



Minnesota Board of Water and Soil Resources.
Minutes.

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5/24/95



**CANCELLATION NOTICE OF
MAY 24, 1995 BWSR MEETING**

One West Water Street
Suite 200
St. Paul, MN 55107
(612) 296-3767
Fax (612) 297-5615

Field Offices

Northern Region:

394 S. Lake Avenue
Room 403
Duluth, MN 55802
(218) 723-4752
Fax (218) 723-4794

3217 Bemidji Avenue N.
Bemidji, MN 56601
(218) 755-4235
Fax (218) 755-4201

217 S. 7th Street
Suite 202
Brainerd, MN 56401-3660
(218) 828-2383
Fax (218) 828-6036

Southern Region:

Highway 15 S.
Box 756
New Ulm, MN 56073
(507) 359-6074
Fax (507) 359-6018

40-16th Street SE
Suite A
Rochester, MN 55904
(507) 285-7458
Fax (507) 280-2875

Box 267
1400 E. Lyon Street
Marshall, MN 56258
(507) 537-6060
Fax (507) 537-6368

Metro Region:

One West Water Street
Suite 250
St. Paul, MN 55107
(612) 282-9969
Fax (612) 297-5615

DATE: May 17, 1995

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

FROM: Ronald D. Harnack, Executive Director

SUBJECT: CANCELLATION OF MAY 24, 1995 BWSR MEETING

The Board of Water and Soil Resources (BWSR) meeting has been canceled; agenda items did not merit a meeting this month.

We will be sending you a full briefing packet the last week of May which will include a full summary of the legislative session and background information on agenda items for the June meeting which will be held June 28, 1995.

If you have any questions please feel free to give me a call.

An equal opportunity employer

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**BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET, CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
JUNE 28, 1995**

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

AGENCY MEMBERS PRESENT:

Kim Benson-Johnson, Department of Health
Erv Berglund, Department of Natural Resources
Paul Burns, Department of Agriculture
Jim Anderson, Minnesota Extension Service
Wayne Anderson, Pollution Control Agency

OTHERS PRESENT:

Jim Schafer and D'Wayne DeZiel, Minnesota Association of Soil and Water Conservation Districts (MASWCD)
Bill Hunt, Natural Resources Conservation Service (NRCS)
John Fax, Department of Natural Resources (DNR)
Franklin Denn, Minnesota Association of Townships (MAT)
Jerry Voyles, Martin SWCD/BERBI

STAFF PRESENT:

Ron Harnack, Jeff Nielsen, Al Kean, Chris Hughes, Wayne Zellmer, Keith Grow, Gene Clark, Jim Birkholz, Marybeth Block, Bruce Sandstrom, and Mary Jo Anderson.

BWSR Meeting

June 28, 1995

Page Two

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

**** 95-29 Adopt Agenda** - Moved by Marv Tripp, seconded by Ted Lovdahl, to adopt agenda as amended. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried.

**** 95-30 Minutes of April 26, 1995** - Moved by Ted Lovdahl, seconded by Dwain Otte, to approve the minutes of April 26, 1995, as circulated. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried.

Jim Rossman entered the meeting at 9:10 a.m.

Reports

Chair's Report - Barb Cobb gave opening remarks as new chair of the BWSR.

Chair Cobb welcomed back Barb Uppgaard as a citizen member.

Recognition of Jim Nielsen - Ron Harnack, on behalf of BWSR, presented former chairman Jim Nielsen with a plaque and certificate of commendation from Governor Carlson and the Board.

Executive Director's Report - Ron Harnack briefly commented on staff's various activities: the management team's performance management training; a two-day management meeting dealing with program issues and budget; bonding activities for next year; a memo regarding the Minnesota Department of Transportation is not requesting permits from watershed districts any longer; and a proposed new prison in Braham that may affect wetlands; Ron plans to meet with each field offices and include area board members. Ron welcomed Barb as chair.

Education Committee - Tim Hvidsten reported that the Education Committee met on June 7 regarding Barb Liukkonen's BWSR/MES education position.

Feedlot Committee - Jim Rossman reported that the Feedlot Committee met on March 31, although he did not attend. The Feedlot Committee listed priorities in order to streamline the feedlot rule process.

Soil Conservation Committee - Glenn Annexstad reported that the committee hasn't met.

Dwain Otte attended a federal farm bill meeting attended by people nationwide. Dwain has a synopsis of the meeting. Ron Harnack stated that Representative Gene Hugoson will be

BWSR Meeting
June 28, 1995
Page Three

the next Commissioner of Agriculture effective July 1; he has initiated meetings trying to get a consensus on the farm bill. Ron will distribute the schedule to the Soil Conservation Committee so that they may attend. LeRoy Stensgaard stated that the Association of Minnesota Counties had a teleconference on Monday to discuss this issue.

Dispute Resolution Committee (DRC) - Kathy Roer reported that a hearing was held in June regarding a watershed district appeal. As of August 1, 1995 new 103D amendments remove BWSR from hearing watershed district appeals on permits and orders. Since they must be heard "on record" it is appropriate that such legal issues be decided by a court. In the future, the primary responsibility of DRC will be Wetland Conservation Act appeals.

Chair Cobb announced that during the lunch hour today board members and agency members will be meeting to go over housekeeping issues.

Legislative Update

Wetland Conservation Act - Ron Harnack gave an update on the Wetland Conservation Act. BWSR needs to address the issue of the five counties that have not adopted the WCA; and also to address the counties that have adopted but are not complying. Barb Uppgaard suggested simplifying the memo that was sent out to county chairs and sending it to each county board member.

County and Metro Water Planning - Ron Harnack gave an update on the county and metro water planning legislation. Chair Cobb stated that an ad hoc committee will be formed to address specific rule issues concerning water planning compliance. Cobb will chair the committee.

Watershed Districts and SWCD Term Compatibility - Ron Harnack updated members on this legislation.

Environmental Reorganization - Ron stated that BWSR has been designated with a key role in the special purpose local government report due December 15, 1995. The state agency report is due on January 15, 1996. In the BWSR's role, the Chair will designate individual board members to participate. The date of the reports will be clarified, as different dates have been given.

Budget - Ron summarized the FY 96-97 budget; the SWCD General Services Grant; Annualization of Technical Assistance to Districts/BWSR; Metro Water Management; and the overall biennial budget. Ron stated that he will continue to evaluate program assessments; it's possibly time to review the BWSR's strategic plan. Chair Cobb stated that an administrative committee will be formed to assist in addressing these issues.

BWSR Meeting
June 28, 1995
Page Four

Chair Cobb called for a break in the meeting at 10:10 a.m. The meeting reconvened at 10:20 a.m.

Natural Resources Block Grants/Wetlands/Minnesota River - Wayne Zellmer presented the proposed block grant allocations and asked that the Board endorse the block grants at this time. Discussion followed. Ron Harnack reported that a meeting regarding the Minnesota River will be held on July 12 at 10:30 a.m. at Sibley State Park in Mankato for signing of Minnesota River. The Lieutenant Governor will be attending. Chair Cobb asked board members in the area to attend. Moved by Roer, seconded by Tripp to endorse the block grants. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp and Uppgaard. Opposed: None. Carried.

**
95-31

Valley Branch Watershed District Plan Amendments - Bruce Sandstrom introduced Peter Zetterburg, chairman of the Valley Branch Watershed District. Bruce reviewed the plan amendments. Staff recommends approval of the Valley Branch Plan amendments. Mr. Zetterburg thanked staff for their assistance on this issue. Chair Cobb read the order. Moved by Annexstad, seconded by Lovdahl, to approve the Valley Branch Watershed District Plan Amendment. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp and Uppgaard. Opposed: None. Carried. A letter will be included with the order of plan approval.

**
95-32

Status of East Ottertail SWCD Financial Investigation - Jim Birkholz explained the situation in East Ottertail SWCD. Jim introduced John Blashack and Carl Annalora, board members of East Ottertail SWCD. Jim explained that a former employee of the SWCD had been stealing funds. The SWCD board has acted very responsibly in trying to resolve the issue. Staff Sara Johnson, Ron Shelito and Jim Birkholz have been working on this issue. The Perham police chief and attorney general's office have a legal investigation underway. A confidential investigation took place in April and May. The SWCD has recently hired two new staff. BWSR staff have been investigating the program and a draft will be available next week. A meeting was held on May 22 in Perham with all parties involved. Jim asked members to consider that the SWCD is well on their way to resolving this issue. Although BWSR needs additional communication regarding restitution of the funds involved, possibly take action in July on East Ottertail SWCD grant allocation. Annalora gave a chronology of the events of the theft. A cost-share audit has not been done in the district since 1987. Mr. Blashack stated that East Ottertail SWCD needs the continued financial support and continued working relationship with BWSR staff.

General Services/Cost-Share/RIM Services/Minnesota River Grant - Wayne Zellmer gave a brief synopsis of the grants. BWSR has the option of authorizing the cost-share grant but withholding the East Ottertail SWCD's allocation until July, awaiting reconciliation; or it can authorize release of East Ottertail's cost-share funds subject to approval of their restitution

BWSR Meeting
June 28, 1995
Page Five

- ****
95-33 plan. Moved by Rossman, seconded by Lovdahl, to endorse the allocation schedule as presented, holding the cost-share allocation to East Ottertail SWCD until approval of reconciliation plan in July. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried.

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

- ****
95-34 **Area II Strategic Plan and Annual Work Plan** - Jeff Nielsen introduced representatives of Area II: Kerry Netzke, Area II coordinator; Darrell Apelgrain, engineer; John Boulton, Darold Nepperman, and Carl Hauschild. Kerry explained Area II's budget and prioritized projects. Moved by Stensgaard, seconded by Tripp, to approve the Area II work plan and grant allocation. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried.

Snake River Watershed Joint Powers Organization - Keith Grow introduced Wes Cashman, who explained the Snake River Watershed Joint Powers Board and updated BWSR on the activities and commitment to addressing the water resource issues of the area. Ron Harnack suggested that future annual reports be given to BWSR in written form; and he commended the Snake River Joint Powers Board for their efforts.

Cost-Share Program Update - Marybeth Block distributed the cost-share rule revision timeline for board members information. Discussion followed.

Advisory Comments

-Kim Benson-Johnson, Department of Health, distributed the Department of Health's new address--see attached.

-Paul Burns, Department of Agriculture, reported that the new Commissioner of Agriculture, Gene Hugoson, will begin July 1, 1995. Paul briefly mentioned the Best Management Practices program he is involved in and the challenges associated with the program.

-Wayne Anderson, Pollution Control Agency, reported that Ann Glumac is leaving the deputy commissioner position.

-Erv Berglund, Department of Natural Resources, reported that the Forestry BMP publication will be available soon.

-Bill Hunt, NRCS, the new state conservationist who began three months ago. Very impressed with BWSR, and is interested in working closely with state agencies. A farm bill

BWSR Meeting
June 28, 1995
Page Six

meeting will be held at the Sheraton-Midway, June 29, 9:30 a.m. - noon; he invited everyone to attend. Glenn Annexstad and Dwain Otte will attend.

-Jim Schafer, MASWCD, said that he is proud to have Barb as chair of the BWSR. Jim thanked BWSR for our support with stable funding initiatives that resulted in an increased general services grant and the Envirothon. MACDE meeting in Alexandria this week.

-Jim Anderson, MES, address change. Public meetings will be held on PCA committee of sewage treatment.

-Franklin Denn, MAT, briefly commented on sustainable development initiative regarding land use planning.

-July BWSR Tour and Meeting - Ted Lovdahl stated that the tour will be on Tuesday, July 25 and the BWSR meeting on Wednesday, July 26.

Ron Harnack reminded board members that expense claims need to be submitted by July 14.

Chair Cobb adjourned the meeting at 2:40 p.m.

Respectfully submitted,

A handwritten signature in cursive script that reads "Barbara Cobb". The signature is fluid and elegant, with the first letters of each name being capitalized and prominent.

Barbara Cobb
Chair

*Mary Jo -
I commented a bit*
B

DRAFT - NOT FOR DISTRIBUTION

**BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET, CONFERENCE ROOM
ST. PAUL, MINNESOTA 55107
JUNE 28, 1995**

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

AGENCY MEMBERS PRESENT:

Kim Benson-Johnson, Department of Health
Erv Berglund, Department of Natural Resources
Paul Burns, Department of Agriculture
Jim Anderson, Minnesota Extension Service
Wayne Anderson, Pollution Control Agency

OTHERS PRESENT:

Jim Schafer and D'Wayne DeZiel, MASWCD
Bill Hunt, NRCS
John Fax, DNR
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Jerry Voyles, Martin SWCD/BERBI

STAFF PRESENT:

Ron Harnack, Jeff Nielsen, Al Kean, Chris Hughes, Wayne Zellmer, Keith Grow, Gene Clark, Jim Birkholz, Marybeth Block, Bruce Sandstrom, and Mary Jo Anderson.

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

Adopt Agenda - Moved by Marv Tripp, seconded by Ted Lovdahl, to adopt agenda as amended. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried.

Minutes of April 26, 1995 - Moved by Ted Lovdahl, seconded by Dwain Otte, to approve the minutes of April 26, 1995 as circulated. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried.

If there are no motions before late arrivals, let's delete this type of sentence
Jim Rossman entered the meeting at 9:10 a.m.

Reports

Chairman's Report - Barb Cobb gave opening remarks as new chair of the BWSR.

Chair Cobb welcomed back Barb Uppgaard as a citizen member.

Recognition of Jim Nielsen - Ron Harnack, on behalf of BWSR, presented Jim with a plaque and certificate of commendation from Governor Carlson and the Board.

Executive Director's Report - Ron Harnack briefly commented on staff's various activities: the management team's performance management training; a two-day management meeting dealing with program issues and budget; working on bonding for next year; some key activity issues: on memo regarding DOT's not going permits to watershed districts any longer; proposed new prison in Braham consideration of wetlands; scheduling meetings with field offices and ^{also new} board members. Ron welcomed Barb as chair.
including

Isn't this the other way around?

Education Committee - Tim Hvidsten reported that the Education Committee met on June 7 regarding Barb Liukkonen's BWSR/MES education position.

Feedlot Committee - Jim Rossman reported that the Feedlot Committee met on March 31, although he did not attend. The Feedlot Committee listed priorities in order to streamline the feedlot rule process.

Soil Conservation Committee - Glenn Annexstad reported that the committee hasn't met.

Dwain Otte attended a federal Farm Bill meeting, largely attended by people nationwide. Dwain has a synopsis of the meeting. Ron Harnack stated that Representative Gene Hugoson will be the next Commissioner of Agriculture effective July 1; he has initiated meetings ^{on} of the farm bill in ^{seeking} trying to see a consensus. LeRoy Stensgaard stated that AMC had a teleconference on Monday to discuss this issue.

✓ Ron will distribute the schedule to the Soil Conservation Committee so that they may attend.

as of Aug 1, 1995 new 103D amendments
remove BWSR from hearing watershed
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they must be heard "on record", it is appropriate
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Chair Cobb announced that during the lunch hour today board members and agency members will be meeting to go over housekeeping issues.

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County and Metro Water Planning - Ron Harnack gave an update on the county and metro water planning legislation. Chair Cobb stated that ^{ad hoc} committee will be formed to address specific ^{rule} policy issues. ^{Chair Cobb will be a member of the committee.} ~~Chair Cobb will be a member of the committee.~~ ^{concerning water planning compliance.}

Watershed Districts and SWCD Term Compatibility - Ron Harnack updated members on this legislation.

Environmental Reorganization - Ron stated that BWSR has been designated with a key role in the special purpose local government report due December 15, 1995; state agency report due on January 15, 1996. In the BWSR's role, the Chair will designate individual board members to participate. The date of the reports will be clarified, as different dates have been given.

Budget - Ron summarized the FY96-97 budget; the SWCD General Services Grant; Annualization of Technical Assistance to Districts/BWSR; Metro Water Management; and the overall biennial budget. Ron stated that he will continue to evaluate program assessments; it's possibly time to review the BWSR's strategic plan. Chair Cobb stated that an administrative committee will be formed to assist in addressing these issues.

Chair Cobb called for a break in the meeting at 10:10 a.m. The meeting reconvened at 10:20 a.m.

Natural Resources Block Grants/Wetlands/Minnesota River - Wayne Zellmer presented the proposed block grant allocations and asked that the Board endorse the block grants at this time. Discussion followed. Ron Harnack reported that a meeting regarding the Minnesota River will be held on July 12 at 10:30 a.m. at Sibley State Park in Mankato for signing of Minnesota River. The Lieutenant Governor will be attending. Chair Cobb asked board members in the area to attend, ~~let Ron know if you plan to be there.~~ Moved by Roer, seconded by Tripp to endorse the block grants. Affirmative: Annestad, Bruggman,

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Valley Branch Watershed District Plan Amendments - Bruce Sandstrom introduced Peter Zetterburg, ^{Chairman} representative of the Valley Branch Watershed District. Bruce reviewed the plan amendments. Staff recommends approval of the Valley Branch Plan Amendments. Mr. Zetterburg thanked staff for their assistance on this issue. Chair Cobb read the order. Moved by Annexstad, seconded by Lovdahl, to approve the Valley Branch Watershed District Plan Amendment. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp and Uppgaard. Opposed: None. Carried. A letter will be included with the order of plan approval.

Status of East Ottertail SWCD Financial Investigation - Jim Birkholz explained the situation in East Ottertail SWCD. He ~~apologized for the misunderstanding and the short notice of invitation to have representatives of the district attend the board meeting today.~~ Jim introduced John Blashack and Carl Annalora, board members of East Ottertail SWCD. Jim explained that a former employee of the SWCD had been stealing funds. The SWCD board has acted very responsibly in trying to resolve the issue. Staff Sara Johnson, Ron Shelito and Jim Birkholz have been working on this issue. The Perham police chief and attorney general's office have a legal investigation underway. A confidential investigation took place in April and May. The SWCD has recently hired two new staff. [BWSR staff have been investigating the program and a draft will be available next week.] A meeting was held on May 22 in Perham with all parties involved. Jim asked members to consider that the SWCD is well on their way to resolving this issue, need additional communication in restitution of the funds involved, possibly take action in July on East Ottertail SWCD grant allocation. Annalora gave a chronology of the events of the theft. A cost-share audit has not been done in the district since 1987. Mr. Blashack stated that East Ottertail SWCD needs the continued financial support and continued working relationship with BWSR staff. - ?

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Respectfully submitted,

Barbara Cobb
Chair

*Susan
for your
edit. Thanks!
mja*

s: june.mtg

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ask Doug about this - CB
confusing

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Natural Resources Block Grants/Wetlands/Minnesota River - Wayne Zellmer presented the proposed block grant allocations and asked that the Board endorse the block grants at this time. Discussion followed. Ron Harnack reported that a meeting regarding the Minnesota River will be held on July 12 at 10:30 a.m. at Sibley State Park in Mankato for signing of Minnesota River. The Lieutenant Governor will be attending. Chair Cobb asked board members in the area to attend; let Ron know if you plan to be there. Moved by Roer, seconded by Tripp to endorse the block grants. Affirmative: Annexstad, Bruggman,

of MR River what?

Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp and Uppgaard. Opposed: None. Carried.

Valley Branch Watershed District Plan Amendments - Bruce Sandstrom introduced Peter Zetterburg, representative of the Valley Branch Watershed District. Bruce reviewed the plan amendments. Staff recommends approval of the Valley Branch Plan Amendments. Mr. Zetterburg thanked staff for their assistance on this issue. Chair Cobb read the order. Moved by Annexstad, seconded by Lovdahl, to approve the Valley Branch Watershed District Plan Amendment. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp and Uppgaard. Opposed: None. Carried. A letter will be included with the order of plan approval.

Status of East Ottertail SWCD Financial Investigation - Jim Birkholz explained the situation in East Ottertail SWCD. He apologized for the misunderstanding and the short notice of invitation to have representatives of the district attend the board meeting today. Jim introduced John Blashack and Carl Annalora, board members of East Ottertail SWCD. Jim explained that a former employee of the SWCD had been stealing funds. The SWCD board has acted very responsibly in trying to resolve the issue. Staff Sara Johnson, Ron Shelito and Jim Birkholz have been working on this issue. The Perham police chief and attorney general's office have a legal investigation underway. A confidential investigation took place in April and May. The SWCD has recently hired two new staff. BWSR staff have been investigating the program and a draft will be available next week. A meeting was held on May 22 in Perham with all parties involved. Jim asked members to consider that the SWCD is well on their way to resolving this issue, ^{although some} need additional communication ^{in regarding} restitution of the funds involved, ^{my board member} possibly take action in July on East Ottertail SWCD grant allocation. Annalora gave a chronology of the events of the theft. A cost-share audit has not been done in the district since 1987. Mr. Blashack stated that East Ottertail SWCD needs the continued financial support and continued working relationship with BWSR staff.

Continue from here
General Services/Cost-Share/RIM Services/Minnesota River Grant - Wayne Zellmer gave a brief synopsis of the grants. BWSR has the option of authorizing the cost-share grant but withholding the East Ottertail SWCD's allocation until July, awaiting reconciliation; or authorize ~~cost-share release of funds~~ ^{East Ottertail's cost-share} subject to approval of their restitution plan. Moved by Rossman, seconded by Lovdahl, to endorse the allocation schedule as presented, except the cost-share allocation to East Ottertail SWCD; approval is subject to approval of reconciliation plan in July. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried. *Jean*

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

Area II Strategic Plan and Annual Work Plan - Jeff Nielsen introduced representatives of Area II: Kerry Netzke, Area II Coordinator; Darrell Apelgrain, engineer; John Boulton, Darold Nepperman, and Carl Hauschild. Kerry explained Area II's budget and prioritized

projects. Moved by Stensgaard, seconded by Tripp, to approve the Area II work plan and grant allocation. Affirmative: Annexstad, Bruggman, Cobb, Hvidsten, Imholte, Lovdahl, Otte, Roer, Rossman, Stensgaard, Tripp, and Uppgaard. Opposed: None. Carried.

Snake River Watershed Joint Powers Organization - Keith Grow introduced Wes Cashman, who explained the Snake River Watershed Joint Powers Board and updated BWSR on the activities and commitment to addressing the water resource issues of the area. Ron Harnack asked that an annual report be given to BWSR, but not necessarily in person. The Snake River Joint Powers Board was commended for their efforts.

Cost-Share Program Update - Marybeth Block distributed the cost-share rule revision timeline for board members information. Discussion followed.

Advisory Comments

-Kim Benson-Johnson, Department of Health, distributed the Department of Health's new address--see attached.

-Paul Burns, Department of Agriculture, reported that the new Commissioner of Agriculture, Gene Hugoson, will ~~take effect on~~ ^{begin} July 1, 1995. Paul briefly mentioned the Best Management Practices program he is involved in and the challenges associated with the program.

-Wayne Anderson, Pollution Control Agency, reported that Ann Glumac is leaving the deputy commissioner position.

-Erv Berglund, Department of Natural Resources, reported that the Forestry BMP publication will be available soon.

-Bill Hunt, NRCS, ^{he} new state conservationist, ^{who began three months ago.} ~~on the job for three months~~. Very impressed with BWSR, and is interested in working closely with state agencies. A farm bill meeting will be held at the Sheraton-Midway, June 29, 9:30 a.m. - noon; he invited everyone to attend. Glenn Annexstad and Dwain Otte will attend.

-Jim Schafer, MASWCD, ^{said that he is} proud to have Barb ^{as} chair of the BWSR. Jim thanked BWSR for stable funding and the Envirothon. MACDE meeting in Alexandria this week.

-Jim Anderson, MES, address change. Public meetings will be held on PCA committee of sewage treatment.

-Franklin Denn, MAT, briefly commented on sustainable development initiative regarding land use planning.

-July BWSR Tour and Meeting - Ted Lovdahl stated that the tour will be on Tuesday, July 25 and the BWSR ^{meeting} on Wednesday, July 26.

Ron Harnack reminded board members that expense claims need to be submitted by July 14.

Chair Cobb adjourned the meeting at 2:40 p.m.

Respectfully submitted,

Barbara Cobb
Chair

*NEW ADDRESS
EFFECTIVE JUNE 26, 1995*

Building Address

*Well Management Unit
Minnesota Department of Health-Environmental Health Division
Metro Square Building, Suite 220
121 East Seventh Place
St. Paul, Minnesota 55101*

Mailing Address

*Well Management Unit
Minnesota Department of Health-Environmental Health Division
Metro Square Building, Suite 220
P.O. Box 64975
St. Paul, Minnesota 55164-0975*

Main Receptionist Phone Number

*(612) 215-0700
Fax Machine (612) 215-0978 (Drinking Water Protection Section)*

Minnesota Department of Health - Main Building

*Minnesota Department of Health
717 Southeast Delaware Street, P.O. Box 9441
Minneapolis, Minnesota 55440-9441
(612) 623-5000
Fax Machine (612) 623-5043*

June 26, 1995

COST-SHARE RULE REVISION TIMELINE

- May 1 -** Draft Rules & Guidelines outline to BWSR staff and Cost-Share committee MASWCD Cost-Share committee members and BWSR AG representative.
- May 25 -** BWSR Staff, Cost-Share and MASWCD committee comments due.
- June 7 -** Retool Team Meeting
→ Review BWSR & MASWCD committee comments
→ Assign response letter to commentor
→ Reach consensus on how to respond to the comment
- June 16 -** Distribute draft rules (with BWSR/MASWCD comments incorporated) to SWCDs and interested agencies.
- July 19 -** SWCD comments due to BWSR.
- July 31 -** Retool Team Meeting
→ Review SWCD comments
→ Assign response letters to a team member
→ Reach consensus on how to respond to the comment
- August 11 -** Draft Rules mailed to Board and submitted to Revisor for form approval.
- Sept. 27 -** Board action to Adopt Rules.
- Oct. 2 -** Submit to "*Notice of Intent to Adopt Rules Without a Public Hearing*" and draft rules for publication in the State Register. A five-month process of preparing a statement of need and reasonableness (SONAR), responding to comments and modifications and preparing notifications must take place prior to adoption.
- Feb. 1-** Notice of Adoption published in the State Register

Note: The work team will be working on the Administrative Guidelines for the State Cost-Share Program concurrently with the above tasks. It is the team's intention to have the guidelines complete for training in February and March of 1996.

TEAM MEMBERS

BWSR COST SHARE RETOOLING WORK TEAM:

Bill Best	(218)755-4176
Marybeth Block	(612)297-7965
Keith Grow	(218)828-6035
Tabor Hoek	(507)537-7260
Mary Kells	(507)280-2873
Jim Lemmerman	(218)723-4996
Jeff Nielsen	(507)359-6075
Gail Watczak	(218)723-4752
Wayne Zellmer	(612)297-7361

MASWCD COST SHARE COMMITTEE:

Timothy Beckett
Brad Grant
Steve Holm
Arland Moger
Russell Rudd
Steve Sorenson
Wayne Zellmer

BWSR COST SHARE COMMITTEE:

Glen Annexstad
Barbara Cobb
Dwain Otte
Marv Tripp
Marybeth Block
Jim Birkholz

DEVELOPMENT STRATEGY: ADMINISTRATIVE GUIDELINES FOR THE STATE COST-SHARE PROGRAM

MEMBER	SUBCOMMITTEE		
	GOALS/ALLOCATION	TECH/PRACTICES	IMPLEMENT/REPORT
RETOOL TEAM * CHAIR	Keith *	Marybeth*	Bill*
	Wayne	Keith	Mary
	Jeff	Jim	Marybeth
		Tabor	
AUXILIARY	Doug	Al	Tom F. Barbara L. (pending)
ADVISORY	BWSR Committee MASWCD Committee SWCD Employees Dept. of Agriculture MPCA	NRCS Tech Advisory Comm. MASWCD Committee	

The above matrix identifies three subcommittees that will be responsible for drafting sections of the Administrative Guidelines of the State Cost-Share Program. The information contained in the guidelines will be comprehensive - that is the sections will address all aspects of program administration, including what is contained in rule. The guidelines will also contain important procedures not contained in the rules, such as the formula used to determine SWCD allocations, the list of approved practices and what costs associated with the approved practices are or are not eligible for cost-sharing.

The subcommittees c/s retool team and auxiliary members will solicit input from the agencies/organizations listed as advisory members at the beginning of the drafting process. This input will be incorporated into the sections where appropriate. The sections will go through a review/edit process.

