loss for certain populations of forest dependent wildlife; decreased availability of certain food producing trees; adverse impacts to visually sensitive areas; development of certain primitive and semi-primitive non-motorized areas; and disturbance or destruction of certain unique cultural and historical resources.

The types of potential significant impacts identified at the medium and high harvest scenarios were fairly similar to those projected under the base scenario. The differences were primarily in the degree of impacts, rather than the types of impacts.

What Did the GEIS Recommend?

The GEIS recommended a variety actions necessary to mitigate the identified potential significant impacts for each of three harvest scenarios. Recommended strategies include developing timber harvesting and forest management guidelines; modifications to harvesting and silvicultural practices, and harvesting equipment; increasing the wood fiber productivity of timber lands; protecting sensitive sites; balancing age class and covertype structure; adjusting management in riparian corridors; managing for extended rotation forests; conducting landscape-based planning; and developing integrated pest management strategies. Increased forest resource monitoring, inventories, and research are also recommended.

The GEIS concluded that, with some modifications to current practices, including the application of certain mitigation measures, the levels of harvest portrayed under the base and medium scenarios are sustainable in the long-term. However, recommended mitigation strategies would have to be implemented relatively soon to avoid or mitigate the significant impacts identified at these harvest levels. Harvest levels assumed under the high scenario could not be

sustained without investments beyond those used in the GEIS analysis. In addition, the study raised some concern as to whether or not some significant impacts could be fully mitigated.

The GEIS further recommended that implementation of mitigation strategies could best be accomplished by integrating them into comprehensive policy programs to address:

- **Site-level Impacts** - This program would include strategies to encourage the implementation of specific on-the-ground, site-specific management practices.

- **Landscape-level Impacts** - This program would include strategies to manage forest resources for a variety of outputs and objectives that transcend ownership boundaries.

The GEIS Roundtable

In 1993, the Legislature assigned the responsibility for implementing GEIS recommendations to the DNR. Recognizing that the successful implementation will require the continued broad-based involvement and ownership by forest landowners and interests in the state, the EQB chair and the DNR commissioner convened the **GEIS Implementation Strategy Roundtable** in April 1994. The GEIS Roundtable, a 25-member group representing diverse interests with respect to the use, management and protection of Minnesota's forest resources, was **charged with developing a consensus-based plan to implement the strategic program (e.g., site-level, landscape-level) recommendations in the GEIS**. The roundtable issued its report in November 1994.

GEIS Roundtable Recommendations

GEIS policy legislation and a $4.25 million GEIS investment initiative within the Governor's budget have been prepared to enable and provide funding to implement much of the Roundtable's recommendations. Using the Roundtable's five major implementation themes, the following briefly describes the policy legislation and the associated funding recommendations for the FY 1996-1997 biennium:

1 Providing Mechanisms and Resources to Accomplish Goals and Successful Outcomes:

- **Forest Resources Council (FRC)** - Establish a 12-member forest resources council to develop recommendations regarding state forest resource policies and practices. *(Funding: $330,000).*

- **Forest Resources Partnership** - Encourage the formation of a private partnership comprised of forest landowners, forest managers, and loggers to coordinate the implementation of policies and practices recommended by the FRC. *(Funding: $0).*

2 Improving Practices:

- **Comprehensive Timber Harvesting and Forest Management Guidelines** - The FRC should develop comprehensive timber harvesting and forest management guidelines. The guidelines are to be VOLUNTARILY applied on private forest lands. *(Funding: $720,000).*

3 Planning to Sustain All Forest Benefits:

- **Regional Forest Resources Committees** - Based on regions defined by forest landscapes, the FRC should establish regional forest resource committees to provide an open and public process to conduct landscape-based strategic planning, discuss regional forest resource issues, and provide regional perspectives to the council. *(Funding: $340,000).*

4 Providing Information and Understanding to Result in Implementation:

- **Monitoring** - Based on strategic direction from the FRC, the DNR should develop monitoring programs that assess forest resource conditions and trends, compliance with certain voluntary practices, and the effectiveness of specific practices. *(Funding: $320,000).*
- **Research Advisory Committee (RAC)** - The FRC should establish a RAC to coordinate the identification and undertaking of priority forest-based research. *(Funding: $660,000).*
- **Interagency Information Cooperative (IIC)** - An IIC should be established to coordinate the development, access and use of forest resources data. *(Funding: $320,000).*

5 Increasing Public and Practitioner Knowledge and Understanding:

- Encourage timber harvesters and forest resource professionals to establish privately administered, voluntary certification programs within their respective professions. *(Funding: $200,000 for continuing education for timber harvesters and forest resource professionals, and general public education).*

The GEIS Roundtable also identified the importance of increased assistance to private landowners to achieve long-term forest management goals. *(Funding: $229,000 to expand cost-share assistance to private landowners, and $450,000 for increased technical assistance through additional field professionals).*

Footnote: *Several aspects of the GEIS initiative could be interagency efforts whereby funding is allocated to the DNR, but implementation could involve establishing partnerships with other state agencies, levels of government, education and research organizations or the private sector.*

4/26/95

BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET, CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
APRIL 26, 1995

BOARD MEMBERS PRESENT:
Jim Rossman, Ted Lovdahl, LeRoy Stensgaard, Darrell Bruggman, Ginny Imholte, Dwain Otte, Kathy Roer, Barb Cobb, Glenn Annexstad, Tim Hvidsten, Marvell Tripp.

BOARD MEMBERS ABSENT:
Jim Nielsen

AGENCY MEMBERS PRESENT:
Jim Anderson, Minnesota Extension Service
Wayne Edgerton, Department of Natural Resources
Kim Benson-Johnson, Department of Health
Wayne Anderson, Pollution Control Agency
Paul Burns, Department of Agriculture

OTHERS PRESENT:
Jim Schafer and D'Wayne DeZiel, Minnesota Association of Soil and Water Conservation Districts (MASWCD)
Dave Weirens, Association of Minnesota Counties (AMC)
Roger Mussetter, Natural Resources Conservation Service (NRCS)
Franklin Denn, Minnesota Association of Townships (MAT)

STAFF PRESENT:
Ron Harnack, Doug Thomas, Barbara Liukkonen, Greg Larson, Jeff Nielsen, Mary Mueller, Eric Mohring, Al Kean, Wayne Zellmer, Marybeth Block, and Mary Jo Anderson.

Vice-Chair Jim Rossman called the meeting to order at 9:00 a.m.

Jim Rossman reported that Jim Nielsen will not be in attendance today. Jim reported that the newly appointed chair of BWSR, Joe Day, was not qualified as chair because he is a state employee; a new appointment as chair will be made. Ron Harnack is at a hearing at the Capitol this morning.

Newly appointed board members were introduced: LeRoy Stensgaard, Ginny Imholte, and Darrell Bruggman.

COMMITTEE REPORTS

Feedlot Committee - Jim Rossman reported that the Feedlot Committee will meet on May 31.

Dispute Resolution Committee (DRC) - Kathy Roer stated that the hearing scheduled for May 11 has been postponed until June 8.

** 95-26 **ADOPT AGENDA** - Moved by Dwain Otte, seconded by Marvell Tripp, to adopt the agenda as presented. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, and Tripp. Opposed: None. Carried.

** 95-27 **MINUTES OF MARCH 22, 1995** - Moved by Barb Cobb, seconded by Dwain Otte, to approve the minutes of March 22, 1995, as circulated. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, and Tripp. Opposed: None. Carried.

CONSENT AGENDA ITEM

-Well Sealing Grant Allocations - Eric Mohring explained the well sealing program and reviewed the application procedure. Staff recommends approval of the Well Sealing Cost-Share Grant Program Allocations. Moved by Marvell Tripp, seconded by Glenn Annexstad, ** 95-28 to approve the Well-Sealing Cost-Share Grant Program Allocation. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, and Tripp. Opposed: None. Carried.

OLD BUSINESS

Legislative Update - Doug Thomas reported that wetland amendments to the Wetland Conservation Act passed in the House last week and will be before the Senate this week. Watershed district amendments passed in the House and are on the Senate floor for action. Water Planning Act amendments passed in the House and are in the Senate Rules Committee.

Budget - Doug stated that the BWSR's base level budget will be the same for the 1996-97 biennium as it is for the current biennium. He also commented on appropriations. The budget bill has passed out of the House and Senate and will go to conference committee.

NEW BUSINESS

-BWSR/MES Educational Activities - Barb Liukkonen updated members on her present activities in northern Minnesota. Barb distributed informational brochures to members.

Vice-Chair Rossman called for a break in the meeting at 9:45 a.m. The meeting reconvened at 9:55 a.m. Ron Harnack returned from the Capitol.

Greg Larson updated the board and highlighted the major issues of comparison on House File #787 and Senate File #483 - wetlands legislation. Senate floor action is expected this week.

Minnesota River Cost-Share Initiative - Jeff Nielsen introduced the Blue Earth River Basin Initiative (BERBI) committee members: Linda Meschke, Jerry Voyles, Mary Mueller, Gary Wehrenberg, and Ray Phelps. The committee distributed a report to the board. BERBI requests $300,000 from the Special Minnesota River Basin Fund to continue the accelerated cost-share effort in the Blue Earth River basin. Discussion followed.

Redwood-Cottonwood Rivers Control Area (RCRCA) - Bob Finley, LeRoy Stensgaard, Jeff Bommersbach and Bruce Berger were introduced and Bob gave an overview of the RCRCA and requests $200,000 from the Special Minnesota River Basin Fund to continue the accelerated cost-share effort in the Blue Earth River basin. Informational materials were distributed to members.

Mound Creek Watershed Project (Cottonwood SWCD) representatives were not available to attend the BWSR meeting, so Jeff Nielsen requested $94,568 of cost-share funding on behalf of the Mound Creek Watershed $94,568 of cost-share funding. Discussion followed.

Ron Harnack stated that in June when applications are received for allocations, these three programs will be included in the process. Members desired to see more information on each initiative's efforts to meet the goal of water quality enhancement i.e. phosphorus loading reduction and reduction in sediment yield to surface waters. Staff was directed to follow-up. Rossman thanked everyone for coming in today to explain their programs.

OTHER BUSINESS

Ron Harnack briefly stated that the next few weeks will be extremely busy in the Legislature. BWSR has been reasonably successful thus far in comparison to other agencies. Ron commended staff for their assistance while he has been at the Capitol. Ron welcomed the new board members and looks forward to working with them.

ADVISORY COMMENTS

- Department of Health (MDH): Kim Benson-Johnson thanked BWSR for approving the well sealing allocations and welcomed new members.
- Department of Natural Resources (DNR): Wayne Edgerton stated that the Legislature is interested in ecosystem- based management in Minnesota. DNR needs to develop a plan on how to approach this system.
- Department of Agriculture (MDA): Paul Burns briefly commented on the loan application process.
- Minnesota Extension Service (MES): Jim Anderson stated that this is his first official meeting as the MES representative.
- Pollution Control Agency (PCA): Wayne Anderson welcomed the new members.
- Natural Resources Conservation Service (NRCS): Roger Mussetter briefly commented on the national and state level reorganization and the changes that will be occurring. Bill Hunt was selected as state conservationist, although he has to reapply for the position.
- Minnesota Association of Soil and Water Conservation Districts (MASWCD): Jim Schafer welcomed new board members. MASWCD is dealing with customer service and marketing issues. Jim thanked Dwain Otte and Jim Birkholz for their attendance in Washington, D.C.,to meet with the Minnesota Congressional Delegation with MASWCD representatives.
- Minnesota Association of Townships (MAT): Franklin Denn stated that hearings on annexation will be held. Sustainable development hearing will also be held, time and places to be announced.

Ron Harnack commented on expense reports; he asked members to submit their expense claims every few months rather than hold them for several months. Expense claims for this fiscal year must be submitted by the July BWSR meeting at the latest.

Ron gave a brief staff update. Marybeth Block transferred to Dave Behm's position. Tim Fredbo is the new RIM coordinator and will be starting on May 3. Barbara Ohman is on maternity leave; Ellen Sones from Hennepin Conservation District is working on a part-time basis to assist with the workload while Barbara is out. NRCS engineer Justin Jeffrey is transferring under an inter-agency agreement.

Ron reported that the July meeting will be held in Duluth, July 25-26, details will be available later.

Ted Lovdahl commended Barb Liukkonen for her efforts in northern Minnesota.

It was requested that the Conservation Reserve Program and Farm Program status be on the next board meeting agenda for discussion.

Vice-Chair Rossman adjourned the meeting at 12:05 p.m.

Respectfully submitted,

Jim Rossman
Vice-Chair

(3rd) Well-Sealing Cost-Share Grant Program - $500,000

April, 1995 BWSR Meeting -
Program Review & Funding Allocation Recommendations

Funding

- $ 500,000 Federal funds (from CDC) granted to MDH
- interagency transfer to BWSR has been made
- funding is for grants to counties to share with landowners the cost of sealing high priority abandoned wells

Application & Allocation

- BWSR approved procedure and criteria at January meeting
- application packet went out in early February
- applications due March 30 '95
- 51 applications received
- reviewed by interagency advisory committee
- funding recommendations developed by committee for April BWSR approval (ATTACHED)
- $25,000 held back for key high priority abandoned wells identified by MDH.

Criteria for evaluating proposals:

- Strength of proposal
- Capability of county to administer program
- Acceptance and application of well-sealing priorities
- Inventory efforts: Priority to counties that have specific high-priority wells identified for sealing
- relation to wellhead protection efforts
- potential for flooding

Well prioritization scheme will take into account:

- well construction, depth, condition
- importance of aquifer as water supply source
- proximity to contamination, current contamination
- contamination susceptibility
- risk of flooding
- availability of other sources of water
- anticipated changes in land use

Grant Period and Reporting

- Well-sealing work should be finished by June 30, 1996. (OK to have some funds encumbered & not yet spent at this point, but need work done by Sept 30, 1996)
- State will submit progress reports to CDC. Final progress report will include # of wells sealed in each county and selected case studies describing the local projects
- Counties will be required to report quarterly to BWSR on their progress.
- Final financial report to CDC by Sept 30, 1996

WELL–SEALING COST–SHARE FUNDING RECOMMENDATIONS, APRIL 1995

COUNTY	LEAD ORG.	SCORE 1–5	REQUEST	RECOMMENDED FUNDING ALLOCATION
Ramsey	SWCD	4.5	$50,000	$25,000
Martin	County Water Planning	4.4	$17,242	$15,000
Dakota	County Env. Mgmt	4.4	$30,000	$17,000
Olmsted	County	4.3	$35,000	$14,000
Renville	County Water Planning	4.2	$5,213	$5,500
Washington	County Health	4.2	$40,000	$14,000
Mower	SWCD	4.2	$150,000	$14,000
Dodge	County Env. Quality	4.2	$10,000	$5,000
Lincoln	County Water Planning	4.1	$33,330	$10,000
Beltrami	SWCD	4.0	$10,000	$9,000
Hennepin	County Env. Mgmt	4.0	$35,000	$25,000
Benton	SWCD	4.0	$25,300	$10,000
Lesueur/Waseca	Board of Health	4.0	$44,000	$19,000
Becker	SWCD	4.0	$10,000	$7,000
Sibley	County Water Planning	3.9	$20,000	$10,000
Stearns	County Env. Services	3.9	$20,000	$14,000
Blue Earth	County Env Health	3.9	$21,450	$11,000
Sherburne	SWCD	3.9	$16,000	$10,000
Hubbard	SWCD	3.9	$10,000	$5,000
Wabasha	Public Health Service	3.9	$20,000	$10,000
Chippewa	SWCD	3.8	$20,000	$10,000
Fillmore	County Water Planning	3.8	$25,000	$12,000
Mille Lacs	SWCD	3.8	$20,000	$8,000
Brown/Nic/Cott	Clean Water Partnership	3.8	$30,000	$15,000
Winona	County Water Mgmt	3.8	$40,000	$10,000
Rock	SWCD	3.8	$20,000	$10,000
Todd	SWCD	3.7	$5,000	$5,000
Lyon	County Env. Dept	3.7	$13,576	$7,000
Mahnomen	SWCD	3.5	$3,300	$3,000
Houston	County Water Planning	3.5	$40,000	$10,000
Scott	County Env. Health	3.4	$50,000	$20,000
Pipestone	SWCD	3.4	$23,000	$10,000
Marshall	County Water Planning	3.4	$10,000	$8,000
Polk	SWCD	3.3	$30,000	$14,000
Lac Qui Parle	County Water Planning	3.3	$20,000	$7,000
Yellow Medicine	County Water Planning	3.3	$15,000	$5,000
Watonwan	County Water Planning	3.3	$15,000	$7,000
Anoka	SWCD	3.2	$30,000	$14,000
Stevens	County Env. Services	3.2	$10,000	$5,000
Big Stone	SWCD	3.2	$5,000	$5,000
Chisago	Chisago City	3.2	$15,000	$0

WELL–SEALING COST–SHARE FUNDING RECOMMENDATIONS, APRIL 1995

COUNTY	LEAD ORG.	SCORE 1–5	REQUEST	RECOMMENDED FUNDING ALLOCATION
Nobles	County RCD	3.2	$27,000	$7,000
Pennington	SWCD	3.0	$2,500	$2,500
Murray	County Env. Services	3.0	$15,000	$5,000
Wadena	SWCD	2.9	$4,000	$3,000
Kanabec	SWCD	2.9	$12,500	$5,000
Douglas	SWCD	2.7	$8,000	$4,000
Cook	County Water Planning	2.5	$45,000	$6,000
Swift	SWCD	2.3	$12,000	$4,000
McLeod	SWCD	2.2	$15,000	$4,000
	TOTAL		$1,183,411	$475,000

BWSR COMMENTS REGARDING S.F. #483 (April 24, 1995)

These comments are based on the engrossment from the Senate Agriculture Committee and referred to the Senate floor.

Agriculture Definition

Sections 1 & 2: This changes the definition of agricultural land to:
1) land designated agricultural land under the local zoning authority of the local unit of government. [*Concern is that many counties do not have county wide zoning therefore this definition would by its approach exempt considerable land in these counties; see attached map.]*; or
2) land that has a capability classification of I thru IV *[Concern is that this classification is not suited for this type of use; it would establish or promote a policy of having highly erodible land or type 3, 4, or 5 wetlands as suitable for agriculture.]* {Alternative is to use the broad definition already in the wetland rules. This would allow all cropped lands, hayed lands, and pastured lands to be designated agricultural land. This expanded approach would exempt type 1 wetlands and type 2 wetlands less than two acres in these areas and would continue to allow all nonexempt agricultural wetlands to be mitigated at 1:1 rather than 2:1. This may be a good compromise}.

Section 3: This section applies to DNR public waters wetlands and allows for maintenance and repair within the right-of-way without replacement; and allows for culvert replacement that would drain wetlands to elevation of original culvert. *[DNR has voiced concern over the drainage provision where the culvert has not been operational for many years and landowners have become accustomed to the a new normal level; riparian rights may be impacted by the provision.]* {Alternative is to just delete the language after the ","on line 3, page 2 and delete lines 4, 5 & 6 on page 2.}

Section 4: Allows for 1:1 replacement statewide if or when based on public value. *[Currently the law requires both replacement for acreage and function (value); in some cases the reliance on acreage has resulted in a net loss of wetland function, particularly in the urban areas.]*

(l) Increases the threshold for on-site sequencing. *[This streamlines the administration of small projects by allowing the determination of avoidance and minimization to be done without detailed written information. Instead, it is done on-site by the local unit of government in consultation with the landowner. Concern is that draining or filling in the shoreland building setback would result in significant impact and is in conflict with the current state shoreland policies and rules. We need to acknowledge that the entire shoreland area is important for*

the longterm protection of recreational lake and river water quality and economic value.] {Recommend that the provision under (l) (1) on line 28, page 4, before "2,000" add "up to" and after "the", delete "building setback" and on line 29, page 4, delete "of"; this would allow greater consistency with local government shoreland ordinances and ensure that the entire shoreland area is given more significance.}

(m) Creates a cash payment to local wetland bank based on market value of created upland. *[Use may be limited as it will be cheaper to purchase from state bank since the value of the upland created will almost always exceed the cost of banked mitigation credits. Provides greater flexibility for assessing avoidance and minimization based on location. BWSR had developed a process to address this with public projects however we cannot use bonding $'s for private lands; therefore some additional appropriation would be necessary for the private elements of banking.]* { Suggestion is to have the provision only apply to public transportation projects and base the cost on the purchase price of the land rather than the assessed value. It is difficult to place a cost on a roadway that goes several miles or more; however the purchase price the local government had to pay for right-of-way can be readily determined.}

Section 5: Exemption 3: Eliminates the 20 year provision. *[The purpose for the 20 year was to limit litigation over determination of what has priority - drainage rights or riparian rights. Courts have ruled that when not maintained drainage rights are superseded by riparian rights of other adjacent landowners and the public. Deleting the 20 year will surely result in renewed litigation at substantial cost to the local government and the public.]* {Alternative: Insert the attached language relating to ditches & keep 20 year and add Types 3, 4, and 5 or increase from 20 - 30 years. This would address the concern and also deter litigation.]

Exemption 6: Includes new roads under the exemption. *[Roads are still the greatest activity that impacts wetlands. The public policy should require road authorities to consider avoidance as part of new road decisions on alignment.]* {Alternate: change from a minimum replacement ratio of 2:1 to 1:1 and provide access to mitigation bank at local cost of land for public road projects and allow exemption to fill wetlands within the ROW for repair, maintenance and improvement of existing roads when required to meet state or federal standards as stated in exemption 16.}

Exemption 7: Exempts Type 1 wetlands statewide including those Type 1 like portions of other wetland basins. *[This includes fringes of larger wetlands and some fishing and recreational lakes in parts of the state. Poses a significant adverse impact to water quality. There is a significant difference between an isolated type 1 wetland and type 1 like vegetation that is buffer to, adjacent to, or part other wetland, lake or river resources.]* {Alternative allow the exemption

of isolated type 1 wetlands basins outside of shoreland areas only or where the local government has defined isolated type 1 wetland basins as unimportant based on an assessment of wetland functions and related value.}

Exemption 8: Adds to the current exemption type 2 like portions of other wetland basins on agricultural land. [*Similar concern exists for recreational lakes in the agricultural area.]* {Alternative: eliminate the "regardless..."language on line 21 and 22, on page 6.}

Exemption 17: provides exemption for maintenance/repair and for state/federal mandated updating of private/public infrastructure. *[This would supersede Exemptions 18; 12; 13; 16; 3 and elements of 11. Allows significant filling/drainage of wetlands. May be appropriate where there is a specific federal or state mandate requiring the additional filling of the wetlands.* {This exemption should be limited to filling only, as allowing drainage would impact areas far greater than what is needed to accommodate the specific state or federal mandates.}

Exemption 25: This exemption increases the amount of drainage or filling that can be done without replacement based on the % of wetlands in the county or watershed. *[Concern is for the shoreland areas where significant wetland areas could be filled or drained without regard for the impacts on lake and river water quality, recreation, and economics. The cumulative impact over time allows the entire wetland fringe of some lakes to be completely filled: eg; 1000 square feet = 50 x 20; 75 x 15; 100 x 10 or 200 x 5, eliminating buffer protection of lakes a significant contradiction with shoreland policies. Since a landowner can do the minimum fills for several different projects entire wetlands, over time, can be completely filled. There is no upper limit relating to a wetland.*] {Alternative: The reference to building setback should be deleted and applied to the entire shoreland area. The 1000 sq ft should not be limiting to local governments who believe that lessor amounts on some shorelands is critical to protection of the resource. Add "up to" before 1,000 and add 5% upper limit provision from exemption 26.}

Exemption 27: Exempts landowners who have owned land as of July 1, 1991 and have owned the land continuously since that date. *Provision virtually exempts all or at least a majority of land in the state. This provision has the effect of repealing the law. This provision was amended out in Senate Agriculture and is a mistake in the engrossment.* { Alternative is to delete this entire provision as the provision does the same as repealing the law.}

Exemption 28: This provision would allow drainage or filling of wetlands to gain access to uplands. *[Concern is that major road building through wetlands would be allowed without regard to the purpose for which the drainage or filling*

would be done. Since access is not defined, this creates a significant opportunity to indiscriminately fill or drain wetlands. In addition this allows drainage to achieve the purpose and drainage would have far greater impact than is necessary to gain access by filling.] {Alternative: eliminate this provision as the diminimus exemption provides sufficient flexibility to gain reasonable access: (eg: 10,000 sq ft = 10' x 1000' or = 20' x 500' or = 15 x 750') or at a minimum limit to minimum fill necessary to achieve the objective consistent with local land use decision and when there is no reasonable alternative to access the land.}

Section 6: Page 10, lines 22 - 27 allows for more filling or drainage of Type 2 wetlands under a conservation plan by SWCD for improving farm efficiency. *[In shoreland areas this poses a potential problem resulting in water quality impacts adverse to lakes and streams.]* { Alternative: Eliminating the "regardless ..." provisions of paragraph (a) clause (8) lines 21 & 22, page 6 would reduce significant impact or limit application to nonshoreland areas.}

Section 7: Provides for local wetland plan criteria. *[Element (ii) (2) is of concern as it is not clear what is meant by reference to upland areas.]*

(ii) (3) these local banks would not have statewide access;

(ii) (4) allows Type 1 and 2 wetlands less than 2 acres on non agricultural land to be exempt. *[This exemption is allowed to applied without regard for function and value of the wetland. At a minimum, before any type of wetland is exempt, particularly in shoreland areas, some assessment of function and value should be applied.]* {Alternative: add to beginning "based on item (1) may".}

Section 8: Changes use of 1989 manual to 1987 manual and requires local governments to provide wetlands maps to requesting landowners. *[The change to the 1987 manual from the 1989 manual has no significance for Minnesota. The delineation of wetlands in Minnesota is the same under both manuals. The difference is application between the manuals is in coastal areas. (b) may have a significant impact for some local governments that do not conduct delineations for all landowners, particularly developers. Most do perform delineations for individual property owners on small projects.]*

Section 9, 10, 11: Streamlines notice of application and decision and eliminates the 30 day waiting period. *[This makes the process consistent with other local land use decisions.]*

Section 12: Streamlines the appeal process to reduce frivolous appeals; and adds posting of bond for local governments. *[Since appeal is to BWSR and not LGU it would be appropriate for this authority for bond to be with BWSR.]* {Alternative is to

add a bonding provision for BWSR so that the increase cost of operation can be recovered and to be a deterrent for frivolous appeals.}

Section 13: Creates additional incentives for mitigation banking and incentives for landowners to preserve current restored wetlands that could otherwise be drained without replacement.

Section 14: Sets a minimum dollar amount payment when replacement plan is denied.

Section 15: Establishes a policy that the state Attorney General will defend actions of inverse condemnation filed do to decisions under the WCA. *[The state will also assume all awards coming from judicial action. This provision will increase the number of litigations until the court system establishes a precedent.]* {Alternative: provide for review of judicial awards by legislature and judgment as to whether to pay or change the law.}

Section 16: Allows local government enforcement to enforce local wetland ordinance and to assume DNR enforcement authority for wetlands. *[It is redundant as LGU's already have the obligation to enforce local controls. Allows, by resolution of the county board, for counties to assume power and authorization of DNR. The county sheriff and the county attorney are elected officers of the county and attorney and sheriff, in addition to the county board, should be required to endorse the acceptance of the additional enforcement authority to ensure reasonable implementation.]* {Suggest adding "with the written concurrence of the sheriff and county attorney".}

Section 17: (2) Provides for routine maintenance of ditch systems and (3) allows exemption for draining or filling of public waters wetlands, under DNR authority, for maintenance & repair of roads. *[(2) is redundant as ditch authorities have this ability now as long as they continue to carry out their other responsibilities. (3) this exemption includes filling and drainage of public waters not just public waters wetlands. There are present and past situations where this exemption would result in significant lowering of recreational and fishing lakes without DNR review and approval.]* {Alternative for (3) is to limit to public water wetlands and limit to filling only.}

Section 18: Allows for natural resources block grants to be used for wetland plans. *[This not prohibited now. If a local unit of government has accepted implementation of the wetlands program they can use the grants for development and implementation of the wetlands plan.]*

Section 19: Provides for a study and report on wetland banking alternatives.

Section 20: This provision limits the authority of the state (PCA) to administer water

quality standards in the state. *[This is a amendment that takes away significant authority of PCA to address water quality in the state. We should not tie ourselves to the federal standards. Minnesota should set its own wetland policies and water quality standards and get federal agencies to endorse the state policy, rules and procedures. This suggests that if the federal government would exempt all wetlands or wetlands less than 5, 10, or 50 acres that the state would accept the federal standard. This is not good policy. If greater public participation in the process is desired then address this specifically.]* {Alternative: delete this language and establish a more formal public review process for decision on 401 certifications.}

ATTACHMENTS:
1 - Ditch maintenance allowed under the wetland conservation act.
2 - Letter from PCA relating to the water quality provisions of sec 20.
3 - Map of % of Presettlement Wetland Acres Remaining by County.
4 - WCA rule definition of agricultural land.
5 - Description of wetland types 1 to 8.
6 - Graphic of wetland characteristics. (not done yet)
7 - Spread sheet of wetland type & distribution by county. (not done)
8 - Map of counties with county-wide zoning. (not done yet)

rdhs483.rdh

Minnesota Board of Water & Soil Resources

MN Wetland Conservation Act

DITCH MAINTENANCE

Wetland Conservation Act *Exemption #3* and other exemptions allow:

(i) maintenance which drains wetlands to a level that existed 20 years prior to the drainage request;

(ii) maintenance which fills wetlands that have been in existence for more than 20 years when the wetlands are located within the right-of-way acreage of the ditch or within a one rod width on either side of the ditch, whichever is greater, and the filling is limited to the side casting of spoil materials resulting from the maintenance and the spoil deposition area is permanently seeded into grass after maintenance activities are completed;

(iii) lowering the elevation of previously placed tile when made necessary by land subsidence provided the lowering does not drain wetlands;

(iv) drainage of wetlands that have formed in the bottom of ditches or were created solely as a result of beaver dam construction;

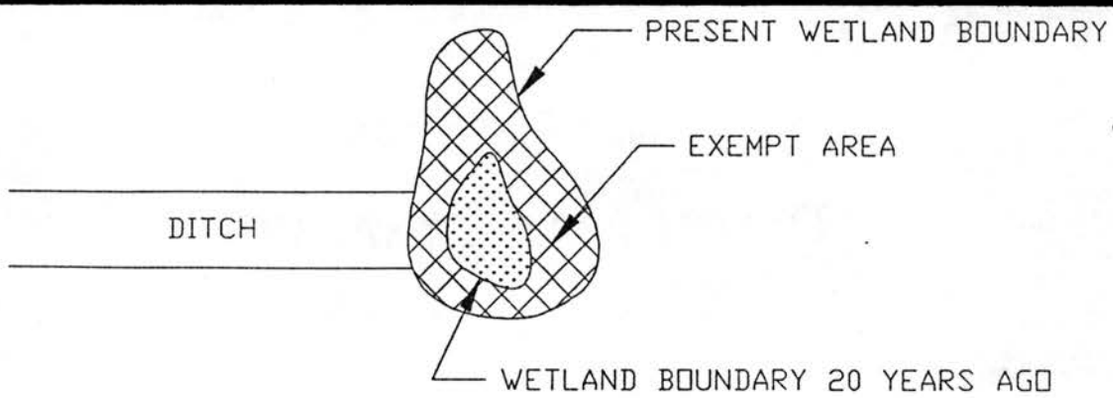
(v) maintenance of ditches next to land that was planted with annually seeded crops, was in a crop rotation seeding of pasture grasses or legumes, or was required to be set aside to receive price supports or other payments under United States Code, title 7, sections 1421 to 1469, in *six of the last ten years* prior to January 1, 1991;

(vi) drainage of type 1 wetlands on agricultural land; and,

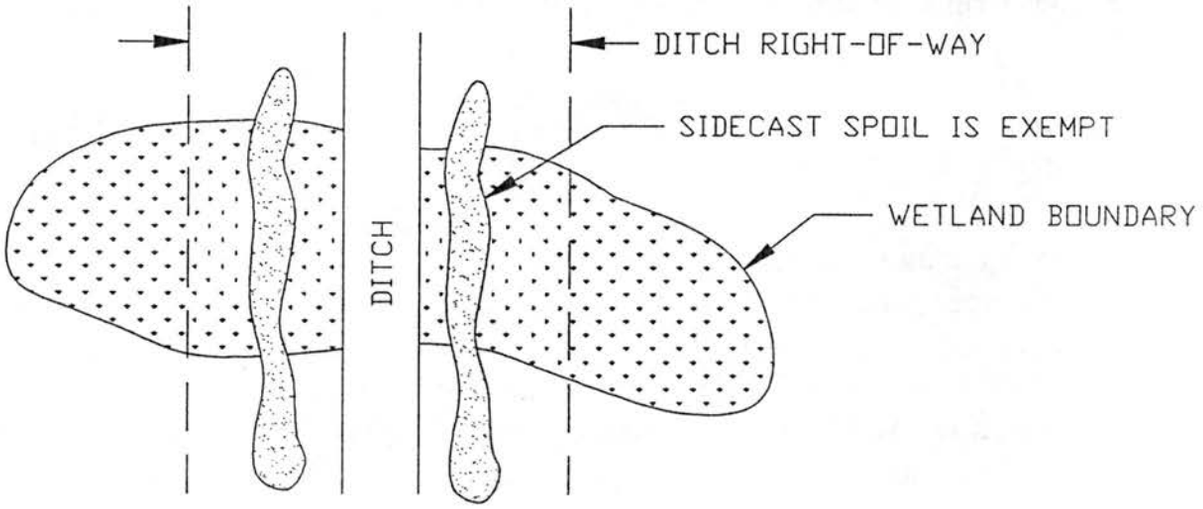
(vii) drainage of type 2 wetlands less than two acres in size on agricultural land.

(See graphical depictions of the above situations on the reverse side of this sheet.)

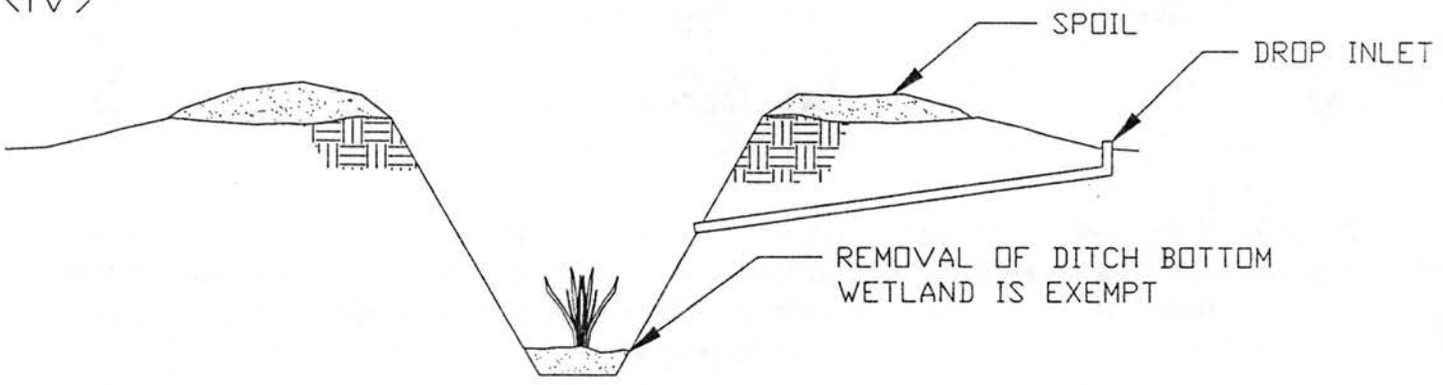
s:ditch2.fs (BWSR/jj, 3/95)



(ii)

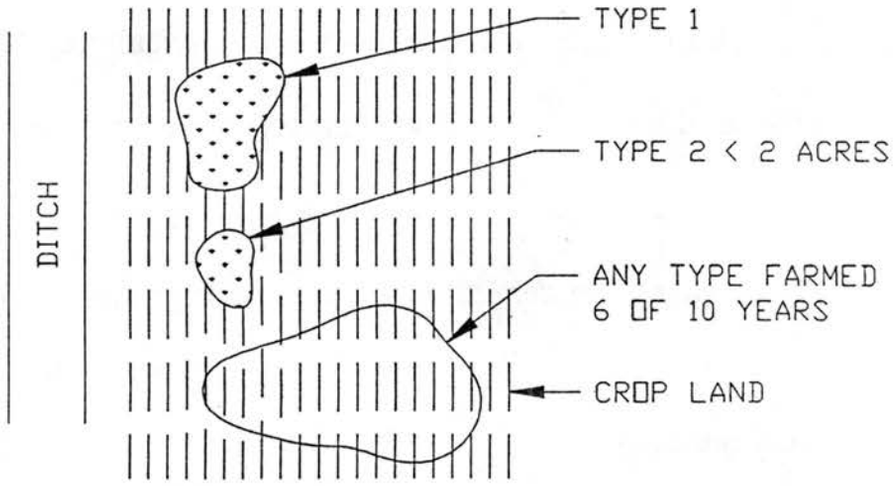


(iv)



(v-vii)

ALL EXEMPT



Minnesota Pollution Control Agency

April 6, 1995

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

RE: Wetland Conservation Act Amendments
Senate File No. 483 - Stumpf Bill

Dear Mr. Harnack:

We have been tracking the Wetland Conservation Act amendment bills and agree that some changes may be necessary. We feel more comfortable with the Munger Bill H.F. 787 which reflects much of the changes recommended by the Wetland Heritage Advisory Committee, the Board of Water and Soil Resources, Department of Natural Resources and the Governor's Office. However, now that S.F. 483 has included Clean Water Act Section 401 Certification directives, we must now get involved. The Minnesota Pollution Control Agency (MPCA) is charged with the responsibility to provide for the prevention, control, and abatement of pollution of all waters of the state, including wetlands, trout streams, trout lakes and other outstanding resources. In its present form, S.F. 483 Section 20 (401 Certification for Federal Nationwide Permits) would require the MPCA to waive water quality certification for all existing and all future Nationwide Permits as proposed by the U.S. Army Corps of Engineers. Adoption of this bill would severely undercut the MPCA's ability to provide for the protection of the designated uses of these waters and remand these authorities back to the federal government.

The 401 is a certification by the MPCA that the proposed project to be licensed or permitted by the federal government will comply with the applicable provisions of Section 301, 302, 303, 306, and 307 of the Clean Water Act. These sections refer to Effluent Limitations, Water Quality Related Effluent Limitations, Water Quality Standards and Implementation Plans, National Standards of Performance, and Toxics and Pretreatment Effluent Standards. The state application of these issues are addressed in water quality standards, Minn. Rules ch. 7050. Wetland impacts by alteration due to filling, draining, excavation or inundation are only one part of the water quality standards that may be applicable to nationwide permits issued by the Corps of Engineers. A waiver of 401 certification would include a waiver of all water quality standards that might be violated by a proposed nationwide permit action. The evaluation by the Corps of Engineers for the individual and cumulative effect of a proposed nationwide permit

does not take into account the concerns or specific limitations that a state may have regarding an area, type of action, type of impact, or impact to planning for water quality in a specific watershed basin. The waiver of all water quality standards for future nationwide permits, when the scope of impact, type of activity and proposed discharge, and waters and locations of these activities are not yet proposed does not comply with the responsibilities and authorities to enforce water quality compliance by both state and federal laws.

S.F. 483 Section 20, Subdivision 3, requiring retroactive waiving 401 certification on the existing nationwide permits, will not have the effect of removing the regional conditions that are more restrictive than the conditions that are listed in the Code of Federal Regulations, title 33, part 330, Appendix A. The U.S. Army Corps of Engineers, St. Paul District has noticed and issued these nationwide permits containing both 401 certification conditions as listed in the MPCA 401 certification and regional conditions that were added to the nationwide permits at the discretion of the District Engineer. The regional conditions were developed by the District Engineer through negotiations between the District Engineer and the resource agencies consisting of the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, and through the public interest review process. It would be the Corps of Engineers decision as to how they would react to a waiver of 401 certification on the existing nationwide permits and whether they would renegotiate, public notice and reissue the nationwide permits.

In addition to this main concern with Section 20 of S.F. 483, we cannot support this bill for these additional reasons:

- It diminishes the current level of wetland protection in that it provides additional exempted activity that impacts wetlands.

- In numerous areas of wetland permitting, this bill allows for a relaxation of the sequence mitigation requirements of the Wetland Conservation Act that will greatly differ from the requirements of the Clean Water Act. The one stop shopping goal of our federal and state interagency task group to achieve federal general permitting to the local unit of government would be difficult, if not impossible, to achieve.

- The directive to waive water quality standards would jeopardize our ability to control the potential addition of other pollutants, such as contaminated sediments to wetlands and other waters that may lead to violations of state water quality standards and loss of aquatic life or wildlife. State concerns for downstream lake or river protection based on special designation will not be accomplished.

We do not support the Senate File 483 Stumpf bill and argue its passage would conflict with water quality protection efforts by our agency.

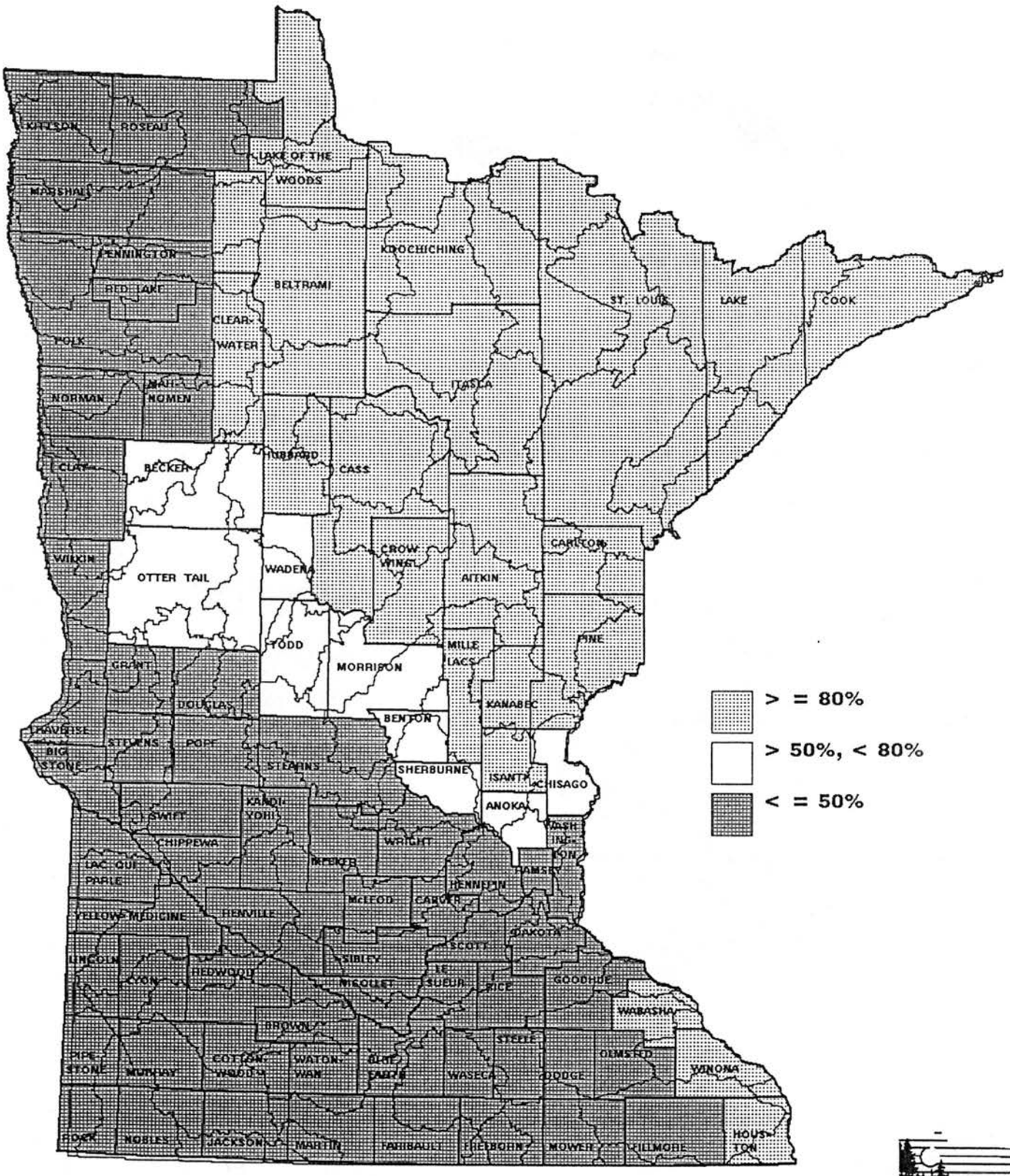
Sincerely,

Patricia M. Burke
Division Manager
Water Quality Division

PMB:ls

cc: Ron Nargang, Deputy Commissioner, Minnesota Department of Natural Resources
Ben Wopat, U.S. Army Corps of Engineers, St. Paul District

Percentage of Presettlement Wetland Acres Remaining



4/21/95
wetland

Minnesota Board of Water & Soil Resources

BOARD OF WATER AND SOIL RESOURCES
WETLAND CONSERVATION ACT RULES
CHAPTER 8420

Extracted from Minnesota Rules 1991, including amendments adopted through July 19, 1993.

