



Minnesota Board of Water and Soil Resources.
Minutes.

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BOARD OF WATER AND SOIL RESOURCES
ROOM 112 (SENATE HEARING ROOM)
STATE CAPITOL
75 CONSTITUTION AVENUE
ST. PAUL, MINNESOTA 55155
JUNE 24, 1992

Appointed Members in Attendance

Jim Nielsen
John Brooks, Jr.
Don Ogaard
Don Warner
Howard Peterson
Barbara Cobb
Dwain Otte
John Boulton
Jack Graba
Sharon Clark
Warren Rodning

Appointed Member Absent

Jim Rossman

Agency Members in Attendance

Wayne Anderson, Pollution Control Agency
Norm Moody, Department of Natural Resources
Paul Burns, Department of Agriculture
Jim Anderson, U of M/Extension Service

Others in Attendance

Roger Musetter, Soil Conservation Service
Marlin Libbesmeier, Minnesota Association of Townships

Staff in Attendance

Ron Harnack
Jim Birkholz
Dave Behm
Susan Tsakakis
Doug Thomas
Chuck Niska
Jeff Nielsen
John Jaschke
Mary Jo Anderson

Meeting Called to Order - Vice-Chairman John Brooks, Jr., called the meeting to order at 8:35 a.m.

92-44 **Adopt Agenda** - Moved by Warner, seconded by Otte, to adopt the agenda as presented. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Ogaard, Otte, Peterson, Rodning, and Warner. Opposed: None. Carried.

92-45 **Approval of Minutes of May 27, 1992** - Wayne Anderson stated that a name correction needs to be made on page seven, it should read "Mr. Gross" rather than Kroese. Howard Peterson stated that punctuation needs to be added on page three: regarding feedlots, it should read, "Resources, both staffing and funding, ..." Moved by Warner, seconded by Peterson, to approve the minutes of May 27, 1992, as corrected. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Ogaard, Otte, Peterson, Rodning, and Warner. Opposed: None. Carried.

Executive Director's Report - Ron Harnack reported that Wendy Share has recently been hired as RIM Realty Specialist. Ron stated that Mel Sinn's position may possibly be filled through inter-governmental candidates; hopefully, the position will be filled by August. Ron reported that 150 applications were received for the six board conservationist positions that will be filled. Interviews will be held in July for those positions.

Ron reported that he and Warren Rodning attended a tour sponsored by the Metropolitan Council and the Metro Waste Control Commission (MWCC) on June 18. He stated that the tour was a good experience and an excellent opportunity to meet with the leadership of those organizations. Partnership opportunities are available with Met Council and MWCC on the Minnesota River.

Ron attended a meeting with the Department of Natural Resources and Department of Transportation regarding northshore projects relating to rock.

Ron explained that the Commission on Reform and Efficiency (CORE) is moving forward on reorganization in state structure. The BWSR staff is drafting a paper on the BWSR's future role in state government.

Chairman Nielsen arrived at the meeting at 8:50 a.m.

Chairman's Report - Chairman Nielsen stated that the fiscal year ends June 30; board members should submit their expense reports to the central office by June 30.

Chairman Nielsen and Warren Rodning attended the MASWCD Area 6 meeting in Mankato.

Chairman Nielsen appointed a sub-committee to work with Don Ogaard on the Red River Valley impoundments issues and concerns. Those appointed to the sub-committee are: Howard Peterson, chair; Sharon Clark, Dwain Otte, and John Brooks. Don Ogaard will assist the sub-committee in coordinating meetings.

Chairman Nielsen asked board members to send their concerns in writing to Ron Harnack or Jim and they will relay those concerns to CORE regarding restructuring. Jim expressed his concern for local units of government not being recognized. He stated that it is very important to raise this issue with decision-makers explaining to them that local units of government have substantial understanding and abilities to take care of themselves.

BWSR Committee Reports -

Feedlot Committee - Ron Harnack met with Pat Bloomgren, assistant commissioner of Minnesota Pollution Control Agency (MPCA); and Newell Searle, assistant commissioner of Minnesota Department of Agriculture (MDA), regarding the determination of long-term strategy for the feedlot program. Ron stated that a memorandum of understanding between BWSR, MPCA, and MDA is a desired outcome.

Pesticide Committee - Don Warner stated that the Pesticide Applicator Education and Examination Review Board met May 28, 1992, and a copy of those minutes are in board members' packets for review.

RIM Committee - John Boulton reported that the committee met three times. The committee's recommendation will come before the BWSR for action later in the meeting today.

Education Committee Report - Susan Tskakais distributed the draft Memo of Agreement between the University of Minnesota/Extension Service (MES) and the BWSR. Susan reviewed the memo of agreement with the board, explaining the shared position; why it is a pilot project; the position description; and the budget for the position.

Susan introduced Catherine Huebner, Extension Service. Don Ogaard reported that a commitment from the MES is there. He also stated that this is a positive step forward for our education efforts; the resources are available and this is a pilot project with envisioned accomplishments. Dwain Otte voiced concern about the draft memo of agreement because he said he believed it was very different from the education strategy as proposed last month. Dwain felt that there was possible overlap in hiring of future metro and southern positions, when one position may be enough. He also expressed concerns about the credibility of MES as seen by local personnel. There was concern raised as to how this shared position would be affected by the reduction in county extension agents and the budget reductions faced by MES. John Brooks stated that this is an excellent opportunity to work together for one year on a pilot program. Other discussion followed. Moved by Brooks, seconded by Ogaard, to accept the Memo of Agreement between the BWSR and MES and approve the full-time shared education position. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Nielsen, Ogaard, Peterson, Rodning, and Warner. Opposed: Otte. Carried. Chairman

Nielsen stated that the education committee will continue, with a report on the progress and implementation of the pilot program to the BWSR at the September and December meetings.

RIM and RIM Services Grant - Dave Behm reported that last month the BWSR reviewed the goals and objectives of the RIM Program. On June 10, Dave facilitated a discussion meeting in St. Cloud with the MASWCD RIM Strategic Plan Committee, the MACDE/RIM Workgroup, and the BWSR/RIM Reserve Strategic Plan Committee (John Boulton, Barb Cobb, and Jim Nielsen attended). The BWSR's challenge is deciding how to allocate the available funds for easements and wetland restoration to keep within the capability of staffing to process easements within 12 months; and deciding to what degree to target a portion of the funds. Also, the BWSR will need to endorse a RIM services grant option that will provide SWCDs payment for various services rendered under the RIM and Wetland Preserves Programs. Discussion followed. Moved by Boulton, seconded by Rodning, to target 50% of the RIM funds to the Minnesota River Basin. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Nielsen, Ogaard, Otte, Peterson, Rodning, and Warner. Opposed: None. Carried.

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92-47

Discussion followed on how to spend the available RIM funds, for easement acquisitions. Moved by Graba, seconded by Boulton, that the funds be designated for the first two sign-up periods. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Nielsen, Ogaard, Otte, Peterson, Rodning, and Warner. Opposed: None. Carried.

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92-48

Chairman Nielsen called for a break in the meeting at 10:20 a.m. The meeting reconvened at 10:30 a.m.

RIM Service Grant Allocation Formula - Dave Behm explained the three options for the BWSR to consider regarding possible revisions to the allocation formula:

Option #1 - explains the existing formula and includes observations of its limitations.

Option #2 - considers modifying the existing formula and includes comments of its limitations.

Option #3 - explains the intent and content of the proposal for a revamped allocation formula. Staff recommends endorsement of Option #3 because it will better reflect the costs of locally administering the program and improve the ability to compensate SWCDs accordingly.

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92-49

Discussion followed. Moved by Boulton, seconded by Cobb, that the BWSR instruct staff to use Option #3 in the allocation formula, and instruct staff to report at the July BWSR meeting. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Nielsen, Ogaard, Otte, Peterson, Rodning, and Warner. Opposed: None. Carried.

Chairman Nielsen introduced Jim Anderson, MES, who is sitting in for Fred Bergsrud today.

Wetlands Update - Joan Miska, chair of the Wetland Heritage Advisory Committee; Don

Buckhout, facilitator of the Rules Working Committee; and John Jaschke, BWSR staff, were introduced. Joan reported that the Wetland Heritage Advisory Committee (WHAC) met in Thief River Falls in June. She stated that the Association of Minnesota Counties has formed a wetlands committee, which has been very helpful to Joan. The WHAC will meet July 9 at the Kelly Inn in St. Paul. John felt the process was working well, although a bit slow at times. The responsibility is a big one and taken seriously by the members; believes that a good rule will be achieved.

Don Buckhout commended the BWSR on the rules process and its broad perspective in the selection of the Rules Working Committee. Don stated that he's continually impressed with the involvement, expertise, and dedication of the voluntary members of the Rules Working Committee members, and the BWSR staff -- John Jaschke and Greg Larson are doing an excellent job of representing the BWSR, as well as great assistance from Bill Clapp and Jennifer Park, Attorney General's Office. Don mentioned some of the frustrations the committee deals with: 1) the timeframe, which is almost unrealistic; 2) the committee does not yet have a complete draft rule, which is a limitation; and 3) the issue is very complex. Don stated that the Rules Working Committee is doing a good job, and he's happy to be a part of it; he believes the process will result in a rule that is practical and acceptable.

John Jaschke reported that all but six counties have accepted the interim program. John and Bill Clapp will put together to-date summaries of activities. John explained that the WHAC was appointed by the Governor, and the Rules Working Committee was appointed by the BWSR, which selected organizations which in turn selected individuals. Ron Harnack reported that he met with Ron Nargang and Pat Bloomgren regarding wetland issues. Pat Bloomgren would like time on the WHAC agenda to explain MPCA issues and concerns. Dwain Otte commended Don Buckhout on his efforts with the Rules Working Committee in making the process run smoothly. Ron Harnack encouraged board members to attend the committee meetings.

Minnesota River Implementation Program (MRIP) Discussion

- Wayne Anderson, MPCA, distributed informational materials on the Minnesota River Assessment Project (MRAP) and explained the four-year project, which started in 1989. Wayne also reported on MRIP planning process and structure. This program is an LCMR proposal for 1993.

- Mary Anderson and Jack Frost, Met Council, distributed a map listing the Twin Cities metropolitan area communities in the Minnesota River Watershed and explained the criteria and interim strategy, with the plan to be completed by the end of 1993, accomplishing their objective of cleaning up the Minnesota River.

- Rebecca Flood and Mike Meyer, Metropolitan Waste Control Commission (MWCC), gave an overview of MWCC's mission to protect public health and environment. In 1988 they started the nonpoint source pollution monitoring sites.

- Jeff Nielsen, BWSR, explained the five steps involved in MRIP: 1) good science; 2) education and awareness; 3) incentive program; 4) regulation; and 5) continued monitoring. John Boulton suggested including Study Area II on the Minnesota River committees. Ron Harnack stated that a commitment from local, state, and federal involvement to accomplish the objectives is needed, and will also make new partnerships occur. Jim Nielsen thanked the presenters for coming before the BWSR today.

Chairman Nielsen adjourned the meeting for lunch at 12:20 p.m. The meeting reconvened at 1:15 p.m.

Cost-Share Allocations and Grants - Chuck Niska explained that the BWSR needs to make a decision today on the 1993 allocations to SWCDs for general services grants, cost-share grants, SLR (streambank, lakeshore and roadside) grants, and special project grants. He summarized the programs, the grants criteria, and recommended approval of the allocations. Moved by Warner, seconded by Otte, to approve the allocations presented. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Nielsen, Ogaard, Otte, Peterson, Rodning, and Warner. Opposed: None. Carried.

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92-50

Hennepin SWCD's Request for Change in Nomination District - Dave Anderson, chair of the Hennepin SWCD, stated that the district has reapportioned its nominating districts and requests approval of their proposed new boundaries. Moved by Otte, seconded by Rodning, to approve the Hennepin SWCD's nomination districts resolution for change in boundaries. Affirmative: Boulton, Brooks, Clark, Cobb, Graba, Nielsen, Ogaard, Otte, Peterson, Rodning, and Warner. Opposed: None. Carried.

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92-51

Agricultural Roundtable Meeting Report and Discussion - Chairman Nielsen reported that he and Jim Birkholz attended the meeting with the Minnesota Department of Agriculture (MDA) and the Department of Natural Resources (DNR). Chairman Nielsen asked representatives of DNR and MDA to explain the agricultural roundtable meeting. Paul Burns, MDA, stated that it refers to the prairie grass resources of the state as well as sustainable agriculture programs. Norm Moody, DNR, stated that this effort is forming a partnership with the agricultural community; beach ridges is the primary focus, and what can be done to integrate native species management? Norm Moody will contact the person involved with the Ag Roundtable and this issue will be addressed at a future BWSR meeting.

Advisor Comments

- Minnesota Association of Townships (MAT), Marlin Libbesmeier: stated that he is a member of the BWSR wetland Rules Working Committee. Banking is a critical element to the acceptability of the program from a transportation viewpoint.
- Soil Conservation Service (SCS), Roger Musetter: stated that Gary Nordstrom is in Missouri for a state conservationists meeting. Roger reported that there's a new district conservationist (DC) in Duluth. Dennis Heil, state soil scientist, has taken a position in out-

state, this position will be vacant until August when a selection will be made. There are other DC vacancies in Ivanhoe, Thief River Falls, and Olivia. Roger invited board members to attend a crop residue alliance meeting June 26. Roger reported that SCS has a new program - the Wetland Reserve Program, which is a permanent easement program. Roger reported that the federal wetlands definitions are still on hold. He distributed soil survey status maps for the board members' information.

- Minnesota Association of Watershed Districts (MAWD), Howard Peterson: reported that the summer meeting and tour will be held June 26-27, in Bemidji. *At the request of Bd member Peterson, Ron Harnack reported on Snake River.*

Ron Harnack reported on the proposed Snake River Watershed District. A three month informal extension has been given, to complete local water plans. The use of local water plans has been helpful in the process, with all plans to be completed by December. Ron stated that he's pleased with the progress being made on this. Doug Thomas stated that an additional component of the water plans is being added to reflect the Snake River situation. Grants are being sought for professional editors and authors for implementation and concerns about its future success are being addressed. Ron stated that he has received positive comments from local interests and is optimistic at this point. The legal and engineering costs are being negotiated between the consultant and the petitioners.

Chairman Nielsen stated that informational materials are in board members' packets regarding training opportunities that are available to members.

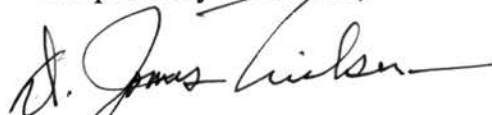
Chairman Nielsen reported that the BWSR meeting that was to be held in Rochester in September will now be held in October, more details later.

Jim Anderson, MES, requested time at a future meeting to explain Extension Service programs to the BWSR. Chairman Nielsen stated that the September meeting would be a good time to do that.

Ron Harnack briefly reviewed the following items to be on the July agenda: RIM allocations; Wells and Borings Committee report; Department of Health report on wells; wetlands report; and MFIP allocations.

Chairman Nielsen adjourned the meeting at 2:20 p.m.

Respectfully submitted,



D. James Nielsen
Chairman

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MEMORANDUM

June 18, 1992



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TO: Board Members

FROM: David H. Behm, Coordinator
RIM Reserve Program

RE: Supplemental June Meeting Packet Info

On June 10, I facilitated a discussion meeting in St. Cloud with the MASWCD RIM Strategic Plan Committee, the MACDE/RIM Workgroup, and the BWSR RIM Reserve Strategic Plan Committee. The purposes of the meeting were to:

- (a) discuss the RIM Reserve Program Plan, and
- (b) discuss the options of revising the existing RIM Reserve services grant allocation formula.

Board members John Boulton and Barb Cobb attended the entire meeting and Jim Nielsen attended the morning discussion regarding the Program Plan.

Program Plan:

Chair Nielsen instructed me to revise the Program Plan based on the comments received. After reviewing the results of the June 10 meeting with Ron Harnack, I have revised the Program Plan as attached. Due to the rearrangement of a number of items and for greater clarity, I have NOT shown the revisions as underlined and ~~stikethrough~~ text. Consequently, please review this DRAFT #4 with the version you received for the May meeting.

Please consider the significance of the following:

- (a) Year-by-year enrollment goals regarding the "priority category" and "acreage amount"
- (b) What is meant by "priority area(s)"?
- (c) How will priority areas be designated? By decree of the Board? Through SWCD application to the Board for consideration? A combination of both?
- (d) How should the \$1.25 million of new bonding funds for easement acquisitions be spent?
- (e) For FY93, how much of the available easement acquisition funds should be committed to each of the three application deadlines (e.g., October 30, 1992; February 1, 1993; June 1, 1993)?

-more-

RIM RESERVE PROGRAM PLAN & SERVICES GRANT ALLOCATION FORMULA MEMO
PAGE TWO
JUNE 18, 1992

Service Grant Allocation Formula:

I have prepared and attached three options for the Board to consider regarding possible revisions to this allocation formula.

Option 1 explains the existing formula and includes my observations of its limitations.

Option 2 considers modifying the existing formula and includes my comments of its limitations.

Option 3 explains the intent and content of my proposal for a revamped allocation formula. I encourage the Board to endorse this approach since it will better reflect the costs of locally administering the program and improve our ability to compensate SWCDs accordingly. If endorsed, I suggest that this approach be discussed in detail by the staff Grants Team and that the actual SWCD allocations be prepared prior to the July Board meeting for your discussion and action.

Allocation of these grants in early August is critical to maintaining continuity for implementing the next sign-up period which will jointly offer Permanent Wetland Preserves as well RIM Reserve.

I look forward to our discussions and your decisions.