Tentative timeline set for development of the guidelines handbook:

- July: Each subcommittee holds a meeting to develop a strategy to complete their sections and solicit input from the advisory members.
- July 31: Subcommittee chairs report to the c/s retool team. [Concurrently the team will be reviewing and acting on comments received on the draft rule sent to SWCDs and agencies.]
- August: Subcommittees meet again and compose draft 1 (rough) of their sections.
- August 25: Subcommittee chairs route draft 1 to c/s retool team members
- Sept. 11: C/S retool team meet to discuss comment on the contents of draft 1.
- Sept. 30: Draft two is complete.
- Oct. 15: Final draft complete
- Nov/Dec: Format final draft
- January: Printing

Management Board

Tom Roeschlein
RR3 Box 369
Mora, MN 55051
(612) 679-3330

Margaret Sherman
RR1 Box 3620
Palsade, MN 56469
218) 845-2816

Ed Montbriand
RR3 Box 76
Pine City, MN 55063
612) 629-6448

Dave Oberfeld
RR1
sle, MN 56342
612) 676-3346

Coordinator

Nes Cashman
RR3 Box 253
Mora, MN 55051
612) 679-2921

Technical Advisors

Dick Noyes
Pine SWCD

Jynda Peterson
Canabec SWCD

Steve Hughes
Utkin SWCD

Robert Berggren
Little Lacs SWCD

Keith Grow
MN BSWR

Citizens Advisory
Committee

Ray Anderson
Little Lacs

Curt Beckstrom
Little Lacs

Harry Bullen
Utkin

Key Eckstrom
Pine

Robert Hoefert
Little Lacs

Robert Krueger
Utkin

John McLouth
Canabec

Art Schultz
Pine

Bill Strusinski
Pine

Ralph Wahlstrom
Canabec

Vade Weber
Canabec

Robert Whalen
Utkin

Snake River Watershed Management Board

RR3, Box 253 Mora, MN 55051

Telephone (612) 679-2921

BOARD of Water and SOIL RESOURCES

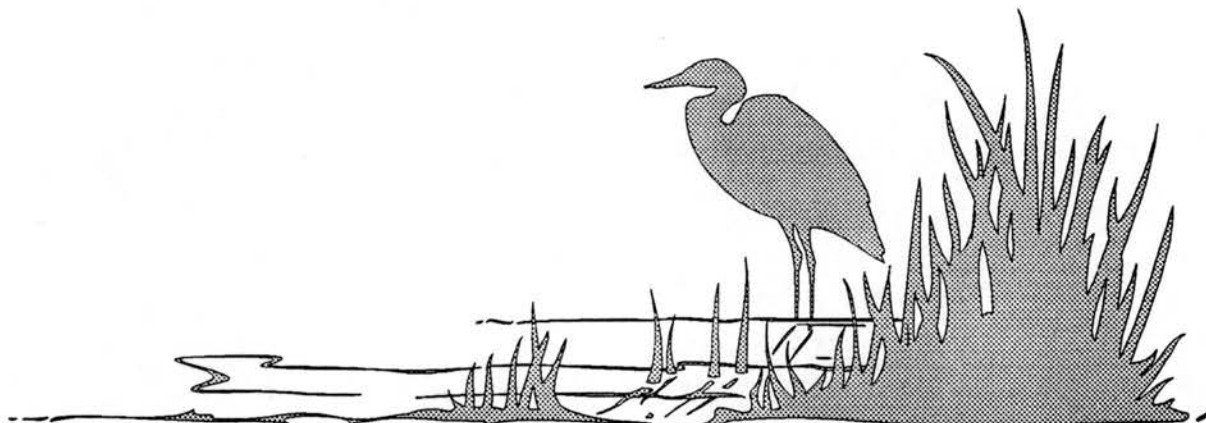
MEETING

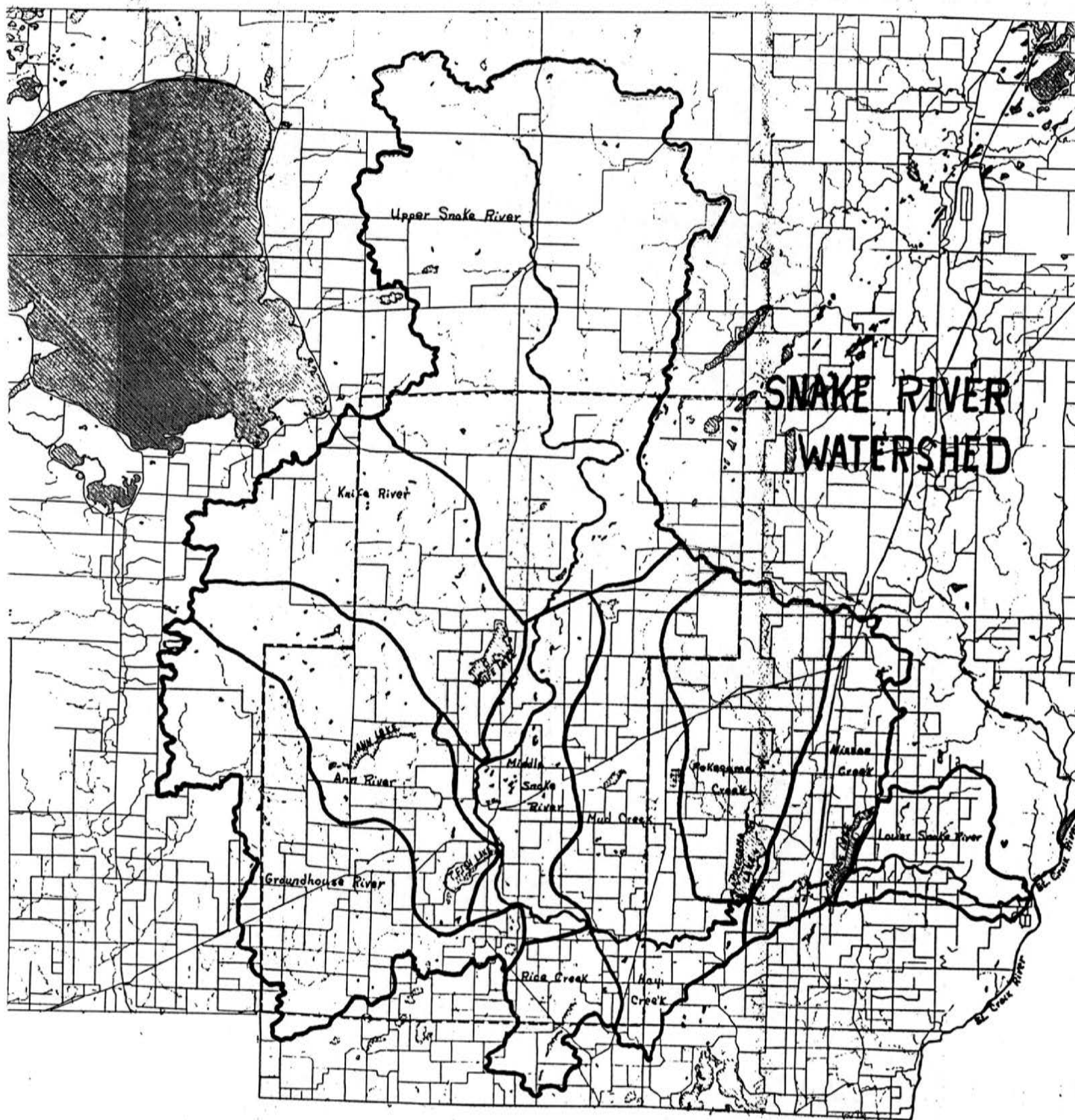
June 28, 1995

INFORMATION PACKET

Provided by:

Snake River Watershed Management Board
RR 3, Box 253
Mora, MN 55051
(612) 679-2921





BY-LAWS

SNAKE RIVER WATERSHED MANAGEMENT BOARD
PINE, KANABEC, MILLE LACS & AITKIN COUNTIES

June 1994

ARTICLE I - PURPOSE

1. The purpose of the Snake River Watershed Management Board is to coordinate the comprehensive county water plans as pertaining to that area within the Snake River watershed and actions relating thereto as existing in the water plans of the four counties; Pine, Kanabec, Mille Lacs and Aitkin, that are signatories to the Joint Powers agreement and to provide for the implementation of the actions as set forth in said plans.
2. To provide for the joint and cooperative management of county water plans and other actions necessary to protect and enhance the water and land resources within the Snake River watershed.
3. To identify existing and potential problems and opportunities for the protection, management and development of water and related land resources within the Snake River watershed.
4. The form of organization is a joint powers board, pursuant to Minnesota Statutes 471.59. Member counties are Pine, Kanabec, Mille Lacs and Aitkin.

ARTICLE II - MEMBERSHIP

1. The membership of the Snake River Watershed Management Board (SRWMB) shall be composed of one (1) county commissioner, designated by each respective board, from each member county.
2. Members of the Snake River Watershed Management Board (SRWMB) shall be appointed for a two (2) year term to run concurrently with each board member's term on his/her respective county board. Members may be reappointed by the county board of commissioners of that county.

ARTICLE III - OFFICERS

1. The officers of the board (SRWMB) shall consist of a chairperson, vice chairperson and a secretary and shall be elected at the Annual Meeting in January.
2. The chairperson shall be elected by the members of the Snake River Watershed Management Board (SRWMB).
3. The vice chairperson shall be elected by the members of the Snake River Watershed Management Board (SRWMB) and shall act as chairperson in his/her absence.
4. The secretary shall be elected by the members of the Snake River Watershed Management Board (SRWMB). The secretary may delegate a representative to record minutes and perform other duties of the secretary. The elected secretary will sign the official minutes of all meetings following approval of the board.

5. The Snake River Watershed Management Board (SRWMB) will request the county commissioners of each county to replace their representative member after missing two (2) consecutive meetings without notice to the coordinator.

ARTICLE IV - COMMITTEES OF THE BOARD

1. The Snake River Watershed Management Board (SRWMB) shall assign members to chair a budget, personnel and legislative committee at the annual meeting.

2. The budget committee chairperson or a delegate shall report on the budget for the next year at the May meeting.

3. The personnel committee shall review staff performance and recommend salary levels or other actions at the December meeting.

4. The legislative committee shall submit recommended proposals for changes in policy and/or action by member counties and/or other policy making bodies to the Snake River Watershed Management Board (SRWMB) for review. Proposals approved by the SRWMB shall be forwarded to the proper authority.

5. The Snake River Watershed Management Board (SRWMB) shall assign members to other committees that are appropriate to fulfilling its goals and objectives.

6. Committee members may be selected from CAC members, technical advisors, agency personnel, organization members or other interested citizens.

ARTICLE V - ADVISORY COMMITTEE TO THE SRWMB

1. Membership of the Citizens Advisory Committee (CAC) as per the joint powers agreement shall consist of twelve (12) members and must meet the following requirements: one (1) Soil and Water Conservation District (SWCD) supervisor from each of the four (4) member counties and two (2) citizens from each county, with at least one (1) of which shall be a lake association member selected from a list of three (3) provided by the lake association (s) within the Snake River watershed if one or more associations exists.

2. Each county's representatives on said Citizens Advisory Committee (CAC) shall be appointed by the board of commissioners of each county.

3. The term of membership of the Citizens Advisory Committee (CAC) shall be three (3) calendar years except that the initial term shall be one (1) for one (1) calendar year, one (1) for two (2) calendar years and one (1) for three (3) calendar years. An individual shall not be a member of this committee for more than three (3) consecutive full or full and partial terms. Each individual county will fill vacancies consistent with Article V-1.

4. The members of the Citizens Advisory Committee (CAC) shall elect a chairperson, a vice chairperson and a recording secretary to serve a term of one (1) calendar year. The members of the CAC may re-elect an individual to two (2) or more consecutive terms. Annual elections will be at the first (1st) meeting of the CAC in January of each year. The secretary may delegate a representative to record minutes and perform other duties normally assigned to the secretary. The elected secretary will sign the official copy of the minutes following approval of the CAC.

5. A member of the Snake River Watershed Management Board (SRWMB) and an alternate will be assigned by the chairperson of the SRWMB at the Annual Meeting of the SRWMB to meet with the Advisory Committee as an ex-officio member.

6. The Citizens Advisory Committee (CAC) will routinely advise the Snake River Watershed Management Board (SRWMB) on issues of policy and administration as related to the SRWMB's purpose and mission statement including, but not limited to land use and management, water quality and stewardship/education thru a regular report at the SRWMB's meetings or by special request of the SRWMB.

7. The Citizens Advisory Committee would operate both as a committee and through sub-committees focusing on the major topics of land use, water quality and stewardship/education. Sub-committees may be formed to increase effectiveness, to address specific topics or project areas including, but not limited to, land management (forest practices, agriculture, private lands), recreational systems planning, water quality monitoring and land conservation.

8. The chairperson of the Citizens Advisory Committee (CAC) will make the decision if input is needed from the full membership or the CAC or a meeting of a sub-committee is appropriate on a specific project, problem or request. Each committee will report to the full CAC membership at a meeting for review of findings, recommendations and for approval.

9. Sub-committees may utilize people who are not members of the Citizens Advisory Committee (CAC). A listing of resource people will be provided by the coordinator from which the CAC may seek out individuals to assist with efforts, provide information, insights, make recommendations and/or advise on committee activities.

ARTICLE VI - COMPENSATION

1. Members of the Snake River Watershed Management Board (SRWMB) shall be compensated for regular meetings by the member county they represent.

2. Members of the Snake River Watershed Management Board (SRWMB) will be compensated for expenses incurred in attending special meetings, such as mileage and meals, by the SRWMB when representing the SRWMB when prior authorization is given by the SRWMB. Receipts are necessary.

3. Members of the Citizens Advisory Committee will be compensated for expenses incurred in attending meetings by the county they

represent, such as mileage and meals according to that county's policy, with whatever each county requires for receipts and other documentation. This compensation will not be paid to members attending as part of their professional duties.

ARTICLE VII - BUDGET

1. The financial year of the Snake River Watershed Management Board (SRWMB) is the calendar year, January 1 thru December 31.
2. All expenses incurred by the Snake River Watershed Management Board (SRWMB) or Citizens Advisory Committee (CAC) must have prior approval of the SRWMB, have a signed claim form submitted itemizing expenses for SRWMB approval at their regular monthly meeting. All claims for reimbursement of expenses must be submitted within thirty (30) days after the month in which they were incurred.
3. The fiscal agent shall be the Kanabec County Auditor.
4. The funds for the Snake River Watershed Management Board (SRWMB) shall be managed by the Kanabec County Auditor's office and are subject to audit by the State of Minnesota.

ARTICLE VIII - MEETINGS

1. The Snake River Watershed Management Board (SRWMB) shall meet on the fourth (4th) Monday of each month at 1:00 p.m. Any change or special meeting will have notification provided to the official newspaper of each county for publication.
2. The Citizens Advisory Committee (CAC) of the Snake River Watershed Management Board (SRWMB) shall meet as deemed necessary by the CAC chairperson or by request of the SRWMB.
3. A quorum for the Snake River Watershed Management Board (SRWMB) and the Citizens Advisory Committee (CAC) meetings shall consist of a simple majority of the members.
4. A motion or resolution shall be approved by a favorable vote of a simple majority of the members present providing enough members are present to make a quorum.
5. The notice of meetings shall be mailed not less than ten (10) days prior to the scheduled meeting date of the Snake River Watershed Management Board (SRWMB) members and/or the Citizens Advisory Committee (CAC) members as appropriate.
6. A notice of the meeting schedule of the Snake River Watershed Management Board (SRWMB) for the year shall be submitted to the official newspaper of each member county following the annual meeting.
7. The established meeting schedule of the Snake River Watershed Management Board (SRWMB) may be changed at the annual meeting with agreement by all the board members.

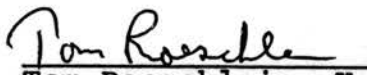
ARTICLE IX - DISSOLUTION

1. Any member of the Joint Powers Agreement may petition the Snake River Watershed Management Board (SRWMB) to dissolve the agreement. Upon ninety (90) days notice in writing to each member Board of Commissioners and to each SRWMB member, the SRWMB shall hold a hearing and upon a favorable vote by a majority of all eligible votes of the then existing SRWMB members, the SRWMB may by resolution recommend that the SRWMB be dissolved, MN Statute 471.59.

2. Upon dissolution, personal property shall be returned to the member county that made the contribution of the said personal property to the Snake River Watershed Management Board (SRWMB). Any property owned by the SRWMB or in event the source of the personal property is not identifiable, it shall be distributed in accordance with the formula used to determine each member county's contribution to administrative expenses.

ARTICLE X - CERTIFICATION

1. These By-laws were adopted by a vote of _____ ayes and _____ nays by the members of the Snake River Watershed Management Board on June 27, 1994.


Tom Roeschlein, Kanabec County


Ed Montbriand, Pine County


Margaret Sherman, Aitkin County


Dave Oberfeld, Mille Lacs County

Form used to gather information
for resource inventory

ID NUMBER: _____

WATERCOURSE: _____

DATE: _____

TOWNSHIP: _____

TECHNICIAN: _____

SECTION: _____

LAND USE: _____

SIDE OF STREAM: _____
(looking up stream)

PROBLEM: Circle One

Stream bank erosion
Gully/cultivated field
Gully/grassland
Gully/pastureland
Gully/woodland
Livestock watering
No. of photos _____

Feed-lot runoff
Unauthorized dump
Cattle crossing
Timber harvesting
Overgrazing
Crossing/field road

Road Ditch
Septic system
Construction site
Municipal waste
Storm sewer
Beaver activity

EXTENT: (LENGTH AND WIDTH OF GULLIES, LENGTH OF STREAMBANK EROSION)

PROBABLE CAUSE: _____

SOLUTION ALTERNATIVES: _____

RESOURCE INVENTORY SUMMARY
1994

SNAKE RIVER

*Two of seven pages
of problem or potential
problem sites recorded
on The Resource
Inventory*

Location	Problem
10 Arthur	Pump on river bank - hose in river
14 Arthur	Pipe outlet next to old railroad bridge
36 Knife Lake	Yard right down to the river
36 Knife Lake	30 yards cleared for bldg site or field
36 Knife Lake	Sandy bank - cattle and water flow causing erosion
30 Whited	Bank erosion
22 Peace	Old farm equipment on river bank
22 Peace	Bank erosion - 30 feet, 10 feet high bank
28 Peace	Bank erosion - 30 yards, 10 feet high bank
28 Peace	Bank erosion - 30 feet, 7-9 feet high bank
23 Ford	Cattle crossing
23 Ford	Cattle crossing, feeding livestock on river bank, watering livestock from river
11 Peace	Bank erosion - 75 yards, very high bank
35 Knife Lake	Water pump on river bank, no problem
32 West Pine City	Corn field with gradual slope to river
7 Grass Lake	Gully, grazing river bank
4 Grass Lake	Gully, grazing river bank
10 Grass Lake	Field on river bank
14 Grass Lake	Field on river bank
10 Royalton	Flowage to river from home - stained water
24 Arthur	Drainage ditch to river
23 Arthur	Abandoned van on river bank
23 Arthur	Lawn to river bank - use of chemicals & fertilizer
15 Arthur	Gully - 15 feet wide, 30-40 feet long
14/15 Ford	Snake River hill erosion
16 Williams	1/4 mile stream bank erosion from 3 & 4 wheeler traffic
20 Pliny	1/4 mile grazing river bank - some bank erosion
32 Pliny	Corn field w/established set-back - gully formed
32 Pliny	Bank erosion - 100 yards, 15 feet high
29 Pliny	Cattle on river bank - some bank erosion

KNIFE RIVER

8 Hillman	Beaver dam across river
27 Knife Lake	Beaver dam across river
4 Knife Lake	Cattle crossing
4 Knife lake	Garbage dumped in gully leading to river
4 Knife Lake	Equipment 30 feet from river bank - bulk tank overturned
2 Knife Lake	Burning barrel on lake bank
30 Peace	Burning barrel on lake bank

Location

Problem

Page 2

12 Knife Lake	Burning barrel on lake bank
30 Peace	Ditch or inlet used as marina - sewer smell with skum and gunk floating
31 Knife Lake	Burning barrel on lake bank
31 Knife Lake	Black pipe leading into lake
10 Knife Lake	Stream bank erosion
10 Knife Lake	Burning barrel on lake bank
10 Knife Lake	Burning barrel on lake bank
10 Knife Lake	Burning barrel on lake bank
35 Knife Lake	Bank erosion
22 Knife Lake	Cattle crossing - field crossing
22 Knife Lake	Cattle fed close to the river
15 Knife Lake	Cattle watering in river - slight erosion - fence on edge of the water
15 Knife Lake	Cultivated field up to lake shore
22 Knife Lake	Boards, iron and cans dumped on river bank
27 Knife Lake	Cultivated field on river bank
35 Hillman	Possible feedlot run-off
35 Hillman	Livestock grazing river bank
35 Hillman	Livestock crossing - some bank erosion
35 Hillman	Bank erosion - cattle crossing - livestock grazing banks
10 Knife Lake	Dozer work on river bank - 1/4 mile
28 Hillman	1/4 mile pasture - grazing river banks
9 Hillman	Cattle grazing river bank - field crossing
4 Knife Lake	Feedlot run-off

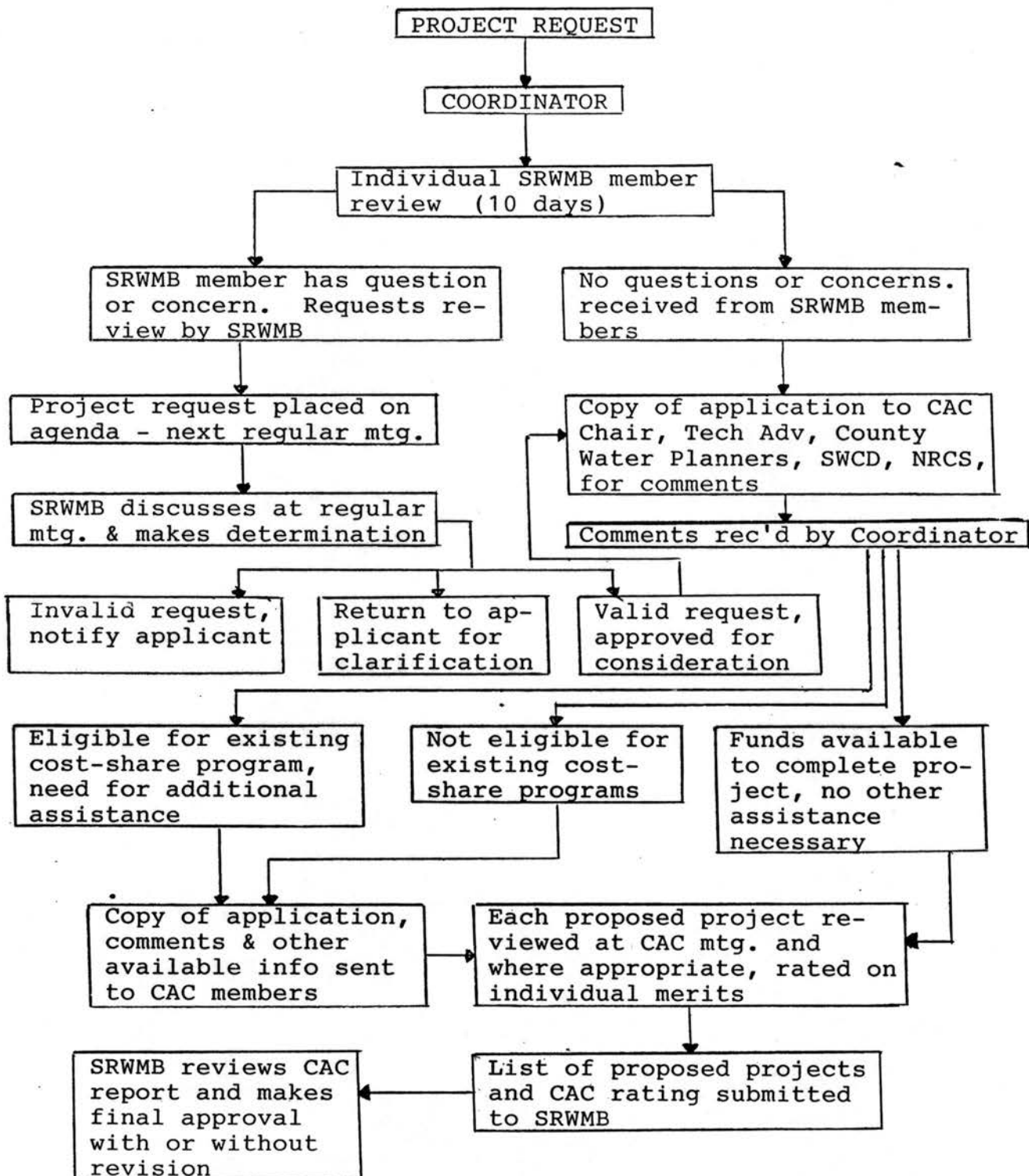
HAY CREEK

18 Royalton	Beaver activity
19 Royalton	Beaver dams - 2 large and a few small
36 Grasslake	Unauthorized dump - plastics and lumber
19 Royalton	Livestock on both sides of creek
19 Royalton	Cultivated field with drainage into wetland and then into creek
30 Royalton	Beaver dams
1/2 Stanchfield	Livestock grazing and watering both sides
30 Royalton	Cultivated field next to stream

GROUNDHOUSE RIVER

27/28 South Fork	Trees across stream
7/8 South Fork	Stream bank erosion - cattle grazing both sides
17 South Fork	Stream bank erosion - cattle crossing
19 South Fork	Corn field with slope towards stream - feed lot above
20 South Fork	Cultivated field up to stream
22/23 South Fork	Stream bank erosion, cattle crossing, feed lot run-off

PROJECT REQUEST FLOW CHART



Approved by SRWMB January 23, 1995

PROJECT APPLICATION
Snake River Watershed Management Board
RR 3, Box 253
Mora, Minnesota 55051
(612) 679-2921

APPLICANT INFORMATION -

Name:
Address:
City, State, Zip:
Phone:

PROPOSED PROJECT DESCRIPTION -

PROBLEM IDENTIFICATION -

PROPOSED SOLUTION -

BENEFITS TO WATERSHED -

COST INFORMATION -

Amount Requested:
Local Match:

COUNTY SWCD RECOMMENDATION -

SRWMB

Citizens Advisory Committee Recommendation :
SRWMB Recommendation:

Applicants Signature

Date

PROJECT REQUEST POLICY AND PROCEDURE

1. All project requests received by SRWMB and CAC members will be mailed or delivered to the coordinator as soon as possible upon receipt.
2. Copies of all project requests received by the coordinator will be mailed to the members of the SRWMB.
3. SRWMB members will have ten (10) working days to review request and notify coordinator of a determination that the request should be discussed by the full SRWMB prior to further action.
4. (a) Request questioned by a SRWMB member.
The request will be placed on the agenda for the next regular SRWMB meeting. The Management Board will decide if procedure below should continue, more information is needed, request does not meet SRWMB criteria, goals and/or objectives and etc.
- (b) No questions by SRWMB members (no replies).
After ten (10) working days, copies of the request for a project will be mailed to the chair of the CAC and to the SRWMB technical advisor/county water planner and the SCS District Conservationist in the county where the proposed project is located.
5. Accompanying the copy of the request, the SRWMB Technical Advisors/County Water Planners and the District Conservationist will be asked to make comments on the proposed project indicating what is known about the problem, what has been done to date, is the proposed project a potential State or ACP cost-share project, alternative solutions to the problem, what action the SRWMB can contribute to expedite implementation and any other pertinent information.
6. (a) Proposed project not eligible for ACP and/or State Cost-Share, nor eligible for other programs administered through the SWCD. (Continue to number 7)
- (b) Proposed project eligible for ACP, State Cost-Share, or other cost-share program but the SWCD or SCS representative indicates the SRWMB may be able to assist to expedite implementation. (Continue to number 7)
- (c) Proposed project eligible for cost-share funds and/or other funds and in the planning process or scheduled for implementation. No assistance from the SRWMB necessary. (No further action required. The comments will be attached to the request and filed for future reference.)

7. Proposed projects, described in 6 (a) or 6 (b), will be placed on the agenda of the next scheduled meeting of the CAC. Copies of the request, comments and other available pertinent information will be mailed to CAC members and the technical advisors with the CAC meeting notice. Proposed project request completing number 6 (a or b) after the agenda and CAC meeting notice has been mailed will be mailed to CAC members and technical advisors as a separate mailing up to six (6) days prior of the meeting date. Proposed project request completing number 6 (a or b) within six (6) days of a scheduled meeting will be delayed until following meeting.
8. CAC members will discuss the proposed project noting the following factors: impact on water quality, cost, funding or other cost-share programs available, permits needed, engineering requirements, work done or data gathered, interest indicated by the land owner, maintenance requirements after completion and other factors deemed important. Each proposed project will be given a rating of one (highest priority) to ten (lowest priority) based on its own merits (two or more proposed projects may have the same rating). After all proposed projects are rated, a list in order for implementation will be compiled. The minutes will be a record of the reasons for placing one project higher on the priority list than another.
9. The list of proposed project ratings as determined by the CAC will be presented at the next SRWMB meeting with a recommendation from the CAC as to which projects should be initiated for action towards implementation. The SRWMB may accept the recommendation of the CAC or revise the priority list. The reason for changing the priority list will be recorded in the minutes for future reference.
10. After the SRWMB have agreed on a priority list, the steps to implementation will be discussed for each project; permits, engineering, funding, Lake Association or Improvement District involvement, letting bids, supervision of construction, maintenance plans, as-built surveys, and other pertinent factors to initiate action and get the project applied.

SNAKE RIVER WATERSHED MANAGEMENT BOARD

Project and Priority Rating Criteria

HIGH PRIORITY (rated 1, 2, or 3)

- 1.) High impact on water quality
- 2.) High priority area - riparian
- 3.) New/innovative projects
- 4.) Implementation requested by land owner/operator
- 5.) Short time frame requirement for implementation - permits and engineering requirement completed

MEDIUM PRIORITY (rated 4, 5, 6, or 7)

- 1.) Medium impact on water quality
- 2.) Medium priority area - separated from water course by wetlands, buffer, sedimentation basin
- 3.) Educational/Demonstration Projects
- 4.) Long time-frame requirement for implementation - permit and engineering requirement not started

LOW PRIORITY (rated 8, 9, or 10)

- 1.) Low impact on water quality
- 2.) Funding potential thru other programs
- 3.) Low priority area - not adjacent to water course or wetland
- 4.) Unfavorable cost/benefit ratio - excessive cost

WATERSHED MANAGEMENT PLAN OUTLINE

- I. INTRODUCTION (historical perspective, Joint Powers Board formation, Snake River Watershed Management Board Citizens Advisory Committee, Technical Advisors, County Water Plans.
- II. INVENTORY
 - A. Watershed Setting
 - 1. Geography (location, size, etc)
 - 2. Topography (high/low elevations, slopes, surface features)
 - 3. Soils (general soils map, permeability, erodibility)
 - 4. Geology (primary aquifers, confining layers, known flow directions)
 - 5. Land Use and Cover (general land use map, vegetative cover map)
 - B. Water Resources
 - 1. Subwatersheds (subwatershed map)
 - 2. Surface water (lakes, streams, ditches, wetlands)
 - 3. Ground Water (sand plain study)
- III. EXISTING AND POTENTIAL PROBLEMS
 - A. Water Quality (flooding, lake levels)
 - B. Water Quality (lakes, streams)
 - C. Erosion and Sedimentation (critical erosion map)
 - D. Fish and Wildlife Resources (general information on inventory, species, hunting and fishing trends)
 - E. Recreational Opportunities (public demands, lake water quality)
- IV. Possible Solutions
 - A. Improvement Projects
 - B. Public Information and Education
 - C. Resource Management Programs (technical or financial assistance to landowners)
- V. GOALS AND OBJECTIVES
 - A. Water Quality
 - B. Erosion and Sedimentation
 - C. Fish and Wildlife Resources
 - D. Recreational Opportunities
 - E. Water Supply
- VI. POLICIES AND PROPOSED ACTIONS
 - A. Project Investigation and Initiation
 - B. Public Information and Education
 - C. Regulation of Activities Affecting Water Resources
 - D. Resource Management Programs
 - E. Intergovernmental Coordination and Cooperation

WATERSHED MANAGEMENT PLAN OUTLINE - Page 2

APPENDICES

- A. Resource Data
- B. Hydrologic Data
- C. Shoreland Ordinances
- D. County Water Plans
- E. Pollution Abatement Systems Location Map
- F. Inventory of Livestock operations adjacent to streams
- G. Developments - Approved plats
- H. Resource Inventory Summary
- I. Project Application Form
- J. Protected Waters Map
- K.
- L.
- M.
- N.
- O.
- P.
- Q.
- R.
- S.
- T.
- U.
- V.
- W.
- X.
- Y.
- Z.

THE STATE COST SHARE PROGRAM

PURPOSE : TO PROVIDE FUNDS TO THE SOIL AND WATER CONSERVATION DISTRICTS(SWCD) TO SHARE IN THE COST OF INSTALLING SYSTEMS OR INDIVIDUAL PRACTICES FOR CONTROL OF EROSION OR SEDIMENTATION CAUSING A DEGRADATION OF THE WATER QUALITY.

