



Minnesota Board of Water and Soil Resources.
Minutes.

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**BOARD OF WATER AND SOIL RESOURCES
HOLIDAY INN-EAST
2201 BURNS AVENUE
ST. PAUL, MINNESOTA 55119
APRIL 25, 1990**

Appointed Members in Attendance

Donald Ogaard
John Williamson
John Boulton
Don Warner
Loni Kemp
Natalie Haas Steffen
James Hoese
Jack Graba
Howard Peterson
William Cofell
John Brooks, Jr.

Appointed Members Absent

Loren Harste

Agency Members in Attendance

Paul Burns, Minnesota Department of Agriculture
Tom Lutgen, Minnesota Department of Natural Resources
Wayne Anderson, Minnesota Pollution Control Agency

Others in Attendance

Al Dornfeld, Minnesota Association of Watershed Districts
D'Wayne DeZiel, Minnesota Association of Soil and Water Conservation Districts
Gary Nordstrom, Soil Conservation Service
Franklin Denn, Minnesota Association of Townships
John Wells, State Planning Agency

Staff in Attendance

Jim Birkholz	Mel Sinn	Chuck Niska
Pat Bloomgren	Wayne Edgerton	Steve Miller
Tom Schwanke	Doug Thomas	Dan Steward
Jim Lemmerman	Bruce Sandstrom	Greg Larson
Dave Behm	Denice DeFrates	Mary Jo Anderson

Meeting Called to Order - Chairman Ogaard called the meeting to order at 9:00 a.m.

90-37 **Adopt Agenda** - Moved by Graba, seconded by Hoese, to adopt the agenda as presented. Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried.

90-38 **Approval of Minutes of March 28, 1990** - Moved by Cofell, seconded by Peterson, to approve the minutes of March 28, 1990 as circulated. Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried.

Chairman's Report - Chairman Ogaard reported that wind erosion has been a problem recently in his area of northwestern Minnesota. Timely rains the past couple days have been appreciated, amounting to 3/4" of moisture.

He made a presentation at the "1990 Water Conference" on April 9-10, at the St. Paul Radisson. It was an excellent conference.

He reported the Environmental Quality Board's meeting on April 19. Topics discussed at the meeting included Earth Day, and a pipeline issue relating to an easement.

Don stated that Dick Ness is retiring effective May 9. Staff had a retirement party for him on April 19.

Chairman Ogaard reported that the Board has its first resignation -Loni Kemp, which will be effective after today's meeting. Don, on behalf of the Board of Water and Soil Resources, thanked Loni for her fine efforts. It was rewarding for him to have Loni as a board member. On behalf of the Governor, Don presented Loni with a letter of commendation and also a plaque. He also presented her with a plaque from the Board. Loni thanked the Board for the recognition. She stated that the Commissioner of the Pollution Control Agency asked her to apply to become a member of that board. Loni said it would be a challenging move for her; she hopes to bring her experiences from the BWSR to PCA.

Board members received copies of the "Minnesota Open Appointments Notice of Vacancy" form and were asked to give it to someone they know who may be interested in filling the current vacancy that now exists on the Board.

Executive Director's Report - Jim Birkholz reported that a letter from the Red River of the North Resource Management Area has been received requesting \$5,000 to assist with their erosion problems in information program in the valley.

Public meetings will be held statewide on the RIM program to gather input and inform the public of RIM activities.

Denice DeFrates will be leaving effective April 27. Susan Tsakakis has been hired to fill the Communications Manager position and will be starting May 9.

Pat Bloomgren will be taking a two month leave, from mid-June through mid-August, and will be doing volunteer work in the Alaska state parks system.

Natalie Haas Steffen entered the meeting at 9:20 a.m.

Jim distributed copies of the budget report, explained expenditures and stated that budget reports will be given on a quarterly basis for the Board's information.

Legislative Report - Jim Birkholz updated the Board on legislative issues. The Board's budget was reduced by \$200,000 or 2.4%. The Metro Local Water Management Task Force bill passed in both the House and Senate and the bill will be going to the Governor for signature. Jim also updated the Board on special levy limits, capital bonding requests, special local levy exemptions, RIM Reserve, sale of state and county forfeited lands.

Natalie asked if counties with bonding ability can levy to pay off debts from general revenue, using additional taxing authority. Jim will check with the Department of Revenue on this.

Chuck Niska distributed material on the water plan implementation tax levy for the Board's information. This issue will be discussed in more detail at the May meeting.

Jim stated that a written legislative summary will be sent out shortly with more specific details for the Board's information. He stated that a new spending plan with the \$200,000 budget reduction will be submitted to the Board for review and approval.

EOB/Water Resources Committee Report - Loni Kemp reported that the Water Resources Committee met on April 5. Highlights of the meeting included the Governor's appointment of a panel to discuss global warming; 10-year water plan drafts revised and refined with focus groups to meet on May 4; Great Lakes Governor's Fund multi-state involvement; MPCA received a nonpoint pollution grant, primarily for additional staff, from the Environmental Protection Agency. Wayne Anderson gave additional information on the grant program. Additional topics addressed at the WRC meeting included the grasshopper issue; Environmental Agriculturalist Education grants; nitrate pollution task force (Greg Larson is the BWSR's representative). Loni stated that the Water Resources Committee functions very well as a clearinghouse for state agencies to work together and gather information. Chairman Ogaard will replace Loni on the Water Resources Committee. On behalf of the BWSR, Chairman Ogaard thanked Loni for her contributions to the Board.

John Brooks, Jr., stated that there is a need to encourage use of updated pesticide and fertilizer application handbooks that are distributed by the University of Minnesota. John quoted an example on his farm where application that had been used in the past can be

decreased by half based on current information. Education on this issue is a necessity.

"Search for Success Program of Renew America" - John Wells, State Planning Agency, went to Washington, D.C. last week and received the award from President Bush on behalf of the original 52 counties in water planning and their state partners. The award was given to Minnesota in the groundwater protection category. He unveiled the award given by Renew America. A celebration will be held in Minnesota at the Governor's mansion with counties, and staff invited.

Chairman Ogaard called for a break in the meeting at 10:35 a.m. The meeting reconvened at 10:45 a.m.

Reinvest In Minnesota Reserve Program - Wayne Edgerton explained the proposed alteration of a RIM Reserve easement in Meeker County (Paul Arnleend, easement #47-13-86-1). Staff recommends approval of the request with the following provisions:

- 1) Acre for acre trade from Dassel Township to Ellsworth Township (6.9 acres),
- 2) New easement in Ellsworth Township will run a full ten years from date of new easement signature,
- 3) No part of the present easement area can be converted to crop production until after April 28, 1997,
- 4) All costs of the alteration of this easement must be born by Mr. Arnleend, including the cost of establishing the vegetative cover according to RIM Reserve specifications.
- 5) There can be no alteration of the existing cover on the present easement until after 6.9 acre trade is finalized, and recorded on the land title.

90-39** Moved by Boulton, seconded by Williamson, to accept the staff recommendation for approval of the alteration of RIM Reserve Easement #47-13-86-1 (Paul Arnleend). Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Steffen, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried.

90-40** Wayne updated the Board on the Milton J. Peterson easement settlement in Faribault County. Staff recommended payment of settlement to cancel this application due to potential long term hazardous waste liabilities because of the existence of an old town dump on the site. Moved by Cofell, seconded by Steffen, to accept the staff recommendation of payment settlement to cancel the Milton J. Peterson easement #22-04-88-1. Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Steffen, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried. Discussion followed.

SWCD Forestry Specialist Report - Jim Lemmerman gave a presentation summarizing Board and SWCD forestry activities since 1985.

Grants for Forestry Stewardship Program - Pat Bloomgren presented the following proposed resolution, "BE IT RESOLVED, that the Board directs the staff to allocate remaining funds from general service grants to SWCDs: to Beltrami SWCD (\$6,000 in cooperation with

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90-41

Clearwater SWCD), and \$3,000 each to Goodhue and Wabasha SWCDs to enable them to participate in the forest stewardship program". Discussion followed. Moved by Warner, seconded by Graba, to approve staff's proposed resolution for the Forestry Stewardship Grant Program. Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Steffen, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried.

Update on 1990 Farm Bill - Loni Kemp distributed a listing of options for the 1990 Farm Bill for Board discussion. Loni encouraged Board members to take a position on the 1990 Farm Bill and communicate that position to others. Discussion followed.

Chairman Ogaard recessed the meeting for lunch at 12:10 p.m. The meeting reconvened at 1:10 p.m.

Discussion continued on the 1990 Farm Bill. Gary Nordstrom, SCS, commented on the conservation compliance plans, which are in the implementation phase (1990 - 1995). The goal of SCS is to have a good working relationship with farmers in implementing the conservation compliance plans.

Moved by Loni Kemp, that the BWSR is in opposition to the position of the SCS Washington, D.C. office which would weaken the conservation compliance plans as done in has been discussed in Iowa. There was not a second to the motion - the motion was defeated.

Advisor Comments

Gary Nordstrom, Soil Conservation Service, reported on the letters sent by the Agricultural Stabilization and Conservation Service (ASCS) concerning redeterminations of swampbuster decisions. SCS has been directed to supply local and state committees with proper documents to better assist in determining recommendations. SCS will supply documents to ASCS. Gary will keep the Board updated on this issue.

Al Dornfeld, Minnesota Association of Watershed Districts, reported that the annual summer meeting and tour will be held on June 22-23, 1990. He stated that the MASWCD/BWSR Blue Ribbon Committee met on April 24 and discussed 10 - 12 issues. Al stated that the no net loss wetland legislation has taken a loss this session.

D'Wayne DeZiel, Minnesota Association of Soil and Water Conservation Districts, reported that he, Dwain Otte, and Danny Potter went to Washington, D.C., last month to discuss Minnesota issues with congressmen. D'Wayne stated that the MASWCD Board of Directors are planning to attend the BWSR meeting and tour in August in Kandiyohi County, and also the September meeting and tour in Grand Marais. He stated that the MASWCD Policy Handbook will be ready for distribution shortly.

Franklin Denn, Minnesota Association of Townships, stated that Minnesota is faced with a grasshopper problem this year. He commented on the wetlands issue. Residential land use

planning needs coordination to a great extent.

Comprehensive Local Water Plan Review and Action - Bruce Sandstrom introduced Bill Weidenbacher (G.M. Montgomery) and Jerald Butcher. Bruce distributed a summary sheet of the Shingle Creek Watershed Management Plan and gave a brief overview of the plan. He also distributed a summary sheet of the West Mississippi Watershed Management Plan and gave a brief overview of the plan. Mr. Butcher commended the BWSR staff on their fine efforts and work on the plan. Mr. Weidenbacher complimented the Department of Natural Resources for their cooperation. Moved by Steffen, seconded by Kemp, to accept the staff recommendation to approve the Shingle Creek WMO Plan and the West Mississippi WMO Plan. Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Steffen, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried.

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90-42

Bruce gave a brief overview of the Shakopee Basin WMO and the Credit River WMO and also distributed a summary sheet for the Board's information. Wayne Anderson, MPCA, stated that he appreciated the contact and support he received in working with Bruce on these plans.

110B Comprehensive Local Water Plans - Doug Thomas introduced Mark Tripp and Brian Christensen (G.M. Montgomery). Doug distributed a summary sheet of the Nobles County 110B Comprehensive Local Water Plan. He gave a brief overview of the 509 plan for the Board's information. Staff recommends approval of the plan. Moved by Kemp, seconded by Boulton, to approve the Nobles County 110B Comprehensive Local Water Plan. Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Steffen, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried.

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90-43

Doug briefly gave a chronological overview of the Waseca County 110B Comprehensive Local Water Plan and distributed a summary sheet for the Board's information.

Dan Steward briefly gave a chronological overview of the Aitkin County 110B Comprehensive Local Water Plan and distributed a summary sheet for the Board's information.

Dan also briefly gave a chronological overview of the Morrison County 110B Comprehensive Local Water Plan and distributed a summary sheet for the Board's information.

Approval of Draft Rules for Local Water Resources Protection and Management Program - Greg Larson distributed an informational handout on the tax bill changes and what it means for allocating funding. Staff needs time to quickly prepare a new draft dealing with the tax bill changes with the metro process to make sure funding is in place. The new draft will be brought before the Board at the May meeting. Chairman Ogaard tabled action on this item until staff have an opportunity to review the new tax bill legislation and can report to the Board on the changes.

Preview of Allocation Process for 1990 Grants to Local Governments - Chuck Niska distributed a summary of the BWSR grant programs and the 1990 grant allocation process for FY91 for the Board's information. Chuck stated that \$159,000 is available for the Streambank, Lakeshore, and Roadside Erosion Program (SLR). Twenty-one applications have been received for the SLR program, in excess of \$400,000 applied for. The Abandoned Well Sealing Program application deadline is June 1st, with a rating period after that. The overall funding level recommendations will be made by the staff during the June Board meeting, regarding the cost-share program, general services grant, abandoned well sealing, and SLR/special projects. Staff recommendation will be made to the Board at the May meeting regarding the \$200,000 funding reduction in program allocations. Staff has been working with the Department of Finance to streamline an encumbrance procedure to allow SWCDs to more readily use cost-share monies in the fall of each work season.

BWSR Draft Strategic Plan - Jim Birkholz stated that the Draft Strategic Plan will be discussed at the May meeting, when a significant amount of time will be spent addressing the plan. Board members comments (written and oral) have been and will continue to be incorporated into the Strategic Plan. Natalie Steffen stated that the metro soil and water conservation districts future need to be more specifically addressed in the Strategic Plan.

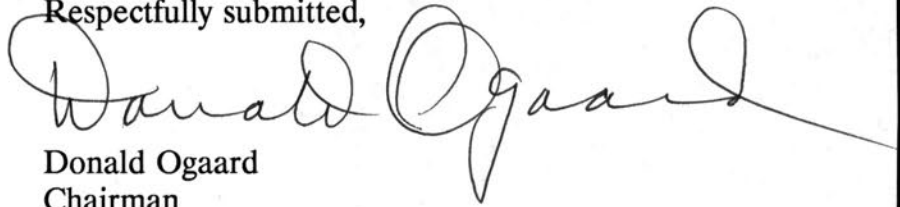
Natalie suggested that Chairman Ogaard, on behalf of the BWSR, send a letter to the Upper Rum River Watershed District requesting that they begin a WMO Plan.

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90-44

Moved by Warner, seconded by Graba, to adjourn the meeting at 3:50 p.m. Affirmative: Ogaard, Williamson, Boulton, Warner, Kemp, Steffen, Hoese, Graba, Peterson, Brooks, Jr., and Cofell. Opposed: None. Carried.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Donald Ogaard", written in dark ink. The signature is fluid and extends across the width of the text area.

Donald Ogaard
Chairman

MINNESOTA OPEN APPOINTMENTS NOTICE OF VACANCY
(One copy of this form to be completed for each vacant position)

AGENCY NAME:

(Enter agency name exactly as it appears in the law or executive order establishing agency)

PERSON REPLACED:

(Name of person previously holding the vacated position or "None" if this is a newly created position)

QUALIFICATIONS AND INFORMATION ABOUT VACANT POSITION TO BE INCLUDED IN NOTICE.

(List all statutory qualifications that appointee must fulfill, e.g., public member, professional member, resident of specific county or district, etc.)

VACANCY TYPE check one: S U N R DATE VACANCY OCCURRED:

Vacancy: S=Scheduled end of term
U=Unscheduled
N=Newly created position
R=Re-activated agency

FOR OFFICE USE ONLY
SR DATE:

Minnesota law requires that the chair of a multi-member agency as defined in M.S. §15.0597, subd. 1, must notify the Secretary of State at least 45 days before the occurrence of a scheduled vacancy or within 15 days of the occurrence of an unscheduled vacancy or the creation of a new position. (M.S. §15.0597, subd. 4)

The chair of any agency who does not submit the data required by M.S. §15.0512, subd. 2 or who does not notify the Secretary of State of a vacancy shall not be eligible for per diem or expenses in connection with agency service until December 1 of the following year.

I affirm that the foregoing is a full and true statement pursuant to M.S. §15.0597, subd. 4

(Signature of appointing authority or designee)

Date

Mail this completed form to: Open Appointments Section, Office of Secretary of State, 180 State Office Bldg., St. Paul, MN 55155-1299, (612)296-2805.