Printed: August 1993

8420.0110 DEFINITIONS.

Subpart 1. **Scope.** The terms used in this chapter have the meanings given them in this part.

Subp. 2. **Act.** "Act," when not used in reference to a specific state or federal act, means the Wetland Conservation Act of 1991, Laws 1991, chapter 354, as amended by Laws 1993, chapter 175.

Subp. 3. **Activity.** "Activity" means draining or filling a wetland wholly or partially.

Subp. 4. **Agricultural land.** "Agricultural land," for use in part 8420.0120, subparts 7 and 8, means land devoted to the production of horticultural, row, close grown, introduced pasture, introduced hayland crops, and growing nursery stock.

For use in all other places in this chapter, agricultural land means land devoted to the production of horticultural, row, close grown, introduced pasture, and introduced hayland crops, and to the pasturing of livestock and dairy animals, growing nursery stock, and animal feedlots, and shall include contiguous land and buildings under the same ownership associated with the production of the above, for example, farmyards.

Subp. 5. **Agricultural Stabilization and Conservation**

*CIRCULAR 39 WETLAND TYPES in MINNESOTA**

TYPE	SOIL	HYDROLOGY	VEGETATION	NWI SYMBOLS	COMMON SITES
TYPE 1: Seasonally flooded basins or flats.	Usually drained during most of the growing season. Saturated for at least two weeks during the growing season.	Occassionally covered with water and is saturated seasonally or temporarily.	Varies greatly according to land use, season, and duration of flooding. Hardwoods as well as herbaceous annual and perennial growth.	PEM1A or J PFO1A or J	Upland depressions as well as fringe areas of other wetland types. In floodplain areas adjacent to rivers, stream and lakes.
TYPE 2: Inland fresh meadows.	Saturated during most of the growing season.	Without standing water during much of the growing season but is usually saturated to within at least a few inches of the surface.	Includes grasses, sedges, rushes, various broadleaved plants. Depends on land use and alterations.	PEM1B	Meadows may fill shallow basins, sloughs, or farmland sags, or these meadows may border shallow marshes or flowages on the landward side.
TYPE 3: Inland shallow fresh marshes.	Saturated or inundated except during drought periods.	Often covered with as much as 6" or more of water.	Includes grasses, bulrushes, spikerushes, and various other marsh plants such as cattails, arrowheads, pickerelweed, and smartweeds.	PEM1C or F	May nearly fill shallow lake basins or sloughs, or may border deep marshes on landward side. Also common as seep areas.
TYPE 4: Inland deep fresh marshes.	(Inundated)	Usually covered with 6" to 3' or more of water during growing season.	Includes cattails, reeds, bulrushes, spikerushes, and wildrice. In open areas, pondweeds, nalads, coontail, watermilfoils, waterweeds, duckweeds, waterlillies, or spatterdocks may occur.	PEMF or G PUBF or G L2ABF, G or H PABF or G L2EM2F, G or H	May completely fill shallow lake basins, potholes, limestone sinks and sloughs, or they may border open water.
TYPE 5: Inland open fresh water.	(Inundated)	Water is usually less than 6' deep. Shallow ponds, small lakes and reservoirs are included in this type.	Fringed by a border of emergent vegetation similar to open areas of TYPE 4.	PABG or H L2ABG or H L1UBH PUBG or H L2UBG or H	Shallow lake basins or they may border large open water basins.

TYPE	SOIL	HYDROLOGY	VEGETATION	NWI SYMBOLS	COMMON SITES
TYPE 6: Shrub swamps.	Usually saturated during growing season.	Often covered with as much as 6" of water, water table at or near the surface.	Includes alder, willows, buttonbrush, dogwoods, and swamp-privet.	PSS1, 2, 3, 4, 5A, 5B, 5C, 5F, 5G, or 5J.	Along sluggish streams, drainage depressions, and occasionally on flood plains.
TYPE 7: Wooded swamps.	Saturated at least to within a few inches of surface during growing season.	Often covered with as much as 1' of water, water table at or near the surface.	Trees include tamarack, arborvitae, black spruce, balsam, red maple, and black ash. Northern evergreen sites usually have a thick ground cover of mosses. Deciduous sites frequently support beds of duckweeds, smartweeds.	PFO1, 2, 4, 5A, 5B, 5C, 5F, or 5J.	Mostly in shallow glacial lake basins, glacial lake filled depressions, on flat uplands, and along sluggish streams.
TYPE 8: Bogs.	Usually saturated.	Water table at or near the surface.	Woody, herbaceous, or both. Supports a spongy covering of mosses. Typical plants are heath shrubs, sphagnum moss, sedges, leatherleaf, labrador tea, cranberries, carex, and cottongrass. Scattered, often stunted, black spruce and tamarack may occur.	PSS1, 2, 3, 4, 5B. PMLB PFO1, 2, 4, 5B. PEMB.	Mostly in shallow glacial lake basins, glacial lake filled depressions, on flat uplands, and along sluggish streams.

***NOTE:** Proper use of the **Circular 39** classification system limits it to descriptions of *entire basins* based on the *predominant* water regime and vegetation. The **Cowardin et. al** (NWI) system recognizes that most *wetland basins consist of different types* and describes the wetland based on the *various* water regimes and vegetation. The Circular 39 does not classify riverine or lacustrine (lake) wetlands as seperate classes.

s:circular.wet

Comparison between H.F. 787 (Rep. Willard Munger, Duluth) and S.F. 483 (Sen. LeRoy Stumpf, Thief River Falls).

as of April 18, 1995

SHORELAND PROTECTION:

Both bills raise the threshold at which the Wetland Conservation Act (WCA) kicks in, i.e., the maximum number of wetland acres that can be impacted before the wetland falls under the WCA's regulations. (Once a project does fall under the WCA regulations, the project sponsor must explore and document attempts to first, AVOID the wetland entirely; and second, MINIMIZE any impacts on the wetlands. Any wetland area that is drained or filled must be replaced.) In current law, this threshold is 400 square feet everywhere; i.e., any project affecting less than 400 square feet is "too small" and does not need to abide by the act's requirements. This threshold is particularly important in shoreland areas, as shoreland wetlands are considered key to protecting the water quality of the lakes and rivers they abut. In addition, shoreland areas provide important fish and wildlife habitat.

House File 787

H.F. 787 maintains the current threshold of 400 square feet within a shoreland area (defined as within 1,000 feet of a lake or 300 feet of a river).

Senate File 483

S.F. 483 would raise the threshold to 1,000 square feet WITHIN BUILDING SETBACK AREAS. It does NOT use the shoreland area definition. This is key because building setback areas are generally only 50 to 200 feet. Shoreland area is defined as 1,000 feet (for lakes) and 300 feet (for rivers). So not only is the threshold much higher under S.F. 483, that threshold would only apply within 50-200 feet of the shoreline. Once outside the 50 to 200 foot building setback area, an even higher threshold would apply.

OTHER THRESHOLD NUMBERS:

As discussed above, both bills increase the maximum number of wetland acres that can be impacted before the project sponsor must abide by the Wetland Conservation Act. In current law, the threshold is 400 square feet, with no distinctions for different counties or shoreland areas. The thresholds below do not apply to shoreland areas (in H.F. 787) or to building setback areas (in S.F. 483)---see above.

H.F. 787 makes the following changes:

- raises the threshold to 1,000 square feet for counties with 50%-80% of their presettlement wetlands remaining
- raises the threshold to 7,500 square feet for counties with more than 80% of their presettlement wetlands remaining.
- maintains the 400 square foot threshold in counties with less than 50% of their presettlement wetlands remaining

S.F. 483 raises the thresholds as follows:

- raises the threshold to 5,000 square feet in the counties with less than 80% of their presettlement wetlands remaining
- raises the threshold to 10,000 square feet for counties with more than 80% of their presettlement wetlands remaining

DITCHES:

Under the WCA as it currently stands, wetlands that have been in existence for LESS than 20 years can be drained without replacement for repair or maintenance of ditches. Wetlands that have existed for more than 20 years cannot be drained for ditch repair or maintenance without replacement. This time frame was a compromise between those who wanted absolutely no draining and filling and those who believed that any draining and filling done in conjunction with ditch work should be exempt. The idea behind the compromise is that any ditch maintenance or repair that requires draining or filling a wetland that has existed for more than 20 years is not really repair or maintenance; it is in essence a new project.

H.F. 787 maintains the law as it currently stands.

Under S.F. 483, a broad exemption is granted to wetlands drained or filled for maintenance and repair of ditches, no matter how long the wetlands have existed.

STATE OVERSIGHT:

H.F. 787 provides additional flexibility for local governments by allowing them to develop wetlands management plans to reach the goals of the WCA, rather than adhering strictly to the rules laid out by the state. However, it does provide for state oversight by requiring state approval of the plans.

S.F. 483 also gives local governments more flexibility in developing their own local wetlands management plans; however, it does not provide for any state oversight.

ROADS:

Currently, the WCA requires that new road construction projects must also follow the AVOID-MINIMIZE-REPLACE sequence laid out in the law. The one difference is that wetlands drained or filled for new road construction can be replaced anywhere in the state, rather than only in specific areas, as is required for all other replacements.

H.F. 787 maintains the current law in relation to new road construction, but lowers the replacement ratio from 2:1 to 1:1 for all public transportation projects, including new public road construction and repair and maintenance of current roads.

S.F. 483 provides an exemption to the Wetland Conservation Act for any wetlands drained or filled for new road construction, as long as those wetlands fall under the Army Corps of Engineers' nationwide permit #14. Under that permit, one-third of an acre (not to exceed 200 lineal feet) may be drained or filled for new road construction. So the change would have the net effect of allowing for the draining or filling of one-third of an acre (up to 200 lineal feet) of wetland for those new roads that fall under the nationwide permit #14.

Since most new roads do NOT fall under the nationwide permit #14, the potential exemption for existing roads (see PUBLIC/PRIVATE INFRASTRUCTURE below) could have a more significant impact than this proposed exemption.

PUBLIC/PRIVATE INFRASTRUCTURE:

H.F. 787 adds an exemption for draining or filling wetlands for repair and maintenance of individual sewage treatment systems.

H.F. 787 also lowers the replacement ratio for all public transportation projects, including repair and maintenance of roads, from 2:1 to 1:1.

S.F. 483 provides a very broad exemption for maintenance and repair of public and private infrastructure, which could potentially include roads, bridges, culverts, etc.

ENFORCEMENT:

The Wetland Conservation Act is currently enforced by DNR conservation officers.

H.F. 787 maintains the current law.

S.F. 483 allows for a county to assume enforcement of WCA in lieu of the DNR.

WETLAND TYPES:

In the current law, all type one wetlands (except bottomland hardwoods, which are woody wetlands along stream and river corridors) on agricultural land and up to two acres of type two wetlands on agricultural land are exempt and can be drained without replacement. Types one and two wetlands are often considered "nuisance" wetlands and are generally easy to drain and farm. Type one wetlands hold water during only a brief time in a given year; type two wetlands are saturated to the surface but rarely hold standing water. With both types, water is not readily apparent, thus contributing to the view that they are not wetlands.

H.F. 787 maintains the current law.

S.F. 483 makes two significant changes:
1) it would expand the exemption to allow for the draining or filling of type one wetlands (except bottomland hardwoods) on all lands, not just agricultural lands.

2) In addition, it would allow for the draining or filling of all type one wetlands (except bottomland hardwoods) and up to two acres of type two wetlands (on ag lands) that are part of other wetlands. This is important because often the outlying areas of larger wetlands with significant benefits are type one or two wetlands, even though the majority of the wetland may be a type three or four. Draining or filling these type one or two "boundary" wetlands significantly decreases the benefits provided by the larger wetland.

COUNTY LIABILITY:

One of the major concerns of counties has been the fear that they could get sued by a landowner over the Wetlands Conservation Act. Both the House bill and the Senate bill address this concern.

Under H.F. 787, the state would provide legal and technical support in defense of the WCA. It also says that the state is liable for court awarded financial awards resulting from a landowner being unable to use his or her property (i.e., a "takings" issue).; and provides a process for the Legislature (acting through the Legislative Claims Commission) to act upon a bill appropriating funds to pay those costs. Both bodies of the Legislature must approve this appropriation and it must be signed by the governor before it can become law.

S.F. 483 would also have the state assume liability for incidents in which a county is sued by a landowner who believes that the WCA is preventing him or her from using their own property (i.e., a "takings" issue). However, S.F. 483 would not use the Legislative Claims Commission as a conduit for these claims; this is, in effect, an open-ended appropriation.

written by Susan Tsakakis, Board of Water and Soil Resources
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s:legtabl.smt

COTTONWOOD SOIL AND WATER
CONSERVATION DISTRICT

Rt. 2, Box 123
Windom, Minnesota 56101
Telephone (507) 831-1153

MINNESOTA
SOIL AND WATER CONSERVATION DISTRICTS

DATE: April 18, 1995

TO: Board of Water and Soil Resources

FROM: Cottonwood Soil and Water Conservation District
Board of Supervisors

SUBJECT: Special Minnesota River Basin Program

The Cottonwood Soil and Water Conservation District Board of Supervisors would like to apologize for not having a representative from the District in attendance at your April 26, 1995 Board Meeting. At this time the District office is relocating in the City of Windom and our staff is in the process of overseeing the move.

We would like to take this opportunity to thank the Board for all the support we have had in the past and hope to have continued support in our future endeavors. Jeff Nielsen will be presenting the District's report on previous funds received and our request for new funding.

Thank you for your consideration of our project.

Sincerely,

Jon Olson
Wilbert Anderson

Jon Olson
Chairman
Cottonwood SWCD

BOARD OF SUPERVISORS:

Jon Olson	Wilbert Anderson	Paul Maras	Verlyn Nickel	Arnold Regier
Chairman	Vice Chairman	Secretary	Treasurer	Member
Storden	Westbrook	Windom	Mountain Lake	Mountain Lake

COTTONWOOD SOIL AND WATER
CONSERVATION DISTRICT

Rt. 2, Box 123
Windom, Minnesota 56101
Telephone (507) 831-1153



MINNESOTA
SOIL AND WATER CONSERVATION DISTRICTS

DATE: April 18, 1995

TO: Jeff Nielsen

FROM: Cottonwood Soil and Water Conservation District

SUBJECT: Special Minnesota River Basin Program

The Cottonwood Soil and Water Conservation District Board of Supervisors is requesting funds for eight conservation practices in the Mound Creek Watershed. At this time the Cottonwood SWCD is networking with other agencies to promote water quality in the watershed.

Funding that has been incorporated into the Mound Creek Watershed at this time is a follows:

State Cost-Share Program Funds and the Special Minnesota River Basins Funds beginning in FY91 through FY95 totals $180,120.70, consisting of 12 projects.

Agricultural Conservation Program (ACP) through the Consolidated Farm Service Agency funded $24,026.00 in 1994 and a $17,500.00 Long Term Agreement, plus a 3.5 acre field has been accepted into the Wetland Reserve Program.

Cooperation from the Cottonwood SWCD, Cottonwood County Environmental Office, and the Brown-Nicollet-Cottonwood Clean Water Partnership has sealed 46 abandoned wells in the Mound Creek Watershed during 1993 and 1994 totaling $12,917.14.

Eight landowners in the watershed have applied for State Revolving Loan Fund through the Cottonwood SWCD and Farm Credit Services. A total of $86,768.00 has been requested from the Minnesota Department of Agriculture for the Mound Creek Watershed.

The Cottonwood County Environmental Office in conjunction with the Brown-Nicollet-Cottonwood CWP has received funding to upgrade 25 septic systems in the watershed. These systems will be cost-shared at 50% with an average cost estimate of $6,500.00. A total allocation for this project is $81,250.00.

Because the District has made a commitment to this watershed we would like to see our conservation efforts realized in the Mound Creek Watershed. At this time landowner involvement is at its peak in the watershed. More landowners are seeking cost-share monies to make more improvements to their land and also unforeseen cost increases on some projects have increased the dollars that are needed to complete these projects. At this time we have seven new projects and an increased cost-estimate on one project to bring our project request to $89,568.00 in addition the District would like to request $5,000.00 for Technical and Administrative funding bringing our total request to $94,568.00.

With the proposed projects in the watershed completed, the status of the watershed will greatly improve the water quality in this area and fulfill our land treatment obligations to the watershed.

COMMITTED LANDOWNERS IN THE MOUND CREEK WATERSHED AND THEIR PROPOSED PROJECTS

STEVEN GODE - ANIMAL WASTE STORAGE SYSTEM

The Steven Gode farm is a cattle and hog operation of 254 animal units.

During 1992 Cost-Share Roll-Over Funds equalling $15,500.00 were received from the Board of Water and Soil Resources for this project along with $7,000.00 from the Cottonwood SWCD Fiscal Year 1993 allocation.

As the design proceeded and the final borings were completed the site found bedrock to close to the surface for the original design. Because of the added expenses the projected cost of the project is $86,440.00. To reach 75% cost-share for the project another $42,330.00 is needed.

RANDY THERKILSEN - ANIMAL WASTE STORAGE SYSTEM

The Randy Therkilsen farm is a grain and cattle operation.

Brown-Nicolleet-Cottonwood Clean Water Partnership in cooperation with Randy Therkilsen are proposing the construction of a vegetative filter strip to treat feedlot runoff on Therkilsen's farm. The purpose of this system would be to demonstrate the use and effectiveness of vegetative filter strips and to continue the extensive promotion of Best Management Practices in the watershed.

Total cost estimate for the project is $6,000.00, at 75% cost-share the total amount needed for the project is $4,500.00

DAVID W. NICKEL
STORMWATER CONTROL SYSTEM - GRASSED WATERWAY WITH TILE

David Nickel raises grain and has a feeder cattle operation with a slurry storage waste system.

The farm is located on the upper reaches of the Mound Creek Watershed above the Wellner-Hageman Reservoir. This waterway would be part of the land treatment plan for the watershed.

The fields are on the north slope of the redrock ridge, shallow soils over quartzite bedrock. The waterways need tile to insure maintenance of the bottom. Total distance for the waterway is 5,700 feet. Total cost estimate for the project is $16,200.00, at 75% cost-share the total amount needed for the project is $12,150.00.

STEVEN GODE - TERRACES

Steven Gode has 80 acres that are on Mound Creek, 1 and 1/4 miles west of the Reservoir. A 3 terrace or sediment control basin system with tile outlet is needed to control the gully erosion.

The estimated cost of this project is $10,750.00, at 75% cost-share the total amount needed for the project is $8,062.00.

WILFRED NICKEL
STORMWATER CONTROL SYSTEM - GRASSED WATERWAY

The Wilfred Nickel project is in the upper reaches of the Mound Creek Watershed. Gullies are formed along side the grassed area. Tile does exist. Rebuilding of the waterway is needed for 4,200 feet.

The estimated total cost of this project is $7,000.00, at 75% cost-share the total amount needed for the project is $5,250.00.

HOEHNE HEIRS
STORMWATER CONTROL SYSTEM - GRASSED WATERWAYS

The Hoehne Heirs have Steven Gode as the operator on a grain farm shallow over bedrock. The farm lies in the Mound Creek Watershed. Erosion occurs along side the waterways. Tile is needed in some area.

The estimated total cost of this project is $5,700.00, at 75% cost-share the total amount needed of the project is $4,275.00.

STEVEN GODE
STORMWATER CONTROL SYSTEM - GRASSED WATERWAY

This project for Steve Gode is an extension of the Hoehne project. Construction of 1,500 feet of grassed waterway, no tile is needed.

The estimated total cost of the project is $2,500.00, at 75% cost-share the total amount needed for the project is $1,875.00

DAVID W. NICKEL
STORMWATER CONTROL SYSTEM - GRASSED WATERWAY WITH TILE

David W. Nickel has another waterway to construct on the same farm as previously requested. Again shallow over bedrock with gullies along side. Tile is needed. Total distance of waterway construction is 4,700 feet.

The estimated total cost of the project is $14,835.00, at 75% cost-share the total amount requested for the project is $11,126.00.

SUMMARY
COMMITTED LANDOWNERS IN THE MOUND CREEK WATERSHED
AND THEIR PROPOSED PROJECTS

STEVE GODE	AG WASTE	$42,330.00
RANDY THERKILSEN	AG WASTE	4,500.00
DAVID W. NICKEL	STORMWATER CONTROL (Waterway w/Tile)	12,150.00
STEVE GODE	TERRACES	8,062.00
WILFRED NICKEL	STORMWATER CONTROL (Waterway)	5,250.00
HOEHNE HEIRS	STORMWATER CONTROL (Waterway)	4,275.00
STEVE GODE	STORMWATER CONTROL (Waterway)	1,875.00
DAVID W. NICKEL	STORMWATER CONTROL (Waterway w/Tile)	11,126.00
	TOTAL COST OF PROJECTS	$89,568.00
TECHNICAL & ADMINISTRATIVE FUNDS		$ 5,000.00
	TOTAL FUNDS REQUESTED	$94,568.00

STATE COST-SHARE PROJECTS INSTALLED OR ENCUMBERED
MOUND CREEK WATERSHED
FY91 - FY95

FY91

Total Allocation	$ 19,989.00
T & A	3,997.80
Other Projects	7,021.02
Sent Back	2,936.61

Harlan Rasmussen - Animal Waste System	$ 6,033.57	(Completed)

FY92

Total Allocation	$ 16,883.00
T & A	3,376.60
Other Projects	0.00
Sent Back	1,506.40

Steve Gode - Terraces	$ 5,000.00	(Completed)
Gary Gode - Animal Waste System	$ 7,000.00	(Completed)

FY93

Total Allocation	$ 16,893.00
T & A	3,378.60
Other Projects	13,243.27
Sent Back	0.00

Harlan Rasmussen - Diversion	$ 271.13	(Completed)

FY92 ROLL-OVER

Total Allocation	$ 54,256.73
T & A	0.00
Other Projects	31,756.73
Sent Back	0.00

Steve Gode - Animal Waste System	$22,500.00	(95 Construction)

FY94

Total Allocation	$ 16,648.00
T & A	3,329.00
Other Projects	13,319.00
Sent Back	0.00

SP94 FUNDS

Total Allocation	$133,380.00
Combined with FY95 Roll-Over	21,862.50
	111,517.50
T & A	13,230.00
Other Projects	0.00
Sent Back	0.00

Ardeen Clark - Waterway w/Tile	$ 1,725.00	(95 Completion)
Ardeen Clark - Waterway	$ 3,750.00	(95 Completion)
Harlan Rasmussen - Animal Waste	$ 6,000.00	(Completed)
Glen Graff - Animal Waste System	$59,812.50	(95 Construction)
Lowell Bierman - Animal Waste System	$27,000.00	(95 Construction)

FY95

Total Allocation	$ 16,099.00
T & A	3,219.00
Other Projects	8,755.00
Sent Back	0.00

Steve Gode - Terrace	$ 1,500.00	(95 Construction)
David W. Nickel - Terrace	$ 2,625.00	(95 Construction)

FY95 ROLL-OVER

Total Allocation	$ 15,041.00
Combined SP94 Funds	21,862.50
	36,903.50
T & A	0.00
Other Projects	0.00
Sent Back	0.00

Kelly Graff - Animal Waste System	$36,903.50	(95 Construction)

SUMMARY
STATE COST-SHARE PROJECTS INSTALLED OR ENCUMBERED
MOUND CREEK WATERSHED
FY91 - FY95

TOTAL ALLOCATIONS	**$ 289,189.73**	
TOTAL T & A	**30,531.00**	**(11%)**
FUNDS RETURNED	**4,443.01**	**(2%)**
OTHER PROJECTS	**74,095.02**	**(25%)**
TOTAL PROJECTS IN MOUND CREEK WATERSHED	**180,120.70**	**(62%)**

ADDITIONAL FUNDS UTILIZED IN THE MOUND CREEK WATERSHED

WELL SEALING COST-SHARE PROJECTS 1993 and 1994

1993

Amboy Township		19 Wells Sealed
Delton Township		10 Wells Sealed
Germantown Township		11 Wells Sealed
TOTAL Mound Creek Watershed		**40 Wells Sealed**
Average Cost of Well Sealings	$378.70	
Average Cost-Share	286.49	
TOTAL Cost for Sealing		$15,148.00
TOTAL Cost-Share		**11,459.50**

1994

Amboy Township		4 Wells Sealed
Germantown Township		2 Wells Sealed
TOTAL Mound Creek Watershed		**6 Wells Sealed**
Average Cost of Well Sealing	$313.42	
Average Cost-Share	242.94	
TOTAL Cost for Sealing		$ 1,880.52
TOTAL Cost-Share		**1,457.64**

TOTAL COST-SHARE 1993 & 1994 - $12,917.14

ACP COST-SHARE PROJECTS 1994

1994

22 Landowners	$24,026.00
1 Long Term Agreement (Gary Gode)	17,500.00
	$41,526.00

TOTAL COST-SHARE 1994 - $41,526.00

SUMMARY
TOTAL FUNDS REQUESTED AND IMPLEMENTED IN THE MOUND CREEK WATERSHED

FUNDING ALREADY RECEIVED:

STATE COST-SHARE (FY91 - FY95)	$180,120.70
ACP COST-SHARE 1994	24,026.00
LTA	17,500.00
WELL SEALING 1993	11,459.50
1994	1,457.64
BROWN-NICOLLET-COTTONWOOD CWP Septic System Upgrades (25 Landowners) Average Cost $6,500 at 50% Cost-Share	81,250.00
TOTAL	**$315,813.84**

PROPOSED FUNDING REQUESTED:

SRF FUNDING REQUESTED (8 Landowners)	86,768.00
SPECIAL MINNESOTA RIVER BASIN PROGRAM REQUEST	94,568.00
TOTAL FUNDING RECEIVED AND PROPOSED FOR MOUND CREEK WATERSHED	**$497,149.84**

BWSR COMMENTS REGARDING S.F. #483 (April 24, 1995)

These comments are based on the engrossment from the Senate Agriculture Committee and referred to the Senate floor.

Agriculture Definition

Sections 1 & 2: This changes the definition of agricultural land to:
1) land designated agricultural land under the local zoning authority of the local unit of government. [*Concern is that many counties do not have county wide zoning therefore this definition would by its approach exempt considerable land in these counties; see attached map.]*; or
2) land that has a capability classification of I thru IV *[Concern is that this classification is not suited for this type of use; it would establish or promote a policy of having highly erodible land or type 3, 4, or 5 wetlands as suitable for agriculture.]* {Alternative is to use the broad definition already in the wetland rules. This would allow all cropped lands, hayed lands, and pastured lands to be designated agricultural land. This expanded approach would exempt type 1 wetlands and type 2 wetlands less than two acres in these areas and would continue to allow all nonexempt agricultural wetlands to be mitigated at 1:1 rather than 2:1. This may be a good compromise}.

Section 3: This section applies to DNR public waters wetlands and allows for maintenance and repair within the right-of-way without replacement; and allows for culvert replacement that would drain wetlands to elevation of original culvert. *[DNR has voiced concern over the drainage provision where the culvert has not been operational for many years and landowners have become accustomed to the a new normal level; riparian rights may be impacted by the provision.]* {Alternative is to just delete the language after the ","on line 3, page 2 and delete lines 4, 5 & 6 on page 2.}

Section 4: Allows for 1:1 replacement statewide if or when based on public value. *[Currently the law requires both replacement for acreage and function (value); in some cases the reliance on acreage has resulted in a net loss of wetland function, particularly in the urban areas.]*

(l) Increases the threshold for on-site sequencing. *[This streamlines the administration of small projects by allowing the determination of avoidance and minimization to be done without detailed written information. Instead, it is done on-site by the local unit of government in consultation with the landowner. Concern is that draining or filling in the shoreland building setback would result in significant impact and is in conflict with the current state shoreland policies and rules. We need to acknowledge that the entire shoreland area is important for*

the longterm protection of recreational lake and river water quality and economic value.] {Recommend that the provision under (l) (1) on line 28, page 4, before "2,000" add "up to" and after "the", delete "building setback" and on line 29, page 4, delete "of"; this would allow greater consistency with local government shoreland ordinances and ensure that the entire shoreland area is given more significance.}

(m) Creates a cash payment to local wetland bank based on market value of created upland. *[Use may be limited as it will be cheaper to purchase from state bank since the value of the upland created will almost always exceed the cost of banked mitigation credits. Provides greater flexibility for assessing avoidance and minimization based on location. BWSR had developed a process to address this with public projects however we cannot use bonding $'s for private lands; therefore some additional appropriation would be necessary for the private elements of banking.]* { Suggestion is to have the provision only apply to public transportation projects and base the cost on the purchase price of the land rather than the assessed value. It is difficult to place a cost on a roadway that goes several miles or more; however the purchase price the local government had to pay for right-of-way can be readily determined.}

Section 5: Exemption 3: Eliminates the 20 year provision. *[The purpose for the 20 year was to limit litigation over determination of what has priority - drainage rights or riparian rights. Courts have ruled that when not maintained drainage rights are superseded by riparian rights of other adjacent landowners and the public. Deleting the 20 year will surely result in renewed litigation at substantial cost to the local government and the public.]* {Alternative: Insert the attached language relating to ditches & keep 20 year and add Types 3, 4, and 5 or increase from 20 - 30 years. This would address the concern and also deter litigation.]

Exemption 6: Includes new roads under the exemption. *[Roads are still the greatest activity that impacts wetlands. The public policy should require road authorities to consider avoidance as part of new road decisions on alignment.]* {Alternate: change from a minimum replacement ratio of 2:1 to 1:1 and provide access to mitigation bank at local cost of land for public road projects and allow exemption to fill wetlands within the ROW for repair, maintenance and improvement of existing roads when required to meet state or federal standards as stated in exemption 16.}

Exemption 7: Exempts Type 1 wetlands statewide including those Type 1 like portions of other wetland basins. *[This includes fringes of larger wetlands and some fishing and recreational lakes in parts of the state. Poses a significant adverse impact to water quality. There is a significant difference between an isolated type 1 wetland and type 1 like vegetation that is buffer to, adjacent to, or part other wetland, lake or river resources.]* {Alternative allow the exemption

of isolated type 1 wetlands basins outside of shoreland areas only or where the local government has defined isolated type 1 wetland basins as unimportant based on an assessment of wetland functions and related value.}

Exemption 8: Adds to the current exemption type 2 like portions of other wetland basins on agricultural land. [*Similar concern exists for recreational lakes in the agricultural area.]* {Alternative: eliminate the "regardless..."language on line 21 and 22, on page 6.}

Exemption 17: provides exemption for maintenance/repair and for state/federal mandated updating of private/public infrastructure. *[This would supersede Exemptions 18; 12; 13; 16; 3 and elements of 11. Allows significant filling/drainage of wetlands. May be appropriate where there is a specific federal or state mandate requiring the additional filling of the wetlands.* {This exemption should be limited to filling only, as allowing drainage would impact areas far greater than what is needed to accommodate the specific state or federal mandates.}

Exemption 25: This exemption increases the amount of drainage or filling that can be done without replacement based on the % of wetlands in the county or watershed. *[Concern is for the shoreland areas where significant wetland areas could be filled or drained without regard for the impacts on lake and river water quality, recreation, and economics. The cumulative impact over time allows the entire wetland fringe of some lakes to be completely filled: eg; 1000 square feet = 50 x 20; 75 x 15; 100 x 10 or 200 x 5, eliminating buffer protection of lakes a significant contradiction with shoreland policies. Since a landowner can do the minimum fills for several different projects entire wetlands, over time, can be completely filled. There is no upper limit relating to a wetland.*] {Alternative: The reference to building setback should be deleted and applied to the entire shoreland area. The 1000 sq ft should not be limiting to local governments who believe that lessor amounts on some shorelands is critical to protection of the resource. Add "up to" before 1,000 and add 5% upper limit provision from exemption 26.}

Exemption 27: Exempts landowners who have owned land as of July 1, 1991 and have owned the land continuously since that date. *Provision virtually exempts all or at least a majority of land in the state. This provision has the effect of repealing the law. This provision was amended out in Senate Agriculture and is a mistake in the engrossment.* { Alternative is to delete this entire provision as the provision does the same as repealing the law.}

Exemption 28: This provision would allow drainage or filling of wetlands to gain access to uplands. *[Concern is that major road building through wetlands would be allowed without regard to the purpose for which the drainage or filling*

would be done. Since access is not defined, this creates a significant opportunity to indiscriminately fill or drain wetlands. In addition this allows drainage to achieve the purpose and drainage would have far greater impact than is necessary to gain access by filling.] {Alternative: eliminate this provision as the diminimus exemption provides sufficient flexibility to gain reasonable access: (eg: 10,000 sq ft = 10' x 1000' or = 20' x 500' or = 15 x 750') or at a minimum limit to minimum fill necessary to achieve the objective consistent with local land use decision and when there is no reasonable alternative to access the land.}

Section 6: Page 10, lines 22 - 27 allows for more filling or drainage of Type 2 wetlands under a conservation plan by SWCD for improving farm efficiency. *[In shoreland areas this poses a potential problem resulting in water quality impacts adverse to lakes and streams.]* { Alternative: Eliminating the "regardless ..." provisions of paragraph (a) clause (8) lines 21 & 22, page 6 would reduce significant impact or limit application to nonshoreland areas.}

Section 7: Provides for local wetland plan criteria. *[Element (ii) (2) is of concern as it is not clear what is meant by reference to upland areas.]*

(ii) (3) these local banks would not have statewide access;

(ii) (4) allows Type 1 and 2 wetlands less than 2 acres on non agricultural land to be exempt. *[This exemption is allowed to applied without regard for function and value of the wetland. At a minimum, before any type of wetland is exempt, particularly in shoreland areas, some assessment of function and value should be applied.]* {Alternative: add to beginning "based on item (1) may".}

Section 8: Changes use of 1989 manual to 1987 manual and requires local governments to provide wetlands maps to requesting landowners. *[The change to the 1987 manual from the 1989 manual has no significance for Minnesota. The delineation of wetlands in Minnesota is the same under both manuals. The difference is application between the manuals is in coastal areas. (b) may have a significant impact for some local governments that do not conduct delineations for all landowners, particularly developers. Most do perform delineations for individual property owners on small projects.]*

Section 9, 10, 11: Streamlines notice of application and decision and eliminates the 30 day waiting period. *[This makes the process consistent with other local land use decisions.]*

Section 12: Streamlines the appeal process to reduce frivolous appeals; and adds posting of bond for local governments. *[Since appeal is to BWSR and not LGU it would be appropriate for this authority for bond to be with BWSR.]* {Alternative is to

add a bonding provision for BWSR so that the increase cost of operation can be recovered and to be a deterrent for frivolous appeals.}

Section 13: Creates additional incentives for mitigation banking and incentives for landowners to preserve current restored wetlands that could otherwise be drained without replacement.

Section 14: Sets a minimum dollar amount payment when replacement plan is denied.

Section 15: Establishes a policy that the state Attorney General will defend actions of inverse condemnation filed do to decisions under the WCA. *[The state will also assume all awards coming from judicial action. This provision will increase the number of litigations until the court system establishes a precedent.]* {Alternative: provide for review of judicial awards by legislature and judgment as to whether to pay or change the law.}

Section 16: Allows local government enforcement to enforce local wetland ordinance and to assume DNR enforcement authority for wetlands. *[It is redundant as LGU's already have the obligation to enforce local controls. Allows, by resolution of the county board, for counties to assume power and authorization of DNR. The county sheriff and the county attorney are elected officers of the county and attorney and sheriff, in addition to the county board, should be required to endorse the acceptance of the additional enforcement authority to ensure reasonable implementation.]* {Suggest adding "with the written concurrence of the sheriff and county attorney".}

Section 17: (2) Provides for routine maintenance of ditch systems and (3) allows exemption for draining or filling of public waters wetlands, under DNR authority, for maintenance & repair of roads. *[(2) is redundant as ditch authorities have this ability now as long as they continue to carry out their other responsibilities. (3) this exemption includes filling and drainage of public waters not just public waters wetlands. There are present and past situations where this exemption would result in significant lowering of recreational and fishing lakes without DNR review and approval.]* {Alternative for (3) is to limit to public water wetlands and limit to filling only.}

Section 18: Allows for natural resources block grants to be used for wetland plans. *[This not prohibited now. If a local unit of government has accepted implementation of the wetlands program they can use the grants for development and implementation of the wetlands plan.]*

Section 19: Provides for a study and report on wetland banking alternatives.

Section 20: This provision limits the authority of the state (PCA) to administer water

quality standards in the state. *[This is a amendment that takes away significant authority of PCA to address water quality in the state. We should not tie ourselves to the federal standards. Minnesota should set its own wetland policies and water quality standards and get federal agencies to endorse the state policy, rules and procedures. This suggests that if the federal government would exempt all wetlands or wetlands less than 5, 10, or 50 acres that the state would accept the federal standard. This is not good policy. If greater public participation in the process is desired then address this specifically.]* {Alternative: delete this language and establish a more formal public review process for decision on 401 certifications.}

ATTACHMENTS:
1 - Ditch maintenance allowed under the wetland conservation act.
2 - Letter from PCA relating to the water quality provisions of sec 20.
3 - Map of % of Presettlement Wetland Acres Remaining by County.
4 - WCA rule definition of agricultural land.
5 - Description of wetland types 1 to 8.
6 - Graphic of wetland characteristics. (not done yet)
7 - Spread sheet of wetland type & distribution by county. (not done)
8 - Map of counties with county-wide zoning. (not done yet)

rdhs483.rdh

Minnesota Board of Water & Soil Resources

MN Wetland Conservation Act

DITCH MAINTENANCE

Wetland Conservation Act *Exemption #3* and other exemptions allow:

(i) maintenance which drains wetlands to a level that existed 20 years prior to the drainage request;

(ii) maintenance which fills wetlands that have been in existence for more than 20 years when the wetlands are located within the right-of-way acreage of the ditch or within a one rod width on either side of the ditch, whichever is greater, and the filling is limited to the side casting of spoil materials resulting from the maintenance and the spoil deposition area is permanently seeded into grass after maintenance activities are completed;

(iii) lowering the elevation of previously placed tile when made necessary by land subsidence provided the lowering does not drain wetlands;

(iv) drainage of wetlands that have formed in the bottom of ditches or were created solely as a result of beaver dam construction;

(v) maintenance of ditches next to land that was planted with annually seeded crops, was in a crop rotation seeding of pasture grasses or legumes, or was required to be set aside to receive price supports or other payments under United States Code, title 7, sections 1421 to 1469, in *six of the last ten years* prior to January 1, 1991;

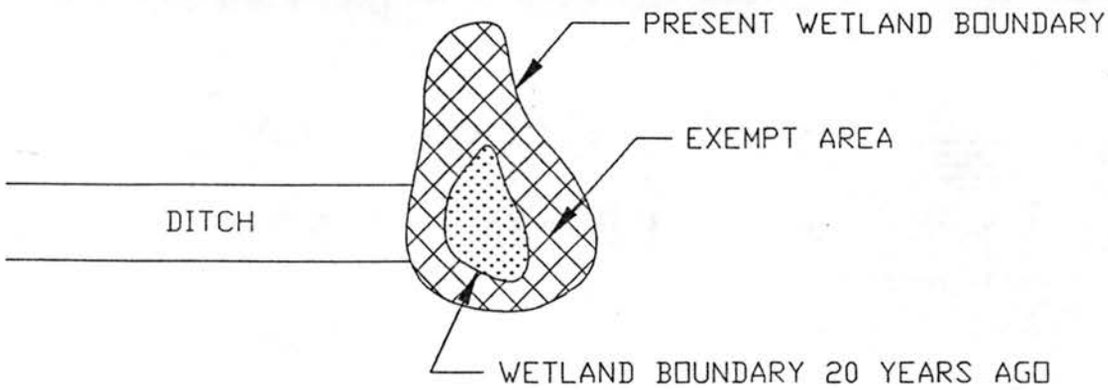
(vi) drainage of type 1 wetlands on agricultural land; and,

(vii) drainage of type 2 wetlands less than two acres in size on agricultural land.

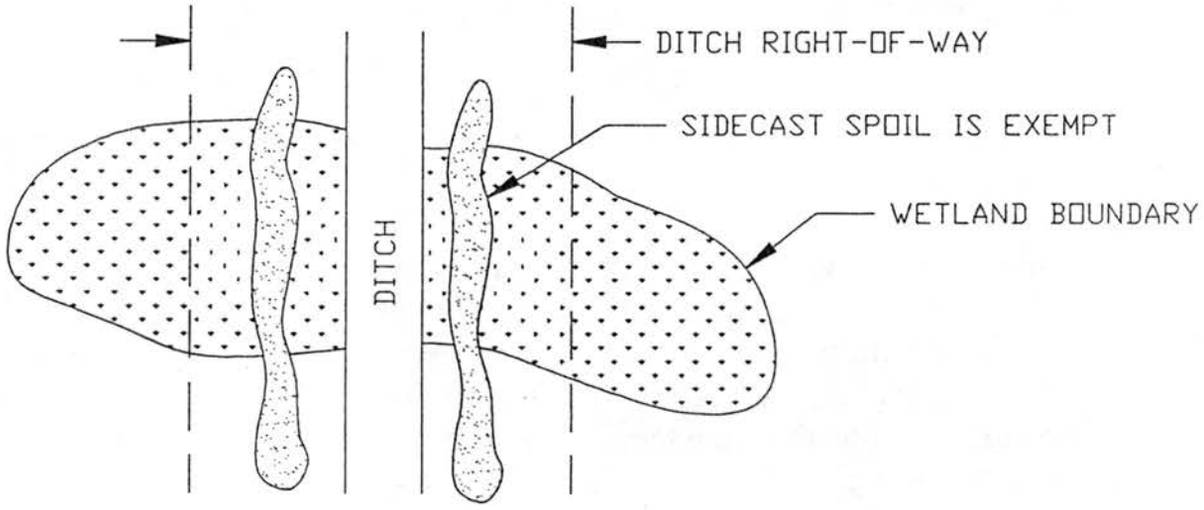
(See graphical depictions of the above situations on the reverse side of this sheet.)

s:ditch2.fs (BWSR/jj, 3/95)

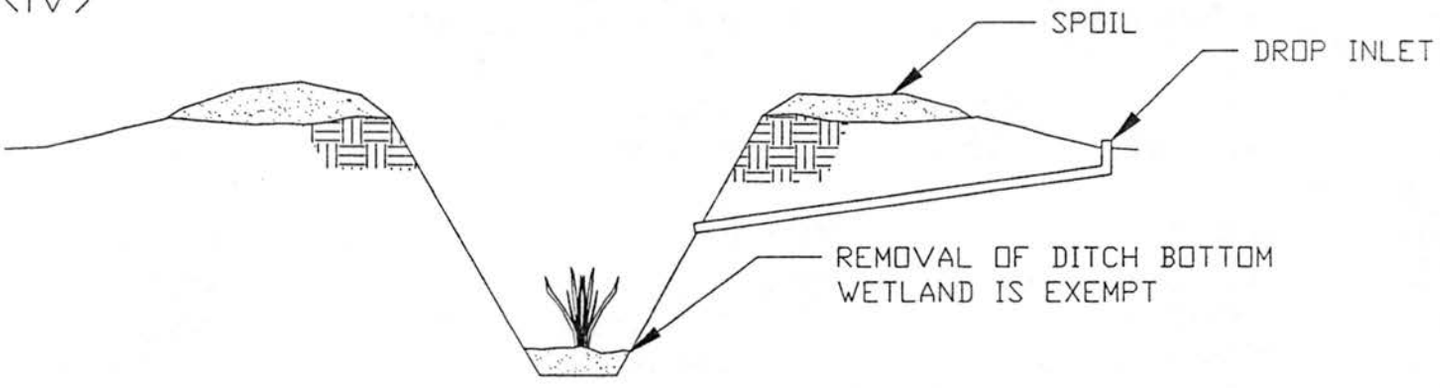
(i)



(ii)

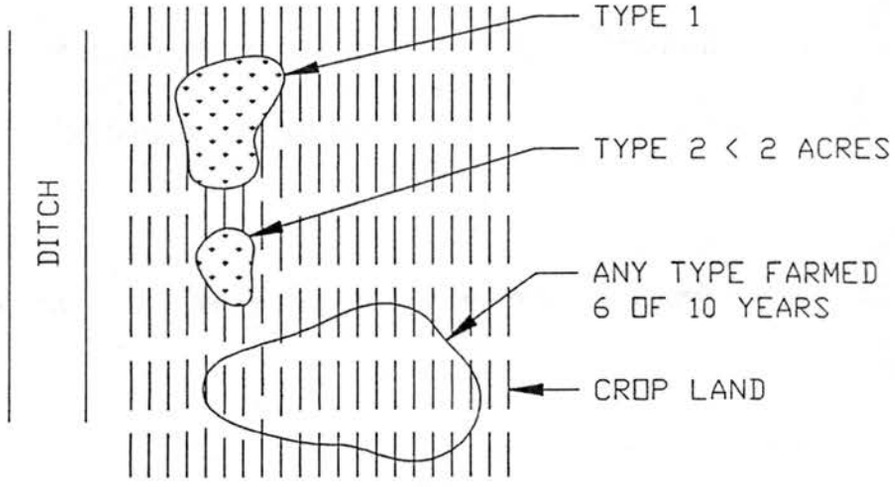


(iv)



(v-vii)

ALL EXEMPT



We do not support the Senate File 483 Stumpf bill and argue its passage would conflict with water quality protection efforts by our agency.