HISTORY:

* STATE INVOLVEMENT AS RESULT OF 1976 DROUGHT AND LACK OF FEDERAL FUNDING AVAILABLE TO MEET LOCAL NEED

* IN 1977 LEGISLATION CREATED THE STATE COST SHARE PROGRAM WITH A DISSENTING VOTE

* IN 1978 FIRST PROGRAM WITH FUNDING WAS A PLAIN SET OF TRADITIONAL PRACTICES AND CONCEPTS \$1,501,000 AT PRESENT \$ 1,461,000

* IN 1982 LEGISLATIVE CHANGES INCLUDED AN ALLOCATION FORMULA BASED ON:

- 1) EXCESSIVE EROSION FROM CROPLAND
- 2) IMPLIED WATER QUALITY IMPACTS WITHIN SHORELAND AREAS
- 3) FEEDLOTS WITHIN SHORELAND AREAS
- 4) LAND TREATMENT COST FACTORS

CONTENT HIGHLIGHTS

* ELIGIBILITY REQUIREMENTS
SWCD'S MUST SUBMIT:

ANNUAL PLAN OF WORK AND REPORT
COMPREHENSIVE PLAN EVERY EVEN NUMBERED YEAR

* COST SHARE PAYMENT RATES MAY NOT EXCEED 75% FOR HIGH PRIORITY PROJECTS AND 50% FOR LOW PRIORITY PROJECTS

PRACTICES FOR EROSION OR SEDIMENTATION CONTROL OR WATER QUALITY IMPROVEMENT THAT ARE DESIGNED TO PROTECT AND IMPROVE SOIL AND WATER RESOURCES ARE AS FOLLOWS:

- | | |
|--|-------------------------------|
| * EROSION CONTROL STRUCTURES | * STRIPCROPPING |
| * TERRACES | * DIVERSIONS |
| * STORMWATER CONTROL SYSTEMS | * FIELD WINDBREAKS |
| * ANIMAL WASTE CONTROL SYSTEMS | * CRITICAL AREA STABILIZATION |
| * STREAMBANK, LAKESHORE AND ROADSIDE STABILIZATION | |

Program Assessment: Cost-Share Program

PROGRAM DESCRIPTION:

Financial assistance is provided directly to landowners implementing specified soil and water conservation practices. Each of the 91 soil and water conservation districts (SWCDs) in the state receives an annual allocation, based on designated high priority resource problems (e.g., erosion rates exceeding "2xT", sedimentation within shoreland areas, and feedlots). While the enabling statute (M.S. 103C.501) is fairly broad in scope, the administrative rules (M.R. 8400.0100 - 8400.2800) focusses the program on agricultural lands.

PROGRAM HISTORY:

The purposes for which the cost-share program was established remain valid today, 17 years after passage of the enabling statutes. Indeed, the public's awareness and concern about water quality degradation -- particularly from nonpoint sources -- may be even greater today.

Since 1975, five major transitional events have occurred relating to the cost-share program.

- 1) 1975: Minnesota Resources Commission (MRC) funded a demonstration program for erosion and sediment control on streambanks, lakeshores, and roadsides;
 - 2) 1977: cost-share program established;
 - 3) 1982: legislative amendments to cost-share program required targeting;
 - 4) 1985: SWCB revised cost-share program administrative rules and guidelines to incorporate legislatively-mandated targeting concepts and it established an allocation formula; and
 - 5) 1994: Soil Conservation Advisory Committee prepared a report regarding the control of agricultural erosion and sedimentation, including recommendations regarding the cost-share program.
- 1975: • Special appropriation (\$300,000 for biennium) via MRC (later named Legislative Commission on Minnesota Resources -- LCMR) for demonstration program for streambank, lakeshore and roadside (SLR) erosion control.
- 1977: (1) Cost-share program established (\$3 million for biennium); 10% allowed for SWCD technical assistance costs and 10% allowed for administrative expenses of SWCDs and the Soil and Water Conservation Board (SWCB). One new staff provided to administer the program (position has evolved into present-day Grants Coordinator).
- (2) Special appropriations (\$250,000 for biennium) from LCMR to continue SLR demonstration program; no new staff provided.
- 1979: • Legislature increased cost-share program appropriation to \$1,585,200/year; no new staff provided.
- 1980: • Legislature established general fund appropriation (\$250,000/year) to continue SLR permanently.
- 1982: (1) Legislative amendments required targeting of at least 70% of funds to high priority erosion, high priority sedimentation, or high priority water quality problems based on SWCD comprehensive and annual plans and statewide priorities of SWCB; no new staff provided.
- (2) Legislature reduced SLR appropriation to \$246,300/year.
- 1984: • Legislature reduced cost-share program appropriation to \$1,541,400/year and reduced the SLR appropriation to \$158,700/year.
- 1985: • Legislative amendments allow up to 20% of annual cost-share program allocation to each SWCD for local costs to administer (including technical services) cost-share program; no new staff provided.

- 1987: • Board created through merger of SWCB, Water Resources Board, and Southern Minnesota River Basin Board. Five new staff provided at the time of merger to carry out the existing program responsibilities of the newly formed Board, yet none were directed to the cost-share program.
- 1988: • Legislature reduced cost-share program appropriation to \$1,501,000/year.
- 1990: • Legislature increased SLR appropriation to \$159,000/year.
- 1991: (1) Legislature reduced cost-share program appropriation to \$1,461,000/year.
- (2) Board administrative reorganization reclassified the three field hydrologists (whom had specialized in Local Water Planning services to LGUs) to Board Conservationists (with more generalized administrative responsibilities). This action resulted in each Board Conservationist assuming, for example, cost-share program administrative assistance responsibilities within their work area, resulting in a net-gain for such assistance to SWCDs.
- 1993: (1) Legislature combined cost-share program and SLR appropriations.
- (2) Legislature increased cost-share program appropriation by \$1.1 million for the biennium; targeted to the Minnesota River watershed. Annual appropriation level will now be \$2,120,000/year.
- 1994: • Soil Conservation Advisory Committee prepares (a) model ordinance for control of agricultural erosion and sedimentation, and (b) report to the Board including recommendations to accelerate and enhance a more comprehensive approach to control agricultural erosion and sedimentation. The report includes a recommendation to seek increase in program appropriations to (1) recover inflationary losses to the program since 1977, and (2) accelerate program accomplishments.

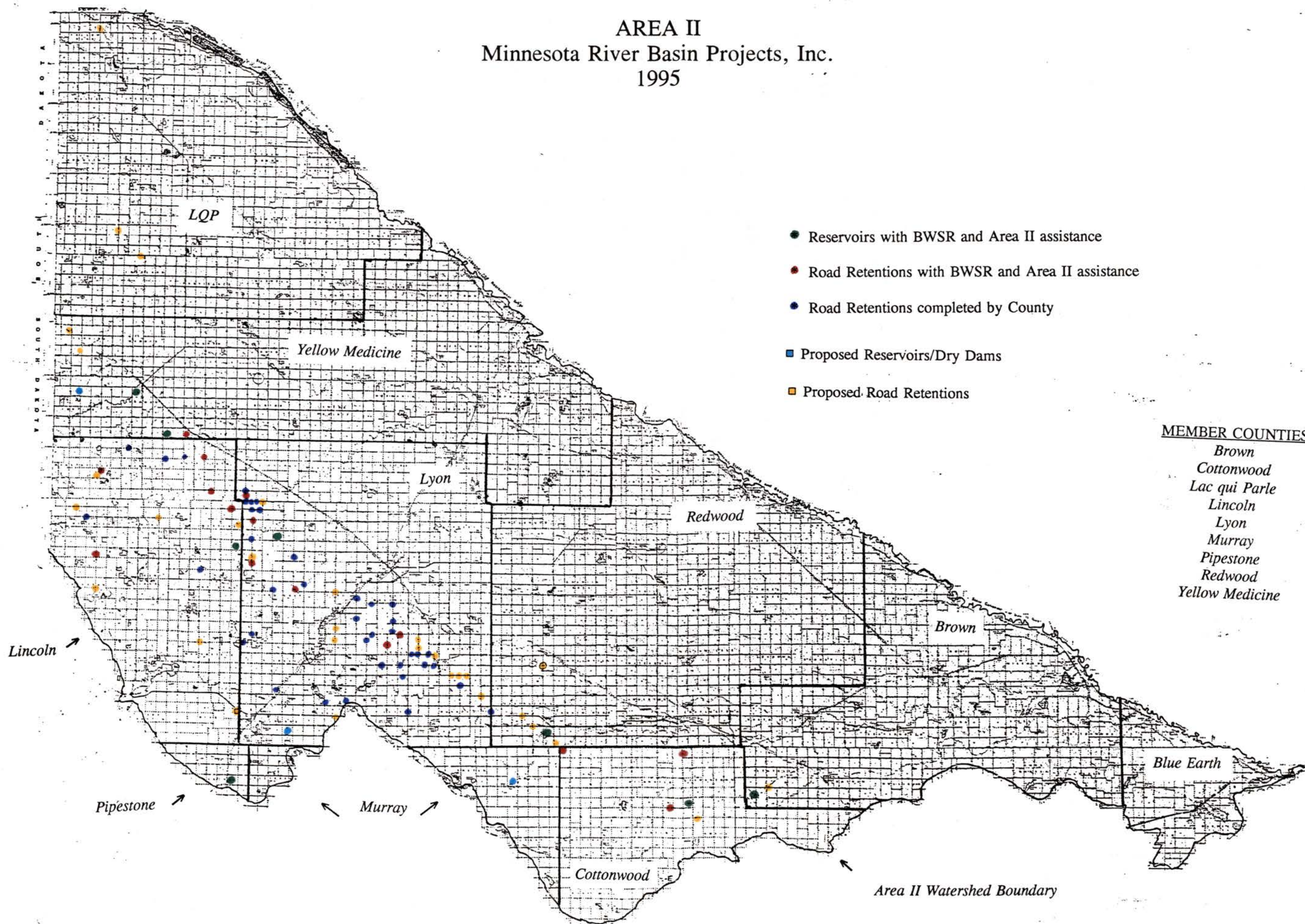
PROGRAM STRENGTHS:

- All SWCDs are provided an incentive-based tool to financially assist landowners address local resource management priorities which directly benefit the protection of soil and water resources.
- Program allocations are targeted to areas with greatest resource protection needs.
- Recent acceleration of program appropriation to a targeted area (i.e., Minnesota River watershed).
- Increased the awareness of the public about SWCDs and served to initially enhance SWCD staff administrative capabilities.
- Enables SWCDs to leverage other state, federal and local funds to address local priority problems.
- Provides considerable degree of latitude for local use of funds for unique soil and water conservation problems.
- Allows for local flexibility, which enables SWCDs to leverage accelerated implementation by landowners of best management practices and to leverage greater compliance with certain official controls (e.g., feedlot and erosion ordinances).
- (Anticipated, due to establishment of low/no-interest loan program – State Revolving Fund) Enables SWCDs to further target limited cost-share funds to financially needy landowners with local high priority soil and water conservation problems.
- Relatively simple program with an easily accountable flow of program funds from the state to SWCDs to individual landowners.
- One of the first state programs to be administered by SWCDs, thereby enhancing SWCD staff capabilities (administrative and technical).

PROGRAM WEAKNESSES:

- Lack of program plan. The Board never prepared this document as mandated in statute. The absence of this document undermines the purpose and utility of the SWCD comprehensive and annual plans that were also required by the same statute. Consequently, the Board does not have a specific document in which the relationship of state and local priorities (as reflected in SWCD comprehensive plans) are adequately assimilated into Board policy regarding program allocations to SWCDs and clearly stated

AREA II
Minnesota River Basin Projects, Inc.
1995



- Reservoirs with BWSR and Area II assistance
- Road Retentions with BWSR and Area II assistance
- Road Retentions completed by County
- Proposed Reservoirs/Dry Dams
- Proposed Road Retentions

- MEMBER COUNTIES
- Brown
 - Cottonwood
 - Lac qui Parle
 - Lincoln
 - Lyon
 - Murray
 - Pipestone
 - Redwood
 - Yellow Medicine

THE ATTACHED MATERIAL IS FOR YOUR INFORMATION

- Questionnaire for July BWSR Tour and Meeting in Duluth --
Please return this form to Mary Jo today
- Board Member Update
- Board Members Listing
- BWSR Organizational Chart
- Status Report on Appeals, May 1995
- June 8, 1995 Hearing, Levine vs Minnehaha Creek Watershed District
- Yellow Medicine Watershed District Plan Update
- "The Cargill Bulletin"
- Met Council Grant
- "Duluth Points North"

JULY BWSR MEETING AND TOUR IN DULUTH

NAME _____

	Yes	No
I will need a sleeping room on Monday, July 24	_____	_____
I will need a sleeping room on Tuesday, July 25	_____	_____
I plan to attend the BWSR tour on July 25	_____	_____
I plan to attend the BWSR meeting on July 26	_____	_____

Rooms have been reserved at:
Comfort Suites of Canal Park
408 Canal Park Drive
Duluth, 55802
218-727-1378



Board Member Update

June 1995

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

Southern Region

- * BWSR board conservationists (BCs) continue to spend a lot of time on comprehensive local water planning update activities. Most counties in southern Minnesota are finishing up their task force meetings and busily working on updating the plans. The 13-county south central comprehensive planning group met with BWSR Water Planning Coordinator Doug Thomas to discuss some differences of opinions regarding the update requirements. Doug Thomas also met with the southern region BCs as a follow-up to the 13-county meeting. Follow-up assistance will no doubt still be required of BCs.
- * BC Chris Hughes met with local water planners in early- and mid-May regarding their concerns that the BWSR is being too restrictive in the areas of measurability and implementation of plans. The meetings helped define BWSR's expectations; however, some water planners are still concerned.
- * Wetland Conservation Act (WCA) activities have picked up again, as have drain and fill activities in Blue Earth County. Chris is following up on these--particularly one that involves land that apparently is not in the farm program but is owned by a person who has land that is in the program. More work is needed on this case. In

addition, BC Tom Fischer assisted several technical evaluation panels/advisory committees with noncontroversial WCA issues. The Stockdale (Mower County) WCA violation continues to require a substantial time commitment for Rochester BC Dave Peterson.

- * Chris also assisted with the hiring of the zone 10 State Revolving Fund (SRF) Conservation Engineer Gene Retka, who started in his new position on May 31. Gene has 19 years of experience with DNR engineering.
- * BC Thomas Fischer participated in another one of the many Ford Jensen Realtor Training sessions being held in Minnesota. This one was in Willmar and had good attendance. Realtors attend the sessions to learn about wetland and water issues. BWSR's participation was centered around giving the attendees a quick review of the WCA and the players involved.

Northern Region

More of the same to report for the month of May. BCs spent time on technical evaluation panels (TEPs) with local governments. The water planning process is stepping up as BCs work with counties to get their updates ready for review. A few highlights:

- * In early May, Benton County submitted its water plan for preliminary review. This is one of the first water plans up for review in the state. Local review will conclude by July 1. The county will then adjust the plan to address review comments, hold a public hearing, and submit the plan for final state agency review and BWSR approval. If all goes well, the plan should be on the board agenda by October, with many others to follow.
- * Brainerd BC Bill Best has been working with Hubbard County to prepare their contract to receive their Legislative Commission on Minnesota Resources (LCMR) grant money from the state. The grant is to conduct an inventory of failing septic systems in the Mantrap watershed and to follow up with education and enforcement efforts. This project is a continuation of several years' efforts through the county water plan.
- * Bemidji BC Brian Dwight spent a couple days training with our famed north shore engineer, Gene Clark. The training is intended to provide BCs with some baseline knowledge in shoreline erosion techniques so they can better assist local governments on these projects. Gene did a nice job of preparing some lecture materials that he went through with Brian; then they hit the field to survey some sites. We plan to run several more northern BCs through this training.
- * Brian also spent several days developing coping strategies now that WCA changes did not pass. Several of the loudest advocates for change are from Brian's work area. He spent long hours with them before the session in the hopes that some changes would come. Brian will undoubtedly hear more from these counties in months to come.
- * Mark reports that he attended the longest TEP in the history of the planet: eight hours at Tettegouche State park. DNR is required to create an ATV trail as part of the original deal with the locals to create the park. The TEP members walked the 7.5 mile trail and paced off the wetland impacts. Mark reports that this is probably the tip of the iceberg with this type of TEP.
- * Northern Supervisor Ron Shelito has three WCA appeals in the works: Wright County, which is already scheduled for a Dispute Resolution Committee hearing; Grant County, which may go away because it looks like the Army Corp of Engineers is going to give a permit with which nobody else agrees; and the Braham prison site, which is very political--who knows where this will go?

**MINNESOTA BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET
SUITE 200
ST. PAUL, MINNESOTA 55107**

612-296-3767

BOARD MEMBERS

<u>Name and Address of Member</u>	<u>Appt. Designation</u>	<u>Term Expires</u>	<u>Telephone</u>
Barbara Cobb, Chair, 2170 Itasca Ave. So., St. Mary's Point, 55043	Watershed	06-30-96	612-436-8953
Dwain Otte, 606 Zanmiller Drive West, Northfield, 55057	SWCD	01-01-96	507-645-4370
Ted Lovdahl, Jr., Route 1, Box 142, Effie, 56639	SWCD	01-06-97	218-743-3686
Tim Hvidsten, Route 1, Box 117, Stephen, 56757	SWCD	01-05-98	218-478-3503
Ginny L. Imholte, 1145 Jackson Avenue, Detroit Lakes, 56501	Watershed	01-04-99	218-847-4433
Barbara Uppgaard, HC 83, Box 436, Pequot Lakes, 56472	Citizen	01-01-99	218-543-4355
Marvell J. Tripp, 1422 So. Shore Dr., Worthington, 56187	Watershed	01-05-98	507-376-6975
Darrell Bruggman, HCR 4, Box 38, McGregor, 55760	Co. Commr.	01-04-99	218-426-3330
James Rossman, 7000 - 70th Street, Oronoco, 55960	Co. Commr.	01-05-98	507-282-2890
LeRoy Stensgaard, Box 118, Ruthton, 56170	Co. Commr.	01-06-97	507-658-3681
Glenn Annexstad, RFD 3, Box 35, St. Peter, 56082	Citizen	01-01-96	507-246-5207
Kathleen Roer, 2232 Tamarack Drive, Long Lake, 55356	Citizen	01-06-97	612-475-0789

In addition to the above members, five ex officio nonvoting members are provided by the Departments of Agriculture, Health, Natural Resources, the University of Minnesota, and the Pollution Control Agency.

Wayne Edgerton
Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155
(612) 297-8341

Jim Anderson
U of M, Extension Service
209 Ag. Engineering Building
1390 Eckles Avenue
St. Paul, MN 55108
(612) 625-8209

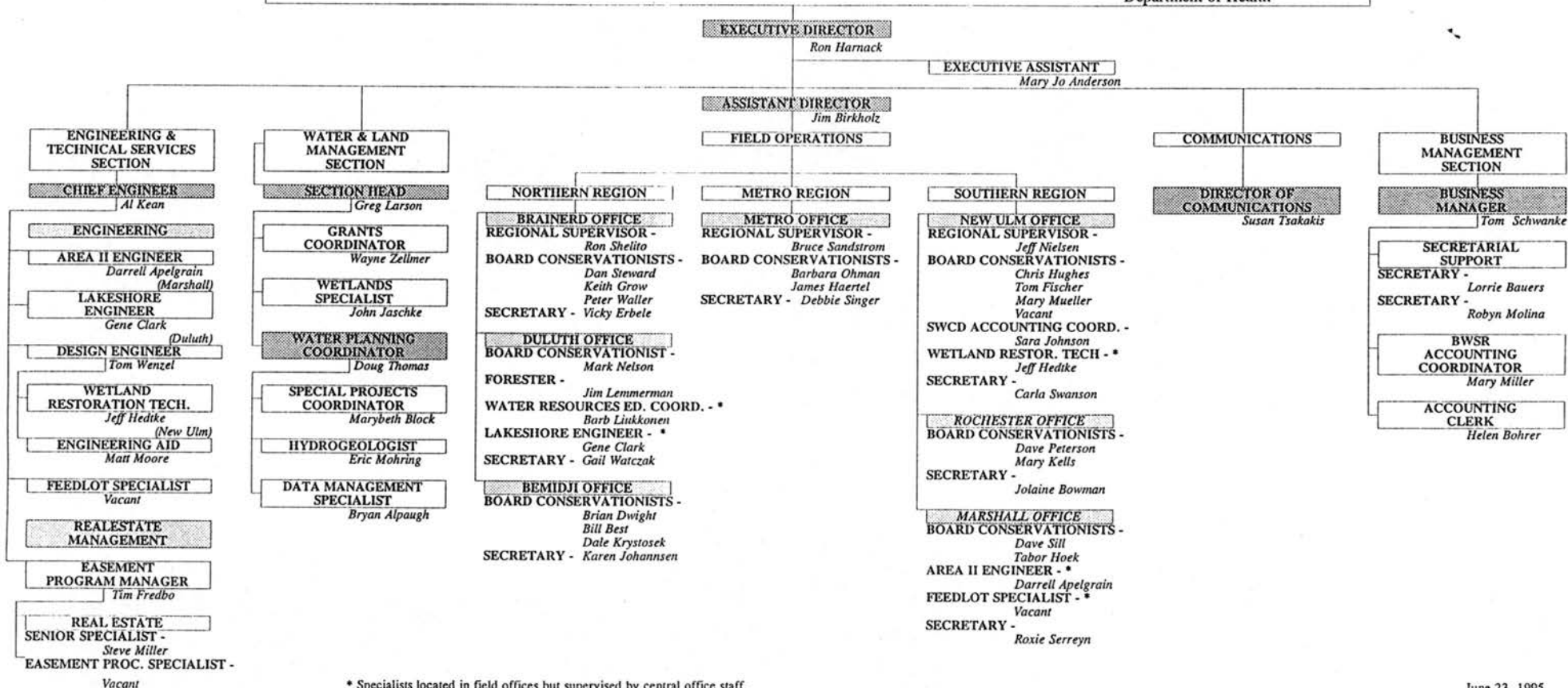
Kim Benson-Johnson
Department of Health
Metro Square Bldg.
P.O. Box 64975
St. Paul, MN 55164-0975
(612) 215-0816

Wayne Anderson
Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155
(612) 296-7323

Paul Burns
Department of Agriculture
90 West Plato Blvd.
St. Paul, MN 55107
(612) 296-1488

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

County Commissioners	SWCD Supervisors	Watershed Representative	Citizens	Agencies
Leroy Stensgaard Darrell Bruggman Jim Rossman	Tim Hvidsten Dwain Otte Ted Lovdahl, Jr	Barbara A. Cobb, Chair Marvell Tripp Ginny Imholt	Barbara Uppgaard Glen Annestad Kathleen Rohr	Department of Natural Resources Pollution Control Agency Department of Agriculture University of Minnesota Department of Health



* Specialists located in field offices but supervised by central office staff.

June 23, 1995

June
July 16, 1995

To: Kathy Roer, DRC Chair

From: Bruce Sandstrom, Supr.
BWSR Metro Region



Re: Status Report on Appeals, May, 1995

Below is a short status report on the appeals that are still active.

Audubon v. Nine Mile Creek WD

(This is an appeal filed under the Metro Water Planning Rules, C. 8410). On April 5, 1995 BWSR met with representatives of Nine Mile Creek WD, Riley Purgatory Bluff Creek WD and the Cities of Bloomington, Eden Prairie, Edina, Hopkins and Minnetonka to discuss some issues that NMCWD felt were important. Barb Cobb chaired the meeting and did an excellent job keeping the focus of the issues & non-issues. This resulted in a follow-up letter from Barbara Cobb to the cities reiterating our position on certain key matters. In the near future, staff will be sending out our revised version of our comments on the NMCWD plan as was agreed to at the April 5 meeting. On April 12 staff met with representatives of Audubon (Mr. Reynolds & Mr. Wallace) to discuss their concerns and explain what happened at the April 5 meeting. Audubon's position is that they are willing to keep their appeal in pending status until NMCWD has a chance to respond to our revised comments. Audubon is also going to continue to pursue BWSR developing a policy on how to implement sanctions for failure to adopt or implement plans. BWSR staff have not made any progress on that issue to date. We published notice of receipt of the plan on April 27, 1995 and on May 3, 1995 we received a request for hearing from Audubon. Attached is a copy of the hearing request.

Staff Comment: The Board should designate a hearing panel to hear this matter at the May Board meeting in case a hearing has to be held. This will allow staff to notice the hearing without unnecessary delays.

Landview Landscaping Inc. (Spartz) v. Minnehaha Creek WD

(This is a 103D appeal.) Minnehaha Creek WD filed the transcript and record of the hearing on April 6. A revised hearing schedule has been set:

5/31/95	- Deadline for Landview's brief
6/21/95	- Deadline for MCWD brief
6/30/95	- Deadline for Landview's reply brief
7/13/95	- BWSR DRC hearing at 1:00 p.m.

Landview has retained Attorney John Boyle to represent them. On May 15, 1995 Mr. Boyle advised me that the transcript contains some omissions and are asking to supplement the record by filing an affidavit by Mr. Spartz. Matt Seltzer recommended that if both counsels can come to an agreement as to how to best summarize the missing statements, that BWSR would not have to remand the matter back to the MCWD for further development of the record.

Levine et. al. v. Minnehaha Creek WD

(This is a 103D appeal of a WD permit and possibly a WCA appeal.) This matter has been scheduled and rescheduled for a hearing before the DRC on April 15, May 11 and June 8. The appellant was supposed to file its brief on May 5, but has not done so as of the date of this report. The WD's attorney advised us that they will move to have the appeal dismissed if the appellant's brief wasn't filed by May 15. It is likely that the June 8 hearing will have to be rescheduled to July unless the BWSR is faced with a motion to dismiss. Maybe this is something that the BWSR might have to address at its June meeting. If the 103D amendments are enacted, the BWSR may have to re-assess whether it still has jurisdiction in the matter.

Trout Unlimited V. City of Shakopee

(This is a WCA appeal) On May 9, 1995 Trout Unlimited requested BWSR to stay any hearing on the matter to give the City of Shakopee opportunity to re-notice the matter in the local paper and to allow the City to consider TU's comments in the City's final decision on the matter. Apparently the City either reversed or stayed their original approval of the project. The developer is a Mr. Ryan and is not directly related to the Klaus Van Zee project that was determined by the DRC to be not ripe for judicial review Dec., 1994).

Fridley v. Rice Creek WD

(This is an appeal under MN Rule 8410.) Update. Fridley recently asked the Minnesota Supreme Court to review the portion of the Appellate Court decision relating to primacy of jurisdiction on appeals relating to failure to implement plans. The City asked the BWSR to participate. We did not respond and on April 27, 1995 the Supreme Court rejected Fridley's request. In a letter dated May 4, 1995 (copy enclosed) the Mayor of Fridley asked BWSR to confirm "that the BWSR will participate in the City's continuing appeal to the State Supreme Court or, if appropriate, in the further actions with the Ramsey District Court." I have sent a copy of the May 4 letter to Matt Seltzer for guidance. If MS 103D.535 is amended this legislative session as anticipated, future project appeals like Locke Lake would be reviewed by BWSR, not a district court. I will be drafting a suggested letter of response to Mayor Nee from Ron Harnack and will see that you receive a copy.

Charles Finn v. Rice Creek WD

(This is an appeal filed under MS 103D of a permit issued by the WD.) On Jan. 10, 1995 we took the position that we would postpone this appeal until the Court of Appeals ruled on the Fridley appeal. On February 28, 1995 the Court of Appeals reversed the District Court in part. The part that was reversed would essentially validate the RCWD's amendments to their watershed plan that Finn alleges should have been followed in the granting of the permit under appeal. Recently, the permittee went bankrupt and the holder of the mortgage (allegedly First Bank Inc.) is try to have the permit subject permit transferred to them. This requires a rule amendment. I will contact the appellant by letter to see if he is willing to withdraw his appeal at this time.

Demands for Hearings on Water Management Plans

Valley Branch Watershed District Plan

(This is a demand for hearing pursuant to our notice of receipt of the VBWD plan.) The City of Lake Elmo and ten residents demanded the hearing. The VBWD recently amended the draft plan in a manner that I felt would alleviate the concerns of the appellants. After asking the appellants to re-consider their request for hearing and attending a special meeting and a city council meeting, I received letters from all the appellants withdrawing their demand for hearing. We can now proceed to final review of the plan and hopefully present it to the Board at its next meeting.

Riley-Purgatory-Bluff Creek Watershed District Plan

(This is a demand for hearing pursuant to our notice of receipt of the VBWD plan.) The demand was filed by the Minnesota Valley Audubon Chapter. The scheduling of the hearing depends upon the nature and scope of the revisions to the plan that the RPBCWD is willing to execute. The same staff comment that I made in the Nine Mile Creek appeal applies to this one.

cc Barbara Cobb, Bd Member
 Dwain Otte, Bd Member
 Matt Seltzer
 ✓Harnack
 Birkholz
 Thomas
 Haertel
 Larson

a:status.may



June 2, 1995

To: Members of the Dispute Resolution Committee

From: Bruce Sandstrom, Super.
BWSR Metro Region

A handwritten signature in dark ink, appearing to read "Bruce S.", written over the typed name "Bruce Sandstrom".

Re: June 8, 1995 Hearing, Levine v. Minnehaha Crk. WD

The hearing as scheduled for 1:00 p.m. on June 8, 1995 is still on as scheduled. The briefing schedule that was agreed to has not been complied with. However, the Minnehaha Creek Watershed District has requested the BWSR to dismiss the matter for "failure of prosecution." After that request was made, the appellant requested the BWSR to not dismiss the appeal. Hopefully, the DRC can consider the issues and provide appropriate recommendations for the BWSR and staff to follow towards resolution of the subject appeal.

Enclosed are copies of pertinent documents that should be reviewed prior to the hearing:

- 1) File Chronology
- 2) May 10, 1995 letter from MCWD Attorney
- 3) May 18, 1995 letter from MCWD Attorney
- 4) May 22, 1995 letter from Appellant
- 5) Copy of transcript
- 6) Copy of Index of Exhibits
- 7) Copy of Exhibit 105
- 8) Copy of Exhibit 115
- 9) Copy of Exhibit 117
- 10) Copy of Exhibit 158
- 11) Copy of Exhibit 159

As you probably are aware of, recent amendments to MS 103D essentially removes BWSR's authority to hear at least the watershed district permit aspect of this appeal. The statutory revisions are effective August 1, 1995. The appellants also need to be aware of this and plan their actions accordingly.

Encl. (for DRC & Seltzer only)

cc Matt Seltzer
Louis Smith, Atty for MCWD

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Page 2
June 2, 1995

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STATE OF
MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

PHONE NO.

P.O. BOX 756, NEW ULM, MN 56073-0756

FILE NO.

507-359-6050

April 20, 1995

John Boulton, President
Yellow Medicine River WSD
Porter MN 56280

Dear Mr. Boulton:

YELLOW MEDICINE WATERSHED DISTRICT PLAN UPDATE

The purpose of this letter is to clarify and stress the importance of our concern over the divergent philosophies that exist between the Department of Natural Resources (DNR) and the Yellow Medicine Watershed District. Our concern is not limited to just your watershed district, but to other government units as well. Our concern stems from our experiences of water resource management on a broader multi-watershed level. We recognize that there is a very different focus of our watershed and floodplain management roles.

