



Minnesota Board of Water and Soil Resources.
Minutes.

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DATE: April 17, 1991
TO: BWSR Board Members, Advisors, and Staff
FROM: Ron Harnack, Executive Director *Ron*
SUBJECT: April 24th BWSR Meeting

The April Board meeting will be held on April 24, 1991, from 9:00 AM to 3:00 PM at the Pollution Control Agency Board room, 520 Lafayette Road, St. Paul. Parking is available one block south of the MPCA building on the west side of Lafayette Road. The Board agenda is attached with some highlights as follows:

GORECKI UPDATE - Last meeting the Board directed that a meeting be held to review and attempt to address some issues of dispute relating to a cost-shared animal waste facility. The meeting will be held on Tuesday and the results reported to the Board.

PILEGAARD UPDATE - Mr. Pilegaard enrolled in the RIM reserve program for restoration of a small wetland. He now desires release from the easement. Staff and the Chair met with the SWCD and viewed the property and will report on the results.

EDUCATION COMMITTEE REPORT - The committee will have its first meeting on Tuesday and will report on activities.

USF&WS ACQUISITION AUTHORITY - The USF&WS has county board approval in some 24 counties to acquire land without having to obtain individual tract approval. This streamlines the process for the landowner and gets projects in place much quicker. The USF&WS desires the Board's support in pursuing similar general approval from the remaining counties.

BWSR Members, Advisors, and Staff
April 17, 1991
Page Two

WELLHEAD PROTECTION/WELL SEALING - Update on the status of the well sealing program to date. Presentation on the wellhead protection technical workgroup that staff is participating on. Next month we will have the policy side of the workgroup update the Board. Wellhead protection will be a major state program in which BWSR will likely be a significant player.

WMO PLAN APPROVAL - As part of the staff effort to accelerate the review and approval of the plans the Board can anticipate four to five plans to be on the agenda each of the next few months. We will also select a plan and have the WMO provide a more detailed review of the policy issues included, the process used to prepare the plan and the implementation strategy.

Look forward to seeing then.

RN:mja
Enc.

BOARD OF WATER AND SOIL RESOURCES
MINNESOTA POLLUTION CONTROL AGENCY BUILDING
CENTRAL BOARD ROOM LOWER LEVEL
520 LAFAYETTE ROAD
ST. PAUL, MINNESOTA 55101
APRIL 24, 1991

AGENDA

- 9:00 a.m.
1. Call to Order
 2. Adopt Agenda
 3. Approval of Minutes of March 27, 1991
 4. Reports
 - Chairman's Report - Donald Ogaard
 - Executive Director's Report - Ron Harnack
 - EQB/Water Resources Report
 5. Gorecki Update - Greg Larson
 6. Pilegaard Update - Ron Harnack
 7. Legislative Update - Ron Harnack
 8. Water Day Success - Ron Harnack
 9. SLR and Special Project Applications Overview - Chuck Niska
 10. MFIP Reallocation and Encumbrance - Chuck Niska
- 11:30 a.m.
11. Environmental Quality Board - Bob Dunn, Chair
 12. Update on BWSR Education Committee - Susan Tsakakis

13. Update on BWSR Training Committee - Mark Nelson

12:15 p.m.

Lunch

1:15 p.m.

14. U.S. Fish & Wildlife Service Aquisition Authority Support - Tom Wenzel

15. Wellhead Protection Technical Workgroup and Well Sealing Update - Eric Mohring

16. WMO Plans - for approval - Bruce Sandstrom
- Middle St. Croix
 - Southwest Scott
 - Shakopee
 - Sand Creek

17. Advisor Comments
- D'Wayne DeZiel, Minnesota Association of Soil and Water Conservation Districts
 - Gary Nordstrom, Soil Conservation Service
 - Pat Wulff, Lake Management Federation
 - Howard Peterson, Minnesota Association of Watershed Districts
 - John Sumption, Minnesota Association of Conservation District Employees
 - Franklin Denn, Minnesota Association of Townships

18. Board Issues - discussion, comments, action needed

Next meeting - May 22, 1991

3:30 p.m.

Adjourn

**BOARD OF WATER AND SOIL RESOURCES
POLLUTION CONTROL AGENCY BUILDING
CENTRAL BOARD ROOM LOWER LEVEL**

**520 LAFAYETTE ROAD
ST. PAUL, MINNESOTA 55101**

April 24, 1991

Appointed Members in Attendance

Donald Ogaard
John Williamson
John Boulton
Don Warner
William Cofell
Howard Peterson
Jack Graba
James Hoese
Diane Jensen
John Brooks, Jr.

Appointed Members Absent

Loren Harste

Agency Members in Attendance

Paul Burns, Department of Agriculture
Wayne Anderson, Pollution Control Agency
Kim Benson-Johnson, Department of Health
Tom Lutgen, Department of Natural Resources
George Foster, University of Minnesota

Others in Attendance

Gary Nordstrom, Soil Conservation Service
Danny Potter, Minnesota Association of Soil & Water Conservation Districts
Pat Wulff, Minnesota Lake Management Federation
Marlyn Libbesmeir, Minnesota Association of Townships

Staff in Attendance

Ron Harnack
Jim Birkholz
Greg Larson
Susan Tsakakis
Mark Nelson
Chuck Niska
Eric Mohring
Bruce Sandstrom
Mary Jo Anderson

Meeting Called to Order - Chairman Ogaard called the meeting to order at 9:15 a.m.

****** **Adopt Agenda** - Moved by Peterson, seconded by Cofell, to adopt the agenda as presented.
91-34 Affirmative: Ogaard, Williamson, Boulton, Warner, Graba, Brooks, Jr., Cofell, Hoese, Peterson, and Jensen. Opposed: None. Carried.

****** **Approval of Minutes of March 27, 1991** - Moved by Cofell, seconded by Warner, to approve the minutes of March 27, 1991 as circulated. Chairman Ogaard stated that a correction needs to be made on page 2, regarding the Chairman's Report. It should read, "Chairman Ogaard also attended the regular monthly meeting of the Environmental Quality Board. The major issues at that meeting were the application of storage of spent nuclear fuel at the Prairie Island generating facility (NSP) and the hiring of a consultant to do the GEIS on Minnesota's forest industry. A firm based in Finland utilizing Minnesota personnel received authorization to do the study GEIS on forestry". Affirmative: Ogaard, Williamson, Boulton, Warner, Graba, Brooks, Jr., Cofell, Hoese, Peterson, and Jensen. Opposed: None. Carried.
91-35

Chairman's Report - Chairman Ogaard reported on the dispute resolution items involving the Board. Don, Jack Graba, and Don Warner met with staff, Benton SWCD employees, SCS staff, and the landowner and reviewed a manure system problem in Foley. Chairman Ogaard and staff met with the Cottonwood County SWCD and reviewed the Pilegaard RIM issue regarding a permanent easement.