**Reinvesting in Minnesota's Water and Soil Resources:
A Five-Year Program Plan for RIM Reserve (1993-1997)**

- I. PURPOSE
- A. Legislative Authority
 - 1. Laws of 1986, Chapter 383, sections 2 through 6 created the Reinvest in Minnesota (RIM) Resources Act to "keep certain marginal agricultural land out of crop production or pasture to protect soil and water quality and support fish and wildlife habitat."
 - 2. Minnesota Statutes (1991) Sections 103F.501 - 103F.531 provides enabling legislative intent and specifies state policy "to encourage the retirement of marginal, highly erodible land, particularly land adjacent to public waters and drainage systems, from crop production and to reestablish a cover of perennial vegetation."
- B. Administrative Authority
 - 1. Minnesota Code of Administrative Rules (MCAR) Parts 8400.3000 - 8400.3930 were initially promulgated as emergency rules in 1986 and later as permanent rules in 1988 and most recently revised in January 1990. Substantive revisions are likely during this five-year period to reflect the long-term goals described herein.
 - 2. Board of Water and Soil Resources has statewide coordination and administrative responsibilities and oversees the local administration of the program by soil and water conservation districts (SWCDs).
- C. Guiding Strategies [from BWSR Strategic Plan]
 - 1. Incentives should be a tool available to local government to enhance local program delivery.
 - 2. Incentives should be offered to potentially affected land occupiers to create positive attitudes about proper land management practices.
 - 3. Incentives should provide opportunities to dissuade harmful and encourage beneficial land and water use activities.
 - 4. Incentives should be coordinated at the state level through the BWSR, and at the local level through comprehensive local water plans.
 - 5. Programs should be available to protect or retire all existing marginal agricultural lands and highly sensitive lands.
 - 6. Land retirement programs should be targeted to the highest priority marginal agricultural lands and sensitive lands.
 - 7. Retired marginal agricultural lands with severe erosion potential should not be brought back into agricultural production unless they are effectively managed to prevent excessive soil loss.
 - 8. Concepts such as "sustainable agriculture" and "watershed-based management" should be promoted and supported through incentive programs.
 - 9. Retirement of marginal agricultural lands and highly sensitive lands will permit land managers to focus their stewardship efforts on more productive lands.
 - 10. Every owner of land has a responsibility for the runoff from their property.
 - 11. Runoff should be managed to minimize property loss and environmental damage by moderating high flows and maintaining low flows of streams.
 - 12. Natural retention systems should be preserved and properly used to the maximum practical extent in managing surface water runoff and ground water recharge.
 - 13. A "net gain" wetland management goal should be adopted in Minnesota.
 - 14. Wetlands restored, enhanced or created under state and federal programs designed to increase our wetland base should not be used for mitigation purposes.

II. GOALS AND OBJECTIVES

A. Long-term Goals

1. Water Quality Protection and Improvements

Protection of ground water quality and improvement or rehabilitation of state and locally-designated surface water resources shall be given priority over efforts to protect the existing quality of surface water resources.

(a) Ground Water

Only the following lands shall be considered:

- lands immediately adjacent and contributing to sinkholes,
- lands immediately adjacent and contributing to exposed and fractured bedrock, or
- lands lying within designated wellhead protection areas.

Enrollment goal = 20% of highest priority acres within wellhead protection areas (20% = 59,250 acres) and 75% of highest priority acres adjacent to known sinkholes and fractured bedrock outcroppings (75% = 15,000 acres)

Prioritized parameters limited to:

- 1) nutrient retention
- 2) pesticide retention
- 3) recharge potential

(b) Surface Water

- Lakes: Only lands immediately adjacent to the riparian source shall be considered.

Enrollment goal = 25% of highest priority acres within shoreland areas
(25% = 358,850 acres)

Prioritized parameters limited to:

- 1) nutrient retention
- 2) sediment reduction
- 3) manure reduction

- Rivers and Streams:

Only lands immediately adjacent to the riparian source shall be considered.

Enrollment goal = 50% of highest priority acres within shoreland areas
(50% = 418,180 acres)

Prioritized parameters limited to:

- 1) sediment reduction
- 2) manure reduction
- 3) nutrient retention

- Wetlands: [Only restorations, not protection of existing basins.]

Only legally drained wetlands shall be considered for restoration. Highest priority shall be given to:

- wetlands which have been completely drained,
- wetland basins which will be completely restored,
- wetlands with a cropping history, and
- wetlands of types 1 through 4.

Enrollment (restoration) goal = 65% of highest priority drained wetlands
(65% = 1,082,250 acres)

b) Prioritized parameters limited to:

- 1) runoff retention
- 2) nutrient retention
- 3) sediment retention from adjacent surface waters

2. Soil Erosion Reductions

1982 NRI (county level basis) indicated 5 million cropland acres eroding at rates exceeding 2xT.

One half of those acres are inherently unproductive and should be retired from agricultural production. **Only** marginal lands shall be considered. **Highest priority** shall be for those lands in land capability classes V through VIII, followed by capability class IV, followed by other specifically designated classes and subclasses. Except for allowing reasonable boundaries of easement areas, land capability classes I and II **shall not** be considered. **Enrollment goal = 30% of inherently unproductive agricultural lands, including enrollment of highest priority acres from expiring CRP contracts and expiring limited duration RIM Reserve easements (30% = 750,000 acres)**

3. Fish and Wildlife Habitat Enhancements

Each parcel enrolled shall have a conservation plan developed to ensure adequate habitat enhancements for all wildlife species, but particularly with a priority for endangered or threatened flora or fauna species where the land has such capability, and generally followed by fish species, and lastly generally followed by any game species of wildlife.

Enrollment goal = sum of above enrollment goals

B. Five-year Objectives

FY93:

1. (a) Enroll and restore 2,000 wetland acres plus adjacent uplands.
(\$1000/acre average total costs, which is approximately 90% of average total costs¹)
- (b) Enroll 1,750 acres of riparian areas. (\$750/acre average total costs²)
- (c) Enroll 250 acres for ground water protection purposes. (\$750/acre average total costs²)
2. 50% of enrolled acres must be located within priority area(s) designated by the Board.

FY94:

1. (a) Enroll and restore 2,000 wetland acres plus adjacent uplands.
(\$1000/acre average total costs, which is approximately 90% of average total costs¹)
- (b) Enroll 3,000 acres of riparian areas. (\$750/acre average total costs²)
- (c) Enroll 2,500 acres of highly erosive marginal lands. (\$750/acre average total costs²)
- (d) Enroll 500 acres for ground water protection purposes. (\$750/acre average total costs²)
2. 50% of enrolled acres must be located within priority area(s) designated by the Board.

FY95:

1. (a) Enroll and restore 2,000 wetland acres plus adjacent uplands.
(\$1000/acre average total costs, which is approximately 90% of average total costs¹)
- (b) Enroll 3,000 acres of riparian areas. (\$750/acre average total costs²)
- (c) Enroll 2,000 acres of highly erosive marginal lands. (\$750/acre average total costs²)
- (d) Enroll 1,000 acres for ground water protection purposes. (\$750/acre average total costs²)
2. 50% of enrolled acres must be located within priority area(s) designated by the Board.

FY96:

1. (a) Enroll 25% of most fragile CRP acres from expiring contracts under perpetual easements.
(\$750/acre average total costs²) [25% = 10,200 acres]
- (b) Enroll 50% of most fragile RIM Reserve acres from expiring 10-year easements under perpetual easements. (\$750/acre average total costs²) [50% objective = 55 acres]
- (c) Enroll and restore 2,000 acres of wetland basins.
(\$1000/acre average total costs, which is approximately 90% of average total costs¹)
- (d) Enroll 3,000 acres of riparian areas. (\$750/acre average total costs²)
- (e) Enroll 1,500 acres for ground water protection purposes. (\$750/acre average total costs²)
2. 50% of enrolled acres must be located within priority area(s) designated by the Board.

FY97:

1. (a) Enroll 25% of most fragile CRP acres from expiring contracts under perpetual easements. (\$750/acre average total costs²) [25% = 75,500 acres]
- (b) Enroll 50% of most fragile RIM Reserve acres from expiring 10-year easements under perpetual easements. (\$750/acre average total costs²) [50% objective = 4,060 acres]
- (c) Enroll and restore 2,000 acres of wetland basins. (\$1000/acre average total costs, which is approximately 90% of average total costs¹)
- (d) Enroll 3,000 acres of riparian areas. (\$750/acre average total costs²)
- (e) Enroll 2,000 acres for ground water protection purposes. (\$750/acre average total costs²)
2. 50% of enrolled acres must be located within priority area(s) designated by the Board.

¹ Average total costs of wetland restoration projects include easement payment for acquisition of land rights, practice payment for restoration of wetland and establishing permanent vegetative cover (grasses, trees, and/or shrubs) on adjacent uplands, and administrative costs estimated to be approximately 20% of the total project costs.

² Average total costs include easement payment for acquisition of land rights, practice payment for establishing permanent vegetative cover (grasses, trees, and/or shrubs), and administrative costs estimated to be approximately 20% of the total project costs.

III. EVALUATION

A. Cumulative Accomplishments [Totals through 1990]

1. Water Quality Improvement
 - (a) Ground Water:

• Lands adjacent to sinkholes	=	0.0 acres
• Lands adjacent to exposed, fractured bedrock	=	N/A acres
• Lands within wellhead protection areas	=	0.0 acres
 - (b) Surface Water:
 - 1) Riparian areas:

a) Riparian cropland	=	977.9 acres
b) Riparian pastures	=	0.0 acres
 - 2) Restored wetland areas
 = | 2,053.1 acres |
2. Soil Erosion Reductions
 - (a) Expiring CRP contract enrollments
 = | 0.0 acres |
 - (b) Expiring RIM Reserve limited easement conversions
 = | 0.0 acres |
 - (c) TOTAL Marginal Agricultural Lands
 = | 29,804.1 acres |
3. Fish and Wildlife Habitat Enhancements
 - (a) Wildlife Habitat:
 - 1) Lands with grasses/legumes
 = | 32,466.2 acres |
 - 2) Lands with shrubs/trees
 = | 3,515.2 acres |
 - 3) Lands with wetlands/open water areas
 = | 2,060.8 acres |
4. Auditing and Enforcement
 - (a) Violations:
 - 1) Cumulative
 = | 10 |
 - 2) Resolved without legal action or penalty
 = | 0 |
 - 3) Resolved with legal action or penalty
 = | 0 |
 - 4) Pending
 = | 10 |

**POTENTIAL OPTIONS FOR
ALLOCATING ADMINISTRATIVE SERVICES GRANTS TO SWCDs
FOR THE RIM RESERVE & PERMANENT WETLAND PRESERVES PROGRAMS**

OPTION 1: USE EXISTING ALLOCATION FORMULA

EXPLANATION OF THE CURRENT ALLOCATION FORMULA

The current system was originally developed in 1988. The only change made that impacts the current calculation is increasing the Index Value for a wetland restoration from the original 2.0 to 3.0. The actual calculation uses three components to arrive at the actual payment to a SWCD.

1. The first is a weighted average that reflects the difficulty of the type of easement and the number of each type of easement that the SWCD has received and processed during the most current sign-up and the preceding two signups. The result of this calculation is called an "Index Value."
2. Each easement older than those included in the Index Value calculation are paid a fixed amount (\$100) to cover the cost of preparing the annual spot check and resolving any problems that are found.
3. A minimum base amount of \$300 is paid to each SWCD for the cost of attending training sessions and keeping the RIM Handbook up to date.

The Index Values used are 1.0 for a limited duration easement; 1.5 for a perpetual marginal land easement; and 3.0 for a wetland restoration easement. The current base payment for spot checks, etc., is \$100 per easement.

OBSERVATIONS ON THE CURRENT ALLOCATION FORMULA

The value of an Index Value "point" (1.0) varies with each allocation. The approximate value of an Index Value "point" for FY93 will be \$611.56 - \$611.60. The value of an Index Value "point" varies accordingly with:

- 1) $\$750,000 - [(91 \times \$300) + (\$100 \times \text{total spot checks})] = \text{"available pool"}$
- 2) "Available pool" influenced by:
 - (a) current year easements conveyed, and
NOTE: Number of easements conveyed in a given year will be largely influenced by easement funds available (which is NOT constant, rather fluctuating up/down).
 - (b) past two years' easements conveyed.
NOTE: See above note.

Consequently, an Index Value "point" does not directly relate to the estimated cost of processing an easement, rather it more directly relates to both a relative order of one easement type to another (wetland restoration = 3.0, perpetual marginal land = 1.5, etc.) and the simple division of the "available pool" by an ever-changing, albeit arbitrary, number of easements conveyed, principally over a 3-year period, and, to a lesser extent, on a cumulative total basis.

Lastly, the existing formula would not readily "adapt" to any type of "targeting" approach the Board may wish to implement. In other words, if the Board chooses to specify high priority areas as presented proposed in the RIM Reserve Program Plan, and if the Board acknowledges that administrative funds should be targeted on an equivalent basis so as to support the "accelerated" efforts being put forth by those "targeted" SWCDs, then factor 3 would have to be substantially increased for those SWCDs. Doing so, as I've indicated above, would reduce the "available pool" of funds to allocate, thereby decreasing the amount of funds available to reimburse all SWCDs for the actual costs of processing any easement. The result would be that an "Index Value" point would likely be "worth" less than the current \$611.

STAFF RECOMMENDATION: Discontinue using existing allocation formula.

OPTION 2: MODIFY EXISTING ALLOCATION FORMULA

POSSIBLE REVISIONS TO THE CURRENT ALLOCATION FORMULA

There are only a few possible changes which could be made to the existing allocation formula, due to its relatively few "factors." In addition, the factors themselves represent, in part, "compiled" index values which are merely relevant to one another.

Factor 1, "Index Value":

- (a) The relative difference between the "index values" of each type of easement could be modified.
Comment: To do so would require an evaluation of the workload differences between processing one type of easement versus another type. However, all easements should be essentially the same regarding the administrative procedures to process the real estate/legal requirements of each easement conveyed. The most notable differences in potential workload as influenced by easement type would be limited to either 1) number and difficulty of the "clouds" present on the title of the property to be enrolled (which has no bearing on easement type), or 2) the technical tasks involved with a wetland restoration project versus any other type of enrollment.
- (b) In addition, the relative significance of the weighted average of the sum of the index value per easement and the number of each type of easement could also be modified.
Comment: The relative significance of the total index value for a particular SWCD is most influenced by the larger number of wetland restoration easements as well as simply a large number of total easements. Since more tasks are required to complete a wetland restoration easement than any other type and that more easement obviously equates to more administrative services provided, it seems unlikely that the relative significance of the "weighted" nature of this factor could or should be modified to any degree.

Factor 2, "Spot Check": The estimated cost of preparing an annual spot check could be modified.

Factor 3, "Base amount": The base amount paid to each SWCD could be modified. As with option 1, the ability of this approach to adapt to any "targeting" the Board may wish to pursue is limited for the reasons stated in option 1.

STAFF RECOMMENDATION: Do not consider modifying existing allocation formula. Develop a "new" formula based on the "real" costs of processing easements and other costs associated with locally administering the RIM Reserve Program.

OPTION 3: NEW SERVICES GRANT ALLOCATION FORMULA

Intent:

- Reimburse SWCDs for the local administrative & technical services provided
- Allocation based on:
 - (a) past fiscal year activity
 - (b) cumulative total of spot checks
 - (c) responses from SWCDs on recent "Self-Evaluation"
- Formula should have ability to reflect the "real costs" of locally implementing the easement program; consequently, formula should be able to indicate the "workload saturation" point for the administrative funds available
- Formula should have ability to allocate funds to any "targeted" SWCDs

Individual Components:

A. Applicant Recruitment & Program Promotion (RIM & PWP)

- 1) Local inventories/assessments
- 2) Promotional activities (plus accelerated activities if in priority area)
- 3) Applicant recruitment
- 4) Sign-up preparation

B. Technical Support

- 1) Conservation plan development (RIM & PWP)
- 2) Wetland restoration responsibilities (RIM only)

C. Easement Processing

- 1) Application compilations
- 2) Courthouse search
- 3) Agreement package
- 4) Process & record easement; title insurance request
- 5) Verify termination of cropping/pasturing (RIM only)
- 6) Cost-share voucher & practice certification (RIM only)

D. Compliance (RIM & PWP; biennially each site)

- 1) Spot checks
- 2) Enforcement

Composite Components:

Factor 1, "Base": # hrs x \$20/hr x 91 SWCDs

Factor 2, "Supplement":

- (a) RIM Reserve easement administration {# hrs x \$20/hr x (# easements/yr)}
- (b) Spot checks {# hrs x \$20/hr x (0.5 x # cumulative easements)}
- (c) Wetland restoration technical services {(sum of total # hrs x \$20/hr) on project basis}
- (d) Permanent Wetland Preserves easement administration {# hrs x \$20/hr x (# easements/yr)}

Funding Sources for Administrative Support:

- 1) **General fund:**
 - \$750,000 per year to SWCDs
 - \$250,000 per year to BWSR
- 2) **Bonding:**
 - An amount justified to Bond Council and the Department of Finance (10 - 15% is normally accepted range)

-more-

Comments: [NOTE: To be discussed by staff Grants Team upon endorsement by Board]

Factor 1:

- What expectations should be identified with the "base amount" received by a SWCD?
- Should each SWCD be awarded a "base amount"? If so, should each SWCD be awarded an equivalent amount, or should the amount of the "base amount" reflect whether it is located in a priority area?

Factor 2:

- \$20/hour seems to be a reasonable payment rate basis.

Overall:

- How to address unknown workload of Permanent Wetland Preserves in initial allocation for FY93?
- Should all or portion of services grant to each SWCD be awarded "upfront" rather than entirely as "reimbursement" as we do now?