The Department further recognizes the purposes for which the watershed district was established: to address agricultural drainage concerns and to reduce flooding. We also understand the importance of having strong and sustainable agriculture as the cornerstone of southwest Minnesota's economy. We support efforts to maintain the agricultural economy within a sustainable and healthy ecosystem.

Our desire is for the watershed district plan to include comprehensive strategies or steps to achieve your stated goals. And, that the steps be in a manner that we can all agree is sustainable. Our efforts, as a society to rid ourselves of excess water by passing the problem onto downstream landowners, cannot persist. We cannot afford the short or long-term costs of trying to build a bigger drain. Shrinking budgets and reductions in government programs mean that we can no longer fund solutions that are not sustainable. Private property rights issues loom on the horizon, and while one group may argue that we cannot restrict the use of their property, downstream owners will challenge that passing those water problems onto them constitutes a taking.

The DNR is aware of many comprehensive and cumulative drainage and flooding issues. We need to better understand what you feel your role as a watershed district should be in identifying and addressing these issues. In your plan, you identify most of the necessary components that need to be involved; however, it seems to lack the identification of who will or should provide the leadership in integrating all these parts into a comprehensive action strategy.

In order to maintain a strong sustainable agricultural economy within a healthy ecosystem, we need to include a broader group of people. It will be important to work with the watershed district, the Board of Soil and Water Resources (BWSR) and the many other people who have a stake in these decisions. Together we can identify a process for finding the potential solutions to some of these difficult questions that we are facing. Some of the questions that we need your assistance and views on are:

- ◆ Do the people you represent want the watershed district to identify and reach future solutions to their problems or do they see your role as resolving disputes and providing technical assistance for the issues that they bring to you?
- ◆ If the district does not see itself as the leader in solving comprehensive drainage and flooding issues, who should this role fall to?
- ◆ Where does the district want to be in the next 5, 10, 25 and 50 years with the issues of drainage and flooding?
- ◆ What steps do we need to take to reach common goals and how soon is reasonable to expect us to reach these goals?
- ◆ What barriers do we need to overcome to reach each step or goal and how can we involve others to identify and reach a common goal despite differences that may exist?
- ◆ How do we know if we are solving our problems (how do we measure success)?
- ◆ How do we integrate our solutions into the "big picture" so that we do not create other problems?
- ◆ How do we determine where in the watershed efforts should be focused?
- ◆ How will the district employ education strategies to address understanding of how drainage and flooding goals will be addressed?
- ◆ We need to understand what the district's policy is on the expansion of drainage to lands already connected to a drainage system (new tiling, more expansive tiling) and about improvements to systems that have more land and tile than was originally approved?

We feel that efforts to maximize drainage improvements and maximize use of flood-prone areas significantly contribute to comprehensive agricultural flooding problems. We recognize that you may not totally agree with this concept. However, it is an area that we need to reach some common agreement. Through further discussion, it is imperative that we identify the steps that will allow us to agree on the causes and identify strategies to solve these issues cooperatively.

The plan that you have drafted is good in many ways. However, in our opinion, it does not go far enough in addressing the drainage and flooding problems that you face. The Department is pressing this issue so that we can work with you and others to collectively identify and plan for solutions that are acceptable in advance. Failure to address these issues now, will likely result in significant future disagreements and frustrations on a project-specific basis. We would hope that your plan can be part of the preparation for developing a comprehensive solution.

We view this as an opportunity to build a stronger cooperative partnership with you to address problems of common concern. We believe that a great deal can be learned from each other, which can help us find acceptable and sustainable solutions for the community, economy, and environment.

Sincerely,

DIVISION OF WATERS



David Leuthe
Regional Hydrologist

c: Doug Thomas BWSR
Kent Lokkesmoe, DNR Waters
Ron Harnack, BWSR
Jeff Nielsen, BWSR
Dave Sill, BWSR
Cheryl Heide, Regional Administrator
Doug Kingsley, Fisheries
Steve Merchant, AWM

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BOARD OF WATER
& SOIL RESOURCES

The price vs. income debate is raging again as Congress considers the '95 farm bill.

Doran Zumbach admits he's no math genius, but he knows a few things about his bottom line.

Over the years the Iowa farmer has seen prices go up and down for a bushel of his corn. While the higher prices were welcome, he says, funny thing was that they didn't always add up to more money in his pocket at the end of the year. In fact, it often worked out the opposite way: If higher prices were accompanied by less corn to sell, he ended up with less total income.

"The day when price or yield was the dominant concern of the producer is gone," Zumbach says. "What is ultimately the concern today is total revenue: price times yield minus expenses."

That aggregate approach, he and many agricultural experts say, is the only way to tally farm finances. Rather than dwell on unit price — the price for, say, a single bushel of corn or wheat — they put more emphasis on ways to increase net income: what farmers end up with after you multiply the unit price by the volume produced, add government payments and other income sources, then subtract production costs and other expenses like taxes.

Others, though, insist that farm income still depends heavily on the per-bushel price. Pay more for a bushel of grain, they say, and farmers will thrive.

"An awful lot of the bottom line is reflected in what you get in the per unit price of what you sell," says Clay Pederson of the National Farmers Union. "That's just a fact of life."

The price vs. net income controversy goes to the heart of the congressional debate over the 1995 farm bill, the omnibus legislation that governs U.S. farm programs. Federal policies dating back to the Depression have tried to force up the unit price of major crops such as corn, wheat, cotton and rice in order to boost farm income.

But sea changes in agriculture, in the U.S. economy and in the global marketplace have rendered many of those programs ineffective at best, counterproductive at worst. As a result, the debate has begun to turn to better ways to protect farm income from weather vagaries and market volatility.

"We're going to have to start looking at it from a business perspective," said Evan Stadlman, director of Iowa Corn Growers Association. "We're evolving. We're running a business."



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I N T H I S I S S U E

THE BOTTOM LINE

Seventh in a series



THE CARGILL BULLETIN

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Price vs. income

Farmers and policymakers traditionally have equated a higher bushel price to higher income.

"All things being equal, you're better off with a higher price," said John Keeling of the American Farm Bureau Federation. "But a higher price isn't always a sure way to higher profits."

That's why, he said, his group is now putting more effort into changing government regulations and other expenses that add as much as \$1 billion to farmers' costs, according to some estimates.

"We've got to improve the overall environment of doing agriculture as a business," Keeling said. "The important thing is to focus on net income: When it's all said and done, what do you have?"

Many factors affect farm income today. Consider:

- About half of all farm households *lose* money farming and mostly depend on off-farm income for their livelihoods. For many of these operations, commodity prices have little relevance: It would take an astronomical price per bushel to make their ends meet without outside income.

- Payments from government commodity programs, intended to support farm income and ensure a stable food supply, contribute relatively little, averaging 7 to 8 percent of gross cash income since 1939. But because production, not need, determines the amount of government payments, large farms receive the bulk of the money, studies show.

- More than a third of U.S. cropland produces for export, a portion expected to grow as trade expands under the General Agreement on Tariffs and Trade, the North American Free Trade Agreement and other

such market-opening pacts. Studies show that higher demand in the world market is a critical contributor to farm income.

- Conversely, a higher per bushel price usually cannot make up for loss of demand, studies show. For instance, idling land to reduce supply and thereby raise prices ends up netting farmers less money — in the short term by reducing the amount they have to sell, in the long term by sacrificing market share.

Both sides of the price-income divide cite statistical support.

For example, the Heritage Foundation, a think tank in Washington, D.C., reported in April that farms as a whole would be better off without government programs. Using a computer model, the study projected a \$2 billion increase in net farm income in the first year after government programs are removed. Over five years, farm income would increase more than \$14 billion, while the "ripple effects" could reach as high as \$21 billion.

But the Food and Agricultural Policy Research Institute (FAPRI), a joint program of Iowa State University and the University of Missouri, reported also in April that overall U.S. farm income would drop \$6 billion in the first year if all government programs, except the Conservation Reserve Program, ended. By the end of 10 years, the study said, farm income would be off an average of \$4 billion a year.

Farmer Zumbach, though, cites recent experience to make his case.

In 1993, when flooding and heavy rains washed out many Midwest crops, his fields yielded only 94 bushels of corn per acre. What Zumbach did grow he was able to sell at

around \$2.60 a bushel. In contrast, his 1994 yield was 172 bushels an acre, with the price hovering around \$2.30 a bushel.

The year with the higher yield at a lower price came out ahead, at about \$150 more per acre.

"It doesn't take a math genius to figure out which is better for me," he said. "It's not that price isn't important; it's one of two components of the revenue equation. But, ultimately, it may not equate to higher income."

The other component, he said, is volume. "The mentality is that we have to control supply to assure a decent price — that's a fallacy," said Zumbach, a member of an Iowa coalition that wants to replace current programs with a "revenue assurance" plan.

What's needed, he and others say, is for demand to grow so farmers can produce and sell more. They point to the potential market expansion created by a growing, wealthier world population that's seeking more plentiful and better diets.

"We will have a use for everything we produce if we let the marketplace work," Zumbach said.

Ironically, studies show that scenario does not mean unit prices would fall.

"If we stopped all the subsidies, world prices would go up," said Fred Sanderson, senior fellow at the National Center for Food and Agricultural Policy. Sanderson estimated that the elimination of subsidies and trade barriers would boost world prices about 10 percent. American farmers would benefit most because they are efficient producers of many export crops, he said.

What is a farm?

Unlike the relatively homog-

enous agricultural community of the 1930s when many federal farm programs were first devised, farms today differ widely in size and make-up.

The number of farms has been shrinking by about 2 percent a year since the 1930s, falling to 1.9 million this year from a peak of 6.8 million in 1935, according to the U.S. Census Bureau.

Even that number is somewhat inflated by the definition used by the census and the U.S. Department of Agriculture (USDA), which consider a "farm" any place that sells at least \$1,000 in produce a year. As a rule of thumb, farms that sell at least \$40,000 a year are considered commercial-scale, full-time operations.

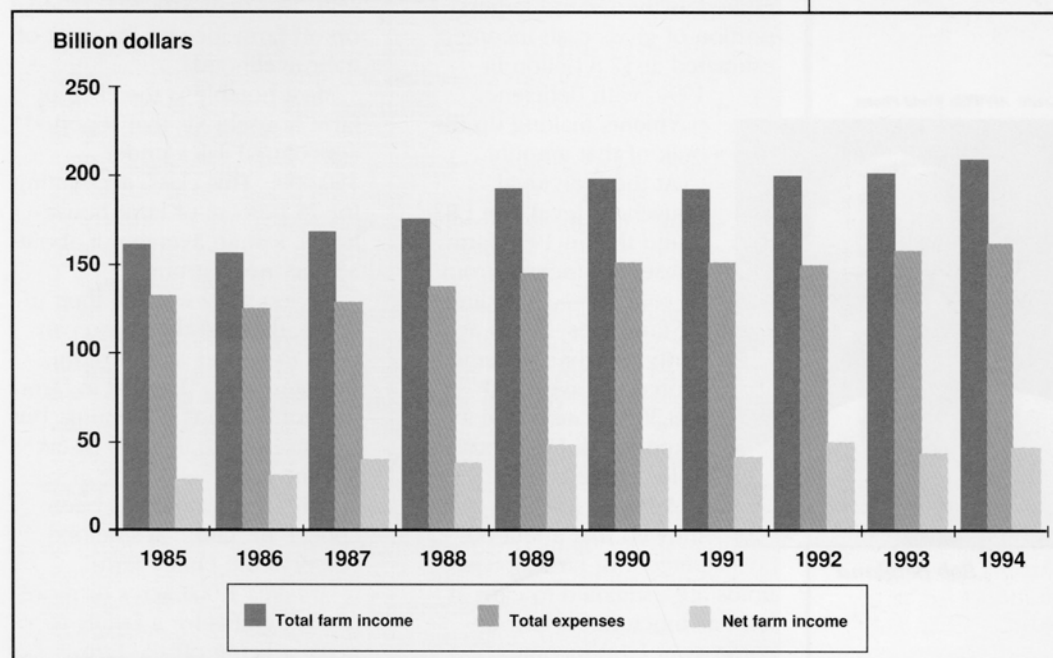
Overall, farms have grown larger and more productive. By 1992, the average farm size grew to 491 acres. And while most of the big operations are still "family farms" run by their owners, many are also legal corporations that support two or more families and hire large numbers of workers.

In a study last year of 1991 farm income, Luther Tweeten, an agricultural economist at Ohio State University, found:

- Operations with at least \$250,000 in agricultural sales accounted for 5 percent of all farms and 60 percent of cash receipts.
- Midsize farms — \$100,000 to \$250,000 in sales — accounted for 10 percent of farms and 20 percent of cash receipts.
- Smaller ones — \$20,000 to \$100,000 in sales — accounted for 26 percent of farms but only 16 percent of receipts.
- The smallest farms — under \$20,000 in sales — accounted for 60 percent of farms but less than 5 percent of cash receipts. That group relied almost completely on off-farm income.

"There are people who need

Net farm income



Source: ERS

the support, but they're not the ones who produce a lot of commodities," said University of Maryland economist Bruce Gardner. "If you try to make prices high enough so everyone can make a living off farming, prices would have to be so high that you'd make multi-millionaires out of really big farms."

The bottom line

From 1985 to 1993, aggregate U.S. net farm income ranged from a high of \$50 billion in 1992 to a low of \$28.8 billion in 1985, according to the USDA's Economic Research Service (ERS). Last year it was estimated at \$47.3 billion. (See chart.)

Net farm income includes all income and expenses associated with the farm, but not off-farm income.

The expense side of the equation breaks down into two

basic categories. Fixed costs include land, machinery, taxes, buildings and depreciation. Variable costs include seeds, fertilizer and labor.

The ERS estimates total production expenses for 1994 at \$162 billion, up from \$158 billion in 1993. Farm-produced inputs like feed, seed and live-stock accounted for \$42 billion; manufactured inputs like fertilizer, pesticides and energy \$23.5 billion; real estate and short-term interest \$11.5 billion; operating expenses such as labor and repairs nearly \$50 billion; rent, taxes and other overhead \$34.8 billion.

"Basically, costs have gone up in proportion with the value of output," Gardner said.

On the revenue side, agricultural sales account for about 90 percent of farm gross cash income. The ERS estimated cash receipts for crops in 1994 at about \$186 billion, including

Off-farm income

has "helped preserve the family farm."

Luther Tweeten

\$91 billion for crops and \$87 billion for livestock.

Direct government payments ranked as the second largest portion of gross cash income, estimated at \$7.8 billion in

1994, with deficiency payments making up the bulk of that amount.

At the individual household level, the ERS found that in 1993 farm household income from all sources — including off-farm jobs, Social Security or other retirement sources — averaged \$38,300, close to the average for all U.S. households. (See chart.)

A recent analysis showed that about 80 percent of farm households are estimated to earn at least as much in off-farm income as in farm income.

Per capita farm income has exceeded that of nonfarmers every year since 1985, Tweeten found. "We're living under very different circumstances," he said. "Farmers are no longer a welfare case. They've made tremendous strides."

Farm households that had between \$100,000 and \$250,000 in sales of agricultural

goods received about equal amounts from off- and on-farm sources, while those that had sales less than \$100,000 relied on off-farm income for most of their livelihoods.

Most notable is the class of farm households that reported agricultural sales under \$50,000. This class, accounting for 75 percent of farm households, lost an average of about \$2,600 from farming.

"If you want to raise their income, the best thing you can do is to get rid of their farm," Tweeten said. "They're in farming not because of farming, but because of the lifestyle or tax advantages."

Off-farm income has been critical, he said: "It's helped preserve the family farm.

"It takes 1,000 acres or more in cash grains for a family to make a living off the farm alone," Tweeten said. "If you farm 100 acres, you shouldn't expect a full-time income. You shouldn't expect a full-time income for part-time work."

To Pederson, however, the growing reliance on off-farm income reflects the plight of rural America. "If you go into teaching, you want to be able to make a living teaching and

not subsidize your income doing something else," he said.

The problem, he says, is that government programs fatten the pocketbooks of many farmers who don't need it.

Among the options being considered this year to solve that problem are targeting federal payments based on financial need, setting tighter limits on payments to individual farmers or cutting off benefits to farmers with substantial off-farm income.

However, such alternatives also have side-effects or would be difficult to administer. Some economists warn, for example, that targeting government dollars on smaller farms would subsidize inefficient operations, giving them an advantage over more efficient operations that receive no subsidies.

Another solution with fewer side-effects, many say, is to eliminate price and income support programs and replace them with a safety net that protects farmers when weather or other disasters hurt their crops.

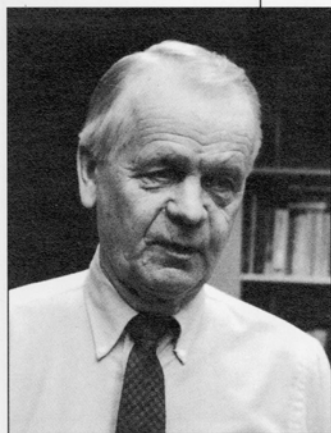
Climbing out of poverty

The situation was dramatically different in the 1930s when the federal government stepped in to help the large farm community of the era.

A third of the U.S. population lived on farms then, exports were minimal and farm income averaged about one-third that of nonfarmers. With little schooling or experience to get off-farm jobs, farmers were left with few options when the Great Depression pushed thousands into bankruptcy.

The government responded with a plan to boost farm income by managing the price and supply of certain crops. A goal, known as parity, sought to ensure that farmers maintained their purchasing power through higher per-bushel

Credit: AP/Wide World Photos



Bob Bergland

Average farm household income (1993)

	Farm size by sales					
	Less than \$50,000	\$50,000-\$99,999	\$100,000-\$249,999	\$250,000-\$499,999	\$500,000-or more	All households
Number of farm operator households	1,498,269	205,605	221,890	69,214	40,714	2,035,692
Farm income	-2,619	7,845	21,271	39,699	128,662	5,125
Off-farm income	35,768	30,464	21,015	24,758	31,700	33,176
Total household income	33,149	38,309	42,285	64,457	160,362	38,300

Source: ERS

prices. (See sidebar.)

That strategy has since evolved into a complicated set of measures and countermeasures, most of which still focus on the unit price. Here's basically how they work:

- Through a loan program, the federal government guarantees farmers a minimum price for 17 eligible crops. If farmers can get a higher price in the marketplace, they sell the crop and repay the loan. If they can't, they turn the crop over to the government and keep the loan. It's called a nonrecourse loan because the government has to accept the crop in lieu of a cash repayment.
- Through deficiency payments, farmers receive direct income support. The government pays farmers the difference between the average market price for certain commodities and "target prices" set by Congress.
- Because support levels are sometimes set above market prices, farmers respond with surplus production of certain crops, which results in large forfeits to the government. To avoid that, Congress began to manage the supply, such as by requiring farmers to idle land in return for federal benefits.
- And, after U.S. prices became too high to be globally competitive in the mid 1980s, Congress instituted export subsidies to help sell crops overseas and reduce surpluses.

Who benefits?

In 1993, a third of all farm operators received government payments. Because of the way the payments are calculated — a formula using eligible acreage base for a particular crop multiplied by the historic yield — larger farms received the largest share.

Farms with more than \$100,000 in sales sold nearly 80

Parity and productivity

One government farm-income tool that fell by the wayside is a concept called parity, which is defined as the price that gives a commodity unit the same purchasing power today as it had in the 1910-14 base period.

Farm legislation in the 1930s aimed to set a price for crops that would give farmers the same purchasing power as nonfarmers. That base period was chosen because it was considered stable, with equilibrium between the purchasing power of urban and rural residents.

Over time, the parity approach was replaced by formulas that attempted to make government support prices track market prices more closely. Thus although parity remains embedded in federal legislation, it's no longer used to set price-support levels for major commodities.

Yet parity serves as a powerful rallying cry for some farm advocates.

"If we, as an organization, can have our way, we'd love it," said Clay Pederson of the National Farmers Union. "That income level is fair . . . Ideally, we'd like to see farm income at a level where you can support a family by farming. We're not asking farmers to be wealthier than average Americans."

Compared to that base period, farmers today are getting only about half of what a parity formula would provide.

But, some economists say, accounting for higher productivity since 1910-14, farmers have reached — and surpassed — 100 percent of parity.

"They've increased their productivity 3.7 times," Ohio State's Luther Tweeten said. "With the same amount of resources, you're growing 3.7 blades of grass where one grew before."

percent of the commodities eligible for federal benefits and captured nearly 70 percent of those payments.

"Most government payments go to people who are well off," Gardner told the Senate Budget Committee in February.

But some farm groups argue that the programs are helpful. "We're better off with them than without them," Keeling said of government payments. While the programs could be improved, he said, they help stabilize farm income.

"It's like the minimum wage for the working world," said Bob Bergland, U.S. agriculture secretary under former Presi-

dent Jimmy Carter. "Not many people work at that level, but to them, it's critical."

However, Gardner said farmers who produce livestock or crops that receive no government support fare at least as well as farmers who do.

Looking at farms with sales over \$40,000 in the Corn Belt and Great Plains, an ERS analysis in December found that those who don't participate in government programs were in slightly better financial condition than those who do. Almost 63 percent of nonparticipants enjoyed favorable financial conditions and only 4 percent were considered vulner-

able. Under 60 percent of participants in government programs were in a favorable situation and around 7 percent were vulnerable.

Nonfarming landowners also benefit from federal payments, and because those payments tend to drive up the value of eligible land. Tweeten found that, based on farm real-estate ownership in 1992, 37 percent of commodity program benefits went to landlords who didn't live on the farm.

"Landowners love government support programs. Government programs ensure a rate of return for land," said Bergland, who has retired to Roseau, Minn. "When

I was elected to Congress in 1970, I started to see that whenever there was a boost in farm income guarantees, land values took a jump."

Farmers who rent land end up paying more because of the inflated land values. "It's all capitalized into our costs," farmer Zumbach said.

Side-effects

The bottom line also is affected by federal countermeasures intended to keep crop surpluses — and federal spending — from mounting.

USDA data from years of using the Acreage Reduction Program (ARP) to curb production on eligible farmland is telling: When the number of acres farmers are required to idle is high, producing a smaller supply of commodities to sell, prices rise.

But farmers lose income because, by idling some of their land, they have fewer bushels to sell. Land idling also leads to higher per unit production costs because fixed expenses remain the same while fewer

bushels are sold to cover them.

A June 1994 USDA analysis showed the effects of ARPs on income: the higher the set-aside, the lower the income.

For example, corn growers were estimated to receive a net income of \$11.1 billion in 1995 if they didn't idle any productive land. That income level dropped to \$10.8 billion with a 5 percent set-aside, then further to \$10.5 billion with a 12.5 percent set-aside requirement.

"Every time we do this analysis, it shows the same thing," said Philip Sronce of USDA's grains analysis division. "Revenue from a higher price does not offset the loss in income: from less deficiency payments and less to sell in the marketplace."

Idling land to raise prices may have worked when U.S. farmers faced a largely domestic market, but is less effective in a global market, economists say. Rather, studies have shown that aggressive U.S. land idling in the 1980s prompted foreign countries to cultivate more acres, with no net change in the number of acres under production worldwide. U.S. farmers ended up losing market share.

"The international market has changed everything," Bergland said.

Studies also confirm that reduced supplies at higher prices affect demand for farm products and hurt the rural economy:

- Raising the set-aside level by 5 percentage points for wheat, corn, rice and upland cotton during 1996-2000 will result in a drop in net farm returns, according to a USDA analysis. Total net farm returns would decline by an average of \$292 million to \$544 million a year, depending on how sensitive the export market is to higher prices. In the long run, higher

prices could prompt buyers to seek alternative sellers or products.

- ERS analysts found that a 10 percent annual drop in the export of bulk commodities for 10 years translated into a \$44 billion decline in net farm income.

- Idling 78 million acres in 1983 under various programs caused a drop of 11 percent in fertilizer use, 15 percent in seed use, 7 percent in fuel use, as well as a decrease in sales of large tractors, Keith Collins, USDA's acting chief economist, told a House agriculture subcommittee in March.

- A 1986 USDA study estimated that idling 30 million acres results in a \$3 billion annual reduction in farm input spending and the displacement of more than 250,000 jobs.

- A 1992 USDA study found that raising the ARP level by 10 percentage points during 1993-1995 would cut exports and displace about 20,000 jobs in farm input, food processing, shipping, wholesaling and retailing industries.

New avenues

As a result, many are proposing new ways to support farmers' bottom lines.

The first step is to break the "addiction" to government programs and look to the marketplace for cues, Tweeten says. He and others are offering Congress an array of alternatives that act as a safety net.

The most recent came out mid-May from the Progressive Foundation, a Democratic think tank, in a report written by former Minnesota Rep. Tim Penny, former USDA official John Schnitker and University of Minnesota agricultural economist C. Ford Runge.

Titled "Ending Agricultural Entitlements: How to Fix Farm Policy," it called farm subsidies



"anachronistic, inefficient, intrusive and unfair" and proposed four major areas of reform, including the end of price and income supports.

Ultimately, though, many say a farm's success comes down to individual farmers, who need better training to prosper in a competitive, fast-changing marketplace.

"It's a very multidisciplinary, skilled-oriented occupation today," Stadlman said. "A young son has the business, with half a section of land and debt-free — that doesn't mean he's going to make it in a few years if he has no management skills."

"Sweat equity has changed to mean more skill equity. It isn't just hard work; it's how to apply knowledge, how to manage with new business skills."

Farmers need to stay on top of technological changes, manage credit, hedge crop risks with insurance and price risks with the futures markets, meet conservation and other regulatory requirements, market their products — all with little professional help, Stadlman said.

"We don't teach farmers a lot of the skills that they need today. There's no continuing education," he said.

Tax dollars may be better spent on education, market development and research, which have broader benefits and fewer unwanted side-effects, he and others say.

"When you really look at the long-term picture, no government policy has ever changed whether a farmer could make it or not," Zumbach said. "I guarantee you that if we spend as much time on marketing as we do on managing government programs, we would do much better." ♦

C A R G I L L C O M M E N T A R Y

For farm prosperity

The 1995 farm bill debate is a good time to reconsider the federal role in U.S. agriculture.

That role has grown steadily in size and scope since the government stepped in to help farmers through the Great Depression. Now, with farmers facing new market opportunities and challenges in the dawn of a new century, is the time to ask what the government can do to better promote agricultural prosperity in the years ahead.

Folks on both sides of the price vs. income debate, for example, need to weigh the benefits vs. drawbacks of current commodity-based programs.

Yes, as some farm groups assert, those programs contribute \$8 billion to \$12 billion a year to the total farm income stream. But that amount has been declining and will continue to fall. And by forcing prices up and production down, those programs also reduce individual farm earnings and, in the process, hurt rural communities, agricultural businesses and U.S. competitiveness in world markets.

Most people would agree that U.S. farm policies should help protect farmers from the worst twists and turns of weather and markets. But better mechanisms are needed than the current heavy-handed approach that encroaches on what and how much farmers grow, with so many painful side-effects.

There are many reasons to make some changes in 1995.

First is opportunity. The world population is approaching 6 billion, and incomes are steadily growing in developing countries, where improved diets are No. 1 on the shopping list. The market-opening achievements of the Uruguay Round, as well as of the North American Free Trade Agreement and other regional pacts, have cleared the way for efficient producers like the United States to serve more of that demand.

Second is money. Agriculture is in the spotlight as Congress moves to balance the federal budget by 2002. Just shrinking existing programs would be a mistake. That would perpetuate many harmful side-effects even while providing fewer benefits to farmers.

Policymakers can slow the drain on taxpayers' pockets while at the same time increasing the flow of money into farmers' pockets. That can be done by designing an appropriate governmental income safety net for farmers, while freeing them to increase their incomes by growing more of what people want to buy.

Third is mechanical. Current farm programs are broken and need fixing.

Experience has disproved the premise that the federal government can put more money in farmers' pockets by legislating price levels for certain crops and defending them with supply-control devices like the Acreage Reduction Program and marketing devices like the Export Enhancement Program.

Think about it. That strategy may have worked when agriculture was a largely domestic industry and farmers were a mostly homogenous group. But over time the commodity-by-commodity approach

"Sweat equity

has changed to

mean more skill

equity."

Evan Stadlman

has grown steadily less effective as technological progress increased productivity and as agriculture became more diversified and global.

Today the equivalent of more than one in three bushels produced in the United States is destined for foreign markets. Policies that deliberately drive up prices and shut down production systematically trade away the U.S. advantage to other producers. The syndrome: U.S. acreage goes down, foreign acreage goes up and so goes market share. That happened in the '80s and prolonged the farm recession.

Today farms range from small, part-time operations populated by people whose off-farm income is their primary source of livelihood to large, sophisticated operations that produce 80 percent of the major crops with great efficiency and reliability. The smallest farm operators can't be made whole with a few more cents per bushel while the most efficient are penalized by supply-control requirements that curb their revenues and stunt their markets.

As important, commodity-based benefits have domestic as well as global side-effects. What works for grain farmers, for example, may not work for livestock farmers; higher feed prices drive up livestock production costs. What works for wheat farmers may not work for corn farmers; subsidizing wheat exports cuts into corn sales as buyers substitute wheat as a cattle feed.

Bottom line: Current policies no longer fit that vast array of individuals, businesses and needs that constitute modern agriculture.

Policymakers also need to recognize that programs that try to raise prices artificially by curbing production harm tens of millions of Americans in rural and urban areas. Shutting down farm production not only leaves farmers with less to sell, but starves Main Street businesses and stunts in-

vestment in the businesses that supply farmers and handle, process and market their products.

A final reason for changes is the environment. Current programs tie conservation requirements to eligibility for federal benefits, but have had unintended environmental consequences both here and abroad.

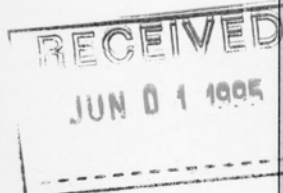
When farmers are required to grow certain crops and to idle productive land in return for benefits, the tendency is to farm the active acres more intensively. And over the past two decades, U.S. policies that have deliberately idled established farmland here have invited farmers elsewhere in the world to intensify their practices and to put new, sometimes fragile land under the plow.

This year's farm bill debate comes at a critical juncture, when policymakers have an opportunity to reconfigure federal policies to serve farmers, the entire agricultural community and the environment better.

Protect farmers from the wildest vagaries of weather and markets. Don't let protection get in the way of opportunity: opportunity for farmers to earn more by growing more; opportunity for rural communities to grow in agricultural jobs and investment; opportunity for U.S. exports to grow based on the bounty of the country's natural resources and the productivity of its agricultural sector; opportunity to deploy U.S. farmland and technology to grow more food for a hungry world in an environmentally sustainable way.

Focus the federal role so that dwindling public dollars go where they do the most good: research, market development, environmental protection and a farm safety net. ♦

The cover story was researched and written by Wendy Tai. Linda Thrane wrote the commentary.



THE CARGILL BULLETIN

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RON HARNACK, DIRECTOR 20137
BOARD OF WATER & SOIL RESOURCES
ONE WEST WATER STREET, SUITE #200
ST. PAUL MN 55107

Board Packet

May 17, 1995

To: Ron Harnack
Jim Birkholz
Doug Thomas
Greg Larson
Jim Haertel
Tom Schwanke

From: Bruce S. 