Chairman Ogaard attended the Environmental Quality Board meeting. He reported that the issue of spent nuclear fuel storage at Prairie Island turned into an organized media event. The generic Environmental Impact Statement issue was also controversial.

Executive Director's Report - Ron Harnack reported that the metro water planning rules will be completed by late summer or early fall. The existing plans are being reviewed so they are consistent with the current rules. Ron reported that Jim Birkholz is scheduling field staff meetings regularly to enhance communication efforts. The soil loss limits ordinance is being reviewed through involvement with interest groups. The staff annual work plans are being prioritized and will be worked around the strategic plan. The staff work plan will be brought before the Board for review.

Ron reported on the BWSR's budget status. The House has proposed an increase in base water plan implementation grants to counties. The credit for this proposed increase goes to the local units of government for their efforts. The abandoned well inventory is in good shape in the House. The Senate took \$1.5 million from DNR and as such, Study Area II will get a reduction as well; however, the position in Study Area II will remain. The Senate proposal increased the LCMR (Environmental Trust Fund) cost-share appropriation by \$500,000 to protect the diversion of sinkholes. . Ron reported that BWSR is, so far, coming out reasonably well budget-wise. House/Senate conference committee comparison attached.

Legislative Update - Ron Harnack updated the Board on the administrative law judge legislation. This is moving forward, it has been approved by the full House, with the Senate adding a few amendments (Gopher State One has been added to this bill). This legislation should save the BWSR substantial costs in the future, ~~which~~^{while} protecting public ability to secure administrative review. The legislation regarding the BWSR to receive gifts, acquire lands, and the ability to receive funds from other organizations has passed the House, but has run into problems in the Senate. Legislation regarding the conversion of short-term wetland restoration projects to perpetual projects is moving along. Senator Steve Morse and Representative Virgil Johnson are carrying the legislation regarding local units of government's authority on levy limits. It is not expected that new levy authority will be authorized. Focus on keeping current levy authority.

Water Day Success - Ron Harnack reported that "Water Day at the Capitol" was held April 8. Governor Carlson made a presentation to local water planning program initiatives. Local water planning project managers, county commissioners, and a number of legislators were in attendance. This was a very successful event, with good promotion of water plans, and a good opportunity for legislators to talk with local constituents. Thank you letters were sent to those in attendance recognizing their efforts.

Pilegaard Update - Ron Harnack updated the Board on Pilegaard issue. The individual landowner wanted to terminate the RIM wetland restoration easement. Chairman Ogaard and staff reviewed the parcel with the SWCD. The District was concerned about the time it was taking, asked BWSR to move expeditiously with design and construction.

Gorecki Update - Chairman Ogaard updated the Board on this issue. After inspecting the situation yesterday, he stated that the pump is operational, although it needs redesigning to maintain its workability in the future. SCS will work on redesigning the system. Early disagreements over construction of the manure system has been the constant conflict between the landowner and the Benton SWCD. Chairman Ogaard stated that there seems to be willingness of all parties (landowner, SCS, SWCD, and BWSR) to cooperate. Greg Larson stated that Benton SWCD was happy to meet with the Board members yesterday, and are willing to cooperate with the landowner to resolve this issue. Don Warner commended Chairman Ogaard for his tactful communication with those involved in this issue, things went very smooth, and people are willing to resolve this issue due to his fine efforts. Discussion followed on posting safety signs (fiberglass or plastic) on the property stating that the gases from the pit are hazardous to health. Staff will work with MPCA on this to determine mandates or requirements.

Advisor Comments

- MASWCD, Danny Potter reported that D'Wayne DeZiel has been following legislative issues. Danny, D'Wayne DeZiel, and Allen Oehlke recently returned from Washington, D.C. They met with legislators, and lobbied for SCS funding and staffing needs. The MASWCD Board of Directors will meet on April 25. The evening of the 25th, the Board of Directors will meet with Ron Harnack, AMC, and ~~SCS~~, to discuss various items of

MAWD

concern.

- SCS, Gary Nordstrom reported that another CRP sign-up is scheduled for July. SCS is proceeding with compliance plans and implementation for ACP. SCS is in a joint state/federal effort to fly over and photograph the entire state of Minnesota. Complete, updated topography maps will then be current, as well as geographically correct digitization. A massive effort is being done on the 1992 NRI. A multi-county sampling of 20,000+ sites will be completed.

- MLMF, Pat Wulff reported that H.F. 446A2, relating to exotic species management, eurasian water milfoil, needs funding assistance. She notified the BWSR that this is short notice, but cities and counties, as well as the BWSR are involved in this piece of legislation, and it is very costly. Staff will work with and assist the Association of Counties, and the Lake Management Federation on this legislation.

- MAWD, ~~Howard Peterson~~ reported that ~~he has been working on legislation to broaden watershed districts.~~ Howard participated in the "Cities Citizen Workshop" in Eden Prairie on April 23. Some of the topics discussed at the workshop included: surface water quality, the Minnesota River, shoreland management, and erosion control. Howard stated that people are making a serious effort to become involved in these issues, education is needed.

SLR and Special Project Applications Overview - Chuck Niska distributed a brief synopsis of Streambank, Lakeshore, and Roadside (SLR) Projects and special project applications for the Board's information and review. Eighteen SLR project applications have been received, with a total of \$331,573 requested, and a total of \$159,000 available. Thirteen special project applications have been received, with a total of \$536,410 requested, and a total of approximately \$250,000 - \$300,000 available. Staff will rank and prioritize the requests. This is for the Board's information at this time, staff will bring recommendations before the Board for approval at the May meeting. Chuck explained that the Winona request is different from the others as it relates to a technical staffing request, which is permissible. Chuck will be talking with DNR on applications that involve water permits.