If so, some potential options:

(a) a portion awarded "upfront" at beginning of fiscal year, with balance reimbursed as a grant amendment based on actual expenditures including reimbursement of any "excess costs" resulting from an underestimated workload

(b) 100% awarded "upfront" at beginning of fiscal year, based on individual SWCD workplan, and all "unspent" funds returned prior to end of fiscal year; "unspent" funds then awarded to those SWCDs with documented "excess costs" in administering the programs, resulting from an underestimated workload

ENGINEERING/TECHNICAL REQUIREMENTS (hours) FOR RIM RESERVE (per easement)

STAGE 1

DELINEATE DRAINAGE AREA
PRELIMINARY SURVEY
PROJECT PLANNING

TOTAL HOURS

DESIGN CLASS			
1	2	3	4
1	2	3	4
6	9	3	4
2	4	5	6
9	15	11	14

STAGE 2

DESIGN SURVEY/TOPOG MAP
HYDROLOGIC ANALYSIS
HYDRAULIC ANALYSIS
PROJECT DESIGN

TOTAL HOURS

DESIGN CLASS			
1	2	3	4
2	3	14	24
0	1	3	6
0	0	3	6
4	8	12	20
6	12	32	56

STAGE 3

L/O - CONTRACTOR MEETING
STAKING
CONSTRUCTION SUPERVISION
CONST. CHECKING/CERTIFICATION

TOTAL HOURS

DESIGN CLASS			
1	2	3	4
1	2	2	4
1	2	4	6
4	8	12	24
1	2	4	6
7	14	22	40

GRAND TOTAL (hours)

22 41 65 110

@ \$20/hr

\$ 440 \$ 820 \$1300 \$2200

FY1993 ALLOCATIONS TO SOIL AND WATER CONSERVATION DISTRICTS

FINAL RECOMMENDATION (JUNE 24, 1993)

	COST	SHARE		GENERAL			TOTAL
DISTRICT	REGULAR ALLOCATION	SPECIAL PROJECTS	SINK-HOLE PROJECT	SERVICES	SLR		SERVICE GRANTS
AITKIN	\$ 4,478.00			\$ 9,321			13,800
ANOKA	\$ 8,332.00	\$ 24,000		\$ 9,537			39,869
BECKER	\$ 28,990.00			\$ 9,110			38,100
BELTRAMI	\$ 10,263.00			\$ 9,185			19,448
BENTON	\$ 9,835.00			\$ 9,148			18,983
BIG STONE	\$ 15,798.00			\$ 9,088			24,884
BLUE EARTH	\$ 23,028.00			\$ 9,193			32,221
BROWN	\$ 13,870.00			\$ 9,110			22,780
CARLTON	\$ 4,308.00			\$ 9,185			13,491
CARVER	\$ 21,848.00			\$ 9,215	\$ 10,775		41,838
CASS	\$ 7,030.00			\$ 9,358	\$ 3,912		20,300
CHIPPEWA	\$ 11,538.00			\$ 9,088			20,626
CHISAGO	\$ 12,220.00			\$ 9,253			21,473
CLAY	\$ 21,330.00	\$ 21,350		\$ 9,148			51,828
CLEARWATER	\$ 8,580.00			\$ 9,125			17,685
COOK	\$ 1,841.00			\$ 9,103			10,944
COTTONWOOD	\$ 18,902.00			\$ 9,103			28,005
CROW WING	\$ 5,242.00			\$ 9,373			14,615
DAKOTA	\$ 28,430.00			\$ 9,313			35,743
DODGE	\$ 11,968.00			\$ 9,088			21,054
DOUGLAS	\$ 18,201.00			\$ 9,403	\$ 10,838		38,282
FARIBAULT	\$ 14,945.00			\$ 9,110			24,055
FILLMORE	\$ 28,303.00		\$ 90,000	\$ 9,125			127,428
FREEBORN	\$ 19,711.00			\$ 9,073			28,784
GOODHUE	\$ 30,280.00	\$ 19,410		\$ 9,140			58,810
GRANT	\$ 10,905.00			\$ 9,148			20,835
HENNEPIN	\$ 12,305.00			\$ 10,253			22,558
HUBBARD	\$ 5,925.00			\$ 9,110			15,035
ISANTI	\$ 7,284.00			\$ 9,118			16,402
ITASCA	\$ 4,904.00			\$ 9,351			14,255
JACKSON	\$ 18,351.00			\$ 9,118			27,469
KANABEC	\$ 8,094.00			\$ 9,148			15,242
KANDIYOH	\$ 16,902.00			\$ 9,125			26,027
KITSON	\$ 6,008.00			\$ 9,110			15,119

	COST	SHARE		GENERAL			TOTAL
DISTRICT	REGULAR ALLOCATION	SPECIAL PROJECTS	SINKHOLE PROJECT	SERVICES	SLR		SERVICE GRANTS
KOOCHICHING	\$ 2,010.00			\$ 9,163			11,173
LAC QUI PARLE	\$ 25,668.00			\$ 9,118			34,786
LAKE	\$ 4,053.00	\$ 30,000		\$ 9,170			43,223
LAKE OF THE WOODS	\$ 2,948.00			\$ 9,193	\$ 37,625		49,766
LE SUEUR	\$ 19,711.00			\$ 9,170			28,881
LINCOLN	\$ 13,839.00			\$ 9,060			22,899
LYON	\$ 17,839.00			\$ 9,185			27,024
MAHNOMEN	\$ 7,799.00			\$ 9,058			16,857
MARSHALL-BELTRAMI	\$ 4,910.00			\$ 9,163			14,073
MARSHALL	\$ 9,834.00			\$ 9,068			18,902
MARTIN	\$ 25,583.00			\$ 9,110	\$ 27,000		61,693
MC LEOD	\$ 16,135.00			\$ 9,155	\$ 20,750		46,040
MEEKER	\$ 20,473.00			\$ 9,163			29,636
MILLE LACS	\$ 8,988.00			\$ 9,246			18,234
MORRISON	\$ 25,409.00			\$ 9,278			34,687
MOWER	\$ 9,669.00		\$ 8,000	\$ 9,073			26,742
MURRAY	\$ 14,262.00			\$ 9,163			23,425
NICOLLET	\$ 10,000.00			\$ 9,125			19,125
NOBLES	\$ 27,899.00			\$ 9,193			36,992
NORMAN	\$ 17,072.00			\$ 9,073			26,145
OLMSTED	\$ 37,911.00		\$ 12,000	\$ 9,148			59,059
EAST OTTER TAIL	\$ 23,541.00			\$ 9,238			32,779
WEST OTTERTAIL	\$ 24,732.00			\$ 9,238			33,970
PENNINGTON	\$ 9,251.00			\$ 9,073	\$ 48,100		66,424
PINE	\$ 10,263.00			\$ 9,200			19,463
PIPESTONE	\$ 15,368.00			\$ 9,110			24,478
EAST POLK	\$ 11,823.00			\$ 9,099			20,922
WEST POLK	\$ 18,944.00			\$ 9,099			28,043
POPE	\$ 24,562.00			\$ 9,103			33,665
RAMSEY	\$ 9,163.00	\$ 20,000		\$ 9,366			38,529
RED LAKE	\$ 6,009.00			\$ 9,073			15,082
REDWOOD	\$ 11,030.00			\$ 9,125			20,155
RENVILLE	\$ 10,771.00			\$ 9,073			19,844
RICE	\$ 17,913.00			\$ 9,110			27,023
ROCK	\$ 15,953.00			\$ 9,095			25,048
ROOT RIVER	\$ 22,513.00			\$ 9,058			31,571
ROSEAU	\$ 11,369.00			\$ 9,103			20,472

	COST	SHARE		GENERAL			TOTAL
DISTRICT	REGULAR ALLOCATION	SPECIAL PROJECTS	SINKHOLE PROJECT	SERVICES	SLR		SERVICE GRANTS
NORTH ST. LOUIS	\$ 3,119.00			\$ 9,358			12,477
SOUTH ST. LOUIS	\$ 8,856.00	\$ 13,359		\$ 9,508			29,724
SCOTT	\$ 20,303.00	\$ 22,815		\$ 9,749			52,667
SHERBURNE	\$ 3,800.00			\$ 9,253			13,053
SIBLEY	\$ 12,871.00			\$ 9,236			22,107
STEARNS	\$ 46,856.00	\$ 31,250		\$ 9,418			87,524
STEELE	\$ 9,840.00			\$ 9,125			18,965
STEVENS	\$ 22,805.00			\$ 9,118			31,723
SWIFT	\$ 11,115.00			\$ 9,065			20,180
TODD	\$ 22,007.00			\$ 9,248			31,253
TRAVERSE	\$ 8,438.00			\$ 9,110			15,548
WABASHA	\$ 21,487.00			\$ 9,148			30,635
WADENA	\$ 5,328.00			\$ 9,088			14,416
WASECA	\$ 9,757.00			\$ 9,155			18,912
WASHINGTON	\$ 12,561.00			\$ 9,343			21,904
WATONWAN	\$ 8,307.00			\$ 9,155			17,462
WILKIN	\$ 10,861.00			\$ 9,073			19,934
WINONA	\$ 17,410.00			\$ 9,200			26,610
WRIGHT	\$ 18,337.00			\$ 9,486			27,823
YELLOW MEDICINE	\$ 18,818.00			\$ 9,170			25,988
SUBTOTAL	\$ 1,314,820.00	\$ 181,984.00	\$ 110,000.00	\$ 836,657.00	\$ 159,000.00		\$ 2,602,481
PROGRAM TOTAL	\$ 1,496,804		\$ 250,000	\$ 863,054	\$ 159,000		
ALLOCATED TOTAL	\$ 1,496,804		\$ 135,000	\$ 836,657	\$ 159,000		
BALANCE	\$ 80		\$ 115,000	\$ 26,397	\$ 0		

Notes:

Grant's Cost-Share allocation has been reduced by \$ 782 for program violations.

Douglas' Cost-Share funding will be decreased \$840 for repayment of program violations.

Balance funding in the Cost-Share Program will become part of the Roll-Over allocation to SWCDs at the end of calendar year 1991.

Balance funding in General Services will be used to match the EPA/MPCA funding of the Feedlot position in Marshall.

STREAMBANK, LAKESHORE & ROADSIDE
APPLICATION SCORING CRITERIA

PURPOSE: Grants are available to SWCDs and other local units of government to solve sediment and erosion control problems that are located on streambank, lakeshore and roadside sites.

Cost-share payments (now given out prior to construction) must not exceed 50 per cent of the project costs, or 50 per cent of the local share if federal funds are used.

The desire to no longer prioritize federally funded projects has been expressed, based on the fact that an original objective of the SLR Program (i.e., to be able to bring revenue to a local economy through a SWCD) is not as significant as it once was. However, the aim of the program to assist local units of government was upheld.

1. Degree of Public Benefit: (0 to 20 points)

Public Benefits include:

- *Public safety considerations
- *Public education
- *Water quality impacts (including proximity to protected waters, wetland protection, etc.)
- *Wildlife & Fisheries benefits
- *Recreational benefits, including accessibility

2. Cause & Effect: (0 to 15 points)

Will an identified problem be adequately treated, providing a long-term solution to satisfactorily address the causes of subsequent erosion, sedimentation & water quality degradation?
Considerations include:

- * Is the cause within the applicants control?
- * Will the problem be adequately treated?
- * Is the treatment to provide long-term solution?

3. Are Least-Cost Methods employed to control an identified problem? 0 to 10 points

4. Tie-in and identification of the project as it relates to local plans and controls, such as: (0 to 10 points)

SWCD Annual Plans
Comp Local Water Plans
Local Ordinances or Official Controls
Other local cooperative efforts

5. Is this a continuation or completion of an on-going project?
0 or 5 points

6. Could this project be completed through the regular Cost-Share Program? 0 or 5 points

SPECIAL PROJECT
APPLICATION SCORING CRITERIA

PURPOSE: To use 10 per cent of Cost-Share Program to fund special projects which address erosion or sediment control, or water quality problems using the administrative procedures set forth in the Cost-Share Program. Special Project funding provides an opportunity for requests of a larger scale to be funded, thus reducing demands on regular cost-share funding, and it also provides a funding mechanism for the installation of innovative methods & approaches for erosion and sediment control and water quality problems.

1. Degree of Public Benefit: (0 to 20 points)
Public Benefits include:
 - *Public safety considerations
 - *Public education
 - *Water quality impacts (including proximity to protected waters, wetland protection, etc.)
 - *Wildlife & Fisheries benefits
 - *Recreational benefits, including accessibility
2. Innovativeness of the project, based on: (0 to 20 points)
 - *New or transferred technology implementation
 - *New methodologies employed
 - *New opportunities identified
 - *The identified/projected life of the project
 - *Multi-agency efforts
 - *Multi-county efforts
3. Tie-in and identification of the project as it relates to local plans and controls, such as: (0 to 10 points)
 - SWCD Annual Plans
 - Comp Local Water Plans
 - Local Ordinances or Official Controls
 - Other local cooperative efforts
4. Cause & Effect: (0 to 10 points)
5. Are Least-Cost Methods employed to control an identified problem? 0 to 10 points
6. Are Cost-Share funds still available locally? 0 to 5 points
7. Could the project be funded through the regular Cost-Share Program? 0 or 5 points
8. Documented or projected effectiveness of the project, (0 to 10 points) based on the data available from:
 - * site investigation
 - * other documentation
 - * post-project reporting & accomplishment

FY1993 SUMMARY
BOARD OF WATER AND SOIL RESOURCES
GRANT PROGRAMS

BWSR PROGRAM	WETLAND CONSERVATION ACT	ABANDONED WELL SEALING	ABANDONED WELL INVENTORY	SINKHOLE COST-SHARE	COST-SHARE PROGRAM
FUNDING SOURCE AND AMOUNT:	\$300,000 in LWRPMP funding \$100,000 in General Funding available for implementation grants	\$230,000 in LCMR funding remaining available	\$200,000 in General Funding has been allocated to Counties	\$250,000 in LCMR funding is available for use within the next year	\$1,461,000 available from the General Fund: \$146,100 to be used for Special Projects
CLIENTELE:	Counties	Counties	Counties	Landowners	Landowners or LGUs
LOCAL ADMINISTRATION:	County or other LGUs	County or designated LGUs	County or designated LGUs	SWCDs	SWCDs
APPLICATION INFORMATION:	Announcement in State Register; applications accepted for 60 days	\$158,000 in applications for funding currently under review, expected to be completed in May	Invoices from participating Counties will be processed for reimbursement upon their receipt by the BWSR	Participating SWCDs are expected to send lists of potential landowner-participants to the BWSR. BWSR has also solicited for the services of a consulting engineer to provide technical assistance.	Funding allocated based on formula, or, for Special Projects, based on competitive applications received from districts.
MILESTONES:	April 22: Board approval of allocation process May 4: Notice placed in State Register May 8: Application information mailed to Counties, LGUs By June 15: Notify Review Team July 3rd: Application deadline for WCA interim implementation grants to Counties. Approx. July 15th: Grant Agreements sent to Counties. August: Grant funds sent to Counties	Funding is out to most requesting Counties, with the Board approving the process used to review current proposals Update the Board in July	After April 30th: reimbursements will begin to be processed. It is anticipated that such payments will be made in three installments over the course of the year (and Project) Update the Board in July	May 8th: Deadline for submittal of RFP responses from engineers. May 13th: Deadline for submittal of participating landowners from SWCDs Mid-May: Select Engineer Late May: Review of potential sites for treatment by BWSR Staff & Engineer June-July: Sites selected for treatment July-August: Grant Agreements and funds sent out to SWCDs	April 1st: Deadline for Special Project applications May: Review of applications by G Team June: Staff allocation recommendation given to the Board for approval July: Grant Agreements are sent to SWCDs August: Funding sent to the SWCDs

BWSR PROGRAM	STREAMBANK, LAKESHORE AND ROADSIDE	GENERAL SERVICES	RIM CONSERVATION RESERVE SERVICE GRANT	MINNESOTA FORESTRY IMPROVEMENT PROGRAM	LOCAL WATER RESOURCES PROTECTION AND MANAGEMENT PROGRAM
FUNDING SOURCE AND AMOUNT:	\$159,000 Available from the General Fund	\$849,000 Available from the General Fund	\$750,000 Available from the General Fund	\$120,000 Available from the General Fund, transferred to the BWSR from DNR Forestry	\$2,535,000 from the General Fund
APPLICATION INFORMATION	Applications for competitive funding are accepted annually from SWCDs, acting on behalf of other LGUs.	Amounts given to SWCDs based on a combination of DNR Water Permit service review, as well as need and use.	FY1993 allocations will be based on responses received from a demand-use survey of program demand, as well as projected wetland easement workload per SWCD.	SWCDs apply for funding based on local need and response during a pre-set sign-up period	Applications for Base and Challenge Grants to Counties will be solicited in late 1992.
CLIENTELE:	Local governments	SWCDs	SWCDs receive RIM Service Grants to promote and administer the program locally.	Private landowners	Counties
LOCAL ADMINISTRATION:	SWCDs sponsor applications	SWCDs		SWCDs	Counties or a designated LGU/Water Plan Coordinator
MILESTONES:	April 1: Deadline for submittal of applications from SWCDs April-June: Applications are screened and scored by the Grants Team and other appropriate BWSR staff and state agencies June: Recommendations for funding are brought before the Board for approval July: Grant Agreements are sent to recipients August: Funds are sent out to the SWCDs	May-June: Allocation figures calculated based on funding available June: Staff funding recommendation presented to the BWSR Board for approval. July: Grant Agreements sent to the SWCDs August-September: Funding sent to the SWCDs	April: Survey mailed out to the SWCDs May: Surveys returned, results tabulated and analyzed May-June: Staff and SWCDs work together to create an allocation formula June: Allocation options presented to the BWSR Board July: Allocation decision made by the Board August: Grant Agreements sent to SWCDs August-September: Funds sent to the SWCDs	May: Notice of sign-up period sent to the SWCDs participating in the MFIP May-June: SWCDs solicit landowners, informing them of the program and practices available for cost-sharing	July-August: levy information to be available from the Department of Revenue September: Application announcement in the State Register; County governments set local levy amounts October: Application period begins for LWRPMP grants December: Counties set final budgets, including commitment of local funding for match to participate in the Program. January 1993: Application periods close for Base and Challenge Grants; Base Grant Agreements are sent out to Counties January 1993: Challenge Grant review process begins January-February: Review Team makes recommendations to the Board February 1993: Board approval of Challenge Grant recommendations