RECEIVED
APR 18 1990

April 1, 1990

Mr. Jim Birkholz
Board of Water and Soil Resources
155 South Wabasha Street, Suite 104
St. Paul, Minnesota 55107

Dear Mr. Birkholz;

As you know, the Soil and Water Conservation Districts in the Red River Valley are making a direct attempt to address the severe soil erosion problems which are occurring in the Valley. The eleven districts have done this by forming an educational/promotional/informational/ organization called Red River of the North Resource Management Area.

At present, the Red River of the North Area is witnessing exciting happenings. There is an increase in the number of field windbreak plantings, and gains are being made in residue management. Though we cannot claim these gains as totally due to Red River of the North activities, we feel by the positive feedback we have received, our efforts have been noted.

Amid success, we find ourselves in the frustrating situation of having an effective program with dwindling funds. This is not due to lack of support from the Soil and Water Districts within the area, but due to completion of the initial pilot project funding received from the Minnesota Soil Conservation Service, and budget constraints for the sponsoring SWCDs which cannot absorb the total project needs.

An attempt is being made to form a funding coalition of SCS, local SWCDs, BWSR, Watershed Districts, and Valley commodity groups for the purpose of providing basic service funds for the Red River of the North. We are proposing a two year funding commitment from each group at \$5,000 per year. With an assured two year base, we can aggressively pursue private grants and other avenues of funding. To date, a grant for the establishment of five residue management plots in the Red River Valley has been received from the Northwest Initiative Fund.

We realize that this is a difficult time for all budgets, but funding for Red River of the North Resource Management Area is critical. The drought has created further erosion problems in America's richest farmland and calls for revitalized and renewed efforts from those committed to conservation.

Thank you for your attention to our funding needs.

Sincerely,

Clair Larson

Clair Larson

Chr. RRN/RMA Advisory Board

BOARD OF WATER AND SOIL RESOURCES

General Fund Budget Status (from 4/1/90 MFR's)

Salaries:

<u>Budget</u>	<u>Expended (thru 3/13/90)</u>	<u>% Expended</u>
\$1,229,031	\$810,785	66%

Supplies and Expense:

<u>Budget</u>	<u>Expended (thru 3/31/90)</u>	<u>% Expended</u>
\$715,791	\$320,944	45%

Grants:

<u>Budget</u>	<u>Expended (thru 3/31/90)</u>	<u>% Expended</u>
\$4,751,423	\$3,947,563	83%

TOTAL:

<u>Budget</u>	<u>Expended</u>	<u>% Expended</u>
\$6,696,245	\$5,079,292	76%

April 24, 1990

**"Process Outlined in Omnibus tax Bill re. Water Planning Levy"
(UPDATED BASED ON DISCUSSIONS WITH SENATE TAX COMMITTEE STAFF
PRIOR TO THE CONFERENCE COMMITTEE)**

It's a two part process-

(A) Initial Levy:

(i) The Commissioner of Revenue directs counties with an approved water plan (110B, 509, metro gw, or 112 plan) that want to be eligible for the BWSR base or challenge grant program to "levy an amount not to exceed the water plan implementation local tax rate times the adjusted net tax capacity for the preceding year". This tax rate is set by September 1st each year by the Department of Revenue for taxes payable in the following year.

The water plan implementation local tax rate for taxes levied in 1990 (payable 1991) and 1991 (payable 1992) is the rate that raises \$1500000 statewide. This is the local match to an equal amount of BWSR base grants. Exhibit A illustrates the levy and base grants for 64 counties. These are counties that (will) have an approved water plan sometime during FY91. For purposes of this discussion, counties with less than one-third of its area covered by an approved water plan were excluded. In this regard, Big Stone should be added to the list of levying counties. The Upper Minnesota River Watershed District Overall Plan is approved and covers most of Big Stone County.

Each participating county would levy at a rate that based on its adjusted net tax capacity would contribute to the statewide \$1500000. Counties with a larger tax base would provide more local matching dollars.

Example:

(i) adjusted net tax capacity * local tax rate = levy

(B) BWSR Base Grants:

(i) " A base grant shall be awarded to a county that levies a tax (as previously described) in an amount equal to \$37500 less the amount raised by the levy". \$37500 was used because it is a base figure that best relates to \$1500000.

(ii) " If the amount necessary to develop and implement the local water plan is less than \$37500, the amount of the base grant shall be the amount that, when added to the levy amount, equals the amount required to develop and implement the plan.

Examples:

- i) \$37500 - levy = base grant. If the levy is \$20000, the base grant is \$17500.
- ii) Plan cost of \$25000 - levy of \$5000 = base grant of \$20000

Other considerations:

-The BWSR must review a county's annual work plan for implementing all approved local water plans to certify that the actions and costs are reasonable and consistent with priorities in the plan(s). It is envisioned that a county would submit a work plan addressing the planned activities of ALL planning entities such as watershed districts, soil and water conservation districts and water management organizations.

-Base grants would be a formula driven procedure with the main factors, the levy amount and plan costs, provided by the Department of Revenue and counties.

- Funds remaining after the base grant procedure would be available as challenge grants. For FY 1991, about \$1.0 M (?) would remain after allocation of \$1.5 M for base grants.

Three examples from Exhibit A:

Anoka County (assume plan implementation costs of \$130000) would not receive a base grant because their levy exceeds \$37500. The balance of plan costs not met by a challenge grant would have to be funded by another source since no additional levy is authorized.

Mahnomen County (assume plan implementation costs of \$50000) would receive a base grant of \$36088 [\$37500-1412]. The balance of plan costs not met by a challenge grant would have to be funded by another source since no additional levy is authorized.

Wabasha County (assume plan implementation costs of \$106000) would receive a base grant of \$31279 [\$37500-6221]. The balance of plan costs not met by a challenge grant would have to be funded by another source since no additional levy is authorized.

Other Issues:

-If an eligible county does not levy and thus not participate, less local match is generated and less money is needed for base grants;

- With the exception of those counties not receiving a base grant because of high net tax capacity, all new local match will be used for base grants. **Consequently, matching requirements for challenge grants must be flexible;**

-BWSR rules may need to address what extent of a county must be covered by an approved water plan before they are eligible to receive a BWSR grant. Arguably, a county with a small part, say less than a third, of its area covered by an approved water plan should be restricted in its ability to participate in the grant program. Stated another way: Should a county with less than a third of its area covered by an approved local water plan be considered "equal" -in terms of eligibility- with a county with complete coverage? If so, it should be noted that the tax bill does not provide for pro-rata base grants or levies. Both counties could then levy the maximum entitled amount and receive the maximum allowable base grant even though one county lacks complete plan coverage. Levy procedures and tax law cannot be directly addressed in the BWSR rule. If it is decided to limit county participation, the rule should be revised; and

- Timing of the levy and grants process must coincide with the county budget process.

Chronology of the levy and grant process:

By September 1st, BWSR certifies plan implementation costs based on a work plan submitted by the county;

Also by September 1st, the BWSR confers with the Commissioner of Revenue to indicate the amount of base grants to be awarded;

The Commissioner of Revenue then authorizes eligible counties to levy for water plan implementation;

By the end of the calendar year, the BWSR would award base grants using the plan implementation costs and the certified levy figures from participating counties;

The due date for challenge grant applications would be timed to allow the BWSR to make grant awards early in calendar year 1991;

This schedule would work better beginning September, 1991. A departure from usual procedures will be necessary this year because BWSR rules will not likely be effective until late this calendar year. The most likely effect of belated rule adoption will be a need to compress the schedule for submitting and reviewing challenge grant applications.

GOAL: \$1,500,000 LEVY BY COUNTIES AND \$1,500,000 STATE GRANT
COUNTIES WERE NOT ALLOWED MONEY FOR PLANNING

COUNTY	LEVY BASED ON 0.0007993 (MAX ON AMT. CERT)	GRANT NEEDED TO MAXIMIZE AT 37,500	ADDITIONAL NEEDED TO FULFILL REQUESTED EXPENDITURES (OVER 37,500)	REQUESTED EXPENDITURE FOR PLAN IMP.
AITKIN	8,042	29,458	53,100	90,600
ANOKA	125,086	0	4,914	130,000
BECKER	11,774	25,726	12,500	50,000
BELTRAMI	9,910	27,590	102,100	139,600
BENTON	0	0	0	0
BIG STONE *	0	0	0	0
BLUE EARTH	22,305	15,195	22,500	60,000
BROWN	9,081	28,419	22,500	60,000
CARLTON	10,383	27,117	2,500	40,000
CARVER	26,264	11,236	92,500	130,000
CASS	15,362	22,138	57,500	95,000
CHIPPEWA	0	0	0	0
CHISAGO	0	0	0	0
CLAY	15,352	22,148	12,500	50,000
CLEARWATER	2,915	34,585	10,500	48,000
COOK	0	0	0	0
COTTONWOOD	6,657	30,843	22,500	60,000
CROW WING	26,696	10,804	53,100	90,600
DAKOTA	186,033	0	13,967	200,000
DODGE	4,851	32,649	71,500	109,000
DOUGLAS	12,359	25,141	60,500	98,000
FARIBAULT	8,102	29,398	22,500	60,000
FILLMORE	5,491	32,007	90,285	127,785
FREEBORN	11,793	25,707	22,500	60,000
GOODHUE	31,763	5,737	189,500	227,000
GRANT	2,960	34,540	12,500	50,000
HENNEPIN	200,000	0	0	200,000
HOUSTON	4,229	33,271	84,500	122,000
HUBBARD	9,067	28,433	46,500	84,000
ISANTI	0	0	0	0
ITASCA	27,000	10,500	53,100	90,600
JACKSON	6,518	30,982	12,500	50,000
KANABEC	0	0	0	0
KANDIYOHI	0	0	0	0
KITTSO	4,798	32,702	12,500	50,000
KOOCHICHING	0	0	0	0
LAC QUI PARL	0	0	0	0
LAKE	0	0	0	0
LAKE OF THE	0	0	0	0
LESUEUR	8,060	29,440	22,500	60,000
LINCOLN	2,860	34,640	2,500	40,000
LYON	9,464	28,036	2,500	40,000
MCLEOD	0	0	0	0
MAHNOMEN	1,412	36,088	12,500	50,000
MARSHALL	5,516	31,984	12,500	50,000
MARTIN	11,944	25,556	22,500	60,000
MEEKER	0	0	0	0
MILLE LACS	0	0	0	0
MORRISON	9,644	27,856	53,100	90,600

* UPPER MINNESOTA 112 PLAN
QUALIFIES THEM

WATER LEVY

GOAL; \$1,500,000 LEVY BY COUNTIES AND \$1,500,000 STATE GRANT
COUNTIES WERE NOT ALLOWED MONEY FOR PLANNING

COUNTY	LEVY BASED ON 0.0007993 (MAX ON AMT. CERT)	GRANT NEEDED TO MAXIMIZE AT 37,500	ADDITIONAL NEEDED TO FULFILL REQUESTED EXPENDITURES (OVER 37,500)	REQUESTED EXPENDITURE FOR PLAN IMP.
MOWER	12,895	24,605	191,415	228,915
MURRAY	4,484	33,016	2,500	40,000
NICOLLET	8,605	28,895	22,500	60,000
NOBLES	7,930	29,570	193,750	231,250
NORMAN	4,177	33,323	12,500	50,000
OLMSTED	48,895	0	201,105	250,000
OTTER TAIL	20,230	17,270	12,500	50,000
PENNINGTON	3,471	34,029	12,500	50,000
PINE	0	0	0	0
PIPESTONE	3,118	34,382	2,500	40,000
POLK	14,397	23,103	12,500	50,000
POPE **	3,987	33,513	12,500	50,000
RAMSEY	200,000	0	0	200,000
RED LAKE	1,385	36,115	12,500	50,000
REDWOOD	8,050	29,450	2,500	40,000
RENVILLE	0	0	0	0
RICE	15,833	21,667	150,500	188,000
ROCK	0	0	0	0
ROSEAU	4,878	32,622	12,500	50,000
ST. LOUIS	0	0	0	0
SCOTT	33,441	4,059	22,500	60,000
SHERBURNE	0	0	0	0
SIBLEY	5,123	32,377	22,500	60,000
STEARNS	47,097	0	202,903	250,000
STEELE	12,199	25,301	22,500	60,000
STEVENS	3,511	33,989	12,500	50,000
SWIFT	0	0	0	0
TODD	0	0	0	0
TRAVERSE	2,683	34,817	12,500	50,000
WABASHA	6,221	31,279	68,500	106,000
WADENA	0	0	0	0
WASECA	7,259	30,241	57,500	95,000
WASHINGTON	102,804	0	97,196	200,000
WATONWAN	4,859	32,641	22,500	60,000
WILKIN	4,266	33,234	12,500	50,000
WINONA	14,339	16,661	0	31,000
WRIGHT	35,402	2,098	57,500	95,000
YELLOW MEDIC	4,801	32,699	2,500	40,000
TOTAL	~ 1,500,033±	~ 1,540,882±	2,757,035	5,797,950

LOCAL MATCH TO
BWSR BASE GRANTS

BWSR
BASE GRANTS

NOTE:
BIG STONE SHOULD
BE ADDED AND
POPE DROPPED

** POPE HAS NO APPROVED PLAN



Searching For Success

National Environmental
Awards Council

THE NATIONAL ENVIRONMENTAL ACHIEVEMENT AWARD

Groundwater Protection Award-Winning Program Minnesota Local Water Planning Pilot Program

The Minnesota Local Water Planning Pilot Program has assisted Minnesota counties in developing comprehensive plans to protect groundwater and surface water and manage related land uses. Local planning can play a crucial role in protecting water resources from potential contamination.

Since 1987, the State Planning Agency has worked with fifty-two counties organized into six groups to develop voluntary plans. In addition to grants to support local efforts, the state has provided technical assistance and data on water resources and land use, and developed a local planning handbook. While still in its early stages, the program has begun to show results: counties are increasing water testing, adopting the state well code, hiring sanitarians, developing agricultural well inventories, enlisting the aid of university experts, and recommending new regulations to manage problems from septic tanks, feedlots, fertilizer application in sensitive areas, and other pollution sources. The state will provide follow-up support for implementation of local plans through a new, ongoing grant program administered by the Board of Water and Soil Resources.

Even more important than the specific elements of plans adopted in Minnesota is the process used—developing community participation, getting people to think about their local environmentally sensitive areas and potential sources of

water contamination, and to develop and carry out their own programs. Local committees, public meetings, and media attention have increased awareness of water issues and built support for actions needed to protect water resources.

Special Merit:

• Ocean Arks International Solar Aquatic Wastewater Purification Projects

Ocean Arks International in Falmouth, Massachusetts, has pioneered a new family of technologies to protect groundwater and surface water by purifying liquid wastes, including sewage, septage, and food industry discharges, without using hazardous chemicals found in conventional waste-treatment processes. The units consist of solar-powered greenhouses containing myriad life forms, and are designed to use complex ecosystem strategies found in nature.

• Nebraska Groundwater Foundation

Since 1985, the Nebraska Groundwater Foundation's (NGF) educational efforts have inspired people throughout Nebraska to protect a resource that is especially vital to the region. Enlisting the active support of experts and volunteers, the NGF has become known for its credibility, packaged creatively in a wide range of "user-friendly" programs.



ON THE OCCASION
OF THE
UNITED STATES OF AMERICA'S
20TH ANNIVERSARY OF EARTH DAY

**FRIENDS OF THE UNITED NATIONS
ENVIRONMENT PROGRAMME (FUNEP)**

HEREBY RECOGNIZES

**THE MINNESOTA LOCAL WATER PLANNING
PILOT PROGRAM**

Renew America Searching for Success Winner
as a

FUNEP 500 WINNER
for
World Environment Day, 5 June 1990

Richard A. Hellman

Richard A. Hellman
President
Friends of UNEP

April 19, 1990

GOVERNOR RUDY PERPICH

130 State Capitol • St. Paul, Minnesota 55155 • 612-296-3391

NEWS RELEASE

For release:
Friday, April 20, 1990

From: John Wells
State Planning Agency
(612) 297-2377

Roberta Heine
Governor's Office
(612) 296-0001

WATER PROGRAM RECEIVES NATIONAL AWARD

Governor Rudy Perpich today announced that the Minnesota Pilot Program for Local Water Planning is a national award winner in Renew America's "Searching For Success" contest. The Minnesota entry was selected as the top program in the Ground Water Protection category.