MFIP Reallocation and Encumbrance - Chuck Niska explained that he has been working with Tom Kroll, DNR/Forestry, on MFIP. There is a request for \$400 of MFIP funds for a special project regarding establishment of a tree plantation in west central Minnesota, Todd County. Koochiching SWCD is returning \$2,000. No other requests for funds have been received. Staff recommends that \$400 be reallocated to Todd County from returned funds received by Koochiching SWCD. Moved by Cofell, seconded by Warner, to approve the MFIP reallocation of funds from Koochiching SWCD to the Todd County project. Affirmative: Ogaard, Williamson, Boulton, Warner, Graba, Brooks, Jr., Cofell, Hoese, Peterson, and Jensen. Opposed: None. Carried.

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91-36

Chairman Ogaard called for a break in the meeting at 10:45 a.m. The meeting reconvened at 11:05 a.m.

Board Issues, Comments, and Concerns - Jack Graba stated that the St. Paul Pioneer Press had a very good article on Big Stone Lake.

Chairman Ogaard reported that there is no word yet on BWSR appointments.

John Boulton reported on the local reaction to the Remerowski/Yellow Medicine Watershed District appeal.

Chairman Ogaard stated that no response has been received yet on the proposed Snake River Watershed District hearing. The Board may have a report from the administrative law judge in early June.

Update on BWSR Education Committee - Susan Tsakakis reported that the education committee met for the first time yesterday. Those in attendance were: Susan, Diane Jensen (BWSR), Chris Hughes (BWSR), LeAnn Buck (MASWCD), and Bob Molstad (MAWD). The committee's primary mission is to assist local units of government (watershed districts, SWCDs, and counties) in educating what they see as their primary audience (adults, children, students, landowners, farmers, the public at large). To complete this mission a survey will be developed for local units to find out what they are doing and where they believe we can provide non-financial help. A checklist will be composed for WDs and SWCDs to encourage them to compile their resources and contact their local educators and let them know of the resources they have available. Another purpose of the committee is to function as a clearinghouse. The BWSR will not be in the business of writing curriculum, although there is a need for coordination of existing curriculum. Susan will sift through resource catalogues available and summarize the major programs. The committee will also serve as a resource and in an advisory capacity to the chair for his role on the advisory committee to the Office of Environmental Education. As a resource, the committee can provide the chair with information about what the SWCDs, counties and WDs have available and what they are currently doing in the way of education. In an advisory capacity, the committee can convey the local units' needs and work with the chair to assess how these needs can be met. The committee will meet again in June after the surveys are received. Chairman Ogaard suggested that the survey be a simplified questionnaire, concise and brief, tailored and not generic.

Environmental Quality Board (EQB) - Chairman Ogaard introduced Bob Dunn, Chair of the EQB. Mr. Dunn gave an in-depth overview of the EQB, which was established in 1973 when the Environmental Policy Act was passed. Mr. Dunn explained the programs, policies and legislative mandates of the EQB; the state water plan priorities and recommendations; reorganization of environmental agencies; and EQB objectives for the next two years. Mr. Dunn wished good luck to the BWSR in their many responsibilities and praised the BWSR for their good work thus far.

Chairman Ogaard adjourned the meeting for lunch at 12:15 p.m. The meeting reconvened at 1:15 p.m.

Update on BWSR Training Committee - Mark Nelson reported that the Training Committee has representation from the MASWCD, WDs, SCS, MACDE, and BWSR staff. Mark distributed the BWSR's five-year training plan for SWCDs and WDs personnel for the Board's information.

U.S. Fish & Wildlife Service (USF&WS) Acquisition Authority Support - Joe Artmann and Bob Hietikko, U.S. Fish & Wildlife Service, gave a brief overview on the wetland acquisition authority. They explained that the U.S. Fish & Wildlife Service was granted the authority to acquire small wetlands in 28 counties, and hopes to receive blanket approval in 59 counties. The USF&WS is requesting expanding authority from the Land Exchange Board so it can acquire wetlands throughout the state as opportunity or need arises. Most of their efforts will be to obtain short-term easements from willing landowners rather than fee title acquisitions. Discussion followed. The Board was not totally clear on the need or implications of the request to landowners and the relationship to RIM reserve. The funding source is the problem, not the state system. John Brooks, Jr., stated that this is an issue the BWSR should not address as the USF&WS has avenues to follow, and the BWSR should not get involved. Moved by Brooks, Jr., seconded by Hoese, that the BWSR not take action to address the USF&WS acquisition authority at this time. Discussion followed. Howard Peterson stated that he will abstain from voting on this issue. Diane Jensen stated that the BWSR should take a position on this issue, but not today. The BWSR should reflect on this issue and take action at a later date. Brooks, Jr., and Hoese withdrew their motion, the Board will review this and take action at the May meeting.

Wellhead Protection Technical Workgroup and Well Sealing Update - Eric Mohring briefed the Board on the activities of the technical workgroup during the past year. He distributed a draft executive summary of the workgroups' recommendations on selected technical aspects of wellhead protection for public wells for the Board's information. Eric gave a brief update on well-sealing. He stated that a draft copy of the annual report is available. Nineteen counties have been given grants. Well sealing can only be issued after June, 1991, after completion of comprehensive local water plans.

WMO Plans - Bruce Sandstrom introduced Jack Whit, Darrell John, and Pete Beckius, representatives of Sand Creek, Shakopee, and Southwest Scott WMO's. Bruce stated that the three WMO plans are individual, yet they will be grouped together as one for action today. Bruce gave a brief overview of each plan. Staff recommends approval of the Sand Creek, Shakopee, and Southwest Scott WMO Plans. Moved by Cofell, seconded by Boulton, to approve the Sand Creek, Shakopee, and Southwest Scott WMO Plans. Affirmative: Ogaard, Williamson, Boulton, Warner, Graba, Brooks, Jr., Cofell, Peterson, and Jensen. Opposed: None. Carried.

Bruce introduced Barbara Cox, representing the Middle St. Croix WMO. Bruce gave a brief overview of the Middle St. Croix WMO Plan, and recommends approval of the plan. Moved by Graba, seconded by Brooks, Jr., to approve the Middle St. Croix WMO Plan. Affirmative: Ogaard, Williamson, Boulton, Warner, Graba, Brooks, Jr., Cofell, Peterson,

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91-37

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91-38

and Jensen. Opposed: None. Carried.