SUMMARY OF SLR/SPECIAL PROJECT APPLICATION REVIEW
FY1993

STREAMBANK, LAKESHORE AND ROADSIDE

<u>DISTRICT</u>	<u>PROJECT</u>	<u>REQUEST AMOUNT</u>	<u>SCORE</u>	<u>RECOMM. FUNDING</u>	<u>CUMULATIVE TOTAL</u>
Pennington	Red Lake River Erosion Control	\$48,100	61	\$48,100	\$ 48,100
Martin	Sylvania Park Erosion Control	\$27,000	60	\$27,000	\$ 75,100
L.O.W.	Bay Park Seawall Construction	\$37,625	60	\$37,625	\$112,725
Douglas	Lake Le Homme Dieu Erosion Control	\$21,675	56	\$10,838	\$123,563
Cass	Portage Lake Emergency Funding	\$ 3,913	55	\$ 3,913	\$127,476
McLeod	Crow River Park Erosion Control	\$41,500	53.5	\$20,750	\$148,226
Carver	City of Waconia Erosion Control	\$43,800	53	\$10,774	\$159,000
Sherburne	Mississippi River Erosion Protection	\$17,500	53		
Traverse	Lake Valley Road Streambank Stabilization	\$ 6,725	44.5		
Carver	City of Victoria Erosion Control	\$15,600	43		
Pine	Norman Township Road Stabilization	\$ 7,000	39.5		
Root River	Caledonia Erosion Control Project	\$22,455	38		
Pine	Mikrot Road (Kettle River Twp.) Stabilization	\$10,000	35		
Root River	Yucatan Erosion Control Project	\$16,170	32		

SPECIAL PROJECTS

DISTRICT	PROJECT	REQUEST AMOUNT	SCORE	RECOMM FUNDING	CUMULATIVE TOTAL
Clay	Buffalo River Erosion Control	\$ 42,700	85	\$21,350	\$ 21,350
Ramsey	Gervais Lake Pond Construction	\$ 20,000	74.5	\$20,000	\$ 41,350
Scott	Prior Lake Wetland Restoration	\$ 22,615	73.5	\$22,615	\$ 63,965
So. St. Louis	Lester River Golf Course Erosion Control	\$ 13,359	72.5	\$13,359	\$ 77,324
Stearns	Lake Koronis Lakeshore Erosion Control	\$100,000	72.5	\$31,250	\$108,574
Lake	Lake Superior Erosion Protection	\$ 50,000	72.5	\$30,000	\$138,574
Anoka	Labelle Pond Erosion Protection	\$ 29,938	70	\$24,000	\$162,574
Goodhue	Cannon Valley Trail Nat. Ctr. Erosion Protect.	\$ 19,410	66	\$19,410	\$181,984
Big Stone	Shady Oak Shoreline Stabilization	\$ 65,855	62		
Big Stone	Sunset View Shoreline Stabilization	\$ 47,779	59.5		
Wadena	Old Wadena Nature Center	\$ 2,000	56.5		
Lyon	Yellow Medicine River Stabilization	\$100,000	55		
Winona	Kronebusch Farms Ag Waste System-Wetland Creation	\$ 9,800	54		
Winona	Whitewater River Technical Assistance	\$ 30,000	52		
Mower	East Side Lake Technical Assistance	\$ 7,500	51		
Big Stone	Dale Steen Wetland Water Quality Monitoring	\$ 7,000	36.5		
Cass	Leech Lake Water Quality Monitoring	\$ 10,000	36		
Dakota	City of Farmington Wetland Inventory	\$ 21,500	30		
Traverse	Taylor Township Scour Hole	\$ 7,500	27		
Traverse	Tubex Installation	\$ 1,065	NS	MFIP	

TOTALS:

a. Available Funding:

SLR: \$159,000

Special Projects: \$181,984

b. Total Requests

SLR: \$319,063

Special Projects: \$608,021

WETLAND CONSERVATION ACT 1991

LGUs Formally Accepting or Declining Responsibility

For the Interim Program

Board of Water and Soil Resources

June 22, 1992

LOCAL GOVERNMENT UNIT	CONTACT PERSON	PHONE NUMBER
Aitkin County	Charlie Bonneville	(218)927-2102
Annandale, City of	Jeffrey E. Karlson	(612)274-3055
Anoka County/SWCD	<i>See appropriate WD, WMO, or City/Town</i>	
Apple Valley, City of	Lon Aune	(612)431-8889
Barnesville, City of	Jerry Ames	(218)354-2292
Barrett, City of	Kent D. Marshall	(612)528-2564
Bassett Creek WMO*	Len Kremer	(612)832-2781
Becker SWCD	Brad Grant	(218)847-2651
Beltrami SWCD	Dale Krystosek	(218)751-3036
Benton County	George E. Minerich	(612)968-6254 Ext. 210
Big Stone County	Mildred Thymian	(612)839-3136
Bloomington, City of	Jim Gates	(612)881-5811 Ext. 260
Blue Earth County	Rick Hanna	(507)387-8381
Breezy Point, City of	Etta Steffen	(218)562-4441
Brooklyn Park, City of	Kevin Larson or Alan Kretman	(612)424-8000
Brown County	Charles Enter	(507)359-7900
Burnsville, City of	Craig L. Ebeling, P.E.	(612)895-4400
Carlton County	Paul G. Gassert	(218)384-4281
Carver SWCD	Paul Neumann	(612)442-5101
Cass County	Tim Richardson	(218)547-3300
Cass County	John Sumption	(218)547-3300 Ext. 212
Chanhassen, City of	Paul Krauss, AICP	(612)937-1900
Chippewa County	Judy Olson	(612)269-2139
Chisago County	Marion Heemsbergen	(612)257-1300 Ext. 447
Clay County	Tim Magnusson	(218)299-5002
Clearwater SWCD	Doug Thompson	(218)694-6845
Cloquet, City of	William J. Schlenvogt	(218)879-2507
Columbus, Town of	Mary A. Hoyt	(612)464-3120
Cook County/SWCD	<i>Have not yet formally accepted.</i>	
Coon Creek WD	Tim Kelly	(612)755-0975
Coon Rapids, City of	William R. Ottensmann	(612)755-2880
Cottage Grove, City of	Gary Berg	(612)458-2824
Cottonwood County	David Thompson	(507)831-5669
Crow Wing County	Bob Markert	(218)829-3272
Dakota County/SWCD	<i>See appropriate WD, WMO, or City/Town</i>	
Dayton, City of	Shirley Slater	(612)427-4589
Dellwood, City of	Joanne Hensley	(612)429-1356
Dodge County	Jack Dolan	(507)635-2321
Douglas SWCD	Jerry Haggemiller	(612)762-0207 or 0208
> Douglas Township	Don Serres	(612)437-3814
Eagan, City of	Rich Brasch	(612)681-4600
East Bethel, City of	Sheri Anderson	(612)434-9569
East Gull Lake, City of		
Eden Valley, City of	Mona Haag	(612)453-5251
Elk River, City of	Stephen Rohlf	(612)441-7420

LOCAL GOVERNMENT UNIT	CONTACT PERSON	PHONE NUMBER
Elm Creek WMO	Leon Zeug	(612)544-8572
Empire Township	G.E. Stelzel	(612)463-8142
Falcon Heights, City of	Terry Maurer	(612)774-6021
Faribault SWCD	Gary Wehrenberg	(507)526-2300 or 2388
Farmington, City of	Thomas J. Kaldunski, P.E.	(612)463-7111
Fergus Falls, City of	Daryl Johnson	(218)739-2251
Fillmore SWCD	Darrell Brekke	(507)765-3878
Forest Lake, City of	James C. Crawford	(612)464-3550
Fridley, City of	John G. Flora	(612)572-3550
Freeborn County	Richard Hoffman	(507)377-5186
Goodhue County	Myrna M. Halbach, P.E.	(612)388-8261
Grant SWCD	Joe Montonye	(218)685-5395
> Hanover, City of	Susan Vergin	(612)497-3777
> Hastings, City of	Tom Montgomery	(612)437-4127
Hennepin SWCD	Leon Zeug	(612)544-8572
Hermantown, City of		
Houston County	A. Peter Johnson	(507)724-5211
# Hubbard SWCD	Bill Alden	(218)732-0121
Inver Grove Heights, City of	Curtis Gutoske, AICP	(612)457-2111 Ext. 233
<i>Isanti County/SWCD</i>	<i>Have not yet formally accepted.</i>	
Itasca SWCD	Art Norton	(218)326-6595 or 0017
Jackson SWCD	Ralph McNab	(507)662-6682
Jordan, City of	Coralee Fox	(612)492-2535
# Kanabec County	Ron Grace	(612)679-3173
Kandiyohi County	Jeff Bredburg	(612)231-6202
Kittson SWCD	Mr. Kelly Bengtson	(218)843-2619
Koochiching County	Doug Grindall	(218)283-6254
La Prairie, City of	Paul Vanderlinde	(218)326-4508
<i>Lac qui Parle County/SWCD</i>	<i>Have not yet formally accepted.</i>	
Lac qui Parle-Yellow Bank WD	Willis Beecher	(507)223-5982
Lake County	Richard A. Sigel	(218)834-8320
# Lake of the Woods SWCD	Gary Lockner	(218)634-1945
Lakeville, City of	James A. Robinette	(612)469-4431
Le Sueur, City of	Loren Kohnen	(612)665-6401
<i>Le Sueur County/SWCD</i>	<i>Have not yet formally accepted.</i>	
Lincoln County	Deane D. Sagmoe	(507)694-1529
Linwood Township	David Thompson	(612)462-0501
Lower Minnesota River WD	Larry Samstad	(612)445-7993
Lower Rum River WMO	James E. Schrantz	(612)755-5100
Lyon SWCD	Rose Anderson	(507)537-0396
# Mahnomon County	Mark Aanenson	(218)935-2987
Mahtomedi, City of	John J. Olinger	(612)426-3344
Maple Grove, City of	Gerald E. Butcher, P.E.	(612)420-4000
Marine on St. Croix, City of	K. Ginger Bolin	(612)433-3636
Marshall County	Tim Finseth	(218)745-5010
Martin County	Linda Meschke	(507)238-3221
May, Town of	Cynthia J. (Cyd) Young	(612)439-1706
McLeod County	Paul Melchior	(612)864-5551
Medina, City of	Loren Kohnen	(612)473-4643
<i>Meeker County/SWCD</i>	<i>Have not yet formally accepted.</i>	
Mendota Heights, City of	James E. Danielson, P.E.	(612)452-1850
Mille Lacs County	Randy Piasecki	(612)983-8205

WETLAND CONSERVATION ACT 1991

LGUs Formally Accepting or Declining Responsibility

For the Interim Program

Board of Water and Soil Resources

June 22, 1992

LOCAL GOVERNMENT UNIT	CONTACT PERSON	PHONE NUMBER
Minnehaha Creek WD	Ron Quanbeck, P.E.	(612)473-4224
Minnetonka, City of	David Sonnenberg	(612)939-8200
Minnetrista, City of	Jay Blake, AICP	(612)446-1660
Monticello, City of	Jeff O'Neill	(612)295-2711
Morrison SWCD	Helen McLennan	(612)632-6606
Mower SWCD	Bev Nordby	(507)433-8268
Murray County	Rimer Isder	(507)425-3129
New Market Township	Larry Hamre	(612)469-2250
New Scandia, Town of	Dolores Peterson	(612)433-2274
Nicollet County	Pam Rivers	(507)931-6800
Nimrod, City of	Larry Gilster	(218)472-3270
Nine Mile Creek WD	Raymond A. Haik, Esq.	(612)334-2609
Nobles SWCD	Dan Livdahl	(507)376-9150
(Nobles County)	Shane Missaghi	(507)372-8227
Norman SWCD	Curtis Borchert	(218)584-5169
North Mankato, City of	Patrick Wussow	(507)625-4141
Oak Grove Township	David H. Thompson	(612)753-1920
Oak Park Heights, City of		
Olmsted SWCD	Laurie Hassler	(507)289-6239
Otsego, City of	Elaine Beatty	(612)441-4414
Otter Tail County	William Kalar	(218)739-2271
Owatonna, City of	Arnold Putnam	(507)451-4542
Pennington County	Kenneth Olson	(218)681-4011
# Pine County	Richard Noyes	(612)384-7431
Pine River, City of	Wanda Tulenchik	(218)587-2440
Pine Springs, City of	Richard Zietlow	(612)777-5724
Pioneer-Sarah Creek WMO	Leon Zeug	(612)544-8572
Pipestone SWCD	Dean Williams	(507)825-5881
Plymouth, City of	Fred G. Moore, P.E.	(612)550-5000
Polk County	Eugene Mattson	(218)281-5408
Pope SWCD	Kim W. Krueger	(612)634-5326
Prior Lake, City of	Bruce Loney	(612)447-4230
Prior/Spring Lake WD	Peter Fryer	(612)473-4224
Ramsey County/SWCD	See appropriate WD, WMO, or City/Town	
Ramsey-Washington Metro WD	Cliff Aichinger	(612) 779-2207
> Randolph, City of	Steve Pressnall	(507)645-7765
> Ravenna Township	Leo Siebenaler	(612)437-3928
Red Lake SWCD		
Redwood SWCD	Marilyn Bernhardson	(507)637-2427
Renville SWCD	Thomas Kalahar	(612)523-1559
Rice SWCD	Tim Labs	(507)334-1887
Rice Creek WD	Gerald A. Sande	(612)687-1286
Richfield, City of	Mike Eastling	(612)861-9792
Riley-Purgatory-Bluff Creek WD	Raymond A. Haik, Esq.	(612)334-2609
Rochester, City of	John Harford	(507)285-8232

LOCAL GOVERNMENT UNIT	CONTACT PERSON	PHONE NUMBER
Rock County	Richard Dillon	(507)283-4456
# Roseau County	Russell L. Larson	(218)463-2063
St. Louis County	Dale Schroeder	(218)726-2450
St. Paul, City of	Roger Ryan	(612)228-3382
Savage, City of	Bruce R. Bullert, P.E.	(612)890-1045
Scott County/SWCD	<i>See appropriate WD, WMO, or City/Town</i>	
Shakopee, City of	David E. Hutton, P.E.	(612)445-3650
Sherburne County	Brian Bensen	(612)241-2701
Shingle Creek WMO*		
Sibley SWCD	Loren Evenson	(612)237-5435
Six Cities WMO	John Flora	(612)571-3450
South St. Paul, City of	John Sachi	(612)450-8704
# Stearns County	Jack Wimmer	(612)656-3613
Steele County	Scott Goldberg	(507)451-8040
Stevens County	Gregg Gerhartz	(612)589-2460
Stillwater, City of	Ann Pung-Terwedo	(612)439-6121
Swift County	Tom Anderson	(612)843-4894
# Todd SWCD	Jim Framstad	(612)732-2644
Traverse County/SWCD	<i>Have not yet formally accepted.</i>	
Vadnais Lake Area WMO	Stephanie McNamara	(612)429-8522
Valley Branch WD	Allen Dornfeld	(612)777-5590
> Vermillion Township	Eugene Rotty	(612)437-4035
Virginia, City of	Robert P. Manzoline	(218)741-2388
Wabasha SWCD	Glen Roberson	(612)565-2646
Wadena SWCD	Malinda Dexter	(612)631-3195
> Waseca SWCD	Marla Watje	(507)835-4831
Washington County/SWCD	<i>See appropriate WD, WMO, or City/Town</i>	
Watsonwan County	Gerald Engstrom	(507)375-3393
West Mississippi WMO*		
West St. Paul, City of	Bill Craig	(612)455-9671
Wilkin SWCD	Bruce Poppel	(218)643-3051
Willmar, City of	Bruce Peterson	(612)235-4913
Winona SWCD	Art Persons	(507)457-6335
Woodbury, City of	David R. Jessup	(612)731-5784
Wright County	Kerry Saxton (SWCD)	(612)682-1933
Yellow Medicine SWCD	Lou Ann Nagel	(612)669-4442

FORMAL ACCEPTANCE TOTALS	*Stipulates that responsibility will be relinquished to a member city, if the city accepts responsibility.	> = An addition since the last update 6/18/92
Counties = 43		
SWCDs = 35		
Cities = 61		
WDs = 10		
WMOs = 8		
Towns/Townships = 10	# = Adopted Burning Certificate	

Understanding

The Minnesota River

Assessment Project

**FOR MORE INFORMATION ON THE MINNESOTA
RIVER ASSESSMENT PROJECT CONTACT:**

**Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155
(612) 296-7283
Toll-free: 1-800-652-9747**

**MPCA Southeast Regional Office
2116 Campus Drive, S.E.
Rochester, Minnesota 55904
(507) 285-7343**

**MPCA Southwest Regional Office
700 North Seventh Street
Marshall, Minnesota 56258
(507) 537-7146**

**UNDERSTANDING THE MINNESOTA
RIVER ASSESSMENT PROJECT**

A Forgotten River

The Minnesota River has been referred to as Minnesota's "forgotten river". Despite its size and grandeur, the river continues to be overlooked and undervalued as a Minnesota natural resource. Those who have lived near the river recognize that serious pollution problems have plagued the resource for many years. The river's water quality has been poor for so long, in fact, that few, if anyone, within the river valley can remember it as a clean and healthy resource.