Renew America's National Environmental Awards Council selected the 22 winning programs from a list of nearly 1,000 nominations from around the country.

The Minnesota Pilot Program for Local Water Planning is a cooperative effort of 52 participating Minnesota counties, the Minnesota State Planning Agency, the EQB Water Resources Committee, the Board of Water and Soil Resources, and others.

The Legislative Commission on Minnesota Resources made the program possible with a grant of \$822,000 in 1987. The Minnesota State Planning Agency and representatives of the counties sought the grant to begin planning under the Comprehensive Local Water Management Act of 1985.

"The inter-county teams and local water planning communities in each community have done a remarkable job of

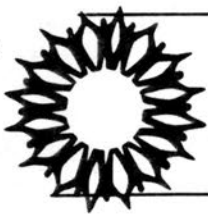
(more)

increasing awareness of water issues and building support for needed solutions," Governor Perpich said. "This national recognition is well-deserved for the initiative they have all taken."

The Governor also praised the State Planning Agency, the EQB Water Resources Committee and the Board of Water and Soil Resources for their support of county water planning.

Award ceremonies were held yesterday in Washington, D.C. as part of the celebration of the 20th anniversary of Earth Day.

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Renew America

NEWS RELEASE

EMBARGOED

For Release 10:30 AM

Thursday, April 19, 1990

CONTACT: Rick Piltz, Deputy Executive Director, Renew America
202/232-2252
Alan Goodfader, Murphy & Demory, Ltd.
202/785-3323

ATTENTION CITY, ENVIRONMENT EDITORS

AMERICA'S ENVIRONMENTAL SUCCESS STORIES RECOGNIZED IN FIRST NATIONAL 'SEARCHING FOR SUCCESS' AWARDS

WASHINGTON, DC, April 19 -- Success in correcting or preventing harm to the environment can have an influential impact when originated by a farm family in Boone, IA, a group of lawyers in Boston, the residents of a New Jersey township, or a determined California entrepreneur -- as well as by agencies of state or federal governments or the massed might of national advocacy organizations.

That was made evident today by the wide range of environmental programs that received National Environmental Achievement Awards in the nation's first Searching for Success program. Each was judged the best in one of 21 areas of

(more)

Searching for Success -- 2

environmental concern by national environmental advocacy groups.

The list of award winners is attached.

The awards were announced today in Washington, DC, during ceremonies that kick off activities in Washington marking the 20th anniversary of Earth Day. Runners-up to the award winners received Certificates of Special Merit.

More than 1,000 entries were received from every state and the District of Columbia. Sponsors entered projects varying in scope from urban neighborhoods and single farms to statewide and regional efforts. Project participants range from groups of children to major corporations and every level of government.

"Searching for Success: Meeting Community Needs Through Environmental Leadership" was launched this year by 23 of America's major national environmental advocacy groups, joined in a National Environmental Awards Council (NEAC). Its purpose is to identify and make available the techniques of programs that successfully counter environmental threats. The council is supported by state governors, U.S. senators and representatives and a wide range of civic groups, businesses, philanthropic and civic organizations and individuals.

The winners survived a rigorous verification and screening by the National Environmental Awards Council. All verified projects will be placed in a continuing Environmental Success Index that will be a source for those seeking to build on success in meeting an environmental problem. They also will be cited for environmental achievement by the Friends of the United Nations Environmental Program.

"We were impressed by the outpouring of interest revealed by the response to Searching for Success. Our national commitment to the health of our planet increases daily. Even more important, the Searching for Success applicants demonstrate conclusively that programs initiated at every level can work to protect, restore and enhance the environment," said Tina Hobson, executive director of Renew America, the organization coordinating the Searching for Success Program.

#



Searching For Success

National Environmental Awards Council

Alliance to Save Energy

American Council for an
Energy-Efficient Economy

American Farmland Trust

California Planning and
Conservation League

The Conservation Foundation

Defenders of Wildlife

Earth Day 1990

The Garden Club of
America

Global Tomorrow
Coalition

Institute for Local Self-
Reliance

Izaak Walton League of
America

National Audubon Society

National Parks and
Conservation Association

National Wildlife Federation

Natural Resources Defense
Council

Renew America

Sierra Club

Soil and Water
Conservation Society

Trout Unlimited

Union of Concerned
Scientists

The Wilderness Society

Zero Population Growth

Executive Coordinator

Renew America

THE NATIONAL ENVIRONMENTAL ACHIEVEMENT AWARD

THE AWARD

Glass is created from the four elements, earth, water, air and fire, that make up the planet. Should glass break, it will return to the sand it once was.

The Award design is reflective of a keyhole, symbolizing man's ability to lock or unlock the door to his environmental future. The upper portion is a hand-blown glass ball with bubbles symbolic of the world and the starry heavens and the dream of unity between man and nature. The base was fused with fire, cast in sand and engraved with sand under air pressure. The triangle base is the most stable of geometric forms, symbolic of the realistic support structure for the dream.

THE ARTIST

ROBERT DuGRENIER is known worldwide for his sculpture and large-scale glass installations. In addition to their inclusion in important museum and private collections, his glass, marble and brass sculptures are presented as prestigious awards.

During the restoration of the Statue of Liberty, Mr. DuGrenier served as consultant and advisor on the reconstruction of the statue's lamp.

4/25/90

STAFF RECOMMENDATIONS

(RIM ITEMS)

I. Alteration of RIM Reserve Easement #47-13-86-1, Paul Arnleend

Recommend **approval** of the request with the following provisions:

1. Acre for acre trade from Dassel Township to Ellsworth Township (6.9 acres),
2. New easement in Ellsworth Township will run a full ten years from date of new easement signature,
3. No part of the present easement area can be converted to crop production until after April 28, 1997,
4. All costs of the alteration of this easement must be born by Mr. Arnleend, including the cost of establishing the vegetative cover according to RIM Reserve Specifications.
5. There can be no alteration of the existing cover on the present easement until after the 6.9 acre trade is finalized, and recorded on the land title.

=====

II. Settlement on Milton J. Peterson RIM Application #22-04-88-1

Recommend payment of settlement to cancel this application due to potential long term hazardous waste liabilities.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES**PROPOSED RESOLUTION**

BE IT RESOLVED, the Board directs the staff to allocate remaining funds from general service grants to SWCDs: to Beltrami SWCD (\$6,000 in cooperation with Clearwater SWCD), and \$3,000 each to Goodhue and Wabasha SWCDs to enable them to participate in the forest stewardship program.

the minnesota project

A CENTER FOR RURAL COMMUNITY
DEVELOPMENT AND PUBLIC POLICY
2222 ELM STREET SE · MINNEAPOLIS, MN 55414
(612) 378-2142
1 (800) 582-5179

P.O. BOX 4 · PRESTON, MN 55965
(507) 765-2700

RR 4, BOX 151
WINONA, MN 55987
(507) 452-3132

April 25, 1990

To: BWSR

From: Loni Kemp

For Discussion: 1990 Farm Bill Options

1. Conservation

- a. For conservation compliance, we should stand by the original goals of the 1985 Food Security Act, using T (tolerable erosion) as the basic program objective. If exceptions must be made for undue economic hardship, then standards should be developed to determine what constitutes economic hardship for individual farmers. We do not support a blanket use of alternative conservation systems. An upper limit on allowable erosion should be set.

Recent actions of SCS in Iowa and Nebraska unnecessarily call into question the entire conservation compliance program, at a time when plans are just beginning to be implemented. Minnesota does not want to see its program tampered with.

- b. Increase the funding available for cost-sharing, and consider expanding the practices eligible for cost-sharing, such as the establishment of legume crops in rotations. Cost-sharing should be targeted to needs identified in compliance plans.
- c. The Swampbuster program should be maintained. It should be strengthened by making drainage the violation, rather than waiting until a program crop is planted.
- d. Sodbuster should also be strengthened by making the breaking up highly erodible land the violation, rather than planting a program crop on such acres.
- e. Fund restoration of wetlands, particularly under long term or permanent easements.
- f. Expand CRP to 45 million acres by 1995. Expand eligibility to include cropped wetlands, shelterbelts, contour grass strips included in rotations, sinkholes, and other environmentally sensitive lands.
- g. Require land that comes out of CRP to meet T.
- h. Establish more incentives for tree planting.

- i. Offer the option of multi-year setasides, as an alternative to annual set asides. This will enable farmers to establish better stands of resource-conserving crops.

2. Sustainable Agriculture

- a. Create a voluntary program to reward farmers who farm sustainably, and encourage others to make the transition. The Fowler and Jontz bills offer incentives to farmers who make a five-year plan for their farm to limit chemical use, protect water quality, and reduce erosion. In return, farmers get more flexibility:
 - payment yields will not be adjusted down for 5 years.
 - deficiency payments will be made on base acres, even when resource conserving crops are planted.
 - Crop base will be increased to the county average base-to-farmland ratio, for those farmers who historically have rotated crops and had low bases.
- b. A major effort to offer education and technical assistance on low input, sustainable practices should be made by SCS and Extension after staff receives training.
- c. The LISA research program should be expanded to \$50 million.

3. Water Quality

- a. A well testing program should be offered so private well owners, particularly farmers, can find out whether ag chemicals are impacting their water.
- b. Research on how farming practices can minimize their impacts on water quality should be increased.

c. urban ag chemicals should be addressed.

SUSTAINABLE AGRICULTURAL ADJUSTMENT ACT OF 1989 (H.R. 3552)

Introduced by Congressman Jim Jontz

For Further Information, call (202) 225-5037

SECTION-BY-SECTION SYNOPSIS

TITLE I - GENERAL PROVISIONS

SEC. 101. PURPOSE.

States four-fold purpose of the bill: (1) to reduce farm program barriers to the adoption of sustainable agriculture production systems; (2) to provide opportunities in education and technical and financial assistance for producers seeking to adopt sustainable agriculture production systems; (3) to promote integrated, whole-farm, multiyear resource management; and (4) to review all current agricultural policies and programs for their impact on sustainable agriculture.

SEC. 102. SUSTAINABLE AGRICULTURE REPORTS.

Requires USDA to (a) prepare progress reports on the programs established by this bill and (b) conduct a full-scale review of how existing agriculture-related programs and policies foster or inhibit the adoption of sustainable agricultural systems.

TITLE II - FARM PROGRAM FLEXIBILITY OPTION

SEC. 201. ESTABLISHMENT.

Establishes a voluntary program designed to enable producers to adopt sustainable production systems for their farms.

SEC. 202. INTEGRATED FARM MANAGEMENT PLANS.

Provides the opportunity for producers to develop five year, farm-specific management plans to enhance profitability and resource stewardship. Authorizes the Secretary, acting through ES, SCS, and ASCS, to assist in development and approval of plans. Provides for flexibility to adjust and modify the plans, consistent with the purposes of the program.

SEC. 203. FARM PROGRAM ADJUSTMENTS FOR PARTICIPANTS.

Reduces farm program barriers to adoption of more sustainable agricultural systems. For participants in the optional program, provides that: (1) program payment yields cannot be adjusted downward; (2) acreage reduction requirements can be satisfied in whole or in part through acreage adjustments resulting from crop rotations and conservation practices that are part of the farm plan; (3) base acreage history shall be maintained and deficiency payments shall be made on any portion of base acres devoted to resource-conserving crops; and (4) cross-compliance is waived.

TITLE III - SUSTAINABLE AGRICULTURE EXTENSION PROGRAM

SEC. 301. ESTABLISHMENT.

Establishes a program within the Extension Service, to operate in conjunction with the research and education program established by the 1985 Agricultural Productivity Act, which will assist producers adopt sustainable agriculture production systems. Designates a coordinator and regional specialists within each state.

SEC. 302. PURPOSE.

Establishes that the SAEP is to provide information, analysis, training, education, and technical assistance to farmers attempting to design and implement sustainable production systems.

SEC. 303. DUTIES.

Elaborates the research, validation, demonstration, information delivery, outreach, and coordination duties of the SAEP.

TITLE IV - TECHNICAL AND FINANCIAL ASSISTANCE

SUBTITLE A - TECHNICAL ASSISTANCE AND TRAINING

SEC. 401. TECHNICAL GUIDES.

Directs the Secretary, in conjunction with the regional panels established by the 1985 Agricultural Productivity Act, to revise the SCS field office technical guides to incorporate the full range of sustainable practices. The guides shall provide standards and practical instructions to ensure (1) nondegradation of farmland soils, (2) reductions in the use of agricultural chemicals to low levels, (3) protection of water supplies from depletion and contamination, and (4) substantial reductions in the use of non-renewable natural resources and purchased production inputs. Authorizes the Secretary to establish a grant program to fund projects that help develop and update the information in the technical guides.

SEC. 402. TRAINING PROGRAM.

Establishes an in-service training program for agency staff in sustainable agriculture practices to facilitate the transfer and adoption of such practices.

SEC. 403. TECHNICAL ASSISTANCE.

Requires the agencies to provide and widely publicize the availability of technical assistance in the preparation of integrated farm management plans.

SUBTITLE B - FINANCIAL ASSISTANCE

SEC. 411. AGRICULTURAL CONSERVATION PROGRAM ELIGIBILITY.

Authorizes ACP cost-sharing assistance to help producers implement integrated farm management plans and to encourage planting of short-term stands of resource-conserving crops.

SEC. 412. FARMERS HOME ADMINISTRATION PROGRAMS.

Revises the Soil and Water Loan Program to emphasize resource conservation and sustainable agriculture purposes. Expands the scope of the Operating Loan Program to cover financing for costs incident to converting to sustainable agriculture production systems and to achieving compliance with conservation requirements.

OVERVIEW OF THE SHINGLE CREEK WATERSHED MANAGEMENT PLAN
FOR THE AUGUST 23RD, 1989 BOARD MEETING

INTRODUCTION

The Shingle Creek watershed is located in east-central Hennepin County and encompasses 43.5 square miles. The Shingle Creek Watershed Management Commission (SCWMC) was organized in 1984 and includes all or parts of the communities of Brooklyn Center, Brooklyn Park, Crystal, Maple Grove, Minneapolis, New Hope, Osseo, Plymouth and Robbinsdale. The major drainage feature of the watershed is Single Creek which flows for 11.3 miles from its origin at the junction of Bass Creek and Eagle Creek in Brooklyn Park to the Mississippi River at Minneapolis.

WATERSHED DESCRIPTION

The Shingle Creek watershed is comprised of sandy outwash soils in the eastern one-half adjacent to the Mississippi River and undifferentiated glacial till in the western one-half of the watershed. Glacial deposits over the bedrock aquifers range in thickness from 0 feet adjacent to the Mississippi to over 400 feet in the western portions of the watershed. Land-use in the eastern three-quarters of the watershed is predominantly urban, with high density residential development being the major use. The western one-quarter of the watershed is mostly rural, but is rapidly developing.

Current water management problems in the Shingle Creek watershed include minor flooding in the developed downstream reaches of Shingle Creek and possible degradation of surface water resources from sediment and urban stormwater pollutants. The major emphasis of the plan is the protection of the drainage systems conveyance and storage capacities and the preservation of surface water quality.

STAFF REVIEW

Overall the Shingle Creek WMC has done a good job in developing their water management plan. The plan provides a detailed inventory of the physical and hydrologic (TR-20, HEC-2 models) characteristics of the watershed, establishes objectives and policies for water management, identifies management issues and strategies and proposes an implementation program. Eight management issues have been identified by the Shingle Creek WMC which include:

- (1) runoff management;
- (2) floodplain management;
- (3) shoreland management;
- (4) water quality monitoring;
- (5) erosion and sediment control;
- (6) stormwater treatment;
- (7) wetlands management; and
- (8) groundwater protection.

Required components of 509 Water Management Plans that will be negotiated with the Shingle Creek WMC include:

- developing a matrix of local controls;
- acknowledgement of National Wetlands Inventory and DNR Protected Waters in the plan;
- how the WMC will accomplish the preservation and use of natural drainage and storage systems; and
- criteria for local plan content.