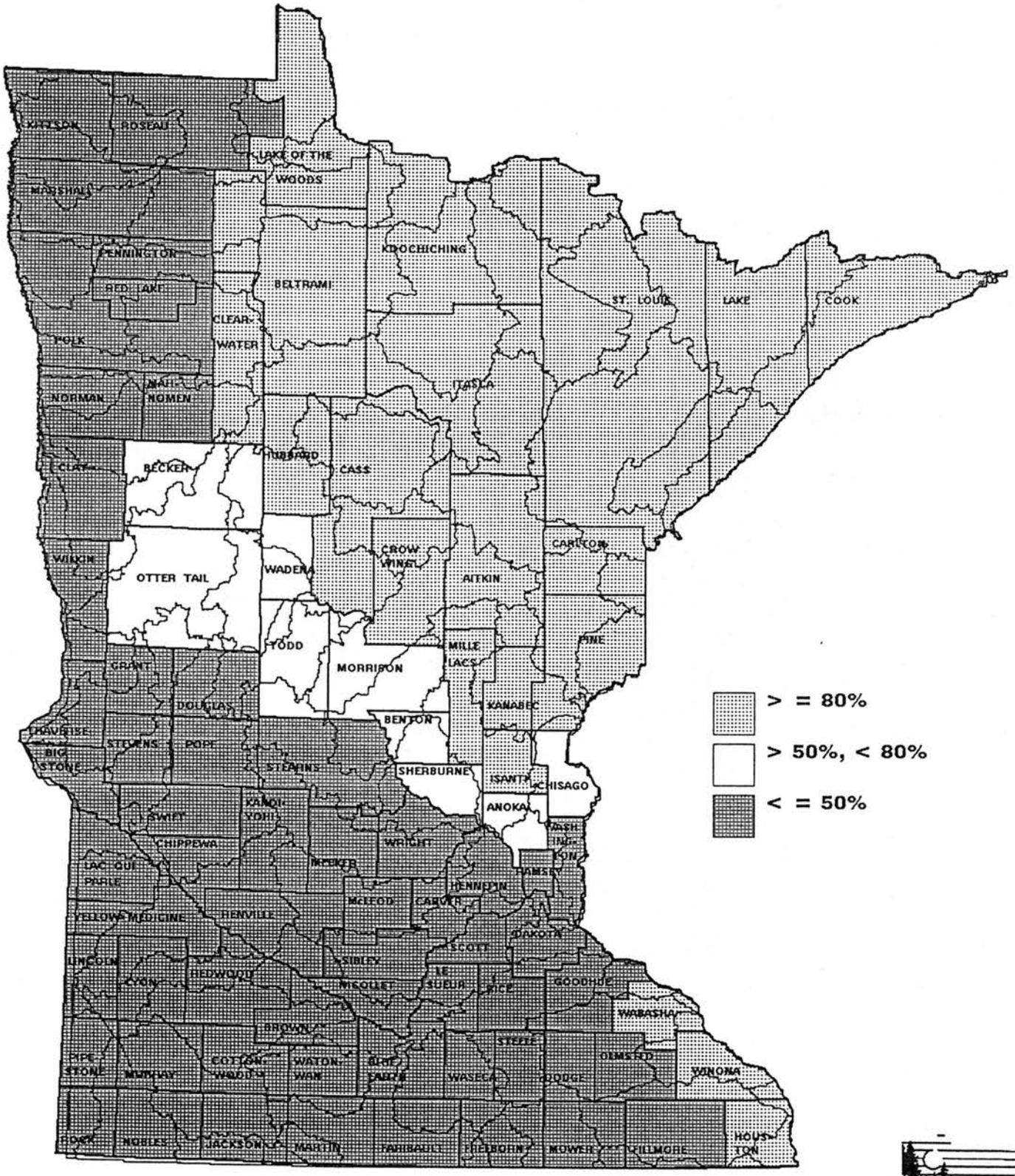
Sincerely,

Patricia M. Burke
Division Manager
Water Quality Division

PMB:ls

cc: Ron Nargang, Deputy Commissioner, Minnesota Department of Natural Resources
Ben Wopat, U.S. Army Corps of Engineers, St. Paul District

Percentage of Presettlement Wetland Acres Remaining



4/21/95
wetland

Minnesota Board of Water & Soil Resources

BOARD OF WATER AND SOIL RESOURCES

WETLAND CONSERVATION ACT RULES

CHAPTER 8420

Extracted from Minnesota Rules 1991, including amendments adopted through July 19, 1993.

Printed: August 1993

8420.0110 DEFINITIONS.

Subpart 1. Scope. The terms used in this chapter have the meanings given them in this part.

Subp. 2. Act. "Act," when not used in reference to a specific state or federal act, means the Wetland Conservation Act of 1991, Laws 1991, chapter 354, as amended by Laws 1993, chapter 175.

Subp. 3. Activity. "Activity" means draining or filling a wetland wholly or partially.

Subp. 4. Agricultural land. "Agricultural land," for use in part 8420.0120, subparts 7 and 8, means land devoted to the production of horticultural, row, close grown, introduced pasture, introduced hayland crops, and growing nursery stock.

For use in all other places in this chapter, agricultural land means land devoted to the production of horticultural, row, close grown, introduced pasture, and introduced hayland crops, and to the pasturing of livestock and dairy animals, growing nursery stock, and animal feedlots, and shall include contiguous land and buildings under the same ownership associated with the production of the above, for example, farmyards.

Subp. 5. Agricultural Stabilization and Conservation

*CIRCULAR 39 WETLAND TYPES in MINNESOTA**

TYPE	SOIL	HYDROLOGY	VEGETATION	NWI SYMBOLS	COMMON SITES
TYPE 1: Seasonally flooded basins or flats.	Usually drained during most of the growing season. Saturated for at least two weeks during the growing season.	Occassionally covered with water and is saturated seasonally or temporarily.	Varies greatly according to land use, season, and duration of flooding. Hardwoods as well as herbaceous annual and perennial growth.	PEM1A or J PFO1A or J	Upland depressions as well as fringe areas of other wetland types. In floodplain areas adjacent to rivers, stream and lakes.
TYPE 2: Inland fresh meadows.	Saturated during most of the growing season.	Without standing water during much of the growing season but is usually saturated to within at least a few inches of the surface.	Includes grasses, sedges, rushes, various broadleaved plants. Depends on land use and alterations.	PEM1B	Meadows may fill shallow basins, sloughs, or farmland sags, or these meadows may border shallow marshes or flowages on the landward side.
TYPE 3: Inland shallow fresh marshes.	Saturated or inundated except during drought periods.	Often covered with as much as 6" or more of water.	Includes grasses, bulrushes, spikerushes, and various other marsh plants such as cattails, arrowheads, pickerelweed, and smartweeds.	PEM1C or F	May nearly fill shallow lake basins or sloughs, or may border deep marshes on landward side. Also common as seep areas.
TYPE 4: Inland deep fresh marshes.	(Inundated)	Usually covered with 6" to 3' or more of water during growing season.	Includes cattails, reeds, bulrushes, spikerushes, and wildrice. In open areas, pondweeds, nalads, coontail, watermilfoils, waterweeds, duckweeds, waterlillies, or spatterdocks may occur.	PEMF or G PUBF or G L2ABF, G or H PABF or G L2EM2F, G or H	May completely fill shallow lake basins, potholes, limestone sinks and sloughs, or they may border open water.
TYPE 5: Inland open fresh water.	(Inundated)	Water is usually less than 6' deep. Shallow ponds, small lakes and reservoirs are included in this type.	Fringed by a border of emergent vegetation similar to open areas of TYPE 4.	PABG or H L2ABG or H L1UBH PUBG or H L2UBG or H	Shallow lake basins or they may border large open water basins.

TYPE	SOIL	HYDROLOGY	VEGETATION	NWI SYMBOLS	COMMON SITES
TYPE 6: Shrub swamps.	Usually saturated during growing season.	Often covered with as much as 6" of water, water table at or near the surface.	Includes alder, willows, buttonbrush, dogwoods, and swamp-privet.	PSS1, 2, 3, 4, 5A, 5B, 5C, 5F, 5G, or 5J.	Along sluggish streams, drainage depressions, and occasionally on flood plains.
TYPE 7: Wooded swamps.	Saturated at least to within a few inches of surface during growing season.	Often covered with as much as 1' of water, water table at or near the surface.	Trees include tamarack, arborvitae, black spruce, balsam, red maple, and black ash. Northern evergreen sites usually have a thick ground cover of mosses. Deciduous sites frequently support beds of duckweeds, smartweeds.	PFO1, 2, 4, 5A, 5B, 5C, 5F, or 5J.	Mostly in shallow glacial lake basins, glacial lake filled depressions, on flat uplands, and along sluggish streams.
TYPE 8: Bogs.	Usually saturated.	Water table at or near the surface.	Woody, herbaceous, or both. Supports a spongy covering of mosses. Typical plants are heath shrubs, sphagnum moss, sedges, leatherleaf, labrador tea, cranberries, carex, and cottongrass. Scattered, often stunted, black spruce and tamarack may occur.	PSS1, 2, 3, 4, 5B. PMLB PFO1, 2, 4, 5B. PEMB.	Mostly in shallow glacial lake basins, glacial lake filled depressions, on flat uplands, and along sluggish streams.

***NOTE:** Proper use of the **Circular 39** classification system limits it to descriptions of *entire basins* based on the *predominant* water regime and vegetation. The **Cowardin et. al** (NWI) system recognizes that most *wetland basins consist of different types* and describes the wetland based on the *various* water regimes and vegetation. The Circular 39 does not classify riverine or lacustrine (lake) wetlands as seperate classes.

s:circular.wet

Minnesota Board of Water & Soil Resources

Board Member Update

April 1995

The mission of the Board of Water and Soil Resources is to provide leadership enabling local governments to properly manage water and soil resources and to help all citizens be stewards of our irreplaceable natural resources.

Metro Section

- Although mother and baby are fine, metro Board Conservationist (BC) Barbara Ohman was recently ordered on five weeks bed rest to prevent pre-term labor. The baby's a girl. Everybody is speculating on the time and date of birth. To fill in somewhat for Barbara, Ellen Sones was hired as a part-time emergency BC for up to 20 hours per week. She mostly will focus on participating in Technical Evaluation Panels (TEPs) for wetland determinations under the Wetland Conservation Act. In addition, outstate BCs will be rotated into the Metro Region for three days a week (starting the week of May 22) to backfill Barbara's workload during her impending three- to four-month parental leave.

- Board Member Barbara Cobb chaired an April 5 meeting including representatives of Nine Mile Creek Watershed District, Riley Purgatory Creek Watershed District, and affected cities to discuss concerns over review of their watershed plans. Staff is redoing a comment letter to differentiate between the things the WDs are obligated to change in the plans and those that BWSR is suggesting they change.

- In other watershed district news, staff met with representatives of the Audubon Society to discuss the status of their appeal to BWSR on Nine Mile Creek's failure to implement a water plan. Audubon agreed not to pursue the matter further until Nine Mile responds to comments on the plan from the various agencies. Audubon is still expecting BWSR to develop a policy on what action the BWSR will take on future documented failures to implement/adopt a water plan.

- BWSR staff submitted a grant request to Met Council asking for $100,000 for a two-year position to develop model watershed management organization (WMO) plans; develop Memorandums of Understanding with the review agencies; provide outreach to watershed management organizations; and several other widgits. We should hear from them by late May.

- On March 28 Trout Unlimited filed a Wetland Conservation Act (WCA) appeal on a replacement plan approved by the city of Shakopee. Staff will arrange a pre-hearing conference, etc., as soon as possible.

- Steven Spartz, a landscaper who believes Minnehaha Creek Watershed District is treating him unfairly, has hired an attorney to represent him. Minnehaha Creek WD filed its transcript

and record relating to the dispute (3" thick) on April 10. BWSR staff is working with the attorneys to adjust the briefing schedule established at pre-hearing. The hearing may be moved back one month.

- Minnehaha Creek WD filed the transcript and record (4.5" thick) on the Ewing Wetland appeal on April 14. BWSR staff is trying to negotiate a slight revision to the briefing schedule to accommodate the parties and still have the matter heard by the BWSR Dispute Resolution Committee (DRC) on May 11 as scheduled.

- Valley Branch WD submitted revisions to its plan and is asking for action. Staff will be asking the appellants (the city of Lake Elmo and some residents) if they will withdraw their demands for a hearing and coordinate with the agencies to move for approval.

- Metro BC Jim Haertel sprained his foot badly and has been hobbling severely while on TEPs, leaving strange foot-prints in the wetlands. Jim's been very busy on WCA matters and watershed plan review.

- Metro Supervisor Bruce Sandstrom went out on his first TEP in a long time, got his hands dirty, and nearly froze his fingers. The frost was still in the ground and the soil not above biological zero, so the TEP will re-convene in May. This is a controversial project in New Brighton; concerned neighbors had decorated the trees and brush with yellow ribbons. Our technical ducks must be in order on this one.

- The Metro Region is holding its first new employee/new supervisor training workshop on May 10. See Debbie for details.

Correction: Last month's Update incorrectly stated that Barbara Liukkonen worked with Keith Grow to resolve an intra-regional WCA dispute involving Forest Lake, Chisago County and Wal-Mart. Actually Barbara Ohman was intimately involved, as was Ron Harnack and several local legislators and politician. Apologies to both Barbaras.

Engineering and Technical Services Section

Lakeshore Engineering

- The Two Harbors Campground shoreline stabilization project is under construction again after a new contractor (Hammerlund Construction of Grand Rapids) was hired by the city to replace the first contractor who went bankrupt. Gene Clark, lakeshore engineer, put the revised plans and specifications together in a hurry in late March after the surety company gave the go-ahead for the city to hire a replacement contractor. As expected, the low bid to complete the job is substantially higher than the original bid to do the entire job ($198,000 to complete vs. $126,000 for the original contract). The surety company should cover most of the difference, but the city of Two Harbors may also have to kick in some additional funding. The surety company has been challenging to deal with, like insurance companies typically are. Because the first contractor left the job in an unstable condition in some reaches, there has been additional slumping and erosion that will require remediation to the extent possible.

- Gene recently assisted North Shore SWCDs with several applications for special project funding (state Cost-Share Program applications were due by April 15). We expect the competition to be stiff due to the reduced federal

Agricultural Conservation Program cost-share available this year, and the general increase in demand as nonpoint pollution abatement awareness increases. The availability of more technical assistance, such as provided by Gene and the new engineers and technicians hired through the State Revolving Fund (SRF), will surely also result in increased demand for cost-share and/or loan funds.

- We recently heard from the Great Lakes Commission that our application for a $9,500 grant to provide shoreline best management practices (BMP) information and education will be funded. Gene was the primary author of the grant application, with review assistance from Mark Nelson, Duluth BC, and Barb Liukkonen, water resources education coordinator.

Conservation Easements

- BWSR recently hired Tim Fredbo as our new conservation easement program manager. Tim has served as the district water resources specialist for Washington SWCD for the past six years. Prior to that, Tim worked for the then-SCS as a district conservationist in Anoka, Ramsey and Dakota counties for seven years, and prior to that, for the U of M and the Cooperative Soil Survey Program for five years. Tim will join the BWSR and conservation easement program team on May 3. We have plenty of work waiting for Tim, such as completing the program retooling process, preparing next year's program work plan, dealing with a myriad of ongoing program issues, helping manage grants, etc., etc. We'll be establishing priorities for Tim prior to his arrival. Other program staff have been sharing the program manager role since the end of January and are anxious to have Tim join us. We know that BCs and some SWCD staff are anxious as well.

- Tom Wenzel, design engineer; Matt Moore, engineering technician, and Jeff Hedtke, wetland restoration technician, have been very busy assisting SWCDs with surveys and other field work in preparation for the upcoming construction season. There is still a backlog of wetland restoration construction to complete, due to the very wet conditions in 1993 and part of 1994. Tom and Matt have also been assisting Kandiyohi SWCD with survey data acquisition and preliminary design efforts for the Grass Lake restoration project. The Natural Resources Conservation Service (NRCS) has been assisting with associated soil borings to the extent that the weather and their work schedule will permit.

- We continue to develop some higher tech (and more efficient) methods for preparing legal description Exhibit A maps using CAD and state GIS data, and legal documents using our program database. Matt and Tom are leading the Exhibit A efforts and Bryan Alpaugh, data management specialist, continues to provide substantial assistance with the generation of electronic forms and associated database improvements.

Area II

- HDR Engineering, the consultant for the RW-22 project, continues to revise the draft Environmental Assessment Worksheet (EAW) for the project based on comments from the Department of Natural Resources (DNR), U.S. Fish and Wildlife Service (USFWS) and the Corps of Engineers. The primary issues center on impacts to the Shelburne Wildlife Management Area located within the proposed temporary reservoir area.

- Darrell Apelgrain, BWSR Area II engineer, continues to work on the feasibility report for the Lazarus Creek floodwater retarding project, in cooperation with Kerry Netzke, Area II coordinator. Darrell is serving as the project engineer for this feasibility study and Kerry as the project manager. BWSR Chief Engineer Al Kean met recently with Darrell, Kerry and several Area II board members to assess the status of efforts in relation to the study plan developed last year. Study efforts are behind schedule, so we addressed ways to get back on track and meet the scheduled late August completion date. A meeting with the review and permitting agencies was held on April 19 to review the proposed methods of assessment and critical issues, with the intent of ensuring efficient and effective documentation in the feasibility report.

SRF Technical Staffing

- Approximately two-thirds of the joint powers areas (JPAs) will have interviewed applicants for the SRF engineer positions by the end of April. To date, we are aware of two engineers (JPA 6 and JPA 8) and one technician having been hired (JPA 11), with outstanding offers having been made to a few more. Quite a few areas will be interviewing between now and the end of April. JPA 11 made offers to its two top ranking engineers, but was turned down by both, and did not feel comfortable making an offer to lower ranking candidates. They are now pursuing additional applications, including some of the engineers who applied in JPA 8. JPA 3 made an offer to its top ranking candidate and was turned down, had its second ranking candidate take a different job after the interviews, and is apparently considering its remaining candidates. All JPAs are actively moving forward to hire engineers and technicians. Most areas had a handful of registered engineers apply and a large number of technicians.

- To date, we have acquired CAD software for the SRF engineers and technicians, but are awaiting the receipt of EPA 319 grant funds to complete the equipment purchases. EPA was slow in getting the funding to the Pollution Control Agency (the EPA fiscal agent in Minnesota) and there is more red tape involved in getting the funds to the BWSR. We're also rolling a previously approved EPA 319 grant (1 year funding for a feedlot technician, with no hope of future funding) together with this one-time 319 grant for SRF start-up. Wayne Zellmer, grants coordinator, and Al Kean updated the associated work plan in late March and are trying to facilitate completion of the paperwork at the Pollution Control Agency. One advantage of this combined grant is that we will be able to purchase plotters to round out the equipment packages for the JPAs.

Southern Region

- Counties and SWCDs are gearing up to update the county comprehensive local water plans. BWSR BCs have been participating in public information meetings and offering assistance at local task force meetings. It appears that a lot of BC time will be logged over the next few months with this updating process. Most counties will have a draft available for agency and public comment by July 1, 1995.

- Meetings seem to be less contentious then six or seven years ago as people become more aware and educated on the issues. Discussion has been excellent and people are asking very detailed questions regarding feedlots, septic

systems, and the Minnesota River.

- All of Minnesota's SWCDs have submitted their 1994 annual reports and 1995 annual plans of work. BCs were busy with initial review of draft copies provided by SWCDs and will continue to be busy during April conducting final reviews and approvals.

- The Blue Earth River Basin Initiative (BERBI, a five-SWCD joint powers board) has encumbered nearly $500,000 in accelerated cost-share dollars in a little over a year for accelerated cost-share practices including feedlots, terraces, and waterways. Practices have and will continue to be installed at an accelerated pace. A detailed listing of these practices--which have all been targeted to high priority areas--will be provided at the April BWSR meeting.

- Wetland Conservation Act (WCA) activities continue. BC Thomas Fischer assisted two local governments units (LGUs) through the technical evaluation process to handle two violations; both resulted in restoration orders. Most of the southern BCs also attended a two-day training program on wetland delineation technology.

- BWSR Assistant Director Jim Birkholz led a meeting of several BWSR BCs and regional supervisors with William Horvath of the National Association of Conservation Districts (NACD). The group discussed concerns, issues, and opportunities facing SWCDs and their relationships with BWSR and other local, state, and federal agencies. Horvath shared some interesting information about the activities and problems of other state's conservation districts.

- Jeff Nielsen, southern regional supervisor, is heading a BWSR committee to "re-tool" the SWCD Operational Handbook. The handbook, which was last updated in 1983, is very much in need of updating. Completion date for the draft update is September 1995.

- The Rochester staff participated in a meeting with BWSR Wetland Management Specialist John Jaschke to bring county engineers information on WCA banking and wetland replacement. The Rochester staff also participated in meetings for SRF organization and personnel, joint SWCD/NRCS staff, and Minnesota Erosion Control Association.

- New SWCD supervisor/employee orientation for the southeast region was conducted with presentations by the Minnesota Association of Soil and Water Conservation Districts (MASWCD), the Minnesota Association of Conservation District Employees (MACDE), and NRCS.

- At the request of the SWCD Board, Rochester staff spent several days in the Olmsted SWCD reviewing district administration of state programs after the dismissal of the district manager.

- The Chippewa River Stewardship Partnership (CRSP) held an open house and information meeting this past month in Benson, reports BC David Sill. CRSP is a recently formed group of landowners, non-profit organizations, sporting groups and federal, state, and local government agencies working to address water quality and flooding problems in the Chippewa River basin. The primary focus of the partnership for the first two years will be on wetland restoration, riparian land restoration, and associated upland restoration in the basin from just above Benson to Montevideo. Along with pursuing some traditional resource programs and

dollars, the group received a $200,000 McKnight Foundation grant.

Northern Region

- Northern field staff hosted two water plan update meetings to provide counties with more guidance regarding the update process. Currently, 56 counties throughout Minnesota are busy updating their plans. BWSR also held three interagency meetings in Grand Rapids, Brainerd, and Bemidji aimed at bring our agency partners up to speed on the status of the updates and what agency roles might be. These meetings we well attended by NRCS, PCA, and Department of Natural Resources (DNR) Division of Waters. Other agencies and divisions of DNR were poorly represented.

- Northern BCs Keith Grow, Pete Waller, Mark Nelson, and Dan Steward combined forces to host Orientation I sessions for new supervisors and new SWCD employees. Only 11 people showed up from a 24-county area for this training. Either people have got too many meetings to go to these days and orientation lost out, or we need to rethink our orientation program. The Training Team will take a look at this on a statewide basis.

- SRF workload continues as some BCs have been asked to sit in on engineer and technician interviews. Also BCs are still fielding many question from the joint powers areas (JPAs) as they work at getting themselves organized and staff hired.

- Pete Waller has a Reinvest in Minnesota (RIM) violation cooking in Grant County that could not be resolved at the SWCD or BC level. Mr. Jochim has been cited for mowing hay on his RIM easement. He claims he is unable to pay the fine. This violation is now being handled by the Attorney General's office. You can expect to hear more on this one.

- Gene Clark and Mark Nelson recently worked with the Lake Superior Association of SWCDs in applying for available Great Lakes grant funding. Three projects got funded: One to put on several best management practices (BMPs) workshops later this year--Gene, Barb Liukkonen, and Mark will be working with north shore SWCDs on these; South St. Louis SWCD received grant funding to stabilize some dunes on Park Point in Duluth; and Cook SWCD received grant funding to beef up enforcement of their existing zoning laws. These are each one year projects.

- Bill Best has been working with West Polk SWCD, the DNR, and the city of East Grand Forks to develop special project applications for rip-rap and bio-engineering on the Red and Red Lake rivers. The steep banks are eroding excessively and causing sedimentation in these rivers.

- Jim Lemmerman, BWSR tree guy, reports that 12 SWCDs have been approved to receive federal Forest Stewardship Program dollars this year. Nine proposals were funded for technical assistance and three for education/information projects. Jim has done a great job over the last few years in promoting the SWCDs to the forestry community. His work has resulted in increased funding through programs such as Forest Stewardship for SWCDs.

- Barb spent a good chunk of time in March helping to set up the two water planning update workshops and then presenting at them. Barb has also been busy planning the three Shoreland Information Volunteer workshops she'll

be putting on in May and June with the assistance of Aitkin, Itasca, and St. Louis SWCDs. These workshops train key lakeshore property owners in the basics of sound water quality management. These lake volunteers then share the information with others around their lake. This program started last year and has been very successful. It's back this year by popular demand.

- Dale Krystosek, Bemidji BC, worked with the city of Breckenridge, Wilkin County, and the DNR to resolve a wetland violation that occurred as part of a flood control project. Dale's WCA workload continued as he assisted Wadena SWCD with finalizing a wetland banking plan for restoration of several wetland basins that will be used to mitigate road projects.

- Dan facilitated a meeting with Crow Wing County, the SWCD, and NRCS to look at ways to develop better understanding of how the county can better inventory critical impact sites. With 416 lakes, the county is looking for practical ways to target available funds to protect water quality. Dan says that the trend toward critical impact site evaluation is an encouraging development in local water planning implementation.

MARSH Memos

ISSUE 11 • March 1995 • BRW, Inc.

Peering Through The Rushes

Beth Kunkel, Editor

Ahhhh! Spring is almost here. After such a mild winter, the coming of spring may be a little anti-climactic, but who's complaining. I made it through another winter without catching a cold, but I am starting to come down with a severe case of spring fever.

Many folks are venturing out from their annual hibernation to feel the warmth of the spring sunshine, to listen to the birds sing, to watch the squirrels frolic in the melting snow, and to enjoy the other signs of spring.



Spring is a time of anticipation, a time when we look forward to new experiences and make plans for the warm days to come. I am starting to think about what to plant in the vegetable garden, what new additions should be made to the wildflower patch, the sounds of the returning Canada geese and mallards in the local park, dusting off the old fishing rod and tackle, and thinking of the smells of the outdoor barbecue or a freshly mowed lawn. I'd better be careful—that spring fever may be contagious.

Spring cleaning is another activity many people start thinking about this time of year. That is what the state legislature is contemplating doing with the Wetland Conservation Act. Several bills will be introduced this session regarding this 1991 Act. After one year of full implementation, several suggestions are making their way to the House and Senate in an effort to clean up the Act to make it more manageable for the local government units charged with its implementation. A brief summary of the bill prepared from suggestions by the Wetlands Heritage Advisory Committee and the Board of Water and Soil Resources is included in this issue.

Also included in this issue is an update on what has been happening with the Minnesota Wetlands Conservation Planning Study that we previously informed you about. Another hot topic that has plagued regulators and developers alike is wetlands and storm water management. The Corps offers some perspective on this topic, but I'm sure this will remain a sensitive issue in 1995.

Several other issues are discussed, including the recent changes at the Soil Conservation Service, best management practices for forested wetlands, a new wetland evaluation methodology, and the availability of digital national wetland inventory mapping.

Before I sign off until July, I want to present you with the Spring Fever Challenge. As you read through the various articles regarding Minnesota wetlands, take a minute to think about the long term effect of our current wetland regulations. Do they promote the preservation of wetlands, urban open space, or result in urban sprawl? Can we achieve the first without the later? Is the intent of the regulations to preserve open space or preserve wetlands? Do urban wetlands preserved without adjacent upland habitat still function as wetlands or simply as urban open space? I don't have the answers, but I know you have an opinion. Will the current wetland regulations achieve a true no net loss of wetlands? I would like to hear from you.

Spring fever will be here until the ice and snow disappear, so don't be surprised if you're not alone when you stop to peer through the rushes. ■



MOA For AG Wetlands

By Mark Oja

A Memorandum of Agreement among four federal agencies makes the Natural Resources Conservation Service (formerly the Soil Conservation Service) the lead agency for wetlands on agricultural lands.

The Memorandum of Agreement (MOA) among the Departments of Agriculture, Interior, and Army and the Environmental Protection Agency implements one of many recommendations regarding federal wetlands policies included in the Clinton Administration's outline to improve managing America's wetlands. The MOA will lead to a reduction in existing overlap in the implementation of Federal wetlands programs affecting agricultural lands.

The MOA ensures that the nation's farmers can rely on NRCS agricultural wetlands jurisdictional determinations and delineations for purposes of the Clean Water Act and "Swampbuster" provisions of the Farm Bill. This assurance will also apply to non-agricultural wetlands once NRCS staff receive the required training in the Corps of Engineers 1987 Manual.



Previously, farmers participating in USDA farm programs received a wetland determination from the NRCS for Swampbuster purposes only. If that farmer needed a Section 404 permit, the Corps of Engineers or the EPA required an additional wetland delineation. The MOA reduces duplication of effort and gives farmers one wetland determination from the federal government. Under the terms of the MOA, the ultimate authority and jurisdiction of Section 404 remains with the Corps of Engineers and EPA, while jurisdiction of Swampbuster remains with the NRCS.

Other highlights of the MOA include:

- The four federal agencies will jointly develop and concur upon a set of mapping conventions to be used in making offsite wetland determinations.

- Wetlands delineated on agricultural lands for purposes of Swampbuster and Section 404 will be completed in accordance with the NRCS National Food Security Act Manual.

- Wetlands delineated on non-agricultural lands for purposes of Swampbuster and Section 404 will be completed in accordance with the COE 1987 manual.

- Agency personnel will be properly trained in the appropriate delineation policy and procedures.

- EPA will lead the signatory agencies in establishing interagency oversight teams at the state level to conduct periodic review of wetland delineations conducted under the provisions of the MOA.

An interagency work group from NRCS, COE, EPA and FWS is currently drafting guidance on coordinating implementation of the MOA. A detailed guidance report outlining the Minnesota operating procedures is expected soon, and will be outlined in a follow-up article. ■

Mark Oja is the State Biologist for the Natural Resources Conservation Service (612) 290-3670.

Natural Resources Conservation Service

The Natural Resource Conservation Service (NRCS) is the new federal agency in the U.S. Department of Agriculture that works hand-in-hand with the American people to conserve natural resources on private lands.

The Natural Resources Conservation Service combines most of the authorities of the former Soil Conservation Service, as well as five natural resource conservation cost-share programs previously ☞

administered by other USDA agencies.

The Secretary of Agriculture created the NRCS on October 20, 1994, as part of a larger USDA reorganization authorized by Congress.

The name change—from the Soil Conservation Service to the Natural Resources Conservation Service—more accurately reflects what they do: help people conserve all natural resources on private lands. It reflects a streamlined agency that provides quality service more efficiently.

While the name has changed, some things will not change. The Natural Resources Conservation Service will continue to build on their 60 years of experience, their scientific and technical expertise, and their partnerships with conservation districts and others.

While some of the infrastructure and program authorities will change, NRCS will build on a unique 60-year relationship between federal, state, and local government and the nation's farmers and other private land users.

NRCS will emphasize strengths in natural resource conservation: voluntary programs, technical assistance, and conservation cost-sharing. Technical assistance will continue to be delivered through conservation districts, managed by locally elected officials charged by state law to develop local programs to meet local natural resource and conservation needs and priorities.

NRCS will focus on meeting the critical needs of The Land. That focus will include:

- Soil and Soil Quality. NRCS will maintain its recognized leadership in soil classification, soil mapping, and soil erosion control. They will expand their focus on soil quality.

- Natural Resource Assessments. NRCS will continue to expand its ongoing comprehensive inventories of the status and condition of America's natural resources on private lands.

- Biological Restoration of Landscapes. NRCS will use its unique conservation engineering skills to help farmers and other land users restore wetlands and riparian areas and protect other fragile and ecologically sensitive landscapes. ☞

- Working With People. NRCS helps farmers and others put conservation on the land they own or manage for the purpose of protecting natural resources - soil, water, plants, animals, air - and people. ■

Forestry BMPs For Minnesota Wetlands

By Erv Berglund and Dr. Mike Phillips

Wetlands are a common landscape feature in Minnesota. Prior to European settlement, Minnesota contained 18.6 million acres of wetlands, including both wet mineral and peat soils. These wetlands covered approximately 35 percent of the state. Minnesota has lost 60 percent of the original wetland acreage. Wetland acreage in forested regions comprises the majority of the remaining wetlands, and most are located on public lands in the northern part of the state.

Recognizing the need to maintain or enhance the remaining wetland resource, a "no net loss" Wetland Conservation Act (WCA) was enacted into law by the Minnesota legislature in 1991 and amended in 1993. The WCA compliments other wetland regulations including Section 404 of the Clean Water Act. Common to both of these acts is the requirement that Best Management Practices (BMPs) be used when needed to qualify for the silvicultural exemption. BMPs are necessary to avoid or minimize direct and indirect impacts from activities that destroy or diminish the quantity, quality and biological diversity of wetlands. These BMPs provide forest managers, loggers and landowners with the tools to avoid or minimize potential adverse impacts to wetland functions and values. With BMPs as an integral part of forest management, continuous commercial timber production on or near Minnesota's wetlands is feasible without comprising environmental quality.

Developing the BMPs for wetlands in forested regions of the state has been a slow and challenging process. When the decision was made to move forward with BMP development, it was recognized that successful implementation of these BMPs would be dependent on obtaining the involvement and commitment of all interested parties. Dr. Mike Phillips, DNR-Forestry, St. Paul, coordinated a forestry wetland BMP task force consisting of representatives from federal and state ➢

agencies, county government, forest industry, environmental organizations, logging interests and private landowner groups.

The BMPs have been developed through a consensus decision-making process. The process is near completion and the BMPs will provide recommendations for road construction and maintenance, timber harvesting, site preparation, pesticide use and prescribed burning. The principal focus of the BMPs is to provide guidance on minimizing impacts to the hydrologic flow in wetlands. Rather than generic guidance, the proposed BMPs provide specific recommendations to address such problems as depth and extent of rutting in wetlands.



These forest wetland BMPs are being incorporated with the revision of "Water Quality in Forest Management, Best Management Practices in Minnesota". A target date for the complete BMP is April 1995. ■

Dr. Phillips is with the DNR Division of Forestry. Erv Berglund is a hydrologist with the DNR.

Urban Stormwater Impacts to Wetlands

By Steve Eggers

In the presettlement landscape of the Midwest, watersheds were in permanent vegetative cover (e.g., prairie, oak savanna) with maximum infiltration and minimum runoff of precipitation. It was under these conditions that Minnesota's wetlands developed over thousands of years. With the massive conversion of this landscape to agricultural uses came substantial changes in runoff to wetlands as well as lakes and streams. Removal of perennial vegetation led to a decrease in infiltration and an increase in the volume of runoff. Annual plowing and planting of row crops exposed soils to wind and water erosion leading to increased sediment loads carried by runoff. Artificial drainage systems accelerated removal of water from the landscape. Agricultural chemicals and animal waste greatly increased nutrient loading and contaminants carried by runoff. All of these factors had prominent roles in altering and degrading wetlands.

Another level of alteration and degradation to wetlands occurs when predominately agricultural watersheds are converted to urban use as is the case with the growth of the Twin Cities Metropolitan Area. Both the quantity and quality of water discharged to wetlands can change and have a pronounced impact on wetlands. Urban runoff is often directed into wetlands via stormsewer systems with some municipalities designing their entire stormsewer system using wetlands as the ultimate discharge point. Cases also exist where numerous isolated wetland basins were artificially connected via a stormsewer system thus creating a "flow through" system where none existed before. Use of wetlands for urban stormwater input can be simply a case of convenience and ease of construction since many wetlands are topographic depressions. It could also reflect a lack of understanding or lack of concern about how this use can degrade wetlands and the functions and values they provide.

Given the wide diversity of wetlands it is not surprising that there is a broad range of tolerance among wetlands to urban stormwater input. Some wetlands (e.g., bogs and fens) are extremely sensitive to impacts associated with urban stormwater inputs such as: a) sediment deposition in excess of what occurs under natural conditions; b) influx of high levels of nutrients; c) influx of chemicals such as pesticides, herbicides and deicing salts; and d) change in hydrology/hydroperiod. Diverse, native plant communities can be replaced by monotypes of sediment- and nutrient-tolerant species such as reed canary grass and/or cattail. On the other hand, some wetlands (e.g., floodplain forests) are better adapted to handle the fluctuating water levels and influx of sediment often associated with urban stormwater. Each wetland should be carefully evaluated to determine potential impacts from a proposed urban stormwater project.

Assessing the impact of stormwater input to wetlands requires consideration of a number of factors:

1) Baseline conditions including watershed (size and land use), topography, hydrology, water quality and vegetation of the wetland prior to urban stormwater input;

2) Frequency, magnitude and duration of inundation due to urban stormwater input;

3) Quality of the stormwater (i.e., sediment load, P and N, salt, sand, petroleum products); and,

4) Susceptibility of each wetland type to degradation by stormwater input.

Predicting the magnitude of adverse impacts to wetlands due to urban development is a complex task, but the general rule is: the greater the change the greater the impact. The assumption that it is beneficial to direct more water into wetlands is not necessarily true. Wetlands are dynamic systems but the increased frequency and duration of inundation due to stormwater input can far exceed the tolerance of most wetland plant communities. The result can be conversion of emergent, shrub and wooded wetlands to mudflats, cattail monotypes or deep, open water ponds. These are evident around the metropolitan area. Note the numerous wetlands used for stormwater retention that are ringed by dead trees—even floodplain forest species such as eastern cottonwood and green ash cannot tolerate prolonged inundation due to stormwater input. The numerous reed canary grass wet meadows within urban areas is another indicator—some of these were tussock sedge meadows that could not tolerate the sedimentation and altered hydrology caused by stormwater input.

The opposite effect—creation of drier conditions—can occur due to construction of curb and gutter systems or utility corridors that divert surface runoff and/or groundwater from wetlands. Construction of roads, buildings and retention ponds can also alter the contributing watershed of wetlands causing drier conditions. A shift from wetland plant communities to communities dominated by weedy, disturbance-indicator species can result.

Degradation of wetland plant communities leads to a degradation of wildlife habitat. Monotypes of cattail or reed canary grass do not provide the same quality of wildlife habitat as marshes and wet meadows composed of an interspersion of different plant species. The "bounce," or fluctuation of water levels, often associated with stormwater input can wreak havoc with nesting birds, furbearers, small mammals, reptiles and amphibians. The same is true when stormwater introduces pollutants such as salt, petroleum products, pesticides, and excessive nutrients.

The best approach to maintaining wetlands within an urban landscape is to avoid and minimize alterations in the quantity and quality of runoff directed into them. Design stormwater management plans such that discharges to wetlands do not exceed the tolerances of existing wetland plant communities. Avoidance may be necessary in cases involving highly susceptible wetlands such as bogs and fens. Pre-treatment (e.g., NURP) ponds constructed on the uplands are highly recommended as they can be used to allow sediments to settle out as well as moderate the "bounce" before stormwater is discharged to natural wetlands.



A Stormwater Advisory Group, convened by the Minnesota Pollution Control Agency and composed of representatives of local, state and federal organizations, is in the process of formulating guidance for evaluating urban stormwater impacts. It is intended that these guidelines serve agencies, developers and landowners in making wise decisions involving the design and implementation of urban stormwater management plans. ■

Steve Eggers is a Wetland Ecologist with the Corps of Engineers.

Minnesota Wetlands Conservation Planning Update

By Beth Carlson

Development of a wetlands conservation plan for Minnesota has been underway since August 1993 under a planning grant from the U.S. Environmental Protection Agency. The state matching funds have been provided by the Minnesota Department of Transportation for the first two years of the project. This project began as a voluntary initiative by nine state and federal agencies with regulatory, programmatic, or compliance responsibilities for wetlands in Minnesota, and emphasizes taking a comprehensive, coordinated approach to dealing with wetlands issues.



Serious Problems Needing Attention

The most perplexing and urgent issues with wetlands policy in Minnesota revolve around the following areas, many of which are interrelated and involve more than one agency, law, or objective:

Governance: Confusion & lack of coordination; conflicts over consistency & fairness; needs for flexibility.

Ecological: Regional differences; functions & values; need for a more holistic approach; clear, consistent purpose & objectives for all wetlands efforts.

Socio-Economic: Sufficient & effective incentives; put efforts where they will produce greatest benefits; property rights concerns of landowners.

There are consequences for failure to address these issues: a) Justice will not be served if issues of governance are not resolved; b) Natural systems will be threatened if ecological policies are not improved; and c) Social and economic needs of communities and citizens will be poorly served if they are not linked with wetlands policies. The answer is that the State of Minnesota must continue the journey it began 15 years ago (protecting wetlands through the public waters law) and find a path through these dilemmas.

Developing the Plan

A substantial amount of time was invested in developing a process for participation by state and federal agencies, local governments, and the private sector, that would help ensure eventual implementation of the plan. Twenty resource groups around the state were organized to participate in issues identification; 260 people participated in these small group discussions, which were completed on January 11, 1995. A briefing report will be prepared to describe the issues identified by the resource groups and other current resource materials for distribution in early 1995. This briefing report will focus the scope and direction of issues to be addressed by Minnesota's wetlands conservation plan.

The next phase of this project will involve deeper analysis of the issues identified in the briefing report, development of goals and strategies for addressing those issues, and action planning for implementation and use of the plan. Therefore, implementation of the plan would be greatly enhanced by a dual track development process that coordinates strategic planning (development of goals and strategies) with operational planning (a detailed implementation blueprint). It will be completed by mid-1997.

Anticipated or Potential Outcomes

A state wetlands plan is likely to include several elements, including such possibilities as:

1) Comprehensive, statewide wetlands goals and policies that coordinate the efforts of all state and federal agencies (currently six) with regulatory and programmatic responsibilities for wetlands in Minnesota;

2) Regionalized goals and strategies for mitigation, restoration, etc., based on appropriate ecological, geographic, and economic distinctions;

3) Model local wetlands plan or ordinance providing assistance for local adaptation and implementation of statewide and regionalized wetlands goals, policies, and strategies;

4) Operational action plans for participating or affected agencies;

5) Monitoring and evaluation process for wetlands plan implementation; and

6) Education modules for plan implementation, such as user training and public education strategies. ■

Elizabeth Carlson is the Project Coordinator for the Minnesota Conservation Planning Project. Phone (612) 297-4890; Fax (612) 296-1811.

WCA Changes Proposed

By John Jaschke

Again this year, the Minnesota Legislature is considering changes to the Minnesota Wetlands Conservation Act (WCA). The following are among the changes being considered.

Comprehensive Wetland Protection and Management Plans

Local Government Units (LGUs) will be given the option of developing wetland management plans to address the variability of wetland resources and their functions across the state and to provide the necessary flexibility for local governments to effectively implement wetland protection measures.

The plans must: 1) be developed consistent with Local Water Plans; 2) assess wetland functions and classify them based on the assessment; and 3) incorporate the wetland management plan into local controls.

The benefits of developing wetland management plans are that local governments may, based on the plan: 1) vary the application of "sequencing;" 2) vary replacement ratios; and 3) allow additional options for wetland replacement.

Exemptions

Exemption #10 would be revised to allow this exemption to apply to private as well as public wetlands created "accidentally."

Exemption #25, the "deminimus" amount not subject to the WCA regulation, would be expanded in counties with the majority of their presettlement wetlands remaining as follows: a) remain at 400 s.f. in shoreland areas of all counties and in <50% counties; b) increased to 1000 s.f. in 50 to 80% counties; and c) increased to 7500 s.f. in >80% counties.

Notification and Appeals Procedures

The notification procedures will be streamlined to eliminate the waiting period after project approval and will also eliminate some of the mailing requirements. The administrative appeals option to the Board of Water and Soil Resources will be reduced or eliminated.

Replacement Credit Options

Partial replacement credit for the following activities would be allowed: 1.) revegetation of farmed wetlands, 2.) inclusion of buffer areas on restored wetlands, and 3.) restored wetlands left intact on land previously enrolled in an expired conservation contract.

Enforcement

The replacement ratio would be doubled for projects that fill or drain wetlands in violation of the WCA.

Local Government Liability

The State will support local governments in claims resulting from WCA actions if the local government unit acts in good faith and the LGU has properly administered and implemented the law. Claims for payment to LGUs will be decided by the Legislative Claims Commission. ■

If you are interested in following the development of the legislation, copies of bills introduced and hearing schedules can be obtained by calling the House of Representatives or Senate information numbers. The number for the House is (612)296-2146 and the number for the Senate is (612)296-0504. The Minnesota Board of Water and Soil Resources can also provide information on the status of pending legislation. Contact John Jaschke at (612)297-3432.

John Jaschke is a Wetland Management Specialist with the BWSR.

News and Views

Beth Kunkel, Editor

NWI Digital and Paper Maps

The National Wetlands Inventory (NWI) Program, administered by the U.S. Fish and Wildlife Service (FWS), provides consultants, planners, and resource managers with information on wetland location and type. These data are available as either original paper maps or digitally, as a computer version. The digital data were prepared with legislative funding through the Legislative Commission on Minnesota Resources. The State program is managed by the DNR-Division of Waters, while the Land Management Information Center (LMIC) provides data conversion and distribution services for the digital NWI program in Minnesota.