The Minnesota River is an impressive resource, stretching 335 miles, from the western border of Minnesota to its confluence with the Mississippi River at Fort Snelling. The Minnesota River drains a 16,770 square-mile area which includes all or part of 37 counties in Minnesota. This river flows and meanders through some of the richest agricultural land in Minnesota, and cultivated land is the largest land use within the river basin. While the river valley has produced significant agricultural commodities for our citizens, this abundance has not come without cost.

A Resource in Trouble

A serious deterioration in the river's water quality over the past century has been largely the result of long-term, intensive agricultural practices within the river basin. As prairie soils were exposed to the ravages of wind and water, serious soil erosion took place throughout the valley. By the 1870s, the character and quality of the river was already beginning to change. The once pristine river began to fill with sandbars and silt.¹

Fish and wildlife habitats, once abundant along the river began to deteriorate. Wetlands, which were once a predominant feature of the river valley and which protected the river from flooding, were drained and destroyed.²

During the mid-1900s, as farmers became increasingly more productive, new sources of pollution began reaching the river. Large-scale use of agrichemicals in the basin exacerbated an already serious deterioration in water quality in the river. Soil, pesticides, fertilizers, and other chemicals were transported to the river through ditches and overland flow. Such pollution continues to wreak havoc on river water chemistry, as well as its fish and wildlife habitat. These contaminants called "nonpoint sources" (NPS) of pollution result from a combination of human activities on the land and the natural flow of water. During normal rainfall and snowmelt events, water flowing over and through the ground picks up and carries with it a variety of pollutants, both natural and man-made, finally depositing them in our surface and ground waters. These pollutants include soil, pesticides, fertilizers, and animal wastes from agricultural operations.

Runoff from cities and towns within the basin have also contributed significant contaminants to the river through this process. Soil, paint, and litter from construction sites; oil, grease, and other automotive fluids from streets and parking lots; pesticides and fertilizers from lawns and golf courses; and organic matter from leaves and grass clippings have all been deposited in the river, largely by storm sewers.

Inadequate sanitary sewer systems from towns and cities (often referred to as point sources) have also historically plagued the river. These systems have for the most part been upgraded and are improving, however, some smaller communities and most rural households continue to discharge untreated or inadequately treated wastewater directly to surface waters throughout the basin.

COOPERATORS OF MRAP

**Legislative Commission on Minnesota Resources
Minnesota Pollution Control Agency (MPCA)
United States Geological Survey (USGS)
EPA - Research Laboratory Duluth (EPA-ERL)
South Central Minnesota Counties
Water Planning Project
Mankato State University (MSU)
Board of Water and Soil Resources (BWSR)
USDA Soil Conservation Service (SCS)
Metropolitan Council
Metropolitan Waste Control Commission (MWCC)
37 County Governments
37 Soil and Water Conservation Districts (SWCD's)**

Today, nonpoint source pollution is the major cause of water quality degradation in the Minnesota River. As a result, the lower reaches of the river no longer support recreational activities such as fishing and swimming. Water quality in the last 25 miles of the river is frequently in violation of water quality standards. Not surprisingly, the Minnesota River has a serious, negative impact on the water quality of the Mississippi River system below Fort Snelling, particularly with respect to turbidity (or the combination of sediment and other solids suspended in water), sediment and nutrients.³

Two major wastewater treatment plants (WWTPs), the Blue Lake and Seneca, discharge their effluent within the last 25 miles of the Minnesota River. The river is currently unable to meet water quality limitations in this stretch during summer, low-flow conditions. The upgrading and improvement of these WWTPs is now underway, but this alone will not be adequate to insure that water quality standards in the river are met. A reduction in the amount of NPS pollution entering the river upstream of the plants will also be needed.

The volume of suspended solids carried by the Minnesota River is higher than most other rivers in the state. A good indication of the severity of the problem is illustrated by a sobering statistic. During 13 years of water quality monitoring at Mankato, the U.S. Geological Survey observed that on average, the equivalent of 270 dump-truck loads of sediment were moving past the monitoring station each day.

While rivers do have a limited ability to "purify" themselves through physical and biological assimilation processes, the system can be quickly overburdened. This "purification" process is dependent on several factors, including temperature, reaeration, dissolved oxygen levels, penetration of sunlight, and the levels of nutrients and organic matter present. In the case of the Minnesota River, pollutant loadings have far exceeded the river's ability to assimilate them. The pollutant loadings, however, continue undiminished.

Scientists have predicted that a 40 percent reduction in loadings of some NPS pollutants, coupled with the upgrading of the above-mentioned WWTPs will be necessary to meet water quality standards in the lower Minnesota during summertime low-flow conditions.⁴

What Exactly is Wrong with the Minnesota River?

Water quality in the Minnesota River is a reflection of the accumulation of pollutants from the many subwatersheds and ground water sources in the basin. The amount of pollution contributed by a subwatershed is a function of the land and water management practices within the subwatershed. Many land-use practices contribute to the volume of pollutants washed off the land and into the river. Even tributaries that appear to have much better water quality than the river under normal conditions can deliver some of the largest loadings of pollutants during rainstorms.

In the Minnesota River, the pollutants of greatest concern are:

- 1) suspended solids,
- 2) nutrients (nitrogen and phosphorus),
- 3) bacteria (from animal and human wastes).

Suspended Solids

The Minnesota River regularly carries heavy loads of sediment and organic matter. These suspended solids give the river its muddy, brown and sluggish appearance. Beyond aesthetic considerations, why is this a problem?

Suspended solids, particularly fine sediment in water, decreases its clarity and therefore significantly reduces the amount of sunlight that penetrates the river. Without proper light conditions, photosynthesis is reduced in rooted aquatic vegetation and microscopic algae. Aquatic plants and algae are critical to providing proper levels of oxygen, habitat and food for aquatic insects and fish.

Suspended solids can also be detrimental to fish species by making sight feeding difficult, causing gill damage, and by smothering important niches, nest sites and fish eggs. Solids in water also absorb heat from the sun, raising water temperatures to levels that can be harmful to some species of fish. Toxic substances and phosphorus attach themselves to sediment particles and are then deposited in reservoirs and wetlands along the river. Finally, suspended solids can reduce the uses of water such as drinking water supply, warm water fisheries, swimming, industrial uses, etc.

Nutrients

Nutrients are necessary for aquatic plant growth. Phosphorus and nitrogen are the two nutrients that most control plant growth.

Excessive levels of nutrients, however, cause overgrowth of aquatic weeds and algae. When these aquatic plants and algae die, the decomposition process begins, using up significant amounts of dissolved oxygen from the water. As oxygen levels drop, the diversity of aquatic animals and plants decrease, upsetting the ecological system significantly.

Nutrients can also cause problems when they enter drinking water supplies. Nutrients can find their way to both underground drinking water aquifers, as well as surface water supplies such as lakes or rivers. High levels of nitrates in drinking water can cause methemoglobinemia (or Blue Baby Syndrome), a serious, potentially fatal illness in infants.

Bacteria

Fecal coliform bacteria are found in the intestinal tracts of warm-blooded animals. These bacteria are often monitored in surface waters since their presence often indicates that human or animal waste are also present. If these wastes are present, so may be infectious diseases that are often associated with them. Fecal coliform standards are frequently violated in the lower reaches of the Minnesota River at present, making the water unsafe for human contact in these portions of the river.

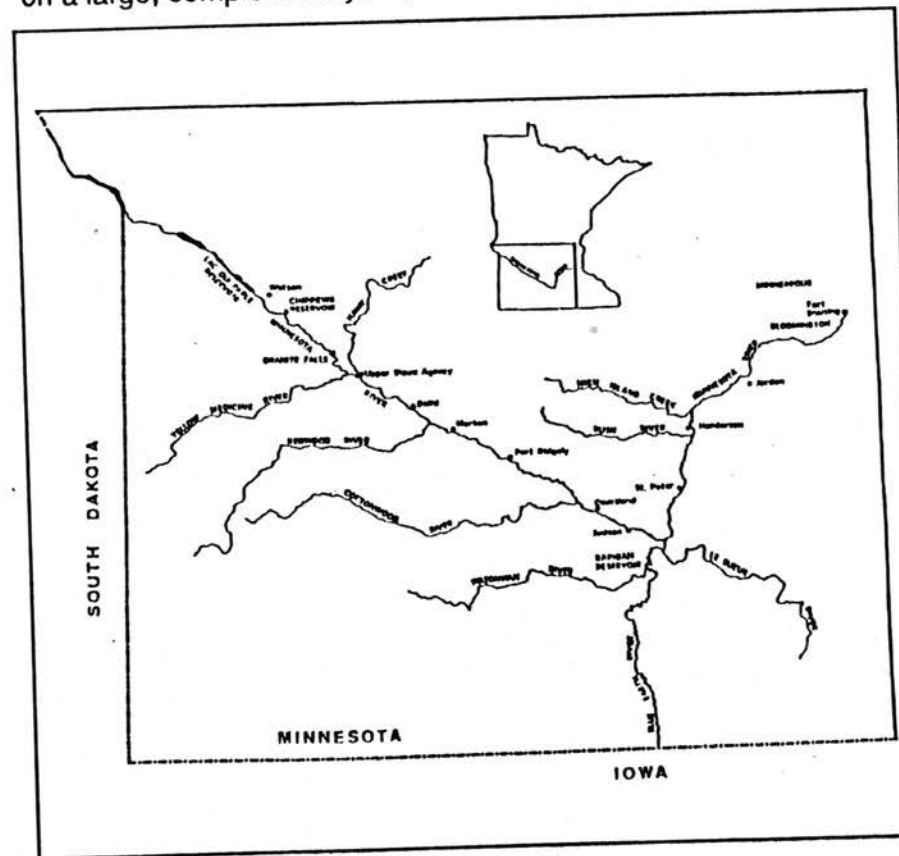
What Will be Necessary to Restore Water Quality in the Minnesota?

Before specific actions can be taken to improve water quality in the river, it is necessary to thoroughly understand the nature and scope of water quality problems in its basin. The first step in restoring the Minnesota River is to determine what and where the most serious problems are and the feasibility of meeting significant pollution reduction goals within the basin.

A cooperative effort called the Minnesota River Assessment Project (MRAP) was established in 1989 to carry out an extensive study of the river and its tributaries. The study, which is managed

by the Minnesota Pollution Control Agency, includes 12 federal, state and local government organizations. These agencies are working together to monitor water on the mainstream of the river and several of its tributaries. MRAP has three major areas of study: Physical/Chemical Monitoring, Biological/Toxicological Monitoring, and Land Use Assessment. The information gathered from this study will be used to establish pollution loading reduction goals and to determine practices and programs that will be necessary to improve water quality in the river.

MRAP is an important project for several reasons. First, it will help to establish a method for assessing water quality within a large geographical area. Second, it is an important model that will demonstrate how federal, state and local governments can cooperate on a large, complex study.



In simple terms, MRAP is studying the entire river, from the dam at Lac Qui Parle Reservoir to its confluence with the Mississippi River at Fort Snelling. All major tributaries are also being monitored as well as nearly 20 ground water springs along the river. MRAP will study:

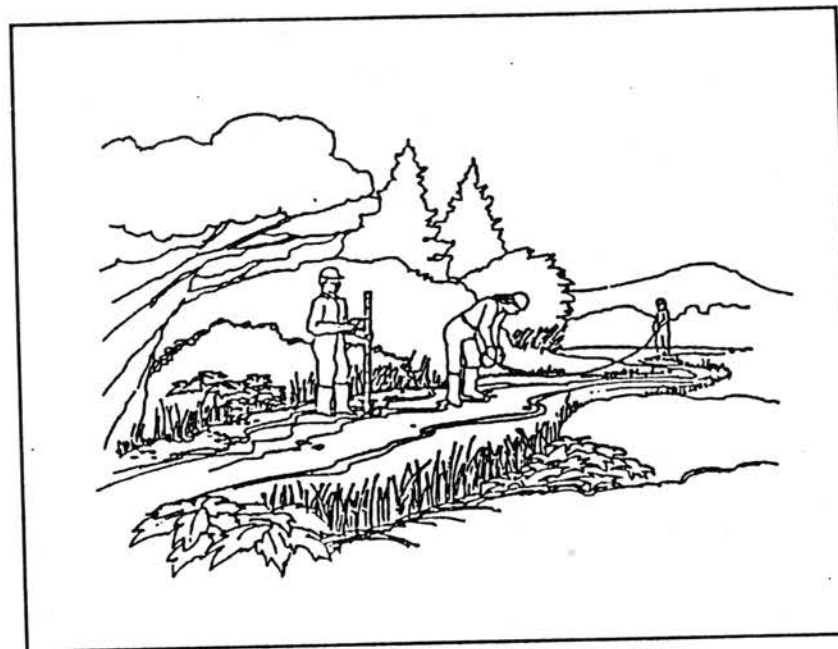
- the general quality of water in the Minnesota River - both during low flow conditions and during rainfall or snowmelt events,
- the effect of current water quality on aquatic invertebrates and fish,
- the effects of various land uses on the river's water quality.

MRAP was initiated in 1989 and will be completed in 1993. The midpoint of the study was recently reached. The following information is based on preliminary findings from the first half of the study period. **Because the study has not been completed, final conclusions should not be made from the information provided.** This information provided presents a general picture of water quality conditions in the Minnesota River.

The following information is provided for those who may wish to know more detail about the scope of MRAP's three major research components.

Physical / Chemical Monitoring Program

A two-fold approach is being used to identify areas within the basin that are contributing nonpoint source pollutants. The first approach consists of sampling the major tributaries at their mouths to better understand the pollution loads each are carrying. Second, the mainstem of the Minnesota River is being sampled to measure the cumulative effect of all sources entering the river. Monitoring is being conducted over a variety of high- and low- flow conditions, and over all open-water seasons.



The major objectives of this phase of the study are to:

- 1) identify sources and loadings of nutrients, suspended sediment, biochemical oxygen demand (BOD) and organic carbon in the river,
- 2) calculate the movement of sediment and associated pollutants between various points along the river,
- 3) identify areas of bank erosion and associated deposition of sediment to determine whether loadings of sediment within the river channel have a more negative effect on water quality than sources of pollution coming from upland areas.

At the midpoint of the four-year study, some general observations can be made about water quality in the Minnesota River. These include:

- Flow in the mainstem of the river increases from west to east in a downstream progression.

- Concentrations of nutrients, specifically nitrates, increase in a downstream progression.
- Concentrations of algae in the river exceed normal levels, indicating eutrophic or "nutrient-rich" conditions.
- Loadings of all pollutants studied increased markedly in a downstream progression.
- Drainage within the basin has been dramatically altered by ditching and tiling activities. As a result, the delivery of pollutants to the river has increased significantly and the speed at which they reach the river has also increased dramatically.

What's to Come In the Next Two Years?

During the final two years of the study, additional emphasis will be placed on studying the Blue Earth River and determining the effect that this river has on the Minnesota River. This river is thought to contribute the largest loadings of any tributary in the river system. In addition, the overall monitoring program will continue on the mainstem and tributaries. Additional work will be done on the tributaries to better characterize the sources and loading rates of pollutants to the river.

Finally, during the final years of the project, MRAP will be studying the effects of streambank erosion to measure the overall contribution of sediment from that source to the river.

Biological/Toxicological Monitoring Program

For many years, scientists and environmental agencies have relied solely on physical and chemical analyses of water quality to determine whether or not a lake, river, or stream was healthy. This approach, however, has not provided a true picture of the

health of aquatic systems. In recent years, specific testing procedures have been developed that look directly at the diversity and number of aquatic animals in rivers, lakes and streams. This information combined with chemical analyses and physical assessments of the resource, can provide us with a far more accurate picture of the true health and quality of our state's waters.

The biological / toxicological portion of the MRAP study is intended to assess the health of biological systems within the Minnesota River. This includes studying the health of fish and invertebrate species such as aquatic insects, freshwater clams and microscopic animals.

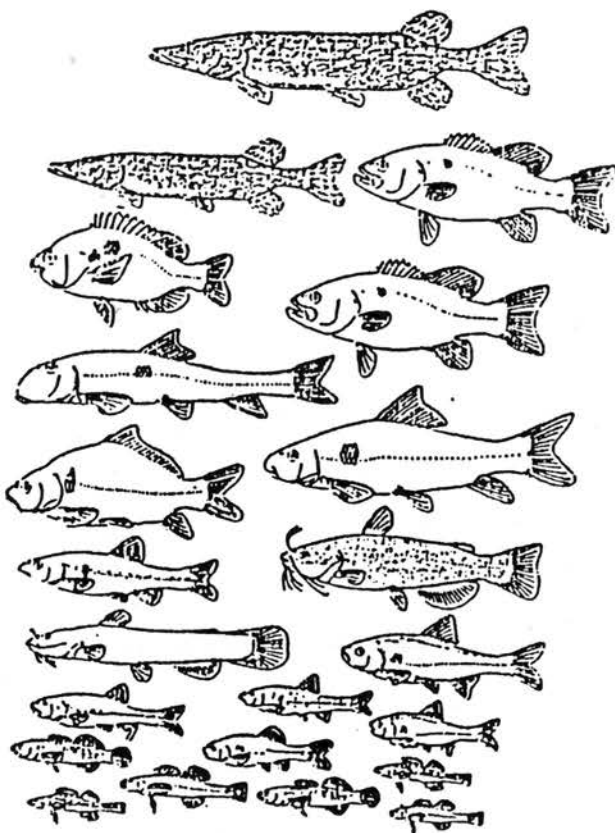
The study also investigates whether there are toxic "hot spots" within the river system and the source of those pollutants.