Re: Met Council Grant

Attached for your information is a copy of Jack Frost's May 16, 1995 memo containing the recommendations for funding of their 1995 water quality grants. Please note that Jack is recommending funding of the grant request BWSR submitted. This is a pleasant surprise since our proposal was not rated very high by several entities. I will keep you informed as the approval process goes forward. I expect that the last hurdle will be the Environment Committee meeting of May 23.

Tom, let me know what you need to know if and when the grant is a sure thing. I reviewed the BC list and we should discuss whether the list should be re-opened in anticipation of the grant project and the positions that may come via the 1995 legislation.

Attachment

a:metgrant

**Metropolitan Council***Working for the Region. Planning for the Future*

Mears Park Centre, 230 East Fifth Street, St. Paul, MN 55101-1634 612 291-6359, Metro Info Line 229-3780, TDD/TTY 291-0904

Facsimile Cover SheetDate: 5/16Time: 3:10Cover Page + 8 PagesSent By: JACK FROSTFax **612 291-6464**To: Mike Meyer, John Hines, Bruce SandstromDale Homuth, Tim Larson

Attention: _____

Company: Various

Location: _____

Telephone: 772-7179 / 297-2271 / 297-5615 / 772-7977
297-0683Special Instructions: Attached is the recommendations I am
sending to the Exec Com. next week. Any questions give
me a call



Metropolitan Council

Working for the Region, Planning for the Future

Mears Park Centre, 230 East Fifth Street, St. Paul, Minnesota 55101-1634
Phone (612) 291-6359 TDD (612) 291-0904 FAX (612) 291-6550 Metro Info (612) 229-3780

DATE: May 16, 1995
TO: Twin Cities Water Quality Initiative Grant Applicants
FROM: Jack Frost, Grant Manager
SUBJECT: 1995 Grant Award Recommendations

Attached are the recommendations for this years TCQI grant awards. This item will be on the Environment Committee agenda on Tuesday, May 23 at 4:00 P.M. in Room 2A. As you can see from the report to the Committee I am recommending that the Council fund 11 technical grants, five educational grants and one special grant. To all the potential grantees that did not make the cut this year I encourage you to work with me over the next year to prepare an application that could be funded in the future. I anticipate the notice for the next round of grants will be available shortly after January 1, 1996.

I will be making some modifications in the grant eligibility and ranking criteria before the next round of grants. Your comments or suggestions on either the eligibility or ranking criteria are welcome. I wish to thank you for your participation in the grant process this year and look forward to working with you on future grants.

Environment Committee Meeting of May 23, 1995**METROPOLITAN COUNCIL****Mears Park Centre, 230 East Fifth Street, St. Paul, Minnesota 55101-1634****Phone (612) 291-6359 TDD (612) 291-0904 FAX (612) 291-6550 Metro Info (612) 229-3780**

DATE: May 5, 1995
TO: Chair and Members of the Environment Committee
FROM: Jack Frost, Environmental Planning & Analysis (291-6519)
SUBJECT: 1995 Twin Cities Water Quality Initiative Grant Funding
Recommendations - Second Round, Committee #95-028-E

EXECUTIVE SUMMARY

ISSUE: This is the second year of a five-year program to fund nonpoint source grants for innovative projects within the Twin Cities.

POLICY IMPLICATIONS: Program is consistent with the Council's *Water Resources Management Development Guide/Policy Plan* and the November 1993 Memorandum of Understanding (MOU) the Council entered into with MPCA regarding the NPDES permit for the Metro Plant.

FUNDING IMPLICATIONS: This request is to fund \$1,388,000 in technical and educational grants, including two special projects. In accord with the MOU, Wastewater Services is required to provide about \$8.8 million for nonpoint source reduction grants over five years.

PREVIOUS ACTIONS: The first round of grants was approved by the Council in September 1994.

DISCUSSION: The project review team consisting of Council staff, the Minnesota Pollution Control Agency, the Board of Water and Soil Resources, Minnesota Department of Natural Resources, and Department of Agriculture, reviewed the 39 applications against the criteria the Council established to rank the projects.

RECOMMENDATION: That the Metropolitan Council:

1. Approve the eleven top ranked technical projects and the five top ranked educational projects at a cost not to exceed \$1,188,472;
2. Inform the City of Chanhassen that its grant request is awarded subject to the approval of the Riley/Purgatory/Bluff Creek Watershed plan by BWSR; and,
3. Approve a "special project" to be awarded to BWSR at a cost not to exceed \$100,000.

1995 TWIN CITIES WATER QUALITY INITIATIVE GRANT FUNDING RECOMMENDATIONS - SECOND ROUND, COMMITTEE #95-028-E

BACKGROUND

In November 1993, the Council approved a Memorandum of Understanding (MoU) among the Minnesota Pollution Control Agency (MPCA), Council and the former Metropolitan Waste Control Commission (MWCC). This MoU was drawn up to resolve the level of phosphorus removal at the Metro Plant over the five-year duration of the MPCA's NPDES permit. Terms of the MoU required the former MWCC to make available about \$10 million over five years to fund a grant program for nonpoint source management projects within the metropolitan area.

In December 1993, the Council adopted a work program, eligibility criteria and administrative process to carry out that grant program. The eligibility criteria and administrative process was revised by the Council in January 1995 for this second year of grants.

During 1994, the first year of the grant program, the Council awarded slightly over \$1 million for both technical and educational projects. Seven educational, five technical and three special projects received grants. The grant to the University of Minnesota for a paired watershed study was a multi-year project. While no guarantees were made that subsequent years would be funded, the Council indicated that an additional \$100,000 would be provided in 1995 if money was available and the project was progressing in accordance with the approved work plan. Hence, the University was not required to submit a request for funding this year.

DISCUSSION

This year, the Council received 39 grant applications; of those received, twenty-nine were for technical projects and ten were for educational projects. While no specific dollar amount was established for the second year of funding, staff anticipated that approximately \$2 million could be made available if enough good projects were proposed. How the grant money would be divided between technical and educational projects was also not predetermined. Requests for funding for the 1995 round of grants totalled \$2.7 million.

Even though the grant procedures were revised this past year to streamline the process and target pollution problems, there is still a need to relook at the grant procedures for 1996 to again try to focus the grants on priority areas. Before the next round of grants, staff intends to recommend more revisions to both eligibility and ranking criteria as well as the application package to further streamline the entire process and focus grant funding in areas that will have the most benefit.

In accordance with the Council's approved administrative process, a technical review committee made up of agency personnel from Minnesota Pollution Control Agency, Department of Natural Resources, Department of Agriculture, Board of Soil and Water Resources, Metropolitan Council Wastewater Services and the Council rated each project according to the established criteria.

The review committee members scored each project in accordance with the criteria approved by the Council. Scores ranged from 95 to 198 for technical projects, and from 61 to 124 for educational projects. Even though each agency had its own perspectives and familiarity with the grantees, based on the ranking criteria, reviewers reached an overall consensus on which projects should be ranked highest. In retrospect, this review process was a very good methodology in selecting potential grantees because it included a much wider range of perspectives and familiarities than any single agency could bring to its decision making process.

Table 1
1995 TCQI GRANT APPLICANTS

	TECHNICAL PROJECTS	EDUCATIONAL PROJECTS
1	City of Lakeville	City of Dellwood
2	Carver County HRA	Carver SWCD
3	Scott SWCD	Friends of the Minnesota Valley
4	Scott SWCD	Board of Water and Soil Resources
5	Scott SWCD	City of Roseville
6	Scott SWCD	Friends of the Mississippi River
7	City of Chaska	St. Paul Neighborhood Energy Cons.
8	Scott County	Minn. Community Education Assoc.
9	U.S. Fish and Wildlife	Dakota County
10	University of Minnesota	City of St. Paul
11	University of Minnesota	
12	None Mile Creek WD	
13	City of Minneapolis	
14	Dept. of Int. - NPS	
15	City of Waconia	
16	Carver SWCD	
17	City of Chanhassen	
18	Carver County	
19	Hennepin Conservation District	
20	Elm Creek WMO	
21	Pioneer-Sarah Creek WMO	
22	Carver Creek WMO	
23	Crow River WMO	
24	Bevens Creek WMO	
25	City of Dayton	
26	Six Cities WMO	
27	City of Burnsville	
28	Dakota County	
29	Carver SWCD	

Results of the ranking process are presented for technical applicants in Table 2 and educational applicants for Table 3. The heavy solid line in each table is the recommended cut-off point for 1995 funding. The total recommended grants for technical and educational projects are \$976,000 and \$212,000, respectively, for a combined total grant amount is \$1,188,000.

Special projects

The Board of Soil and Water Resources (BWSR) submitted a proposal to prepare a model second generation watershed plan and model ordinances on wetlands, erosion control and best management practices, and to assist watershed management organizations in implementing the model plan and ordinances.

The technical review committee thought that the BWSR project should be classified as a "special project". The Council defined "special projects" as:

...those projects which have an overall significance to Metropolitan area water quality and specifically nonpoint source control.

While BWSR applied for a grant under the educational guidelines and the project was reviewed using these guidelines, it also fits the "special project" using the Council's criteria. It is therefore suggested that this project be funded under "special projects" and the Council staff negotiate a final grant amount with BWSR that does not exceed \$100,000. There are parts of the grant request that we may not fund and need further clarification from BWSR.

As indicated above, there is a likelihood of funding an additional \$100,000 for the University of Minnesota "paired watershed" study. The first phase of this project is proceeding very well, and the University anticipates it will request that an additional year of funding be granted.

Funding level for 1995

While the amount of recommended funding is below what staff anticipated, the review team did not believe the other grants should be funded this year. They recommend the criteria be revised to better reflect the type of projects or targeted areas funding should be directed to in the next three years of grant funding. Staff will also work with potential grantees over the remainder of 1995 to better focus grant applications on types of projects that we feel should be funded with these grants.

Eligibility for funding issue

As part of the application each grantee was to certify, along with other items, that

the project is consistent with an approved watershed management plan prepared under Minnesota Statutes, Chapter 103B

In the case of Chanhassen, the Riley Purgatory Bluff Creek Watershed District plan has not yet been formally approved by BWSR. The Council's legal counsel indicated this certification could be interpreted to mean that before a grant was awarded, the watershed plan needs to be approved.

Table 2
TECHNICAL GRANTEES

Rank	Grantee & Brief Description	Total Score	Amount (\$)
1	U.S. Fish and Wildlife -- Wetland restoration	198	73,000
2	Scott SWCD -- Land Mgmt Practices	192	100,000
3	Scott SWCD -- Floodplain and Riparian Rest.	190	100,000
3	City of Chaska -- East Chaska Cr Ponding	190	90,700
5	Scott SWCD -- Filter Strip Program	181	100,000
6	Scott SWCD -- Animal Conf. Poll. Abate.	176	100,000
7	Carver Co -- Feedlot Imp Proj	172	100,000
8	City of Chanhassen -- Bluff Creek Project	170	89,146
8	U of M -- Instream Nutrient Removal Demo	167	23,340
10	City of Burnsville -- Stormwater Qual. Imp.	156	100,000
11	Carver SWCD -- Surface Tile Inlet Study	152	100,000
12	Carver SWCD -- RIM Supplement	148	90,000
13	Carver Cr WMO -- Watershed Planning	147	100,000
14	Bevens Creek WMO -- Watershed Planning	146	100,000
15	Carver Co HRA -- Septic Tank Revolving Loan	145	100,000
16	Scott Co -- Water Quality Staffing	141	100,000
17	Elm Creek WMO -- Watershed Planning	137	41,021
18	City of Lakeville -- ISTS evaluation	137	4372
19	Pioneer/Sarah WMO -- Watershed Planning	136	41,021
20	Hennepin Cons Dist -- Windshield Surv BMP's	131	15,821
21	Crow River WMO -- Watershed Planning	131	100,000
22	Nine Mile Creek WD -- Diagnostic Study	123	50,914
23	Dakota Co -- WQ Initiative for Miss. River	111	92,500
24	U of M -- WQ of Sludge Amended Watershed	110	60,235
25	Dept of Int, NPS -- Human Impacts L. St. Croix	110	15,360
26	City of Dayton -- Historic Village ISTS survey	108	40,245
27	Six Cities WMO -- Springbrook Mon & Ed Proj	108	80,360
28	City of Waconia -- Old Town NPS Reduction	101	30,082
29	City of Minneapolis -- Illicit dischargers	95	98,207

Table 3
EDUCATIONAL GRANTEES

Rank	Grantee and Brief Description	Total Score	Amount (\$)
1	Friends of the MN Valley -- Heritage Registry	124	72,198
2	Minn Comm Ed Assoc -- Minnehaha School Youths	124	49,814
3	Neigh Energy Cons -- Urban Neighborhood Program	123	62,974
4	City of Roseville -- Catch Basin Filter Bag Demo	112	7,300
5	Dakota Co -- Miss River Educational Initiative	108	20,000
6	BWSR - Model Watershed Plan	103	100,000
7	City of St Paul -- Highwood ISTS Proj	96	74,031
8	Friends of the Miss -- TC Model Lawn Program	94	54,000
9	Carver SWCD -- Conserv Farm Planning	75	100,000
10	City of Dellwood -- ISTS Insp Program	61	20,000

BWSR staff did, however, indicate the Watershed District is currently responding to their comments and those of other review agencies. The Council must determine if the spirit of the certification is met and allow funding of their technical grant request, or if the Council takes a more literal interpretation and disallows this project. Since the Chanhassen grant request was found by the technical committee to be of very high quality, staff recommends that the Council look upon the spirit of the requirement for an approved watershed plan and award the grant to Chaska after the watershed plan has been approved by BWSR later this year.

CONCLUSIONS

1. The Council has solicited applications for its second Twin Cities Water Quality.
2. Thirty nine applications for both technical and educational grants were received.
3. Grant requests totaling approximately \$3 million were received.
4. During the second year of this grant program approximately \$2 million was available for grants.
5. Eleven technical and five educational grants are recommended for approval.
6. The grant request from BWSR should be acted on as a "special project".
7. The City of Chanhassen has met the spirit of the grant condition to have an approved watershed plan.

RECOMMENDATIONS

That the Metropolitan Council:

1. Approve the eleven top ranked technical projects and the five top ranked educational projects at a cost not to exceed \$1,188,472;
2. Inform the City of Chanhassen that its grant request is awarded subject to the approval of the Riley/Purgatory/Bluff Creek Watershed plan by BWSR; and,
3. Approve a "special project" to be awarded to BWSR at a cost not to exceed \$100,000.

14 Team
Board packet

POINTS NORTH

Duluth News-Tribune

Section B

Friday, May 5, 1995

■ Crucial testimony coming in Towle trial.

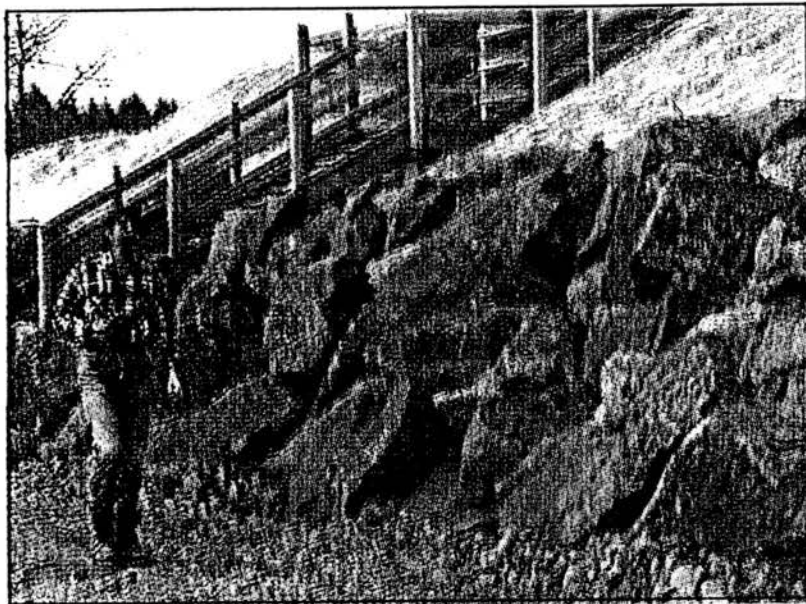
Page 2

■ Weekend: Theater troupe looks for a home of its own.

Page 4

■ Business: President threatens Japan with trade embargo.

Page 5



Charles Curtis/News-Tribune

Gene Clark of Duluth, a lake shore engineer for the Minnesota Board of Water and Soil Resources, walks between the shore of Lake Superior and the campground at Burlington Bay in Two Harbors. About 12,000 cubic yards of rock from the North Shore tunnels were used to keep the red clay soil from sliding into the lake.

Silver Cliff boulders bolster Two Harbors' fight on erosion

By Julie Gravelle
News-Tribune staff writer

TWO HARBORS — As Lake Superior's waves gently lapped against the shoreline on Thursday, workers loaded in tons of boulders to keep those waves from washing the land away.

The city is completing its long-awaited \$240,000 shoreline erosion control project at the Municipal Campground on Burlington Bay. The popular campground, which often is filled with tourists during the summer, has been losing an average of one foot of its red clay shoreline annually to erosion.

Campers who wanted to reach the beach have found themselves sliding down the sagging slope, which city officials deemed

a safety hazard.

And when the clay moves into the lake, it stays suspended in water less than a half mile from the city's public water intake pipe. That meant it needed extra filtering at the water treatment plant. The sediment also covered up trout spawning reefs.

For years, city officials have been trying to put a plan together to save the 1,500 foot-long shoreline, but they never gathered enough money to do it.

Then, just as with Duluth's popular downtown Lakewalk, the blasting of rock along the shoreline for a highway project provided the material. At Two Harbors, it was the rock generated from the creation of the Silver Cliff tunnel along

Highway 61. About 7,000 cubic yards of larger stone and 5,000 cubic yards of mixed-size rocks from the tunnel were brought to the shoreline.

"Here's another case where once the stone was on the site, the funding and the engineering assistance came together to make the project work," said Gene Clark, a lake shore engineer with the Minnesota Board of Water and Soil Resources. The board provided seed money to hire Clark to prepare plans for the site, and a grant also was obtained from the Great Lake Commission's Erosion and Sediment Control Program.

A recent rock slide at the tunnel

Please see **Boulders**, Page 2B

over



Boulders: They're helping save shoreline

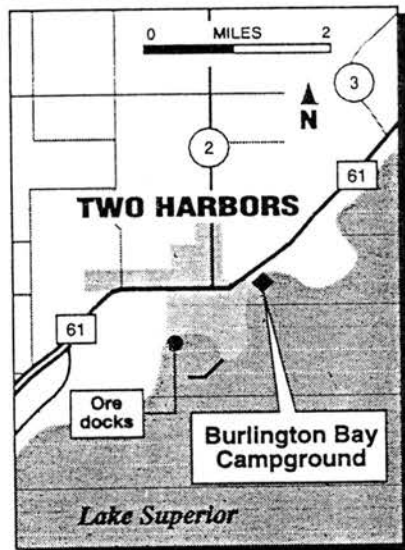
From Page 1B

nel site provided additional rock for the project.

"That was a godsend, literally," said Wayne Seidel, a conservation specialist Lake County Soil and Water Conservation District. "We got another 500 cubic yards of rock in areas where we were short."

Private property owners who live along the shore are watching the project to measure its success and see whether they should try the same method.

Seidel said a similar erosion control project completed just up the North Shore at Flood Bay three years ago showed the difference: After a recent storm, the water in Burlington Bay was laden with sediment while the water in Flood Bay was clear.



"It's been a long time coming, but I know when it's completed it will satisfy everyone, and, most importantly, it will protect the lake," he said.

AREA II ANNUAL PLAN FOR FISCAL 1996

Approved &
adopted 6/95

Anticipated Annual General Fund Allocation from the State	\$189,000.00	<u>Area II Match</u>
*Less Technical Services Agreement (see enclosed sheet for details)	-101,775.00	\$54,525.00 (25%)
Funds Available for Projects	\$ 87,225.00	29,075.00 (25%)

BWSR Challenge Grant

\$ 8,182.00

\$ 8,182.00 (in-kind)

The purpose of the grant is to assist the Area II member counties to achieve their goals in reduction of flood damages to roadways, bridges, culverts, and rural and urban areas as outlined in their comprehensive local water plans. Some goals of the grant are:

- 1) To develop a sophisticated system of road retention design taking into account dam safety concerns, effects with and without a riser, and comparison of downstream effects on delaying peak flows to the main stem on a watershed-based approach.
- 2) To develop a technical manual to set design guidelines for which engineers throughout the entire state can utilize as suggested by FEMA in their 1993 visit following the floods.

Fiscal 1996 Focus

Area II with its staff of a coordinator, BWSR engineer, two engineering technicians, and part-time secretary will focus on the planning and design of numerous road retention projects throughout the nine county region and several major flood control impoundments in the headwaters of the major watersheds of Area II. With the proven benefits, ease of construction, and cost savings, watershed districts, townships, and counties have taken extreme interest in incorporating floodwater retention into their ongoing road improvement projects. Area II also provides engineering inspection services to districts and townships which cannot perform the duties themselves.

PRIORITIZED LIST OF ROAD RETENTION PROJECTS

HIGH PRIORITY

Gorecki-Jeremiason Road Retention - Lincoln Co.
 Storden Township Section 2 - Cottonwood County
 Lake Stay Township Section 9 - Lincoln County
 Hendricks Township Section 35 - Lincoln County
 North Hero Township Section 31 - Redwood Co.
 Hansonville Township Section 23 - Lincoln Co.
 Stately Township Section 21 - Brown Co.
 Gales Township Section 35 - Redwood Co.
 Gales Township Section 23 - Redwood Co.
 Upper RW-22 and Lazarus Creek watersheds
 Limestone Township Section 3 - Lincoln Co.

Project Status

June 1995 construction and inspection
 Summer 1995 construction
 Summer 1995 construction
 Summer 1995 construction
 Data Collection Phase
 Data Collection Phase
 Bridge failure - Feasibility Report Phase
 Bridge failure - Data Research Phase
 Awaiting land acquisition
 Investigate at part of dam/reservoir projects
 Possible modifications to existing structure

Funding Status

Funded FY 1995
 Funded FY 1995
 Funded FY 1995
 Funded FY 1995
 Expected FY 1996
 Expected FY 1996
 Expected FY 1996
 Expected FY 1996
 Funded FY 1995

Land Acquisition Appropt'd

MEDIUM PRIORITY

Ann Township Section 9 - Cottonwood Co.
Amboy Township Section 8 - Cottonwood Co.
Holly Township - Murray County
Garfield Township Section 18 - LQP County
Sheridan Township Section 26 - Redwood Co.
Yellow Bank Township Section 11 - LQP County
Germantown Township Section 25 - Cottonwood Co.

Project Status

Possible modifications to existing structure
Feasibility Phase
Investigate entire watershed with several failing bridges
Feasibility Phase
Feasibility Phase
Feasibility Phase
Feasibility Phase

Funding Status

LOW PRIORITY

Yellow Medicine CSAH 14 - Yellow Medicine Co.
Diamond Lake Township Section 33 - Lincoln Co.
Monroe Township Section 24 - Redwood Co.
Springdale Township Section 34 - Redwood Co.
Sheridan Township Section 29 - Redwood Co.
Lake Benton Township Section 36 - Lincoln Co.
Hansonville Township Section 8 - Lincoln Co.

Funding prioritization - low benefit
Verify sponsorship
Feasibility Phase
Sediment basin for Lake Laura
Data Collection Phase
Feasibility Phase
Funding prioritization - low benefit

PRIORITIZED LIST OF LARGE PROJECTS

RW-22 - sponsored by Lyon County, Consulting Engineers - HDR Engineering, Inc.

Project Status - Draft EAW is complete, final revisions due by mid-June with publishing and comment period following. Permits anticipated by winter 1995. Area II to site any upstream road retentions and work with HDR Engineering on design.

Funding Status - \$250,500 General Appropriations to be used for engineering design (\$97,490.31 remaining balance)
\$250,000 Bonding earmarked for land acquisition only from 1993 legislative session (\$250,000 remaining)
\$800,000 Bonding earmarked for land acquisition only from 1994 legislative session (\$800,000 remaining)
≈ \$1,250,000 Bonding to be sought from 1996 legislature for construction and mitigation expenses

NOTE: All amounts matched 25% by Area II Counties.

LAZARUS CREEK - sponsored by Lac qui Parle - Yellow Bank Watershed District.

Project Status - Feasibility report due August 1995 by Area II staff.

Funding Status - ≈ \$1,000,000 Estimated bonding expected to be sought from 1996 legislature for construction, land acquisition, etc.

PETERSON DAM - sponsored by Murray County.

Project Status - Preliminary design underway, need to analyze entire surrounding watershed for road retentions which may change design constraints.

Funding Status - ≈ \$350,000 Estimated bonding to be sought at a later date.

approved
6/95

AREA II
Minnesota River Basin Projects, Inc.

Strategic Plan

September 1994

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APPENDICES

Appendix A -- General Locator Map of Area II

Appendix B -- DNR Desired Stream Gage Locations

Appendix C -- Area II Project Steps

Purpose

The creation of this document was encouraged by the Board of Water and Soil Resources (BWSR), Minnesota Pollution Control Agency (MPCA), and Department of Natural Resources (DNR) to streamline the efforts of Area II Minnesota River Basin Projects, Inc. and guide the organization in a direction where most benefit can be gained. The purpose of this document is to strategically plan Area II's current and future efforts to be consistent with the ongoing practices that are supported by the contributing agencies in their advisory and regulatory roles. With Area II's limited funding, the efforts of the organization shall be in the areas of data collection and interpretation, technical design assistance, and watershed-based planning as part of project implementation.

Mission Statement

Area II Minnesota River Basin Projects, Inc. is a grant-in-aid program pursuant to Minnesota Statutes 103F.173-103F.187 that administers the joint powers agreement signed by the nine member counties consisting of: Brown, Cottonwood, Lac qui Parle, Lincoln, Lyon, Murray, Pipestone, Redwood, and Yellow Medicine. (Please refer to the general locator map included in Appendix A.) The corporation's function is to provide technical and financial assistance to local units of government within Area II for the engineering, land rights acquisition, and construction costs for the installation of floodwater retarding/retention structures within a general plan for floodplain management for that portion of the Minnesota River and its tributaries from Ortonville to Mankato along the south side of the river. Area II's primary purpose is to implement the flood control recommendations outlined in the Minnesota River Basin Report and P.L. 87-639 Study, both structurally and nonstructurally, as governed by the Articles of Incorporation and in cooperation with local, state, and federal units of government. Area II is nine counties united, working in conjunction with one another since water does not stop at the county boundaries and neither do the benefits of flood control.

Vision Statement

The following statements reflect the objectives to obtaining the goals explained above:

- 1) As the awareness of environmental impacts has grown, the flood control efforts have been more successful in the form of smaller, road retention structures that serve as temporary impoundments, or dry dams. Area II will continue to support and promote the larger, multi-purpose dams and reservoirs that have been and continue to be a sound flood control practice. The larger structures are more difficult to implement due to cost, land area involved, and natural resource considerations.
- 2) Area II recognizes the importance of ecological systems; the relationship between soil, air, water, and human and wildlife; and will implement water quality measures wherever practical. Wetlands serve as Nature's own filtering and retention basins and shall be incorporated into Area II's mission for providing flood control to the region while creating additional benefits of wildlife refuge and groundwater recharge.

- 3) Area II shall fully utilize the Memorandum of Understanding between the Department of Natural Resources (DNR) and Minnesota Pollution Control Agency (MPCA) to gain interagency cooperation, collaboration, and participation through project conception through construction.
- 4) Area II shall support other agencies and organizations performing research and investigative studies as to reap the benefits of the collected information and incorporate those findings into future project ventures.
- 5) Area II shall utilize all funding opportunities as they become available such as Legislative Commission on Minnesota Resources (LCMR) Grants, Board of Water and Soil Resources (BWSR) Grants, Minnesota River Cleanup funding, South Dakota Board of Water and Natural Resources, and nationwide foundations.
- 6) Area II shall strive to increase water quality awareness among the nine counties and associated watershed districts. This shall be done by continuing funding to USGS gaging stations on the North Fork of the Yellowbank River near Odessa, Minnesota and its entrance into Marsh Lake. More use of the monitoring equipment owned by Area II shall be utilized by preparing a rotation schedule for the equipment on a priority basis. Appendix B contains a listing of the sites identified by the DNR. Area II shall research the need to purchase additional equipment to satisfy the needs that exist.
- 7) Area II shall expand on a goal set forth in the original statutes requiring at least one project per watershed unless agreed upon by the Area II Board of Directors. This requirement shall be expanded to achieving at least one project in each member county of Area II to make the benefits of flood control more widespread throughout the region.
- 8) The Coordinator for Area II shall make an annual presentation to each of the nine Boards of Commissioners, RCRCA, watershed districts, and associated organizations.
- 9) The organization will continue to urge Blue Earth County to rejoin Area II since withdrawing in 1989. Being situated at the bottom of the Area II watershed, Blue Earth County has the most to gain from any flood control beneficial to the Minnesota River.

This strategic plan does not provide specific details for all future project developments, nor is it intended to be all inclusive. It is a plan that may be amended to meet the changing needs of the nine members counties of Area II, Redwood Cottonwood Rivers Control Area (RCRCA), and associated watershed districts. It provides the framework for which the Area II Board of Directors and staff can carry out the corporation's responsibilities as designated by the By-laws and Articles of Incorporation.

To facilitate the coordination and cooperation among the local, state, and federal units of government, Area II shall base its strategic plan upon the nine Comprehensive Local Water Plans approved by the Board of Water and Soil Resources. In doing so, this removes the P.L. 87-639 Study and Minnesota River Basin Report from that base and makes them the "tools" in which flood control efforts can be implemented more specifically and strategically. The following sections review excerpts from the water plans and identifies the areas in which Area II can most fully assist in making the goals and objectives more of a reality.

BROWN COUNTY

Within Brown County, 30,200 acres of land are susceptible to annual flooding as reported by the SCS in their 1982 National Resources Inventory. Of these 30,200 acres, 17,500 are cropland, 2,300 are pasture land, 7,700 are forested, and 2,700 in miscellaneous categories. Brown County contains 209,800 acres that could potentially flood. Flooding is primarily a concern in the agricultural areas adjacent to the Minnesota and Cottonwood Rivers where flood waters flow swiftly. Flood control projects along the Cottonwood River need to be considered due to the river's swift flow and its path through the community of Springfield.

Projects within Brown County of which Area II has participated are as follows:

• **WELLNER-HAGEMAN RESERVOIR (1992)**

7.5 miles S and 5 miles W of Springfield, Section 30 of Stately Township. T108N R35W. Mound Creek Watershed to the Cottonwood River.

In reference to the Brown County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL D.2: TO IMPROVE MANAGEMENT OF PROTECTED LAKES, WETLANDS, AND STREAMS.