Overview
West Mississippi Watershed Management Commission "509" Plan
For The October 25, 1989 BWSR Board Meeting

INTRODUCTION

The West Mississippi Watershed Management Commission is located north western Hennepin County , it is approximately 23.5 square miles. The West Mississippi Watershed Management Organization was established in 1984 through a Joint Powers Agreement between the cities of: (order according to area contribution)
Brooklyn Park, Champlin, Brooklyn Center, Maple Grove, Osseo

WATERSHED DESCRIPTION

The WMC area is composed mainly of Sand and gravel outwash and glacial till with drainage ranging poor to well. Areas along the river are oak openings and barrens, the eastern section of watershed is prairies. Land use types are fairly typical of developed and developing suburban areas, proximity to Mpls. is a factor influencing land use. Glacial deposits vary in thickness over the bedrock aquifers.

Nearly half of the WMC area drains directly into the Mississippi river, the rest of the area drains into Edinbrook and Oxbow creeks.

Major concerns of the WMWMC include the protection of water table aquifers from contamination, flood plain and shoreland management, surface water quality management and control of sedimentation and erosion. Current problem in the area is with runoff management (ponding and treatment) where surcharges occur following a storm.

STAFF REVIEW

Like most plans that have been reviewed by staff to date, a number of revisions, suggestions for improvement and clarifications are needed. The plan contains no capital improvement program. The plan proposes, however, to design and implement a water quality monitoring program. The plan also proposes to accomplish the following studies :

- 1- Edinbrook & Oxbow creeks flood profiles
- 2- Drift aquifers recharge

The following plan revisions and clarifications to the plan are being sought by staff through negotiations:

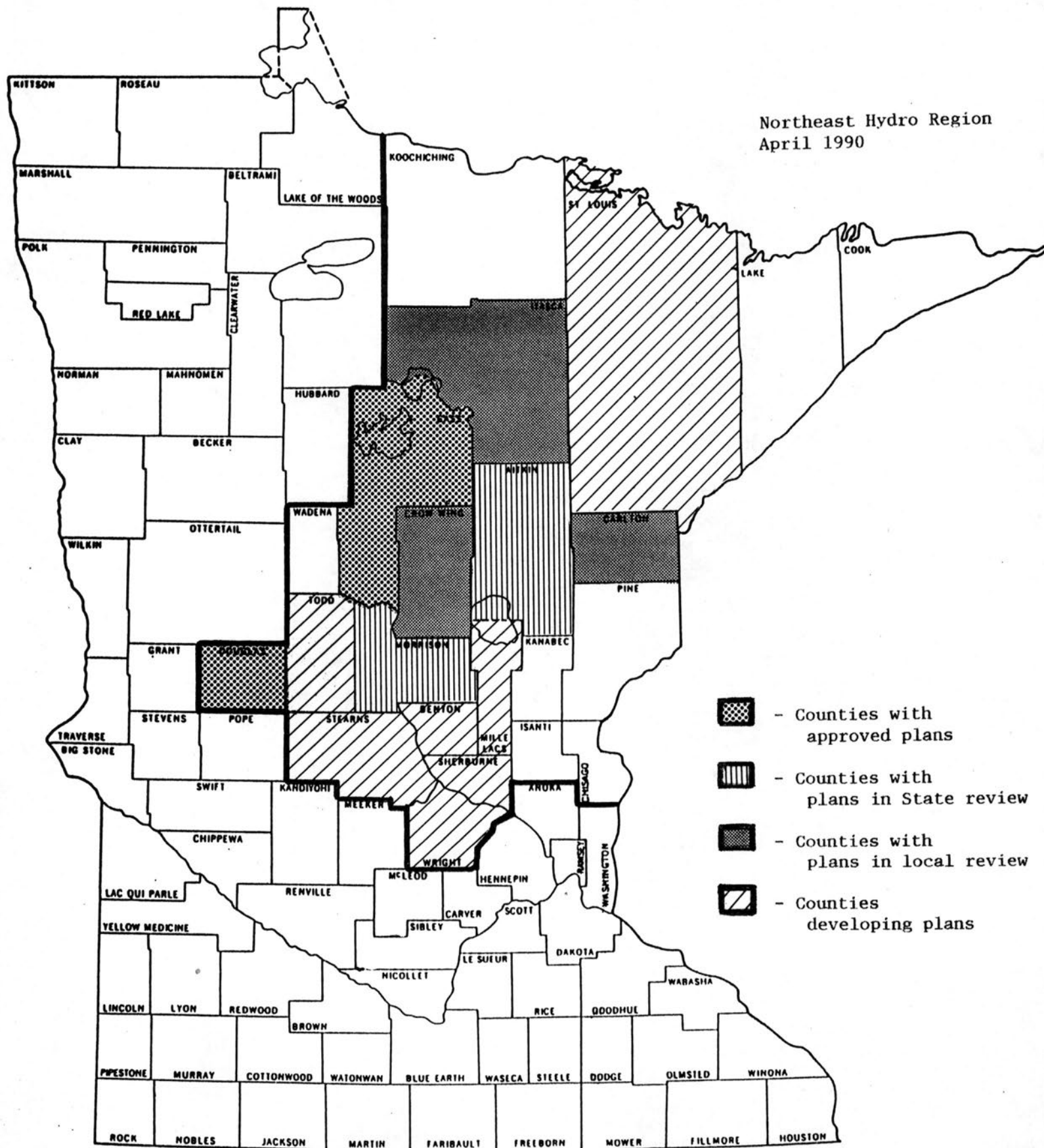
- Management matrix for the five communities involved and clearer direction on what should be in each local plan
- How will the data acquired from the above mentioned studies will be utilized and or incorporated into existing flood studies.
- Merits of the 3 year time table for local plan adoption process with no direct WMC regulatory authority .
- Adoption of policy language which acknowledges the National Wetlands Inventory and the DNR protected waters and their respective regulatory programs.
- Clarification of the MPCA's allegation that the WMC surface water classification system is in violation of state rule and law.

FN:WMISSWMO.OVR

By BDS and SH 10/24/89

BOARD OF WATER AND SOIL RESOURCES

LOCAL WATER PLANNING STATUS



OVERVIEW OF THE WASECA COUNTY COMPREHENSIVE WATER PLAN
FOR THE APRIL 25, 1990 BOARD MEETING

INTRODUCTION

Waseca County is located in South Central Minnesota, in the second tier of counties north of Iowa. It is bounded on the north by Le Sueur and Rice Counties, Steele County on the east, Freeborn and Faribault Counties on the south and Blue Earth County on the west. The total land area of the county is approximately 415 square miles, of which 4.3% is lake area. 98.8% of the acreage in the county is privately owned by state and federal agencies. Agriculture is the primary land use in Waseca County with 84% of the county being cultivated for crop production. Another 5.5% of the land in the county is currently in open pastureland. Deciduous forest and prairie grasses are the native vegetation of Waseca County, with the Le Sueur River forming a general boundary between the two. The largest cities in Waseca County are Waseca, Janesville and New Richland. Waseca is the County seat and has an estimated population of 8,593. Waseca County began Local Water Planning on July 1, 1986 as part of the South Central Minnesota Counties Comprehensive Water Planning Project, a 13 county joint powers board formed to write and implement local water plans.

PHYSICAL DESCRIPTION OF COUNTY

Waseca County is in an area where several ice sheets advanced and retreated during the glacial period. The irregular morainic topography is typical of that found in a till plain and was formed by the late Wisconsin ice sheet. End moraines and ground moraines in places have formed short, circular hills that have smooth sides and nearly level tops.

The Le Sueur River drains a large part of the County. It has a broad, shallow valley that is less than 50 feet deep. The southwestern part of the County drains to Bull Run Creek, the Cobb River and the Little Cobb River. The Cannon River drains a small area of the northern edge of the county. Crane Creek also drains a small portion of the northeastern portion of the County.

A need for development of a geologic atlas exists in the county. The county also needs to develop a surface and groundwater quality monitoring program and monitor any changes occurring in water quality. Non point pollution problems related to feedlots, abandoned well, underground storage tanks and pesticide/fertilizer use exist in the county. The county experiences soil erosion causing sedimentation of ditches, streams and lakes.

STAFF REVIEW

Waseca County has outlined several actions to address the needs and problems identified through the planning process. These actions

include participation in the 13 county geologic mapping effort now underway in southcentral Minnesota. The county will also assess the quality of its surface and groundwater through development and implementation of monitoring plans. Additional actions planned by the county include inventorying abandoned wells, underground storage tanks, feedlots and pesticide\fertilizer use. The county also plans an extensive pesticide and fertilizer education program focussing on non-degradation of its surface and groundwater resources. Drought contingency planning and drained wetland mapping are also planned.

Waseca County has contributed towards the hiring of an extension cluster agent to help implement educational components of the water plan. The county will keep the local water planning task force to oversee, review and guide implementation along with a local water planning coordinator to be assigned to the Waseca County Solid Waste Office.

The Waseca plan was submitted to the BWSR for final state agency review on April 1, 1990.

Submitted by Chris Hughes 4/23/90

Reference: Waseca County Comprehensive Local Water Plan dated March 22, 1990.

OVERVIEW OF THE AITKIN COUNTY WATER PLAN
FOR THE APRIL 25, 1990 BOARD MEETING

Development of the Aitkin County water plan was initiated by resolution of the County Board of Commissioners (Board) in November 1987. Earlier in the year, the Mississippi Headwaters Board applied for water planning grants from the Legislative Committee on Minnesota Resources on behalf of its eight member counties. In November 1987, the Board delegated plan development responsibility to the Aitkin SWCD. Steve Hughes, District Manager, was appointed County Project Coordinator. James M. Montgomery, Inc. was retained to provide consulting services. Development of the plan was guided by a 25 member task force.

County Description

Aitkin County is located in northeastern Minnesota at the southeast corner of the State's arrowhead region. Aitkin County has plentiful surface and groundwater resources. Located in the northern lakes and forest eco-region, the county has over 200 lakes. Forests dominate the land use of the county. Cultivated cropland accounts for less than 20% of county land use. Wetlands cover about one-third of the county, and provide tremendous water storage and filtration in addition to forestry products and wildlife habitat. Most of the county's 440,000 wetland acres are spruce, alder and tamarack peatlands (types 6-8).

The largest water body in the county is Big Sandy Lake (10,640 acres) which is one of the six reservoirs on the Mississippi headwaters watershed operated by the U.S. Army Corps of Engineers. Other large Aitkin County lakes includes Rice (4,422 acres), Minnewawa (2,451 acres), Farm Island (2,025 acres). In addition, 62,680 acres of Lake Mille Lacs (nearly half) is in Aitkin County.

The Mississippi River twists for 77 miles through the county and provides for nearly all surface drainage, although the Snake and Kettle Rivers drain southeastern Aitkin County to the St. Croix River before eventually reaching the Mississippi.

The horseshoe shaped Mille Lacs moraine is the county's most prominent topographic feature. Between the Mille Lacs moraine, located in the south part of the county and skirting Mille Lacs Lake, and the Cromwell moraine in eastern Aitkin County, lies the bed of Glacial Lake Aitkin, an extensive peatlands area. Most of the peatlands are in either county or state ownership. Rice Lake National Wildlife refuge surrounds Rice Lake and is located southwest of MacGregor.

Two flood-control projects have been constructed to reduce flooding in and around the City of Aitkin. In 1957, a six-mile by-pass channel was completed which diverts flood waters around Aitkin. In 1969, a 7,500-foot dike was constructed to protect the City.

Common glacial drift depths of 150-200 feet allows for adequate non-bedrock aquifers. Glacial drift thickness varies from 15 feet to over 300 feet with the greater depths occurring in the north and western parts of the county.

1988 County Planning and Zoning Department tests of 172 well water samples indicated 20 contained coliform bacteria and five exceeded the 10 mg/L standard for nitrates. Generally speaking, county ground water quality is good.

Staff Review

BWSR field staff met with the county local water plan coordinator on January 4, 1990 to review the draft plan. Staff also attended the county's public hearing with the County board on March 20. Staff will update BWSR of any significant plan review issues at the May meeting.

MISCELLANEOUS WATER RELATED INFORMATION

County Seat Aitkin Population 1,800 (1986 est.)
County Population (1986 Est.) 13,000 Population Density 7.1/square mile
County Area 1,820 square miles Eco-Region Northern lakes & forest
Surface Water Drainage Mississippi Watershed
Major Streams Snake, Willow, Rice, Sandy, Swan, Prairie, & Miss. Rivers
Major Lakes Mille Lacs (part), Big Sandy (R-10, 640)
No. of Lakes 213
Groundwater Surficial aquifer supplies abundant
Peatland 440,000 acres
Depth to Bedrock 15' - > 300' 150'-200' common
Miles of Public Ditches 409
Irrigated Acreage 8,157
Maximum County Relief 506'

OVERVIEW OF THE MORRISON COUNTY WATER PLAN
FOR THE APRIL 25, 1990 BOARD MEETING

BACKGROUND

On October 27, 1987, the Morrison County Board passed a resolution to initiate development of a county water plan. Debbie Ginder, with Morrison County's Planning & Zoning Department, was appointed local plan coordinator. Klaers, Powers and Associates was retained to provide consulting services. Morrison County is the southernmost member of the eight member Mississippi Headwaters Board (MHB). The MHB applied for local water planning funding on behalf of its eight member counties in 1987. Each county received \$15,300 from the Legislative Committee on Minnesota Resources to help them develop their plan. The County Board delegated plan development responsibilities to it's local water planning task force. The task force met seventeen times between January 1988 and May 1989 to prepare the draft plan.

COUNTY DESCRIPTION

Morrison County is located in central Minnesota in the State's transition zone between the intensive agricultural region to the south and the lakes and forests to the north. With 60% of the county cultivated for crop production, agriculture is the dominant land use. Eggs and milk are the most important agricultural products. Forest occupy about one third of the county. Lakes cover 2%.

The county has 140 lakes larger than ten acres. These lakes are concentrated in the northwestern and northeastern parts of the county. The most popular recreational lakes in Morrison County include Alexander, Shamineau and Fishtrap. Surface water drainage is provided by the Mississippi River which flows 35 miles through the center of the county. It is the sand plain associated with the river that poses the most critical questions for Morrison County water resources management. Coarse soils and depths to water table of twenty feet combine with urban, rural residential, and irrigated agricultural land uses to yield an aquifer very susceptible to contamination. Although ground water quality is generally thought to be good, the recent MDH-MDA pesticide study indicated the presence of nitrates and pesticides in some wells in the sand plain.

Rural residential growth rates of 50-110% for five townships from 1960-1987 indicate the need to vigorously enforce the county's on-site septic ordinance. In addition, the county's 21,000 acres of irrigated cropland is concentrated in the sand plain.

STAFF REVIEW

BWSR 110B field staff met with the Morrison County local coordinator to discuss plan review on February 8, 1990. BWSR staff will be meeting further with the county representatives regarding the addressing of agency comments in the near future. If any significant review issues develop, the BWSR will receive an update on the process at the May meeting.

MISCELLANEOUS WATER RELATED INFORMATION

County Seat Little Falls Population 7,100 (1987 est.)

County Area 1,125 square mi. Co. Population 30,200 (1987 est.)

County Population Density 26.8/square mile

Surface Water Drainage Mississippi Watershed

Major Streams Crow Wing, Platte, Skunk, Little Elk, Nokasipi,
& Rum Rivers

Major Lakes Alexander (2,990), Shamineau (1,453), Fishtrap (1,320)

No. of Lakes 140 Total Lake Acreage 15,204

Irrigated Acreage 21,000

Maximum County Relief 250'

Public Land Ownership 8.4%

Largest Public Land Ownership Block
Camp Ripley Military Reservation (52,063 acres)

Agricultural Production Compared To Other MN Counties:
Hens & Pullets - 2nd, eggs - 2nd, milk - 4th

Certified Feedlots 950

Inventoried Underground Storage Tanks 312

April 24, 1990

**"Process Outlined in Omnibus tax Bill re. Water Planning Levy"
(UPDATED BASED ON DISCUSSIONS WITH SENATE TAX COMMITTEE STAFF
PRIOR TO THE CONFERENCE COMMITTEE)**

It's a two part process-

(A) Initial Levy:

(i) The Commissioner of Revenue directs counties with an approved water plan (110B, 509, metro gw, or 112 plan) that want to be eligible for the BWSR base or challenge grant program to "levy an amount not to exceed the water plan implementation local tax rate times the adjusted net tax capacity for the preceding year". This tax rate is set by September 1st each year by the Department of Revenue for taxes payable in the following year.