Don Warner suggested that staff send out the plan overview with the BWSR meeting notice so members would have adequate time to review the plans before approval at the meeting. Bruce explained that the final paperwork on the plan may not always be ready until the meeting. Warner stated that it's not a crisis if the plan is delayed a month due to that happening.

Bruce reported that the next subcommittee meeting on the metro water planning rules is scheduled for May 2. Bruce distributed an updated status report of the metro water plans for the Board's information.

** Moved by Graba, seconded by Warner, to adjourn the meeting at 3:40 p.m. Affirmative:
91-39 Ogaard, Williamson, Boulton, Warner, Graba, Brooks, Jr., Cofell, Peterson, and Jensen.
Opposed: None. Carried.

Respectfully submitted,


Donald Ogaard
Chairman

SLR and SPECIAL PROJECT PROPOSALS
FY92 APPLICATIONS

STREAMBANK, LAKESHORE AND ROADSIDE PROGRAM APPLICATIONS

DISTRICT

PROJECT DESCRIPTION

Anoka

Phase II of the Rice Creek Stabilization Project originally funded by the BWSR in FY90. Work to be done includes correcting an erosion problem caused by a non-functioning DNR dam structure, which will be removed to allow streamflow to return to its normal course, and the stabilizing of valley walls. Work to be done through the Rice Creek Watershed District.

Request Amount: \$ 32,325

Carver

Stabilization of the Watertown South Fork of the Crow River; Stabilization of the riverbank, addressing both the overland flow and bank failure. Work to be done includes reshaping the river bank, riprapping the toe of the bank and stabilizing the area above the riprap using critical area stabilization practices.

Request Amount: \$ 26,635

Cass

County Highway 162 Erosion Control Project
To prevent erosion and sedimentation from entering into the Shingobee River from improperly designed backslopes and ditches functioning to carry water away from the road. Corrective measures include reshaping the side and back slopes of the road, as well as the ditch carrying water away from the road, as well as stabilizing the slopes and ditches.

Request Amount: \$ 13,040

Hennepin

Grays Bay Headwaters Control Structure Stabilization; earth fill adjacent to a flow control structure built in 1979 has been damaged, and is eroding due to high water levels on Lake Minnetonka, foot traffic and vandalism at the site. Work proposed to be done include stabilizing bank walls as well as installing erosion control practices such as riprap and gabions as needed. Work to be done through the Minnehaha Creek Watershed District.

Request Amount: \$ 18,375

Hubbard Shell River Bridge Erosion Control Project;
Stream bank erosion occurring on both the side slopes of the
river bank and at the sites where bridge supports are located
have the potential to render the bridge unsafe inoperative.
Corrective measures include placing rock riprap and a filter
blanket on the banks of the river, as well as on the ends and
sides of the bridge.

Request Amount: \$ 1828

Lac Qui Parle 1 County Road 31 Erosion Control Project; installation of tile
and 10 water and sediment control structures which will carry
runoff in a steep area that is erosion prone. This is to
accompany an effort to rebuild the road as it passes through
the Lac qui Parle River valley.

Request Amount: \$ 11,000

Lac Qui Parle 2 County Road 33 Erosion Control Project; A county road ditch
adjacent to a relatively small watershed is experiencing water
erosion, and is also receiving sediment from the area above
the watershed. Runoff has created a large gully which also
needs to be corrected. Corrective measures include installing
five water and sediment control structures, and conducting
critical area stabilization.

Request Amount: \$ 6,250

Lac Qui Parle 3 County Road 72 Erosion Control Project; to control water
erosion in the road ditch, thereby decreasing the sediment
loading rate into the Yellow Bank River. Corrective measures
include constructing five water and sediment control
structures.

Request Amount: \$ 5,900

Norman 1 County Highway 19-4-91 Erosion Control Project; to repair a
gully formed along and adjacent to a bridge embankment.
Corrective measures include reshaping and revegetating the
ditch, as well as installing a riprap outlet for water
entering into the Marsh River.

Request Amount: \$ 2,938

Norman 2 County Highway 29-1-91 Erosion Control Project; to repair a
gully starting where a spring comes out of a sideslope.
Corrective measures include tiling at the point of the seep,
installing a drop structure, retention structure and a
stilling basin to carry the seep water. Also, the road ditch
will be reshaped and reseeded.

Request Amount: \$ 3,025

- Norman 3 County Highway 29-2-91 Erosion Control Project; to repair a gully by reshaping a road ditch, and installing a rock riprap chute to provide a stable outlet for a diversion carrying over land flow.
- Request Amount: \$ 7,137
- Norman 4 County Highway 29-3-91 Erosion Control Project; to stabilize and protect the banks of a stream channel adjacent to the roadway, which is currently eroding the soil between the stream and the road. Corrective measures include installing a stilling basin with rock rip rap and stabilizing all disturbed soil areas.
- Request Amount: \$ 11,825
- Pennington 1 Red Lake River Highway 32 Project; to prevent the continuing erosion occurring on the outer bank of the river which is adjacent to the state highway. The erosion is encroaching on the road, which has a railroad grade on its other side. This project is being cost-shared with the USACOE and the Red Lake Watershed District.
- Request Amount: \$ 22,500
- Pennington 2 Red Lake River East Bank Stabilization Project; to remove debris and stabilize the river bank adjacent to a public walkway. Corrective measures including debris removal are to reshape the river bank, riprapping the bank, and stabilizing the area above the water level. Work to be done with the USACOE and the Red Lake Watershed District.
- Request Amount: \$ 72,500
- Pennington 3 Red Lake River Cemetary Site Riprap; to protect the area of the Red Lake River adjacent to the St. Hilaire Cemetary. Corrective measures include armoring the riverbank with rock riprap. Work to be done in conjunction with the USACOE and the Red Lake Watershed District.
- Request Amount: \$ 22,750
- Pine Rock Creek Erosion Control Project; to control erosion occurring in the city of (and water body also named) Rock Creek due to the combination of surface flow concentration and an improperly placed culvert. Corrective measures would include diverting surface runoff, creating a waterway and installing a drop-inlet pipe to control runoff, as well as placing loose riprap and gabion baskets in the water to armor the bank of Rock Creek.
- Request Amount: \$ 17,500

Wabasha

Mississippi River Emergency Streambank Protection; an area of the river bank at the City of Wabasha is eroding the river bank, which could eventually reach a local street, its underlying septic line and a sanitary sewer lift station.