A. Fish Study

This study looks closely at fish communities within the river. In order to do so, it is important to develop specific criteria or goals that reflect fish community health. A tool for assessing the health of fish species in the river is called the Index of Biotic Integrity (IBI). This tool examines the condition of the fish habitat, the number of fish species found, the population of each species and the availability of food sources at sampling sites. The value of this IBI tool is that it provides a methodology for diagnosing water quality problems for water resources and to a certain extent to determine what might be causing the problems.

An important first step in using the IBI is to find a reference stream within the watershed. This reference stream represents the best attainable conditions for that river and thus serves as a goal for improving other, more degraded stream reaches. Forty-five sites on the river were sampled in order to select reference sites. In addition to this, researchers are studying several fish species in the river in an attempt to understand the true impacts of organic chemicals, such as PCBs, oil and farm pesticides, on the health of the fish. These organic pollutants have, in previous studies, been

EXCELLENT BIOTIC INTEGRITY



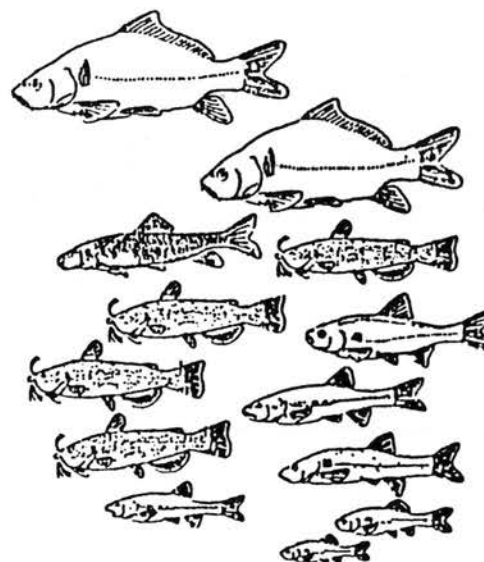
All regionally expected species for the habitat and stream size:

Balanced trophic structure;
older age classes of top carnivores well represented;
Intolerant species present.

found to induce the production of higher than normal levels of some liver enzymes in certain fish species. By studying the levels of these enzymes in the livers of fish collected from the Minnesota River, the study will attempt to ascertain whether it is PCBs that

are impacting fish or whether they may be affected by a combination of PCBs and other organic pollutants in the river. Conclusions cannot yet be drawn from the first two years of data, however, the study has found that organic pollutants appear to be negatively impacting some fish species in the river system.

POOR BIOTIC INTEGRITY



Dominated by omnivores.
Pollution-tolerant forms, and
habitat generalist;
few top carnivores;
diseased fish often present.

What's to Come in the Next Two Years?

Additional studies will be conducted on reference sites in the basin over the next several years to verify proposed biological criteria for

the basin. In addition, an in-depth study of the Blue Earth River will be done using the Index of Biotic Integrity developed from the reference sites.

B. Algal Studies

Algal communities play an important role within streams since they are an important food source for invertebrates and fish. Algae are also good indicators of general stream condition. For these reasons, MRAP is studying the abundance and diversity of algal populations within representative streams in the river basin. The MRAP study looks at river bottom surfaces in key areas of the river basin and analyzes the kinds and abundance of algae attached to them.

Where underwater surfaces are rock or gravel, there is often a higher diversity and larger populations of algae; where the river bottom is muddy, algae populations tend to be low. In the case of the Minnesota River, the following observations were made:

- All mainstem sites sampled except for Watson and Upper Sioux Agency had river bottoms composed of at least 90 percent fine materials, making them unsuitable for algal growth.
- The number of species at any one site was higher if the river bottom was rocky rather than gravelly or muddy. Researchers believe that the lack of good, rocky substrates in portions of the river may be significantly affecting populations and diversity of algae in the Minnesota River.

What's To Come In the Next Two Years?

During the last two years of the study, additional tributaries will be studied, especially the upper reaches of streams.

C. Toxicity Testing

Toxicity tests are often used in analyzing water quality for the purpose of identifying problem areas or "hot spots" in the river. Toxicity information is most useful when compared to chemical and biological data. MRAP looked at 26 sites for their levels of toxicity. Two standard test procedures, using a small microscopic animal and a green algae, were performed.

These species have been widely used nationwide by EPA to evaluate the toxicity of water extracted from bottom sediments or "sediment pore water". In addition to these two procedures, an additional test examined the effect of sediment pore water on mitochondria, one of the building blocks of living cells. The samples were collected during five time periods and encompassed all four seasons of the year. Some of the interesting findings of the study include:

- Minnesota River sediment pore water was toxic to the microscopic animal Ceriodaphnia at 5 of the 25 sites sampled.
- Minnesota River sediment pore water was toxic to the green algae Selanstrium at eight of the 15 sampled sites. The most toxic of these sites were at Fort Snelling, Henderson, and the Rapidan and Lac Qui Parle reservoirs.

What's to Come In the Next Two Years?

During the next two years of the study, special emphasis will be placed on applying toxicity tests to the upper reaches of the river's tributaries to better understand the causes of toxicity in the river. Final results on the toxicity of Minnesota River waters will not be available until the study has been completed in 1993.

D. Macroinvertebrate Study

Aquatic macroinvertebrates are considered to be important indicators of water quality. This community consists largely of insect larva, and is an important component of the overall biological

Department of Agriculture



Minnesota



community in a river or stream. Factors affecting the macroinvertebrate community will have a significant effect on the biological make-up of a stream. Recognizing this fact, several water quality agencies have begun using macroinvertebrate assessment techniques to better measure stream water quality.

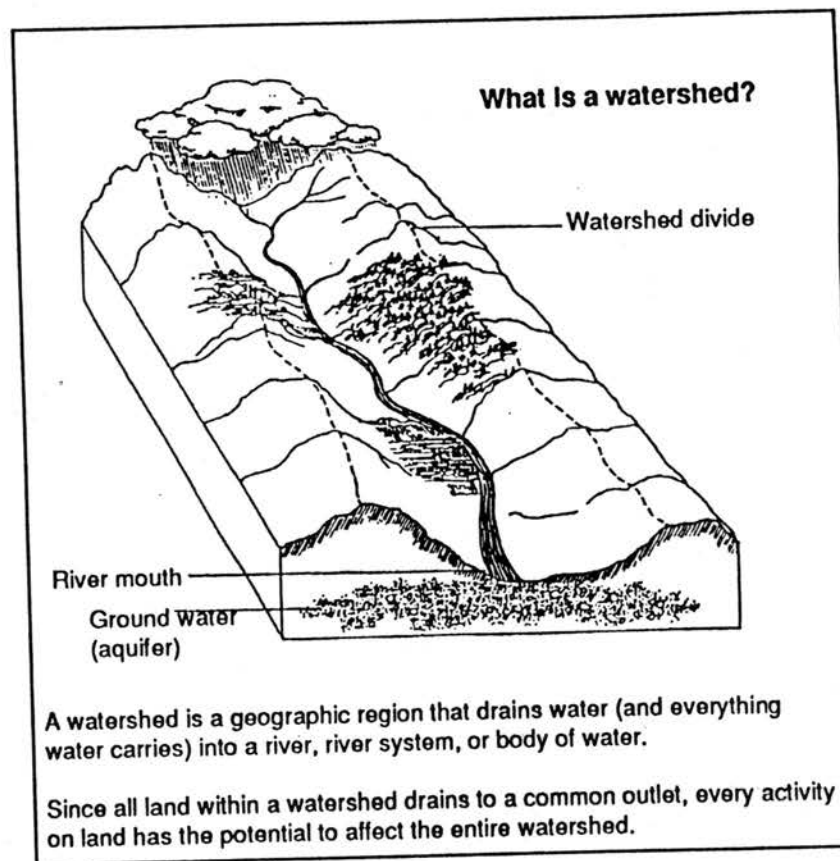
The macroinvertebrate communities were assessed at 19 sites during the first two years of this study. The macroinvertebrates were sampled at the same sites used in the water quality monitoring portion of the study. The 19 sites included nine mainstem and 10 tributary sites. The sites were assessed during the late summer and early fall of both 1989 and 1990. During the winter of 1990, four of the mainstem sites were assessed.

Three techniques were used to sample macroinvertebrate communities in riffle areas. Samples were collected using a kick net, where possible, and by hand-picking specimens from natural river bottom materials at each site. A more precise sampling method was also used, involving the placement of artificial substrate samplers. The health of the benthic macroinvertebrate community at each sampling site was evaluated. The findings to date include:

- In both 1989 and 1990, the diversity of aquatic macroinvertebrate at tributary sites varied more than at mainstem locations.
- The 19 sampling sites in this study can generally be categorized according to the degree to which the site is affected by pollution. Six mainstem stations (5 in 1989 and 1 in 1990) were not affected, 10 (2 in 1989 and 8 in 1990) were slightly affected and two were moderately affected. On the tributaries, six sites (4 in 1989 and 2 in 1990) were not affected, 11 (5 in 1989 and 6 in 1990) were slightly affected and three (1 in 1989 and 2 in 1990) were moderately affected.
- Initial analysis of the sampling data collected during this study suggest several possible conclusions regarding the

health of the communities at the stations that were examined. Based on the analysis completed to date, in at least one of the two years of study, all stations sampled have been affected by pollution. The mainstem sites of Henderson, Upper Sioux, and Lac Qui Parle are the most severely affected. The Chippewa River appears to be the most affected tributary.

Land Use Assessment Program



The Minnesota River has a huge watershed encompassing 16,770 miles. Any study to assess the Minnesota River's problems and

any strategy to solve those problems must be approached within this watershed context. What is a watershed? A watershed is a geographic region that drains water, as well as any pollutant carried by water, into a river, lake, or wetland. It follows then that any activity on the land within a watershed has the potential to negatively affect water quality by carrying pollutants from those land uses to a body of water. Thus, poor land management activities within the huge Minnesota River watershed may ultimately affect the Minnesota River in some way.

To better understand the connection between land use practices and water quality within the Minnesota River, MRAP looked closely at key land areas within the basin. Within the Minnesota River Basin, there are 1,208 minor watersheds which make up the surface water flow to the river system. Because the land area is so large within the river basin, it is impossible to study each and every minor watershed in detail. As such, 32 minor watersheds were selected for study. These study areas are considered to be representative of the entire basin, allowing some conclusions to be drawn for the remaining subwatersheds not studied. Within the 32 watersheds studied, four different methods of land use assessment were used. These methods have been termed Levels I, II, III, and IV.

Land Use Level I - Nonpoint Source Pollution Potential

Assessing the extent of NPS pollution problems within the Minnesota River is very difficult because of the large number of pollutants which must be considered and the diversity of waters within the river basin. To make this assessment easier, a tool was developed that looks at Minnesota's "ecoregions". Ecoregions are developed by looking at land use, soil types, land surface formations, and potential natural vegetation. Each ecoregion has a particular set of characteristics that allow us to draw some conclusions about the potential for nonpoint source pollution to occur within its boundaries. The Minnesota River passes through three of these areas.

Level I uses the ecoregion concept to characterize the 12 major watersheds in the basin and to predict the potential for NPS pollution within each of these watersheds. An atlas of the entire Minnesota River Basin was developed as a result of these activities. This atlas will be valuable to MRAP participants throughout the remainder of the study and into the implementation phase of the project.

Land Use Level II - USDA-SCS Assessment

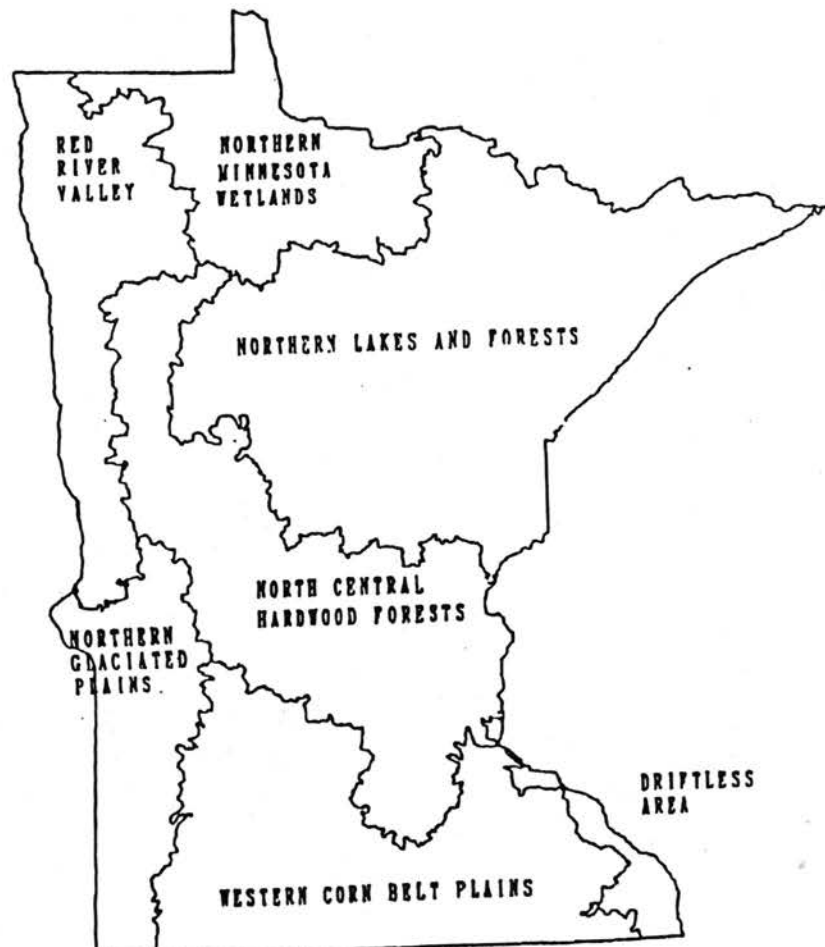
Land Use Level II conducted by the USDA Soil Conservation Service, involves identifying and recommending the most economical, cost-effective Resource Management Systems (RMSs) or Best Management Practices (BMPs) that will prevent water quality problems caused by agricultural practices. Ten of the 1,208 minor watersheds will be studied under Level II. A number of computer models will be used to predict events and to define the appropriate practices. Experience gained from the 10-watershed study will provide important tools for expanding this technique in other minor watersheds in the basin.

Land Use Level III - SWCD Methodology

Numerous Soil and Water Conservation Districts (SWCDs) within the river valley are managing this portion of the assessment project. This methodology was developed as a means of assessing nonpoint sources, as well as small point sources of pollution within some of the minor watersheds. This is a very labor-intensive approach and has been conducted on 32 of the 1,208 minor watersheds. This approach required a four-step process:

- 1) walking each of the minor watersheds to collect field data,
- 2) interviewing landowners within the watersheds to better understand land-use practices in the area,
- 3) development of detailed land-use maps within these minor watersheds,

MINNESOTA ECOREGIONS



- 4) development of a database to include the information collected by the SWCD staff.

This methodology proved extremely valuable for a number of reasons which include:

- the maps and data obtained are very accurate because they were generated by extensive information that was collected and verified in the field
- the process provided a great opportunity to inform and educate participants in the study

Land Use Level IV - Aerial Photography

This method of study involved using infrared aerial photography to help to interpret land use activities within some of the assessed minor watersheds and to help develop maps for these watersheds. This process involved five steps. They were:

- 1) aerial infrared photos were taken during the spring before the leafing out of crop cover,
- 2) color ground photos were taken at the same time as the aerial photos in order to aid in interpreting the infrared photos,
- 3) a mosaic was made of all of the aerial photos taken,
- 4) the photo mosaic was then analyzed to distinguish landscape features. These features were then mapped on sheets of mylar,
- 5) these mylar maps were then converted to a digitized electronic form.

This level of assessment was performed on the same 10 minor watersheds that were assessed in Levels II and III above. This will allow direct comparisons between three of the four levels of land use assessment.

What's to Come in the Next Two Years?

The atlas developed in Level I will be available for use by MRAP participants. An effort will be made to refine and improve the methodology for using ecoregions to predict NPS pollution potential on the ground.

During the next two years, Level II will be completed and several work products developed. Once the project is completed, the managers of the Level II assessment will be able to provide recommendations for protecting water quality within agricultural areas in the river basin.