NWI information is intended to be used as a general indicator of wetland type, location, and distribution for drainage basin and multi-county resource planning. It is not a legal record. NWI information is not intended to be used as a precise locator of wetland boundaries, for site-specific planning or management, or for regulatory purposes.

Wetlands interpretation was performed by the FWS from aerial photography of 1:58,000-, 1:65,000-, or 1:80,000-scale with source dates ranging from 1974 to 1984. Wetland delineations were transferred from the photographs to standard USGS quadrangle maps. Types are categorized by plant and soil type, and frequency of flooding characteristics, as defined by the "Classification of Wetlands and Deepwater Habitats of the United States" by Cowardin, et al., published by the FWS in 1979 (FWS/OBS-79/31).

The minimum mapping unit, in general, is from one to three acres depending on wetland type and scale of aerial photography. In the treeless prairies, wetlands as small as 1/4 acre are delineated. Small open water and emergent wetlands are mapped in forested areas. In evergreen forested areas, wetlands smaller than three acres may not be included. Some small wetlands and those obscured by dense forest cover may not be included on the source maps. Scale limitations place constraints on the way in which NWI digital data may appropriately be used. Location accuracy cannot be assumed to exceed National Map Accuracy Standards for 1:24,000-scale maps (± 40 feet for easily identified points).



Quality assurance steps, using sampling techniques, are being taken by DNR to confirm that all digital data accurately reflect the information contained on the original NWI maps. Little of the originally captured digital data, however, have been rigorously checked for positional or attribute accuracy.

Wetlands mapped on a U.S. Geological Survey topographic base map at a scale of 1:24,000 (1" = 2000') are available on paper or teslin from: Minnesota's Bookstore, Ford Building, 117 University Avenue, St. Paul, 55155, Tel. 1-800-657-3757 or 612-297-3000.

Digital NWI data are available for all of Minnesota from LMIC. These data have been taken directly from the original paper maps. Digital files are delivered to LMIC in Digital Line Graph (DLG) format and then converted to ARC/INFO proprietary coverages and checked for file integrity. The files are then converted to an ASCII export format and delivered to DNR. Each file is also converted to a raster format compatible with EPPL7 software.

NWI data are provided on UNIX-compatible cassette tapes (either 150 megabyte, or 8 millimeter) for DLG and ARC export files, and 3.5" diskettes for EPPL7 files.

Inquiries for NWI digital data should be directed to: John Hoshal, MN Land Management Information Center (LMIC), 330 Centennial Building, 658 Cedar Street, St. Paul, 55155, Tel. 612-296-1202.

DNR is maintaining correction files for this data base. If you discover errors in the data, please report potential corrections to: Glen Radde, NWI Data Base Coordinator, DNR-Division of Waters, 500 Lafayette Road, St. Paul, MN 55155-4032, Tel. 612-297-4950.

Wetland Rapid Assessment Methodology

The Minnesota Interagency Wetlands Group has begun developing a wetland assessment methodology based on previous work in Wisconsin. The methodology is intended to be used to document the effectiveness of various wetland functions for a particular wetland or wetland complex. The methodology is flexible so that it can be used for various purposes and for different geographic areas. However, defining the purpose and scope of the assessment is critical if the assessment results are to be meaningful and reproducible. The methodology is more rapid than complex methodologies such as WET and WEM and can generally be applied without additional training by practicing wetland professionals. To receive and test a draft version of the methodology contact, John Jaschke at the Minnesota Board of Water and Soil Resources at (612)297-3432. ■



Takings Law in Plain English

By American Resources Information Network

There are a number of different ways in which communities concerned about fairness and balance for all citizens in addressing the takings issue can protect themselves against potential takings claims. These include the following:



1. Establish a sound basis for land-use and environmental regulations through thorough comprehensive planning and background studies. A thoughtful comprehensive plan or program that sets forth overall community goals and objectives and which establishes a rational basis for land-use regulations helps lay the foundation for a strong defense against any takings claim. Likewise, background studies of development and pollution impacts can build a strong foundation for environmental protection measures.

2. Institute an administrative process that gives decision-makers adequate information to apply the takings balancing test by requiring property owners to produce evidence of undue economic impact on the subject property prior to filing a legal action. Much of the guesswork and risk for both the public official and the private landowner can be eliminated from the takings arena, by establishing administrative procedures for handling takings claims and other landowner concerns before they go to court. These administrative procedures should require property owners to support claims by producing relevant information, including an explanation of the property owner's interest in the property, price paid or option price, terms of purchase or sale, all ➤

appraisals of the property, assessed value, tax on the property, offers to purchase, rent, income and expense statements for income-producing property, and the like.

3. Establish an economic hardship variance and similar administrative relief provisions that allow the possibility of some legitimate economically beneficial use of the property in situations where regulations may have an extreme result. These procedures help to avoid conflicts in the first place by allowing for early consideration of alternatives that may be satisfactory to all concerned. However, relief should be granted only upon a positive showing by the owner or applicant that there is no reasonable economic use of the property as witnessed by evidence produced as outlined in No. 2 above. Remember that the landowner has the burden of proof on hardship and takings issues.



4. Take steps to prevent the subdivision of land in a way that may create economically unusable substandard or unbuildable parcels. Subdivision controls and zoning ordinances should be carefully reviewed, and should be revised if they permit division of land into small parcels or districts that make development very difficult or impossible - for example by severing sensitive environmental areas or partial property rights (such as mineral rights) from an otherwise usable parcel. Such self-created hardships should not be permitted to develop into a takings claim.

5. Make development pay its fair share, but establish a rational, equitable basis for calculating the type of any exaction, or the amount of any impact fee. The U.S. Supreme Court has expressly approved the use of development conditions and exactions, so long as they are tied to specific needs created by a proposed development. The use of nationally accepted standards or studies of actual local government costs attributable to a project, supplemented by a determination of the actual impact of a project in certain circumstances, may help to establish the need for and appropriateness of such exactions.

6. Avoid any government incentives, subsidies, or insurance programs that encourage development in sensitive areas such as steep slopes, floodplains, and other high-hazard areas. Nothing in the Fifth Amendment requires a government entity to promote the maximum development of a site at the expense of the public purse or to the detriment of the public interest. Taxpayers need not subsidize unwise development. At the same time, consider complements to regulation such as incentive programs that encourage good development, when regulatory approaches cannot alone achieve necessary objectives without severe economic deprivation. While not a legal requirement, such programs can help take the sting out of tough, but necessary, environmental and land use controls. ■

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Annual Wetland Report Completed

The Wetland Conservation Act of 1991 requires a report to the Legislature on the status of implementation of state laws and programs relating to wetlands and information on the quantity, quality, acreage, types and public value of wetlands in the state. The BWSR has completed its second report prepared under this mandate of the act.

In addition to information on wetland impacts resulting from the Wetland Conservation Act, this report includes information on wetland activities resulting from the Reinvest in Minnesota (RIM) Reserve Program and the Permanent Wetland Preserves Program. It also includes information on wetland activities that occurred through the actions of the Minnesota Department of Transportation, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and non-profit and private organizations.

The results of the data collected by BWSR from the first full year of WCA implementation indicates a number of successes, the most significant of which is the frequency with which proposed wetland projects were re-worked to avoid wetlands entirely. The report states that of the over 5,000 non-exempt project proposals, 72 percent resulted in avoidance of any impacts to wetlands. Where wetland impacts were unavoidable, nearly 400 acres of wetland were replaced.

Another success noted in the report is the implementation of a wetland banking program, which provides a mechanism for planned wetland replacement and exchanges of wetland credits developed by prior restoration and creation projects. Nearly 400 acres of bank credit have been or are ready for deposit into the state wetland bank, with another 1,000 acres in the construction and review process.

The report also notes the efforts of our state conservation officers in enforcement of WCA. In 1994, conservation officers issued approximately 300 cease and desist orders to stop unapproved work until approval was given. Approximately 90 restoration orders were issued with assistance from the soil and water conservation districts.

Several appeals have also kept BWSR staff busy. In 1994, five appeals were filed and heard by the BWSR Dispute Resolution Committee, requiring about 300 hours of BWSR staff time. The results of the four completed appeals (the fifth one is pending) included two decisions affirming a local government decision, one decision overturning a local government decision and one decision remanding the decision back to the local government unit.

The report also includes some statistics on federal program results. During 1994, the Army Corps of Engineers estimates approximately 1,200 acres of wetlands were created or restored to mitigate impacts to 700 acres of wetlands authorized by the permitting process. The agency is in the process of developing a tracking database and stresses that the above figures are estimates. No accurate acreage information is available for actions or approvals prior to 1994.

The U.S. Fish and Wildlife Service (USFWS) administers several programs aimed at restoring wetlands on private and public lands. The USFWS places high priority on projects that will benefit migratory waterfowl and strives to restore sites as close as possible to their former status (i.e., restoring a partially drained wetland to its pre-drainage condition). In 1994, the USFWS restored approximately 3,161 acres on 939 public and private sites. The USFWS estimates that it has restored 9,372 wetland sites, totalling 30,377 acres, in Minnesota since 1987. These figures include restorations completed on acres enrolled in U.S. Department of Agriculture's 10 year Conservation Reserve Program (CRP).

Several other interesting findings and facts are presented in this annual report. Contact the BWSR office for your copy. ■

Pocket Plant List Available

To meet the need for a pocket-sized field reference for the official federal wetland plant indicator status list, Resource Management Group, Inc., has published the most recent version of the National List of Scientific Plant Names for various regions. RMG's wetland regulatory specialists developed the easy-to-use format to meet their own needs for a convenient field reference. The field guide lists the federally recognized indicator status of wetland plant species alphabetically by both common and scientific names. Previous versions of the plant list were cumbersome to take to the field, but the field guide fits well in a vest pocket.

Region 3 books (includes Michigan, Illinois, Missouri, Iowa, Wisconsin and Minnesota) are $15 each, plus $2 each shipping and handling, from Resource Management Group, Inc., PO Box 487, Grand Haven, Michigan 49417-0487. Please call (616) 847-1680 for bulk order quotes. ■



Correction Notice

I would like to acknowledge the correct spelling of the author's name for the "Wetland Reference Materials" article in the last issue of MARSH MEMOS. This was submitted by Mr. Doug Norris, of the DNR Division of Fish and Wildlife.

We also inadvertently left out a word in the excerpt from the ARIN publication "Takings Law in Plain English" that was included in the Takings Law article. The excerpt should have read;

"Historical precedent and recent case law make clear that reasonable land use and environmental regulations will have **little** trouble withstanding constitutional scrutiny in the vast majority of cases."

Mailing Lists

Address corrections, duplicates or additions should be sent to:

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Beth Kunkel, Editor

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This toll-free phone line links Minnesota's citizens and decision makers to expertise and professional assistance on water issues.

The **Water Line** is operated as a partnership of the American Ground Water Trust and the Minnesota Extension Service, University of Minnesota.

A **Water Line** specialist will talk with you in non-technical language, and offer you advice on your question or problem related to water.

Call the Water Line when you have questions about:

- safety of your household water supply
- water well design, construction and operation
- septic system siting, design and maintenance
- issues dealing with aquifer protection, water supply, lakes, rivers and wetlands
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The **Water Line** is a pilot project beginning in April 1995 and is available in these counties:

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1-800-455-4526

A **Water Line** specialist will be available to take calls from 9:00 a.m. to noon, Monday through Friday. At other times you can leave a message and your call will be returned.

When additional expertise is needed, the **Water Line** specialist will have a volunteer technical adviser contact you. These trained volunteers will have no financial or political interest in your concern, but will offer their expertise to help you make decisions. **Water Line** technical advisers are professionals, such as hydrogeologists, engineers, well contractors, attorneys, aquatic scientists and public agency staff—all interested in public education.

The Partnership

The **Minnesota Water Line** is a unique partnership that links the expertise of the University of Minnesota land grant institution with water industry professionals. The American Ground Water Trust is a national non-profit educational organization with active members in Minnesota. The Minnesota Extension Service is the University of Minnesota outreach network located in every county in the state.

Other cooperators are the Minnesota Board of Water and Soil Resources, St. Louis County, Minnesota Sea Grant College Program, Minnesota Pollution Control Agency, and other state agencies.

The University of Minnesota is an equal opportunity educator and employer.

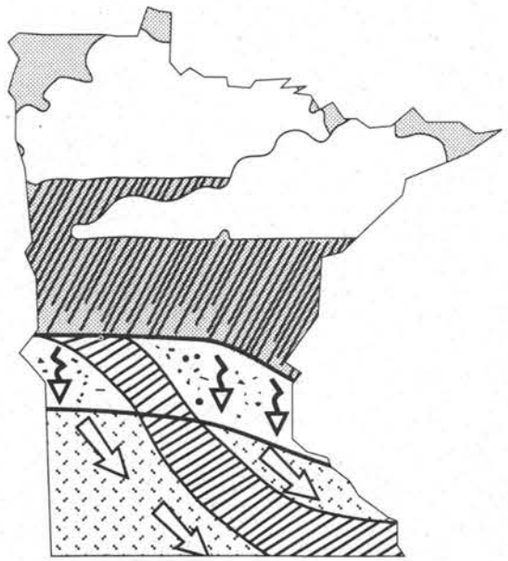
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- Endorsing the objectives of the project.
- Financially supporting the project.
- Joining the other professionals volunteering their time as part of the project team.

We set a target date of January 1,1994 to have the MINNESOTA WATER INFORMATION LINE in operation. With this aggressive schedule in place, we invite you to call us, so we can talk about your participation in this project on the stewardship and management of one of Minnesota's greatest natural resources - WATER!

Contact persons are listed on the back.



Fostering cooperation and dialogue among the public, government, and industry.

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A partnership of the:

American Ground Water Trust

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA

MISSION

The key conviction of this project is that wise water policy requires an informed dialogue among the public, government, and industry. This project's mission is to educate and involve the citizens of Minnesota in the management, decision making, and use of the state's water resources, particularly ground water.

This is a mutually shared mission of the two partners committed to this project—the American Ground Water Trust and the Minnesota Extension Service, University of Minnesota.

GOAL

The goal of this partnership is to establish a toll-free telephone MINNESOTA WATER INFORMATION LINE. The line will provide information, educate the public, and thus empower citizens to become involved in the management of Minnesota's water resources.

There is a rich source of experience and research readily available through the University of Minnesota and the volunteer assistance of water resources and environmental professionals. These volunteer professionals could benefit the state by advocating protection of our natural water resources through the fostering of an informed public. It is the public, via their own individual actions and election of decision makers, who ultimately decide how to manage the state's water resources.

SITUATION

Minnesota is known for its lakes, rivers, and wetlands. What is often not well understood is that our bountiful and much-loved surface waters represent only a small fraction of the volume of water within the state. Most of the state's water resources are held in ground water aquifers. Surface water quality and quantity are inextricably linked to ground water. In fact, 95 percent of the communities in Minnesota rely on ground water for their municipal water supply. This means that three out of four Minnesota residents depend on ground water for their domestic water use.

Environmental regulations are growing more complex and touch all segments of society. Over 80 percent of the sites in the federal Superfund program, involve ground water contamination. An emerging concern for water quality, breakthroughs in technology, and an overall environmental awareness by citizens and public officials, underscores the need for practical education and access to information. Professionals and educators have a responsibility to share their knowledge and expertise with those who must ultimately decide how Minnesota's water resources will be managed.

THE PARTNERS

The MINNESOTA WATER INFORMATION LINE is a unique partnership that links the experience and expertise of the University of Minnesota land grant institution, with professionals in consulting, contracting, research and high-tech industries from communities throughout Minnesota. The American Ground Water Trust is a national non-profit educational organization, with an active Minnesota Education Project Committee of volunteer professionals. The Minnesota Extension Service is the University of Minnesota outreach network in every county in the state, with a long tradition of providing quality education to the citizens of Minnesota.

OPERATION of the MINNESOTA WATER INFORMATION LINE

The toll-free phone line will connect Minnesota citizens and decision makers who have a concern about a water issue, to professionals who have no financial or political interest in their concern. The professionals will function in an educational manner by providing technical information, suggesting alternatives and consequences for action, making appropriate referrals, and encouraging callers to seek and evaluate information.

The staff will consist of 1) a University of Minnesota Extension Educator with water quality expertise and experience, who has access to other University of Minnesota faculty and researchers, and 2) trained volunteer professionals from industry such as hydrogeologists, engineers, well contractors, attorneys, and public agency staff.

The volunteers will be senior level professionals from across the state, who possess good communication skills and are willing to donate their time. They will be interviewed, selected and trained by a team from the two partner organizations. Training will include response protocol, risk communication skills, and information sources and agency responsibilities in Minnesota. It is expected the training program will be a valuable incentive to attract volunteers. The volunteer professionals will be called upon by the Extension Educator when a more specialized area of expertise is needed and they will be asked to respond to the original caller within a reasonable time.

The Extension Educator will have designated hours for taking phone calls daily. After hours the public will have 24-hour access to the line via voice mail to leave messages. The Extension Educator will have appropriate support staff, as well as office, travel, computer, and promotional support. Office space and administrative support will be provided in-kind by the Minnesota Extension Service. The annual budget for operation of the MINNESOTA WATER INFORMATION LINE will be approximately $70,000. This amount is expected to be matched with the value of the volunteers' in-kind contributions each year.

stamp

mailing label

return mailing address



Regional Workshops

Similar topics will be covered at each workshop, but the schedules will be different.

Long Lake Conservation Center, Palisade — May 5-6

- 10:30 am Friday until 1:00 pm Saturday

For more information contact:
Art Norton, Itasca County SWCD, (218) 326-0117
Jean Pitt, Aitkin County Extension, (218) 927-7321

Giant's Ridge, Biwabik — May 19-20

- 3:00 pm Friday until 4:30 pm Saturday

For more information contact:
Mark Johnson, St. Louis Co. Health (218) 725-5217
Gene Bromenshenkel, MES, (218) 726-7512

Wolf Ridge Environmental Learning Center, Finland — June 2-3

- 3:00 pm Friday until 4:30 pm Saturday

For more information contact:
David Abazs, Lake County SWCD, (218) 834-2686
Karen Evens, Cook County, (218) 387-2282

Workshops will be limited to 50 participants. Trained Shoreland Volunteers should be willing to serve as resources for other property owners on their lake or river.

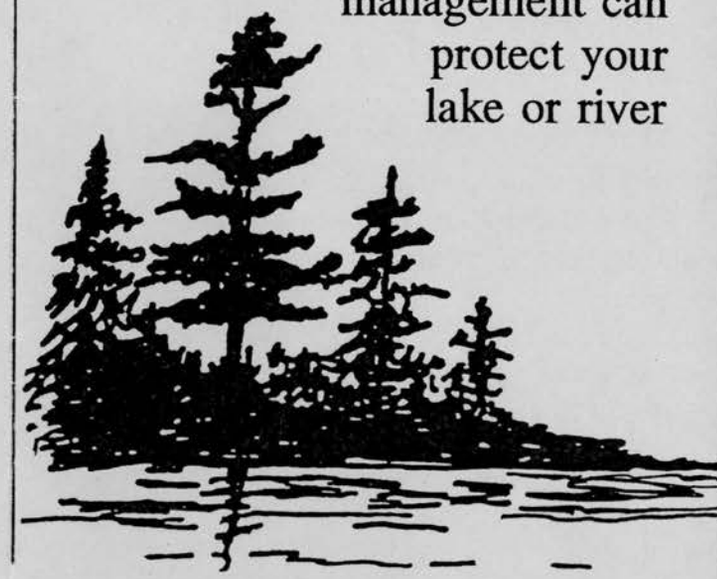
Sponsors

County Water Plans are sponsoring the workshops, with support from the Minnesota Extension Service, Minnesota Board of Water and Soil Resources, and the Minnesota Sea Grant Program.

Be a Shoreland Volunteer

Shoreland Volunteers share their knowledge to help protect water resources

You're invited to attend a workshop to receive valuable training that will help you understand how improved management can protect your lake or river



As a Shoreland Volunteer you will:

1. receive accurate, research-based information on water resource issues;
2. learn effective problem solving strategies from other active volunteers;
3. identify water quality issues and practical approaches to addressing those issues; and
4. take home a resource notebook with over $40 worth of educational materials

What Will the Workshop Cover?

- shoreland best management practices
- interpreting water quality data
- on-site septic systems
- vegetation management
- understanding watersheds
- shoreland property values
- forming lake associations
- communicating with members
- sharing educational materials

Who Should Attend?

Shoreland property owners from the Arrowhead region who are committed to protecting or improving water quality will benefit from the workshops. Participants may or may not already belong to a shoreland owners' association. Volunteers are strongly encouraged to attend as a team and to stay overnight.

Problem Solving Focus

Participants will identify issues that need attention and can develop an action plan to address those problems.
The workshop will help volunteers work with existing associations or bring together neighbors to help solve problems facing their lake or river.

Information Sharing

If your association has produced a newsletter, membership materials, or a brochure, please bring a few copies to share with other participants. One of the best ways to get new ideas for solving common problems, is to see how other groups have responded. This sharing of ideas and examples will be an important part of the workshops.

Cost and Accomodations

A $25 registration fee will cover less than half the cost of the workshop, resource notebooks, lodging, and food. The remaining expenses will be covered by County Water Plans and the Minnesota Extension Service.

Overnight accomodations will be camp-style, with shared rooms and cafeteria meals. Specific information about facilities and travel directions will be sent with your confirmation.



detach and return

Registration

Shoreland Volunteer Workshop

Check one:	*register by:*
❑ Long Lake CC, May 5-6	April 10
❑ Giant's Ridge, May 19-20	May 1
❑ Wolf Ridge ELC, June 2-3	May 8

Name _____

Address _____

_____

City _____ zip _____

Daytime phone (____) _____

Registration Fee is $25.00

make checks payable to: University of Minnesota

Mail payment and registration form to:
Barbara Liukkonen, BWSR, Room 403
394 South Lake Avenue / Duluth, MN 55802

You will receive a confirmation letter
2 weeks before the workshop

1. What lake or river is your property on?
2. What county is your shoreland property in?
3. Do you belong to a shoreland association?
   yes **no**
4. What's the most serious problem or issue facing residents on your lake or river?
5. Why do you want to attend the workshop?

Guidelines for Stenciling

- **For successful stenciling, the weather must be dry and calm with temperatures above 50°**
- **Each drain will take 15-20 minutes to stencil**
- **One adult is needed for each team of 3-5 youth**
- **Volunteers should be at least 12 years old**

For more information or
to sign up YOUR volunteer group
as storm drain painters, contact:

DIANE LOMMEL
WILKIN COUNTY SWCD
(812) 643-3051



What Can YOU Do?

You can help prevent pollution by volunteering to stencil DON'T DUMP messages near storm drains in your neighborhood.

What is a storm drain?

Storm drains are found in most communities in Minnesota. They draw off rainwater to prevent street flooding. Rainwater often carries street debris - trash, leaves, grass, pet wastes, car fluids - into storm drains. Pesticides, paints, antifreeze and used motor oil can end up in storm drains when people improperly dispose of these by dumping them in the street or down a storm drain.

What is the problem?

Have you ever wondered where water goes after it "disappears" into a storm drain? Storm water is usually not treated at a wastewater plant, but is discharged directly into Minnesota's rivers, lakes, or wetlands through outfall pipes. Runoff carries contaminants and debris picked up along the way, polluting lakes and streams. It can also contaminate ground water and threaten drinking water supplies.



PAINT THE TOWN

is a community service project designed to help protect the

OTTER TAIL, RED, AND BOIS DE SIOUX RIVERS

Paint the Town sponsors:

Wilkin County Environmental Office
Wilkin County Extension Office
Wilkin County SWCD
City of Breckenridge

Paint the Town is supported in Minnesota by the:
Board of Water and Soil Resources
Minnesota Extension Service

Preparation

1. Discuss the idea of stenciling "Don't Dump" messages by storm drains in your community or neighborhood with your club or organization. This project is appropriate for youth groups (at least 12 years old), civic organizations, lake associations, or neighborhood groups.

2. Plan to spend time organizing your group and contacting community officials before you start to paint.

3. When you call to sign up your volunteer group, you will need to know:
   - where you want to stencil
   - who will be stenciling
   - who will be supervising the group

   For more information, contact:
   Diane Lommel, 643-3051
   Wilkin Soil & Water
   Conservation District

4. Your group will receive a confirmation letter. Carry a copy of it when Painting the Town. This will help answer questions about storm drain stenciling.

5. Form stenciling teams and assign individual responsibilities for cleaning the road, painting, delivering stencils and watching traffic.

6. You may want to post flyers and/or deliver brochures to neighborhood residents one week in advance to inform them about the storm drain stenciling.

Painting

1. All members of your group should wear reflective safety vests, gloves, and old clothing.

2. Set up safety cones around the area where you'll be stenciling.

3. Clean dirt and debris from the road where the stencil will be. Tape the stencil in place with masking tape.

4. Don't use too much paint or it will seep under the stencil and blur the design! Shake can before spraying. Hold can 6" above the stencil and use a back and forth motion across the stencil. Lift the stencil carefully to avoid smearing the paint.

5. If you have trouble with the paint, don't try to clean and redo it - it will probably get worse. Move on to another drain.

6. Have several members of your team deliver brochures during the stenciling. Remove the stake marking the storm sewer when you're finished.

7. Move the safety cones to the next drain. Don't leave any trash behind!

Thanks for helping protect Minnesota's water resources

Follow-up

1. Wipe excess paint off the stencils, taking care not to tear them.

2. Fill out evaluation forms and return them with the stenciling kits.

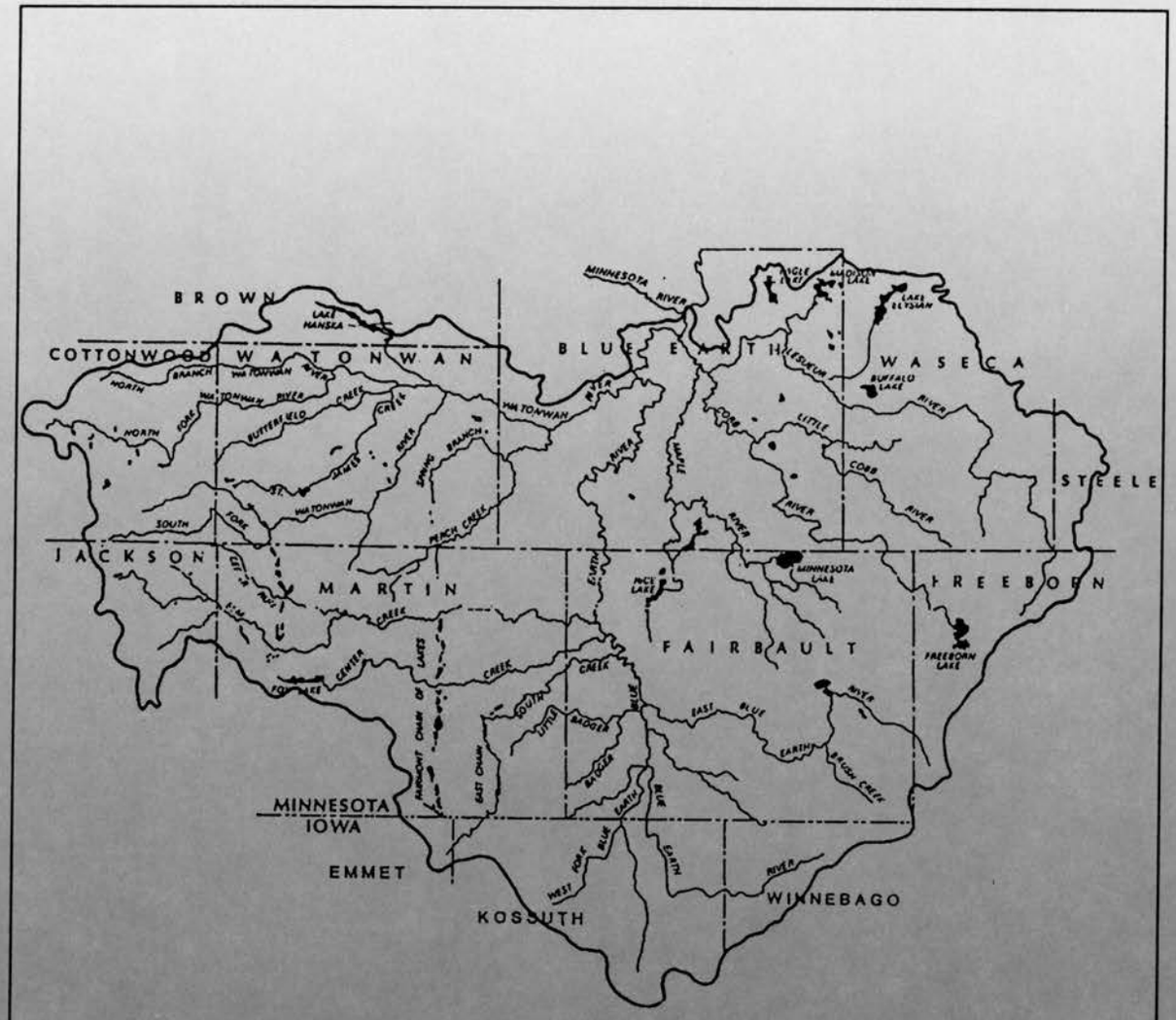
!! SAFETY FIRST !!

- ✓ **One adult is needed for each team of 3-5 youth**
- ✓ **Volunteers should be at least 12 years old**
- ✓ **Each volunteer must have a signed liability waiver**
- ✓ **All volunteers should wear brightly colored, old clothing**
- ✓ **Only stencil drains in the assigned area**
- ✓ **Never stencil if cars are parked near the drain**
- ✓ **Adult chaperones must make sure paint isn't used for grafitti**
- ✓ **Use the sidewalk when delivering brochures - don't cut across lawns or gardens**

ONE MEMBER OF THE TEAM SHOULD ALWAYS WATCH FOR TRAFFIC

Blue Earth River Basin Initiative

Report to the Board of Water and Soil Resources on the Special Minnesota River Basin Fund



April 1995

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BLUE EARTH RIVER BASIN INITIATIVE
COMMITTEE MEMBERS

POLICY COMMITTEE

Raymond Phelps
Blue Earth County SWCD

Jan Willette
Faribault County SWCD

Roger Benz
Martin SWCD

Curt Russell
Waseca SWCD

Harold Wolle, Jr.
Watonwan SWCD

George Doyle
Waseca County Commissioner

TECHNICAL COMMITTEE

Rick Hanna
Blue Earth CLWP

Charles Peterson
Blue Earth County SWCD

Gary Wehrenberg
Faribault County SWCD & CLWP

Linda Meschke
Martin CLWP

Jerry Voyles
Martin SWCD

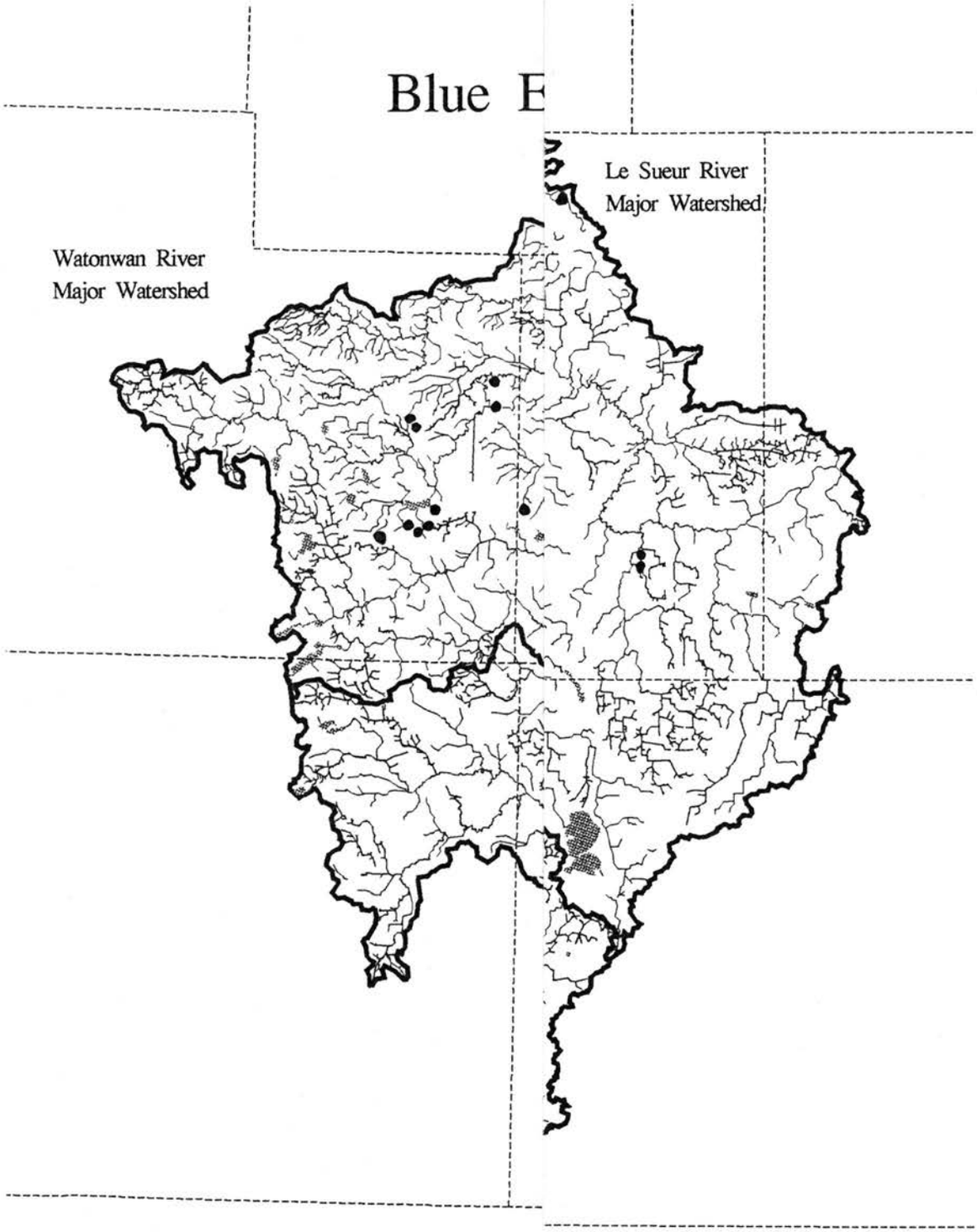
Marla Watje
Waseca SWCD

Mike Thissen
Watonwan CLWP

Carole Krueger
Watonwan SWCD

Mary Mueller
BERBI Coordinator

Blue E


Le Sueur River
Major Watershed
Watonwan River
Major Watershed

Blue Earth River Basin

Watonwan River
Major Watershed

Le Sueur River
Major Watershed

Blue Earth River
Major Watershed

BLUE EARTH RIVER BASIN INITIATIVE
REPORT ON ACCOMPLISHMENTS WITH THE
BOARD OF WATER AND SOIL RESOURCES
SPECIAL MINNESOTA RIVER BASIN FUND

INTRODUCTION

The Blue Earth River Basin Initiative (BERBI) has received two grants to accelerate the state cost-share program which funds conservation practices. The grants are from the Board of Water and Soil Resources (BWSR) Special Minnesota River Basin Fund. The fiscal year (FY) 1994 grant of $281,620 was received in April of 1994; the FY 1995 grant of $230,000 was received in August of 1994. This report outlines the use of both of these grants and the water quality benefits and soil savings which will result from implementation of the projects funded.

Conservation grants are made available to landowners and operators within the geographic area of the Blue Earth River basin. Cost-sharing grants are available for up to 75% of the cost of the following practices:

- Terraces
- Erosion Control Structures
- Manure Management Systems
- Stormwater Control - Diversions
- Stormwater Control - Waterways
- Stormwater Control - Water and Sediment Control Basins
- Critical Area Stabilization
- Contour Strip Cropping
- Field Windbreaks.

Cost-sharing grants of up to 50% are available for streambank, lakeshore, and roadside stabilization projects.

Projects considered for funding need to meet all the guidelines of the state cost-share program. BERBI defined three priority areas for funding: 1) lands within 1,000' of surface water, 2) practices which prevent sediment and nutrients from entering open tile intakes, and 3) local priorities. Local priorities are practices found to be highly beneficial to water quality even though they do not meet the first two priorities. Practices considered for funding need to be recommended by the local soil and water conservation district (SWCD). A written explanation of priority reasoning is provided to the BERBI technical and policy committees. The technical committee reviews each project and makes funding recommendations to the policy committee. The policy committee makes final funding decisions.

Funds for both grants were 100% encumbered at the April 20, 1995 BERBI policy committee meeting. Requests for an additional $49,129 were also presented at the April meeting and will be considered for future implementation as funds become available. Seventy-seven percent of the projects for which funds are encumbered meet BERBI's first priority of being within 1,000' of surface water, 19% are within 1000' of an open tile intake which delivers pollution to surface water, and 4% meet local priorities.

Funds are being used to install the following projects:

Practice	Units	% of Dollars
Manure Management System	12	44.1
Grassed Waterway	56,515' (10.7 miles)	24.2
Terrace	15,800' (3.0 miles)	13.9
Water & Sediment Control Basin	9,200' (27 basins)	6.9
Structure	7	5.5
Critical Area Stabilization	7.1 acre	2.4
Diversion	2,720'	2.1
Streambank Stabilization	425'	0.9

Graphs on pages 6-13 outline these expenditures. Detailed information on each contract can be found on matrix pages 18-24.

Estimated soil loss reduction from the projects outlined is 27,408 tons per acre per year; 6,786 acres will be treated. Manure from 3,036 animal units will receive proper treatment as a result of this grant.

An important part of developing a meaningful conservation implementation program is the successful installation of practices. The 92 projects outlined in this report will serve as demonstrations of good land stewardship and will display how BERBI, SWCDs, and county water planning can lead to improved water quality for the Blue Earth River and its outlet.

FISCAL REPORT

The following tables outline the implementation expenditures from the FY 1994 and FY 1995 grants. The FY 1994 grant included $56,324 for technical/administrative purposes; FY 1995 included $30,000 for these purposes. The technical/administrative expenditures are outlined on pages 14-16.

GRANT 02-12-95 BWSR ACCELERATED COST-SHARE (GRANT 1)

PROJECT #	PRACTICE	DATE	ENCUMBERED	DATE	CHK#	SPENT	SLIPPAGE	BALANCE
		4-8-94						281,620.00
	20% Tech/Admin Funds	4-8-94				56,324.00		225,296.00
83-02-94-01	Critical Area Stabilization	5-19-94	1,635.00					223,661.00
83-02-94-02	An Waste Cntrl - Earthen Basin	5-19-94	26,505.00					197,156.00
83-02-94-03	Stormwater Cntrl - Waterway	5-19-94	1,725.00					195,431.00
83-02-94-04	Stormwater Cntrl - Waterway	5-19-94	6,493.50					188,937.50
83-02-94-05	Critical Area Stabilization	5-19-94	733.50	11/17/94	1023	321.27	412.23	188,616.23
83-02-94-06	Stormwater Cntrl - Waterway	5-19-94	3,270.00					185,346.23
83-02-94-07	Critical Area Stabilization	5-19-94	5,385.00					179,961.23
83-02-94-08	Stormwater Cntrl - Dike	5-19-94	1,425.00					178,536.23
83-02-94-09	Stormwater Cntrl - Waterway	5-19-94	1,695.00					176,841.23
83-02-94-10	Stormwater Cntrl - Waterway	5-19-94	979.95	9-15-94	1010	947.29	32.66	175,893.94
83-02-94-11	Stormwater Cntrl - Waterway	5-19-94	6,180.00					169,713.94
83-02-94-15	Stormwater Cntrl - Waterway	5-19-94	2,992.50					166,721.44
07-02-94-01	Animal Waste Control	6-16-94	10,000.00					156,721.44
07-02-94-01A	Amendment to Contract	9-15-94	11,664.00					145,057.44
07-02-94-02	Animal Waste Control	6-16-94	11,500.00					133,557.44
81-02-94-01	An Waste Cntrl - Earthen Basin	6-16-94	10,650.00					122,907.44
83-02-94-12	Stormwater Cntrl - Waterway	6-16-94	1,674.75					121,232.69
83-02-94-13	Critical Area Stabilization	6-16-94	1,890.00					119,342.69
83-02-94-14	Stormwater Cntrl - Waterway	6-16-94	1,732.50					117,610.19
81-02-94-02	Erosion Cntrl - Terrace	7-21-94	3,750.00					113,860.19
81-02-94-03	Cancelled	7-21-94	0.00					113,860.19
81-02-94-05	Ag Waste Cntrl - Earthen Basin	7-21-94	4,500.00					109,360.19
81-02-94-04	Erosion Cntrl - Terrace	7-21-94	1,687.50					107,672.69
22-02-94-01	Erosion Control Structure	7-21-94	5,652.31					102,020.38
46-02-94-01	Stormwater Cntrl - Waterway	8-18-94	3,000.00					99,020.38
83-02-94-16	Critical Area Stabilization	8-18-94	525.00					98,495.38
81-02-94-06	Stormwater Cntrl - Waterway	10-20-94	1,125.00					97,370.38
81-02-94-07	Erosion Cntrl - Terrace	10-20-94	3,375.00					93,995.38
81-02-94-08	Animal Waste Cntrl - poured	10-20-94	10,557.75					83,437.63
81-02-94-09	Erosion Cntrl - Sediment Basin	10-20-94	6,600.00	1-11-95	1032	3,625.50	2,974.50	79,812.13
81-02-94-10	Erosion Cntrl - Sediment Basin	10-20-94	4,800.00	1-14-95	1039	2,532.20	2,267.80	77,279.93
81-02-94-11	Erosion Cntrl - Terrace	10-20-94	3,300.00	1-14-95	1039	1,959.50	1,340.50	75,320.43
81-02-94-12	Erosion Cntrl - Terrace	10-20-94	1,851.00	3-16-95	1045	1,851.00	0.00	73,469.43
81-02-94-12A	Erosion Cntrl - Terrace	2-14-95	1,281.00	3-16-95	1045	1,281.00	0.00	72,188.43
81-02-94-13	Erosion Cntrl - Terrace	10-20-94	17,587.50			11,187.50		61,000.93
		partial pymt		1-14-95	1039	6,400.00		54,600.93
22-02-94-02	Erosion Cntrl - Terrace	11-17-94	5,899.50					48,701.43
22-02-94-03	Critical Area Grass Seeding	11-17-94	381.00					48,320.43
22-02-94-04	Stormwater Cntrl - Waterway	11-17-94	2,186.63					46,133.80
22-02-94-05	Stormwater Cntrl - Waterway	11-17-94	2,293.87					43,839.93
81-02-94-14	Erosion Cntrl - Terrace Vridge	11-17-94	712.50					43,127.43
81-02-94-15	Erosion Cntrl - Block Chute	11-17-94	4,312.50					38,814.93
22-02-94-06	Erosion Cntrl - Sediment Basin	12-15-94	4,659.75					34,155.18
07-02-95-06	Stormwater Cntrl - Waterway	4-20-95	7,460.00					26,695.18
07-02-95-07	Grade Stabilization Structure	4-20-95	6,055.00					20,640.18
22-02-95-14A	Stormwater Cntrl - Waterway	4-20-95	273.75					20,366.43
22-02-95-15A	Stormwater Cntrl - Waterway	4-20-95	631.87					19,734.56
81-02-95-21	Stormwtr Cntl wtr/sedmt Basin	4-20-95	4,457.96					15,276.60
83-02-95-06A	Stormwater Cntrl - Waterway	4-20-95	2,947.50					12,329.10
83-02-95-22	Grade Stabilization Structure	4-20-95	2,165.47					10,163.63
83-02-95-24	Stormwater Cntrl - Waterway	4-20-95	3,463.13					6,700.50
83-02-95-25	Erosion Cntrl - Terrace Broad	4-20-95	6,700.50					0.00