Request Amount: \$ 18,450

Washington

Carver Ravine; to stabilize this ravine, thereby reducing the sediment load into Carver Lake. As a part of an overall project to be worked on by the City of Woodbury and the Ramsey-Washington Watershed District, corrective measures include placing riprap on the stream channel, and the reshaping and revegetating of the areas eroding above where rock will be placed.

Request Amount: \$ 37,595

18 SLR PROJECT APPLICATIONS

TOTAL AMOUNT REQUESTED: \$ 331,573

AMOUNT AVAILABLE: \$ 159,000

SPECIAL PROJECT APPLICATIONS

DISTRICT

PROJECT DESCRIPTION

Anoka

Labelle Pond Erosion Stabilization Project; To correct the severe erosion of embankments adjacent to the pond using a combination of new engineering practices and critical area stabilization practices.

Request Amount: \$ 241,000

Beltrami

Lake Bemidji Stormwater Control System Demonstration Project; construction of a stormwater control system is desired to reduce the sediment and nutrient inflows into Lake Bemidji. Corrective measures would include building two wetland treatment ponds and a rerouting of runoff into the lake through natural vegetation in an attempt to reduce the nutrient load entering from the upstream watershed. Nutrient reduction levels will be monitored using a monitoring system developed through Clean Water Partnership Project activities. Other cooperative assistance will be supplied by the MPCA, SCS, DNR and the City of Bemidji.

Request Amount: \$ 49,500

Cook

Lutsen Golf Course Critical Area Stabilization; completion of the project funded using FY88 Roll-over funding. Heavy rains during the fall of 1990 destroyed a number of late seedings that were intended to revegetate concentrated flow areas emptying into the Poplar River and ultimately Lake Superior. Corrective measures include installing sod and stakes on these sites.

Request Amount: \$ 12,919

Itasca

Lakeshore Erosion Protection Project; due to the on-going efforts of the SWCD and the SCS staff to implement the SCS' TR-2 for flexible erosion protection on lakeshore sites, a number of projects have been installed at a low cost in the county. Due to the successful installation of a number of projects, continued funding of these efforts (originally begun in the fall of 1987) is requested, in response to lakeshore owner demand. (Originally funded using FY88, FY89 and FY91 Special Project funds.)

Request Amount: \$ 16,000

Kanabec

Knife Lake High Bank Erosion Control Project; due to the raising of the water level of Knife Lake in 1983, bank erosion has accelerated on this privately owned 330 foot stretch of lakeshore. Corrective measures would include using the SCS' TR-2 to design a lakeshore protection system using a combination of geotextile and rock riprap.

Request Amount: \$ 7500

Kandiyohi

Shakopee Creek Water Retention Structure; to construct a control point along the creek in order to provide a reduction in the amount of nutrients and sediment going downstream from non-point sources and drainage systems in the upper portions of the watershed. Corrective measures include creation of a dam that would create an 85 acre empoundment that would provide a number of other benefits such as wildlife and fishery habitat creation and improvement, and an effective flood water retention area.

Request Amount: \$ 21,750

West Polk

Red Lake River Bridge Erosion Control Project; to prevent the continued eroding of 600 feet of river bank adjacent to the Red Lake River. Failure of the bank is causing homes in the immediate proximity of the river to be threatened. Corrective measures include the placing of a two foot thick layer of rock on the sideslopes of the bank, and the creation of a berm at the top of the bank so as to be able to divert water from washing over the bank.

Request Amount: \$ 29,863

West Polk

Central Park Erosion Control Project; to arrest the stream bank erosion occurring at the City of Crookston's Central Park, which also poses a threat to the flood protection dikes within the city. Corrective measures include the reshaping of the sideslopes, and the installation of riprap and vegetative covering above the rock.

Request Amount: \$ 20,400

No. St. Louis

Sand Lake Erosion Control Project; to pay for the remainder of state funding requested during the FY91 Roll-over application period. A total of nine landowners plan to stabilize their lake frontage, which has been subject to wave action erosion and ice jacking, using a flexible system as proposed in the SCS TR-2 Handbook. In order to expedite the processes needed to be done (i.e., plan design and installation) private engineering services will be employed.

Request Amount: \$ 18,369

So.St.Louis 1 Enger Golf Course Erosion Control Project; to eliminate the erosion taking place on unvegetated portions of the golf course, causing sedimentation to enter into a pond and into the West Bank of Coffee Creek. Corrective measures will include reshaping slopes and critical area stabilization using a sod and stake system. This is the completion of funding which started in the FY91 Roll-over funding of this project.

Request Amount: \$ 12,416

So.St.Louis 2 Lester River Golf Course Erosion Control Project; to eliminate sheet erosion which is currently taking place on the golf course expansion by creating an improved drainage system, and by vegetating soils which are currently exposed.

Request Amount: \$ 29,288

Wilkin Otter Tail River Erosion Control Demonstration Site; to construct four different types of erosion control systems along the river's banks. Corrective measures include reshaping, riprapping, and revegetating various lengths of the bank.

Request Amount: \$ 47,405

Winona Whitewater River Comprehensive Management Plan Implementation; to incorporate comprehensive farm planning technical assistance along the Middlebranch portion of the river in an attempt to reduce soil erosion and sedimentation by a factor of 3.5 times over the next four years. Funds are to be used for the purpose of providing salaries for SWCD staff in three counties that will be responsible for the targeted technical assistance in the Middlebranch. Corrective measures include constructing terraces, waterways, grade stabilization structures, strip cropping and tree plantings.

Request Amount: \$ 30,000

13 SPECIAL PROJECT APPLICATIONS

TOTAL AMOUNT REQUESTED: \$ 536,410

TOTAL AMOUNT AVAILABLE: TO BE DETERMINED (\$ 150,000+)

~ \$250,000 - \$300,000
to be available



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Bemidji, MN 56601
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394 South Lake Avenue
Room 403
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West Central Region
503 Washington Street
Brainerd, MN 56401
218-828-2604

South Central Region
Box 756
New Ulm, MN 56073
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507-285-7458

Southwest Region
Box 267
1400 E. Lyon Street
Marshall, MN 56258
507-537-6060

East Central Region
Southbridge Office Building
155 South Wabasha St., Suite 104
St. Paul, MN 55107
612-296-3767

BWSR EDUCATION COMMITTEE

First meeting: Tuesday, ^{April}~~May~~ 23

Attending: Bob Mostad (MAWD); LeAnn Buck (MASWCD); Susan Tsakakis (BWSR); Diane Jensen (BWSR); Chris Hughes (BWSR). AMC and MACDE have expressed interest in the committee and are planning on having members present at the next meeting.