The water plan implementation local tax rate for taxes levied in 1990 (payable 1991) and 1991 (payable 1992) is the rate that raises \$1500000 statewide. This is the local match to an equal amount of BWSR base grants. Exhibit A illustrates the levy and base grants for 64 counties. These are counties that (will) have an approved water plan sometime during FY91. For purposes of this discussion, counties with less than one-third of its area covered by an approved water plan were excluded. In this regard, Big Stone should be added to the list of levying counties. The Upper Minnesota River Watershed District Overall Plan is approved and covers most of Big Stone County.

Each participating county would levy at a rate that based on its adjusted net tax capacity would contribute to the statewide \$1500000. Counties with a larger tax base would provide more local matching dollars.

Example:

(i) adjusted net tax capacity * local tax rate = levy

(B) BWSR Base Grants:

(i) " A base grant shall be awarded to a county that levies a tax (as previously described) in an amount equal to \$37500 less the amount raised by the levy". \$37500 was used because it is a base figure that best relates to \$1500000.

(ii) " If the amount necessary to develop and implement the local water plan is less than \$37500, the amount of the base grant shall be the amount that, when added to the levy amount, equals the amount required to develop and implement the plan.

Examples:

- i) \$37500 - levy = base grant. If the levy is \$20000, the base grant is \$17500.
- ii) Plan cost of \$25000 - levy of \$5000 = base grant of \$20000

Other considerations:

-The BWSR must review a county's annual work plan for implementing all approved local water plans to certify that the actions and costs are reasonable and consistent with priorities in the plan(s). It is envisioned that a county would submit a work plan addressing the planned activities of ALL planning entities such as watershed districts, soil and water conservation districts and water management organizations.

-Base grants would be a formula driven procedure with the main factors, the levy amount and plan costs, provided by the Department of Revenue and counties.

- Funds remaining after the base grant procedure would be available as challenge grants. For FY 1991, about \$1.0 M (?) would remain after allocation of \$1.5 M for base grants.

Three examples from Exhibit A:

Anoka County (assume plan implementation costs of \$130000) would not receive a base grant because their levy exceeds \$37500. The balance of plan costs not met by a challenge grant would have to be funded by another source since no additional levy is authorized.

Mahnomen County (assume plan implementation costs of \$50000) would receive a base grant of \$36088 [\$37500-1412]. The balance of plan costs not met by a challenge grant would have to be funded by another source since no additional levy is authorized.

Wabasha County (assume plan implementation costs of \$106000) would receive a base grant of \$31279 [\$37500-6221]. The balance of plan costs not met by a challenge grant would have to be funded by another source since no additional levy is authorized.

Other Issues:

-If an eligible county does not levy and thus not participate, less local match is generated and less money is needed for base grants;

- With the exception of those counties not receiving a base grant because of high net tax capacity, all new local match will be used for base grants. Consequently, matching requirements for challenge grants must be flexible;

-BWSR rules may need to address what extent of a county must be covered by an approved water plan before they are eligible to receive a BWSR grant. Arguably, a county with a small part, say less than a third, of its area covered by an approved water plan should be restricted in its ability to participate in the grant program. Stated another way: Should a county with less than a third of its area covered by an approved local water plan be considered "equal" -in terms of eligibility- with a county with complete coverage? If so, it should be noted that the tax bill does not provide for pro-rata base grants or levies. Both counties could then levy the maximum entitled amount and receive the maximum allowable base grant even though one county lacks complete plan coverage. Levy procedures and tax law cannot be directly addressed in the BWSR rule. If it is decided to limit county participation, the rule should be revised; and

- Timing of the levy and grants process must coincide with the county budget process.

Chronology of the levy and grant process:

By September 1st, BWSR certifies plan implementation costs based on a work plan submitted by the county;

Also by September 1st, the BWSR confers with the Commissioner of Revenue to indicate the amount of base grants to be awarded;

The Commissioner of Revenue then authorizes eligible counties to levy for water plan implementation;

By the end of the calendar year, the BWSR would award base grants using the plan implementation costs and the certified levy figures from participating counties;

The due date for challenge grant applications would be timed to allow the BWSR to make grant awards early in calendar year 1991;

This schedule would work better beginning September, 1991. A departure from usual procedures will be necessary this year because BWSR rules will not likely be effective until late this calendar year. The most likely effect of belated rule adoption will be a need to compress the schedule for submitting and reviewing challenge grant applications.

WATER LEVY

EXHIBIT A

GOAL: \$1,500,000 LEVY BY COUNTIES AND \$1,500,000 STATE GRANT
COUNTIES WERE NOT ALLOWED MONEY FOR PLANNING

COUNTY	LEVY BASED ON 0.0007993 (MAX ON AMT. CERT)	GRANT NEEDED TO MAXIMIZE AT 37,500	ADDITIONAL NEEDED TO FULFILL REQUESTED EXPENDITURES (OVER 37,500)	REQUESTED EXPENDITURE FOR PLAN IMP.
AITKIN	8,042	29,458	53,100	90,600
ANOKA	125,086	0	4,914	130,000
BECKER	11,774	25,726	12,500	50,000
BELTRAMI	9,910	27,590	102,100	139,600
BENTON	0	0	0	0
BIG STONE *	0	0	0	0
BLUE EARTH	22,305	15,195	22,500	60,000
BROWN	9,081	28,419	22,500	60,000
CARLTON	10,383	27,117	2,500	40,000
CARVER	26,264	11,236	92,500	130,000
CASS	15,362	22,138	57,500	95,000
CHIPPEWA	0	0	0	0
CHISAGO	0	0	0	0
CLAY	15,352	22,148	12,500	50,000
CLEARWATER	2,915	34,585	10,500	48,000
COOK	0	0	0	0
COTTONWOOD	6,657	30,843	22,500	60,000
CROW WING	26,696	10,804	53,100	90,600
DAKOTA	186,033	0	13,967	200,000
DODGE	4,851	32,649	71,500	109,000
DOUGLAS	12,359	25,141	60,500	98,000
FARIBAULT	8,102	29,398	22,500	60,000
FILLMORE	5,423	32,007	90,285	127,785
FREEBORN	11,793	25,707	22,500	60,000
GOODHUE	31,763	5,737	189,500	227,000
GRANT	2,960	34,540	12,500	50,000
HENNEPIN	200,000	0	0	200,000
HOUSTON	4,229	33,271	84,500	122,000
HUBBARD	9,067	28,433	46,500	84,000
ISANTI	0	0	0	0
ITASCA	27,000	10,500	53,100	90,600
JACKSON	6,518	30,982	12,500	50,000
KANABEC	0	0	0	0
KANDIYOHI	0	0	0	0
KITTSO	4,798	32,702	12,500	50,000
KOOCHICHING	0	0	0	0
LAC QUI PARL	0	0	0	0
LAKE	0	0	0	0
LAKE OF THE	0	0	0	0
LESUEUR	8,060	29,440	22,500	60,000
LINCOLN	2,860	34,640	2,500	40,000
LYON	9,464	28,036	2,500	40,000
MCLEOD	0	0	0	0
MAHNOMEN	1,412	36,088	12,500	50,000
MARSHALL	5,516	31,984	12,500	50,000
MARTIN	11,944	25,556	22,500	60,000
MEEKER	0	0	0	0
MILLE LACS	0	0	0	0
MORRISON	9,644	27,856	53,100	90,600

* UPPER MINNESOTA 112 PLAN
QUALIFIES THEM

WATER LEVY

GOAL; \$1,500,000 LEVY BY COUNTIES AND \$1,500,000 STATE GRANT
COUNTIES WERE NOT ALLOWED MONEY FOR PLANNING

COUNTY	LEVY BASED ON 0.0007993 (MAX ON AMT. CERT)	GRANT NEEDED TO MAXIMIZE AT 37,500	ADDITIONAL NEEDED TO FULFILL REQUESTED EXPENDITURES (OVER 37,500)	REQUESTED EXPENDITURE FOR PLAN IMP.
MOWER	12,895	24,605	191,415	228,915
MURRAY	4,484	33,016	2,500	40,000
NICOLLET	8,605	28,895	22,500	60,000
NOBLES	7,930	29,570	193,750	231,250
NORMAN	4,177	33,323	12,500	50,000
OLMSTED	48,895	0	201,105	250,000
OTTER TAIL	20,230	17,270	12,500	50,000
PENNINGTON	3,471	34,029	12,500	50,000
PINE	0	0	0	0
PIPESTONE	3,118	34,382	2,500	40,000
POLK	14,397	23,103	12,500	50,000
POPE **	3,987	33,513	12,500	50,000
RAMSEY	200,000	0	0	200,000
RED LAKE	1,385	36,115	12,500	50,000
REDWOOD	8,050	29,450	2,500	40,000
RENVILLE	0	0	0	0
RICE	15,833	21,667	150,500	188,000
ROCK	0	0	0	0
ROSEAU	4,878	32,622	12,500	50,000
ST. LOUIS	0	0	0	0
SCOTT	33,441	4,059	22,500	60,000
SHERBURNE	0	0	0	0
SIBLEY	5,123	32,377	22,500	60,000
STEARNS	47,097	0	202,903	250,000
STEELE	12,199	25,301	22,500	60,000
STEVENS	3,511	33,989	12,500	50,000
SWIFT	0	0	0	0
TODD	0	0	0	0
TRAVERSE	2,683	34,817	12,500	50,000
WABASHA	6,221	31,279	68,500	106,000
WADENA	0	0	0	0
WASECA	7,259	30,241	57,500	95,000
WASHINGTON	102,804	0	97,196	200,000
WATONWAN	4,859	32,641	22,500	60,000
WILKIN	4,266	33,234	12,500	50,000
WINONA	14,339	16,661	0	31,000
WRIGHT	35,402	2,098	57,500	95,000
YELLOW MEDIC	4,801	32,699	2,500	40,000
TOTAL	~ 1,500,033 ±	~ 1,540,882 ±	2,757,035	5,797,950

LOCAL MATCH TO
BWSR BASE GRANTS

BWSR
BASE GRANTS

NOTE:
BIG STONE SHOULD
BE ADDED AND
POPE DROPPED

** POPE HAS NO APPROVED PLAN

04/24/90

[REVISOR] JMR/CA CCRHF2478

1 comprehensive local water plans. Grants may be used to employ
2 persons and to obtain and use information necessary to:

3 (1) develop comprehensive local water plans under section
4 110B.04 that have not received state funding for water resources
5 planning as provided for in Laws 1987, chapter 404, section 30,
6 subdivision 5, clause (a); and

7 (2) implement comprehensive local water plans.

8 A base grant shall be awarded to a county that levies a tax at
9 the rate established under section 275.50, subdivision 5,
10 paragraph (z), in an amount equal to \$37,500 less the amount
11 raised by that levy. If the amount necessary to implement the
12 local water plan for the county is less than \$37,500, the amount
13 of the base grant shall be the amount that, when added to the
14 levy amount, equals the amount required to implement the plan.

15 Sec. 2. Minnesota Statutes 1989 Supplement, section
16 103B.3369, subdivision 7, is amended to read:

17 Subd. 7. [RULES.] The board shall adopt rules that:

18 (1) establish performance criteria for grant administration
19 for local implementation of state delegated or mandated programs
20 that recognize regional variations in program needs and
21 priorities;

22 (2) recognize the unique nature of state delegated or
23 mandated programs;

24 (3) specify that program activities contracted by a county
25 to another local unit of government are eligible for
26 funding; and

27 ~~(4) require that grants from the board may not exceed the~~
28 ~~amount matched by participating local units of government; and~~

29 ~~(5) specify a process for the board to establish a base~~

~~that all participating counties may be~~

8 A county may levy an amount not to exceed the water
9 implementation local tax rate times the adjusted net tax
10 capacity of the county for the preceding year. The water
11 implementation local tax rate shall be set by August 1 each year
12 by the commissioner of revenue for taxes payable in the
13 following year. As used in this paragraph, the "adjusted net
14 tax capacity of the county" means the net tax capacity of the
15 county as equalized by the commissioner of revenue based upon
16 the results of an assessment/sales ratio study. That rate shall
17 be the rate, rounded up to the nearest one-thousandth of a
18 percent, that, when applied to the adjusted net tax capacity for
19 all counties, raises the amount specified in this clause. The
20 water implementation local tax rate for taxes levied in 1990
21 shall be the rate that raises \$1,500,000 and the rate for taxes
22 levied in 1991 shall be the rate that raises \$1,500,000. A
23 county must levy a tax at the rate established under this clause
24 to qualify for a grant from the board of water and soil
25 resources under section 103B.3369, subdivision 5;

26 (aa) pay the unreimbursed county costs for court-ordered
27 family-based services and court-ordered out-of-home placement
28 for children to the extent that the county can demonstrate to
29 the commissioner of revenue that the estimated amount included
30 in the county's budget for the following levy year is for the
31 purposes specified under this clause. For purposes of this
32 special levy, costs for "family-based services" and "out-of-home
33 placement" means costs resulting from court-ordered targeted
34 family services designed to avoid out-of-home placement and from
35 court-ordered out-of-home placement under the provisions of
36 sections 260.172 and 260.191, which are unreimbursed by the



Southbridge Office Building
155 South Wabasha St., Suite 104
St. Paul, Minnesota 55107

(612) 296-3767
Fax (612) 297-5615

Regional Offices

Northwest Region
1106 Paul Bunyan Drive, NE
Bemidji, MN 56601
218-755-3963

Northeast Region
394 South Lake Avenue
Room 402
Duluth, MN 55802
218-723-4752

West Central Region
503 Washington Street
Brainerd, MN 56401
218-828-2604

South Central Region
Box 756
New Ulm, MN 56073
507-354-2196

Southeast Region
Friedell Bldg., Room 100
1200 S. Broadway
Rochester, MN 55904
507-285-7458

Southwest Region
Box 111
1400 E. Lyon Street
Marshall, MN 56258
507-537-7260

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

Date: April 9, 1990
To: Abandoned well sealing cost-share contacts
From: Eric Mohring (612) 297-7360
Subject: "Application packet"; additional information

I. Background

This letter and enclosed informational materials are being sent to all those contacts identified in responses to our initial survey. The purpose is to give you more information on the status of the well sealing cost-share program and to give you the opportunity to respond with a request for funding and additional information, if desired, which will help us make a more informed selection of pilot counties to participate in the program. Most of the feedback we received from counties indicated that they would like the chance to "state their case" once criteria were set for the program. At the time of our initial survey, we were in the early stages of developing guidelines and procedures for the program, and did not have detailed information about the grants. Since then we have received input from an inter-agency advisory group, county personnel, and local water planning authorities, and have developed some goals, priorities, and procedures.

The initial survey was useful in determining level of interest, identifying contacts, and assessing work done to date at the local level. Based on the initial response, we have decided to establish an "application" period during which counties could provide additional information after having received more information about the program. The application period will close June 1, 1990.

Some of the information which follows will be provided in more detail after pilot counties are selected. It is provided here to give all those interested a sense of BWSR expectations.

II. Overall Goals

The primary program goals are:

- To use the available dollars to accomplish the most ground water protection.
- To demonstrate the feasibility of well sealing cost-share programs in areas of different hydrogeology and well construction practices around the state.

III. Program Objectives:

- Define a useable methodology for prioritizing wells for sealing. Cost-share funds are used only to seal high priority wells.
- Use most of the allocated funds for pilot programs in several selected counties.
- Select pilot counties based on well construction, hydrogeology, aquifer and land use, as well as on the county's planning and inventorying efforts, the ability of the county to administer the program, and the strength of the county's proposal.
- Select pilot counties in different hydrogeologic settings around the state where different well construction practices exist.
- Reserve a smaller portion of the funds ($\pm 20\%$) for statewide "wild card" eligibility - e.g. for counties not selected for the pilot program but with a number of high priority wells identified for sealing.