GRANT 03-06-95 **BWSR ACCELERATED COST-SHARE (GRANT 2)**

PROJECT #	PRACTICE	#	AMT	DATE	ENCUM	DATE	CHK#	SPENT	SLIPPAGE	BALANCE
				8-8-94						230,000.00
	20% Tech/Admin Funds			8-8-94				30,000.00		200,000.00
22-03-95-07	Stormwater Cont. - Waterway		1450'	1-19-95	3,753.38					196,246.62
22-03-95-08	Stormwater Cont - Waterway		1660'	1-19-95	2,388.75					193,857.87
22-03-95-09	Stormwater Cont - Waterway		575'	1-19-95	934.69					192,923.18
22-03-95-10	Stormwater Cont - Waterway		5400'	1-19-95	12,073.13					180,850.05
17-03-95-01	Stormwater Cont - Waterway		850'	1-19-95	1,798.00					179,052.05
17-03-95-02	Stormwater Cont - Waterway		2900'	1-19-95	7,270.00					171,782.05
17-03-95-03	Stormwater Cont - Waterway		1200'	1-19-95	2,542.50					169,239.55
17-03-95-04	Stormwater Cont - Waterway		400'	1-19-95	1,128.75					168,110.80
17-03-95-05	Stormwater Cont - Waterway		1000'	1-19-95	1,177.50					166,933.30
17-03-95-06	Stormwater Cont - Waterway		1100'	1-19-95	2,100.00					164,833.30
83-03-95-17	Diversion		500'	2-14-95	1,412.85					163,420.45
83-03-95-18	Diversion		860'	2-14-95	1,008.00					162,412.45
83-03-95-19	Terrace - Broad Base		300'	2-14-95	1,407.00					161,005.45
83-03-95-20	Terrace - Broad Badse		250'	2-14-95	869.25					160,136.20
83-03-95-21	Strm Wtr Cntrl - Water/Sed Cor	5		2-14-95	4,218.75					155,917.45
46-03-95-02	Stormwater Cont - Waterway		650'	2-14-95	750.00					155,167.45
46-03-95-03	Stormwater Cont - Waterways	2		2-14-95	2,100.00					153,067.45
46-03-95-04	Stormwater Cont - Waterways		300'	2-14-95	750.00					152,317.45
46-03-95-05	Stormwater Cont - Waterway		1700'	2-14-95	2,250.00					150,067.45
46-03-95-06	Terrace		3550'	2-14-95	4,500.00					145,567.45
46-03-95-07	Stormwater Cont - Waterway		1300'	2-14-95	1,875.00					143,692.45
07-03-95-04	Manure Mgmt. System	1		2-14-95	13,950.00					129,742.45
81-03-95-16	Stormwater Cont - Waterway	2	700'	3-16-95	1,050.00					128,692.45
81-03-95-17	Stormwater Cont - Sed Basin	7	2150'	3-16-95	7,406.25					121,286.20
81-03-95-18	Stormwater Cont - Waterway	2	1350'	3-16-95	1,771.88					119,514.32
81-03-95-19	Stormwater Cont - Sed Basin	2	600'	3-16-95	1,425.00					118,089.32
81-03-95-20	Stormwater Cont - Waterway		1000'	3-16-95	1,522.50					116,566.82
17-03-95-07	Stormwater Cont - Waterway			3-16-95	1,057.50					115,509.32
17-03-95-08	Stormwater Cont - Waterway			3-16-95	585.00					114,924.32
17-03-95-09	Terraces			3-16-95	3,251.00					111,673.32
22-03-95-11	Ag Waste Cont - Waste Pond		242,837 ft3	3-16-95	33,356.38					78,316.94
22-03-95-16	Ag Waste Cont - Waste Pond		91,000 ft3	3-16-95	13,500.00					64,816.94
22-03-95-17	SLR - Rip Rap (50%)		425'	3-16-95	3,750.00					61,066.94
22-03-95-12	Stormwater Cont - Side Inlet	1		3-16-95	2,039.08					59,027.86
22-03-95-13	Stormwater Cont - Waterway		1475'	3-16-95	2,355.94					56,671.92
22-03-95-14	Stormwater Cont - Waterway		300' w tile	3-16-95	806.25					55,865.67
22-03-95-15	Stormwater Cont - Waterway		450' w tile	3-16-95	1,149.38					54,716.29
22-03-95-18	Ag Waste Cont - Waste Pond		96,728 ft3	3-16-95	16,341.40					38,374.89
46-03-95-08	Stormwater Cont - Waterway		1 acre	3-16-95	1,500.00					36,874.89
46-03-95-09	Ag Waste Cont - Waste Pond			3-16-95	16,875.00					19,999.89
07-03-95-05	Ag Waste Cont - Earthen Pit	1		4-20-95	8,025.00					11,974.89
22-03-95-19	Erosion Cont - Rock Chute	1		4-20-95	4,390.23					7,584.66
81-03-95-22	Side Inlet Structure	1		4-20-95	1,875.00					5,709.66
83-03-95-23	Terrace - Grassed back		900'	4-20-95	4,213.13					1,496.53
83-03-95-26	Diversion		760'	4-20-95	1,496.53					0.00

ATTACHMENT B

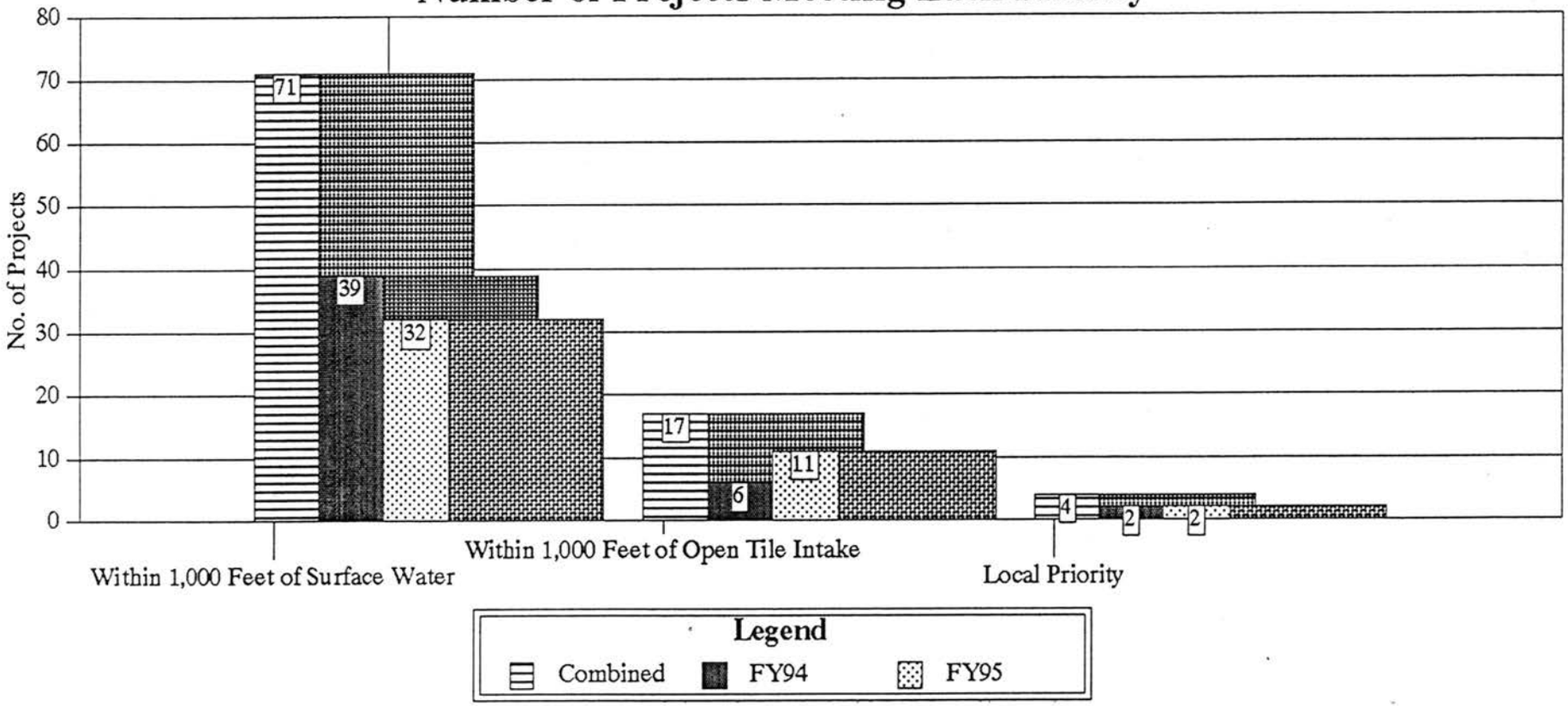
TECHNICAL/ADMINISTRATIVE BUDGET June 1994 - December 1995

GRANT 02-12-95	DATE:	CHECK #	Salary/Benefits	Equipment	Training	Phone/Supplies	Vehicle	Gas/Misc	BALANCE
TOTAL BUDGET			30,980.00	3,544.00	4,500.00	2,000.00	11,406.00	3,894.00	56,324.00
TOTAL SPENT			8,745.66	2,688.68	4,139.00	128.07	11,406.00	642.03	
BALANCE			**$22,234.34**	**$855.32**	**$361.00**	**$1,871.93**	**$0.00**	**$3,251.97**	
Van	6-21-94	1001					11,406.00		44,918.00
Survey Equipment	6-23-94	1002		1,711.53					43,206.47
Pat Hailey	8-18-94	1008			2,333.33				40,873.14
Grainland Coop	8-18-94	1007						58.62	40,814.52
Grainland Coop	9-15-94	1011						62.13	40,752.39
Walmart	9-15-94	1012				3.44			40,748.95
L and M Motors	9-15-94	1013						38.38	40,710.57
Beltline Oil Plus	10-3-94	1015						21.25	40,689.32
Bartley Printing	10-3-94	1016				30.10			40,659.22
Driver Vehicle/Tabs	10-5-94	1017						170.50	40,488.72
Grainland Coop	10-5-94	1018	(June - August)					54.87	40,433.85
Reimb to SWCD	10-20-94	1021	8,745.66	402.52		94.53		78.29	31,112.85
Grainland Coop	11-02-94	1024						32.86	31,079.99
Walmart	11-02-94	1025						12.52	31,067.47
Grainland Coop	12-05-94	1027						65.22	31,002.25
Bellkato	12-15-94	1028		547.00					30,455.25
Breens	12-05-94	1030		27.63					30,427.62
US Postmaster	1-12-95	1031						7.50	30,420.12
Grainland Coop	1-19-95	1034						39.89	30,380.23
Pat Haley	1-19-95	1035			639.00				29,741.23
Pat Haley	1-19-95	1036			1,166.67				28,574.56

GRANT 03-06-95	DATE:	CHECK #	Salary/Benefits		Training	Phone/Supplies		Gas/Misc	BALANCE
TOTAL BUDGET			21,000.00		4,500.00	2,250.00		2,250.00	30,000.00
TOTAL SPENT			17,611.18		300.00	360.78		127.31	
BALANCE			**$3,388.82**		**$4,200.00**	**$1,889.22**		**$2,122.69**	
Mankato State Univ	2-14-95	1038			300.00				29,700.00
Graninland Coop	2-09-95	1040						29.60	29,670.40
Midwest Plan Service	2-23-95	1042				24.50			29,645.90
Grainland Coop	3-9-95	1046						27.25	29,618.65
Walmart	3-9-95	1047	(Sept - Dec)					2.47	29,616.18
Faribault County Treas	3-16-95	1048	9,306.80						20,309.38
Faribault Co SWCD	3-16-95	1049				215.00			20,094.38
Grainland Coop	4-13-95	1051						41.78	20,052.60
Nicole Vanvalkenburg	4-13-95	1052						6.75	20,045.85
Nicole Vanvalkenburg	4-13-95	1053				48.87			19,996.98
Walmart	4-13-95	1054				12.96			19,984.02
Hanson Auto Repair	4-13-95	1055						19.46	19,964.56
Faribault County SWCD	4-13-95	1056	(Jan 95 - Apr 7, 95)			59.45			19,905.11
Faribault County Treas	4-19-95	1057	8,304.38						11,600.73

Special Minnesota River Basin Fund

Number of Projects Meeting Each Priority



Local Priorities

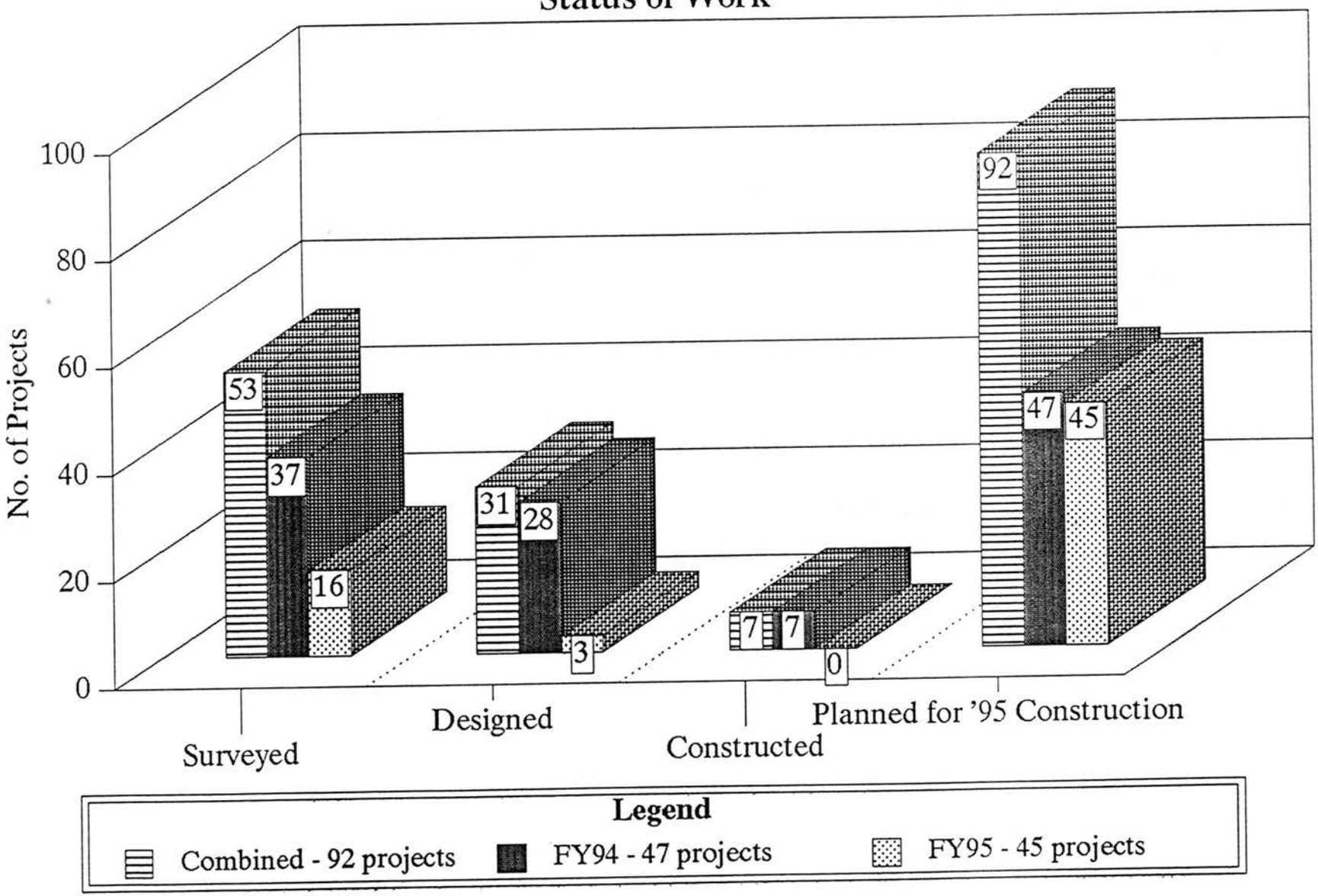
17-03-95-05 & 17-03-95-06: sediment enters road ditch where there is concentrated flow, road ditch outlets into creek

07-02-94-02: feedlot runoff flows down steep slope, 1,600 feet to Blue Earth River floodplain

81-02-94-12: sediment flows 1,050 feet to county ditch

Special Minnesota River Basin Fund

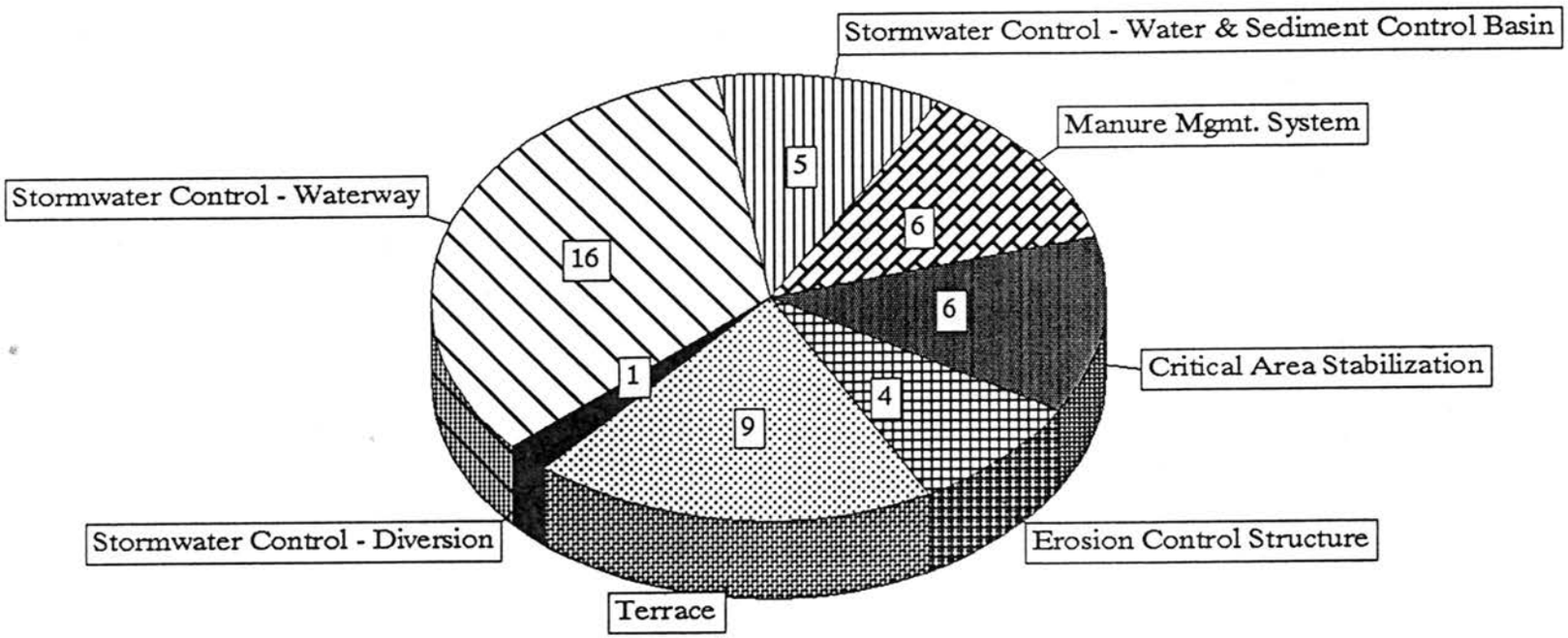
Status of Work



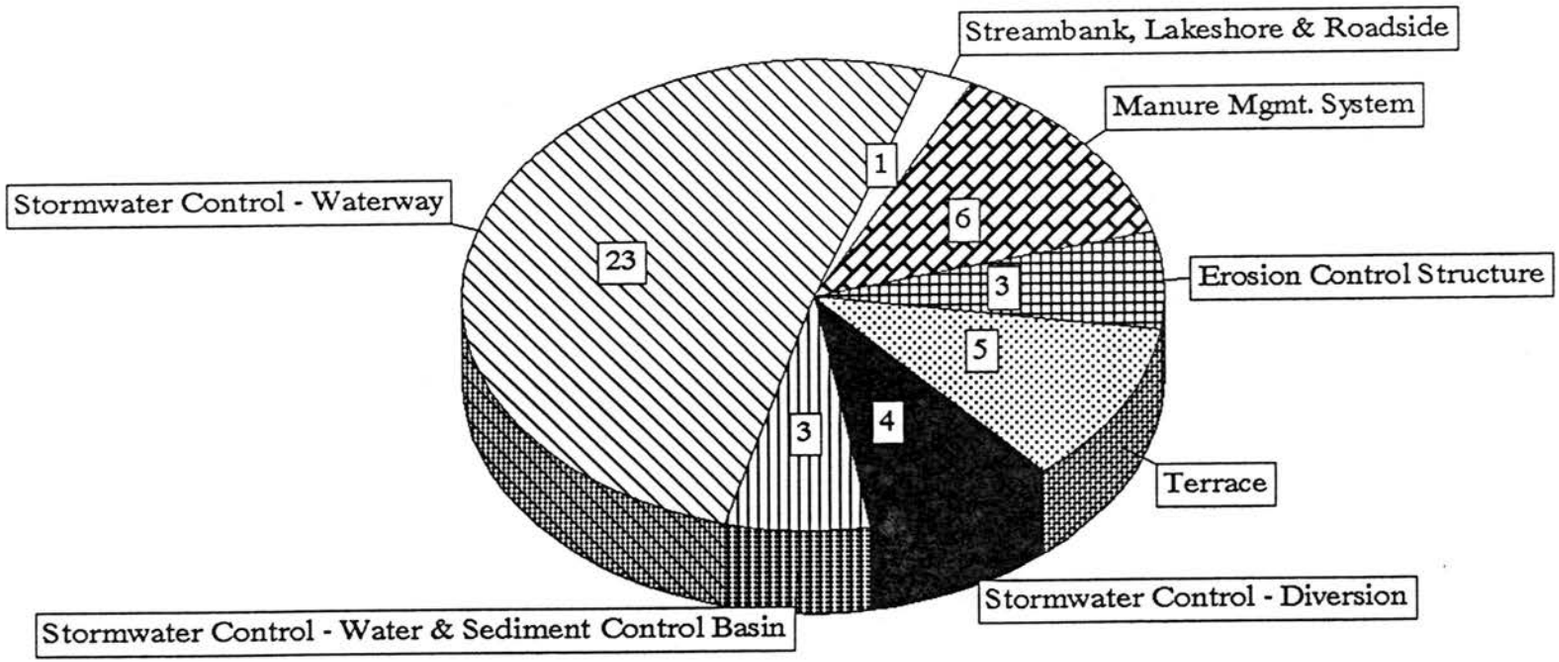
Special Minnesota River Basin Fund

Accelerated Cost-Share - FY94

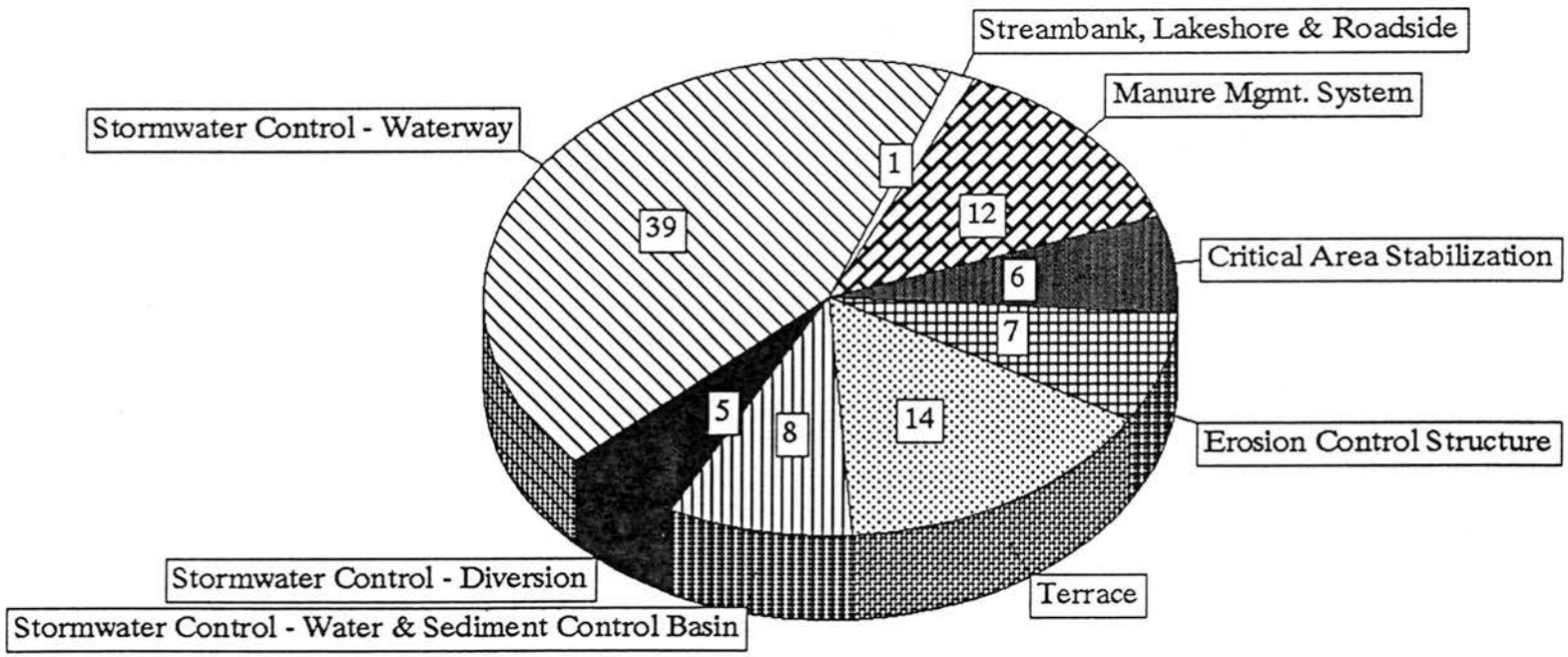
Number of Practices



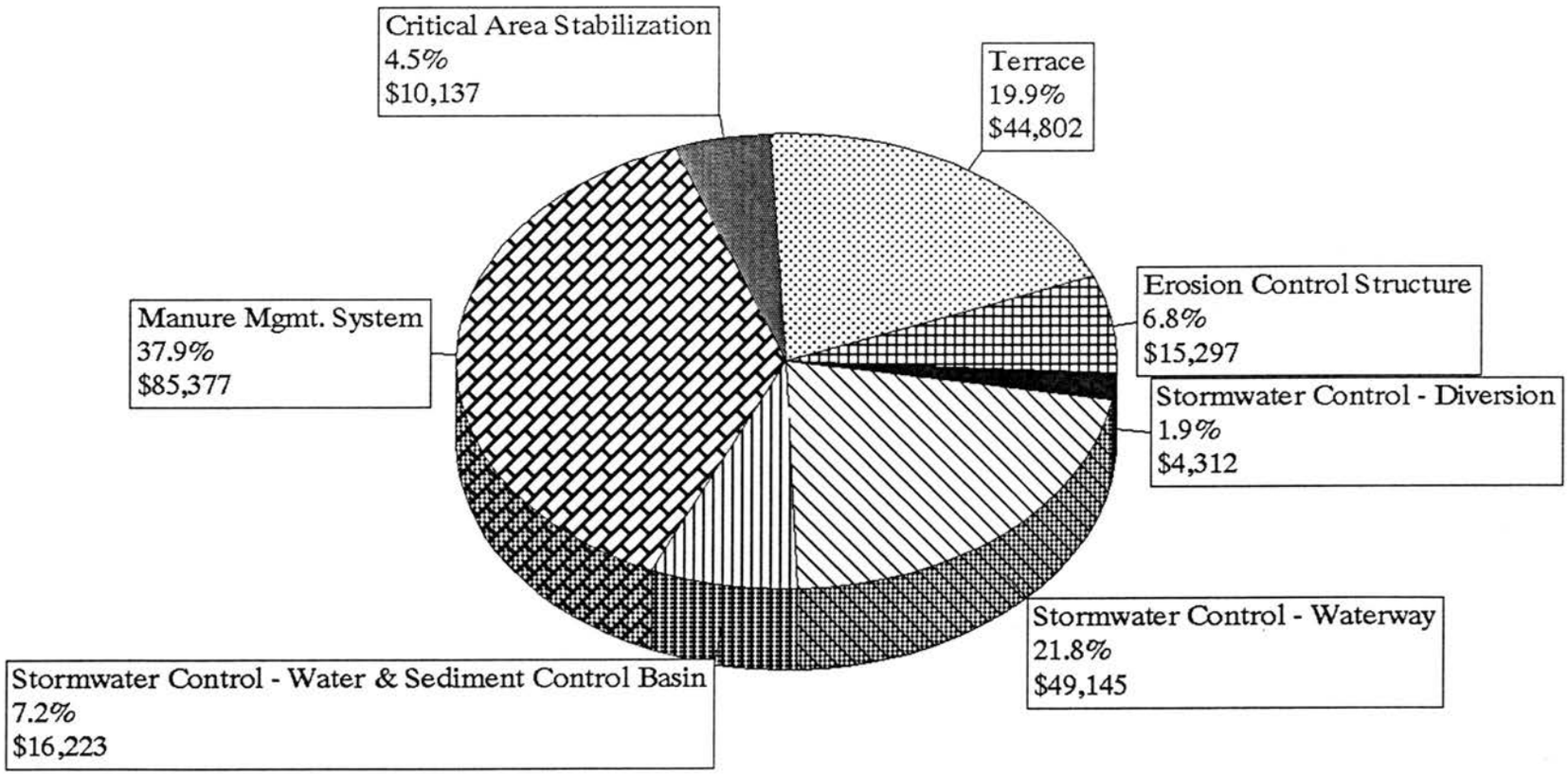
Special Minnesota River Basin Fund
Accelerated Cost-Share - FY95
Number of Practices



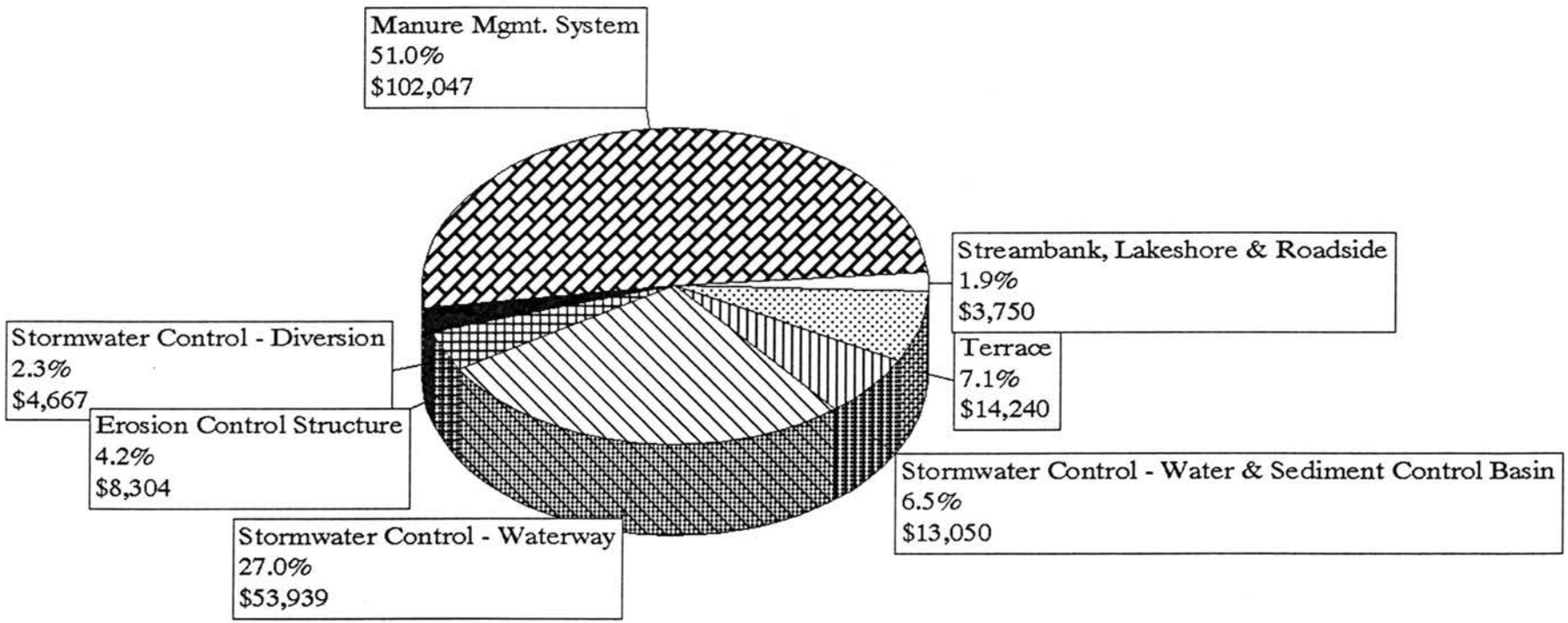
Special Minnesota River Basin Fund
Accelerated Cost-Share - FY94 & FY95
Number of Practices



Special Minnesota River Basin Fund
Accelerated Cost-Share - FY94
Fund Utilization



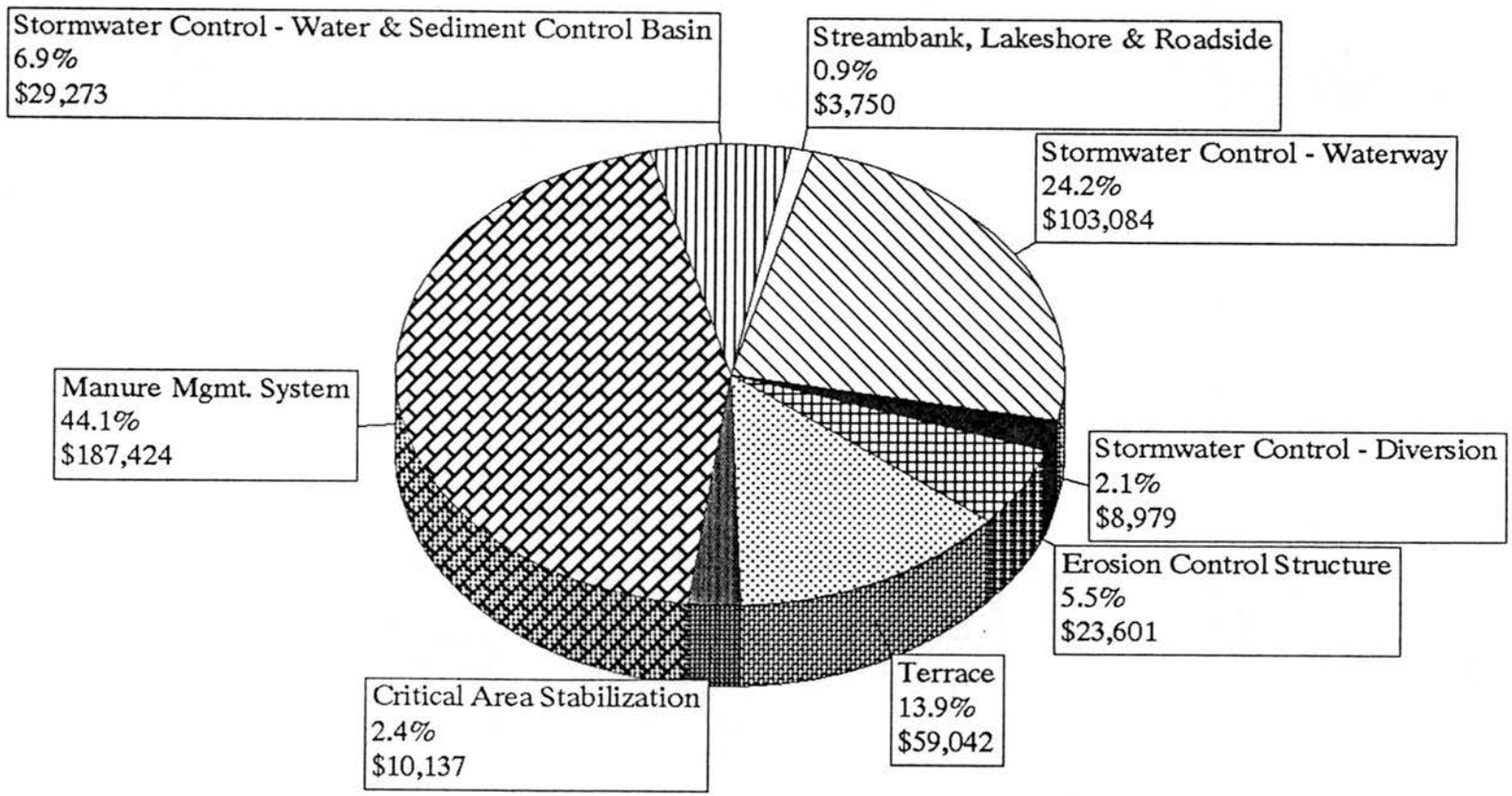
Special Minnesota River Basin Fund
Accelerated Cost-Share - FY95
Fund Utilization



Special Minnesota River Basin Fund

Accelerated Cost-Share - FY94 & FY95

Fund Utilization



TECHNICAL/ADMINISTRATIVE FUND

Combined technical/administrative dollars for the FY 1994 and FY 1995 grants is $86,324. A detailed budget is presented on page 5. This section outlines how these funds are being utilized.

Salary/Benefits ($51,980)
BERBI hired Nichole Van Valkenburg, assistant engineer, in June of 1994. The assistant engineer is responsible for providing technical support for the BERBI Special Minnesota River Fund grants. Nichole is a graduate of the University of Minnesota with a degree in Civil Engineering and is working toward a professional engineering license. The assistant engineer is housed in the Faribault SWCD office. Office space and insurance is provided by the Faribault SWCD.

Equipment ($3,544)
BERBI has purchased survey equipment including: level, tripod, rod, hand level, measuring wheel, 100' tape, compass, two way radios, orange vest and rain suit, a concrete manure tank design manual, office furniture, drafting table, and drafting supplies. This equipment is cared for and used by the assistant engineer for practice installation within the basin. BERBI intends to use the remaining dollars in this budget toward a lap top computer.

Training ($9,000)
BERBI evaluated training needs for the assistant engineer and the technical staff of the member SWCD's and county water plan coordinators. The needs were evaluated as to what was needed to carry out the accelerated cost-sharing. BERBI contracted with Pat Hailey, a former Soil Conservation Service engineering technician, to provide training. The table on the following page outlines the courses offered and the number of staff attending each session. To date BERBI members staff has benefited from 1,004 person hours of training. Additional small group training is planned for the spring of 1995. BERBI also intends to purchase a display board which will be used to promote this program as well as other conservation programs.

Phone and Supplies ($4,250)
This budget has been utilized primarily for phone use and office supplies. The remaining funds are targeted for approximately $150 of office supplies, $125 of survey and construction supplies, $600 of phone use and the remainder for the purchase of a lap top computer.

Vehicle ($11,406)
BERBI purchased a 1989 Dodge Caravan for use by the assistant engineer and as needed for BERBI business.

Gas/Miscellaneous ($6,144)
This budget is used primarily for vehicle gas and upkeep. A portion of the remaining dollars may be used toward the purchase of a lap top computer.

BERBI ASSISTANT ENGINEER
TRAINING COMPLETED

Title	Date	Number Attending
Using the Technical Guide and Engineering Manuals - Emphasis Part 4	June 22	10
Hydrology: 1. Rainfall frequency, intensity, duration, and distribution 2. Land use and hydrologic soil groupings 3. Soil cover complex numbers 4. Runoff peaks and volumes	June 22, 23	10
Hydraulics - Mannings Equation	June 24	10
Watershed Delineation	June 24	10
Grassed Waterway Design	July 6	12
Manure Management System Design - Basics	July 7	10
Erosion Control Structure Introduction to Various Types	July 20	9
Side Inlet - Design	July 20, 27	9,7
Erosion Control Structures and Field Day to Determine Type	July 22	10
Concrete Block Shoots	July 27	7
Barrel and Riser Design	July 28	6
Earthen Dams	July 28	6
Streambank, Lakeshore, and Roadside Stabilization	August 3	9
Water and Sediment Control Basin Design	October 18	9
Terrace Layout - Field	October 25	7
Terrace Design	October 26	7
Prelim. Site Evaluation - Gully & Rill Erosion	October 19	3
Survey & Design Waterway	October 6, 19	3
Survey & Design Rock Chute	November 2 & December 6	3
Prelim. Site Evaluation - Gully & Rill Erosion	November 2	2
Water and Sediment Control Basin Design	December 6	2

DOLLARS SPENT FOR ADMINISTRATION

The primary responsibility to carry out this grant has been with the soil and water conservation districts; water plan coordinators have assisted in determining priorities and publicizing the availability of cost-share dollars. BERBI members estimate that $130,000 has been spent locally to employ and provide for the needs of staff to carry out the responsibilities of this grant.

REQUEST FOR FY 1996

The table on the following page was prepared by BERBI for the application of FY 1994 Special Minnesota River Basin Fund. These projections were developed using Minnesota River Assessment Project (MRAP) estimates as well as local knowledge of needs. Ability to provide the technical assistance to implement the programs was also considered in developing this five-year plan. BERBI feels the estimate on this table provides a basis for future application of funds.

BERBI requests $300,000 from the Special Minnesota River Basin Fund to continue the accelerated cost-share effort in the Blue Earth River basin. If the dollars are granted, BERBI will administer them in a similar fashion as in 1994 and 1995. Approximately 20% ($60,000) will be needed for the continuation of the assistant engineer position. The remaining $240,000 will be spent for cost-share assistance to persons applying conservation measures in high priority areas. As with past grants, BERBI will offer funds to our neighbors for high priority projects in the Blue Earth River basin. Upon notification that grant funds will be awarded, BERBI will analyze its prioritization methodology and make changes as warranted. BERBI will consult with its state partners as well as the Natural Resource Conservation Service for input in developing a prioritization methodology that considers the latest technology for best utilizing water quality dollars.

BERBI IMPLEMENTATION PRACTICES
STATE-COST SHARE PROJECTED NEEDS FOR 1994 - 1998

Practice	Unit Size	Total Units	Price Per Unit	Total Costs	Cost-Share Funds Needed
Erosion Control Structures	Each	17	$11,000.00	$187,000.00	$140,250.00
Strip Cropping	Acre	200	$10.50	$2,100.00	$1,575.00
Terrace	Foot	52,500	$3.00	$157,500.00	$118,125.00
Diversion	Foot	7,800	$2.25	$17,550.00	$13,162.50
Field Windbreaks	Foot	369,000	$0.15	$59,400.00	$44,550.00
SLR Stabilization	Foot	12,502	$11.50	$143,773.00	$71,886.50
Storm Water Control Systems:					
Grassed Waterway	Foot	66,500	$1.75	$116,375.00	$87,281.25
Water & Sediment Control Basins	Each	295	$650.00	$191,750.00	$143,812.50
Grade Stabilization Structures	Each	72	$4,500.00	$324,000.00	$243,000.00
Total - Storm Water Control Sys.				$632,125.00	$474,093.75
Animal Manure Mgmt. Systems:					
Manure Storage Ponds	Each	97	$17,000.00	$1,649,000.00	$1,236,750.00
Filter Strip for Livestock Runoff	Acre	52	$1,067.00	$55,484.00	$41,613.00
Total - Manure Mgmt. Systems				$1,704,484.00	$1,278,363.00
Critical Area Stabilization:					
Traditional	Acre	55	$235.00	$12,925.00	$9,693.75
*Riparian Buffers	Acre	2100	$235.00	$493,500.00	$370,125.00
*Tile Intake Buffers	Each	210	$20.00	$4,200.00	$3,150.00
Total - Critical Area Stabilization				$510,625.00	$382,968.75

* While it appears these practices meet the state cost-share guidelines for critical area stabilization, standards do not exist at this time. We anticipate encouraging the writing of standards and specifications for future application of these practices.