Committee's primary mission: To assist local units of government--basically watershed districts, SWCDs, and counties--in educating what they see as their primary audience (adults, children, students, landowners, farmers, the public at large).

To complete this:

ACTION ITEM #1: LeAnn and Susan will develop a survey of the local units to find out what they are doing and where they believe we can provide (non-financial) help.

ACTION ITEM #2: LeAnn and Susan will compose a checklist for WDs and SWCDs to encourage them to compile their resources and contact their local educators and let them know of the resources they have available. Bob Mostad pointed out that information involving local resources, such as lakes, parks, and farms, is likely to be of more interest than more hypothetical information.

Secondary purpose of the committee: functioning as a "clearinghouse" of sorts. Although we determined that the BWSR should NOT be in the business of actually writing curriculum, we think there is a need for coordination of existing curriculum.

To complete this:

ACTION ITEM #3: Susan will begin to sift through some of the resource catalogues available and summarize the major programs.

Secondary purpose for the committee: serving as a resource and in an advisory capacity to the chair for his role on the advisory committee to the Office of Environmental Education. As a resource, the committee can provide the chair with information about what the SWCDs, counties and WDs have available and what they are currently doing in the way of education. In an advisory capacity, the committee can convey the local units' needs and work with the chair to assess how these needs can be met.

Next meeting: after receiving the surveys; hopefully in June.

**BOARD OF WATER & SOIL RESOURCES
FY 1992
TRAINING CALENDAR**

JUNE - 1991	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH - 1992
NEW SUPERVISOR & EMPLOYEE ORIENTATION NORTH & SOUTH			MANAGEMENT LEVEL I		CLERICAL SESSION	ACCOUNTING SESSION	MANAGER/ CHAIRMAN WORKSHOP NORTH & SOUTH		
							TECHNICAL TRAINING BY REGION TOPIC UNDECIDED		
MULTI CLIENTELE WORKSHOPS - COUNTY/SWCD/WD									

BOARD OF WATER AND SOIL RESOURCES
FIVE YEAR TRAINING PLAN

1992	1993	1994	1995	1996
MANAGEMENT LEVEL I	MANAGEMENT LEVEL II	MANAGEMENT LEVEL I	MANAGEMENT LEVEL II	MANAGEMENT LEVEL I
ORIENTATION I	ORIENTATION I&II	ORIENTATION I	ORIENTATION I&II	ORIENTATION I
TECHNICAL TRAINING MINIMUM OF ONE	TECHNICAL TRAINING MINIMUM OF ONE	TECHNICAL TRAINING MINIMUM OF ONE	TECHNICAL TRAINING MINIMUM OF ONE	TECHNICAL TRAINING MINIMUM OF ONE
CLERICAL TRAINING	CLERICAL TRAINING	CLERICAL TRAINING	CLERICAL TRAINING	CLERICAL TRAINING
MANAGER/CHAIRMAN	MANAGER/CHAIRMAN/D.C.	MANAGER/CHAIRMAN	MANAGER/CHAIRMAN/D.C.	MANAGER CHAIRMAN
WATERSHED DISTRICT	WATERSHED DISTRICT	WATERSHED DISTRICT	WATERSHED DISTRICT	WATERSHED DISTRICT
MULTI-CLIENTELE WORKSHOP	MULTI-CLIENTELE WORKSHOP	MULTI-CLIENTELE WORKSHOP	MULTI-CLIENTELE WORKSHOP	MULTI-CLIENTELE WORKSHOP
ACCOUNTING TRAINING	ACCOUNTING TRAINING RESOURCE CONSERVATION FOR ADMINISTRATORS	ACCOUNTING TRAINING	ACCOUNTING TRAINING RESOURCE CONSERVATION FOR ADMINISTRATORS	ACCOUNTING TRAINING

U.S. Fish and Wildlife Service Request for Statewide Acquisition Authority

Why does the Service want expanded small wetland acquisition authority?

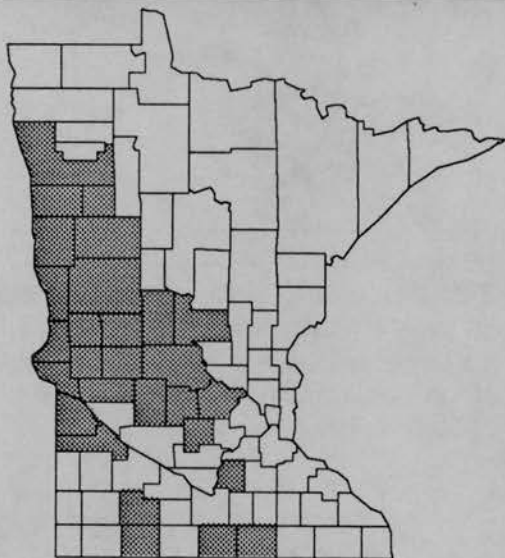
The U.S. Fish and Wildlife Service (Service) is requesting expanded small wetland acquisition authority so it can protect wetlands throughout Minnesota as opportunity or need arises. In many counties, there may not be any acquisitions since there is no defined need or adequate lands have already been protected. Most of the Service's expanded acquisition efforts will be to obtain easements from willing landowners rather than fee title acquisitions.

Since 1986, about 1000 landowners have become partners with the Service in restoring small wetlands. We would now like to purchase easements from many of these individuals to provide long-term protection to these wetlands.

What is the Service's current acquisition authority?

The Service was granted authority to acquire small wetlands in 19 Minnesota counties in 1962. In 1977, the number of counties was expanded to 28 and "acreage goals" were established. These "acreage goals" were 391,460 acres for fee title purchases and 587,320 acres for easement acquisitions.

28 Counties with Small Wetland Acquisition Authority



How much land has the Service acquired since 1962?