IV. Funding

Pending legislative budget reductions make it impossible for us to provide a definite figure for funding of the program at this time. We estimate that between \$300,000 and \$400,000 will be available for cost-share grants during the period July 1990 to June 1991. This will be enough money to seal only a few hundred wells statewide. Because of the limited funding, only a few selected counties will receive most of the funding from the first phase of the program beginning July, 1990. The funds awarded may not be distributed evenly among the selected counties, and may vary according to differing costs of well sealing in areas where different well construction techniques exist, and the number of priority wells identified.

V. Information on Grants

- Grants will be in the form of "up-front" grants to counties. Funds will be provided to counties prior to the beginning of the program (as opposed to a reimbursable program). Counties may delegate the administration of the program to a local unit of government.
- There are **no administrative funds** for counties associated with this grant program.
- It is expected that all funds will go toward well sealing costs. Cost sharing is limited to 75% of the total cost, not to exceed \$2,000 per well.
- Other cost items associated with a well sealing, such as water sampling beyond that required of the water well contractor, geophysical logging, etc., may be reimbursable with prior approval of the BWSR, as long as the well is sealed and cost-share limits per well are adhered to.
- Grant funds must be spent or obligated by June 30, 1991. Well sealing work may continue after this date as long as funds are obligated in a contract.
- Pilot counties will be given substantial flexibility to tailor the program to local needs. For example, counties will be able to vary the cost-share percentages (up to the maximum). The only expectation is that funds be used to seal priority wells according to the Minnesota Department of Health well code.

- Multi-county proposals will be accepted. There may be some advantage to these in certain locations, such as where there are particular problem areas which cross county lines or where multi-county agencies are taking the lead.
- Many contracting options are available to counties. The most efficient option may be for counties to develop a "package" contract with one or several water well contractors for the well sealing work.

VI. Additional Benefits of Grant Program

- Useful for assessing costs of well sealing in different parts of the state where different well construction practices exist.
- Record-keeping of administrative costs will provide guidance for future years.
- Provides training opportunities for new well inspectors at the local and state levels.
- Opportunity for demonstration of proper well sealing techniques.
- Opportunities for public education.

VII. Selecting Pilot Counties

Counties will be given until June 1 to supply additional information and to make a proposal if desired. In early June the applications will be evaluated by BWSR staff and the interagency work group. Recommendations will then be made to the board for funding for pilot counties. Grants will be made soon after funds become available in July.

An enclosed sheet (Attachment A) lists the criteria for selection of pilot counties.

VIII. State-wide ("Wild Card") Eligibility

Counties not selected as pilot counties may still be eligible for smaller cost-share grants for well sealing. Under this provision, counties not selected as pilot counties but with several high-priority wells identified could receive cost-share grants directed at sealing those wells. To apply, counties would have to submit a request to seal a specific number of identified high priority wells. Any "wild card" funds not requested by February 1, 1991 will be reallocated to existing pilot counties.

IX. Prioritizing Wells for Sealing

Given the limited funding and the numbers of abandoned wells, the available funds will be most effective if they are used to seal only high priority wells. We feel it would be a poor use of limited money if wells were sealed indiscriminately. A minimum definition of a priority well is one whose construction, condition, and location poses a problem greater than that posed by inherent geologic conditions. Information is enclosed on well sealing priorities (Attachment B). Also enclosed is a checklist of "priority well characteristics" developed from these priorities (Attachment C). We hope that the checklist approach will be a workable method for prioritizing wells for sealing. The idea behind the checklist is that the more priority characteristics a given well meets, the higher its priority for sealing. Along with the checklist are explanations of items on the checklist.

X. Abandoned Well Inventory

Developing an inventory of abandoned wells in a county will be a many-year process requiring broad participation and landowner support. Given the timing of this program, it is not realistic to require a detailed inventory of an entire county as a prerequisite for participation in the program. Most counties are just beginning this effort. However, some amount of inventorying will be necessary for defining the extent of the problem and for prioritizing wells for sealing. While the extent of inventory efforts and priority wells identified will be one of the criteria for selecting pilot counties, we hope this will not encourage a "rush job" on what must be a long-term process.

Information is enclosed regarding developing an inventory (Attachment D). Some counties are considerably past this stage, but we thought that most would have use for this type of information. Abandoned wells typically do not have water well records on file, so much of the location and construction data necessary for prioritizing are not readily available. However, there are some basic pieces of information which can be collected. The enclosed "abandoned well inventory form" and accompanying explanation (Attachment E) present some ideas. These materials may be used or modified to suit your needs.

XI. Expectations

While there will be substantial flexibility for counties receiving grants to tailor the program to suit local needs, the following is a list of minimum performance standards:

- Justification for wells prioritized for sealing under this program provided to BWSR
- Wells sealed according to state well code.
- Payment made to contractor(s) only after an Abandoned Well Report is filed with the Minnesota Department of Health.
- Copies of Abandoned Well Reports sent to BWSR.
- Payments within limits specified in statute.
- Opportunity for on-site inspection by county or state staff.
- Grant monies spent or obligated in contract by June 30, 1991.
- Locations of wells sealed under this program provided to BWSR, in Public Land Survey coordinates (township, range, section, $\frac{1}{4}\frac{1}{4}\frac{1}{4}\frac{1}{4}$ section) and plotted on copies of 7 $\frac{1}{2}$ min. topographic maps.
- Records kept of administrative costs.

XII. Contracting Options

There are many options for contracting to carry out the well sealing work. The most efficient and cost-effective option may be for counties to develop a "package" contract with one or several water well contractors to seal wells identified for this program. The county could pay the contractor(s) the chosen percentage of the well sealing costs, with the contractor(s) billing the landowners for the remainder. Alternatively, the county could pay the contractor(s) the entire cost and bill the landowners for the remainder. Another option is for individual landowners to contract for the well sealing work and

recoup the cost-share percentages from the county. The advantages of the package contract are:

- Costs per well sealed would be less because of reduced contractor mobilization charges;
- Better quality control because of fewer contractors;
- Well sealing work could be performed after July 1991 if funds are encumbered in a contract.

Care must be taken in developing the contracts. An apparent low bid may often have hidden costs. For example, water well contractors have been known to charge a low unit cost per foot for cement up to a certain limit, and then charge a much higher cost per bag after this limit. For wells exceeding the limit, well sealing costs become very high, and the low bids initially submitted are not accurate. The interagency advisory group will provide guidance in developing contracts for well sealing.

XIII. How to Apply

If interested in being considered as a pilot county, submit the following types of information by June 1:

- Given that a typical grant to a county may be in the vicinity of \$30,000-\$40,000, describe how you would prioritize wells for sealing and allocate the funds.
- If available, provide a description of priority wells identified for sealing.
- We are not requiring that additional information be submitted to be considered as a pilot county. Though we did not ask for it in the initial survey, some counties prepared a detailed proposal, and may not need to supply additional information.
- If you submit a proposal, please be as concise and brief as possible.

It is not necessary to submit:

- Descriptions of geology from published reports;
We have and are familiar with most of these. Unless it is new information not generally available, this type of material will not add to the value of your proposal. Descriptions of geologic setting will be useful only in the context of well construction of priority wells or in priority areas.
- A detailed inventory of abandoned wells in the county

XIV. Recommended Procedures

The following tasks are recommended for counties receiving cost-share grants for well sealing. More detailed information will be provided to counties after pilot counties are selected. This information is provided here to give a sense of BWSR expectations and goals. These procedures may be modified to meet local needs, as long as the minimum requirements listed under XI are met.

Pilot counties

- Assess existing inventory and prioritizing efforts and determine the need for additional inventory work.
- Notify public regarding the availability of state cost-share funds. Invite public to report existence of abandoned wells to the county.
- Involve SWCD's, watershed districts, local health boards, planning and zoning departments, extension agents, and other appropriate organizations and local government units.
- Conduct additional inventory work if necessary.
- Prioritize wells for sealing.
- Develop a contract with one or more water well contractors for the well sealing work.
- Take advantage of all opportunities to use the program for demonstration, public education, and technical training.

"Wild card" eligibility

Counties not selected as pilot counties but with high priority wells identified should:

- Prioritize wells for sealing.
- Submit a funding request for specific wells to be sealed.
- If grant is awarded, develop a contract for the well sealing work.
- Since these grants will be smaller, it will be especially important to take advantage of opportunities for demonstration, education, and training.

XV. Additional Information

As indicated in part I., additional information will be provided to counties selected as pilot participants. Non-pilot counties will be given information concerning the process to receive "wild card" funding.

Please do not hesitate to call me at (612) 297-7360 with questions or comments.

ATTACHMENT A: CRITERIA FOR SELECTING PILOT COUNTIES

- distribution in different hydrogeologic settings around the state where different well construction practices exist
- strength of county's proposal, considering:
 - how the county will implement the program
 - how the county will allocate limited funds and prioritize wells for sealing
 - ability of county to administer program
 - ability to have funds spent or obligated by July 1991
- number of high priority wells identified
- extent of counties planning and inventory efforts
- other criteria as outlined in statute:

well construction:

well construction practices used in the county (as well as current state of repair of wells in the county) have resulted in unsealed, abandoned wells which provide avenues for migration of contaminants which are appreciably faster than natural pathways.

geologic conditions:

local geology provides protection by preventing contamination from reaching the aquifers in question; unsealed abandoned wells represent the main pathway by which these aquifers can become contaminated.

current aquifer use:

county residents rely on aquifers for which unsealed abandoned wells are the main potential or existing source of contamination.

land use:

land uses in the county produce contaminants likely to contaminate ground water when encountering unsealed abandoned wells.

aquifer susceptibility to contamination by unsealed wells:

aquifers situated such that unsealed abandoned wells provide pathways for contamination to reach the aquifer which would not otherwise exist.

ATTACHMENT B: WELL SEALING PRIORITIES

Priorities based on following criteria:

- well construction, depth, and condition
wells whose construction, depth, and condition responsible for providing pathway for contamination to travel downward which is substantially faster than provided by inherent local geologic conditions.
 - construction
 - improper grouting provides conduit through confining layer.
 - open hole multi-aquifer
 - depth
 - depends on depth of confining layers, etc.
 - condition
 - ruptured casing, etc can have same effect as improper construction and grouting.
- importance of aquifer as water supply source
priority given to wells threatening aquifers which are important public and private water supplies, and especially for which there are limited alternative supplies.
- proximity to known point or non-point contamination sources
priority given to wells (meeting construction criteria) near known contamination sources.
- current contamination of well or aquifer
just the fact that a well shows contamination does not make it a priority well for abandonment (e.g. high nitrate levels in a shallow sand plain well).
priority given to wells capable of transferring contamination from a currently contaminated aquifer to deeper aquifers that are important water supply sources.
- susceptibility of an aquifer to contamination by unsealed wells
priority given to wells in aquifers for which unsealed abandoned wells provide the main pathways for contamination to reach the aquifer (pathways not otherwise present).
- limited availability of alternative sources of drinking water
priority given to wells threatening aquifers for which there are limited alternative supplies.
- anticipated changes in land or water use
priority given to wells meeting construction criteria and located in areas which will undergo development or other changes in land use that have the potential to increase contaminant load or water use.
- potential use of well as a monitoring well
if a well has potential use as a monitoring well or water level observation well, if it does not pose a contamination risk, and if an organization is willing to "adopt" it and meet all provisions in the well code, then it should not be sealed.
- danger of humans and animals falling into well
wells which pose this kind of risk are a high priority for capping to make sure no humans or animals can fall in, but may not be a priority for sealing to code for ground water protection.

ATTACHMENT C:

CHECKLIST OF PRIORITY WELL CHARACTERISTICS FOR WELL SEALING COST-SHARE FUNDS (More conditions met => higher priority for sealing)

Construction, depth, condition (provides pathway for contamination migration substantially faster than provided by inherent local geologic conditions):

- ☐ Well serves to channel contaminants into an aquifer (surface water drainage or waste disposal wells reaching water table, wells in pits with surface water drainage to well, etc).
- ☐ Well penetrates confining layer(s).
- ☐ Well has sand-packed or ungrouted casing(s) penetrating confining layer(s).
- ☐ Multi-aquifer well.
- ☐ Multiple screened well >100 ft deep.
- ☐ Well poses hazard of people and animals falling into well (optional).

Location, aquifer characteristics:

- ☐ Within ½ mile of public water supply well and in same aquifer.
- ☐ Well provides connection to water supply aquifer for which there are limited alternative supplies.
- ☐ Well in or near a confirmed or suspected zone of contamination and capable of transferring contamination to deeper water supply aquifer(s) faster than natural flowpaths.
- ☐ Well in an area and aquifer where unsealed abandoned wells provide the main pathways for contamination to reach the aquifer.
- ☐ Well in area which will undergo development or other changes in land and water use which have the potential to increase the contaminant load.

REASONS FOR NOT SEALING AN ABANDONED WELL USING COST-SHARE FUNDS

- ☐ Well does not meet any of above criteria.
- ☐ Well has potential use as a monitoring or water level observation well and an organization is willing to "adopt" it and meet all provisions of the well code.
- ☐ Property transfer situations.

EXPLANATION OF CHECKLIST ITEMS

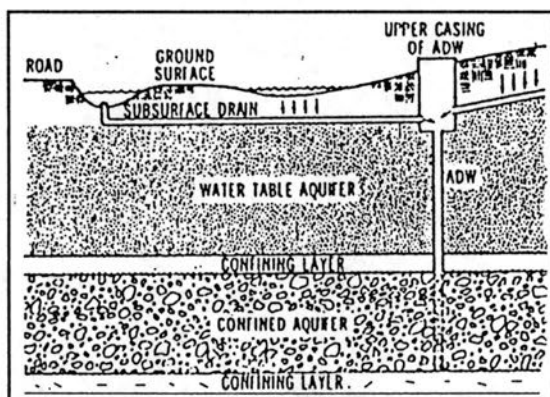
CONSTRUCTION, DEPTH, CONDITION

For this program, the basic philosophy for prioritizing is to identify wells whose construction, depth, and condition provide pathways for contamination migration which are substantially more direct than provided by local geologic conditions. Wells which do not substantially modify the local hydrogeology (e.g. shallow wells in surficial sand aquifers, shallow wells in fractured limestone at the surface, etc.) would not be high priority wells for sealing.

• Well serves to channel contaminants into an aquifer.

This category includes any well which directly channels surface water runoff or contaminants to ground water. Some wells were specifically designed for this purpose:

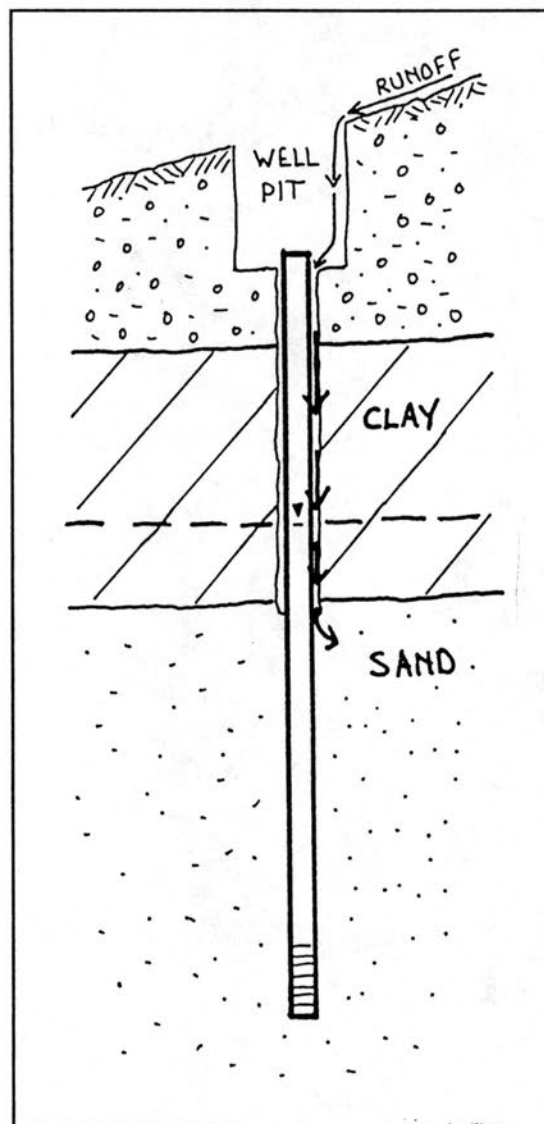
- Agricultural drainage wells reaching the water table.
- Waste disposal wells reaching the water table.