Total Cost: $ 3,414,657

Total Annual Costs: $ 682,871

Total Cost-Share Dollars Needed: $ 2,524,975

Total Annual Cost-Share Dollars Needed: $ 504,995

BWSR ACCELERATED COST-SHARE GRANT 2 - FY 1994

									Erosion Control		Animal Waste Practice					
Project No.	Practice	Units (acres, feet)	Total Cost	BERBI Grant $	Other Grant $	Landowner Cost	Twn/Rng/Sec	Minor Watershed No. (5 digits)	Soil Loss Reduction (T/Ac/Yr)	Acres Treated	No. of Animal Units	Surveyed	Designed	Constructed	Plan for '95 Construction	Priority
07-02-94-01	Manure Mgmt. System - E. Pit (As Amended)	1	28,885	21,664		7,221	106-27-07	30091			143.0	x	x		x	within 1,000' of Blue Earth River
07-02-94-02	Manure Mgmt. System - E. Pit	1	20,000	11,500	3,500	5,000	105-28-07	30025			600.0	x	x		x	steep slope, runoff flows 1,600' to Blue Earth River floodplain
07-02-95-06	Stormwater Control - Waterway	2,735'	9,945	7,460		2,485	105-27-10	32062	49 T/yr.	99.1					x	outlet into ravine which outlets into Maple River
07-02-95-07	Grade Stabilization Structure	1	8,070	6,055		2,015	105-25-20	32061	14 T/Yr.	24.0						outlet 400' from Maple River
22-02-94-01	Erosion Control Structure - Drop Toewall	1	7,536	5,652		1,884	103-28-36	30022	4.4	1,184.0		x	x		x	outlets into tributary of Blue Earth River
22-02-94-02	Terraces	1,275'	7,866	5,899		1,967	101-24-14	30010	24.3	9.7		x	x		x	800' to ditch to Brush Creek
22-02-94-03	Critical Area Stabilization - Grass seeding	300' 0.2 ac.	508	381		127	102-28-22	30031	33.8	6.2		x	x		x	along ditch, outlet Badger Creek
22-02-94-04	Stormwater Control - Waterway	860'	2,916	2,187		729	102-28-22	30031	25.5	33.0		x	x		x	outlet ditch to Badger Creek
22-02-94-05	Stormwater Control - Waterway	750'	3,059	2,294		765	102-26-01	30017	12.0	21.6		x	x		x	tile intake within 500'
22-02-94-06	Stormwater Control - Water & Sediment Control Basin	950'	6,213	4,660		1,553	101-24-02	30008	27.5	9.9		x	x		x	outlets into ditch to Blue Earth River
22-02-95-14-A	Stormwater Control - Waterway	100'	365	274		91	104-26-10	32048	see 22-03-95-14			x			x	see 22-03-95-14
22-02-95-15-A	Stormwater Control - Waterway	250'	843	632		211	104-26-11	32048	see 22-03-95-15			x			x	see 22-03-95-15
46-02-94-01	Stormwater Control - Waterway	1,250'	4,000	3,000		1,000	103-31-36	30071	5.0	46.0		x	x		x	outlets into Lily Creek, 350' from end of waterway
81-02-94-01	Manure Mgmt. System - E. Pit	1	14,200	10,650		3,550	106-24-22	32013			95.0	x	x		x	runoff enters intermittent stream to intake
81-02-94-02	Terrace	800'	5,000	3,750		1,250	107-24-17,15,14	32018	6.5	35.5					x	within 1000' of tile intake

BWSR ACCELERATED COST-SHARE GRANT 2 - FY 1994

									Erosion Control		Animal Waste Practice					
Project No.	Practice	Units (acres, feet)	Total Cost	BERBI Grant $	Other Grant $	Landowner Cost	Twn/Rng/Sec	Minor Watershed No. (5 digits)	Soil Loss Reduction (T/Ac/Yr)	Acres Treated	No. of Animal Units	Surveyed	Designed	Constructed	Plan for '95 Construction	Priority
81-02-94-04	Terrace	400'	2,250	1,687		563	108-24-26	32001	3.6	7.3		x	x		x	500' to ravine with running surface water
81-02-94-05	Manure Mgmt. System - E. Basin	1	6,000	4,500		1,500	108-24-26	32001			80.0	x			x	runoff enters ravine with running surface water
81-02-94-06	Stormwater Control - Waterway	500'	1,500	1,125		375	108-24-13	32002	13.5	9.6		x	x		x	700' to wetland
81-02-94-07	Terrace - Narrow Base	800'	4,500	3,375		1,125	105-24-01	32035	12.7	6.1					x	runoff flows 600' to ditch
81-02-94-08	Manure Mgmt. System- Poured Walls	12'x 70'x 8'	14,077	10,558		3,519	108-23-09	32002			35.0	x			x	runoff directly enters wetland
81-02-94-09	Stormwater Control - Water & Sediment Control Basins	900'	5,464	3,626		1,838	108-24-28	32019	6.5	24.0		x	x	x	x	850' or less to Lake Elysian
81-02-94-10	Stormwater Control - Water & Sediment Control Basins (4)	1,000'	3,376	2,532		844	208-24-13	32002	11.2	15.1		x	x	x	x	terrace blocks will prevent sediment from entering lake
81-02-94-11	Terrace - Narrow Base	800'	3,440	1,959		1,481	107-24-01	32019	6.2	8.7		x	x	x	x	sediment enters ditch 30
81-02-94-12 (as amended)	Terrace - Broad Base	775'	7,244	3,132		4,112	107-24-08	32017	3.1	9.0		x	x	x	x	1050' from county ditch
81-02-94-13	Terrace - Narrow/Broad Base	3,050'	23,450	17,588		5,862	107-24-30	32015	6.5	47.0		x	x	x	x	sediment enters wetlands or LeSueur River
81-02-94-14	Terrace - V-Ridge	200'	950	712		238	105-22-06	32026	5.5	4.0		x	x		x	900' from Boot Creek
81-02-94-15	Erosion Control - Diversion, Rock Chute	300'	5,750	4,312		1,438	105-22-06	32026	3.4	13.6		x	x		x	Sediment enters Boot Creek
81-02-95-22	Stormwater Control - Water & Sediment Control Basin (6)	1,600'	5,994	4,458		1,486		32005	7.5	45.0					x	900' or less to ditch #45
83-02-94-01	Critical Area Stabilization	1.2 ac	2,180	1,635		545	106-33-30	31016	15.0	39.2					x	200' from trib. of Butterfield Creek
83-02-94-02	Manure Mgmt. System - E. Pit	1	35,340	26,505		8,835	105-31-29	31048			442.0	x	x		x	900' from Willow Creek

BWSR ACCELERATED COST-SHARE GRANT 2 - FY 1994

									Erosion Control		Animal Waste Practice					
Project No.	Practice	Units (acres, feet)	Total Cost	BERBI Grant $	Other Grant $	Landowner Cost	Twn/Rng/Sec	Minor Watershed No. (5 digits)	Soil Loss Reduction (T/Ac/Yr)	Acres Treated	No. of Animal Units	Surveyed	Designed	Constructed	Plan for '95 Construction	Priority
83-02-94-03	Stormwater Control - Waterway	1,100' 1.5 ac	2,300	1,725		575	106-33-08	31033	341 T/yr.	250.0		x			x	300' from tributary of Watonwan River
83-02-94-04	Stormwater Control - Waterway	4,650' 4.8 ac	8,658	6,493		2,165	106-31-01	31021	51 T/yr.	315.8					x	200' from Watonwan River
83-02-94-05	Critical Area Stabilization	.83 ac	428	321		107	107-33-12	31038	15 T/yr.	1.9		x	x	x	x	20' from Watonwan River
83-02-94-06 as amended	Stormwater Control - Waterway	3,960' 2.8 ac	8,290	6,218		2,073	105-30-33	31010	14 T/yr.	190.3		x	x		x	130' from Perch Creek
83-02-94-07	Critical Area Stabilization	4.5 ac	7,180	5,385		1,795	105-32-36	31007	25 T/yr.	2,000.0					x	100' from tributary of Watonwan River
83-02-94-08	Erosion Control Structure - Dike	600'	1,900	1,425		475	107-33-13	31036	9.0	13.6		x	x		x	50' from N. Fork Watonwan River
83-02-94-09	Stormwater Control - Waterway	650' 1.4 ac	2,260	1,695		565	107-32-11	31040	54 T/yr.	29.6		x			x	800' from Watonwan River
83-02-94-10	Stormwater Control - Water & Sediment Control Basin	250' 1 basin	1,263	947		316	106-31-04	31020	10.8	20.0		x	x	x	x	500' to tributary of St. James Creek
83-02-94-11	Stormwater Control - Waterway	3,400' 3.2 ac	8,240	6,180		2,060	106-31-01	31021	320.3 T/yr.	3.2		x			x	50' to trib. of Watonwan River
83-02-94-12	Stormwater Control - Waterway	1,400' 1.9 ac	2,233	1,675		558	107-33-28	31030	41 T/yr.	86.0		x	x		x	direct to surface intake to J.D. #11 to Watonwan River
83-02-94-13	Critical Area Stabilization	.83 ac	2,520	1,890		630	105-33-32	31009	9 T/yr.	70.8					x	within 100' of surface intake
83-02-94-14	Stormwater Control - Waterway	1,300' 1.2 ac	2,310	1,732		578	107-32-18	31039	14.5 T/yr.	47.5		x	x		x	direct to surface intake
83-02-94-15	Stormwater Control - Waterway	3,200' 3.2 ac	3,990	2,992		998	106-31-27	31023	19.4 T/yr.	59.7					x	1000' from Watonwan River
83-02-94-16	Critical Area Stabilization	.38 ac. 550'	700	525		175	106-33-36	31017	94 T/yr.	19.0		x	x		x	outlets into Butterfield Creek

BWSR ACCELERATED COST-SHARE GRANT 2 - FY 1994

									Erosion Control		Animal Waste Practice					
Project No.	Practice	Units (acres, feet)	Total Cost	BERBI Grant $	Other Grant $	Landowner Cost	Twn/Rng/Sec	Minor Watershed No. (5 digits)	Soil Loss Reduction (T/Ac/Yr)	Acres Treated	No. of Animal Units	Surveyed	Designed	Constructed	Plan for '95 Construction	Priority
83-02-95-22	Grade Stabilization Structure	1	2,887	2,165		722	107-31-26	31028	113.0	0.2		x	x		x	sediment enters ditch to Watonwan River
83-02-95-24	Stormwater Control - Waterway	2,200' 2.2 ac	4,618	3,463		1,155	106-31-19	31020	24.0	2.2		x			x	sediment enters St. James Creek
83-02-95-25	Terrace - Broadbase	1,400'	8,934	6,700		2,234	106-31-19	31020	69.3	0.2		x			x	sediment enters St. James Creek
			309,632	225,293	3,500	80,790				4,807.6	1,395.0					

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BWSR ACCELERATED COST-SHARE GRANT 3 - FY 1995

									Erosion Control		Animal Waste Practice					
Project No.	Practice	Units (acres, feet)	Total Cost	BERBI Grant $	Other Grant $	Landowner Cost	Twn/Rng/Sec	Minor Watershed No. (5 digits)	Soil Loss Reduction (T/Ac/Yr)	Acres Treated	No. of Animal Units	Surveyed	Designed	Constructed	Plan for '95 Construction	Priority
07-03-95-04	Manure Mgmt. System - E. Pit	1	18,600	13,950		4,650	106-26-18	32071			123	x	x		x	road ditch to open tile intake
07-03-95-05	Manure Mgmt. System - E. Pit	1	10,700	8,025		2,675	105-26-07	32061			260	x			x	900' from Maple River
17-03-95-01	Stormwater Control - Waterway	850'	2,398	1,798		600	106-34-32	31058	33.0 T/yr.	20					x	outlet is intermittent stream to Mountain Lake
17-03-95-02	Stormwater Control - Waterway	2,900'	9,695	7,270		2,425	105-35-01	31058	64.0 T/yr.	138					x	open tile intake at beginning and end
17-03-95-03	Stormwater Control - Waterway	1,200'	3,390	2,542		848	105-34-06	31058	137.0 T/yr.	80					x	outlet flows 100' to road ditch then 100' to open tile intake
17-03-95-04	Stormwater Control - Waterway	400'	1,505	1,129		376	105-34-05	31058	7.0 T/yr.	5					x	outlet 100' to open tile intake
17-03-95-05	Stormwater Control - Waterway	1,000'	1,570	1,177		393	106-34-08	31035	81.0 T/yr.	109					x	outlets to road ditch concentrated flow to creek
17-03-95-06	Stormwater Control - Waterway	1,100'	2,800	2,100		700	106-34-08	31035	64.0 T/yr.	109					x	same as 17-03-95-05
17-03-95-07	Stormwater Control - Waterway	900'	1,410	1,057		353	106-34-02	31034	53.0 T/yr.	50					x	outlets into Watonwan River
17-03-95-08	Stormwater Control - Waterway	500'	780	585		195	106-34-02	31034	30.0 T/yr.	13					x	outlets into Watonwan River
17-03-95-09	Terrace	1,300'	4,335	3,251		1,084	105-34-06	31058	83.0 T/yr.	19					x	within 1000' open tile intake - outlet trib. of Watonwan
22-03-95-07	Stormwater Control - Waterway	1,450'	5,005	3,753		1,252	102-24-31	30013	11.1	226		x			x	outlets to ditch to Brush Creek
22-03-95-08	Stormwater Control - Waterway	1,660'	3,185	2,389		796	102-27-23	30046	14.0	59.1		x			x	outlet within 800' of Blue Earth River
22-03-95-09	Stormwater Control - Waterway	575'	1,246	935		311	101-24-20	30010	9.0	203		x			x	outlet is trib. to Brush Creek
22-03-95-10	Stormwater Control - Waterway	5,400'	16,098	12,073		4,025	101-24-14	30010	16.3	153.3		x			x	200' to open tile intake
22-03-95-11	Manure Mgmt. System - E. Pit	1	44,475	33,356		11,119	103-25-14	32045			625	x			x	runoff accumulates in low area then flows 150' to intake

BWSR ACCELERATED COST-SHARE GRANT 3 - FY 1995

									Erosion Control		Animal Waste Practice					
Project No.	Practice	Units (acres, feet)	Total Cost	BERBI Grant $	Other Grant $	Landowner Cost	Twn/Rng/Sec	Minor Watershed No. (5 digits)	Soil Loss Reduction (T/Ac/Yr)	Acres Treated	No. of Animal Units	Surveyed	Designed	Constructed	Plan for '95 Construction	Priority
22-03-95-12	Side Inlet Structure	1	2,719	2,039		680	101-25-36	30015	2.9	211		x			x	outlets into ditch to Brush Creek to Blue Earth River
22-03-95-13	Stormwater Control - Waterway	1,475'	3,141	2,356		785	102-25-31	30012	9.6	275		x			x	waterway tile outlets into ditch to Brush Creek
22-03-95-14	Stormwater Control - Waterway	300'	1,075	806		269	104-26-10	32048	14.7	25		x			x	outlets into wetland which outlets into Maple River
22-03-95-15	Stormwater Control - Waterway	450'	1,533	1,149		384	104-26-11	32048	15.9	14		x			x	outlets into tile intake to Maple River
22-03-95-16	Manure Mgmt. System - E. Pit	1	18,000	13,500		4,500	103-28-13	30023			250	x			x	channelized flow enters trib. of Blue Earth River
22-03-95-17	SLR - Rip-Rap	425'	7,500	3,750		3,750	102-27-23	30046				x			x	bank of Blue Earth River
22-03-95-18	Manure Mgmt. System - E. Pit	1	21,789	16,341		5,448	103-25-31	30017			114				x	flows 200' to county ditch
22-03-95-19	Erosion Control Str. - Rock Chute	1	5,854	4,390		1,464	103-27-17	32057	6.1	83					x	sediment enters DNR wetland #65W which outlets into Rice Lake
46-03-95-02	Stormwater Control - Waterway	650'	1,000	750		250	103-32-22	30076	8	.5					x	outlets into J.D. #25 to Elm Creek
46-03-95-03	Stormwater Control - Waterways (2)	1,000' 850'	2,800	2,100		700	103-32-22	30076	8	1.5					x	outlet into J.D. #25
46-03-95-04	Stormwater Control - Diversion	300'	1,000	750		250	103-32-22	30076	5	1					x	outlets into J.D. #25
46-03-95-05	Stormwater Control - Waterway	1,700'	3,000	2,250		750	103-31-04	30070	4	1.8					x	350' to Elm Creek
46-03-95-06	Terrace	3,550'	6,000	4,500		1,500	103-33-21	30076	3	1					x	outlets into J.D. 73-2 to Elm Creek
46-03-95-07	Stormwater Control - Waterway	1,300'	2,500	1,875		625	103-33-21	30076	3	1					x	outlets into J.D. 73-2
46-03-95-08	Stormwater Control - Waterway	1,300'	2,000	1,500		500	103-33-01	30078	3	1					x	750' to open tile intake
46-03-95-09	Manure Mgmt. System - E. Pit	1	22,500	16,875		5,625	101-29-18	30034			241				x	800' to East Chain Lake

BWSR ACCELERATED COST-SHARE GRANT 3 - FY 1995

									Erosion Control		Animal Waste Practice					
Project No.	Practice	Units (acres, feet)	Total Cost	BERBI Grant $	Other Grant $	Landowner Cost	Twn/Rng/Sec	Minor Watershed No. (5 digits)	Soil Loss Reduction (T/Ac/Yr)	Acres Treated	No. of Animal Units	Surveyed	Designed	Constructed	Plan for '95 Construction	Priority
81-03-95-16	Stormwater Control - Waterways (2)	700'	1,400	1,050		350	107-24-17	32017	9.0	21.1					x	sediment enters J.D. 11, ditch is 900' from project site
81-03-95-17	Stormwater Control - H_20 & Sed Control Basins - 7	2,150'	9,875	7,406		2,469	107-24-17	32017	11.3	39.9					x	same as above
81-03-95-18	Stormwater Cont - Waterways (2)	1,350'	2,363	1,772		591	107-24-32	32015	8.6	26.0					x	sediment is being deposited into LeSueur River
81-03-95-19	Stormwater Control - H_20 & Sed Control Basins - 2	600'	1,900	1,425		475	107-24-16	32016	6.1	18.6					x	sediment is deposited into J.D. 11, ditch is 750' from site
81-03-95-20	Stormwater Control - Waterway	1,000'	2,030	1,523		507	105-22-21	32025	6.6	17.6					x	sediment is deposited into Joint County Ditch 6
81-03-95-23	Side Inlet Structure	1	2,500	1,875		625	105-24-01	32035	12.7	22.0		?				sediment enters drainage ditch, outlet Little Cobb
83-03-95-17	Stormwater Control - Diversion	500'	1,884	1,413		471	106-30-20	31024	N/A	.23	28	x	x			outlets into Spring Branch Creek, proj. 500' from site
83-03-95-18	Stormwater Control - Diversion	860'	1,344	1,008		336	106-31-04	31020	37.7	.6						sediment is delivered direct to open tile intake
83-03-95-19	Terrace - Broad Base	300'	1,876	1,407		469	106-31-08	31020	12.1	7.3						sediment is delivered direct to open tile intake
83-03-95-20	Terrace - Broad Base	250'	1,159	869		290	106-31-05	31020	8.5	5.7						sediment enters tributary of St. James Creek, 30' to site
83-03-95-21	Stormwater Control - H_20 & Sed Control Basin	1700' (5)	5,625	4,219		1,406	106-33-33	31017	9	18		x	x			500' to tributary of St. James Creek
83-03-95-23	Terrace - Grassed Backslope	900'	5,617	4,213		1,404	106-30-16	31022	56?	.1?						within 1000' of Tierney WMA wetland
83-03-95-26	Stormwater Control - Diversion	760'	1,995	1,496		498	106-31-19	31020	21	.35		x				sediment enters St. James Creek
			269,171	199,997	0	69,173				1977.68	1641					

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REDWOOD RIVER WATERSHED BEST MANAGEMENT PRACTICES

Practice	County	ACP(FED) Cost Share Est.	State Cost Share Est.	Cost Share (Estimated)	Total Project Cost (Estimated)	Total Operator Cost (Estimated)
SLR	Lyon	$3,500.00	$5,250.00	$8,750.00	$13,800.00	$5,050.00
Critical Area Planting	Redwood		$1,500.00	$1,500.00	$2,000.00	$500.00
412	Redwood	$1,200.25	$2,642.00	$3,842.25	$5,123.00	$1,280.75
SLR	Redwood		$5,000.00	$5,000.00	$10,000.00	$5,000.00
Ag Waste	Lyon	$3,500.00	$11,500.00	$15,000.00	$20,000.00	$5,000.00
Ag Waste	Lyon	$3,500.00	$4,000.00	$7,500.00	$10,000.00	$2,500.00
412	Lyon		$3,562.50	$3,562.50	$4,750.00	$1,187.50
312 & 412	Lyon	$3,500.00	$986.88	$4,486.88	$5,982.50	$1,495.62
412,342,606	Lyon	$750.00		$750.00	$1,000.00	$250.00
412	Lyon	$3,500.00		$3,500.00	$5,000.00	$1,500.00
412,342	Lyon	$1,188.00		$1,188.00	$1,500.00	$312.00
412,342	Lyon	$1,875.00		$1,875.00	$2,500.00	$625.00
412,606,342	Lyon	$3,700.00		$3,700.00	$5,000.00	$1,300.00
412,606,342	Lyon	$3,500.00		$3,500.00	$4,700.00	$1,200.00
412,606	Lyon	$3,375.00		$3,375.00	$4,500.00	$1,125.00
606,412,342	Lyon	$2,000.00		$2,000.00	$2,500.00	$500.00
342,412	Lyon	$1,500.00		$1,500.00	$2,000.00	$500.00
600	Lyon	$3,500.00		$3,500.00	$5,000.00	$1,500.00
638,620,342	Lyon	$1,500.00		$1,500.00	$2,000.00	$500.00
412,342	Lyon	$7,000.00		$7,000.00	$10,000.00	$3,000.00
362,620,342	Lyon	$3,500.00		$3,500.00	$5,000.00	$1,500.00
412,342	Lyon	$1,500.00		$1,500.00	$2,000.00	$500.00
412,606,342	Lyon	$3,500.00	$625.00	$4,125.00	$5,500.00	$1,375.00
638,620,342	Lyon	$2,700.00		$2,700.00	$3,500.00	$800.00
638,342,620	Lincoln	$3,500.00		$3,500.00	$6,555.00	$3,055.00
412,606	Lincoln	$7,000.00		$7,000.00	$12,586.00	$5,586.00
412	Lincoln		$1,350.00	$1,350.00	$1,800.00	$450.00
Water & Sediment Basin/waterway	Lincoln		$9,334.00	$9,334.00	$17,112.00	$7,778.00
WP4 Waste Storage Pond	Lincoln	$35,000.00		$35,000.00	$46,700.00	$11,700.00
412,606	Pipestone	$10,484.00		$10,484.00	$14,255.00	$3,771.00
Ag-Waste	Redwood		$18,750.00	$18,750.00	$25,000.00	$6,250.00
Ag-Waste	Lyon		$26,250.00	$26,250.00	$35,000.00	$8,750.00
Willow Posting SLR	Redwood		$3,000.00	$3,000.00	$6,000.00	$3,000.00
412	Lincoln		$6,750.00	$6,750.00	$8,600.00	$1,850.00
412	Lincoln		$3,626.25	$3,626.25	$4,835.00	$1,208.75
412	Lincoln		$5,916.00	$5,916.00	$8,768.00	$2,852.00
412	Lincoln		$12,690.00	$12,690.00	$16,919.00	$4,229.00
638	Lincoln		$2,214.00	$2,214.00	$2,952.00	$738.00
412	Murray		$3,975.00	$3,975.00	$5,300.00	$1,325.00
412	Lyon	$3,500.00	$1,100.00	$4,600.00	$6,100.00	$1,500.00
TOTALS		$119,272.25	$130,021.63	$249,293.88	$351,837.50	$102,543.62

JULY 1, 1994 TO APRIL 24, 1995

DEALING WITH WETLANDS IN MINNESOTA

QUESTIONS & CONCERNS FROM AROUND THE STATE ABOUT ISSUES FOR A STATE WETLANDS CONSERVATION PLAN

APRIL 1995

PROJECT REPORT #1

MINNESOTA WETLANDS CONSERVATION PLANNING
PROJECT REPORT #1

DEALING WITH WETLANDS IN MINNESOTA
QUESTIONS & CONCERNS FROM AROUND THE STATE ABOUT ISSUES FOR A STATE WETLANDS CONSERVATION PLAN

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EXECUTIVE SUMMARY

This initiative is an opportunity to improve how wetlands are protected, restored, and managed by making policies and procedures more consistent and coordinated, sharing information that is needed for informed decision-making, and setting goals for wetlands that recognize competing demands for all resources and land uses, without sacrificing the current level of wetlands protection. A statewide wetlands conservation plan should provide more specific goals for wetlands in Minnesota, show specific management strategies to achieve those goals, and improve how well the system for wetlands conservation works for landowners, concerned citizens, and responsible government officials. It should be a useful and realistic "working" document.

Three core values or aspirations have not been addressed in Minnesota's system for dealing with wetlands:

- The need for specific wetlands goals and strategies coordinated across organizations and programs;
- The demand for a wetlands protection system that is respectful and responsive, and functions cooperatively and efficiently; and
- The desire for long-term sustainability for citizens, communities, and the environment.

A more advanced framework for wetlands decision-making, designed for both comprehensiveness and differentiation, is urgently needed in Minnesota.

At the beginning of the project, the Project Coordinator targeted two essential objectives that had to be met first in order to develop a statewide wetlands plan: (a) Participants in developing the plan must share a clear, common understanding of the issues and challenges to be addressed; and (b) Solid participation by local levels of government, along with state and federal agencies and private sector interests is essential to developing a plan that is accepted and useful, improves relationships, and produces action outcomes. These objectives were addressed through a series of facilitated small group discussions around the state between January 1994 and January 1995 to flush out varied perspectives and sources of information on issues that could be addressed through a state wetlands plan.

This report fulfills three purposes:

1) To report back the full range of input received around the state on issues and challenges for statewide wetlands planning and acknowledge the contributions from all individuals who put time and thought into the discussions;
2) To give greater focus and direction to the project by showing areas of common understanding and some patterns and connections between interrelated and correlated issues; and
3) To introduce the next project phase for resolving some of the issues.

This report on issues for a state wetlands conservation plan does not explore or suggest solutions to any of the identified issues. Finding solutions, answers, changes, and improvements for the system of wetlands efforts will be the focus of work in the next phase of the planning process, beginning in mid-1995. This report and all written comments received by June 1, 1995, will be submitted to work teams for the plan development phase, as described at the end of this report.

Most issues for a comprehensive state wetlands conservation plan can be divided into three general categories: **ecological, socio-economic, and governance**. In addition, some issues or aspects of issues relate to **education and data/research**. All of these categories are interrelated and many are strongly

correlated. The issues may be broken down into other ways, but these general categories reflect the discussions in the resource groups and the ways in which the participants saw the issues.

The criteria for selecting which issues to work on first include predominant concerns, sequential factors, and urgency. It will also be helpful to get some early "successes" to show results and demonstrate the potential of this project. There were very few issues that were mentioned by participants in only one region of the state, so the issues listed below are not sorted by region. Any distinctions may be found the text for a particular issue.

The task ahead is to develop a "roadmap," or statewide wetlands plan, for wetlands managers, which will be done through the wetlands network created during the first phase of this project. Now a subset of individuals from diverse public and private sector interests can be organized to work in small work teams and a "consulting pool" for the work teams. The three initial work teams would be an **Ecological/Socio-Economic Work Team**, a **Policy/Management Work Team**, and a **Local Wetlands Management Work Team**.

The Local Plans Work Team would meet during Spring 1995 with the task of drafting informational materials for local government units and the other two work teams should begin meeting during the summer of 1995 and will continue their work for about 1 to 1½ years. The Local Plans Work Team will develop local wetlands planning guidelines. The Ecological/Socio-Economic Work Team will start by addressing regional differences, followed by wetland functions and values and statewide goals for wetlands. The Policy/Management Work Team will focus initially on jurisdictional coordination and system streamlining and simplification.

The purpose of a consulting pool would be to maintain communication and participation by a wider array of interests and expertise than can be accommodated in a small work team. The advantage of small work teams is that they can meet more frequently and work more intensively than a large group; the principle weakness of a small group is that important insights and concerns could be missed. Having a consulting pool should overcome that weakness while using those strengths to build a wetlands plan as quickly and efficiently as possible.

The issues and circumstances discussed in this report point to a need for a state wetlands conservation plan that is designed to be comprehensive (with vertical and horizontal consistency among all wetlands efforts, and oriented more towards system-based management than site- or species-based management) and to differentiate (recognizing critical regional distinctions and conflicting needs and values in land use planning and natural resources management). Citizens would benefit from fair and efficient public efforts for wetlands; maintenance of healthy, functioning land and water systems; improved access to information and education about wetlands; and increased recognition and understanding about the complex social, economic, and environmental contexts for wetlands decisions that affect a person's or a community's opportunities to thrive and flourish.

Such a state wetlands plan would be used primarily by leaders and staff of state agencies, but should also be useful and informative for local government units and federal agencies in Minnesota. A state wetlands conservation plan is most likely be implemented in stages as components are completed.

This report does not provide answers to the challenges and conflicts described; it set forth the questions and concerns about wetlands protection and management that a diverse network of people around that the state have shared and discussed. It should provoke an open and productive public discourse about where Minnesota is headed with its wetlands policy. It is imperative that concerned governments and individuals find a path through these dilemmas through a cooperative problem-solving effort.

INTRODUCTION

PROJECT PURPOSE AND SCOPE

This initiative is an opportunity to improve how wetlands are protected, restored, and managed by making policies and procedures more consistent and coordinated, sharing information that is needed for informed decision-making, and setting goals for wetlands that recognize competing demands for all resources and land uses, without sacrificing the current level of wetlands protection. A statewide wetlands conservation plan should develop more specific goals for wetlands in Minnesota, show specific management strategies to achieve those goals, and improve how well the system for wetlands conservation works for landowners, concerned citizens, and responsible government officials. It should be a useful and realistic "working" document.

PROJECT ORIGINS

Development of a wetlands conservation plan for Minnesota has been underway since August 1993 under a planning grant from the U.S. Environmental Protection Agency (EPA). The state matching funds have been provided by the Minnesota Dept. of Transportation for the first two years of the project; sources for future state funding have not been determined. The EPA grant has been extended to mid-1997, which is the deadline for developing the wetlands plan. Elizabeth Carlson was hired by the Minnesota Dept. of Natural Resources to coordinate the project.

The project began as a voluntary initiative by nine state and federal agencies with regulatory, programmatic, or compliance responsibilities for wetlands in Minnesota. The following government organizations, or their individual members, are participating in the project:

Association of Minnesota Counties (AMC)
Minnesota Association of County Planning & Zoning Administrators (MACZPA)
League of Minnesota Cities (LMC)
Minnesota Association of Townships (MAT)
Minnesota Association of Watershed Districts (MAWD)
Association of District Administrators (ADA)
Minnesota Association of Soil & Water Conservation Districts (MASWCD)
Minnesota Board of Water & Soil Resources (BWSR)
Minnesota Dept. of Natural Resources (MDNR)
Minnesota Pollution Control Agency (MPCA)
Minnesota Dept. of Agriculture
Minnesota Dept. of Transportation (MnDOT)
U.S. Army Corps of Engineers, Regulatory Branch, St. Paul District (COE)
U.S. Fish & Wildlife Service (USFWS)
U.S.D.A. Natural Resource Conservation Service (NRCS), formerly the Soil Conservation Service
Federal Highway Administration (FWHA)

These government entities, while not yet agreeing on perceptions of the problems or potential solutions, do agree that everyone should work together on solutions through a cooperative problem-solving process.

NEED FOR STATEWIDE WETLANDS PLANNING

Three core values or aspirations have not been addressed in Minnesota's system for dealing with wetlands:

- The need for specific wetlands goals and strategies coordinated across organizations and programs;
- The demand for a wetlands protection system that is respectful and responsive, and functions cooperatively and efficiently; and
- The desire for long-term sustainability for citizens, communities, and the environment.

A more advanced framework for wetlands decision-making, designed for both comprehensiveness and differentiation, is urgently needed in Minnesota. Many of the issues relating to wetlands protection reflect a tension between land use planning (which is usually the domain of local units of government) and natural resource management (which historically has been undertaken by various state and federal agencies). Wetlands decisions can bring persons with different values, priorities, information, responsibilities, and specialties into conflict. Some existing public laws and policies now also conflict due to changing priorities. Citizens and elected officials are challenged by the slippery status of the "public good" relative to individual rights and responsibilities. The essential question is, "Where are we now with wetlands protection efforts and where do we go from here?"

FIRST PHASE OF PLANNING PROCESS:
→ Identifying Key Issues and Developing Participation

At the beginning of the project, the Project Coordinator targeted two essential objectives that had to be met in order to develop a statewide wetlands plan: (a) Participants in developing the plan must share a clear, common understanding of the issues and challenges to be addressed; and (b) Solid participation by local levels of government, along with state and federal agencies and private sector interests is essential to developing a plan that is accepted and useful, improves relationships, and produces action outcomes.

Resource Groups

A series of facilitated small group discussions were organized around the state between January 1994 and January 1995 to flush out the many varied perspectives and sources of information on issues that could be addressed through a state wetlands plan. Each "resource group" (average size of 12 persons) discussed and proposed issues that they believe should be addressed through a statewide wetlands plan, based on their own experience and insights. Participants were invited from local governments (both elected officials and staff), and citizens with interests in business and industry, agriculture, recreation and environment, and education.

One of the resource groups is a standing group consisting of technical and administrative staff from local, state, and federal government units that have administrative and/or compliance responsibilities for wetlands in Minnesota; members of this resource group are liaisons for the Project Coordinator with participating government organizations for the duration of the planning process, but it is not a "steering committee." There are no current plans to reconvene the other resource groups, but the group lists will be saved for such a possibility and all participants will remain on the project mailing list. Appendices B, C, and D provide information about the resource groups.

Project Report #1 on Issues

This report fulfills three purposes:

1) To report back the full range of input received around the state on issues and challenges for statewide wetlands planning and acknowledge the contributions from all individuals who put time and thought into the discussions;
2) To give greater focus and direction to the project by showing areas of common understanding and some patterns and connections between interrelated and correlated issues; and
3) To introduce the next project phase for resolving some of the issues.

This report on issues for a state wetlands conservation plan does not explore or suggest solutions to any of the identified issues. Finding solutions, answers, changes, and improvements for the system of wetlands efforts will be the focus of work in the next phase of the planning process, beginning in mid-1995. This report and all written comments received by June 1, 1995, will be submitted to work teams for the plan development phase, as described at the end of this report.

Submission of Written Comments

This report was written for any Minnesota citizen who is concerned about wetlands protection and management. It is being mailed to the entire project mailing. Any individuals and organizations may ask to receive a copy of the report and can be added to the project mailing list at any time.

Persons wishing to submit written comments should use the format provided in Appendix A. Please read the report carefully before preparing any comments. If you have questions about submitting comments, please call Elizabeth Carlson, Project Coordinator, at (612) 297-4890, or Doug Norris, Project Grant Administrator, at (612) 296-0779.

Written comments should be sent to the Project Coordinator by any of the following methods:

Elizabeth Carlson
State Wetlands Plan Project Coordinator

Mail: DNR Ecological Services, Box 25
500 Lafayette Road
St. Paul, MN 55105-4025

Fax: 612-296-1811

Internet: beth.carlson@dnr.state.mn.us

Receipt of all written comments will be acknowledged by postcard.

NETWORK OF RESPONSIBILITIES FOR WETLANDS

Responsibilities for wetlands in Minnesota are broadly shared among state and federal agencies, various forms of local government, and private citizens and organizations. These responsibilities include both regulatory and non-regulatory activities. The agencies and local government units involved in the system are operating under different mandates and have varied, sometimes multiple objectives. Please note that, while state and federal transportation agencies do not have regulatory or non-regulatory responsibilities, they do have significant compliance responsibilities related to their construction and maintenance responsibilities.

The two tables on the following pages outline how each of these entities plays different, interrelated roles in wetlands protection, management, and restoration, and provide a partial illustration of why so many organizations are part of the system for dealing with wetlands in Minnesota. Further information about programs and responsibilities listed in the charts can be obtained from the responsible agencies.

KEY TO AGENCY ABBREVIATIONS IN CHARTS

WCA: Minnesota Wetland Conservation Act

LGU: "Local Government Unit" under the WCA (may be a county, city, township, water management organization, or soil and water conservation district; also, responsible agencies for state-owned lands)
WD: Watershed District
WMO: Watershed Management Organization
SWCD: Soil and Water Conservation District

BWSR: Minnesota Board of Water and Soil Resources
MDNR: Minnesota Dept. of Natural Resources
MPCA: Minnesota Pollution Control Agency
MDOT: Minnesota Dept. of Transportation
EQB: Minnesota Environmental Quality Board

USCOE: U.S. Army Corps of Engineers
USDA: U.S. Dept. of Agriculture
CFSA: Consolidated Farm Service Agency
(formerly known as Agricultural Stabilization & Conservation Service)
NRCS: Natural Resource Conservation Service (formerly known as Soil Conservation Service)
USFWS: U.S. Fish and Wildlife Service (U.S. Dept. of Interior)
FHWA: Federal Highway Administration
FmHA: Farmers Home Administration

SUMMARY OF REGULATORY RESPONSIBILITIES AS OF 1994

Govt. Unit	Form of Responsibility
Counties, Cities, Townships, WDs, WMOs, SWCDs	(1) LGUs: Draining & filling a wetland prohibited without replacement; Consider applications for replacement plan approval. (2) Counties: Local water planning in greater Minnesota. (3) Metro watersheds: Surface water comprehensive plans. (4) Metro cities & townships: Local water plans consistent with watershed plans. (5) All counties & cities: Shoreland & floodplain ordinances with DNR approval. (6) Any may administer other locally-instituted wetlands, drainage, & stormwater plans and ordinances.
BWSR	(1) Provide administrative & technical guidance to LGUs. (2) Consider appeals of local decisions under WCA. (3) Oversee metropolitan surface water planning & local water planning in greater Minn. counties.
MDNR	(1) Permitting for draining, filling, channelizing, etc. in protected waters wetlands (type 3, 4, 5 of a min. size in the public water inventory). (2) Enforcement for "protected waters" & WCA wetlands. (3) Permitting for water appropriation. (4) Aquatic plant management, rules.
MPCA	(1) Sec. 401 of CWA: Certify compliance with state water quality standards for a discharge into state waters. (2) Issuance of NPDES & SDS permits for stormwater & other discharges.
All state agencies	(1) Responsible Govt. Units must conduct environmental reviews under MEPA. EQB prepared rules & provides assistance. (2) Executive Order 91-3 re: no-net-loss of wetlands.
USCOE	(1) Sec. 404 of CWA: discharge of dredge or fill into wetlands. (2) Rivers & Harbors Act: activities affecting course, location, & condition of navigable waters. (3) Enforcement.
USFWS	Endangered & threatened species & their habitat not to be jeopardized by federally-supported activities.
USDA / CFSA & NRCS	Farm Bill's "Swampbuster": prohibits drainage of wetlands on federally-subsidized farmland; this is meant to control production of commodities rather than to regulate wetlands directly.
FHWA	Compliance responsibility only.
All federal agencies	(1) E.O. 11990: must consider mitigation & public involvement before proposing new construction in wetlands. (2) E.O. 11988: Must take actions to reduce risk of flood loss; minimize impact of floods on human health, safety, & welfare; and restore & preserve the natural & beneficial values served by floodplains.

SUMMARY OF NON-REGULATORY PROGRAM RESPONSIBILITIES

Govt. Unit / Organization	Form of Responsibility
Counties, Cities, Townships, WDs, WMOs, SWCDs	Varies. SWCDs provide assistance to landowners for wetland enhancement and restoration. Some watershed districts and water planning programs may also be able to provide similar assistance.
Minnesota Dept. of Agriculture	Technical, advocacy, & policy support for agricultural interests.
BWSR	Wetland Mitigation Bank; Permanent Wetland Preserves Program; Reinvest in Minnesota (RIM); Cost-Share Programs; Wetland Preservation Areas; Local Water Resources Protection & Management Grant Program; technical & administrative assistance to local government units.
MDNR	RIM Critical Habitat Matching Grant; Private Lands Wetland Restoration Program; various wildlife habitat enhancement and land acquisition programs; Northern Pike Spawning Area Program; Flood Damage Reduction Program; Forestry Stewardship Program; Environmental Indicators Project; technical assistance to landowners for wetland and wildlife management and wetland restoration; Training & Education Programs provide workshops, training, & education on wildlife & habitat development for professional, clubs, & schools.
MPCA	Clean Water Partnership; Clean Lakes Program (with U.S.E.P.A.); Wetlands Biological Assessment Project.
USCOE	Project Modification for Improvement of the Environment Program; Wetlands Research Program; Wetland Technical Assistance Program provides limited assistance to state & local governments.
USFWS	Partners for Wildlife Program; Wetland Restoration; North American Waterfowl Management Plan; Small Wetlands Acquisition, Nat. Wildlife Refuge System; Acquisition/Easement Program; Monitoring Wetland Loses & Quality Program; Office of Training & Education provides wetlands training courses to interested persons; Information & Education Programs provide information on wetlands through printed materials, videos, & presentations.
USDA / CFSA & NRCS	Conservation Reserve Program (CRP); Water Bank Program; Wetland Reserve Program; PL-566 Watershed Program; Plant Materials Program; technical assistance to individuals, groups, and local governments.
FmHA	Conservation Easement; Debt Restructuring.
National Park Service	Land and Water Conservation Fund for states.
Private organizations	Partners for Wetlands Program (Izaak Walton League) Purchase and/or easement (MN Deer Hunters Assoc.; MN Waterfowl Assoc.; The Nature Conservancy; Pheasants Forever) Construction and/or funding (Ducks Unlimited; MN Waterfowl Assoc.; sportsmen's clubs; Pioneer Heritage Conservation Trust in Douglas, Grant, & Otter Tail Counties; West Central MN Initiative Fund).

ISSUES FOR A STATE WETLANDS PLAN

The description of issues in this section uses words and phrases provided by participants in the resource groups as closely as possible. Some editing was done to combine similar and related contributions. Any judgments or assumptions expressed in this section were made by resource group participants, not the Project Coordinator. A "Note" in the text denotes a clarification provided by the Project Coordinator.

Each issue statement is written as a question that responsible parties can respond to or act on. The "Background Comments" after each issue statement include various reasons provided by one or more participants as to why it is an important issue for a state wetlands plan; the comments were derived from the summaries of the resource group sessions. The participants did not vote on the issues; this report is should reflect the essence of the perspectives discussed without attempting to determine majority viewpoints.

There are clearly some conflicting values and objectives illustrated in the list of issues. Nothing has been dismissed or downplayed; it will be up to future participants in the planning process to address those conflicts.

Issue Categories

Most issues for a comprehensive state wetlands conservation plan can be divided into three general categories: **ecological, socio-economic, and governance**. In addition, some issues or aspects of issues relate to **education and data/research**. All of these categories are interrelated and many are strongly correlated. The issues may be broken down into other ways, but these general categories reflect the discussions in the resource groups and the ways in which the participants saw the issues.

A Note on "Values"

The term *value* is used in several different ways: (a) to express the quality of a wetland's functions; (b) to quantify an economic value for a parcel of land; and (c) to describe social norms and things of importance and merit which might not be easily measured or compared. These varied uses of the same term often results in confused dialogue and harsh judgments between persons concerned with wetlands. In particular, the phrase *functions and values* is poorly understood and liberally used in discussions about wetlands; clearer definition and use of this phrase is necessary for both technical staff and the general public.

Regional Aspects of Issues

There were very few issues that were mentioned by participants in only one region of the state, so the issues listed below are not sorted by region. Any distinctions may be found the text for a particular issue; the reader may assume that concern about an issue was not confined to any particular region if no regional distinctions are listed.

OUTLINE OF ISSUES

This outline lists the main issues under the five broad categories. The issues are listed within each category in the order of their general predominance in the resource group discussions; however, it was not a statistical survey and no votes were taken. As such, this outline and the more detailed information that follows provides a "roadmap" to the current status of wetlands issues in Minnesota.

1 ECOLOGICAL

- 1.1 Clear, consistent purposes and goals for all wetlands efforts
- 1.2 Understanding and treatment of wetland functions and values
- 1.3 Changing conditions
- 1.4 Specific ecological issues raised in discussions

2 SOCIO-ECONOMIC

- 2.1 Links and distinctions among communities, regions
- 2.2 Property rights
- 2.3 Economic valuation of wetlands efforts
- 2.4 Non-regulatory options and incentives
- 2.5 Funding sources and allocation
- 2.6 Economic sustainability

3 GOVERNANCE

- 3.1 Consistency and coordination among jurisdictions
- 3.2 Streamlining and simplification of process
- 3.3 Monitoring and evaluation of program effectiveness
- 3.4 Enforcement
- 3.5 Coordination with other plans and policies
- 3.6 Specific governance issues raised in discussions

4 EDUCATION

- 4.1 Information for government staff and elected officials
- 4.2 Information for the general public

5 DATA AND RESEARCH

- 5.1 Inventories and maps

1 ECOLOGICAL ISSUES

The "Ecological" category of issues includes matters that are fundamentally related to land and water, wetland plant and animal communities, and the human relationship with the general landscape and with wetlands.

1.1 CLEAR, CONSISTENT PURPOSES AND GOALS FOR ALL WETLANDS EFFORTS

1.1.1 Goals-setting:

(a) What should be Minnesota's specific goals and objectives for the protection, restoration, and management of wetlands, and how would such goals and objectives be achieved?

(b) How will "no net loss" of wetlands be defined and measured in Minnesota?

Background Comments

Clear objectives around which management strategies can be built are needed in Minnesota. Without specific goals, we cannot define or measure success and many debates and controversies over wetlands policies will continue within that void. Each agency has its own set of missions and goals, which sometimes result in conflicts on wetlands protection and management. Common goals could help increase efficiencies and save tax dollars, while conserving wetlands.

"No net loss" of wetlands is an appealing concept without any clear, specific definition or strategy behind it. There are strong suspicions that the State's "no net loss" goal is not really being achieved and there is no clear strategy for achieving long-term net gain of wetlands in the state to recover historic losses. Consistent, well-understood terminology and policies are needed for both the gain and loss sides of the "no net loss" equation.

Wetlands function as part of the water regime and are a factor in restoring or enhancing the condition of state's water systems. Flooding, low stream flows, and water quality problems all have adverse consequences for and the health and stability of watersheds and ecosystems and, ultimately, human health and social welfare.

Concern was expressed about protecting wetlands to the detriment of other important systems or landscapes.

1.1.2 Restoration strategy:

(a) What goals, guidelines, and actions should a state wetland restoration strategy set for mitigation on-site or in the same watershed and for restoring wetlands in targeted regions?

(b) What kinds of goals (size, type, function, distribution) can appropriately be set at each level of jurisdiction, which also meet the State's overall goals?

Background Comments

A proactive, workable strategy for wetland restoration is needed, instead of just taking whatever is done on a ad hoc basis. There must be specifics about what preservation and mitigation is needed, where it should be targeted, and how best to accomplish those goals.

Many worthwhile projects involve some wetland impacts; there must be a simple way to mitigate lost wetland acreage. Containing mitigation for impacts within the same area is a problem because it often is or seems easier to go outside of the impacted area. Current requirements are confusing and difficult to understand.