Objective No. 4: To restore and maintain wetlands, where feasible

Action: *Reclaim wetlands which act as water purifiers, aquifer rechargers and help diminish flooding.*

Area II encourages Brown County to inventory its potentially restorable wetlands and submit that list to the Area II for technical assistance in evaluating the flood control benefits of restoration of the wetlands while keeping in mind, the wildlife and water quality issues that make wetlands so important.

GOAL D.3: TO REDUCE FLOODING PROBLEMS THROUGH FLOODPLAIN PROTECTIVE MEASURES.

Objective No. 1: *Develop flood control programs as needed in the county.*

Action: *Implement plans for the flood control dam to be constructed on Mound Creek.*

Action: *Support continued efforts/funding of Area II Minnesota River Basin Projects, Inc.*

Construction of the Wellner-Hageman Reservoir was completed in 1992 although it continues to be strengthened by the addition of sediment ponds to reduce the amount of sediment entering the reservoir. Brown/Nicollet/Cottonwood Community Health Services, through their Clean Water Partnership, continues to monitor the tributary inflows to the reservoir utilizing four of Area II's samplers and flow meters. The partnership monitors and analyzes the chemical parameters that can in turn be evaluated and formed into watershed-based land treatment recommendations to be implemented by the Brown and Cottonwood Soil and Water Conservation Services. The primary goal is to create a healthy and beautiful environment with fishable and swimmable waters minus the nonpoint source pollution and sediment.

COTTONWOOD COUNTY

Cottonwood County contains five major watersheds; the Des Moines headwaters draining the southeastern and central portion of the county, the Blue Earth watershed draining a small part of the southeastern corner, the Middle Minnesota watershed draining the northeastern edge, the Watonwan watershed draining the eastern portion, and the Cottonwood watershed draining the majority of the north central and western areas of the county. The Cottonwood watershed contains the tributaries belonging to Highwater Creek, Dutch Charlie Creek, Mound Creek, and Pell Creek all flowing in a northeasterly pattern and contributing to the Area II watershed. The county is characterized by lowland plains and a plateau that is nearly level to gently sloping ground moraine descending at 30 feet per mile. The highest point in the county is at 1500 feet above sea level with the highest point on the plateau at 1200 feet descending to 1030 feet at the lowest point.

Projects within Cottonwood County of which Area II has participated in are as follows:

- **SCHOPER-BUSH RESERVOIR (1987)**

4 miles N and 1/2 mile W of Jeffers, Section 31 of Germantown Township. T108N R37W.
Dry Creek watershed to the Cottonwood River.

- **TRI-COUNTY ROAD RETENTION (1992)**

Section 6 of Ann Township. T108N R38W.
Pell Creek watershed to the Cottonwood River.

- **GERMANTOWN 6 ROAD RETENTION (1994)**

Sections 19 and 30 of Germantown Township. T108N R36W.
Unnamed tributary to Dry Creek watershed to the Cottonwood River.

In reference to the Cottonwood County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL: TO MANAGE OUR SOILS, RIVERS, STREAMS AND LAKES IN SUCH MANNER THAT PROPER GROUND WATER RECHARGE AND SURFACE WATER LEVELS CAN BE MAINTAINED TO ENSURE AN ADEQUATE SUPPLY OF WATER, WHILE MINIMIZING FLOOD LOSSES AND OTHER NEGATIVE IMPACTS OF FLOODING.

Objective No. 3: Inventory, monitor and study the impact of runoff during flooding from Urban and rural areas as land use developments and practices presently exist and change.

Action No. 3: *Study potential water retention sites within watershed areas to control the quantity, quality and speed of runoff.*

Action No. 4: *Study the potential to downsize culverts and restore wetlands in key upland areas for flood protection.*

Area II shall continue to provide technical and financial assistance for the construction of road retention structures within Cottonwood County as well as the other member counties of Area II. The effectiveness of road retention structures will be emphasized with the

Cottonwood County continued...

greatest advantage being taken to incorporate road retention into scheduled bridge or culvert replacements. Area II will strive to base retention design on a watershed basis where the effects of all structures within a watershed can be analyzed and updated to reflect the most accurate hydraulic conditions. Area II encourages Cottonwood County to inventory the potentially restorable wetlands and submit that list to Area II for technical assistance in evaluating the benefits for flood control while keeping in the mind the wildlife and water quality issues that make wetlands so important.

Objective No. 6: Establish methods of increasing surface water retention, thereby increasing the potential for infiltration to groundwater aquifers, while eliminating existing and potential flooding problems.

Action No. 6: *Work cooperatively with Area II and RCRCRA to identify, construct and finance structures that reduce flood damage.*

Action No. 7: *Establish a program to inventory, prioritize and upgrade existing dams so that if funding becomes available these needed improvements for replacements could be accomplished.*

Action No. 8: *Continue to explore new and existing programs to help fund the maintenance and construction of control structures such as earthen dams and/or reservoirs, where deemed necessary in accordance with results of diagnostic study, ...*

Area II shall continue to utilize the technical information obtained in the Type IV and 639 Study for site location and preliminary design. Area II, working in conjunction with the SCS, shall investigate repair methodologies which take into consideration the following factors: cost, age of the structure, extended life of the structure, and flood control benefits that the structure may provide. Area II will continue its search for outside funding of the larger, multi-purpose structures as well as the repair work to be done on the privately owned structures.

Objective No. 7: Require proper monitoring and regulation of land use practices that have the potential to impact flood plains and flooding problems, while ensuring that local flood plain mapping is complete and updated as needed.

Action No. 2: *All construction, such as bridge repair, culvert replacements and downsizings, etc., should be planned according to potential flooding flows.*

Area II shall initiate a program whereby the county's scheduled bridge and culvert replacements are investigated by the Area II technical staff for the possible downsizings. As proven in the past, downsizings can save a tremendous amount of state and county highway money when done in cooperation with a scheduled replacement. Additional savings can be gained should Area II participate in the funding of construction and land acquisition.

LAC QUI PARLE COUNTY

Lac qui Parle County borders the Minnesota River to the north and is characterized with nearly level to rolling ground moraine. This surface contains numerous closed depressions that trap and contain surface waters in marshes and wetlands. The southwest corner of the county is where the Coteau des Prairies is located with an elevation of 1400 feet above sea level. The rivers that originate here descend rapidly from the upland areas dropping 500 feet in a few miles. Due to the topography alone, the county can receive flood flows from heavy rains in South Dakota without receiving a drop of rainfall within the county. Lac qui Parle County is threatened with flash floods and sedimentation problems at the base of the slope. County Ditch systems are also known to significantly contribute to the sedimentation of Lac qui Parle Lake and other watercourses.

The southern two-thirds of the county drains into the Lac qui Parle River with the northern third draining northeasterly into the headwaters of the Minnesota River containing the Yellow Bank and Emily Creeks. Lac qui Parle County suffers from frequent crossover flooding which occurs at the West Branch of the Lac qui Parle River, Florida Creek, Yellow Bank River, Lost Creek, Lazarus Creek, Canby Creek, and Ten Mile Creek. The flood of 1969 resulted in excess of \$400,000 of damage to county roads and other public property.

In reference to the Lac qui Parle County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL 1: PROTECT THE QUALITY OF SURFACE WATER IN THE COUNTY.

Objective B: Encourage and promote changes in urban and rural land use practices to protect surface water resources.

Action No. 6: *Integrate efforts of the watershed district, state agencies, the county, the Lac qui Parle Lake Watershed Project Association, the Army Corps of Engineers and municipalities to maximize efficiency in solving water related problems.*

Area II will continue to cooperate with local, state, and federal agencies by keeping the agencies up to date on the projects in which Area II is involved in or considering for the work plan. The Coordinator shall make every effort to attend meetings and related functions which concern flooding or the resulting water quality.

Objective D: Increase surface water quality monitoring in Lac qui Parle County.

Action No. 3: *Monitor water quality out-flows of storm water drains, ditches, and tributaries to the high priority waters in the county.*

Area II shall consider the listing of proposed monitoring sites within the County on an annual basis. This listing among others submitted to the Board will be prioritized and eligible for use of the monitoring equipment available through Area II. The County shall encumber the expense of water quality analyses and the manpower to operate the monitoring equipment.

Lac qui Parle County continued...

GOAL 2: IMPROVE CONTROL OF SURFACE WATER IN THE COUNTY.

Objective B: Install structures and promote practices to control runoff.

- Action No. 1: *Increase water storage through temporary and permanent water retention structures or other appropriate technologies. Target areas such as the West Branch of the Lac qui Parle River, Florida Creek, the Yellow Bank River, Lost Creek, and others where cross-over flooding is a significant problem.*
- Action No. 2: *Identify and prioritize drained but potentially restorable wetlands for voluntary restoration programs for flood control, recreation, and recharge protection.*
- Action No. 5: *Cooperate with South Dakota to build retention structures in the hills of eastern South Dakota to reduce flooding in the headwaters of rivers flowing into Western Minnesota. Coordinate and support work with Area II.*

Area II shall continue to utilize the technical information obtained in the Type IV and 639 Study for site location and preliminary design, especially at those critical cross-over points listed above. The drainage of wetlands with the resulting loss of natural flood water storage has increased the severity of the cross-over flooding problem. Area II encourages Lac qui Parle County to inventory and submit a listing of potentially restorable wetlands for further evaluation by Area II staff for their potential benefit for flood reduction while keeping in mind the wildlife and water quality issues that make wetlands so important. With Area II's capability of cost-sharing projects 50% across the state border, Area II shall continue to pursue projects on the South Dakota side of the watershed that will benefit Lac qui Parle County.

At present, Lac qui Parle County is one of the two member counties that does not have a project designed or funded through Area II. This has been made a top priority as mentioned in the foregoing Vision Statement.

LINCOLN COUNTY

Lincoln County presents an interesting scenario through the geographic drainage of the county with the northern two-thirds of the county draining to the North Branch of the Yellow Medicine River and South Branch of the Lac qui Parle River while the southern one-third of the county drains into the Redwood River Subbasin. The remaining portions of the county drain in a southwesterly direction to the watersheds of the Rock and Big Sioux Rivers outside of the Area II watershed.

The Coteau des Prairies, the most unique topographical feature of the region, creates these drainage patterns with elevations ranging from 1900 to 2000 feet above sea level. The presence of this divide results in relatively small streams and rivers but requires inter-agency cooperation for successful flood damage reduction programs. This is seen in the efforts put forth by Area II, RCRCA, Yellow Medicine River and Lac qui Parle-Yellow Bank watershed districts.

Projects within Lincoln County of which Area II has participated are as follows:

- HAUSCHILD-THANGE RESERVOIR (1980)
7 miles E and 2 miles N of Ivanhoe, Section 25 of Limestone Township. T112N R44W.
Yellow Medicine River watershed.
- CALLENS-HAUSCHILD ROAD RETENTION (1989)
Section 3 of Limestone and Section 34 of Alta Vista Townships. T112/113N R44W.
Tributary to North Branch Yellow Medicine River watershed.
- DANDURAND ROAD RETENTION (1993)
Sections 15 and 16 of Alta Vista Township. T113N R44W.
Unnamed tributary to North Branch Yellow Medicine River watershed.
- CSAH 19 ROAD RETENTION (1993)
Sections 13 and 24 of Marble Township. T113N R45W.
North Fork Yellow Medicine River watershed.
- GORECKI-JEREMIASON ROAD RETENTION (1995 scheduled construction)
Sections 1,2,11,12 of Limestone Township. T112N R44W.
Tributary to North Branch Yellow Medicine River watershed.

In reference to the Lincoln County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL I: INCREASE RECREATIONAL OPPORTUNITIES BY IMPROVING THE WATER QUALITY OF LINCOLN COUNTY'S LAKES AND STREAMS.

Objective No. 1: Compile information regarding surface water quality.

Action No. 2: *Assess sedimentation in drainage ditches through analyses of individual drainage ditch watersheds. This will be done through the County Engineer's office using data obtained by the 639 Study and appropriate computer models.*

Lincoln County continued...

Area II shall provide the necessary information from the 639 Study and Type IV Study as needed in the ditch sediment assessment.

Objective No. 2: Reduce the volume of sediment and nutrients reaching county lakes, streams, and wetlands.

Action No. 2: *Construct impoundments along the Coteau to decrease sedimentation in lakes, streams, and wetlands. This will be accomplished through the efforts of the Lac qui Parle - Yellow Bank and Yellow Medicine Watershed Districts, Area II Minnesota River Basin Projects, Inc. (Area II) and Redwood-Cottonwood Rivers Control Area (RCRCA), and it is dependent upon state and federal funding.*

Area II shall continue to utilize the technical information obtained in the Type IV and 639 Study for site location and preliminary design, especially at those critical points at the base of the Coteau. Funding for these larger, multi-purpose structures is to be sought from outside funding such as the State of Minnesota's Capitol Improvement Bonds.

GOAL III: IMPROVE SURFACE WATER MANAGEMENT TO DECREASE FLOODING IN LINCOLN AND ADJACENT COUNTIES.

Objective No. 1: Incorporate flood control benefits into future road and bridge replacements.

Action No. 1: *Analyze road crossings to determine what effect changes in elevations will have on downstream flow rates. The analysis will utilize data collected through the 639 Study.*

Action No. 2: *Develop and rank a list of potential road projects through the highway engineer's office with assistance from Area II technical staff.*

Action No. 3: *Finance improvements with a combination of Area II, state bridge bonding and Special Project (BWSR) funds.*

Area II shall continue to provide technical and financial assistance for the construction of road retention structures within Lincoln County as well as the other member counties of Area II. The effectiveness of road retention structures will be emphasized with the greatest advantage being taken to incorporate road retention into scheduled bridge or culvert replacements. Area II will strive to base retention design on a watershed basis where the effects of all structures within a watershed can be analyzed and updated to reflect the most accurate hydraulic conditions. Lincoln County shall submit a prioritized listing of project sites on an annual basis to the Board of Directors for their possible inclusion on the Area II work plan and for funding eligibility.

Objective No. 2: Restore small dams in the County that were previously constructed by landowners with Agricultural Conservation Program (ACP) cost-share funds.

Action No. 1: *Develop a list of dams in need of repairs. This will be done by the Watershed District and the SWCD. Seek input from DNR and SCS on proper structural design.*

Action No. 2: *Rank structures according to criteria developed by the watershed districts and the SWCD.*

Lincoln County continued...

Action No. 3: *Repair a minimum of one dam per year.*

Action No. 4: *Seek funds from existing cost-share programs.*

Area II, working in conjunction with the SCS and BWSR, shall investigate repair methodologies which take into consideration the following factors: cost, age of the structure, extended life of the structure, and flood control benefits that the structure can provide. Area II will continue its search for outside funding for the repair work to be done on the privately owned structures.

Objective No. 4: Re-establish drained wetlands in areas having flood damage reduction benefits.

Action No. 1: *Develop a list of potential sites based on data previously compiled. This will be done through the efforts of the watershed districts, SWCD, SCS, and County Engineer's office.*

Action No. 2: *Work with appropriate state and federal agencies to provide equitable compensation to landowners for establishing wetlands.*

Action No. 3: *Subject all new ditch systems and proposed improvements to a careful appraisal of their contribution to downstream flooding. This will be accomplished through use of 639 Study data and appropriate computer models (e.g., TR-20) and will be the responsibility of the ditch authority.*

The drainage of wetlands with the resulting loss of natural flood water storage has increased the severity of the cross-over flooding problem. Area II encourages Lincoln County to inventory and submit a listing of potentially restorable wetlands for further evaluation by Area II staff for their potential benefit for flood reduction while keeping in mind the wildlife and water quality issues that make wetlands so important. Further encouragement is extended to the County to urge landowners to participate in the Reinvest in Minnesota (RIM) and other programs overseen by the Board of Water and Soil Resources (BWSR) for land conservation. Area II promotes flood control on a watershed-based approach so that all existing structures are taken into consideration and the most accurate hydraulic and hydrologic conditions are utilized.

LYON COUNTY

Lyon County, in similar regards to Cottonwood County, is unique as it contains five individual watersheds: Yellow Medicine River draining the northwestern portion, Redwood River draining the central portion, Cottonwood River draining the southeastern portion, Middle Des Moines River draining the south central portion, and the Minnesota River. The Coteau des Prairies intercepts the county in the southwestern corner with an elevation of 1719 feet above sea level and then drops 500 feet in 16 miles. This abrupt drop is the cause of widespread and frequent flooding.

As stated in the 639 Study (dated 1989), 22,000 acres in Lyon County are contained within the 100 year floodplain. Nearly half of that amount, 10,538 acres, are in the Redwood River watershed, 8,611 acres within the Yellow Medicine River watershed, and the remainder in the Cottonwood River watershed. The economic losses are estimated at \$413,000 annually if flood reduction measures are not taken. Of these losses, the greatest are within the Cottonwood river watershed as illustrated:

Meadow Creek	\$10,000 per mile
Three Mile Creek	\$ 2,700 per mile
Redwood River	\$ 3,500 per mile
South Branch of the Yellow Medicine River	\$ 1,500 per mile.

Projects within Lyon County for which Area II has participated are as follows:

- SONSTEGARD-TELSTE RESERVOIR (1983)

5 miles south and 1/2 mile west of Minneota, Section 22 of Nordland Twp. T112N R43W.
Unnamed tributary to the South Branch Yellow Medicine River watershed.

- NORDLAND TOWNSHIP ROAD RETENTION (1989)

Sections 7,8,16,17 of Nordland Township. T112N R43W.
Unnamed tributary to North Branch Yellow Medicine River watershed.

- SODUS TOWNSHIP ROAD RETENTION (1989)

Sections 8 and 9 of Sodus Township. T110N R41W.
Unnamed tributary to the Meadow Creek watershed.

- CSAH 20 ROAD RETENTION (1989)

Sections 3 and 10 of Sodus Township. T110N R41W.
Meadow Creek watershed to the Cottonwood River.

- EIDSVOLD TOWNSHIP ROAD RETENTION (1989)

Sections 31 and 32 of Eidsvold Township. T113N R43W.
Unnamed tributary to North Branch Yellow Medicine River watershed.

- COUNTY ROAD 76 ROAD RETENTION (1990)

Sections 29 and 32 of Nordland Township. T112N R43W.
South Branch of the Yellow Medicine River watershed.

- ISLAND LAKE TOWNSHIP ROAD RETENTION (1993)

Sections 13 and 14 of Island Lake Township. T111N R43W.
Three Mile Creek watershed to the Cottonwood River.

Lyon County continued...

In reference to the Lyon County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL: REDUCE FLOODING

Objective No. 1: Identify and Monitor Critical Water Resources.

Action No. 1: *Expand the streamflow gaging network.*

Area II shall assist Lyon County to expand their current streamflow network consisting of the two USGS streamflow gages at the following locations:

South Branch of the Yellow Medicine River

1/2 mile northwest of Minneota, MN and 6 miles upstream from the mouth of the Yellow Medicine River.

Mean Discharge of 26.6 cfs.

Maximum Discharge of 4430 cfs on April 8, 1969.

Redwood River

2 miles upstream from the diversion structure on the southwest edge of Marshall, MN.

Mean Discharge of 53.7 cfs.

Maximum Discharge of 5370 cfs on June 17, 1957.

Lyon County shall submit a listing of monitoring sites within the county on an annual basis for the Area II Board of Directors to consider among other submitted lists and investigate implementation of water sampling and flow metering at those locations on a priority basis.

Objective No. 3: Assess Structural Solutions to Flooding.

Action No. 1: *Inventory county-wide flood control sites.*

Action No. 2: *Inventory and assess private and public dams.*

Action No. 3: *Develop a prioritized list of proposed structural activities utilizing information collected by Area II, RCRC, and SCS. The Marshall flood control project in conjunction with RW-22 will have top priority.*

Area II, in conjunction with HDR Engineering, Inc. and Lyon County, shall continue the plans and design for the RW-22 Flood Control Structure in Section 26 of Shelburne Township. Water quality monitoring sites on the Redwood River immediately downstream of the dam site and approximately 3.5 miles upstream were installed May 27, 1994 with the assistance of Mark Hanson, Region IV MPCA and RCRC. Area II will be responsible for the collection of samples and downloading of the flow measurements as the project continues and up to a time when MPCA determines that monitoring is no longer necessary. RW-22 in conjunction with the proposed Corps of Engineers flood control project for the City of Marshall are considered top priority in the county water plan. Area II will continue to pursue other reservoir and road retention sites throughout the county with special emphasis on those critical areas of significant damages and cross-over flooding.

Lyon County continued...

Objective No. 4: Minimize Downstream Flooding Effects of Ditch Projects.

Action No. 3: *Build holding reservoirs in ditches wherever possible.*

Area II shall assist in providing hydraulic and hydrologic information in relation to construction of holding reservoirs for county ditch improvements. Area II recognizes the importance of all flood reduction projects and wants to ensure that these efforts are done as cost-effective as possible as not to render other in-place projects less effective.

Objective No. 5: Improve Communication Between Agencies and Organizations Concerned with Flooding.

Action No. 3: *Convert data collected by the Upper Minnesota River Subbasins Study (Public Law 87-639) into information that can be readily used by local personnel.*

Area II will provide the information and answer any questions or concerns as they arise.

Objective No. 7: Repair Existing Farm Ponds for the Purpose of Reducing Flooding and Sedimentation.

Action No. 1: *Coordinate with other counties.*

Action No. 2: *Develop economical method for repairs.*

Action No. 3: *Develop plan for prioritizing repairs.*

Action No. 4: *Seek funding for repairs.*

Area II shall assist Lyon County in its pursuit to repair existing farm ponds constructed with ACP funds and SCS small dams for the reduction of flooding and sedimentation. These efforts shall be coordinated with neighboring counties to develop economical methods for repair based on prioritization and a committed funding source while also considering age and extended life of the structure and possible flood benefits that the structure may provide.

Objective No. 8: Establish Regional Coordination of Flood Control Activities.

Action No. 1: *Maintain participation and support of RCRC and Area II.*

Area II shall be a viable part of Lyon County's efforts to improve communication between the local, state, and federal agencies and organizations concerned with the recurrent flooding of southwestern Minnesota. The Area II Coordinator shall take every opportunity to attend Lyon County Water Task Force meetings and other activities related to flooding or water quality issues.

Lyon County continued...

Objective No. 9: Incorporate Flood Control Benefits into future Road and Bridge Replacements.

- Action No. 1: *Analyze road crossings to determine what effect changes in elevations will have on downstream flow rates. The analysis will utilize data collected through the 639 Study.*
- Action No. 2: *Develop and rank a list of potential road projects through the highway engineer's office with assistance from Area II technical staff.*
- Action No. 3: *Finance improvements with a combination of Area II, state bridge bonding and Special Project (BWSR) funds.*

Area II shall continue to provide technical and financial assistance for the construction of road retention structures within Lyon County as well as the other member counties of Area II. Due to the assertive efforts by former Lyon County Engineer, Tom Behm, Lyon County is the foundation of proof for the effectiveness of road retention structures. The greatest advantage is taken when flood control is incorporated into a bridge or culvert replacement with a significant decrease in cost for most cases. Area II promotes retention design on a watershed basis where the effects of all structures within a watershed can be analyzed and updated to reflect the most accurate hydraulic conditions. Area II will also continue to seek outside funding sources such as the State of Minnesota Bonding Funds, BWSR Special Project Grants, and DNR Flood Damage Reduction Grants for further implementation of road retention technology.

GOAL: IMPROVE SURFACE WATER QUALITY

Objective No. 2: Assess Existing Water Quality of Rivers and Lakes.

- Action No. 2: *Determine the need for water quality monitoring on other streams and rivers.*

In conjunction with DNR and MPCA, Area II encourages Lyon County to submit an annual plan for water quality monitoring within the county to the Area II Board of Directors for their possible inclusion on the Area II work plan and for use of the monitoring equipment available through Area II. Area II shall consider this list along with others for prioritization.

MURRAY COUNTY

Murray County is principally drained by the Des Moines River watershed with only a small portion of the northwestern corner and northeastern corner contributing to the Area II watershed. The rolling topography is the result of the Bemis Moraine (Buffalo Ridge) which reaches elevations in excess of 1900 feet above sea level. The northeastern part of the county contains another moraine approximately 300 feet lower than the Buffalo Ridge. Between the ridges is a plain gradually sloping to the northeast. Rivers and streams which originate in the ridges generally flow southeasterly except for the northwest corner flowing due north to the Redwood River and the northeast corner flowing northeasterly to Plum Creek. These streams have few tributaries but numerous networks of marshes, swamps, ponds, and lakes.

In reference to the Murray County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL 1: IMPROVE THE QUALITY OF MURRAY COUNTY'S SURFACE WATER TO ENHANCE RECREATION AND ECONOMIC OPPORTUNITIES.

Objective F: Develop wetlands within the County for their value for filtering surface water, recharging ground water and wildlife habitat.

Along with the environmental factors associated with wetlands, they also serve as a natural water retention system that includes flood control benefits. Area II encourages Murray County to inventory and submit a listing of the potentially restorable wetlands within the county to Area II for technical assistance in evaluating the restorability and possible benefits for flood reduction. Further encouragement is extended to the County to urge landowners to participate in the Reinvest in Minnesota (RIM) and other programs overseen by the Board of Water and Soil Resources (BWSR) for land conservation.

Objective H: Establish a board to foster communication between the Middle Des Moines Watershed District and other watersheds represented in Murray County.

Action No. 1: *Continued support of joint powers boards (RCRCA and Area II).*

Action No. 2: *Work toward implementation of flood reduction plans.*

Area II will continue to cooperate with local, state, and federal agencies by keeping the agencies up to date on the projects in which Area II is involved in or considering for the work plan. The Coordinator shall make every effort to attend meetings and related functions which effect flooding or the resulting water quality for southwestern Minnesota. Upon completion of the Design Guidelines Manual for Road Retention Construction, these methodologies can be implemented state-wide and in those other watershed areas not included within Area II.

At present, Murray County is one of the two member counties that does not contain a project designed or funded through Area II. This has been made a top priority as mentioned in the foregoing Vision Statement.

PIPESTONE COUNTY

The elevation of Pipestone County in excess of 1950 feet above sea level is among the highest in Minnesota due to the Coteau des Prairies, a ridge crossing the northeastern part of the county from northwest to southeast dividing the Mississippi and Missouri River basins. From the top of the Coteau to the northeast corner of the county, the elevation drops 250 feet in five miles. Northeast of the Coteau, the area is characterized by gently undulating terrain with short, irregular slopes with many common closed depressions forming marshes, ponds, and swamps.

Projects within Pipestone County for which Area II has participated are as follows:

• MINETT-KRANTZ RESERVOIR (1986)

2 miles south and 1/2 mile east of Ruthton, Section 23 of Aetna Township. T108N R44W.
Unnamed tributary to the Redwood River watershed.

In reference to the Pipestone County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL 3: IMPROVE MANAGEMENT OF SURFACE WATER SUPPLIES

Objective No. 2: Restore drained wetlands where practical.

Area II encourages Pipestone County to inventory and submit a listing of potentially restorable wetlands within the county to Area II for technical assistance in evaluating the flood control benefits while keeping in mind the wildlife and water quality issues that make wetlands so important. Further encouragement is extended to the County to urge landowners to participate in the Reinvest in Minnesota (RIM) and other programs overseen by the Board of Water and Soil Resources for land conservation.

Objective No. 3: Institute a flood damage reduction program within the Rock River Watershed.

Upon completion of the Design Guidelines Manual for Road Retention Construction, these methodologies can be implemented state-wide and in those other watershed areas not included within Area II.

Objective No. 5: Incorporate flood control benefits into future road and bridge replacements.

Action No. 1: *Analyze road crossings to determine what effect change in elevation will have on downstream flow rates.*

Action No. 2: *Develop and rank a list of potential road projects through the highway engineer's office with assistance from Area II technical staff.*

Action No. 3: *Seek funding from Area II, state bridge bonding, and BWSR special project funds.*

Pipestone County continued...

Area II shall continue to provide technical and financial assistance for the construction of road retention structures within Pipestone County as well as the other member counties of Area II. The effectiveness of road retention structures will be emphasized with the greatest advantage being taken to incorporate road retention into scheduled bridge or culvert replacements. Area II will strive to base retention design on a watershed basis where the effects of all structures within a watershed can be analyzed and updated to reflect the most accurate hydraulic conditions. Pipestone County shall submit a prioritized listing of project sites on an annual basis to the Board of Directors for their possible inclusion on the Area II work plan and funding.

REDWOOD COUNTY

Redwood County poses an interesting drainage scenario with all its creeks and rivers draining directly into the Minnesota River to the north. Echo, Rice, and Boiling Springs Creeks in the northern portion of the County and Crow and Wabasha Creeks in the northeastern portion contribute directly to the Minnesota River. Sleepy Eye and Coal Mine Creek in the southern portion flow into the Cottonwood River which also empties into the Minnesota River.

The southwestern portion of the county contains the Coteau with elevations of 1450 feet above sea level with a county average of 1,100 feet. The Coteau, with its steep slopes and deep ravines, is the origin for the tributaries to the Cottonwood River. The Redwood River meanders across the broad, flat plain and descends rapidly through a deep gorge near Redwood Falls and into the Minnesota River. Upland from Redwood Falls, the slope averages four feet per mile until downstream of Redwood Falls where it increases to 20 feet per mile.

Redwood County is home to one USGS gaging station on the Redwood River located 8.5 miles upstream from the river's mouth with a mean discharge of 120 cfs and maximum discharge of 19,700 cfs recorded in 1957. Partial stream flow stations are installed on Spring Creek and an unnamed tributary to the Cottonwood River.

As established in the 639 Study (dated 1989), approximately 7,000 acres of Redwood County are within the 100 year floodplain of the Cottonwood River. Annual damages amount to \$170,000, or \$4,278 per river mile. Approximately 6,000 acres of Redwood County are within the 100 year floodplain of the Redwood River. Annual damages amount to \$47,000, or \$1,300 per river mile. A particular eight mile reach located near Vesta averaged damages of \$3,600 per mile.

Projects within Redwood County for which Area II has participated are as follows:

- **WALNUT GROVE RESERVOIR (LAKE LAURA) (1979)**

1 mile W and 1/2 mile S of Walnut Grove, Section 25 of Springdale Twp. T109N R39W.
Unnamed tributary to Plum Creek watershed.

- **HOFFMAN/TRUEDSON ROAD RETENTION (1995 scheduled construction)**

Sections 23 and 24, Gales Township. T110N R39W.
Unnamed tributary to the Cottonwood River watershed.

In reference to the Redwood County Comprehensive Local Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL 2: IMPROVE WATER QUALITY OF COUNTY RIVERS, STREAMS AND LAKES.

Objective E: Gather additional water quality information to help assess nonpoint source pollution problems in the County.

Action No. 2: *Enroll Lake Laura in the MPCA Citizen Lake-Monitoring Program and work with MPCA to establish an ongoing water quality sampling program for the lake.*

Redwood County continued...

In conjunction with DNR and MPCA, Area II encourages Lyon County to submit an annual plan for water quality monitoring to the Area II Board of Directors for their possible inclusion on the work plan and use of the monitoring equipment available through Area II. Area II shall consider this list along with others for prioritization.