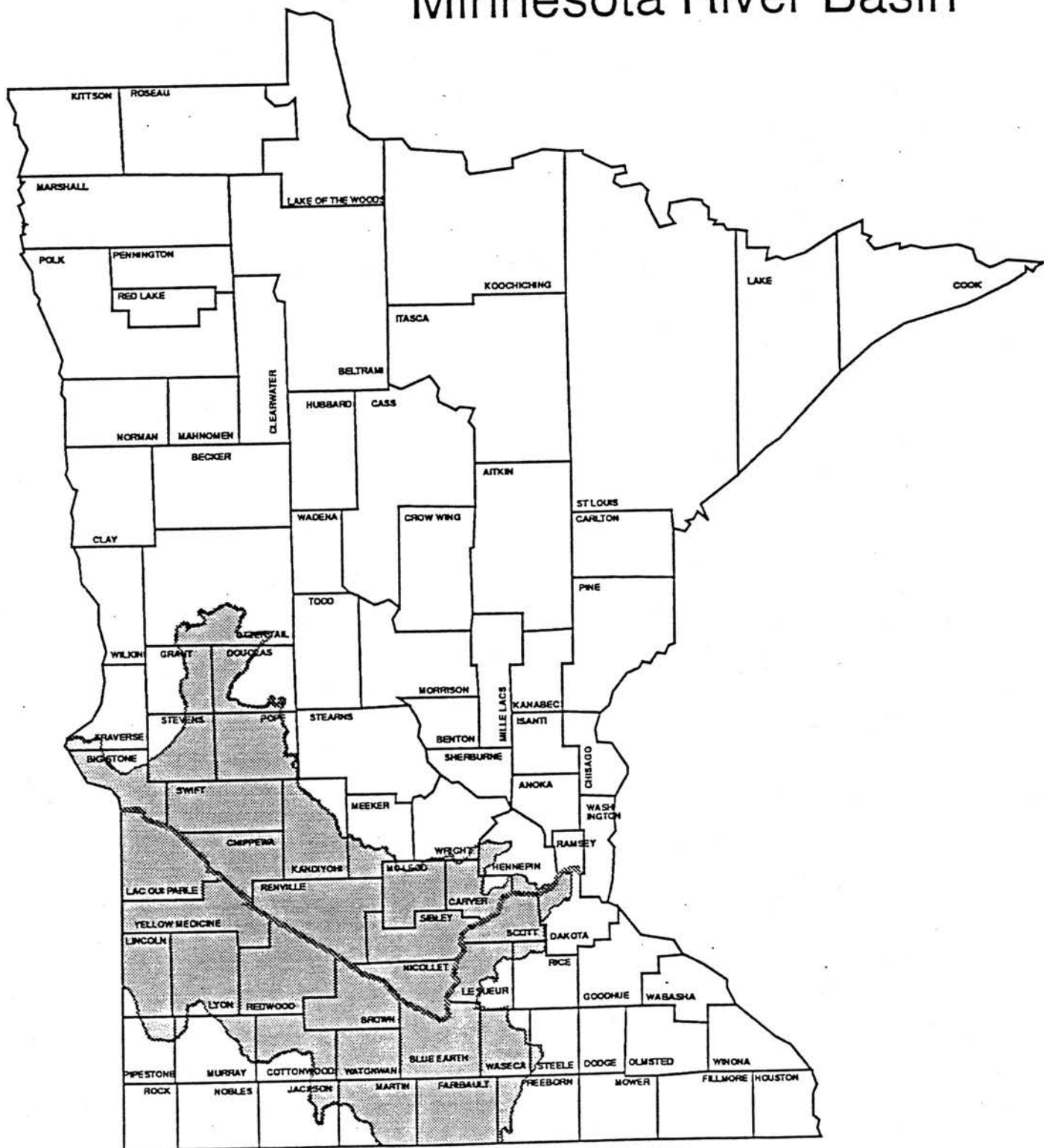
The Level III methodology will be applied to a limited number of additional minor watersheds to fill in information gaps found during the initial stages of the project.

During the next several years, the Level IV assessment process will be used to assess the amount of stream bank erosion taking place within the Minnesota River Basin.

NOTES

1. Robinson, Edward Van Dyke. Early Economic Conditions and the Development of Agriculture in Minnesota. Minneapolis, Minnesota: University of Minnesota.
2. Magner, Joe A., and Scott C. Alexander. 1991. The Minnesota Basin: A Hydrogeologic Overview. St. Paul, Minnesota: Minnesota Pollution Control Agency.
3. Minnesota Department of Natural Resources, The Biological Survey of Minnesota River. March 1985. St. Paul, Minnesota.
4. Minnesota Pollution Control Agency. The Lower Minnesota River Wasteland Allocation Study. October 1985. St. Paul, Minnesota.

Minnesota River Basin





Minnesota River Implementation

- \$750,000** **A. Demonstration watersheds**
- Distributed across basin.
 - Visually demonstrate BMPs to landowners and local units of government.
 - Establish reference data for water quality after BMPs are implemented (goals for attainability in small watersheds).
 - Allow experimentation with innovative BMPs.
 - Base monitoring, watershed selection, local staffing, contract establishment.
 - Continue to gather data to support MRIP recommendations.
- \$900,000** **B. BMP research and development.**
- University of Minnesota and U.S.G.S. provide leadership.
 - Wetland restoration design and site location for optimal water quality improvement.
 - Tile system impact assessment and redesign.
 - Will be coordinated with demonstration watersheds.
- \$200,000** **C. Education**
- School based environmental awareness through Midwestern Rivers or similar program.
 - Demonstration tours and signage for demo watersheds.
 - Extension acceleration of sustainable farming and low input farming to landowners
 - Newsletter editing, publishing and distribution.
 - Support technical transfer.
- \$75,000** **D. Trend monitoring**
- Maintain stations for tracking water quality and quantity changes over time.
- \$475,000** **E. Accelerate implementation of existing programs through technical or financial assistance.**
- Funding to programs which implement BMPs will be provided to accelerate BMP placement. Funding will be directed to those programs and geographic areas where landowners are willing to install BMPs and where they will obtain the greatest water quality benefit to the Minnesota River. Care will be given to insure that these funds supplement and not supplant existing program resources.
 - Demonstrate integration of existing programs.
 - Programs:
 - Local Water Implementation
 - Clean Water Partnership
 - Cost Share Program
 - RIM
 - Conservation Reserve Program
 - Shoreland Regulations
 - Streambank, Lakeshore and Roadside Erosion Program
 - Fertilizer BMP Promotion
 - Feedlot Program
 - Onsite Training

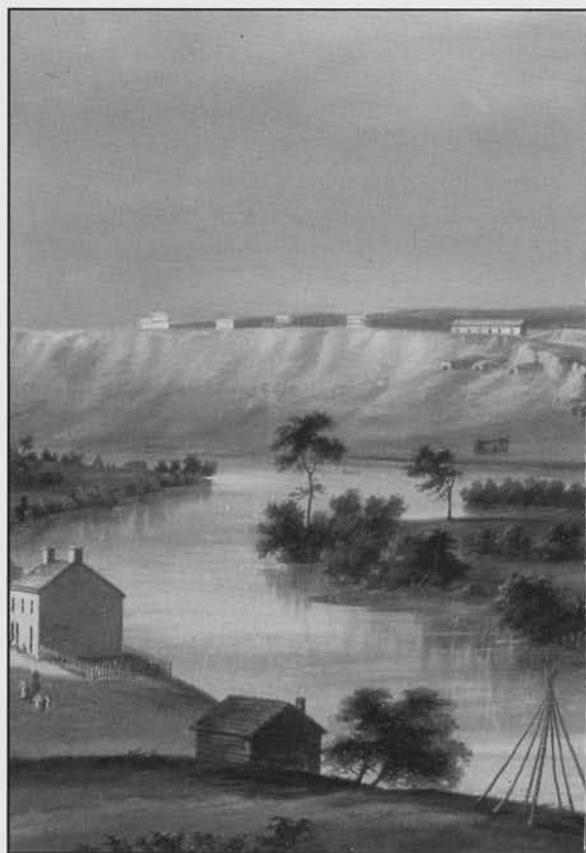
Total \$2,400,000

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THE MINNESOTA RIVER

Reclaim a legacy



IN THE FALL of 1835, on behalf of the U.S. government, explorer Colonel George W. Featherstonhaugh and his crew canoed from the mouth of the Minnesota River at Fort Snelling to its headwaters at Big Stone Lake. As an early explorer of the southern Minnesota wilderness, Featherstonhaugh was impressed with the natural beauty of the Minnesota River valley. His journals describe a river with transparent waters, riverbeds of white sand, gracefully sloping banks, and abundant wildlife.

If Featherstonhaugh were alive today, however, he would see a very different river. Once clear waters are murky and brown. White sand bottoms have turned to mud. Streambanks are eroded and bare. Much of the wildlife has long since gone. Wetlands, which once protected the valley against flooding and erosion have all but disappeared. Soil, pesticides, fertilizers, oil and grease, toxic chemicals, garbage, and septic systems wastes have all found their way to the river.

The Minnesota River today is a seriously degraded resource. The lower reaches of the river no longer support recreational uses such as fishing and swimming. As a result, most people have gone elsewhere for recreation, and with them have gone millions of dollars in lost revenue for the communities and counties within the Minnesota River Basin.

Who's responsible for water quality problems in the Minnesota River?

While it would be easy to blame only industries or municipal facilities along the Minnesota River, the reality is that we are all responsible. Many of our daily activities have an effect on water quality. Major contributors of pollution include construction sites, agricultural lands, and mining operations. Individuals also contribute pollution to the river. Even simple things we do, such as fertilizing our lawns, spraying our gardens for pests, disposing of litter, walking our dogs, and changing the oil in our cars, affect the quality of our ground and surface waters. When multiplied by the thousands of individuals in the Minnesota River Basin, these activities can seriously degrade water quality.

What can be done to restore the Minnesota River?

An important first step will be to assess the causes and severity of water quality problems in the river. The Minnesota Pollution Control Agency (MPCA), in cooperation with other federal, state and local organizations, is currently managing a four-year study of the river, the Minnesota River Assessment Project (MRAP). This study will fully examine the effect of pollution on the river's physical, chemical and biological systems. Information from the study will be used to develop specific pollution control practices and programs for restoring water quality in the river.

An immediate goal for improving water quality is to restore beneficial uses in the lower reaches of the river by 1996. Meeting this goal will require a significant reduction in pollutants entering the river upstream. During 1991, the MPCA will begin to coordinate development of a comprehensive strategy for restoring water quality in the Minnesota River.

Who should be involved?

Just as we are all responsible for the river's problems, we all must be a part of the solution. It may require changing the way we live and work, including the ways we take care of our homes, build our roads, grow our crops, manage our chemicals, develop our towns, and protect our living resources. It will require all of us to become involved in finding a solution.

Minnesota Valley National Wildlife Refuge



What can you do to help?

At Home:

- keep your septic system in good working order (direct discharge of untreated wastes to surface waters is a violation of state and federal law)
- recycle used car oil and antifreeze — never dispose of them in storm drains or on the ground
- use lawn fertilizers and pesticides sparingly (if at all) and according to directions
- control soil erosion on your property by planting ground cover and trees on erosion-prone areas
- clean up your pet's wastes from streets and sidewalks

Around the Farm:

- reduce soil erosion by using conservation tillage
- protect drinking water by minimizing the use of pesticides
- use planned grazing systems on pastures
- dispose of pesticides, containers, and tank rinsate in an approved manner
- control runoff from feedlot operations

In Your Local Community:

- become involved in your local water planning process
- encourage local officials to develop construction erosion/sediment control ordinances in your community
- adopt a tributary of the river and manage cleanup activities in your area

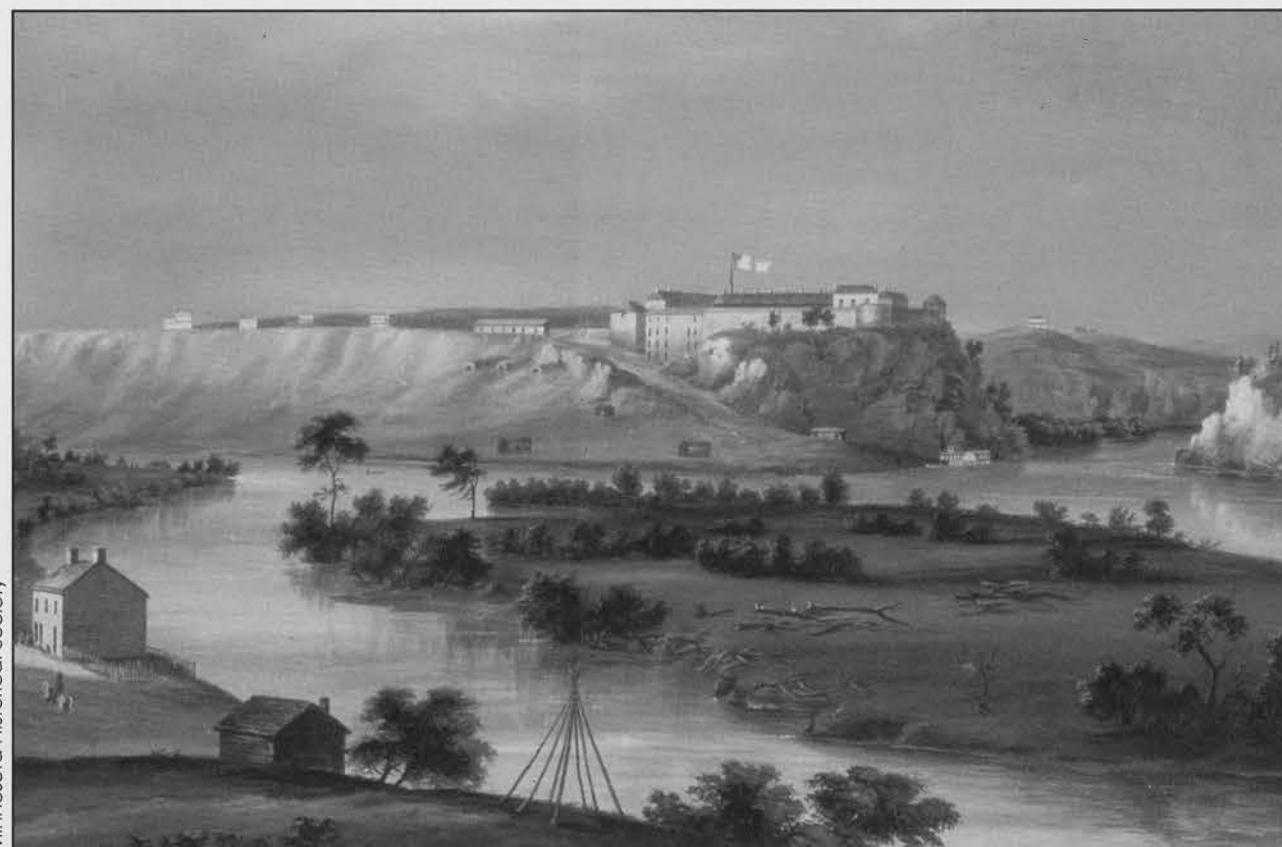
Minnesota Valley National Wildlife Refuge

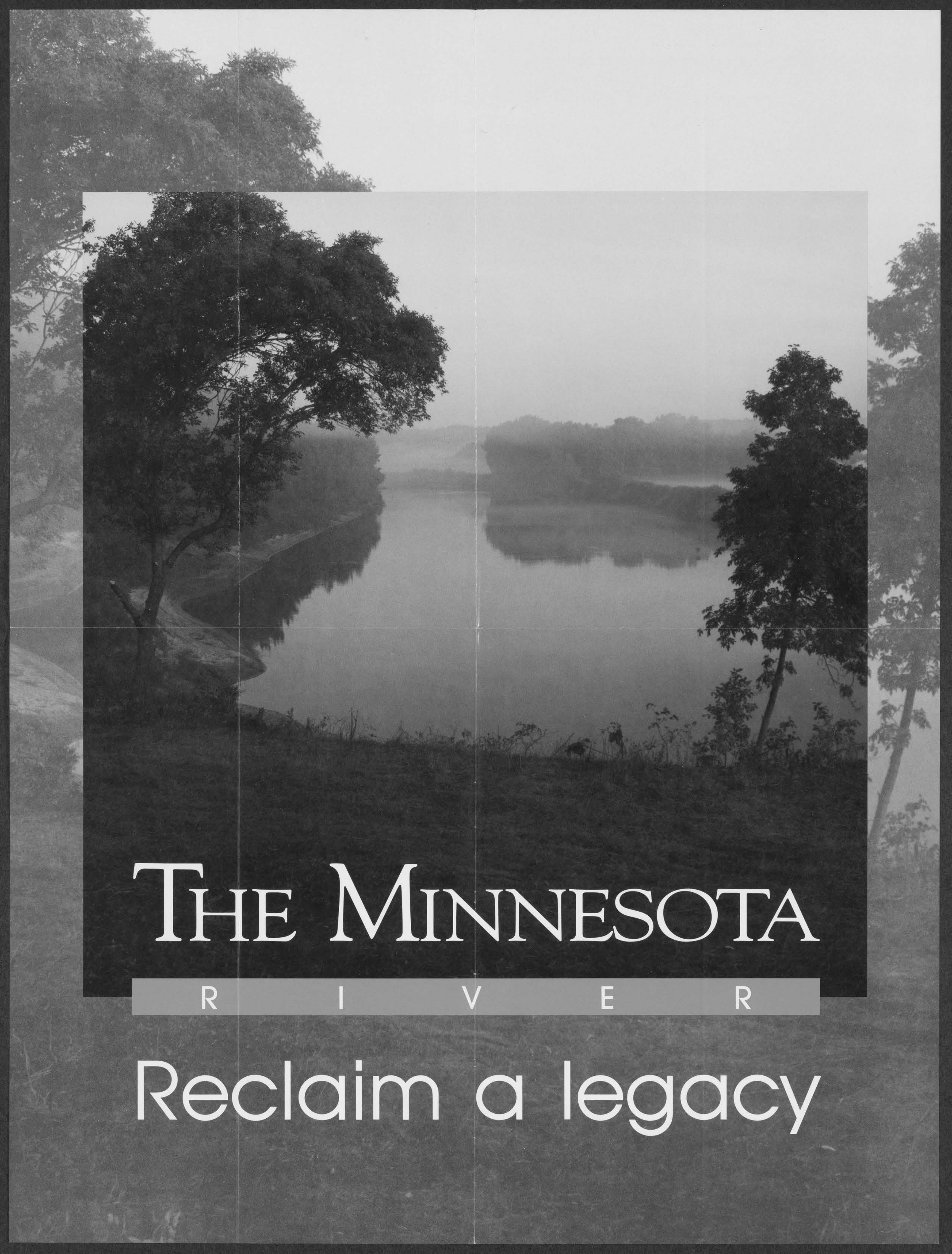


"From the brink of this prairie I had a fine view of the line of the river and the country around. The stream had a graceful serpentine course, and the trees on its left bank were beautifully distributed in natural clumps and lines, and everything assisted in the perfect and general embellishment of the scene; even the uninterrupted solitude of the prairie was full of enjoyment."