Created wetlands are problematic because they have not been proven to duplicate natural, functioning wetlands.

1.1.3 Land use planning:

(a) How can wetland management goals be integrated into general land management, focusing on long-term sustainability of landscapes, watersheds, and social and economic systems?

(b) How should urban land use plans protect wetlands, given current concerns about urban sprawl?

Background Comments

There can be a delicate balance between preservation and development policies. We should be planning for long term sustainability, not just for short term benefits. Wetlands are just one component of a landscape that needs integrated management to sustain ecological processes. The needs of society, regions, communities must be addressed along with individuals. Some things may need to be changed for the benefit of the whole. (e.g., farming practices, public policies, etc.).

Interest was expressed in dealing with wetlands in the context of watershed or ecosystem-based management. The location of a wetland within a watershed has a lot to do with its actual or potential functions and values. Wetlands policy needs a framework or system context that addresses many interrelated environmental goals and recognizes multiple benefits of wetlands. Attention to wetland quality and distribution of wetlands in the watershed will maximize wetland benefits. The location, shape, and management of a wetland basin all impact its value for flood control and water purification. The location, shape, and management of a wetland basin all impact its value for flood control and water purification.

All the uses of a wetland should be considered - wildlife habitat, hunting, places for quiet time and solitude (to be with nature), water quality downstream, nice place to live by. Not all such uses will be compatible in every situation.. Of course, one person's private wetland is restricted area for other possible users. We need to move toward a sense of getting along with, living with our environment.

It can be challenging to answer the common question of why to preserve a particular basin or complex on a particular site in an urban area, when individual permit applicants have a localized viewpoint that typically fails to realize regional implications.

1.1.4 Regional distinctions in goals-setting:

(a) How could existing wetland resources and functional needs be prioritized, with regional flexibility or differentiation? How would priority areas be identified or targeted for wetland restoration and creation?

(b) What kinds of regional distinctions are most useful and appropriate?

(c) What adjustments should be made to recognize the physical constraints in northeast and northcentral Minnesota that wetlands protection places on development possibilities?

(d) What kind of flexibility could be allowed in areas under particular development pressures, such as rapidly growing urban areas for fully developed areas with fewer alternatives?

Background Comments

Current wetlands policy is believed to be a "one-size-fits-all" public policy that, in reality, does not always fit well and may fail to recognize differences between ecosystems relative to wetlands. There is strong interest throughout the state in acknowledging and understanding regional differences and how they might be incorporated in wetlands goals and policies. The hope exists that more could be achieved for wetlands and other policy goals by doing this.

Ecological and economic needs in different regions are often perceived to be different in some way. The types and quantities of remaining wetlands and the types of land use planning issues vary across the state. Not all types of wetlands have the same functions and values for the amount and types present.

Wetland managers need to know where best to target efforts and where they can afford to (or should) make trade-offs. This may be crucial information for community planning and development and for efficient application of financial resources. Setting goals by region or watershed could help eliminate the NIMBY ("not in my back yard") phenomenon by customizing responsibilities.

Questions were raised about how state and federal lands should fit into a state wetlands strategy and no net loss goal.

In northeast and northcentral Minnesota, especially small communities, wetland protection can be a real but possibly unnecessary barrier to development, resulting in economic and social costs. The abundance and types of wetlands in those regions should be taken into account in a statewide wetlands plan.

There were suggestions to allow mitigation at 1:1 ratio in urban areas; allow no compensation for taking in urban areas; allow mitigation for urban impacts in rural areas; allow cash in lieu of mitigation for more valuable/urgent projects; allow splitting of mitigation into functions and sites; do urban wetland banking statewide.

1.2 *UNDERSTANDING AND TREATMENT OF WETLAND FUNCTIONS & VALUES*

1.2.1 What can be done to set [more] consistent, precise, and workable definitions, standards, and measures for wetland definitions, delineations, and wetland mitigation?

Background Comments

Clear direction for such decision-making is believed to be lacking, especially for mitigation objectives and alternatives. The various agencies seem to have different definitions of wetlands. Much effort is expended arguing about what is a wetland.

A standard format is needed for "mitigation banking" in order to maximize wetland benefits while ensuring that losses are, first, avoided and, second, minimized.

1.2.2 Assessment, classification, and prioritization of wetland functions and values:

(a) How can wetland functions and values be adequately assessed for factoring into regulatory and management decisions and take into account what is learned from experience?

(b) How should different functions of wetlands be identified and prioritized to make more efficient use of limited time and money?

(c) What criteria should be used to evaluate the qualitative value of a wetland's functions?

Background Comments

Sound decisions for mitigation vs. denial cannot be made without some way to establish relative value. Each situation should be looked at holistically instead of piecemeal in order to develop adequate, focused management and regulatory programs. There is high demand for classification systems, with the risk that systems will be based more on expediency than on ecosystem or watershed needs. Wetlands are valued differently by different people and in different regions.

1.2.3 Qualitative criteria for differentiating management of wetland impacts:

(a) How should potential effects on wetlands "health" or functionality be incorporated into decisions on development?

(b) What would be acceptable reasons for treating some wetland impacts differently than others?

(c) How much cost and effort is justified to protect "marginal" wetlands?

(d) How can cumulative impacts of multiple projects impacting small areas of wetlands and/or associated landscapes be measured and addressed?

Background Comments

The lack of flexibility forces all wetland impacts to be treated the same and does not allow for perhaps the best decision in some circumstances. Insights into these questions could help with targeting efforts towards more valuable wetlands, when there is a choice to be made for staff time, limited funds, and competing objectives. The current laws do not address varying degrees of human interaction and impact related to different values of wetlands.

There is some desire for the flexibility to allow impacts to "marginal" wetlands that provide little or no public benefit, in favor of investing in more functional restored or created wetlands elsewhere. This analysis stems from combinations of limited funds (for local governments and developers), development pressures, and a desire to "get the most bang for the buck."

There is a common belief that a lot of hassle and expense goes into wetlands of lesser value because of blanket protection for all wetlands, no matter what. There's a perception that protection of degraded or low-functioning wetlands leads to lack of commitment and loss of compliance. Caution is offered, however, because in some circumstances those "marginal" wetlands might provide protections to the more familiar, open water wetlands. There were questions about "over-regulation" of somewhat poorly drained soils (ephemeral wetlands) relative to drainage and agricultural sustainability.

If impacts involving greater area or higher quality wetlands required a longer, more cumbersome review, there would be more incentive to minimize impacts. Minor impacts of low quality wetlands are processed today in the same lengthy process as more significant impacts, when a good replacement plan that produces a higher quality wetland could be more beneficial in the long run.

There is some interest in cost-benefit analysis (for both public and private costs) and the short and long-term impacts of the costs on public budgets.

The analysis should go beyond the straightforward measurement of wetland acreage destroyed to impacts on a wetland's functions. Degradation needs to be addressed along with acreage loss.

Nibbling away at wetlands can add up to a major impact, resulting in continued degradation of habitat, water quality, etc., and keeping the State from achieving "no net loss" of wetlands.

1.3 *CHANGING CONDITIONS*

1.3.1 How will the state wetlands plan adapt to changing conditions over time?

Background Comments

Wetlands are dynamic systems (a "moving target") and the plan should not assume that any wetland retains its characteristics steadily and permanently over time. The process of natural succession is part of the ecological system. The capabilities and potential of different wetland resources vary. There can be uncertainty and inconsistency in predicting or measuring irreversible decisions.

1.4 *SPECIFIC ECOLOGICAL ISSUES RAISED IN DISCUSSIONS*

[Note: Drainage and stormwater seems to be urban and rural counterparts of the same objective - to channel excess water away from a defined area. In some developing areas, where agricultural land is being developed for urban uses, a ditch system can become part of the community's stormwater management system. Drainage law came up as an issue in various regions of the state.]

1.4.1 What can be done to bring drainage law policy (generally perceived to be out-of-date) into conformance with more current policies and principles of wetlands protection and watershed management?

Background Comments

The drainage law is antiquated and does not reflect current understanding of wetland functions and values. Current drainage (ditch) law makes it difficult to improve or abandon judicial ditches in order to restore wetlands. State law still provides an absolute right to drain land, even if only one landowner along the ditch system demands it. This is a serious impediment to restoration of wetlands in many areas of the state. Drainage and environmental concerns are often viewed as incompatible.

There is considerable sentiment in drained agricultural areas for maintaining and repairing ditch systems that are in actual use.

1.4.2 When should a wetland be protected from stormwater runoff and when can it be used to treat runoff?

Background Comments

Decisions are very subjective without clear guidance. This is a common use for wetlands and can overwhelm a wetland's capacity for fulfilling that function.

1.4.3 How would constructed wetlands designed for treatment of municipal wastewater be a part of a state wetlands plan?

Background Comments

Such technology could offer a number of advantages for rural communities, including lower capital and operating costs, aesthetic and wildlife enhancements, and stormwater detention. It has been successfully used in other states.

1.4.4 What criteria for buffer areas and areas beyond the delineated boundary of a wetland should be taken into account in evaluating impacts and what additional protections might be needed? What additional protections, if any, are needed for wetlands associated with floodplains, shorelands, lakes, and streams?

Background Comments

This concern was raised in urban communities and lakeshore areas, especially for water quality. Wetland buffers or adjacent uplands must be intact to protect the physical, chemical, and biological integrity of a wetland "community." A wetland may be the last opportunity for water quality control of drainage into a lake. Inconsistencies in buffer ordinances for adjacent communities was cited as a potential problem.

Floodplains are sometimes productive agricultural land or perceived as desirable building sites.

1.4.5 How can protection and restoration of wetlands be targeted for specific functions, such as sediment control, wildlife habitat, etc.?

Background Comments

1.4.6 How can upland development impacts to wetlands (e.g., changes in hydrology and pollutant loads) be addressed?

Background Comments

This is a large, unaddressed impact to wetlands.

2 SOCIO-ECONOMIC ISSUES

The "Socio-Economic" category of issues includes matters that are fundamentally related to social and economic relationships among people and communities as they deal with wetlands.

The major economies of rural Minnesota were frequently described as "resource-based." (Generally: agriculture predominates in northwest, westcentral, southwest, southcentral, and central Minnesota; forestry, minerals, and tourism are very important in northeast, northcentral, and central Minnesota. Other commercial development occurs in any region of the state, but the relative pressure of development varies among regions.)

2.1 *LINKS AND DISTINCTIONS AMONG COMMUNITIES, REGIONS*

[Note: The perceived value attributed to a wetland seems strongly correlated with the prevalence of wetlands in the local landscape; perceptions of unfairness also seem to follow that relationship.]

2.1.1 How can wetland resources of statewide and national significance be properly protected and managed while respecting local needs and attitudes?

Background Comments

This was characterized as a classic conflict between the right of self-determination vs. "big government." A wetlands plan should take into account the perspectives of both individuals and the public at large. A "middle ground" may be elusive in a arena of conflicting values.

Some northern Minnesota participants believe that current definitions of protected wetlands, which extend to more seasonal and wooded wetland types, are impeding economic development in northern Minnesota. The distinction here seems to be "what wetlands are regulated", not "what is a wetland." The need to replace wetlands in southern Minnesota is the reason wetlands regulations were developed. The perception in northern Minnesota is that the south had their chance to develop economically and now the north is paying the price for drainage of wetlands in the south.

2.1.2 What can be done to address the effect of the disparity in land values between northern and southern Minnesota for northern wetland projects needing to do out-of-region mitigation?

Background Comments

With little or no opportunity to do on-site or same-watershed mitigation in northeastern Minnesota, proposed plans either have a high potential for failure or the cost to do mitigation out-of-area is unacceptably high. The state's interest might be met, but not local needs.

2.2 *PROPERTY RIGHTS*

[Note: The topic of property rights was brought up in all regions of the state, although greater anxiety and tension was expressed about the issue in northcentral and northwest Minnesota.]

2.2.1 Respect due to citizens:

(a) How can wetlands regulations be applied to landowners in reasonable and practical ways?

(b) Under what circumstances and to what degree should landowners and local governments be compensated for losses associated with wetlands beyond what is currently provided under statutes and case law?

Background Comments

Some aspects of regulation and program implementation are thought by some people to threaten or usurp a landowner's property rights, including asset value and income. People need to be able to make a living. There can be the perception that the regulations are inconsistently applied to small property owners and big developers. Enforcement must be perceived as fair treatment.

Some landowners object to losing "access" to and use of their wetlands due to new protections, while still having to pay taxes on that land. There are also objections to individual landowners having to bear the cost of providing a public benefit. Changing regulations sometimes had adverse effects on long range investment expectations in some cases. On the other hand, activities of landowners can affect many other people (positively or negatively), even beyond their immediate community. Landowners may be more inclined to resist compliance if there's no compensation.

Wetlands are often classified (zoned) for their highest and best development potential. The higher taxes put pressure on landowners to convert wetlands to such uses. Local governments may also be reluctant to downscale land use classifications for wetlands if doing so would reduce tax revenues.

Some counties expressed concerns about bearing financial liability for takings claims tied to their decisions in implementing the Wetland Conservation Act and about wetland parcels being lost from their tax base. Local governments are sometimes reluctant to approve wetland acquisitions without some compensation for lost property taxes by state and federal authorities; such in-lieu-of-tax payments may not equal 100% of prior taxes and source funds are disputed.

These concerns reflect continued focus on short-term gains and maintenance of the status quo. Land use classification and tax assessment policies can provide incentives to convert wetlands and penalize landowners who restore wetlands. Such policies encourage wetland loss and discourage wetland gains, exactly the opposite of what the state's wetland goals should be.

2.2.2 What are the trespass issues associated with protection of wetlands and how can they be resolved?

Background Comments

Many of the larger wetlands restorations in Minnesota involve multiple landowners. Some landowners are reluctant to restore these wetlands if it means that a neighbor or other person can enter on their wetland property. State law on access to public waters and private wetlands is not well-understood by all citizens.

This is particular concern in areas of the state where hunting, snowmobiling, and other outdoor recreation is common; landowners want to control access to their property and recreation enthusiasts don't want to lose opportunities or privileges. There may also be some confusion about public having right to access on wetlands.

2.3 *ECONOMIC VALUATION OF WETLANDS EFFORTS*

2.3.1 How do we determine the value (costs) of wetlands to landowners, to society, and to the environment?

How can (or should) acceptable economic values for wetlands be measured or established according to function and region?

Background Comments

We need a better way to relate wetland impacts and compensation. There are no clear values stated by anyone claiming economic or intrinsic benefits from wetlands, especially public benefits. Wetlands vary in perceived importance, depending on who owns, uses, or observes them. Full costs associated with wetlands protection must be understood (e.g., land, roads, infrastructure).

We are influenced by economists' method of placing market value over intrinsic value. Wetlands may have value beyond what we recognize as benefits to humans. Some people do not want to see economic values attached to wetlands because intrinsic value might be disregarded or devalued. The subjective meaning and feeling for natural resources might be lost.

2.4 *NON-REGULATORY OPTIONS AND INCENTIVES*

2.4.1 Private activities:

(a)How can private landowners be further encouraged to preserve and restore wetlands?

(b) How can we continue to develop and improve on the success of the Best Management Practices effort to protect water and wetland quality?

(c) What needs to be done to encourage more participation in wetland banking?

(d) What new or enhanced non-regulatory, voluntary incentives could be offered to encourage wetlands protection? Could more financial or technical assistance be made available?

(e) Would long-term leases with some flexibility for changes in circumstances be acceptable to regulators?

Background Comments

Best Management Practices (BMPs) have been developed in forest management and farming practices in recent years. Achievement of cost-effectiveness and on-the-ground effectiveness vs. use of regulations characterizes the support for BMPs.

Voluntary participation would get more commitment from the landowner. There were strong suspicions that requirements for permanent easements are a disincentive for some landowners; perhaps a 99-year easement would bring more participation. Economic disincentives to comply or go beyond the requirements must be neutralized. Some kind of credit for preserving

or enhancing existing wetlands was frequently cited as a wish. If wetlands have value in a marketplace, then more of the public could be convinced that they are worth something.

2.4.2 How can wetlands conservation partnerships be promoted among businesses, conservationists, and government to work together on wetlands?

Background Comments

This approach needs more attention and emphasis. Compliance is better if entered into voluntarily. Cost-sharing is a familiar incentive for farmers, because of farm programs. Incentives can get cooperation from landowners. "Carrots" are better than "sticks."

Greater cooperation among planners, developers, and regulatory agencies is needed. These different interests are often in conflict and need to work together whenever possible. There may be much that they can achieve together that they could not do on their own.

2.5 *FUNDING SOURCES AND ALLOCATION*

2.5.1 How can adequate funding be assured for wetland protection, restoration, and management?

How should funds for wetland protection, restoration, and management be allocated/targeted?

How and by whom will the viability of preserved or restored wetlands be financed and maintained?

Background Comments

Non-regulatory federal and state programs to preserve, restore, or enhance wetlands are popular, but funding has been inadequate so far to meet landowner requests. These programs are critical to the "net gain" side of the "no net loss" equation. The public seems to expect landowners to donate wetlands for the public good. Without adequate funding, wetland gains will not be maximized.

Local government units may need funds for acquisition or compensation, especially if development alternatives are limited or unavailable under a local wetland management plan and/or local land use plan. Local government units (including school districts) are faced with loss of local tax base and inequitable in-lieu-of-tax payments on public lands which has other budgetary implications (e.g., other landowners have to make up the difference).

2.6 *ECONOMIC SUSTAINABILITY*

2.6.1 How can various resource-based economies (e.g., forest management, agriculture, tourism) in close proximity to wetland areas be profitably sustained?

Background Comments

All concerned parties need to work together on protecting and restoring wetlands.

Some people argue that these economic activities need not be completely incompatible with good management of wetlands, while others believe that development and preservation are mutually exclusive.

The forest industry operates primarily in the northeast and northcentral regions of the state which also have the greatest amount of wetlands relative to total land area and have experienced minimal losses of wetlands in the last century.

The relationship between lakeshore development and related businesses, agricultural practices, water quality, and wetlands is complex. In northern Minnesota there is a common belief that agencies discourage economic development in tourism-reliant areas (put up barricades rather than lead the way). On the other hand, the locally-driven Big Sandy Area Lakes Watershed Project and the Heron Lake Area Restoration Project were cited as excellent examples of cooperation on those related issues.

There are many factors challenging the sustainability of agriculture and forestry economies. Wetlands regulation is seen as a further barrier to survival in some instances and a pointless exercise in other cases.

2.6.2 How do we resolve the economic and ecological conflicts of wetlands and the use of them?

Background Comments

We are still losing both wetlands and farmers; if this is not addressed, we will end up with both poorer farmers and a poorer environment. In northwest Minnesota, it was asserted that very small pothole wetlands prevent farmers with large equipment from using their land in an economically efficient manner.

There were suggestions that ditches, semi-lowlands, and pothole areas in farm and residential areas be exempted from most restrictions to allow construction and farming to progress, due to the history of federally-supported clearing and draining of the land, or that the landowner in the past of development should be able to mitigate wetland impacts quickly, perhaps with a higher replacement ratio.

3 GOVERNANCE ISSUES

The "Governance" category of issues includes matters that are fundamentally related to shared responsibilities for wetlands, structural processes for dealing with wetlands, and concerns about fairness for and between people.

3.1 CONSISTENCY AND COORDINATION AMONG JURISDICTIONS

3.1.1 Several issues relate to achieving consistency in objectives and application:

(a) How can state, federal, and local wetland goals and programs be linked for compatibility and coordination?

(b) How could consistency in rules interpretations be improved over time and different situations?

(c) How can inconsistencies be resolved among local, state, and federal wetland efforts for mitigation through acquisition, easements, restoration, and enhancement?

(d) What must be done to assure consistent application of sequencing requirements (avoid, minimize, and mitigate) by local, state, and federal wetland regulators?

(e) What will Minnesota do if the federal delineation methodology is again?

Background Comments

Achieving greater consistency would be one way to streamline the process, improve response time, and make regulations more effective. Attempting to do so might also force each level of jurisdiction to acknowledge and deal with the concerns raised by other jurisdictions. It can be difficult to be knowledgeable about and comply with expectations flowing from conflicting agency objectives.

Because each non-regulatory program has different enabling legislation, programs often "compete" for landowners or do not provide for their needs. Variables in payment rates and eligibility cause confusion among government staff and landowners.

There is a perception that there is little coordination or common understanding among the agencies, resulting in long delays and conflicts in permitting. There are appearances of unequal treatment. Implementation varies among local government units. Internal conflicts within the MDNR about wetlands policies are apparent. Interpretation of the rules changes with staff turnover.

More guidance is needed on sequencing requirements (avoid/minimize/mitigate) to get meaningful avoidance and minimization. Some regulators seem to jump to mitigation without properly reviewing alternatives. This results in additional loss of natural wetlands and conflicts among agencies and local governments.

A teamwork approach to areas among agencies and more community presence would be helpful (a metro-area suggestion).

A caution was offered that everyone believes their situation has unique qualities; arbitrary or unsubstantiated decisions can make the overall process a failure.

There was a suggestion for a statewide, official citizen review board to review and rule on wetland classification questions or disagreements, and another suggestion for regional review boards.

3.1.2 Trust between levels of jurisdiction:

(a) How can state agencies assure federal agencies that conservation, preservation, and "no net loss" of wetlands will be achieved through state efforts?

(b) How can local government units assure state and federal agencies that conservation, preservation, and "no net loss" of wetlands will be achieved through local efforts?

Background Comments

Different scientific disciplines and agencies are hesitant to trust and believe that their goals and interests will be pursued diligently. Everyone is watching everyone and no one is managing, resulting in misallocation of time, material, and know-how.

State wetlands laws are broader, yet not as "deep" as the federal Clean Water Act provisions applicable to wetlands. State and federal agencies have differing goals, as well. There could be a "merger" of interests and efforts through partnerships.

The efforts of many local government units to exercise responsible local control are not adequately recognized, so they are treated to the same lengthy processes; this is a disincentive for local wetlands planning. Minimum standards and criteria or a general policy framework were suggested in northcentral Minnesota as reasonable guidance that could be set by the state for local government units.

3.2 *STREAMLINING AND SIMPLIFICATION OF PROCESS*

[Note: Frustration and confusion about the complex and time-consuming nature of the permitting process were consistently cited as reasons for public anger and non-compliance with wetland protection requirements. There were fears that citizens will simply try to avoid the process, rather than the wetlands.]

3.2.1 State and federal levels of the process:

(a) How can multiple-agency review and permitting be reduced or simplified? How can wetland banking and replacement be simplified?

(b) What can or should be done to give one agency or unit of government sole regulatory responsibility for wetlands or to serve as a single point-of-contact for citizens?

Background Comments

The sheer number of agencies and local government units which can be involved in any wetlands project can be confusing, frustrating, alienating, and overwhelming for landowners and staff. The layers of government may also make enforcement more complicated. Confusion and lack of understanding are common, almost universal complaints, and the consequences are not necessarily a savings of wetland benefits. Applicants can get fragmented responses and find the process very time-consuming. Construction seasons can be short, especially in northern Minnesota. Perceived or real duplications of effort appears to be a waste of tax dollars. Too many entities have authority.

There is a great deal of mistrust between state and local levels of government; similar mistrust also exists to some degree between the state and federal level. Applicants and local governments want timely finality for decisions on wetlands and the opportunity to move on. People need to know that they can get most of their answers at one place and have a reasonable expectation of what the answers will be. However, one "textbook" answer for the whole state

does not account for variations between very different counties, like Houston County and Koochiching County.

Further streamlining should be done for greater consistency and economy and less public burden in regulating. People feel there are too many levels of government regulating the same thing.

There was a suggestion to eliminate "protected waters" permitting as a separate wetlands program.

3.2.2 Local levels of jurisdiction:

(a) What can be done to encourage and support local wetlands planning and management?

(b) What can be done to assure that local government units have authority over wetlands decisions within the context of local land use planning?

[Note: Land use planning is traditionally done at the local level of government, where people are most familiar with the area and have aspirations for their future well-being. With the delegation of responsibility for wetlands decisions to local government came a more focused tension between land use planning and natural resource management.]

Background Comments

Local circumstances are important because that is where much of the impact of regulations and other protection measures are felt. Some local government units feel a lack of control over their own environment. The state is extremely variable and local citizens could fit wetland regulations to their situation using a process patterned after the successful local water planning laws (where the State gives general guidelines and local citizens work together to meet those guidelines).

There continues to be concern and some anxiety over the possible loss of local control in land use decisions. Examples were cited of situations where local government units had decision authority in theory, but they believed they were constrained and over-supervised by state and federal authorities in the process. People resent outside, "heavy-handed" regulation.

State and federal agencies remain concerned about the capacity of local government units to plan for wetlands protection and management (a) under the pressure of other local economic and social needs, and (b) with limited expertise in resource management. They would like to see more of a long-term outlook at the local level.

3.2.3 What could be done to provide concerned citizens with more time and/or more information about specific projects?

Background Comments

Public confusion about the complex process makes participation difficult. Constructive public participation will improve the process. There is too little time to gather necessary information , especially at certain times of the year. People do this on their own time, rather than as part of their work.

3.2.4 How can a state wetlands conservation plan be a useful tool for regulators and users? How will local concerns and circumstances be a part of a statewide wetlands plan?

Background Comments

Lack of amiable and serious dialogue between rural landowners and environmentalists is a cause (obstacle) for gridlock over solutions and is impeding resource protection and economic gains. Too often it's "us-vs.-them." A diverse population, with different objectives and values, is affected by or concerned about wetlands protection.

Concerns were expressed about adding to existing bureaucracy, regulation, and costs. "Turf protection" by agencies, local governments, and interest groups will be a considerable challenge to developing a state wetlands plan. Clearly defined lines of responsibility must be spelled out. The plan should be simple and understandable for the average citizen, not written only for scientists; if it's too complicated, it will be too hard to sell the benefits.

Wetlands policy must encourage grassroots participation and encourage local planning. Specific priorities should be identified at the local level by citizens.

A lot of time and effort will be wasted if the plan does not benefit wetlands.

3.3 *MONITORING AND EVALUATION OF PROGRAM EFFECTIVENESS*

3.3.1 How will the effectiveness of wetlands protection efforts be monitored and evaluated?

Background Comments

Accurate information is needed for measuring progress and knowing where we stand.

There is still little certainty in the scientific community about success rates, criteria, and standards for wetland restoration and creation. Although it is generally agreed that restoration is much more likely to succeed than creation, the outcomes of either approach for wetland mitigation are apparently unpredictable enough to caution state and federal regulators and support their emphasis on avoid and minimizing impacts on existing wetlands. Mitigation seems like an easy fix but there is still much we don't understand about wetland systems.

The filling, alteration, or development of wetlands should be monitored over time to make sure that the integrity and function of the area's wetland [hydrologic] system is not significantly degraded or destroyed; such impacts might not be immediately apparent.

Monthly monitoring during growing season for 5 years is very expensive and adds large costs to a project.

3.4 *ENFORCEMENT*

3.4.1 What kinds of penalties would more effectively deter or punish violations of wetlands laws and regulations and how can they be implemented?

Background Comments

Penalties available under existing laws may be insufficient disincentive for flagrant and knowing violations, such as ignoring setbacks or removing shoreland vegetation for profitable developments. A question was raised about disproportionate fines for truly innocent violations

by average citizens confused by the requirements. The sufficiency of using only monetary penalties was questioned, with the suggestion that restoration should be the only alternative.

3.4.2 How can fairness and empathy be encouraged in enforcing the regulations?

Background Comments

Most violations were alleged to occur out of innocent ignorance. There were complaints about rude or unhelpful enforcement personnel. Education must be a #1 priority for those enforcing the rules. There are perceptions of a lack of uniformity in enforcement statewide.

3.5 *COORDINATION WITH OTHER PLANS AND POLICIES*

3.5.1 How will a state wetlands plan be coordinated with other plans or policies, like the Sustainable Development Initiative, Minnesota Water Plan, CRP & RIM programs, etc.?

Background Comments

How the need for development is determined is a dynamic, marketed-oriented process. There can be widely divergent opinions on it, even within a small community.

Agricultural policies of the federal farm programs and wetlands protection policies need to be better integrated or coordinated. Continuing debate will dilute actions on important matters.

3.6 *SPECIFIC GOVERNANCE ISSUES RAISED IN DISCUSSIONS*

3.6.1 Roads: What particular assistance, if any, is needed by townships, cities, and/or counties to construct and reconstruct roadways while fulfilling responsibilities for wetlands?

Background Comments

There are additional costs for time, studies, and mitigation to be balanced with maintaining safe roads, which is also an important public policy and obligation. There were some suggestions that such impacts should be exempted from mitigation. More uniform standards for road construction and wetlands credits to counties for construction were cited as needs.

4 EDUCATION

"Education" was discussed as both and issue and as a tool for dealing with other issues. Participants generally agreed that public awareness about wetlands has increased considerably over the past several years, but that further, targeted information and education is needed. The benefits provided by wetlands and the costs ensuing from wetland losses are not always self-evident, which is a particular challenge for wetlands education.

4.1 *INFORMATION FOR GOVERNMENT STAFF AND ELECTED OFFICIALS*

4.1.1 How can information and education about wetlands protection and management be directed to policy makers and land managers?

What sources of funding would be available for information and education for policy makers and land managers and who can most effectively deliver that information and education?

Background Comments

Informed decisionmakers are needed to deal with wetlands issues fairly and effectively. There were examples of time lost in the permitting process due to the lack of experience and training of the local staff dealing with wetlands. There are costs associated with training local staff. The total picture for the environment and financial impacts need to be understood better by government leaders.

Information needs to be targeted differently for staff who have day-to-day responsibilities for wetlands and for staff and elected officials who need more familiarity and context on wetlands for general decision-making.

There may be problems with inconsistency and subjective interpretation if local government units have most of the responsibility for education, given their personal contact with permit applicants.

There were several comments about legislators' unfamiliarity with the Wetland Conservation Act they had voted for in 1991, and the rules that followed.

4.2 *INFORMATION FOR THE GENERAL PUBLIC*

4.2.1 How can the general public become better informed about the functions and values of wetlands in their own communities and across the state?

How can public knowledge and understanding about less-than-obvious wetland types 1, 2, and 6 be enhanced?

How can the public be helped to understand the various regulatory and non-regulatory wetland programs?

What sources of funding would be available for information and education programs for the general public and who can most effectively deliver that information and education?

Background Comments

People generally want to "do the right thing," if they understand and agree on what that is. Much of the public still does not understand or appreciate the full range of values of individual wetlands. The general public has been well-taught to believe that wetlands are where you see ducks and cattails or that wetlands are bad. Education could improve voluntary compliance, which would reduce the need for expensive enforcement and legal action. Without more public support and comprehension of what is at stake, the State will probably fail to achieve whatever goals it sets for wetlands. It was suggested that rulemakers will make more rules than are really needed without better public understanding.

Ignorance is also a large part of the difficulty with providing wetland owners access to the process (who to notify, who can provide advice and assistance, what approvals are needed, what information is needed, etc.). Project guidelines for landowners and permit applicants might be helpful (some local government units try to provide this). Wetland rules still are not accepted in some northern areas; they are feeling forced to protect wetlands rather than wanting to protect them. Many people place other priorities over wetlands.

5 DATA AND RESEARCH

"Data and Research" needs were described as information gaps or roadblocks for dealing effectively with other issues.

5.1 INVENTORIES AND MAPS

5.1.1 How can a community, county, or watershed economically inventory its existing wetlands (and perhaps other natural resources) for planning purposes and public information?

How can common criteria be established for developing an inventory of wetlands and their functions?

What can be done to standardize or coordinate conventions for wetland delineation and mapping?

Background Comments

Landowners and local government units that are responsible for wetlands need more information about their own circumstances so that they can make plans with fewer surprises. Currently, there is no standard database or inventory on wetlands in Minnesota (for such information as acreage, types, location, historical trends, rate of net gain or loss, etc.). State, federal, and local regulators often use different delineation and mapping conventions, with the result that a wetland mapped by one agency might not be identified by another agency as the same type of wetland or in the same location. This is very inefficient and confusing.

5.1.2 How can accessible and user-friendly, digital and graphic mapping information be developed and provided regarding wetlands and related geographic information? How can basic research be funded?

Background Comments

This information is vital for implementation of any program, but it's not available yet. Basic information is lacking for informed decision-making at both the local and state levels (e.g., where drained wetlands are located (for potential restoration sites); where groundwater recharge areas are located (especially for aquifers providing water supplies); we need to target research to crucial information gaps. If we're lacking baseline data, we won't have anything to compare to.

There was a suggestion that geopositionally-correct mapping of land ownership and protected natural resources should be an ongoing process as part of a statewide land information system.

Better organization and communication of existing and future data on land types, ecoregions, watersheds, etc., is needed.

There was a specific suggestion for identification and retrieval of wetland data by plat location or public survey reference in a single database for all agencies and government units; each entity having its data available and indexed, and updating its data on-line; and the whole system accessible to citizens through a convenient government office.

5.1.3 How can a general inventory of microfauna for different wetland types be accessed or developed?

Background Comments

This is needed to determine if wetlands can function as nutrient recycling and organic breakdown zones.

SECOND PHASE OF PROJECT: GIVING MANAGERS A ROADMAP
A MESSAGE FROM THE PROJECT COORDINATOR

WHERE TO START: MAKING THE TASK MANAGEABLE

Making the task of putting a plan together manageable and action-oriented involves a "who" and a "what." The "who" is a wetlands network that reflects and maintains important perspectives (local/state/federal; public/private sectors; private and public rights and responsibilities). The "what" is the selection of issue elements and questions that can be the bricks and mortar foundation for statewide wetlands conservation planning.

Many questions and concerns were raised in the resource group discussions around the state - too many and too complex to be handled all at once. This is not a simple, cause-and-effect, straight-line situation, so the problem-solving process should not pretend that it is so by artificially separating interdependent (or conflicting) organizational structures and objectives. An effective and responsive planning process ought to reflect the people and organizations involved.

Such a challenging job must be staged in manageable tasks. Criteria for deciding which issues to work on first include predominant concerns, issues which must be resolved before other related items can be properly addressed, and matters of great urgency. It will also be helpful to get some early "successes" to show results and demonstrate the potential of this project. The following assessment of issues using these criteria is based on what I heard and sensed in all 20 resource group sessions.

CRITERIA FOR WORKING ON ISSUES:

Predominant Concerns: The three broad categories of issues that emerged in every resource group session were (a) the confusing and complex process for permitting; (b) interest in applying regional differences to wetlands policy; and (c) education. Another area of particular concern for state and federal agencies (and also discussed by some resource groups) is the need for common goals and strategies for wetlands, including a clear, workable wetland restoration strategy.

Sequential Factors: Some issues must be addressed before other, related matters can be worked on. For example, functions and values of wetlands, including definition and identification, were also the subject of much discussion and concern. This set of issues must be addressed early in the project, because it will affect the work done on the high priority issues listed above.

Urgency: Many cities, counties, and watershed districts want to develop local wetlands management plans for a variety of reasons, especially given the direct responsibility that local government units now have for wetlands under the Wetland Conservation Act. Given that there is little or no guidance currently available to assist these communities in their planning efforts and that these efforts should be coordinated with state-level goals and strategies, this issue must be addressed immediately.

WHO IS WORKING ON THE PROJECT: THE WETLANDS NETWORK

At the start of this project I had two needs as Project Coordinator: I needed a network of people with interests in wetlands that stretched across the state in order to develop broad-based participation in the project, and I needed to learn from the network participants about the crucial needs and concerns they

had with wetlands protection and management in Minnesota. Both of those needs were met and now you have read the first installment of contributions from the wetlands network. There is more background information, some in the form of real stories, which will also be compiled.

A network can be a powerful tool for action. Our wetlands network has interactive levels of jurisdiction, shared leadership, independent members voluntarily engaged in the process, and, may I suggest, a unifying purpose or shared interest in what might be called "sustainable wetlands management." Sustainability is a concept which carries compound meanings and implications for people in the wetlands network, which goes to the heart of what needs to be shared, discussed, and worked out.

Furthermore, I was impressed by the positive reaction of participants to the small group discussion format for the resource groups in the first phase, and I want to build on the strengths of small teams. It is through personal interactions that mutual learning and understanding can occur among an array of interest groups and experience. Small work teams of about 15 people could include local, state, federal, and private sector interests and use good communications to build voluntary links and unifying purposes among those who share power and responsibility for wetlands.

For the next phase of the project (addressing the issues identified in this report), I recommend forming work teams within the wetlands network: an **Ecological/Socio-Economic Work Team**, a **Policy/Management Work Team**, and a **Local Wetlands Management Work Team**. Education and information issues would be addressed as necessary within this configuration. The ecological and socio-economic topics are grouped together because those categories have substantial crossover and the challenge of associating the two topics must be done up-front and throughout plan development. There were common complaints that social and economic consideration have gotten inadequate consideration in wetlands rules and programs. Attention to social and economic concerns will be crucial to local participation in development and implementation of a state wetlands plan. These factors overcome the appealing symmetry of matching teams to categories, as described on page 9 of this report.

The Local Wetlands Management Work Team would meet during Spring 1995 with the task of drafting guidelines for local wetland management programs. This task is being undertaken in response to urgent needs for assistance. The materials might include anything from principles for wetlands management to guidelines for developing local wetlands management programs to a model local wetlands plan or ordinance. At the time of publishing this report, it is unknown whether such materials would be voluntary for users or would be transferred into rulemaking for amendments to the Wetland Conservation Act. The other two work teams should begin meeting during the summer of 1995 and would continue their work for about 1 to 1½ years.

PROCESS FOR GETTING TO OUTCOMES AND ACTIONS

Work Teams

The work teams would each meet at least monthly, work in close communication with each other, and review and adjust each other's products. Records of every work team session would be shared with the other teams and the consulting pool in a timely manner, with the request for ongoing feedback. The Ecological/Socio-Economic Work Team and the Policy/Management Work Team would produce joint proposals through their cooperative efforts.

Technical advisory panels can be set up as needed, on a case-by-case basis, with members drawn from the academic community and from technical experts in the public and private sector. Tests and pilot demonstrations of proposed strategies should be encouraged during the development phase. Action planning by cooperating agencies, local government units, and the private sector would have to accompany development of each piece of the plan.

The Local Wetlands Management Work Team must complete its task no later than July 1, 1995. The Ecological/Socio-Economic Work Team and the Policy/Management Work Team would have a target date of January 1996 for their first set of joint proposals.

Consulting Pool

The purpose of a consulting pool would be to maintain communication and participation by a wider array of interests and expertise than can be accommodated in a small work team. The advantage of small work teams is that they can meet more frequently and work more intensively than a large group; the principal weakness of a small group is that important insights and concerns could be missed. Having a consulting pool should overcome that weakness while using those strengths to build a wetlands plan as quickly and efficiently as possible.

From time to time, it may be necessary or desirable for the work teams to meet together or for the entire wetlands network (work teams and consulting pool) to meet as a group. Such meetings would be scheduled with as much advance notice and in as convenient a location as possible.

WORK TEAM INITIATIVES:

	Issue Codes	Tentative Timeline
Local Wetland Plans		
Local Wetlands Planning Guidelines	(3.1.2 and 3.2.2)	4/95 - 6/95
Education	(4.1)	
Ecological/Socio-Economic		
Regional Differences	(2.1)	6/95 - 8/95
Functions and Values	(1.2)	9/95 - 12/95
Goals-setting	(1.1)	1/96 - ?
Policy/Management		
Jurisdictional Coordination	(3.1)	6/95 - 9/95
System Streamlining	(3.2)	10/95 - ?

Role of Project Coordinator

As Project Coordinator, I will continue to help maintain the wetlands network. The assistance I can provide includes helping with communications among work teams, the consulting pool, decisionmakers, and concerned citizens; scheduling and process management; and monitoring participation. In contrast, the wetlands network would be responsible for developing policy and action proposals.

Acceptance, Authorization, and Action on Proposals

The kind of acceptance or authorization needed to act on any proposal will depend on several variables, including the nature of the proposal and the number and jurisdiction of responsible parties. Development of acceptance, authorization, and actions will necessarily be a part of the strategic planning process.

There will be two kinds of products from these efforts: (1) written materials (on paper or computer disk) that report any agreements, goals and strategies, and action plans (what would be recognized as a written "plan"); and (2) activity in wetlands management, education, networking, and continued learning. Outcomes are discussed further in the next section of this report ("Anticipated Outcomes").

Project Report #2

Stories are an important way for people to connect, learn, and understand about each other. In each local-level resource group session, participants were asked to share real local examples to illustrate the questions and concerns they were discussing. The second Project Report will share with everyone on the project mailing list the experiences and insights of participants in the resource group discussions in a sampling of those stories. They describe successes, failures, and uncertainties as seen by contributors. The stories will supplement the listing of issues in Project Report #1.

ANTICIPATED OUTCOMES

The issues and circumstances discussed in this report point to a need for a state wetlands conservation plan that is designed to be comprehensive (with vertical and horizontal consistency among all wetlands efforts, and oriented more towards system-based management than site- or species-based management) and to differentiate (recognizing critical regional distinctions and conflicting needs and values in land use planning and natural resources management). Citizens would benefit from fair and efficient public efforts for wetlands; maintenance of healthy, functioning land and water systems; improved access to information and education about wetlands; and increased recognition and understanding about the complex social, economic, and environmental contexts for wetlands decisions that affect a person's or a community's opportunities to thrive and flourish.

A state wetlands plan is likely to include several elements, including the following possibilities:

- Statewide wetlands goals and policies that coordinate the efforts of all state and federal agencies with regulatory and programmatic responsibilities for wetlands in Minnesota, based on appropriate ecological, geographic, and economic distinctions, with operational action plans for participating or affected agencies;
- Assistance for local adaptation and implementation of statewide and regionalized wetlands goals, policies, and strategies, possibly in the form of a model local wetlands plan or ordinance and/or other informational materials or training;
- Monitoring and evaluation process for wetlands plan implementation;
- Education modules, such as user training and public education strategies.

Such a state wetlands plan would be used primarily by leaders and staff of state agencies, but should also be useful and informative for local government units and federal agencies in Minnesota. A state wetlands conservation plan is likely to be put into effect through a combination of independent initiative, memoranda of agreement among participants, rulemaking, executive order, and/or recommendations for legislative action. It will most likely be implemented in stages as components are completed.

This report does not provide answers to the challenges and conflicts described; it set forth the questions and concerns about wetlands protection and management that a diverse network of people around that the state have shared and discussed. It should provoke an open and productive public discourse about where Minnesota is headed with its wetlands policy. It is imperative that concerned governments and individuals find a path through these dilemmas through a cooperative problem-solving effort.

There will be serious consequences for failure to deal with the dilemmas in Minnesota's wetlands protection system: (a) Justice will not be served if issues of governance are not resolved; (b) Natural systems will be threatened if ecological policies are not improved; and (c) Social and economic needs of communities and citizens will be poorly served if they are not linked with wetlands policies.

Minnesota's wetlands conservation plan will be a dynamic document, created as a set of cooperative achievements; reviewed over time for effectiveness, and adapted to new knowledge and changing needs. It is the actions taken to implement the plan that will make this effort worthwhile. Real actions based on this plan will help achieve local and state wetlands goals, and those actions are the true objective of the project. The outcome will be well-informed decision-making by governments and by individuals.

APPENDIX A: FORMAT FOR WRITTEN COMMENTS

PREFERRED FORMAT FOR COMMENTS

Please read the report carefully before preparing any comments. If you have questions about submitting comments, please call Elizabeth Carlson, Project Coordinator, at (612) 297-4890, or Doug Norris, Project Grant Administrator, at (612) 296-0779.

Use the following questions to comment on Project Report #1, *Dealing With Wetlands in Minnesota: Questions & Concerns From Around the State About Issues For a State Wetlands Plan*. It will be easier to make use of your comments if they are kept as brief and to-the-point as possible.

1. **If there is an important issue that you believe has not been considered at all in Project Report #1, please answer the following questions about that issue:**
   (a) What is the issue?
   (b) Why is it an issue?
   (c) What are the probable consequences if that issue is not addressed?

2. **If you agree, disagree, or want to offer further insights concerning any issue that is listed in Project Report #1, please provide brief comments in the following format for each issue:**

   Issue # (reference the outline number assigned to the issue in the text)

   Comments:

WHERE TO SEND COMMENTS

Written comments should be sent to the Project Coordinator any of the following methods:

Elizabeth Carlson
State Wetlands Plan Project Coordinator
Mail: DNR Ecological Services, Box 25
500 Lafayette Road
St. Paul, MN 55105-4025
Fax: 612-296-1811
Internet: beth.carlson@dnr.state.mn.us

Receipt of all written comments will be acknowledged by postcard. Project Report #1 and all written comments to the report received by June 1, 1995 will be submitted to work teams for the plan development phase, as described at the end of the report.