Agricultural Drainage Well

Other wells in this category:

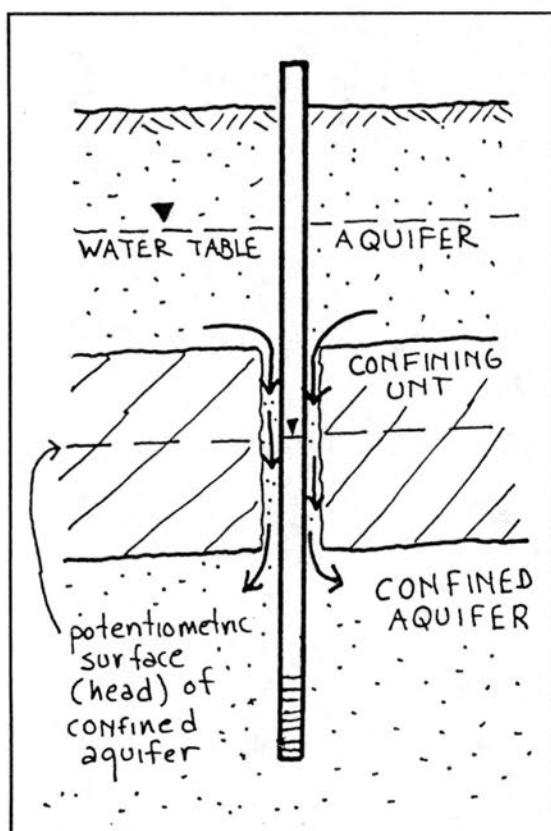
- Wells located in well pits receiving surface water runoff. These wells may channel contaminants directly to ground water, especially if they are improperly constructed, grouted, or in poor condition.



Well located in a well pit and receiving surface runoff. Runoff being channelled to ground water along ungrouted casing.

- Well penetrates confining layer(s).
- Well has sand-packed or ungrouted casing(s) penetrating confining layer(s). Wells penetrating confining layers change existing hydrogeologic conditions and increase the likelihood of contaminants at the surface reaching deeper aquifers. If these wells are improperly constructed, cased, or grouted, or if well casings are ruptured, the risk of contaminants reaching deeper aquifers is even greater.

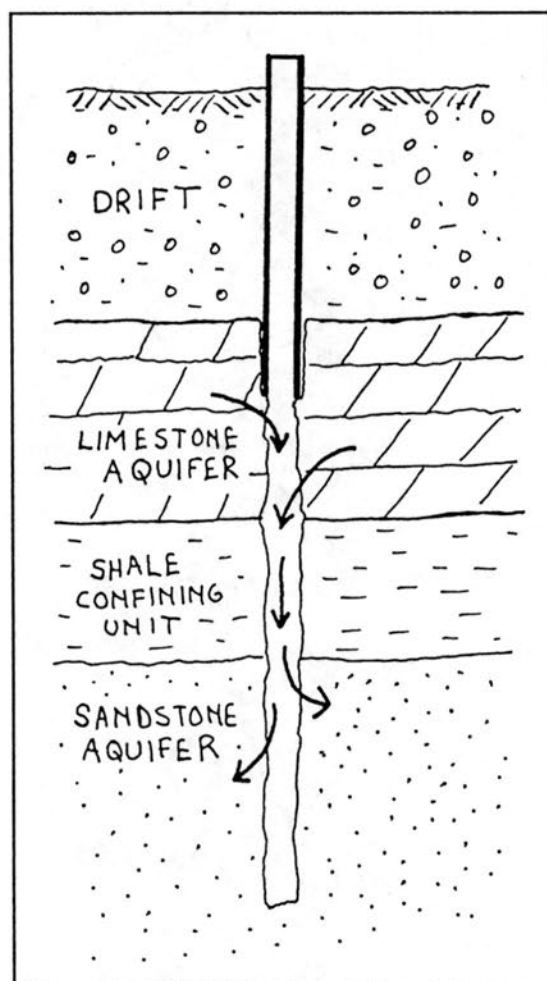
Wells with ungrouted casings penetrating confining layers can channel contaminants to deeper aquifers through the annular space around the casing. Wells with sand-packed casings penetrating confining layers have replaced the original confining material with a more permeable material (sand or gravel) in the well bore, increasing the potential for contaminants to migrate along the well casing.



Well with sand-packed or ungrouted casing penetrating confining layer

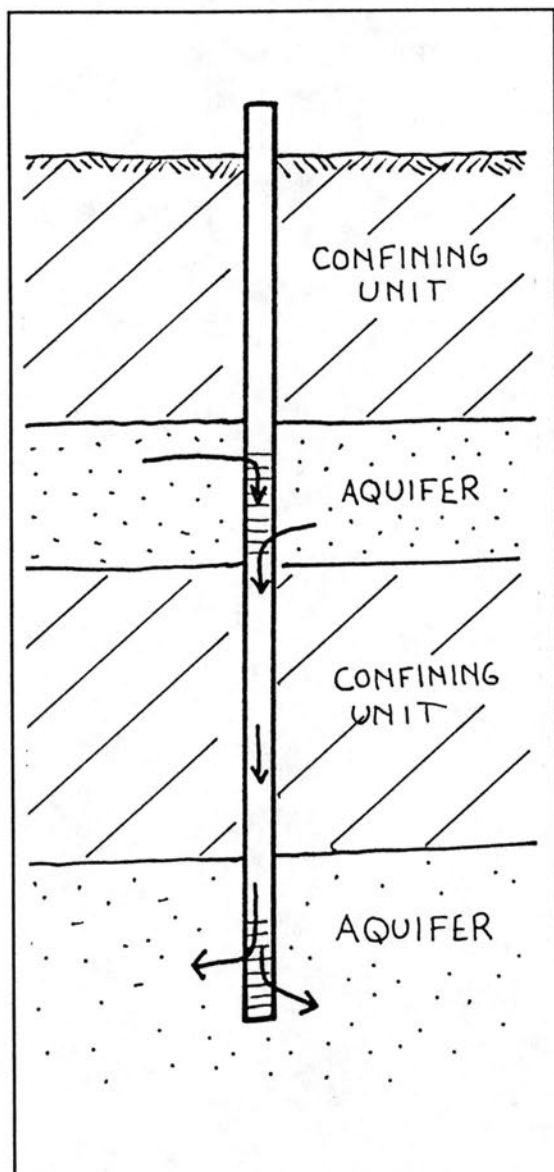
• Multi-aquifer well

Wells which obtained water from 2 or more aquifers can cross-connect aquifers. Contaminants can be channeled from an upper aquifer to a lower aquifer through such a well. Open-hole multi aquifer wells are common in the bedrock aquifers in the southeastern part of the state. A typical construction practice was to install casing to the top of bedrock, and drill open-hole through several aquifers until yield requirements were met. Water from several aquifers can intermingle through these open holes.



Multi-aquifer open hole well penetrating confining unit

• **Multiple screened well >100 ft deep**
A well with multiple screened intervals may cross-connect two or more aquifers, and may pose some of the same problems as an open-hole multi-aquifer well.



multiple-screened well

• **Well poses hazard of people and animals falling into well.**

A large diameter well may pose a risk of people or animals falling into the well. While a well posing such a physical hazard is a high priority for covering or capping to prevent people or animals falling into the well, it may not pose a groundwater contamination threat. It is the opinion of the well-sealing advisory group that wells posing only physical hazards and not otherwise meeting the criteria for a high-priority well should not be a high priority for sealing up to well code standards using cost-share funds. A county with a large number of wells posing physical hazards and receiving a cost-share grant may wish to set aside a small percentage of the money to seal this type of well.

LOCATION, AQUIFER CHARACTERISTICS

- Well is within $\frac{1}{2}$ mile of public water supply well and in same aquifer.

Abandoned wells close to public water supply wells and in the same aquifer, and especially those meeting the construction criteria above, deserve priority status because of potential public health impacts to a larger number of people.

- Well provides connection to water supply aquifer for which there are limited alternative supplies. (self explanatory)

- Well in or near a confirmed or suspected zone of contamination and capable of transferring contamination to deeper water supply aquifer(s) faster than natural flowpaths. (self explanatory)

- Well in an area and aquifer where unsealed abandoned wells provide the main pathways for contamination to reach the aquifer.

Aquifers for which local geologic conditions generally prevent contamination from occurring, and for which unsealed abandoned wells represent the main source of contamination, deserve priority status. Sealing abandoned wells in these aquifers, especially if they meet the construction criteria above, would result in measurable ground water protection.

- Well in area which will undergo development or other changes in land and water use which have the potential to increase the contaminant load or water use.

Abandoned wells in an area undergoing growth or expansion which will result in either increased contaminant load at the surface or increased importance of ground water as a water supply source.

REASONS FOR NOT SEALING AN ABANDONED WELL USING COST-SHARE FUNDS

- Well does not meet any of above criteria (self explanatory).

- Well has potential use as a monitoring or water level observation well.

A variety of organizations monitor ground water quality and quantity. A common concern is the inadequacy of data. If an abandoned well has use as a monitoring well for water quality or as a water level observation well for water quantity, if it does not pose a contamination threat, and if an organization is willing to adopt it and meet all provisions of the Minnesota Department of Health Water Well Code, then the well should not be sealed.

- Property transfer situations

State law will require the disclosure of all abandoned wells at the time of property transfer. The Minnesota Department of Health will encourage sealing of wells at this time. For wells that are otherwise not a priority, the BWSR feels that it would not be appropriate to use cost-share funds to seal wells only for reasons of property transfer.

ATTACHMENT D: DEVELOPING A COUNTY ABANDONED WELL INVENTORY

The purpose of this attachment is to summarize some of the key sources of information and to present some ideas on developing abandoned well inventories. Developing a county-wide inventory of abandoned wells will be a long-term (probably many year) process requiring painstaking detective work, broad participation, and landowner support. There is no set methodology for accomplishing this task. Some techniques will work better for different workers and in different parts of the state. A large volume could probably be written detailing techniques for identifying, locating and developing inventories of abandoned wells. A detailed manual is beyond the scope of this packet. More detailed information on specific approaches taken can be found in the following reports:

Evenson, E. L., 1989. Abandoned Wells: A Model for Local Protection of Ground Water Resources. Report to the Northwest Regional Development Commission.

Blomquist, P.K. and Rongitsch, B.A., 1984. An Inventory of Water Wells on DNR-Managed Land in Southeastern Minnesota. Minnesota Department of Natural Resources, Division of Waters.

While it may not be realistic to require comprehensive inventories for the first year of the cost-share program, inventories will become more important as counties begin to implement this part of their water plans. At some point it may be a good idea to develop a manual on techniques for inventorying abandoned wells. Perhaps if there is sufficient interest in such a product it is something the BWSR could pursue.

SOURCES OF INFORMATION

Information for developing an abandoned well inventory will fall into three broad categories: 1) data on location and construction of abandoned wells with water well records or drillers logs on file; 2) information for locating possible abandoned well sites; and 3) information on location and construction of abandoned wells with no records on file.

Data on wells with water well records

- water well records on file

Since 1975 water well drillers have been required to submit a record (driller's log) of each well drilled in Minnesota to the Minnesota Department of Health (MDH). MDH then distributes copies to other agencies, including MGS, DNR, and SWCD's. MGS has the most complete and organized set, with a portion of the logs field located and interpreted by geologists. MGS files also include many records from wells drilled before 1975. The US Geological Survey (USGS) has historical files of information from surveys done in the 1960's, including information on wells located within municipalities.

- existing computerized data bases

The County Well Index (CWI) data base developed by MGS will be the most useful for the purposes of a county well inventory. CWI contains basic ("index") information on over 100,000 wells statewide. It is PC-based, relatively easy to use, and was specifically designed for use at the county level. The MGS "WELLOG" data base contains complete well drillers and geologic logs (in addition to the basic well data) for about 40,000 of these wells. The "WELLS" data base managed by DNR is the statewide compilation of CWI data.

Sources of information for locating possible abandoned well sites

The following are some sources of information for determining candidate sites where abandoned wells are likely to occur:

- county and state historical society records
useful for information on building construction and use to determine possible sites.
- air photos
Comparisons of older and newer sets could be used to locate old building sites. Ineffective for locating wells.
- township records
- utility records
identification by date of areas served by public water systems can help in locating possible sites.
- municipalities and municipal water system maps
- long-time residents
- township boards
- county plat books and atlases
Comparison of current and older plat books and atlases is useful for locating old building sites.
- mail out surveys
- public notification

Sources of information on location and construction of abandoned wells with no records on file

Unfortunately most abandoned wells will probably fall in the category of having no records on file. Finding accurate locations, and once this is done, finding well construction information, can be problematic. The following sources of information and techniques can be used:

- landowners
- long time residents
- well drillers
- township boards
- township and municipal records
- public notification and mail-out surveys
- field checking while on other projects

Once a well is located, even though there may be no construction data available from a drillers log, some basic information on the well can be collected using the above sources of information combined with field measurements. The "abandoned well inventory form" (Attachment E) suggests the types of information which should be collected on an abandoned well as an inventory is developed.

STEPS TO DEVELOPING A COUNTY ABANDONED WELL INVENTORY

Here are some steps that might be taken to develop a county abandoned well inventory, modified from some of the recommendations in the NWRDC report (Evenson, 1989):

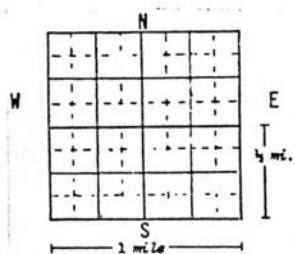
- 1) Locate possible inactive well sites (abandoned home or building sites) by comparing recent plat maps to older maps, identifying by date areas served by public water systems, surveying long-term residents, and other sources listed above.
- 2) Collect well information on file:
 - water well records on file at MGS, SWCD's, USGS, etc.
 - CWI data base
- 3) Obtain locations of abandoned wells using above sources and the list of possible sites.
- 4) Plot sites on USGS topographic maps.
- 5) Confirm locations with township boards and well drillers.
- 6) Field check locations and obtain additional information on well construction.