Over the past 30 years, the Service has acquired 152,869 acres have been acquired in fee title and 218,408 acres via easements. This amounts to 38% of the authorized "acreage goals" or about .6% of the state's total area. The Service is not asking for expanded "acreage goals" because the acreages already approved are adequate and will be distributed to expansion counties on a negotiated basis.

What kind of land is the Service acquiring?

The Service acquires primarily existing wetlands or wetlands that have been drained and now are marginal farmlands. The latter are generally not productive cropland because they are too wet to crop and produce low yields.

Does the Service consult with the County on lands to be acquired?

The Service routinely consults with local governments when planning to acquire lands. Also, the Service is required by law to consult with the Land Exchange Board when using Migratory Bird Conservation Act funds to purchase small wetlands.

Does the Service work with other agencies in its wetland protection efforts?

The Service commonly works with groups such as Soil and Water Conservation Districts, Board of Water and Soil Resources, Department of Natural Resources, Pollution Control Agency, and Soil Conservation Service when planning wetland acquisitions.

Will the landowner receive compensation for wetlands that the Service wants?

The Service pays appraised market value for lands that are purchased in fee title or easement. In either case, the Service buys only from willing sellers who receive fair compensation for their property.

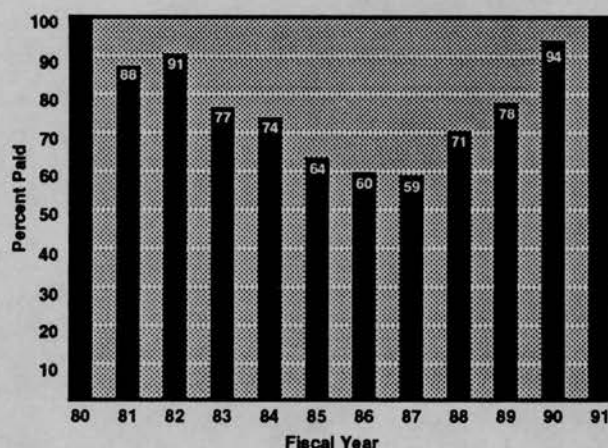
Who pays for wetland restorations and improvements?

Wetland restorations on private lands are usually done at no cost to the landowner. The Service or other partners provide funding for the improvements.

Does the Service pay taxes on land it acquires?

The Service does not pay taxes but provides annual revenue sharing payments to local governments. Payments are based on the greater of 25% of net refuge receipts or 3/4 of 1% of the appraised value of the purchased lands. In some years, there have not been sufficient funds to fully fund revenue sharing payments. In 1990, counties received 94% of the payment and in 1991, payment is expected to be at the 100% level. For lands that the Service has only acquired an easement, the land stays on the tax rolls and is taxed at normal rates. Taxes are paid directly by the landowner.

Shared Revenue Payments



What are the benefits of wetlands?

Wetlands have many benefits to the landowner and the general public:

- payments for non-productive or marginally productive land
- replenish soil moisture and groundwater recharge
- increased water retention and storage capacity
- reduction in water and soil erosion
- production of forage crops
- improvement of water quality
- reduction in flooding severity
- source of water for livestock
- habitat for fish and wildlife
- increased hunting opportunities
- increased trapping opportunities
- increased baitfish harvest
- increased fishing and boating recreation
- reduced water sediment loads
- removal of farm chemical and nutrient loads
- habitat for rare and endangered species
- educational and scientific opportunities
- increased wildlife observation
- quiet areas to enjoy nature

Are there other economic benefits to wetlands?

The economic value of wetlands has been difficult to determine. However, here are some values for wetland activities that are known:

- **waterfowl hunting :**
a \$2 billion industry in the U.S. and Canada

• trapping:

Minnesota marsh related species provide a fur harvest of about \$15 million annually.

• hunting:

Minnesota's hunting related expenditures amounted to more than \$216 million in 1985.

• nonconsumptive uses:

In 1985, Minnesotans spent almost \$240 million on nonconsumptive wildlife recreation. Much of this was related to wetlands.

It is estimated that nationally flooding costs \$3-4 billion annually. Wetlands have been shown to retain runoff and reduce flood impacts thereby providing a \$300 per acre foot in flood storage benefit. Similarly, water and wind erosion are reduced thereby improving the quality of our waters and soils. Wetlands also provide water purification by removing soil particles, farm chemicals, nutrient loads and other pollutants.

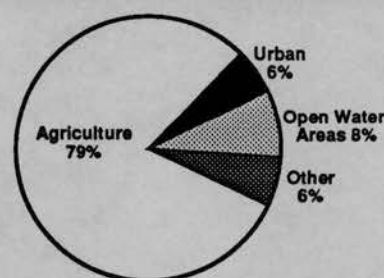
Canada estimates that the overall benefits from their wetlands amounts to \$10 billion annually.

Why is the Service concerned about the wetlands?

The Service has management responsibility for migratory birds, endangered species and anadromous fish, many of which depend on wetlands for all or most of their life cycles. In some cases, it is necessary to protect important lands via some type of acquisition.

Over the past 100 years, our nation has lost almost 120 million acres (or 53%) of wetland habitat. Minnesota has lost 42% (about 7 million acres) of its wetlands. The remaining 8.7 million acres are very important since they amount to about 9% of the nation's total remaining wetlands.

Causes of Wetland Loss



How does the Service effort fit with the wetland protection bills that are making their way through the State legislature?

The Service wetland protection efforts should complement whatever legislation finally emerges from state legislature. It should also support the President's "No Net Loss" wetland policy.



For more information

Contact Rick Schultz or Joe Artmann, USFWS, Federal Bldg., Fort Snelling, MN 55111 (612 725-3570)

DRAFT

EXECUTIVE SUMMARY

BACKGROUND

The Minnesota Department of Health (MDH) is responsible for developing State wellhead protection (WHP) rules and for preparing the State WHP Program plan for submittal to the U.S. Environmental Protection Agency (U.S. EPA). The Commissioner of Health assembled an advisory workgroup to consider a number of technical issues related to WHP rule development and program implementation.

The Ad Hoc WHP Technical Workgroup met nine times from April 1990 to February 1991. This report contains recommendations from the workgroup to the Commissioner of Health on selected technical aspects of WHP for public wells. A summary of the major recommendations follows.