GOAL 3: REDUCE FLOOD DAMAGES THROUGH IMPROVED SURFACE WATER MANAGEMENT.

Objective A: Develop a maintenance and repair program for small, multi-purpose reservoirs.

Action No. 1: *In cooperation with adjacent counties, compile a list of dams in need of repair along with reasonable cost estimates.*

Action No. 2: *Develop criteria for prioritizing repairs.*

Action No. 3: *Initiate discussions with state and federal agencies including BWSR, SCS, and ASCS to develop a workable cost-share program for financing dam repairs.*

Area II shall assist Redwood County in its pursuit to repair existing farm ponds constructed with ACP funds and SCS small dams for the reduction of flooding and sedimentation. These efforts shall be coordinated with neighboring counties to develop economical methods for repair based on prioritization and a committed funding source while also considering age and extended life of the structure and the potential flood control benefits that the structure may provide.

Objective B: Support construction of reservoirs and related flood damage reduction structures as identified in flood control studies such as PL 87-639.

Action No. 1: *Work through Area II and RCRCRA to identify and finance flood damage reduction reservoirs.*

Action No. 2: *Work with state and federal agencies to develop a cost-share program for constructing small multi-purpose reservoirs.*

Action No. 3: *Wherever possible, design road and bridge replacements in a manner that provides reductions in peak flows.*

Area II shall continue to provide technical and financial assistance for the construction of road retention structures and multi-purpose reservoirs within Redwood County. The effectiveness of road retention structures will be emphasized with the greatest advantage being taken to incorporate road retention into scheduled bridge or culvert replacements. Area II promotes road retention design on a watershed basis where the effects of all structures within a watershed can be analyzed and updated to reflect the most accurate hydraulic conditions. Redwood County shall submit a listing of possible dam and road retention project sites on an annual basis to the Board of Directors for their possible inclusion on the Area II work plan and for funding eligibility.

Redwood County continued...

Objective C: Restore former wetland areas where practical, and protect those that already exist.

Action No. 2: Establish a priority list of sites based on potential water quality and flood damage reduction benefits.

The drainage of wetlands with the resulting loss of natural flood water storage has increased the severity of the cross-over flooding problem. Area II encourages Redwood County to inventory and submit a listing of potentially restorable wetlands for further evaluation by Area II for their potential benefit for flood reduction while keeping in mind the wildlife and water quality issues that make wetlands so important. Further encouragement is extended to the County to urge landowners to participate in the Reinvest in Minnesota (RIM) and other programs overseen by the Board of Water and Soil Resources for land conservation.

YELLOW MEDICINE COUNTY

The central portion of the county experiences frequent flooding due to the steep slope of the Yellow Medicine River which drops as much as 300 feet in six miles where the river originates in the Coteau des Prairies. Elevations range from 1714 feet above sea level in the southwestern corner of the county, to 1380 feet in the northwestern corner, to 920 feet in the northeastern tip, to 1059 feet in the southeastern corner. This change in elevation creates annual flash flood threats during spring runoff and heavy summer storms. Sedimentation is most severe in the downstream portions of the Yellow Medicine River and streams within the Lac qui Parle River watershed. The SCS has estimated that 58,000 tons of sediment is annually deposited into the Minnesota River from the Yellow Medicine River alone.

Through the findings of the 639 Study (dated 1989), the Corps of Engineers and Soil Conservation Service estimated that 27,657 acres of Yellow Medicine County is in the 100 year flood plain of the Lac qui Parle and Yellow Medicine River watersheds. The Lac qui Parle watershed suffers annual damages of \$190,030 with \$471,080 in the Yellow Medicine River watershed.

Yellow Medicine County is home to two USGS Stream Flow Gages at the following locations:

Minnesota River

Downstream from the mouth of the Chippewa River.

Mean Discharge of 716 cfs.

Maximum Discharge of 35,100 cfs recorded on April 12, 1969.

Yellow Medicine River

Near Granite Falls.

Mean Discharge of 117 cfs.

Maximum Discharge of 17,200 cfs recorded on April 10, 1969.

Projects within Yellow Medicine County for which Area II has participated are as follows:

•**FALES-VANHYTE RESERVOIR (LAKE JOHN) (1981)**

2 miles W of Porter, Section 36 of Norman Township. T114N R45W.

Unnamed tributary to Mud Creek watershed.

•**DEL CLARK RESERVOIR (CANBY CREEK R1) (1985)**

1 mile S and 1/2 mile W of Canby, Section 9 of Norman Township. T114N R45W.

Canby Creek watershed.

•**CSAH 16 ROAD RETENTION (1994)**

1 mile NW of Porter, Section 32 of Wergeland Township. T114N R44W.

Unnamed tributary to Mud Creek watershed.

Yellow Medicine County continued...

In reference to the Yellow Medicine County Comprehensive Water Plan (dated 1990), the following objectives and goals have been identified for Area II participation:

GOAL 3: TO PROTECT SURFACE AND GROUND WATER QUANTITY.

Objective No. 2: Expand surface water monitoring.

Action No. 3: *Request that the U.S. Geological Survey, or DNR if appropriate, establish more stream flow gauging stations on the Minnesota River and other rivers in the County (e.g., Yellow Medicine, Lac qui Parle, Canby and Lazarus Creek). RCRCA, Area II, and SWCD should submit a list of locations for future surface water monitoring stations in the County.*

Action No. 4: *Request that MPCA institute a broader network of water quality monitoring stations on County rivers and streams. Considerably more data could be collected from existing stations as well. (Canby, Lac qui Parle, Minnesota River, Yellow Medicine River and other creeks.)*

In conjunction with DNR and MPCA, Lyon County shall submit an annual plan for water quality monitoring to the Area II Board of Directors for their possible inclusion on the work plan and use of the monitoring equipment available through Area II. Area II shall consider this list along with others for prioritization.

Objective No. 3: Preserve existing wetlands and restore drained wetlands having flood damage reduction, wildlife, recreational, and groundwater recharge benefits, where practical.

Action No. 4: *Subject all new ditch systems and proposed improvements to a careful appraisal of their contribution to downstream flooding. This will be accomplished through use of 639 Study data and appropriate computer models (e.g., TR-20) and will be the responsibility of the ditch authority.*

Area II shall provide the necessary information and address any questions or concerns as they arise.

GOAL 4: IMPROVE SURFACE WATER MANAGEMENT TO DECREASE FLOODING IN YELLOW MEDICINE AND ADJACENT COUNTIES.

Objective No. 1: Incorporate flood control benefits into future road and bridge replacements.

Action No. 1. *Analyze road crossings to determine what effect changes in elevations will have on downstream flow rates. The analysis will utilize data collected through the 639 Study.*

Action No. 2: *Develop and rank a list of potential road projects through the highway engineer's office with assistance from Area II technical staff.*

Action No. 3: *Finance improvements with a combination of Area II, state bridge bonding and Special Project (BWSR) funds.*

Action No. 4: *Seek funds from existing cost-share programs.*

Yellow Medicine County continued...

Area II shall continue to provide technical and financial assistance for the construction of road retention structures within Yellow Medicine County. The effectiveness of road retention structures will be emphasized with the greatest advantage being taken to incorporate road retention into scheduled bridge or culvert replacements. Area II promotes road retention design on a watershed basis where the effects of all structures within a watershed can be analyzed and updated to reflect the most accurate hydraulic conditions. Yellow Medicine County shall submit a prioritized listing of project sites on an annual basis to the Board of Directors for their possible inclusion on the Area II work plan and for funding eligibility.

Objective No. 2: Restore small dams in the county that were previously constructed by landowners with agricultural conservation program (ACP) cost-share funds.

- Action No. 1: *Develop a list of dams in need of repair. This will be done by the Watershed Districts and the SWCD. Seek input from DNR and SCS on proper structural design.*
- Action No. 2: *Rank structures according to criteria developed by the watershed districts and the SWCD.*
- Action No. 3: *Seek funds from existing cost-share programs.*

Area II shall assist Yellow Medicine County in its pursuit to repair existing farm ponds constructed with ACP funds and SCS small dams for the reduction of flooding and sedimentation. These efforts shall be coordinated with neighboring counties to develop economical methods for repair based on prioritization and a committed funding source while also considering age, extended life of the structure, and any flood control benefits that it may provide.

Objective No. 3: Assist in construction of flood damage reduction reservoirs as identified in the 639 Study.

- Action No. 1: *This will be an ongoing effort accomplished through continued financial support of Area II and RCRC.*
- Action No. 2: *Pursue funds from available sources including the DNR Flood Damage Reduction Grant Program.*

Area II shall continue to provide technical and financial assistance for the construction of dry dam and multi-purpose reservoirs within Yellow Medicine County as well as the other member counties of Area II. Area II will strive to base their engineering design on a watershed basis where the effects of all structures within a watershed can be analyzed and updated to reflect the most accurate hydraulic conditions.

Objective No. 4: Preserve existing wetlands and restore drained basins having flood damage reduction potential.

- Action No. 2: *Support efforts to restore wetlands on private land that have both flood control and other environmental benefits.*

Yellow Medicine County continued...

The drainage of wetlands with the resulting loss of natural flood water storage has increased the severity of the cross-over flooding problem. Area II encourages Yellow Medicine County to inventory and submit a listing of potentially restorable wetlands for further evaluation by Area II staff for their potential benefit for flood reduction while keeping in mind the wildlife and water quality issues that make wetlands so important. Further encouragement is extended to the County to urge landowners to participate in the Reinvest in Minnesota (RIM) and other programs overseen by the Board of Water and Soil Resources (BWSR) for land conservation.

Area II is quite unique in that it contains two watershed districts, the Yellow Medicine River and Lac qui Parle-Yellow Bank, and also a joint powers board entitled the Redwood Cottonwood Rivers Control Area (RCRCA). RCRCA's purpose is to develop and implement plans with regard to the protection of property from flood damage, erosion control, pollution and sedimentation prevention, and maintaining and improving the quality of water in the streams, lakes, and groundwater in accordance with Section 471:59 of Minnesota Statutes.

Watershed districts are required to update their overall plans every ten years to ensure consistency with plans and programs overseen by the Board of Water and Soil Resources. Currently, both districts' plans are outdated although the Yellow Medicine River Watershed District's Overall Plan is in a revised draft form. Area II encourages the districts to update the plans for further consideration by Area II and any revision to this strategic plan. RCRCA has not been required to formulate an overall plan and will be overlooked at this time. Area II will continue to participate in RCRCA's mission and consider their goals and objectives within the strategic plan of action. While the districts' plans are not compliance, they contain an enormous amount of information valuable to Area II as considered in the following section.

YELLOW MEDICINE RIVER WATERSHED DISTRICT

The Yellow Medicine River Watershed District covers approximately 685 square miles of which 39% lie in Lincoln County, 23% lie in Lyon County, and 38% lie in Yellow Medicine County. The district measures 32 miles north and south by 50 miles east and west. The headwaters of the watershed originate at Lake Shaokatan located in the Coteau that occupies nearly one-third of the area. The remainder of the area is characterized by flat to gently undulating land except in the vicinity of the Minnesota River valley. The highest elevation within in the district is at 1,970 feet above sea level dropping down to 860 feet below Granite Falls with a range of 1,100 feet.

As identified in the Type IV Minnesota River Basin Report compile by the SCS in 1977, the problems within the watershed follow in order of severity: 1) flooding, 2) drainage, 3) erosion, 4) pollution, and 5) recreation, fish and wildlife. Flooding is the foremost problem which was the primary incentive for the creation of the Watershed District. The P.L. 87-639 Study was completed in 1989 as a joint effort by the SCS and U.S. Army Corps of Engineers. This study concluded that flood damages will continue to increase in the Yellow Medicine River watershed with 96,700 acres subject to flooding resulting in \$599,410 damages annually.

There are four major tributaries to the main stem of the Yellow Medicine River: the South Branch, Mud Creek, the North Branch, and Spring Creek. Cross-over flooding from one watershed to another is a severe problem for this particular watershed. There is a very real possibility that without intervention, the normal flow of the Lac qui Parle River to the north of the watershed boundary, may eventually become a tributary of the Yellow Medicine River. Natural, but yet substantial, overflows occur into Spring Creek in Sections 11 and 23 of Oshkosh Township; Mud Creek in Section 5 and 6 of Wergeland Township; and Section 13 of Norman Township, all in Yellow Medicine County. Miscellaneous overflows occur at the following sites:

- 1) North Branch of the Yellow Medicine into Mud Creek just east of Porter, MN.
- 2) Mud Creek into Spring Creek in Wergeland Township (Yellow Medicine County) about seven miles east of Canby.
- 3) Internal crossover in two tributaries to Mud Creek between Section 24 of Wergeland Township and Section 19 of Burton Township in Yellow Medicine County.
- 4) Yellow Medicine River into Spring Creek in Sections 26, 28, 29, and 31 of Normania Township in Yellow Medicine County.
- 5) South Branch of the Yellow Medicine into the watershed of Judicial Ditch 7 in Section 18, of Westerheim Township in Lyon County.
- 6) Yellow Medicine River watershed into the Redwood River in Sections 14 and 23 of Westerheim Township, and Sections 18 and 19 of Grandview Township in Lyon County.
- 7) Redwood River into the South Branch of the Yellow Medicine in Section 7 of Diamond Lake Township in Lincoln County.

To most effectively address these problems, the watershed district has identified upland retention structures near the flood-prone areas. Besides providing temporary control of excess flood waters, the site also serves as a sediment basin to catch the unwanted sediments that harm the

Yellow Medicine River Watershed District continued...

watercourses and ditch systems. Wetland restoration is another viable alternative that replaces the natural retention basins that existed prior to their draining. The watershed district will continue to pursue larger dams and reservoirs as suggested by the 639 Study.

The overall goal for the Yellow Medicine Watershed District Board of Managers is to conserve and make provident use of the waters and related resources within the District so as to improve the economy and general welfare for the benefit of its present and future residents, as stated in the draft revision of their overall plan dated May 1994. Of their stated objectives, Area II may participate in the following:

A) Control or alleviate damage from flood waters.

2) Restoration of wetlands is a viable option to recreate the natural water retentions that functioned prior to their draining. Area II encourages the watershed district to review their respective member counties' inventories of potentially restorable wetlands as submitted to Area II for further evaluation. Further encouragement is extended to the watershed district to urge landowners to participate in the Reinvest in Minnesota (RIM) and other land conservation programs overseen by the Board of Water and Soil Resources (BWSR).

4) Area II will continue to promote the construction of large, multi-purpose reservoirs by providing the technical assistance and the hydraulic and hydrological information necessary for preliminary design. Outside funding sources such as State of Minnesota Capitol Improvement Bonds and DNR Flood Damage Reduction Grants will be sought to finance the cost of such developments.

5) The watershed district feels that the area is deficient in stream gaging and flow recording. The watershed district shall compile and prioritize a listing of possible stream gaging sites to be submitted to the Board of Directors for Area II. Area II will consider this list among others to prioritize and assign the monitoring equipment available through Area II. This monitoring will provide the information needed to determine how to protect and enhance the water quality in the district's watercourses and water basins.

7) Area II will continue their participation in watershed district projects as they have willingly sponsored many township road retentions and reservoirs. Area II can provide the technical assistance necessary for design and may choose to participate in funding for construction. Funding for these structures can be sought from DNR Flood Damage Reduction Grants, neighboring counties, and Area II.

11) In conjunction with the member counties of the district, repair of small dams constructed by the SCS or with ACP funds is an issue. Area II will work cooperatively with the SCS and BWSR to find a committed funding source and devise methodologies for repair based on cost, age of the structure, and life expectancy of the structure.

LAC QUI PARLE-YELLOW BANK WATERSHED DISTRICT

The Lac qui Parle-Yellow Bank Watershed District was established with the general purpose of providing a public corporation to wisely manage and conserve the waters and natural resources of the state within the territory of the Watershed District.

There are 976 square miles within the watershed boundaries with 73% lying in Lac qui Parle County, 20% in Yellow Medicine County, and 7% in Lincoln County. The district covers 1,712 square miles of drainage of which 736 square miles are in South Dakota. As identified by the USDA, their inventory shows that 59,500 acres within the watershed district are subject to flooding along with 12,600 acres in South Dakota. There are two primary rivers within the district; the Yellow Bank and the Lac qui Parle.

The Yellow Bank River contains two forks which join in Section 25 of Yellow Bank Township in Lac qui Parle County and outlets directly into the Minnesota River three miles southeast of Odessa, MN. The headwaters for the North Fork of the Yellow Bank River originate in Stockholm, SD encompassing 121,100 acres of drainage in South Dakota and 7,700 acres in Minnesota. The South Fork of the Yellow Bank River originates in Lake Alice near Tunerville, SD with 93,000 acres of drainage in South Dakota and 40,700 acres in Minnesota. Mud Creek, with its watershed of 17,000 acres, flows into the South Fork of the Yellow Bank River.

The Lac qui Parle River originates in Lake Hendricks, near Hendricks, MN with 46,500 acres of drainage in South Dakota and 170,000 acres in Minnesota. Many tributaries add to the complexity of the Lac qui Parle River system. Ten Mile Creek joins the river at Section 26 of Lac qui Parle Township (Lac qui Parle County) with 78,000 acres of drainage area. Canby Creek with 26,000 acres of drainage joins the river in Section 14 of Hammer Township in Yellow Medicine County. Lac qui Parle Creek empties into the river at Section 3 of Oshkosh Township in Yellow Medicine County with an additional 26,000 acres of drainage area. The West Fork of the Lac qui Parle River is the largest tributary with 96,000 acres of drainage (64,000 acres of which are in South Dakota) and converges with the main stem one mile east of Dawson, MN. Two tributaries empty into the West Fork; one being Lost Creek with 60,000 acres (50,000 acres in SD) and Florida Creek with 53,000 acres (31,000 acres in SD). They join in at Section 24 of Mehurin Township and Section 17 of Garfield Township in Lac qui Parle County respectively.

From the highest point in the watershed along the Coteau to the outlet at the Minnesota River, there is an elevation difference of 1,070 feet. The rate of descent averages 25 feet per mile on the uplands and 10 feet per mile from the flood plain to the outlet. Due to the Coteau, cross-over flooding is a significant problem for the district.

Locations where water overflows from one tributary to another within the watershed boundaries are as follows:

- 1) Yellow Bank River into the Lac qui Parle River at a point two miles southeast of Nassua in Section 3 of Augusta Township in Lac qui Parle County.

Lac qui Parle-Yellow Bank Watershed District continued...

- 2) Florida Creek into the Lac qui Parle Creek at Sections 21 and 28 of Freeland Township in Lac qui Parle County.
- 3) Florida Creek into Lac qui Parle Creek at Sections 6 and 7 of Hammer Township in Yellow Medicine County.
- 4) Florida Creek into Lazarus Creek at Sections 17 and 18 of Hammer Township in Yellow Medicine County.
- 5) Lazarus Creek into Canby Creek at Section 4 of Norman Township in Yellow Medicine County.
- 6) Canby Creek into Lac qui Parle River at Section 1 of Norman Township in Yellow Medicine County.

Locations of overflows from inside the Lac qui Parle-Yellow Bank Watershed District to a tributary outside the district are as follows:

- 1) Lac qui Parle River into Spring Creek (Yellow Medicine River) at Sections 11 and 23 in Oshkosh Township in Yellow Medicine County.
- 2) Lac qui Parle River into Mud Creek (Yellow Medicine River) at Section 5 of Wergeland Township in Yellow Medicine County.

Objectives of the Watershed District of which Area II can participate in are as follows:

1) Control or alleviate damage by flood waters.

The Board of Managers, through their overall plan dated 1972, prioritized the alleviation of flooding as the number one priority followed by watershed boundary overflow. Wetland restoration is a viable option to reduce the cross-over flooding which so readily occurs. Area II encourages the watershed district to review the inventories of its respective member counties as submitted to Area II for further evaluation of the flood control benefits. The district will cooperate with other governing bodies, state and local agencies, and local groups to determine the feasibility of containing the flood waters within their natural watershed. Further encouragement is extended to the watershed district to urge landowners to participate in the Reinvest in Minnesota (RIM) and other land conservation programs overseen by the Board of Water and Soil Resources.

2) Construct water detention dams wherever possible to delay runoff from reaching the flood plain.

Area II will provide the technical assistance necessary for site location and preliminary design of both road retention structures and larger, multi-purpose dams and reservoirs. Funding will be sought from an outside source such as DNR Flood Damage Reduction Grants and State of Minnesota Capitol Improvement Bonds.

5) Regulate the flow of streams and conserve the waters thereof.

In order to know what stream flows are present, Area II would like to urge to Watershed District to implement stream gaging networks and water quality analysis. In cooperation with the district's member counties, DNR, and MPCA, the district shall compile a list of potential monitoring sites to be submitted to the Area II Board of Directors on an annual basis. The Directors will consider this list among the other submitted to prioritize the sites and assign stations for the monitoring equipment available through Area II.

Executive Summary

In reviewing the preceding sections, the comprehensive local water plans discuss many similar problems and target areas. In Area II's pursuit to strategically plan their flood control efforts to be consistent with ongoing practices, the organization shall base their priorities on the needs demonstrated by the individual member counties.

The following list represents the areas of need in order of frequency as mentioned in the water plans:

- 1) Road Retention Design and Construction
- 2) Restoration of Wetlands
- 3) Dry or Multi-Purpose Dam Design and Construction
- 4) Water Quality Monitoring and Stream Flow Gaging
- 5) Repair of Existing SCS and ACP Dams.

To fully assist the member counties within the capabilities of the Area II staff, Area II will participate in the following manner:

Road Retention Design and Construction

Area II staff will work to inform the member counties of the benefits of road retentions which include savings to federal, state, and local governments; relatively simple fundamentals of design; ease of construction; effective flood control; and positive environmental impact in most scenarios. With the county engineers' willingness to undertake road retention projects, Area II staff will assist in the design and inspection duties until the engineer feels comfortable with the design method. The counties are encouraged to ask for technical assistance in more complex situations or where multiple structures are involved to ensure that the design is best suited and most beneficial to the watershed. With DNR's participation and encouragement, the DNR will also review the project through the permitting process to ensure a design beneficial to the watershed as a whole.

Area II has been involved in the creation of a Design Guideline Manual for Road Retentions; a joint effort by Area II, BWSR, MnDOT, DNR, and Lyon and Lincoln County Engineers. It is hoped that the manual will be published and distributed to counties throughout the State by 1995 so that they too can reap the benefits of road retention design.

The Area II Board of Directors shall consider funding such road retention developments based on flood benefits and priority.

Restoration of Wetlands

Area II encourages the member counties to inventory the potentially restorable wetlands within Area II. At the request of a county, Area II may be able to assist with the surveying and technical issues related to the restoration project. As encouraged by BWSR, a cooperative effort by the member counties, watershed districts, and Area II would be ideal so that a management plan for the region may be developed. Input from state and federal agencies will be necessary to obtain collective ideas and to prevent conflicting objectives in restoration methodologies.

Dry or Multi-Purpose Dam Design and Construction

Using the P.L. 87-639 Study and Minnesota River Basin Report as tools and information sources, Area II will continue to site and investigate the feasibility of large reservoirs and temporary impoundments (dry dams). Although the large structures are more difficult to promote due to cost and environmental impact, they continue to be a sound practice with considerable flood control benefits.

Area II alone cannot finance structures of this magnitude and will rely on BWSR to assist in seeking additional funding through State appropriations and Bonding for Capitol Improvements. In turn, the member counties of Area II will prepare themselves to provide the necessary matching funds as needed.

Water Quality Monitoring and Stream Flow Gaging

Area II would like to see coordination with local, state, and federal units of government to develop a regional plan for water quality monitoring and stream flow gaging. The need is present and warrants serious consideration by all parties involved.

Area II is in possession of nine (9) ISCO automatic samplers with flow meters and recording equipment that are to be made available to the member counties following prioritization and authorization by the Area II Board of Directors. Area II personnel, trained by MPCA monitoring staff, shall pass the training onto county personnel responsible for the operation of the equipment and collection of the samples and data. Due to Area II's limited funding ability, the counties shall encumber the expense of the water quality analyses and manpower. An exception may be made when monitoring or gaging are done in conjunction with the planning or design of an Area II project.

Repair of Existing SCS and ACP Dams

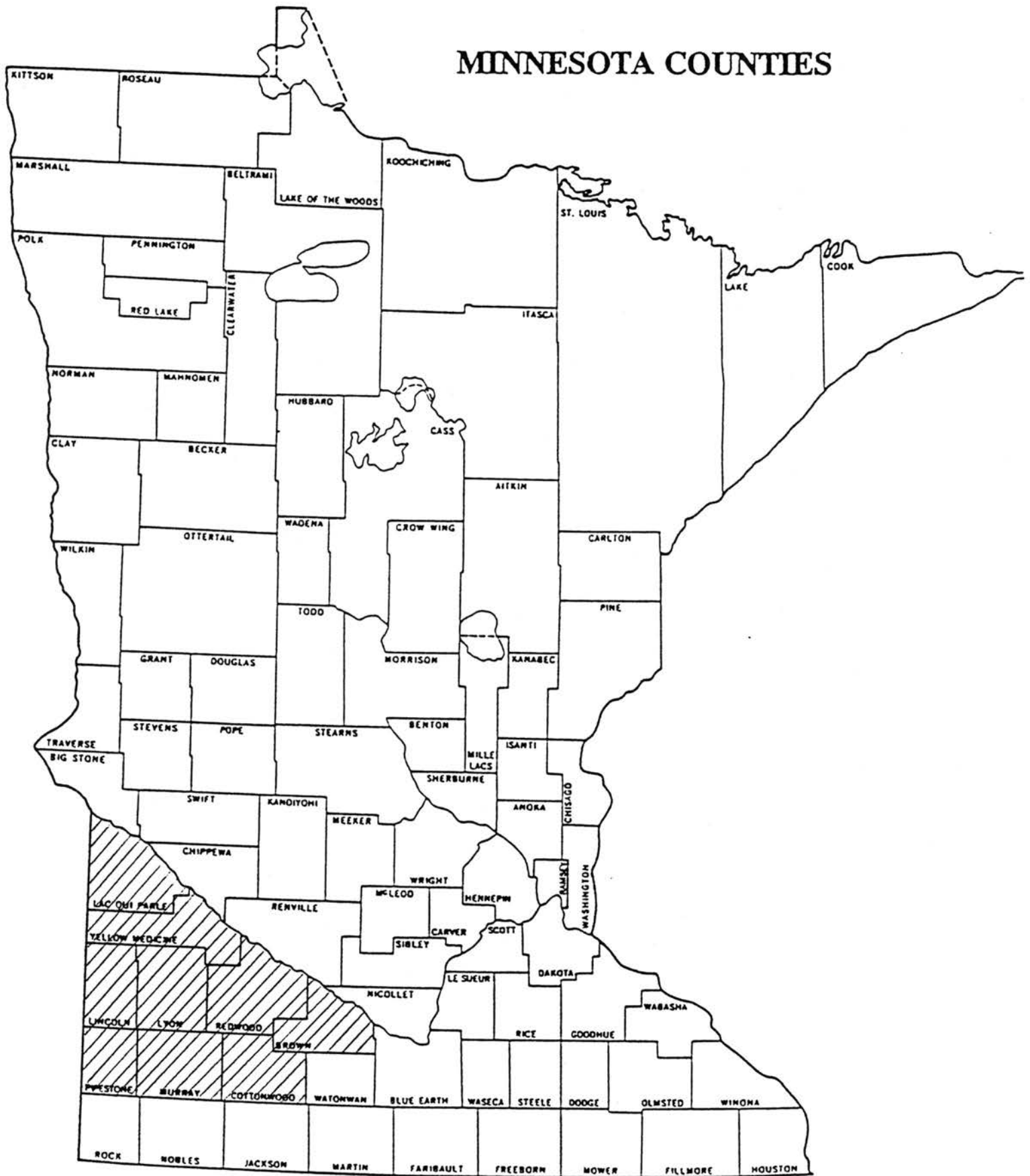
Numerous structures throughout Area II were constructed with SCS and ACP funding. Many of these structures have reached the end of their useful life and are in need of repair or reconstruction. The primary concerns in undertaking such an endeavor as this is not local interest, but funding and design. Area II would like to cooperate with BWSR and SCS to devise repair methodologies that take into consideration the age of the structure, extended life of the structure, and potential flood reductions that may be provided. Again, a committed funding source is the most important issue where Area II will ask BWSR to assist in seeking that source.

In summary, Area II will focus their project implementation efforts on the following in order of importance to the member counties:

- 1) Road Retention Design and Construction
- 2) Restoration of Wetlands
- 3) Dry or Multi-Purpose Dam Design and Construction
- 4) Water Quality Monitoring and Stream Flow Gaging
- 5) Repair of Existing SCS and ACP Dams.

APPENDIX A
GENERAL LOCATOR MAP OF AREA II

MINNESOTA COUNTIES



APPENDIX B

**Desired Stream Gage Locations as submitted by
Department of Natural Resources - Waters Division**

Department of Natural Resources - Waters Division

Desired Stream Gage Locations

YELLOW BANK RIVER

- At the old gage location near the outlet (LQP County)
- South Fork near Section 25, Yellow Bank Township (LQP County)
- North Fork near County Road, Section 21, Yellow Bank Township (LQP County)

LAC QUI PARLE RIVER

- Crossover from the Yellow Bank at two locations:
 - County Ditch 5, Section 7 of Garfield Township (LQP County), and
 - Unnamed tributary at Hwy 212, Section 14 of Hamlin Township (LQP County)
- Ten Mile Creek near outlet in Section 1, Baxter Township (LQP County)
- Unknown County Ditch outlet into LQP River, Section 30, LQP Township (LQP County)
- West Branch at Dawson (LQP County)
- Main Stem, south of Dawson (LQP County)
- Canby Creek, Section 3 of Oshkosh Township (Yellow Medicine County)
- Lazarus Creek, Section 28 of Hammer Township (Yellow Medicine County)
- Fish Lake tributary, Section 32 of Norman Township (Yellow Medicine County)
- Main Stem, Section 8 of Marble Township (Lincoln County)
- Florida Creek, Section 5 of Freeland Township (LQP County)
- Cobb Creek, Section 6 of Freeland Township (LQP County)
- Lost Creek at County Road 53, Section 23 of Mehurin Township (LQP County)
- Main Stem, Section 25/26 of Mehurin Township (LQP County)

YELLOW MEDICINE RIVER

- Ditch 17 at Hanley Falls, Section 11 of Sandnes Township (Yellow Medicine County)
- Spring Creek near Hanley Falls, Section 4 of Sandnes Township (Yellow Medicine County)
- South Branch near Minneota, Section 7 of Westerheim Township (Lyon County)
- Mud Creek near Minneota, Section 1 of Eidsvold Township (Lyon County)
- North Branch NW of Porter, Section 12 of Alta Vista Township (Lincoln County)
- Antelope Valley crossover gage on blacktop N of Taunton, Section 29 of Burton Township (Yellow Medicine County)
- Oshkosh crossover gage on Spring Creek N of Porter, E side of Section 13 of Oshkosh Township (Yellow Medicine County)

REDWOOD RIVER

- Clear Creek near Seaforth (Redwood County)
- Three Mile Creek near Green Valley (Yellow Medicine County)
- Coon Creek near Redwood Falls (Redwood County)
- Ramsey Creek near Russell (Lyon County)
- Tyler Creek near Florence (Lyon County)
- Crossover from Yellow Medicine to County Ditch 15 at two locations:
 - Sections 24/25 of Westerheim Township (Lyon County)
 - Sections 19/24 of Vallery Township (Lyon County)

COTTONWOOD RIVER

- County Ditch 1 near Sleepy Eye (Brown County)
- Sleepy Eye Creek near Sleepy Eye (Brown County)
- Mound Creek, location to be determined (Cottonwood County)
- Dry Creek at old USGS Station (Cottonwood County)
- Highwater Creek east of Lamberton (Redwood County)
- Dutch Charlie before emptying into Highwater Creek (Redwood County)
- Pell Creek at Hwy 14, Section 19 of Lamberton Township (Redwood County)
- Plum Creek, location to be determined
- Meadow Creek near Lyon/Redwood County line
- Main Stem near Highway 59 (Lyon County)

APPENDIX C
AREA II PROJECT STEPS

1) Request for Assistance

County shall submit Request for Assistance form to the Board of Directors.