ATTACHMENT E: SUGGESTED FORMAT FOR ABANDONED WELL INVENTORY FORM

Date _____ Source of Info. _____
 Well Owner's Name _____ Phone # _____
 Home Address _____

WELL LOCATION INFORMATION:

Address (if different from above) _____
 Township Name _____ Township # _____ Range # _____ Section _____
 Location of well in section grid: $\frac{1}{4}$ - $\frac{1}{4}$ - $\frac{1}{4}$ sec _____ Quad _____



Addition Name
Block Number
Lot Number

Other location information or sketch:

WELL CONSTRUCTION INFORMATION:

Type (drilled, dug, sand point, etc.) _____ Use _____
 Approx. date drilled _____ Driller _____ Sketch of well head: _____
 Well record available? _____ Unique Well # (if available) _____
 Casing: _____ height _____
 type _____ diameter _____ above (below) ground _____
 inner casing(s), changes in diameter, etc.: _____

Well head completion (pit, pitless unit, etc) _____
 Pump Pulled _____ When? _____
 Well depth _____ How Determined _____
 Water Level _____ Date Measured _____
 Aquifer Material (surficial sand, buried sand, bedrock, etc): _____

OTHER:

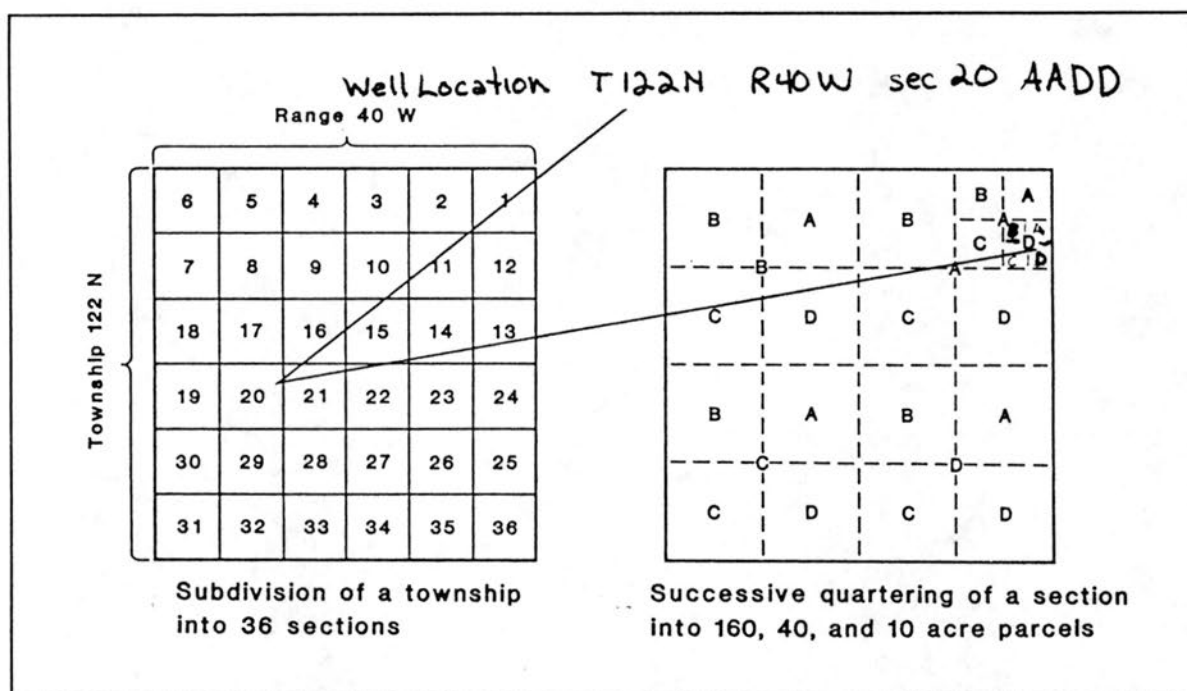
Proximity to contamination source: _____
 Proximity to public water supply well: _____
 Any water quality analyses ? _____ Who performed analyses _____
 Dates and Results: _____

COMMENTS (any special concerns about well):

EXPLANATION OF SUGGESTED ABANDONED WELL INVENTORY FORM

Location Information

- Location down to at least the $\frac{1}{4}$ - $\frac{1}{4}$ - $\frac{1}{4}$ - $\frac{1}{4}$ section is helpful. The "abcd" method of locating quarter sections is most usable. Starting from largest to smallest the section is successively quartered: a is northeast, b is northwest, c is southwest, and d is southeast.



Successive quartering of a section using "abcd" method

- Quad refers to the name of the USGS 7½ minute topographic quad.
- Well could be located on the section grid on the form, and preferably also plotted on USGS 7½ minute topographic maps.
- A sketch showing location of well with respect to roads, buildings, etc. is helpful.

Well Construction Information

- Type of well** refers to well construction method used, such as cable tool, rotary drilled, bored, augered, sand point, dug, driven, jetted, or other.
- Use categories** include domestic, irrigation, public supply, municipal, air conditioning, industry, commercial, and test well.
- In the fortunate circumstance that a drillers log or well record is available, attach it and include the **Minnesota Unique Well Number** of the well, if available. The Unique Number is a 6-digit number assigned to wells since 1975. It appears in the upper right hand corner of the MDH water well record. All well data are keyed on these numbers.
- Casing type** refers to material and how sections are joined together. Materials include galvanized steel, PVC, concrete curbing, etc. Joints can be threaded, welded, glued, etc.
- Inner casings which extend to the surface can be noted from the top of the well.

Changes in casing diameter, such as "telescoping" casings, must be obtained from drillers or landowners records, or measured from the surface using weighted steel tape or video logging.

- **Well head completion** refers to how the top of the well was finished. Many older wells were completed in well pits, while newer wells had pitless adaptor units below ground surface. A sketch of the top of the well is useful.
- It is important to know whether or not the pump was pulled. If the pump was dropped to the bottom of the well it needs to be removed before the well can be sealed.
- The **well depth** can be determined from records or from the landowner's or driller's recollection. If possible it is a good idea to measure the current depth of the well using a weighted tape. If the pump is in place it may still be possible to measure the depth with a steel tape.
- The **static water level** in the well is an important indicator of aquifer conditions. It should be reported in feet below land surface. Even if the water level was reported on an original record, it is a good idea to obtain a current measurement. A chalked steel surveyor's tape or an electric tape are the best measurement methods.
- The **aquifer material** can be determined from drillers records or from the depth of the well and knowledge of the geology of the area.

Other Information

- **Proximity to contaminant source(s)** is an important bit of information for prioritizing wells for abandonment. Sources include septic tanks, feedlots, underground storage tanks, and known contamination from landfills, spills, etc.
- **Proximity to public supply well** is another important piece of information for prioritizing.
- **Comments** should include notes on the general condition of the well, special concerns about the well, other notes on location and construction etc.

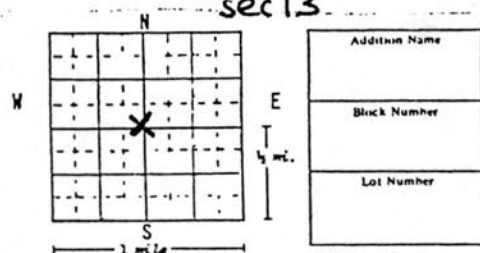
EXAMPLE ONLY

ATTACHMENT E: SUGGESTED FORMAT FOR ABANDONED WELL INVENTORY FORM

Date 9-8-83 Source of Info. DNR District Forester, Caledonia
Well Owner's Name DNR Forestry Division Phone # (507) 724 5261
Home Address 603 N Sprague St, Caledonia, 55921

WELL LOCATION INFORMATION:

Address (if different from above) State Forest Land - Lager Valley Tract
Township Name Winnebago, Houston Co. Township # 101 Range # 5 Section 13
Location of well in section grid: $\frac{1}{4}$ - $\frac{1}{4}$ - $\frac{1}{4}$ - $\frac{1}{4}$ sec bddd Quad Eitzen



Other location information or sketch:

access across pasture, up dry wash off of township road, follow dry wash to fence. sec windmill tower.

elevation $805 \pm 10'$

WELL CONSTRUCTION INFORMATION:

Type (drilled, dug, sand point, etc.) drilled Use old domestic well?

Approx. date drilled ? Driller ?

Well record available? no Unique Well # (if available) _____

Casing: type steel diameter 6" height above (below) ground _____

inner casing(s), changes in diameter, etc.:

unobstructed, but 1st section of pipe probably bent.

Well head completion (pit, pitless unit, etc) windmill

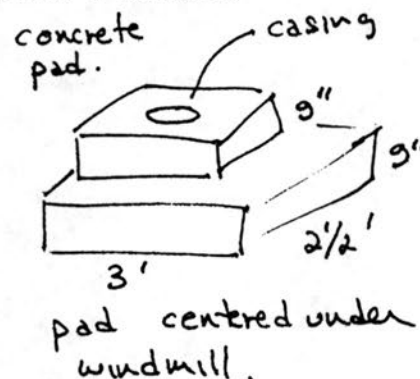
Pump Pulled yes When? _____

Well depth 54 How Determined sounded with tape

Water Level 23 Date Measured 9/8/83

Aquifer Material (surficial sand, buried sand, bedrock, etc):

Sketch of well head:



OTHER:

Proximity to contamination source: _____

Proximity to public water supply well: _____

Any water quality analyses? _____ Who performed analyses _____

Dates and Results:

COMMENTS (any special concerns about well):



Southbridge Office Building
155 South Wabasha St., Suite 104
St. Paul, Minnesota 55107

(612) 296-3767
Fax (612) 297-5615

Regional Offices

Northwest Region
1106 Paul Bunyan Drive, NE
Bemidji, MN 56601
218-755-3963

Northeast Region
394 South Lake Avenue
Room 402
Duluth, MN 55802
218-723-4752

West Central Region
503 Washington Street
Brainerd, MN 56401
218-828-2604

South Central Region
Box 756
New Ulm, MN 56073
507-354-2196

Southeast Region
Friedell Bldg., Room 100
1200 S. Broadway
Rochester, MN 55904
507-285-7458

Southwest Region
Box 111
1400 E. Lyon Street
Marshall, MN 56258
507-537-7260

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

April 23, 1990

To : Local Water Planning Rules Committee
From : Greg Larson
Re : Status of rule

After our last meeting and subsequent BWSR action on March 28th, I thought we could finally begin the formal part of the rulemaking process. However, the proposed water planning levy, which significantly alters base grants, is tied up in tax conference committee. Until its status is determined, rulemaking cannot proceed.

I have enclosed draft #6 which was the version presented to the BWSR in March. The board made changes regarding local matching requirements and base grants; consequently, those changes are also pending legislative action on the water planning levy. I prepared a cursory schedule for completing the rule under two scenarios of legislative action.

Water planning levy enacted:

- draft #7 including water planning levy "stuff" will be prepared and mailed to committee
- meeting of committee scheduled for early to mid-May
- BWSR action sought on May 23rd

Water planning levy not enacted:

- draft #7 with BWSR comments mailed to committee
- no meeting planned unless serious concerns
- BWSR action sought on May 23rd

The metropolitan version of this rule will begin after June 1st, including establishment of the metro rules committee. Let me know if you wish to participate in this effort.

CC: Board Staff

1990 GRANT ALLOCATION PROCESSES FOR FISCAL YEAR 91

OVERVIEW:

- \$200,000 FUNDING REDUCTION NECESSARY IN PROGRAM ALLOCATIONS;
STAFF RECOMMENDATION TO THE BOARD IN MAY
- OVERALL FUNDING LEVEL RECOMMENDATIONS WILL BE MADE BY THE STAFF DURING THE JUNE BOARD MEETING, REGARDING THE
 - COST SHARE PROGRAM
 - GENERAL SERVICES GRANT
 - ABANDONED WELL SEALING
 - SLR/SPECIAL PROJECTS
- PROGRAMS HIGHLIGHTED (REFER TO HANDOUT)
 - SLR/SPECIAL PROJECT REQUESTS
 - ABANDONED WELL SEALING
 - COST SHARE
 - GENERAL SERVICES
 - LOCAL WATER RESOURCES
 - MFIP
- STAFF WORKING TO STREAMLINE AN ENCUMBRANCE PROCEDURE TO ALLOW SWCDs WITH MORE TIME TO USE COST SHARE MONIES IN THE FALL OF EACH WORK SEASON. THIS INVOLVES DISCUSSIONS WITH THE FINANCE DEPARTMENT.
- ALL GRANT AGREEMENTS BEING REVIEWED WITH THE ATTORNEY GENERAL'S OFFICE TO GUARANTEE THAT:
 - 1) CONTENT IS CORRECT AND RELEVANT
 - 2) STREAMLINING IS ACCOMPLISHED WHEN POSSIBLE

SUMMARY
BOARD OF WATER AND SOIL RESOURCES
GRANT PROGRAMS

	SOUTHWEST FLOOD CONTROL	STREAMBANK, LAKESHORE AND ROADSIDE (SLR)	ABANDONED WELL SEALING
<u>Year Funded</u>	1976	1976	1989
<u>Purpose</u>	Flood Control	Erosion and sediment control or water quality protection	Groundwater protection
<u>Current Funding</u>	\$199,000 per year	\$159,000 per year	\$65,000 (FY 90) \$465,000 (FY 91)
<u>Eligible Uses</u>	Structural and non-structural flood control practices	Long-term erosion, sedimentation and water quality practices on streambank, lakeshore, or roadside sites	Cost-sharing the sealing of priority abandoned wells
<u>Principal Clientele</u>	Counties and watershed districts in study area II	Local units of government	Private landowners
<u>Cost-Share Rate</u>	75 percent	50 percent or one-half the local share if federally funded	75 percent of the total cost not to exceed \$2,000 per well
<u>Local Administration</u>	Handled by BWSR's staff engineer in cooperation with Lyon County and other local government officials	Grants made to SWCDs; tech. assistance from SCS or private engineers. About twelve SWCDs participate annually.	Grants made to counties who may delegate the program to other local units of government. The administering agency makes cost- share payments to landowners
<u>Other</u>	Grants are geographically limited to the ten counties in study area II of the southern Minnesota River Basin. This area is south of the Minnesota River from Ortonville to Mankato, then west to Pipestone County	This program began as a four-year LCMR funded demonstration program. Funding in the early 80s reached \$250,000 per year	Participating counties will be determined based on groundwater sensitivity and other factors

SUMMARY
BOARD OF WATER AND SOIL RESOURCES
GRANT PROGRAMS

	RIM CONSERVATION RESERVE	COST-SHARE	GENERAL SERVICES
<u>Year Established</u>	1986	1978	1978
<u>Purpose</u>	Retirement of marginal ag land; wetland restoration; living snowfences, sensitive groundwater areas, pastured hillsides, and riparian lands	Erosion and sediment control and water quality protection	General administration of SWCDs, including technical assistance and review of DNR water permit applications
<u>Current Funding</u>	\$1.5M per year for easements. \$750,000 per year to SWCDs for administration	\$1,501,000 per year (up to 20% is used by SWCDs for tech and adm. costs)	\$978,000 per year
<u>Eligible Uses</u>	Long-term vegetative cover; wetland restoration and wildlife enhancing plantings	Long-term erosion, sedimentation and water quality practices, including feedlot practices	Staff salaries, supervisor compensation, and administration of the office
<u>Principal Clientele</u>	Private owners of eligible cropland	Private and public landowners	Recipients of SWCD assistance
<u>Cost-Share Rate</u>	Easement payments based on current market value or rental rates; veg. cover cost-shared at 75 to 100 percent	75 percent max. for high priority problems; 50% max for lower priority problems	Not applicable
<u>Local Administration</u>	Grants made to SWCDs statewide with tech. assistance from DNR and SCS	Grants made to SWCDs statewide with tech. assistance from SCS	Grants made to SWCDs statewide
<u>Other</u>	RIM Reserve is part of a comprehensive act administered by BWSR and DNR	Grant focuses on most critical problems by providing incentives which complement programs such as ASCS cost-sharing	Grant supplements other SWCD funds such as county appropriations and money earned from tree planting programs

SUMMARY
BOARD OF WATER AND SOIL RESOURCES
GRANT PROGRAMS

	LOCAL WATER RESOURCES PROTECTION AND MANAGEMENT	MINNESOTA FORESTRY IMPROVEMENT PROGRAM (MFIP)	ENVIRONMENTAL AGRICULTURE EDUCATION
<u>Year Funded</u>	1989	1984	1989
<u>Purpose</u>	Develop and implement local water plans	To encourage proper forest management and complement USDA-ASCS forestry programs	To promote groundwater "safe" agriculture with agricultural producer
<u>Current Funding</u>	\$610,000 (FY 90) \$2,610,000 (FY 91)	\$120,000 per year transferred by DNR Division of Forestry to BWSR	\$200,000 (FY 90) \$200,000 (FY 91)
<u>Eligible Uses</u>	Plan development costs and staff and data necessary to implement plans	Selected forest management practices not cost-shared by USDA-ASCS forestry programs	Promotions and demonstrations including personnel consistent with the above purpose
<u>Principal Clientele</u>	Counties or their designee	Private, non-industrial forest landowners	Agencies or groups working with agricultural producers
<u>Cost-Share Rate</u>	A grant must be matched with local funds	Varies by practice	Not applicable
<u>Local Administration</u>	Grants made to counties who may delegate the program to other local units of government	Grant made to SWCDs selected by DNR, Division of Forestry; tech. assistance from DNR. There are 35 SWCDs currently participating	Contracts must complete the proposed work by the end of the biennium
<u>Other</u>	Grants provided to develop a local water plan may not be awarded for a time longer than two years. An approved local water plan is required before grants for implementation may be awarded	This program began in the late 70s as an LCMR funded demonstration program in southeastern Minnesota	Applications are submitted to the BWSR. The BWSR awards contracts following review by the legislative water commission