RECOMMENDATIONS ON SELECTED TECHNICAL ASPECTS OF WHP FOR PUBLIC WELLS:

- 1) Aquifer and well vulnerability assessments should be conducted at each public well as part of the WHP management plan. Contaminant source management strategies should consider the degree of geological protection of the aquifer. Additionally, the MDH should: a) develop guidelines for public water suppliers to use in assessing aquifer and well vulnerability, b) evaluate and expand the plan review and site inspection process for new public wells, and c) develop and maintain a statewide database of public well information and aquifer/well vulnerability ratings.
- 2) The distance, time-of-travel (TOT), and flow boundary delineation criteria are best suited for broad program application. At a minimum, the TOT threshold value should be equal to or greater than five years.
- 3) The arbitrary fixed-radius method of WHP area (WHPA) delineation may be used to delineate the innermost zones of WHPAs but should not be used to delineate the outer boundaries of WHPAs. The calculated fixed radius and the simplified variable shape methods of WHPA delineation may be used to delineate the outer zones of WHPAs for most hydrogeologic settings in Minnesota. The analytical methods and numerical flow modeling may be used to delineate the outer zones of WHPAs in all of the hydrogeologic settings found in Minnesota. The hydrogeologic mapping method should be used in conjunction with other selected methods when delineating WHPAs.
- 4) Two approaches are proposed for WHPA delineation in Minnesota. The first approach addresses transient, noncommunity wells. The second approach addresses community and nontransient, noncommunity wells. These

approaches are simplified and may not be suitable for all types of hydrogeologic settings.

- a) The WHPAs for transient, noncommunity public wells should consist of at least one zone delineated using the isolation distances specified in the State Well Code.
 - b) The WHPAs for community and nontransient, noncommunity wells should consist of at least two zones. The innermost zone should be delineated using the isolation distances of the State Well Code. The recommended methods for outer zone delineation are based on the population served by the public well. Analytical methods or numerical modeling should be used to delineate the outer zone at public wells serving large populations (a population of greater than 3,300) as defined by the U.S. EPA. For public wells serving populations equal to or less than 3,300, the outer WHPA boundaries should be delineated using a method appropriate for the hydrogeologic setting as defined on Table 1, Method Suitability for Delineating the Outer Zones of WHPAs in Common Hydrogeologic Settings in Minnesota. The TOT (≥ 5 years) and flow boundary criteria should be used with these methods. A third zone, located beyond this outer zone, may be warranted in certain hydrogeologic settings.
- 5) The accuracy of WHPA delineation methods is largely dependent on the availability and quality of the data input parameters. The workgroup identified several State/local data coordination needs, including: a) the need for strong coordination among State and local agencies to ensure data accessibility to public well owners and b) the need for funding to local units of governments to assist in basic data collection and coordination. The workgroup also provided guidance regarding minimum data requirements for delineation method input parameters.
 - 6) Monitoring of groundwater quality within the WHPA is a critical component of the WHP management plan. Land- and water-use changes should also be included in the monitoring scheme since they may alter the approach to water quality testing or the boundaries of the WHPA. The workgroup provided a number of specific recommendations regarding minimum monitoring requirements. The workgroup also recommended that the MDH: a) develop a guidance document to assist public well owners in the development of monitoring plans; and b) work with appropriate State and local agencies to develop compatible, minimum data standards, and a guidance document for WHPA managers to use in conducting contaminant source inventories.
 - 7) Several additional studies are warranted to address State and local information needs and to facilitate effective program implementation, including: a statewide tritium age-dating survey, a study of aquifer confining units, a sensitivity analysis of delineation input parameters, and local and regional aquifer studies.

DRAFT

- 8) Education must be an essential component of the State WHP strategy. The MDH should provide education and training opportunities on WHP to local agencies and public water suppliers.
- 9) A number of recommendations by the technical advisory workgroup reflect policy issues in addition to technical issues. The workgroup identified five issues for review and consideration by the Ad Hoc WHP Policy Workgroup, including: a) whether local units of governments are empowered to require more conservative isolation distances from contaminant sources than the State Well Code for WHP purposes, b) policy considerations with regard to the recommended five-year TOT threshold value, c) the assumptions used to select a population value of 3,300 for determining the recommended approach for WHPA delineation, d) policy issues with regard to monitoring and the burden of cost, and e) initiatives to fund special studies to help meet State and local information needs.

STATUS OF METROPOLITAN WATER MANAGEMENT ACT PLANNING (509)

As of April 24, 1991

Prepared by the Minnesota Board of Water and Soil Resources

Plan Status Uncertain	Local Review In Progress	Met. Council Review in Progress	Agency Review In Progress	MBWSR Review In Progress	Plans Approved By BWSR
Hazeltine-Bavaria Middle Miss. River Upper Rum River Chaska Creek	Lower Minn. River Cottage Grove Ravine	North Cannon River	Carnelian-Marine	East Mississippi * Nine Mile Creek * Riley-Purg.-Bluff Crk * Sunrise River * Prior L - Spring L * Marine on St. Croix * Lower St. Croix * Crow River Carver Creek Minnehaha Creek	Ramsey-Wash. Metro (9/12/86) Vadnais Lake (4/07/87) Grass Lake (8/19/87) Valley Branch (9/08/87) Pioneer Creek (2/24/88) Elm Creek (5/25/88) Coon Creek (7/27/88) Six Cities (7/27/88) Lower Mississippi R. (7/26/89) Bassett Creek (7/26/89) Gun Club Lake (8/23/89) Vermillion River (8/23/89) Black Dog (11/22/89) Browns Creek (1/24/90) Forest Lake (2/28/90) Shingle Creek (4/25/90) West Mississippi (4/25/90) Rice Creek (7/25/90) Richfield-Bloom (1/23/91) Lower Rum River (1/23/91) Central Ramsey (3/27/91) Southwest Ramsey (3/27/91) Bevens Creek (3/27/91) Credit River (3/27/91) Sand Creek (4/24/91) Shakopee Basin (4/24/91) Southwest Scott (4/24/91) Middle St. Croix (4/24/91)

* = BWSR has taken formal position and is waiting for plan revisions.

Note 1: Some state agencies may be reviewing some plans concurrent with the BWSR review process but have not commented in writing.

Note 2: Any person noting errors in this status report are requested to contact Bruce Sandstrom at 297-4958 so that corrections can be made.