2) Data Research

- a) Compile existing information and project constraints.
- b) Compile a list of needed information.
- c) Include photographs or videotape.
- d) Obtain initial sponsorship.

3) Prioritization and Inclusion on the Work Plan by the Board of Directors.

4) Plan of Study

- a) Outline the needed information.
- b) Plan the design approach considering the constraints.
- c) Devise a preliminary timeline.

5) Data Collection

Gather the information to include soil borings and survey notes.

6) Feasibility Report

- a) Include primary alternatives analysis including cost/benefit.
- b) Address environmental concerns outlined in EAW format.
- c) Hydrology and Hydraulics Analysis.

7) Verify Sponsorship

Discuss feasible options and estimated cost with the project sponsors.
Sponsor shall give authorization to Area II to continue.

8) Funding Prioritization

Coordinator shall present the Board of Directors with the sponsor's funding plan and funding options of Area II.

9) Final Design

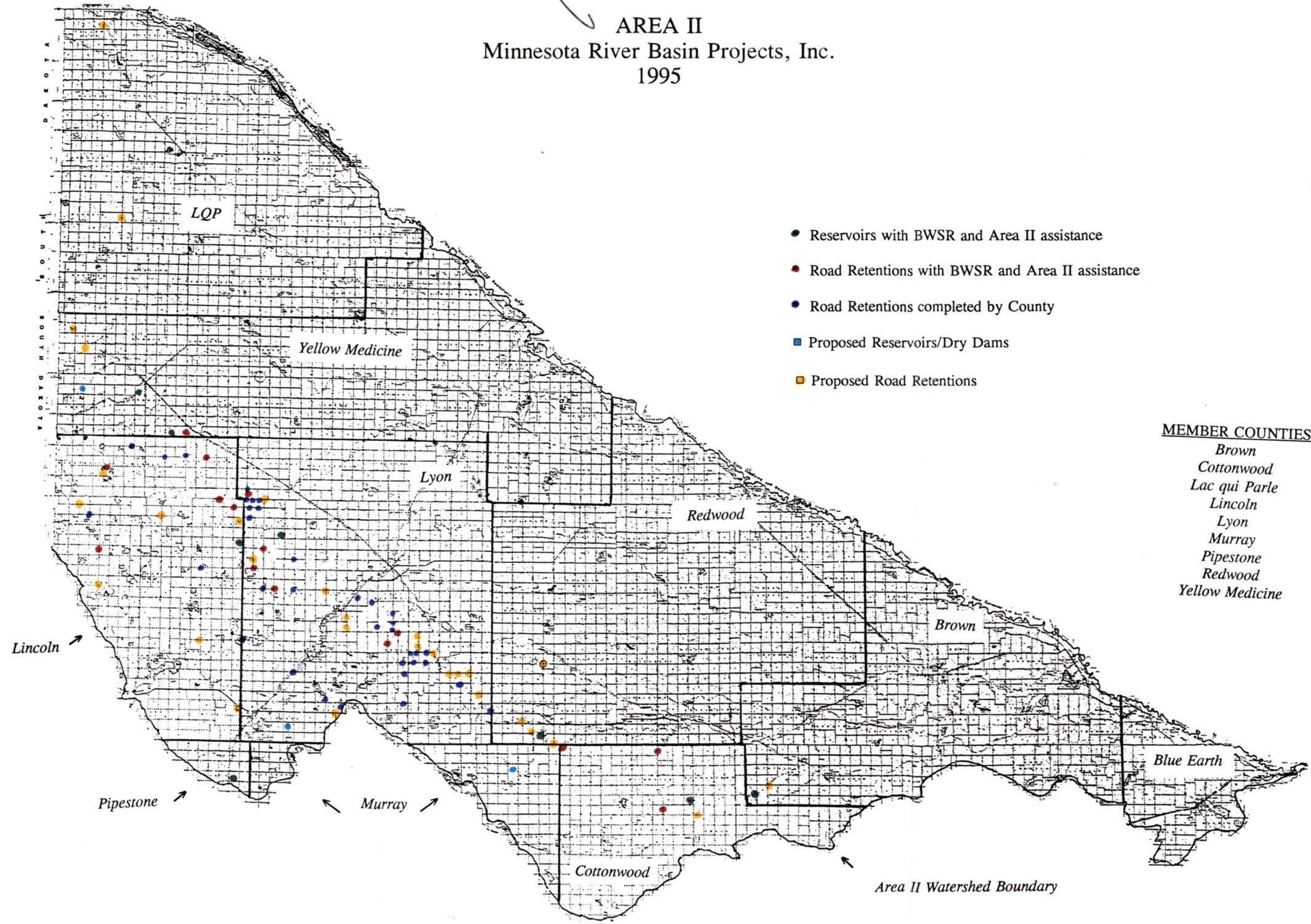
10) Construction

11) Finals

Include final inspection, as-built drawings, and transfer of Operation & Maintenance (O&M) responsibilities to the sponsor.

NOTE: Agency contact to be throughout the step progression.

AREA II Minnesota River Basin Projects, Inc. 1995



AREA II
MINNESOTA RIVER BASIN PROJECTS, INC.

AREA II MN RIVER BASIN PROJECTS, INC.

1400 East Lyon Street, P.O. Box 267

Marshall, MN 56258

(507) 537-6369

Fax: (507) 537-6368

AREA II ELECTED OFFICIALS

Chair: Darold Neperman

1st Vice Chair: Gary Johnson

2nd Vice Chair: Clarence Buysse

Secretary: LeRoy Stensgaard

Treasurer: John Boulton



AREA II BOARD OF DIRECTORS

	<u>MEMBER</u>	<u>ALTERNATE</u>
<i>BROWN COUNTY</i>	Charles Guggisberg RR 1 New Ulm, MN 56073	Andrew Lochner RR 1 Box 135 Sleepy Eye, MN 56085
<i>COTTONWOOD COUNTY</i>	Kenneth Elg RR 2 Comfrey, MN 56019	Marlowe Nelson RR 2 Westbrook, MN 56183
<i>LAC QUI PARLE COUNTY</i>	Willard Pearson RR 1 Dawson, MN 56232	Arvid Gollnick RR 2 Box 140 Madison, MN 56256
<i>LINCOLN COUNTY</i>	John Boulton RR 1 Box 18 Porter, MN 56280	Carl Hauschild RR 1 Box 183 Minneota, MN 56264
<i>LYON COUNTY</i>	Clarence Buysse RR 2 Minneota, MN 56264	Jasper Vandelanotte 54 Lakeview Drive Cottonwood, MN 56229
<i>MURRAY COUNTY</i>	Lennen Nelson RR 1 Balaton, MN 56115	Steve Cohrs RR 1 Box 80 Currie, MN 56123
<i>PIPESTONE COUNTY</i>	LeRoy Stensgaard RR Ruthton, MN 56170	Gordon Baden 100 W. 2nd Jasper, MN 56144
<i>REDWOOD COUNTY</i>	Darold Neperman 413 2nd Avenue Lamberton, MN 56152	Joseph Schouvieller RR 2 Box 43 Morgan, MN 56266
<i>YELLOW MEDICINE COUNTY</i>	Gary Johnson RR 4 Box 224 Montevideo, MN 56265	Charles Simonsen RR 4 Box 23 Canby, MN 56220

Minnesota Statutes

103F.171 SOUTHERN MINNESOTA RIVERS BASIN AREA II BOUNDARIES.

For the purposes of sections 103F.171 to 103F.187, the term "southern Minnesota rivers basin area II" means the area within the watersheds of rivers and streams that are tributaries of the Minnesota River from the south between the cities of Ortonville and Mankato. Major rivers included within the watershed are the Yellow Bank, Lac qui Parle, Yellow Medicine, Redwood, and Cottonwood. All of the Lac qui Parle, Yellow Medicine, and Redwood counties, and parts of Lincoln, Lyon, Pipestone, Murray, Cottonwood, and Brown counties are included within the boundaries of the area.

HIST: 1990 c 391 art 6 s 16

103F.173 PROGRAM.

There shall be a state grant-in-aid pilot program of providing financial assistance to units of local government, including counties, soil and water conservation districts, and watershed districts, located in the southern Minnesota river basin area II for project and construction costs for the building of floodwater retarding and retention structures within a general plan for floodplain management.

HIST: 1990 c 391 art 6 s 17

103F.175 AID FORMULA.

Grants may be made by the board of water and soil resources to a local governmental unit for the purposes of sections 103F.171 to 103F.187 in an amount not to exceed 75 percent of the total cost of each project, including site acquisition, engineering, and construction. If federal funds are being utilized for a portion of the project costs, the state contribution may not exceed 50 percent of the remaining nonfederal costs. If the structure is located in the state of South Dakota, the two states shall share the nonfederal costs equally. Money granted by the state may not be used for any project of stream channelization.

HIST: 1990 c 391 art 6 s 18

103F.177 OPERATION WITHIN AGENCY.

Subdivision 1. Board of Water and Soil Resources.

The board of water and soil resources shall supervise the grant-in-aid pilot program pursuant to sections 103F.171 to 103F.187.

Subd. 2. Procedures and forms. The board shall devise procedures and forms for application for grants by the local units of government, and review of and decision on the applications by the state board.

Subd. 3. Staff position. A professional engineer shall be employed by the board to work exclusively on the technical implementation and engineering of the pilot project established pursuant to sections 103F.171 to 103F.187. The engineer shall assist local units of government and the board to achieve the purposes of the project, and shall have duties including:

- (1) field review and analysis of projects and project sites;
- (2) preparation of permit applications, including evaluation of environmental effects;
- (3) development of recommended pertinent provisions of permits for specific projects;
- (4) preparation of plans for further consideration of remedial flood control structural measures as part of a general rural floodplain management effort; and
- (5) evaluation of the effectiveness of completed projects constructed under this program.

HIST: 1990 c 391 art 6 s 19

103F.179 SELECTION OF PROJECTS.

Subdivision 1. Evaluation of area and sites; federal cooperation.

Before a grant is made, a priority system shall be devised for the selection of projects to receive the aid. The board of water and soil resources is the granting authority and shall cooperate with the United States Army Corps of Engineers, the department of natural resources, the United States Soil Conservation Service and the area II action committee in analysis of the general floodplain management plan for the area and in hydrological and engineering studies on specific proposed sites. From that information, the board of water and soil resources shall determine the relative severity of the flooding problem which would be wholly or partly solved by each projects. The range of priorities based on these findings shall provide a basis for selections of project sites.

Subd. 2. Project requirement for each watershed.

Notwithstanding the requirement in subdivision 1 that project selection be based on a priority system, not more than one project may be located within any one of the Cottonwood, Lac qui Parle, Redwood, Yellow Medicine, and Yellow Bank rivers' watersheds unless agreed upon by the area II action committee composed of representatives of each of those watersheds.

HIST: 1990 c 391 art 6 s 20

103F.181 CONDITIONS FOR GRANTS

Subdivision 1. Local expression of willingness. The local unit of government shall apply for a grant by a resolution requesting state funding assistance for the construction of a floodwater retention or retarding structure within its jurisdiction. The resolution shall include provisions concerning local funding, if any. The local unit of government shall state its intent to obtain necessary land rights for proposed construction sites and to assume responsibility for maintenance of the structure on its completion.

Subd. 2. General plan. The local unit of government shall demonstrate that the construction project that it proposes is consistent with its general plan for floodplain management. The general plan of the local government unit shall be in conformity with the policy and objectives of this chapter and shall, where reasonable and practicable, include nonstructural means of floodplain management.

Subd. 3. **Federal aid availability.** The board of water and soil resources shall complete a detailed analysis of the availability of federal funds and programs to supplement or complement state and local efforts on each project and include the eligibility requirements and time frame for receiving the federal aid.

Subd. 4. **Environmental impact statement.** The local unit of government, assisted by the project staff engineer, shall make a comprehensive evaluation of the positive and negative environmental effects which would be reasonably likely to take place if the particular proposed project would be constructed.

HIST: 1990 c 391 art 6 s 21

103F.183 APPROVED PROJECTS

Subdivision 1. **Contracts.** When a proposed project is approved to receive a grant, the board of water and soil resources shall negotiate a contract with the local unit of government involved. The contract shall specify the terms of state and local cooperation, including the financing arrangement for the construction and a n agreement on maintenance of the structure after completion.

Subd. 2. **Permits.** Before grant money is spent on construction of the structure, permits required for construction must be obtained from state agencies.

HIST: 1990 c 391 art 6 s 22

103F.185 INTERSTATE COOPERATION.

The board of water and soil resources and the staff engineer may enter into a working agreement with the South Dakota-Minnesota boundary waters commission, or successor organization, in regard to flood retention and retarding structures constructed pursuant to sections 103F.171 to 103F.187 that involve territory of the state of South Dakota as well as this state.

HIST: 1990 c 391 art 6 s 23

103F.187 REPORT TO LEGISLATURE.

When the project has been in operation for a period of two years, the board of water and soil resources and the staff engineer shall prepare and deliver a report to the legislature on the program and its consequences with an evaluation of the feasibility and benefit of continuing the project.

HIST: 1990 c 391 art 6 s 24

AREA II MN RIVER BASIN PROJECTS

WALNUT GROVE RESERVOIR (LAKE LAURA)



LOCATION: 1 mile west and 1/2 mile south of Walnut Grove, MN in Plum Creek Park, Redwood County

YEAR: 1979

SPONSOR: Redwood County Commissioners & Redwood SWCD

PROJECT COST:

Construction Cost	\$235,000
Land Cost (Donated by sponsor)	\$ 0
TOTAL COST	\$235,000

State Share	\$176,250
Local Share	\$ 58,750

WATERSHED: Cottonwood River

COUNTY: Redwood

HEIGHT OF DAM: 55.7 Feet

SIZE OF POOL: 29.3 Acres

MAXIMUM DEPTH: 21.3 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control, Swimming, Fishing, Camping and Recreation (County Park)

AREA II MN RIVER BASIN PROJECTS

HAUSCHILD-THANGE RESERVOIR



LOCATION: 7 miles east and 2 mile north of Ivanhoe, MN in
Section 25, Range 44W, Township 112N in Lincoln County

YEAR: 1980

SPONSOR: Yellow Medicine River Watershed District

PROJECT COST:

Construction Cost	\$391,600
Land Cost	<u>\$ 42,200</u>
TOTAL COST	\$433,800

State Share	\$325,350
Local Share	\$108,450

WATERSHED: Yellow Medicine River

COUNTY: Lincoln

HEIGHT OF DAM: 52.2 Feet

SIZE OF POOL: 27.0 Acres

MAXIMUM DEPTH: 19.3 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control and Recreation (Privately owned)

AREA II MN RIVER BASIN PROJECTS

FALES-VAN HYFTE RESERVOIR (LAKE JOHN)



LOCATION: 2 miles west of Porter, MN in Section 36, Range 45W,
Township 114N in Yellow Medicine County

YEAR: 1981

SPONSOR: Yellow Medicine River Watershed District

PROJECT COST:

Construction Cost	\$270,800
Land Cost	<u>\$ 55,800</u>
TOTAL COST	\$326,600

State Share	\$244,950
Local Share	\$ 81,650

WATERSHED: Yellow Medicine River

COUNTY: Yellow Medicine

HEIGHT OF DAM: 45 Feet

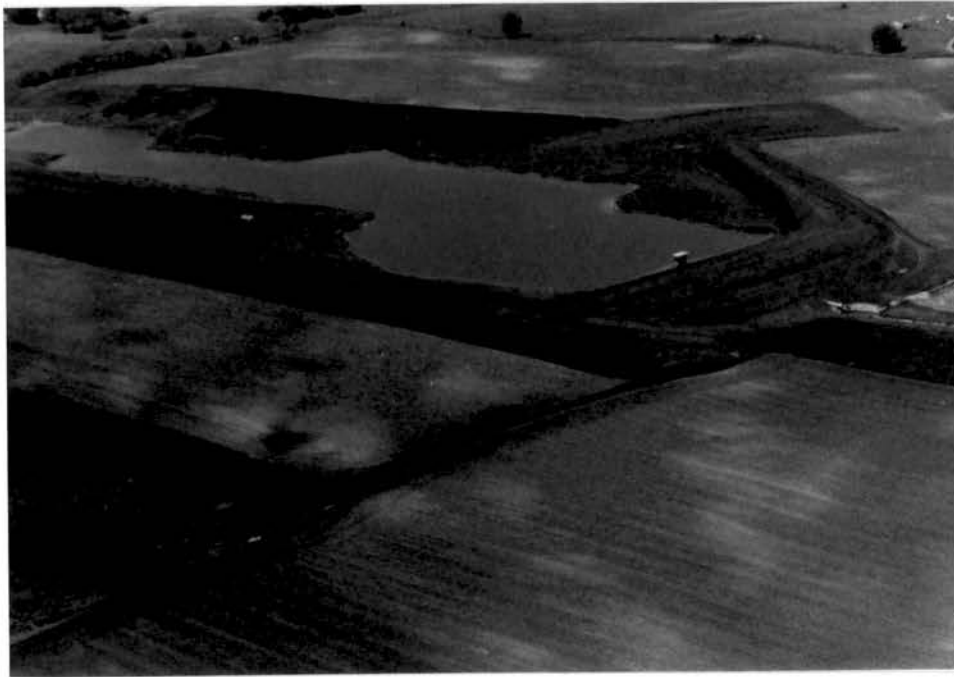
SIZE OF POOL: 20.1 Acres

MAXIMUM DEPTH: 19.8 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control, Swimming, Fishing and
Wildlife Enhancement (Watershed Park)

AREA II MN RIVER BASIN PROJECTS

SONSTEGARD-TELSTE RESERVOIR



LOCATION: 5 miles south and 1/2 mile west of Minneota, MN in
Section 27, Range 43W, Township 112 N, in Lyon County

YEAR: 1983

SPONSOR: Yellow Medicine River Watershed District

PROJECT COST:

Construction Cost	\$343,000
Land Cost	<u>\$ 26,600</u>
TOTAL COST	\$369,600

State Share	\$277,200
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Local Share	\$ 92,400
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WATERSHED: Yellow Medicine River

COUNTY: Lyon

HEIGHT OF DAM: 42.5 Feet

SIZE OF POOL: 15.4 Acres

MAXIMUM DEPTH: 20.1 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control and Recreation (Privately owned)

AREA II MN RIVER BASIN PROJECTS

DEL CLARK RESERVOIR (CANBY CREEK R1)



LOCATION: 1 mile south and 1/2 mile west of Canby in Yellow Medicine County

YEAR: 1985

SPONSOR: Yellow Bank - Lac Qui Parle Watershed District

PROJECT COST:

Construction Cost	\$2,486,734
Land Cost (approximately)	<u>\$ 800,000</u>
TOTAL COST	\$3,286,734

Federal Share	\$2,793,724
State Share	\$ 50,000
Local Share	\$443,010

WATERSHED: Canby Creek

COUNTY: Yellow Medicine

HEIGHT OF DAM: 55 Feet

SIZE OF POOL: 155 Acres

MAXIMUM DEPTH: Approximately 30 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control, Fishing, Swimming, Camping and Recreation (Regional Park)

AREA II MN RIVER BASIN PROJECTS

LABOLT LAKE RESTORATION



LOCATION: 1 mile west of Labolt, South Dakota in Section 23, Range 43W, Township 108 N, in Grant County

YEAR: 1986

SPONSOR: East Dakota Water Development District

PROJECT COST:

Construction Cost	\$120,000
Land Cost	<u>\$ 0</u>
TOTAL COST	\$120,000

State Share	\$ 30,000
Local Share	\$ 90,000 (Includes SD Share)

WATERSHED: Yellow Bank River

COUNTY: Grant County, South Dakota

HEIGHT OF DAM: 25 Feet

SIZE OF POOL: 12 Acres

MAXIMUM DEPTH: 21 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control, Fishing, Swimming and Recreation (County Park)

AREA II MN RIVER BASIN PROJECTS

SCHOPER-BUSH RESERVOIR



LOCATION: 4 miles north and 1/2 mile west of Jeffers, MN in
Section 31, Range 36W, Township 108 N, in Cottonwood County

YEAR: 1987

SPONSOR: Cottonwood County Commissioners & Cottonwood SWCD

PROJECT COST:

Construction Cost	\$410,500
Land Cost	<u>\$ 74,500</u>
TOTAL COST	\$485,000

State Share	\$363,750
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Local Share	\$121,250
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WATERSHED: Cottonwood River

COUNTY: Cottonwood

HEIGHT OF DAM: 43 Feet

SIZE OF POOL: 13 Acres

MAXIMUM DEPTH: 20.8 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control, Fishing and Recreation (County Park)

AREA II MN RIVER BASIN PROJECTS

MINETT-KRANTZ RESERVOIR



LOCATION: 2 miles south and 1/2 mile east of Ruthton, MN in
Section 23, Range 43W, Township 108 N, in Pipestone County

YEAR: 1987

SPONSOR: Pipestone County Commissioners & Pipestone SWCD

PROJECT COST:

Construction Cost	\$136,700
Land Cost	<u>\$ 31,000</u>
TOTAL COST	\$167,000

State Share	\$125,775
Local Share	\$ 41,925

WATERSHED: Redwood River

COUNTY: Pipestone

HEIGHT OF DAM: 26 Feet

SIZE OF POOL: 9.1 Acres

MAXIMUM DEPTH: 20 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control, Fishing and Recreation (County Park)

AREA II MN RIVER BASIN PROJECTS

CALLENS-HAUSCHILD ROAD RETENTION STRUCTURE



LOCATION: 4 miles west and 4 miles south of Taunton, MN on Alta Vista and Limestone Township line, Section 34, Range 44W, Township 113W and Section 3, Range 44W, Township 112N in Lincoln County

YEAR: 1989

SPONSOR: Limestone and Alta Vista Township
Yellow Medicine River Watershed District

PROJECT COST:

Local Watershed District	\$ 6,630
Alta Vista Township	\$ 3,315
Limestone Township	\$ 3,315
State	<u>\$ 6,630</u>
TOTAL COST	\$ 19,890

WATERSHED: Yellow Medicine River

COUNTY: Lincoln

SIZE OF POOL: N/A

MAXIMUM DEPTH: N/A

USES OF STRUCTURE: Flood Control and Road Safety

AREA II MN RIVER BASIN PROJECTS

WELLNER-HAGEMAN RESERVOIR



LOCATION: 7.5 miles south and 5 miles west of Springfield, MN in Section 30, Range 35W, Township 108N, in Brown County

YEAR: 1992

SPONSOR: Brown County Commissioners & Brown SWCD

PROJECT COST:

Construction Cost	\$1,692,073
Land Cost	<u>135,000</u>
TOTAL COST	\$1,827,073

State Share	\$1,727,073
Local Share	\$ 100,000

WATERSHED: Cottonwood River

HEIGHT OF DAM: 50 Feet

SIZE OF POOL: 70 Acres

MAXIMUM DEPTH: 30 Feet
(OF POOL)

USES OF STRUCTURE: Flood Control, Fishing, Swimming and Recreation

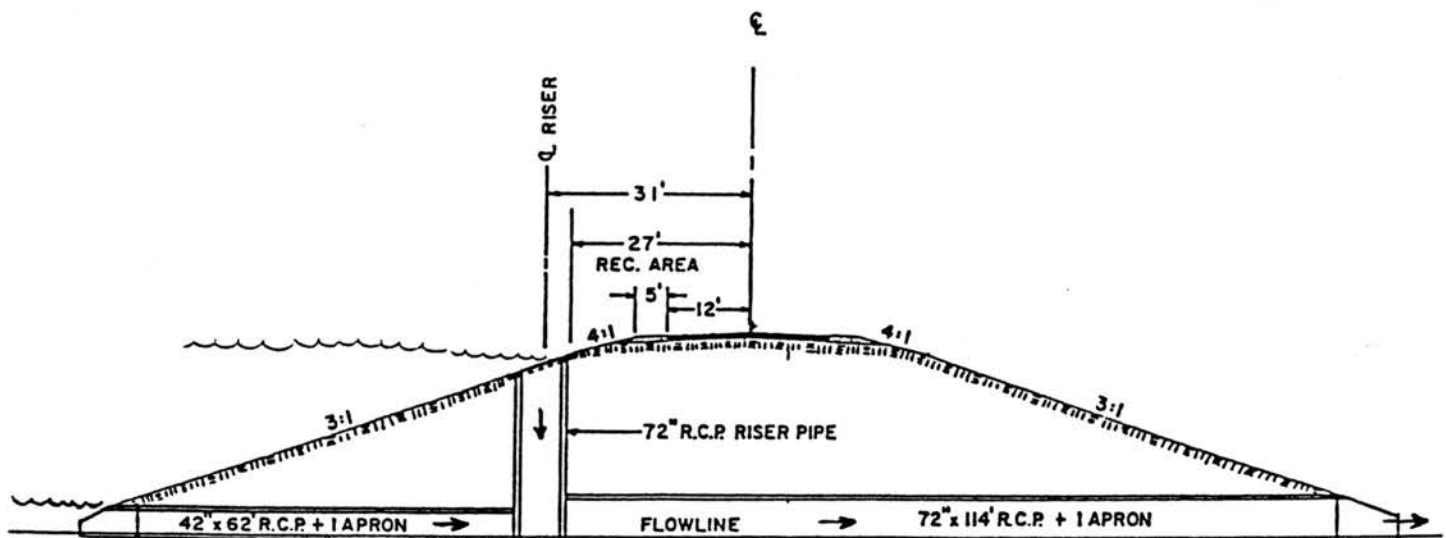
**1994 - AWARDED ONE OF THE
SEVEN WONDERS OF ENGINEERING IN MINNESOTA**

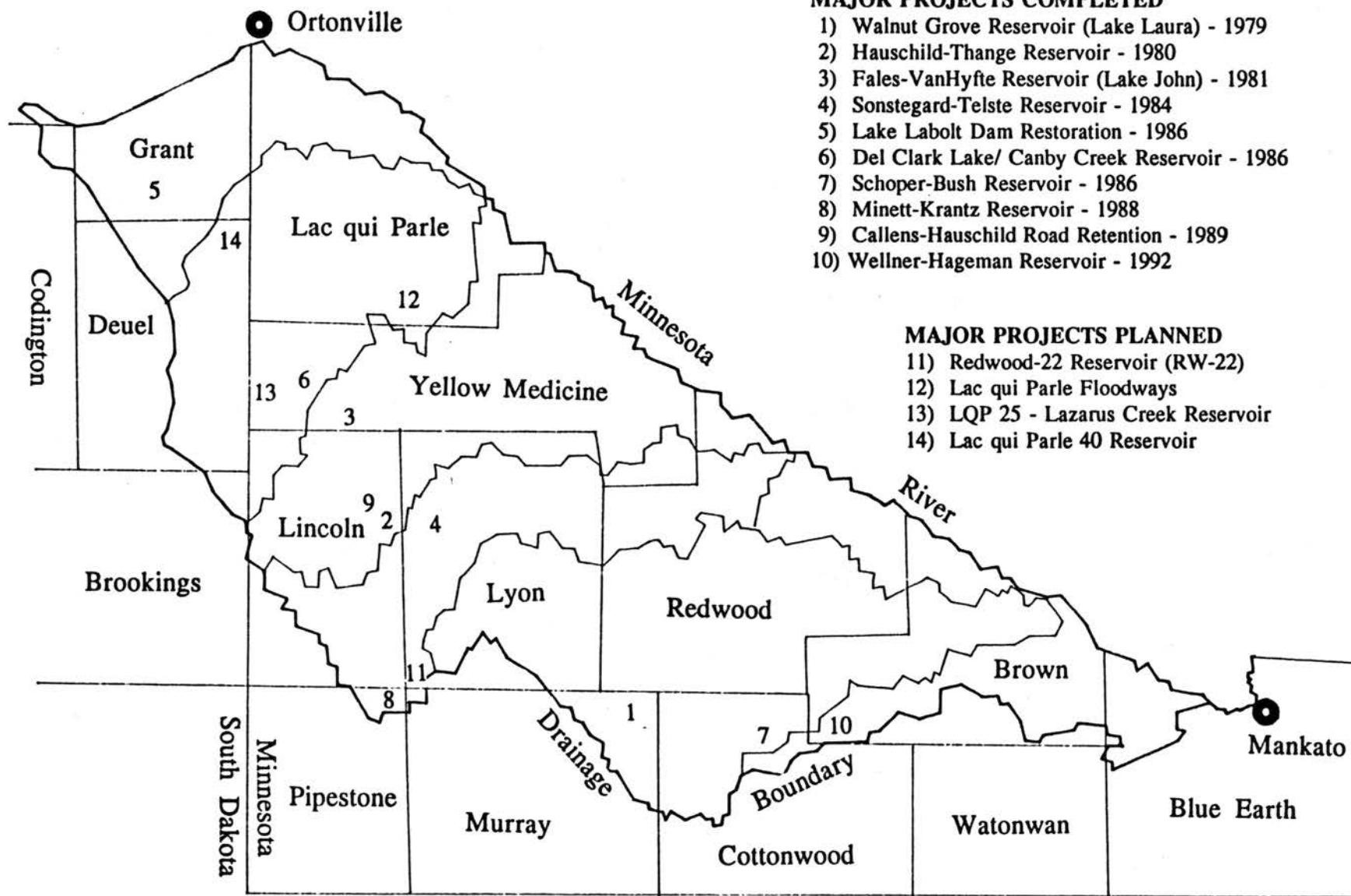
AREA II MN RIVER BASIN PROJECTS TYPICAL ROAD RETENTION STRUCTURES



Lake Marshall Township, Lyon County

Drainage area of 422 acres.
100 year flood pool of 7 acres.
Storage area of 44 acre-ft.





AREA II
MINNESOTA RIVER BASIN PROJECTS, INC.