APPENDIX B: LOCATIONS OF RESOURCE GROUP SESSIONS

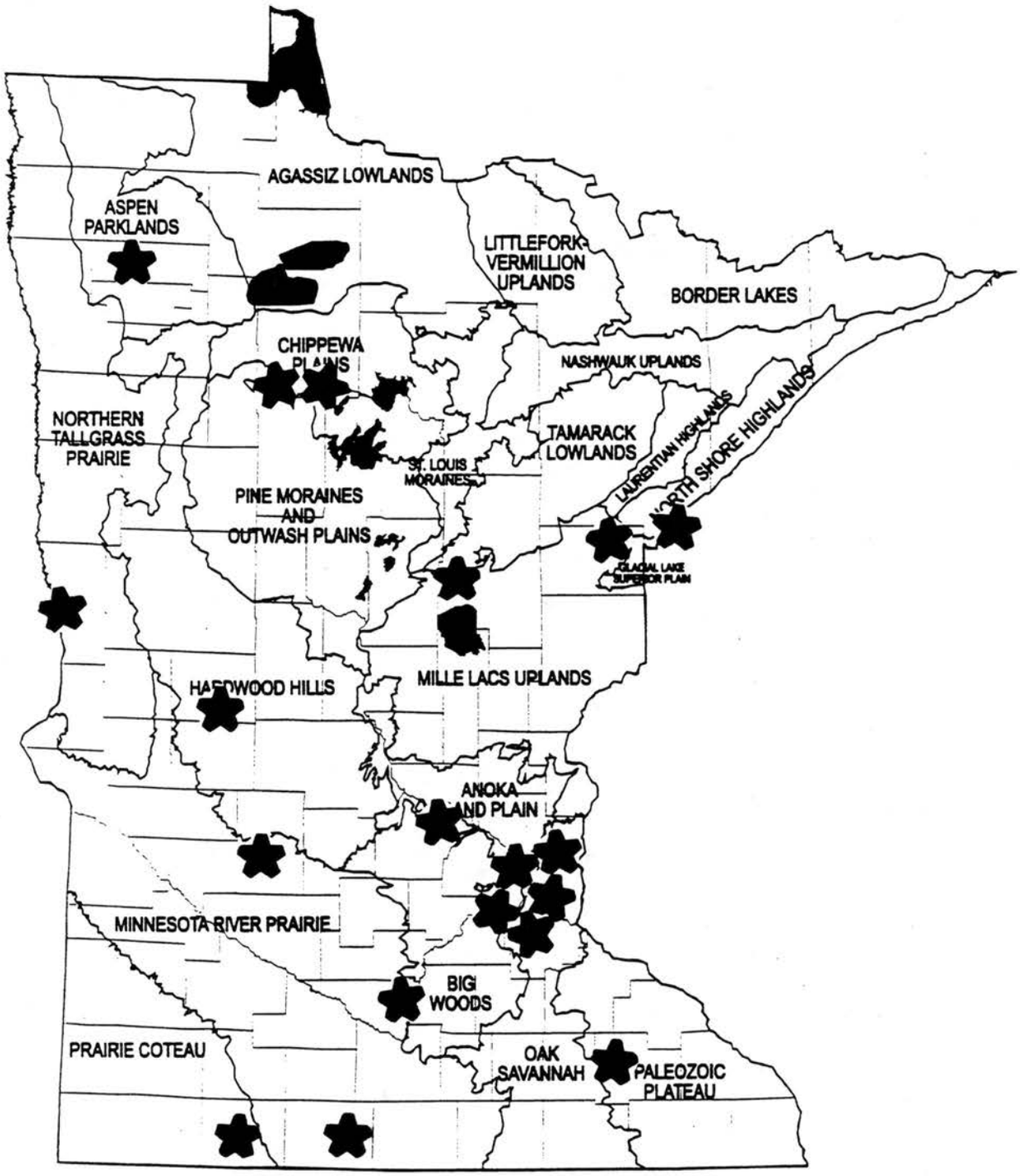
Participants in resource groups were identified through a variety of sources and networking referrals. Each group had a diverse mix of people in different forms of local government (elected or staff), business and industry, agriculture, recreation and environment, educators, landowners, and people with general interests in wetlands.

In total, 260 people around the state participated in these resource groups for issues identification and clarification. The technical/administrative resource group is a standing group of staff liaisons in participating agencies and local government associations. Other resource groups had one-time discussions and all participants remain on the project mailing list for future developments.

LIST OF MEETINGS

Location	Date
Government Technical/Administrative Staff → *Met at various locations in metro area*	January - May 1994
Maplewood [Phalen Chain-of-Lakes Watershed Project]	July 7, 1994
Willmar	August 2, 1994
Fairmont [Blue Earth River Basin Initiative]	August 9, 1994
Metro area	August 11, 1994
Alexandria	August 23, 1994
Cloquet	August 30, 1994
Metro area	September 1, 1994
Lakefield [Heron Lake Area Restoration Assoc.]	September 13, 1994
Duluth	September 21, 1994
Metro area	September 27, 1994
Metro area	October 11, 1994
Northern Township *(near Bemidji)*	October 26, 1994
Northern Township *(near Bemidji)*	October 27, 1994
Thief River Falls	November 22, 1994
Rochester	November 29, 1994
St. Peter	December 8, 1994
Breckenridge	December 19, 1994
Aitkin	January 5, 1995
Otsego *(west side of Mississippi River near Elk River)*	January 11, 1995

LOCATIONS OF THE 20 RESOURCE GROUPS AROUND MINNESOTA



20TH RESOURCE GROUP: Technical / Administrative Staff Group from local, state, and federal government units (met in the metro area).

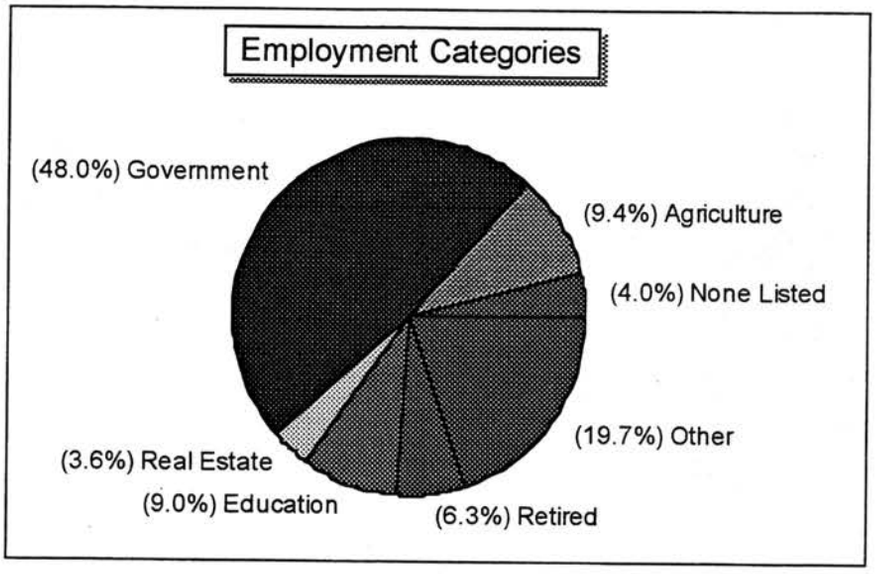
NOTE ABOUT MAP: The underlying map attempts to define different units of the landscape across Minnesota, using interrelationships among climate, geology, geomorphology, soils, vegetation, hydrology, animals, and land history. Compiled by Minnesota DNR, University of Minnesota, and U.S.D.A. Forest Service. This map is dated 11/04/93; the exact placement of boundary lines may not be final.

APPENDIX C: SURVEY INFORMATION ON RESOURCE GROUPS

Participants in the resource groups were asked to complete a six-question survey about their backgrounds. The responses were compiled and analyzed by DNR Volunteer Julie Rodriguez of Moorhead, Minnesota; Julie is a survey analyst and transportation economist for the Upper Great Plains Transportation Institute in Fargo, North Dakota.

Response rate: 223 out of 260 participants completed and returned surveys, for a total response rate of 86%. The first local resource group, which met on July 7, 1994, was not given the survey because it had not yet been drafted; therefore, excluding those 11 participants, the response rate was 90%.

QUESTION #1: PARTICIPANT'S FORM OF EMPLOYMENT

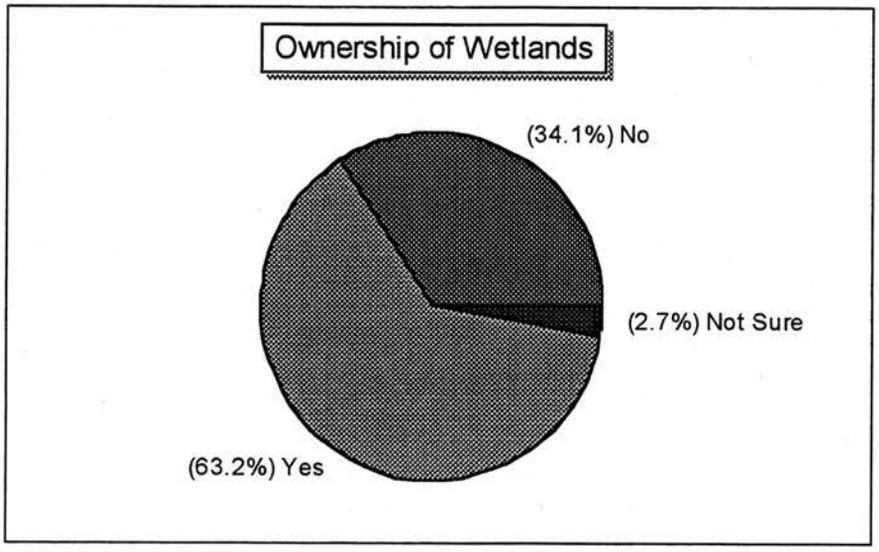


Note: The "Other" category includes a variety of professions and activities. Please refer to the list of participants in Appendix D for more specific information.

QUESTION #2: "IF YOUR CONCERN ABOUT WETLANDS POLICY IS NOT RELATED TO YOUR EMPLOYMENT, WHAT IS THE NATURE OF YOUR INTEREST IN WETLANDS POLICY?"

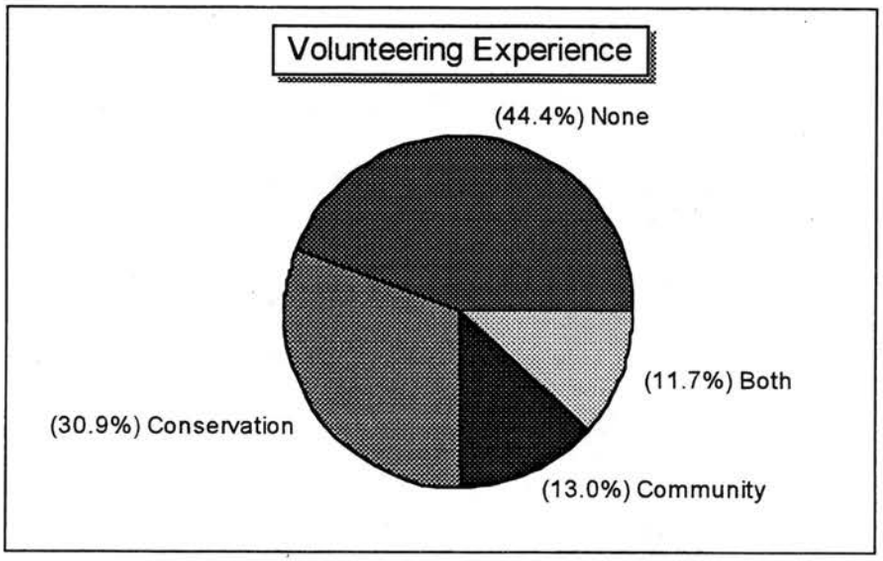
The intent of this survey question was to learn the sources of a participant's interest in wetlands policy. It was not possible to create a pie chart that would adequately reflect the variety and complexity of the responses received. Many participants listed two or more interests that were generally a combination of land ownership, outdoor recreation activities, and/or personal interests in land use and conservation. A number of surveys did not provide any response to this question.

QUESTION #3: "DO YOU, OR DOES THE COMPANY YOU REPRESENT , OWN OR MANAGE REAL ESTATE WHICH HAS A WETLAND ?"



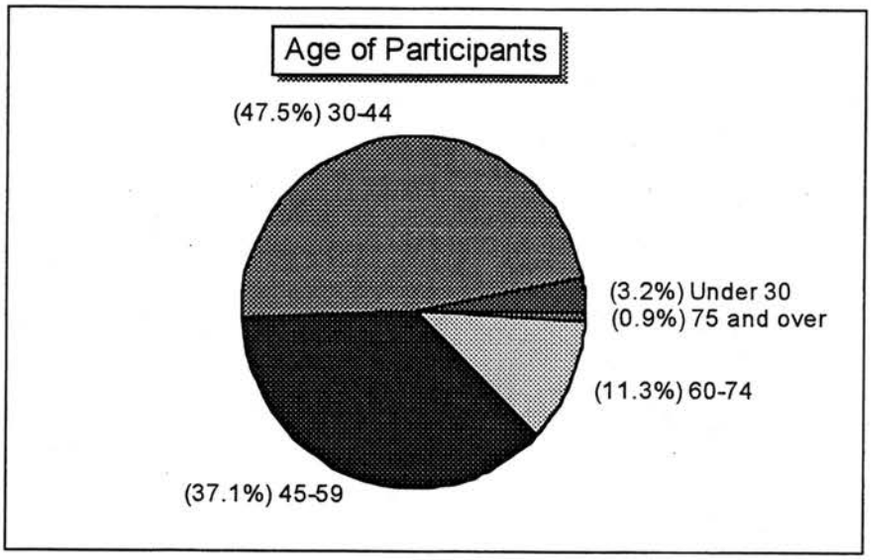
Note: This question was included in the survey because an ownership or management interest in wetlands could affect a participant's perceptions, priorities, and recommendations.

QUESTION #4: PARTICIPANT'S OTHER VOLUNTEER EXPERIENCE

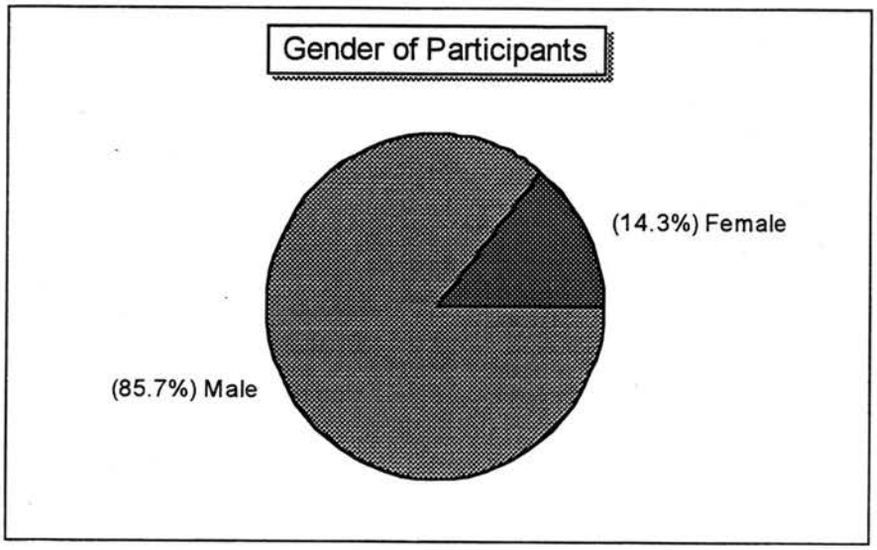


Note: This question was included in the survey to check whether the participants were all active, regular volunteers for this type of activity or if the Project Coordinator had succeeded in inviting a wider array of participants.

QUESTION #5: AGE OF PARTICIPANT



QUESTION #6: GENDER OF PARTICIPANT



Note: Professionals in the sciences and various aspects of land development still tend to be predominantly male. The Project Coordinator made a concerted effort to have gender diversity in all resource groups.

APPENDIX D: LIST OF RESOURCE GROUP PARTICIPANTS

FACILITATORS

Elizabeth Carlson — **Project Coordinator & primary facilitator for all sessions**

Charlotte Shover — **in Metro area, Willmar, & Alexandria**
Former planning consultant; now Dakota Co. Envir. Educ. Coordinator; Burnsville City Council member

Bruce Hawkinson — **in Fairmont**
Planner/facilitator in DNR Div. of Fish & Wildlife

Deb Bailey — **in Cloquet & Duluth**
Arrowhead Regional Development Commission staff

Gayle Crampton — **in Lakefield**
Management analyst & facilitator in DNR Bureau of Field Services

Cliff Tweedale — **in Bemidji**
Headwaters Regional Development Commission staff

Deb Zak — **in Thief River Falls**
Minnesota Extension Service educator in Pennington County

John Pauley — **in Rochester**
Regional Planner for DNR Metro Region; SE Minnesota resident

Lynne Kolze — **in St. Peter**
Planner/facilitator in MN Pollution Control Agency, Water Quality Div.; Project Coord. for MNRIP

Steve Mikkelson — **in Breckenridge**
The International Coalition staff

Joe Stinchfield — **in Aitkin**
Policy planner in DNR Office of Planning

TECHNICAL / ADMINISTRATIVE STAFF GROUP

→ **5 SESSIONS, JANUARY - MAY 1994; CONTINUE AS LIAISONS FOR NETWORK OF GOVT. UNITS**

1. K. J. McDonald, MN Dept. of Agriculture, Interagency Liaison
2. John Jaschke, MN Board of Water & Soil Resources, Wetland Management Specialist
3. Doug Norris, MN Dept. of Natural Resources, Div. of Fish & Wildlife, Wetlands Coordinator
4. Tom Landwehr, MN Dept. of Natural Resources, Div. of Fish & Wildlife, Wetland Wildlife Program
5. Mike Phillips, MN Dept. of Natural Resources, Div. of Forestry
6. Paul Pojar, MN Dept. of Natural Resources, Div. of Minerals, Reclamation Engineer
7. Erv Berglund, MN Dept. of Natural Resources, Div. of Waters, Wetlands Conservation Hydrologist
8. Mary Knudsen, MN Pollution Control Agency, Water Quality Div.
9. Sarma Straumanis, MN Dept. of Transportation, Environmental Services, Wildlife Biologist
10. Dave Ballman, U.S. Army Corps of Engineers, Ecologist
11. Gary Wege, U.S. Fish & Wildlife Service, Fish & Wildlife Biologist
12. Mark Oja, U.S. Natural Resource Conservation Service, State Biologist
13. Thomas Peters, Federal Highway Administration, Environmental Coordinator
14. Joe Basta, Isanti County Zoning Administrator; President of MACPZA *[contacted through AMC]*
15. Sara Prow, City of Woodbury, Senior Planner *[contacted through LMC]*
16. John Dooley, Attorney for Minnesota Association of Townships
17. Howard Peterson, Riley-Purgatory-Bluff Creek Watershed District *[contacted through MAWD]*
18. Tim Kelly, Coon Creek Watershed District Administrator *[member of ADA]*
19. Tom Kalahar, Renville County SWCD biologist *[contacted through MASWCD]*

NE - Cloquet

→ **TUESDAY, AUGUST 30, 1994, UM-CLOQUET FORESTRY CENTER**
[names in italics unable to attend]

1. Wayne Olson, Carlton County Hwy. Engineer [Cloquet]
2. James Mohn, City of Duluth Planning Division [Duluth]
3. Larry Schwarzkopf, Fond du Lac Reservation Natural Resources Manager [Cloquet]
4. Joel Peterson, Fond du Lac Reservation Environmental Program [Cloquet]
5. Terry Weber, Arrowhead Regional Development Commission [Duluth]
6. Lil Stocke, Edina Realty; Chair of local realtors association
7. Bruce Barker, Minnesota Timber Producers [Duluth]
8. Tom Murn, Potlatch Corp. [Cloquet]
9. Ann Thering, Audubon Society member & "wetlands watcher" [Duluth]
10. Jill Jacoby, MPCA "River Watch" Coordinator [Duluth]
11. Ross Cass, DNR Realty Specialist [Grand Rapids]

Lee Ramsdell, Lake County Commissioner [Two Harbors]
Graham Tobin, UMD Dept of Geography [Duluth]
Richard Libby, Greater Pokegema Lake Association [Grand Rapids]
Pat Collins, DNR Lake Superior Habitat Coordinator [Cloquet]

NE - Duluth

→ **WEDNESDAY, SEPTEMBER 21, 1994, NATURAL RESOURCES RESEARCH INSTITUTE**
[names in italics unable to attend]

1. Mark Johnson, St. Louis County Water Plan Coordinator [Duluth]
2. John Thompson, St. Louis County Land Dept. [Duluth]
3. Bob Manzoline, City of Virginia Asst. City Engineer [Virginia]
4. Cindy Hagley, Sea Grant Program (water resources education) [Duluth]
5. Barb Liukkonen, BWSR/Minnesota Extension Education Coordinator [Duluth]
6. Keith Hanson, Minnesota Power & Light [Duluth]
7. Glenn Evavold, UMD Dept of Geology; consulting engineer-hydrogeologist [Duluth]
8. Mike Billman, Billman's Construction / Hermantown Planning Commission [Duluth]
9. John Powers, planning consultant / citizen involved in St. Louis River RAP [Duluth]
10. John Pegors, Izaak Walton League [Duluth]
11. Mark Nelson, BWSR Board Conservationist [Duluth]
12. Bob Berrisford, Superior National Forest [Duluth]

Marna Butler-Fasteland, Carlton County SWCD Water Plan Coordinator [Cloquet]
Howard Hedstrom, Hedstrom Lumber [Grand Marais]
Eric Mayranen, Associated Contract Loggers [Britt]
Deb Ortman, Northern Environmental Network [Duluth]

NC - Bemidji "A"

→ **WEDNESDAY, OCTOBER 26, 1994, NORTHERN TOWN HALL**
[names in italics unable to attend]

1. Brad Nord, Beltrami County Commissioner [Bemidji]
2. John Sumption, Cass Co. SWCD Manager [Walker]
3. Tim Penfield, Clearwater County Land Dept. [Bagley]
4. Michelle Hanson, Hubbard Co. Wetlands Administrator & Water Plan Coordinator [Park Rapids]
5. Mark Thorson, Thorson Inc. (road contractor) [Bemidji]
6. John Grimley, Leech Lake Realty; L. L. Chamber of Commerce; Leech Lake Watershed Project [Walker]
7. R. Allen Wake, cattle farmer / biology teacher / hunter [Federal Dam]
8. Ron Palmer, Agency Bay Lodge & Trailer Court [Walker]
9. Edward Hamerly, North Star Sportsmen's Club [Walker]
10. Cindy Buttleman, DNR-Minerals [Bemidji]
11. Brian Dwight, BWSR [Bemidji]

Joel Maggert, Koochiching County Commissioner; beef cattle farmer [Northome]
Shirley Nordrum, Leech Lake Reservation Div. of Resource Management [Cass Lake]
Molly MacGregor, Mississippi Headwaters Board Director [Walker]
Randolph Rajala, Rajala Lumber Company [Deer River]

NC - Bemidji "B"

→ **THURSDAY, OCTOBER 27, 1994, NORTHERN TOWN HALL**
[names in italics unable to attend]

1. Pat Alberg, Hubbard County Commissioner; resort owner; lake assoc. [Park Rapids]
2. Dick Florhaug, Beltrami County Commissioner [Kelliher]
3. Norm Moody, Cass County Land Commissioner [Walker]
4. Gary Lockner, Lake of the Woods County Environmental Services [Baudette]
5. Jeff Hrubes, Beltrami Co. SWCD [Bemidji]
6. Chuck Meyer, Wetlands Specialist, Red Lake Band of Chippewa Indians DNR [Red Lake]
7. Carl Wegner, Minnesota Extension (forestry) in Itasca County [Grand Rapids]
8. David Rabas, NC Experiment Station [Grand Rapids]
9. Tim Beebe, Champion International Corp. [Bemidji]
10. Charles Holt, Lake Consultants Inc. [Bemidji]
11. Jerry Maertens, member of Audubon Society & Wildlife Society [Bemidji]
12. Butch Belcher, DNR-Trails & Waterways [Bemidji]
13. Brenda Glenn, Chippewa National Forest [Cass Lake]

Rosemary Given Amble, Bemidji City Council [Bemidji]
John Ostrem, Headwaters RDC Director [Bemidji]
Skip Duchesneau, D. W. Jones Inc. (developer); Leech Lake Assoc.; Cass Co. Planning Comm. [Walker]

NW - Thief River Falls

→ **TUESDAY, NOVEMBER 22, 1994, PENNINGTON COUNTY COURTHOUSE**
[names in italics unable to attend]

1. Ken Murphy, Pennington Co. Commissioner [Thief River Falls]
2. Delray Larson, Marshall Co. Commissioner; beef cattle farmer [Gatzke]
3. Becky Trefz, Clearwater Co. Hwy. Dept. [Bagley]
4. Tim Finseth, Marshall Co. SWCD Manager [Warren]
5. Raymond Olson, Pennington Co. SWCD Supervisor [Thief River Falls]
6. Gary Lane, Pennington Co. SWCD Manager [Thief River Falls]
7. Lowell Enerson, Red Lake Watershed District Administrator [Thief River Falls]
8. Don Barron, Thief River Falls City Council; wild rice producer; fmr SCS [Thief River Falls]
9. Roland Gullekson, head of Agassiz ELC; farmer (row crops); fmr bd Sand Hill River WD [Fertile]
10. Bobby Holder, UM-Crookston & NW Agri. Experiment Station; soils science, aquatic chem. [Crookston]
    also, West Polk County SWCD Supervisor
11. Howard Person, Minn. Extension (environment & natural resources) [Thief River Falls]
12. Blanchard Krogstad, retired UMD ecologist [Winger]
13. Leon Heath, NW RDC [Thief River Falls]
14. Dave Zavoral, farmer; member of Minnesota Landowner Rights Association [Grygla]
15. Gordon Forester, DNR Area Wildlife Manager [Thief River Falls]
16. Dave Bennett, Acting Manager, Agassiz Natl. Wildlife Refuge (USFWS) [Middle River]
17. Fred Kollman, NRCS [Thief River Falls]

Jim Johnson, Middle River-Snake River WD; sugarbeet farmer; hunter [Warren]
Lyle Pierce, Hawkes Co. Inc. (peat mining) [Grand Forks]
Dan Svedarsky, UM-Crookston & NW Agri. Experiment Station; wildlife/wild rice [Crookston]

NW - Breckenridge

→ **MONDAY, DECEMBER 19, 1994, FIRST AMERICAN BANK**
[names in italics unable to attend]

1. Carolyn Engebretson, Becker Co. Commissioner; EQB member; Chr AMC's ENR Committee [Rochert]
2. Bill Kalar, Otter Tail County Land & Resource Office wetlands coordinator [Fergus Falls]
3. Bruce Poppel, Wilkin Co. Environmental Officer [Breckenridge]
4. Gerald Van Amburg, Buffalo-Red River Watershed District; MAWD president [Moorhead]
5. Dave Freitag, Breckenridge City Engineer & wetlands coordinator [Breckenridge]
6. Gary Mikulecky, MN Extension Service - Wilkin Co. (ENR) [Breckenridge]
7. Scott Dirks, Attorney (lakeshore development); DU member [Pelican Rapids]
8. Darral Nordick, pork producer [Rothsay]
9. Jerry Nordick, wheat grower [Rothsay]
10. Charles Pikarski, grain farmer & seed sales [Fergus Falls]
11. Jack Misson, Becker Co. Sportsmen Club [Detroit Lakes]
12. Willis Mattison, MPCA [Detroit Lakes]
13. Paul Stolen, DNR EcoServices E.R. [Bemidji]
14. Howard Lipke, USFWS Wetland Management District [Detroit Lakes]

Don Ogaard, RRWMB Administrator; fmr BWSR bd (farms sugarbeets, small grains, row crops) [Ada]
Paul Krabbenhoft, Clay Co. SWCD Supervisor; realtor [Moorhead]
Judy Stringer, North American Prairie Wetlands Learning Center [Fergus Falls]
Clayton Schott, certified public accountant; works with sportsmen's groups [Detroit Lakes]

WC - Alexandria

→ **TUESDAY, AUGUST 23, 1994, DOUGLAS COUNTY PUBLIC WORKS DEPT.**
[names in italics unable to attend; group recruited by local contact]

1. Jerry Haggenmiller, Douglas County SWCD Manager [Alexandria]
2. Craig Haseman, Douglas County SWCD Supervisor [Alexandria]
3. Don Sinnwell, Douglas County Land & Resource Management [Alexandria]
4. Dave Nelson, Douglas County Ditch Inspector [Alexandria]
5. Robert Mostad, Sauk River Watershed District [Sauk Centre]
6. Lynn Nelson, Sauk River Watershed District [Sauk Centre]
7. Mike Weber, Alexandria City Planner [Alexandria]
8. Gary Lemme, West Central Experiment Station [Morris]
9. Robinson Abbott, Prof. Emeritus at UM-Morris, Dept. of Biology [Morris]
10. Terry Grauman, Otter Tail Power Company [Fergus Falls]
11. Paul Strom, Land Improvement Contractors Association [Brandon]
12. Charles Anderson, Widseth Smith Nolting & Associates, consulting civil engineer [Alexandria]
13. Randy Fischer, Counselor Realty [Alexandria]
14. Duane Hammargren, Douglas County Lakes Association [Alexandria]
15. Sue Kelly-Weinauer, citizen/member of environmental organizations [Farwell]
16. Dennis Miller, SCS District Conservationist [Alexandria]

Vern Ostrem, Evansville Sportsmans Club [Evansville]

WC - Willmar

→ **TUESDAY, AUGUST 2, 1994, KANDIYOHI COUNTY HIGHWAY DEPT.**
[names in italics unable to attend; group recruited by local contact]

1. Jeff Bredberg, Kandiyohi Co. Environmental Director [Willmar]
2. Gary Danielson, Kandiyohi Co. Highway Engineer [Willmar]
3. Rick Reimer, Kandiyohi Co. SWCD [Willmar]
4. Foster Hudson, Roseville Twp. official [Hawick]
5. Dale Scheffler, Cenex Fertilizer Plant [Willmar]
6. Dave Stuhr, Big Kandiyohi Lake Association [Willmar]
7. Steve Wood, Kandiyohi Co. Lakes Association [Willmar]
8. Roger Strand, citizen/member of conservation organizations [New London]
9. Skip Wright, DNR Area Hydrologist [Spicer]
10. Steve Erickson, USFWS Wetland Management District [Litchfield]

Earl Larson, Kandiyohi Co. Commissioner [Willmar]
Bruce Peterson, community-economic development for City of Willmar [Willmar]
Gene Hippe, Mid-Minnesota Development Commission [Willmar]
Harmon Wilts, Minnesota Extension Service [Willmar]
Wes Nelson, ASCS Director [Willmar]

EC - Aitkin

→ **THURSDAY, JANUARY 5, 1995, MILLE LACS ELECTRIC MEETING RM** *[names in italics unable to attend]*

1. Darrell Bruggman, Aitkin Co. Commissioner [McGregor]
2. Thomas (Mike) Ware, Mille Lacs Band of Ojibwe DNR (water quality lab director) [Onamia]
3. John Janzen, Aitkin Co. SWCD Supervisor [Aitkin]
4. Steve Hughes, Aitkin Co. SWCD Manager [Aitkin]
5. John Walkup, Aitkin County Highway Dept. [Aitkin]
6. Al Cottingham, Brainerd LGU contact [Brainerd]
7. Fred Hauenstein, City of Lakeshore Environmental Planning Committee [Lakeshore]
8. Robert Olson, Ideal Township Officer; knows lakes & aquaculture [Pequot Lakes]
9. Roger Germann, Region 5 Development Commission (planner) [Staples]
10. Mary Safgren, Region 5 Development Commission (community development) [Staples]
11. Jim Marshall, Blandin Corp. [Grand Rapids]
12. Tom Bercher, Bercher Construction [Brainerd]
13. Bonnie Williams, Focus 10,000 (Minn. Lakes Assoc. magazine) [Aitkin]
14. Dan Steward, BWSR [Brainerd]
15. Steve Lane, DNR-Forestry [Aitkin]
16. Dan Ecklund, COE [Brainerd]
17. Ralph Lloyd, Rice Lake National Wildlife Refuge (USFWS) [McGregor]

OBSERVER/PARTICIPANTS:

18. DuWayne Konewko, Aitkin Co. Environmental Services [Aitkin]
19. Leonard Sam, Mille Lacs Band of Chippewa (wild rice project coordinator) [Onamia]
20. Russell Ruud, Aitkin Co. SWCD Supervisor [Palisade]
21. Donald Simons, Itasca Co. SWCD Supervisor [Grand Rapids]
22. Al Waller, Itasca Co. SWCD Forester [Grand Rapids]
23. John Francis, Rice Lake Wildlife Refuge (USFWS) [McGregor]

James M. Wielinski, Pike Creek Township Officer; poultry producer; Reg. 5 RDC [Little Falls]
Harold Kosbau, Aitkin Agri-Peat [Grand Rapids]
Linda Cluett, Sheshebe Resort; realtor [McGregor]

EC - Otsego

→ **WEDNESDAY, JANUARY 11, 1995, OTSEGO CITY HALL** *[names in italics unable to attend]*

1. Dennis Berg, Anoka County Commissioner; farmer [Burns Twp.]
2. Don Adams, Stearns Co. Environmental Services Dept. [St. Cloud]
3. Dave Schwarting, Sherburne Co. Engineer [Elk River]
4. Doris Wynia, Clearwater River Watershed District [South Haven]
5. Paul McAlpine, Wright Co. SWCD Supervisor; farmer [Maple Lake]
6. Patty Gartland, St. Cloud Planning Director [St. Cloud]
7. Ken Heimenz, St. Joseph City Council & Planning Commission; (fmr USFWS) [St. Joseph]
8. Elaine Beatty, Otsego City Clerk / Zoning Administrator [Otsego]
9. Dr. Robert Bixby, St. Cloud State Univ Dept. of Geography [St. Cloud]
10. Dr. Chansheng He, St. Cloud State Univ Dept. of Geography [St. Cloud]
11. Kurt Deter, Attorney specializing in drainage law [St. Cloud]
12. Ron Bowen, Prairie Restorations [Princeton]
13. Lynn Caswell, John Oliver & Associates (land surveyor with development planning firm)
14. Harlan Anderson, alfalfa farmer [Cokato]
15. Don Dinndorf, conservationist & waterfowler [St. Cloud]
16. Neal Voelz, St. Cloud State Univ. Dept. of Biology (on behalf of Darlene Peters, Cold Spring) [St. Cloud]
17. Todd Manley, DNR Wetland Enforcement Officer [St. Cloud]
18. Dan Lais, DNR Area Hydrologist [St. Cloud]

Kevin Kielb, Hakanson & Anderson Associates (engineering consultant) [Anoka]

SW - HERON LAKE AREA RESTORATION ASSOCIATION

→ **TUESDAY, SEPTEMBER 13, 1994, VALLEYBROOK CLUBHOUSE IN LAKEFIELD**
[group recruited by local contact]

1. Milford Gentz, Chair of HLARA; former Jackson County Commissioner; retired farmer [Lakefield]
2. Robert Ferguson, Jackson County Commissioner; farmer [Heron Lake]
3. Marvin Baumgard, Nobles County Commissioner; farmer [Brewster]
4. Jerry Raedeke, Okabena-Ocheda Watershed District; wildlife artist [Worthington]
5. Lee Carlson, Ecologist for Middle Des Moines River Watershed [Balaton]
6. Dean Schumacher, Heron Lake Development Corp.; farmer [Heron Lake]
7. K Costello, South Heron Lake Improvement Association; volunteer [Lakefield]
8. Leroy Peterson, retired; area sportsman [Boone, Iowa]
9. Randy Markl, DNR Area Wildlife Manager [Windom]
10. Steve Kallin, USFWS Wetland Management District [Windom]

SC - COUNTIES IN THE BLUE EARTH RIVER BASIN INITIATIVE

→ **TUESDAY, AUGUST 9, 1994, MARTIN COUNTY LIBRARY IN FAIRMONT**
[names in italics unable to attend; group recruited by local contact]

1. Linda Meschke, Martin County Wetland Program [Fairmont]
2. Charles Nelson, Brown County Wetland Program [New Ulm]
3. Tom Grant, Waseca Co. SWCD Supervisor & landowner [Waseca]
4. Jeff Ruedy, Waseca Co. SWCD Supervisor & farmer [Waseca]
5. Jerry Voyles, Martin Co. SWCD Manager [Fairmont]
6. Greg Isakson, Faribault County Highway Engineer [Blue Earth]
7. Duane Belseth, Fox Lake Conservation League [Fairmont]

Loren Lien, Faribault County Commissioner [Blue Earth]
Lawrence Sukalski, Township Officer in Martin County [Fairmont]
Curt Russell, Waseca County SWCD Supervisor [New Richland]
Everett Garlisch, drainage contractor [St. James]
Kevin Kolstad, drainage contractor [St. James]
Jim Sinn, farmer (corn, soybeans) [Sherburn]
Jim Miller, Fox Lake Conservation League [Sherburn]
Wayne Feder, landowner [Blue Earth]
Hugh Valiant, DNR Area Fisheries Supervisor [Waterville]

SC - St. Peter

→ **TUESDAY, DECEMBER 8, 1994, INTERPRETIVE CENTER AT GUSTAVUS ADOLPHUS COLLEGE**
[names in italics unable to attend]

1. Ken Albrecht, Nicollet Co. Commissioner; Reg. 9 Development Commission [North Mankato]
2. Terry Bovee, Le Sueur Co. Planning Director; soil scientist [Le Center]
3. Peter Beckius, Scott Co. SWCD Manager [Jordan]
4. Stan Christ, Mankato mayor [Mankato]
5. Lowell Busman, Minnesota Extension (water quality); 13-county water planning staff [Waseca]
6. Robert Moline, Dept. of Geography, Gustavus Adolphus College [St. Peter]
7. Mark Johnson, Dept of Geology, Gustavus Adolphus College [St. Peter]
8. Scott Waldner, Minnesota Poultry Industries Association; poultry producer [New Ulm]
9. Gene Zins, Swan Lake farmer; Sierra Club member [Nicollet]
10. Buster West, German-Jefferson Sportsmen Club; Jefferson-German Lakes Clean Water Project [St. Peter]
11. Jeff Nielsen, BWSR Southern Region Supervisor [New Ulm]
12. John Schladweiler, DNR-Nongame Specialist [New Ulm]

Gene Isaacson, Sibley Co. Public Works Director [Gaylord]
Diana Austin, North Mankato WCA Coordinator [North Mankato]
Jeff Besougloff, Upper Sioux & Lower Sioux Communities, Dir of Envir. Programs [Redwood Falls]
Kris Juliar, Reg. 9 RDC; MN Rural Futures board; grain farmer [Mankato]
Lt. Pat McGuire, DNR Wetland Enforcement Officer (SE & SC Minn.) [St. Paul]

SE - Rochester

→ **TUESDAY, NOVEMBER 29, 1994, RIVERLAND TECHNICAL COLLEGE**
[names in italics unable to attend]

1. Kevin Kelleher, Houston Co. Commissioner [Houston]
2. Tom Johnston, Dodge Co. SWCD (wetlands; water plan implementation) [Mantorville]
3. Darrell Brekke, Fillmore Co. SWCD [Preston]
4. John Voz, Mower County SWCD [Austin]
5. Neal Mundahl, Winona State University Dept. of Biology [Winona]
6. Peter Sheffert, Minn. Extension - Goodhue Co. [Red Wing]
7. Mitzi Alex Baker, Construction Management Services [Rochester]
8. Duane Bakke, pork producer [Lanesboro]
9. Ted Raczek, member of Zumbro Valley Greens, Sierra Club [Mazeppa]
10. Ed Weir, MPCA [Rochester]
11. Steve Klotz, DNR-Fisheries [Rochester]
12. Tony Batya, U.S. Fish & Wildlife Service [Winona]

Jim Rossman, Olmsted Co. Commissioner [Oronoco]
Mitch Rasmussen, Rice Co. Engineer [Faribault]
Brian Peterson, Red Wing City Planner [Red Wing]
John Wurst, Township Official [Lake City]

METRO "A"

→ **TUESDAY, OCTOBER 11, 1994, MINNESOTA VALLEY WILDLIFE REFUGE VISITOR CENTER**
[names in italics unable to attend]

1. Fred Moore, City of Plymouth Public Works Dir; Elm Creek Watershed Management Organization
2. Eric Evenson, Dakota County Local Water Plan Coordinator
3. Tim Fredbo, Washington Co. SWCD Water Resources Specialist
4. John Barten, Hennepin Parks Water Quality Manager
5. Jim Bodensteiner, Northern States Power Company
6. John Shardlow, Dahlgren Shardlow & Uban
7. John Anderson, Wetlands Data
8. John Smyth, Bonestroo Rosene Anderlik & Associates; Consulting Engineers Council
9. Rollin Dennistoun, Minn. Agri-Growth Council [tentative; may attend in Monticello or St. Peter instead]
10. Ciarán Mannion, Minnesota Environmental Initiative
11. Cheryl Miller, National Audubon Society
12. Nick Rowse, U.S. Fish & Wildlife Service (metro area)

Sandra Archibald, natural resource economist (Univ. of Minnesota Humphrey Institute of Public Affairs & Agriculture Economics Dept.)
Susan Galatowitsch, University of Minnesota Dept. of Horticulture
George Boody, Land Stewardship Project
Cathy Hamm, DNR Wetland Enforcement Officer

METRO "B"

→ **TUESDAY, SEPTEMBER 27, 1994, ROSEVILLE ACTIVITY CENTER**
[names in italics unable to attend]

1. Sheri Anderson, East Bethel City Clerk
2. Curt Sparks, Forest Lake Watershed Management Organization; consulting engineer
3. Barbara Palen, Minnesota Geological Survey
4. Rick Pilon, Minnegasco
5. Paul Nelson, Montgomery Watson Inc. (environmental scientist)
6. Bill Clapp, retired Asst. Attorney General
7. John Winter, DNR Metro Region Parks Supervisor
8. Harvey Sundmaker, SCS Area Conservationist

Blair Tremere, Golden Valley mayor; MN Chap Amer. Planning Assoc. Legislative Committee
Tom Maple, President, Minnehaha Creek Watershed District [Excelsior]
Diane Desotelle, Chanhassen Water Resources Coordinator
Francie Cuthbert, UM Dept of Fish & Wildlife (Conservation Biology Program)
Ann Bothun, Peoples Natural Gas
Joseph Barisonzi, International Alliance for Sustainable Agriculture
Tom Dunnwald, Minnesota Lakes Association
Dave Moran, Minnesota Conservation Federation
Mike McGinty, Minnesota Waterfowl Association

METRO "C"

→ **THURSDAY, AUGUST 11, 1994, MINNESOTA VALLEY WILDLIFE REFUGE VISITOR CENTER**
[all persons who could not attend were rescheduled to other groups]

1. Cliff Aichinger, Ramsey-Washington Metro Watershed District Administrator
2. Jody Polzin, Minneapolis Public Works
3. Jim Larsen, Metropolitan Council, Metro Systems - Natural Resources
4. Kenneth Brooks, University of Minnesota College of Natural Resources
5. Joan Archer, Builders Association of Minnesota
6. Michael Black, Royal Oaks Realty
7. Charlotte Brooker, Izaak Walton League
8. Pam Pontzer, citizen/planner
9. Lou Flynn, MPCA Water Quality Division (Non-Point Source Program)
10. Sharon Pfeifer, DNR Ecological Services (Environmental Review)

METRO "D"

→ **THURSDAY, SEPTEMBER 1, 1994, MINNESOTA VALLEY WILDLIFE REFUGE VISITOR CENTER**
[one person who could not attend was rescheduled to another group]

1. Jim Gates, City of Bloomington Dept. of Public Works
2. Jim Robinson, City of White Bear Lake Community Development Director
3. Chris Lord, Anoka County SWCD
4. Diann Crane, Metropolitan Mosquito Control District
5. Carole Schmidt, Cooperative Power Association
6. Franklin Svoboda, Franklin J. Svoboda & Associates (biologist; wetlands consultant)
7. Beth Kunkel, BRW (wetland specialist / wildlife biologist; consulting firm)
8. Wayne Jacobson, Short Elliott Hendrickson, Inc. (consulting engineers)
9. Tom Moore, Association of General Contractors
10. Rick Packer, Shamrock Development
11. Brett Smith, Sierra Club North Star Chapter
12. Harvey Nelson, retired regional director for USFWS
13. Bruce Sandstrom, BWSR
14. Lloyd Knudson, Carlos Avery WMA Manager

METRO - PHALEN CHAIN-OF-LAKES WATERSHED PROJECT

→ **THURSDAY, JULY 7, 1994, MAPLEWOOD CITY HALL**

1. Sherri Buss, Phalen Watershed Project Coordinator
2. Jack Frost, Maplewood Planning Commission
3. Ric Kuster, North St. Paul Planning Commission
4. Karen Swenson, Northeast Neighborhoods Development Corp.
5. Paul Gilliland, St. Paul District 2 Community Council
6. Thomas Kuhfeld, St. Paul District 5 Phalen Task Force
7. Dana Larsen, Director, Willow Lake Nature Preserve - H.B. Fuller Co.
8. Gary Perrault, NE Metro Environmental Coalition
9. Tom Skalbeck, NE Metro Environmental Coalition
10. Mark Gernes, Izaak Walton League member
11. Amy Tibbs, graduate student