George W. Featherstonhaugh
From a Canoe Voyage
up the Minnay Sotar

Minnesota Historical Society





THE MINNESOTA

R

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Reclaim a legacy

Minnesota River Facts

- The Minnesota River begins at Big Stone Lake on the Minnesota-South Dakota border. From this point, the river flows 330 miles across the state to join the Mississippi River at Fort Snelling.
- The Minnesota River Drainage Basin represents approximately 19 percent of the land mass of the state.
- The Minnesota River Basin is 16,770 square miles; 14,840 of which are within Minnesota's borders.
- Agricultural activities account for more than 92 percent of the land uses in the basin.
- The Minnesota River is one of the most seriously polluted waters in the state.
- Originally called the Minnaw Sotar by the Indians, the river's name was changed by French explorers to the St. Peter's during the early 1800s. Congress officially changed the river's name back to the Minnesota in 1852. Our state takes its name from the river.

Mankato Area Convention and Visitors Bureau



About this brochure

The poster on the inside of this brochure captures the beauty of the Minnesota River. Shot by Shakopee photographer Leroy Lebens, the poster photo shows a tributary of the Minnesota River near its outlet into the Mississippi.

The watercolor and gouache of Fort Snelling on the cover was painted by John Casper Wild in 1848.

Text: Lynne Kolze

Editing and project coordination: Patricia Engelking

Graphic design: Carol Pruchnoffski



Where can I get more information?

For more information on the Minnesota River, call or write the Minnesota Pollution Control Agency in St. Paul or one of its regional offices in Rochester or Marshall, Minnesota.

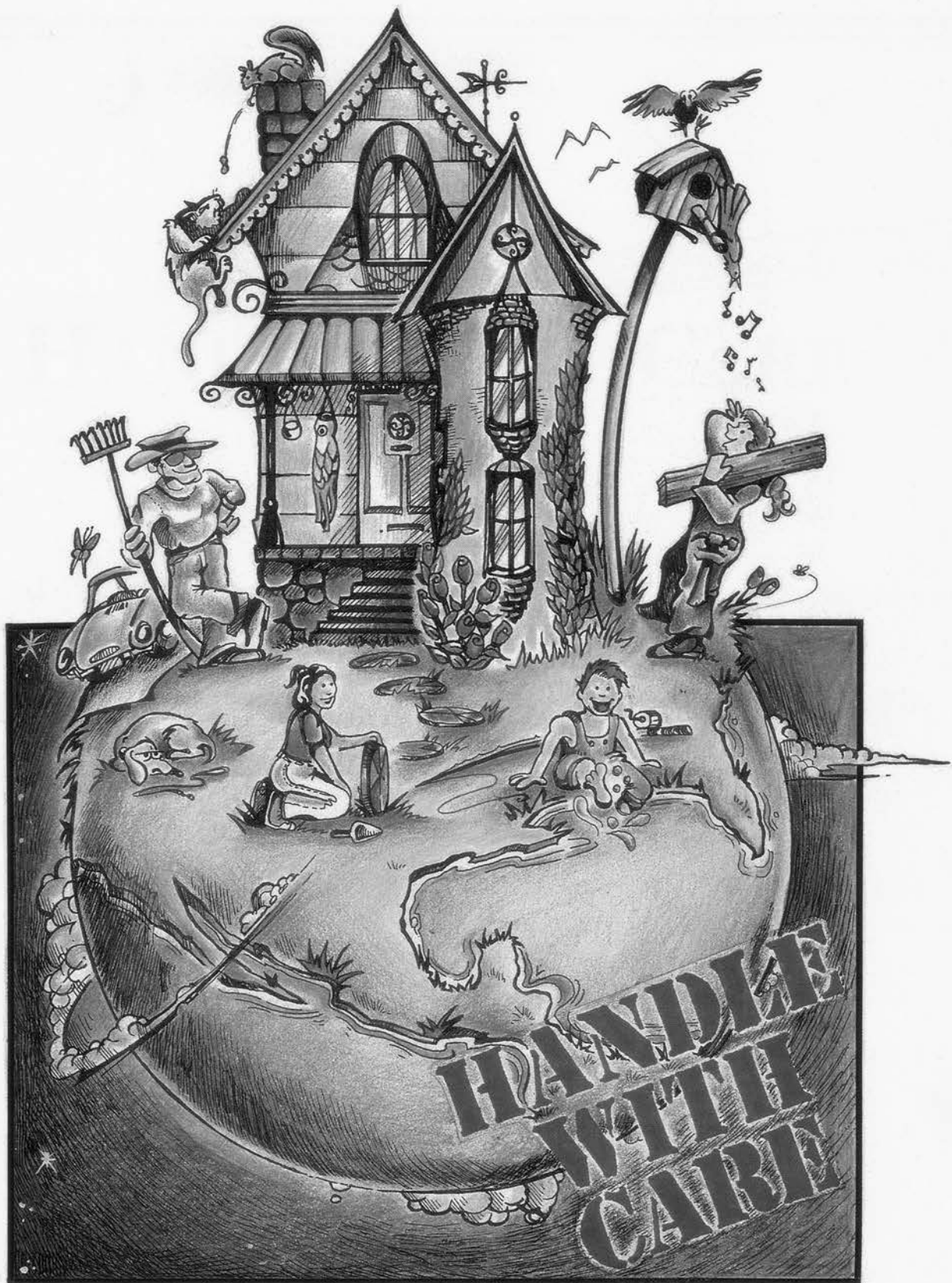
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155
(612) 296-6300
Toll-free 1-800-652-9747

MPCA Southeast Regional Office
2116 Campus Drive S.E.
Rochester, MN 55904
(507) 285-7343

MPCA Southwest Regional Office
RLC Building
109 South Fifth Street
Marshall, MN 56258
(507) 537-7146



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Your guide to preventing water pollution

HANDLE WITH CARE

Your guide to preventing water pollution

The Terrene Institute

Washington, D.C.

ACKNOWLEDGMENTS

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Written by Judith Taggart and Betty Bracht

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Before you reach page 2 . . .

. . . you will discover that if we eliminated all water pollution from our industries and cities' sewage treatment plants tomorrow, we would stop less than half the pollution to our lakes and streams.

So where does this nation's pollution come from? And how do we end it?

Most of our pollutants now come from our homes, our yards, our streets, our land, our farms. Yes, we often pollute our environment by the very ways we care for it.

"Nonpoint" is the environmental buzzword — but "thoughtless" is more to the point.

And that's the whole reason for this book — to help you *think* about your own space: how your garden (and grass) grows and how you care for your home.

Neither the first nor the last word, *Handle with Care* should be used simply as a guide for your own environmental responsibility. Pollution (and its prevention) does indeed begin — and end — with each of us.

Contents

Do You Know What Happens When It Rains?	1
<i>The last time it rained, did you notice what happened in your neighborhood?</i>	
Preventing Water Pollution at Home	4
<i>Do you know how to pollution-proof your home?</i>	
Keeping Runoff Clean	5
Around the House	5
Maintain Your Septic Tank Properly	5
Use and Dispose of Household Chemicals Properly	7
Care for Your Car	9
Clean Up After Pets	10
Around the Lawn and Garden	10
Landscape for the Environment	11
Prevent Soil Erosion	12
Care for Your Lawn	12
Care for Your Garden	17
Store and Dispose of Pesticides Properly	21
Reducing Runoff	22
<i>You can decrease runoff in two general ways.</i>	
Permeable Pavements	22
Contouring and Infiltration Devices	22
Water Your Lawn and Garden Wisely	24
Think Prevention	25
<i>Where to find — and give — help.</i>	
Where to Go for Advice and Assistance	25
For Further Reading	26
State Nonpoint Source Coordinators	27
EPA Regional Nonpoint Source Coordinators	29
USDA Soil Conservation Service — State Offices	30
USDA Forest Service — Field Offices	32
USDA Extension Service — State Offices	32



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BRIEFING PAPER

Status of Minnesota River Implementation Planning Process

May 19, 1992

- o Significant accomplishments in planning for MRIP include: production of a four-color brochure, development of an interim information and education plan, completion of three public meetings, execution of a MRAP conference, and transmittal of a newsletter called "River Reach."
- o Enthusiasm for a Minnesota River implementation project is growing. Examples of this enthusiasm include: greater media coverage of events related to the river, a heightened awareness among agency and local government officials, significant public interest expressed at public meetings, and the creation of two grass roots organizations designed to address Minnesota River issues.
- o The MRIP Process is expected to take two years, at a minimum.
- o MRIP activities will involve three important groups: A Technical Advisory Committee, A Citizen's Advisory Committee and the general public. Each will play a critical role in the planning process.
- o The Technical Advisory Committee will review staff-generated concept papers dealing with a variety of issues related to improving water quality in the river. This group will essentially peer-review all papers developed for MRIP. Once this group has approved the concept papers, they will go on to the Citizen's Advisory Committee for their review.
- o The Citizen's Advisory Committee, consisting of approximately 25 individuals, will provide general direction to the formulation of a strategy for the MN River. This committee will review concept papers for policy and funding implications and decide whether the concept papers should be incorporated into the overall strategy document.
- o The Citizen's Advisory Committee consists of representatives from a wide variety of organizations and regions of the river basin. Members represent local units of government, academia, sportsman's groups, agricultural producer groups, environmental groups, the farming community, etc.
- o During the time we are holding the Technical and Citizen's Advisory Committee meetings, we will hold as many public meetings as possible for the purpose of informing citizens of our activities, as well as to hear their concerns, issues and ideas. These meetings will provide an important feedback loop from the average citizen to decisionmakers.
- o The final product that will result from MRIP will be a basin plan for the Minnesota River.
- o The final strategy will include recommendations for state agencies, local units of government, and the legislature. The document may also include recommendations for grass roots organizations as well.
- o The first MRIP Citizen's Advisory Meeting will be held on May 21, 1992.

MRIP PLANNING PROCESS

MRIP Process

Public
Involvement



MRIP Citizens
Advisory Committee



Technical
Advisory Committee



MRIP Citizens
Advisory Committee



MPCA Citizens
Board



Public
Involvement



MPCA

What Will Be Done?

Public provides information to agency staff and outlines issues of concern.

Assists in defining the scope of issues that must be addressed in order to restore the river and presents these to the Technical Advisory Committee.

Develops comprehensive set of recommendations for restoring water quality in the Minnesota River.

Reviews Technical Committee recommendations. Oversees development of Minnesota River restoration strategy. Provides approval for transmittal of draft strategy to MPCA Citizens' Board.

Approves the release and distribution of Minnesota River restoration strategy for public comment.

Public provides final comments on river restoration strategy.

Distribute final Minnesota River restoration strategy to the public, legislature, local units of government.

Who Will Be Involved?

General public provided opportunity to participate in public meetings throughout the basin.

25 individuals have been selected to represent a broad range of interests and organizations throughout the basin.

State and federal agency technical staff, local government technical staff.

See above.

MPCA Board Members

General Public

MPCA Water Division

Timeframe for Activities

November 1991 - ongoing

September 1992

September 1992 -
September 1993

January - December 1993

February 1994

March - June 1994

September 1994

MINNESOTA RIVER IMPLEMENTATION PLANNING

CITIZENS ADVISORY COMMITTEE

MEETING AGENDA

CARVER COUNTY COURTHOUSE

BOARDROOM

600 E. FOURTH STREET

CHASKA, MINNESOTA

MAY 21, 1992

9:00 A.M. - 12:00 P.M.

9:00 a.m.	Greetings	Cynthia Jepsen, Deputy Commissioner MPCA Ron Nargang, Chairman
9:15	Introductions	Committee Members
10:00	Explanation of Committee Process	Lynne Kolze, MPCA
10:20	Break	
10:35	Discussion of Proposed Mission Statement	Ron Nargang Committee Members
10:50	Minnesota River Assessment Project Overview	Tim Larson, MPCA
11:50	Closing Remarks °Decisions reached °Preview of next meeting	Ron Nargang
12:00 p.m.	Adjourn	

MRIP CITIZENS' ADVISORY COMMITTEE

PROPOSED SCHEDULE OF MEETINGS

MAY 21, 1992	Greetings, Introductions, Explanation of Process, Discussion of Mission Statement, Minnesota River Assessment Project (MRAP) Overview
JULY 9, 1992	MRAP Presentations Physical/Chemical Biological/Toxicological Land Use Metropolitan Council/MWCC Minnesota River Activities Developing Decision Making/Conflict Resolution Procedures
SEPT 10, 1992	Goal Setting (small group discussions) - For Citizens Advisory Committee - For Minnesota River Water Quality
NOV 12, 1992	Defining the scope of issues and questions that the CAC wants to address (small group discussions)
EVALUATION	
JAN 14, 1993	Technical Advisory Committee Presentation
FEB 11, 1993	Technical Advisory Committee Presentation
MARCH 11, 1993	Technical Advisory Committee Presentation
APRIL 8, 1993	Technical Advisory Committee Presentation
MAY 13, 1993	Technical Advisory Committee Presentation
EVALUATION	
JUNE 10, 1993	Technical Advisory Committee Presentation
JULY 8, 1993	Technical Advisory Committee Presentation
AUG 12, 1993	Technical Advisory Committee Presentation
SEPT 9, 1993	Technical Advisory Committee Presentation
NOV 12, 1993	Discussion of Draft River Restoration Strategy Document

DEC 9, 1993

Final Discussion and Comment on Strategy Document
Vote on release of strategy to MPCA Citizens Board

FINAL EVALUATION

FEB 1994

Presentation of Minnesota River Restoration Strategy
to MPCA Citizens Board

APRIL-JUNE 1994

Public Meetings on Strategy Document

SEPT 1994

Final document distributed to the public

May 1992

Attachment A

MINNESOTA RIVER CITIZENS ADVISORY

COMMITTEE MEMBERS

CHAIRPERSON

Ronald Nargang
Deputy Commissioner
Department of Natural Resources
500 Lafayette Road
St. Paul, Minnesota 55155
(612) 296-2540

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Representative Vanasek's Office
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Land Stewardship Project
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Garfield Eckberg
Farm Bureau
Board of Directors
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MINNESOTA RIVER CITIZENS ADVISORY

COMMITTEE MEMBERS

(Continued)

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MINNESOTA RIVER CITIZENS ADVISORY

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(Continued)

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MINNESOTA RIVER CITIZENS ADVISORY

COMMITTEE MEMBERS

(Continued)

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(612) 330-1042 (W)

Jan Willette
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Blue Earth, MN 56013
(507) 854-3595

MINNESOTA RIVER RESTORATION STRATEGY

DRAFT OUTLINE

VOLUME 1 - ACTION PLAN FOR RESTORING THE MINNESOTA RIVER

Executive Summary

I. Introduction

II. Historical Overview of Resources in the River Basin (4-5 pages)

- a. Geologic history of the river basin
- b. Early explorations of the region
- c. Presettlement Conditions
- d. Human settlement and resulting changes in the landscape

III. Description of the Basin (10+ pages)

- A. Physical Characteristics
- B. Land Uses
- C. Climate and Weather
- D. Hydrology
- E. Water Quality
- F. Wildlife/ Endangered Species
- H. Natural Areas
- I. Ground Water Resources

IV. Regional Profile - Summary of Trends and Conditions (5-7 pages)

- A. Population Changes in the Basin 1900-Present
- B. Employment and Wages
- C. Age Distribution
- D. Foundations of the Economy

V. Restoring the Minnesota River Basin - A Plan of Action

- A. Legal Status and Authorities for Basin Planning
- B. Process for Developing a Minnesota River Restoration Strategy
- C. Approach for Developing a Restoration Strategy
 1. general planning - developing broad policy recommendations for the Basin
 2. specific planning - developing detailed watershed plans for the 13 major watersheds in the MN River Basin
- D. Water Quality Goals for the Minnesota River

MINNESOTA RIVER RESTORATION STRATEGY

DRAFT OUTLINE

VI. Policy Recommendations for the Minnesota River Basin

A. Societal Needs

1. Waste and Wastewater Disposal
 - a. on-site systems
 - b. feedlots
 - c. municipal/industrial wastewater
 - d. stormwater
2. Solid Waste
 - a. landfills and dumps
3. Water Use
 - a. livestock/Irrigation Water
 - b. domestic Use
4. Flood Control
5. Crop and Animal Production
 - a. tillage practices
 - b. drainage
 - c. fertilizer/pesticide management
6. Forest Management
7. Recreation

B. Ecological Considerations

1. Water Quality - Chemical
 - a. DO, enrichment, toxics, temp.
2. Flow regimes
3. Habitat Quality
4. Water Quality Standards
 - a. nonpoint source chemical criteria
 - b. biological criteria

MINNESOTA RIVER RESTORATION STRATEGY

DRAFT OUTLINE

C. Institutional Arrangements

1. Role of Local Water Planning in improving water quality in the Minnesota River and tributaries
2. Federal, State and Local Responsibilities for implementation
3. Additional authorities needed to ensure implementation
4. Project Evaluation and Monitoring
 - a. Evaluating Local implementation
 - b. Evaluating State implementation
 - c. Evaluating Federal implementation
5. Potential funding mechanisms for implementation programs

D. Water Quality Standards

1. Development of Nonpoint source criteria
2. Development of biological criteria

VII. Policy Recommendations for the Twin Cities Metropolitan Area

VIII. Appendices

FY1993 SLR APPLICATIONS

DISTRICT	PROJECT DESCRIPTION	REQUEST AMOUNT
Cass	Portage Lake Emergency Funding Request Proposal to cover funding of a project funded by the BWSR in 1990. Additional funding will be to cover the cost of an archaeologically significant site investigation, done where a rip rap installation was to be completed in 1991.	\$ 3,912
Carver	City of Victoria Gully Repair Proposal to repair a gully area, as well as to install a rock dam to eliminate erosion problems occurring in a residential area.	\$15,600
Carver	City of Waconia Stormwater Control Proposal to replace a failed drainage system which is degrading, and in need of maintenance. Corrective measures include formation of a sediment basin, as well as repair of the storm drainage waterway.	\$43,800
Clay	Buffalo River Streambank Stabilization Proposal to demonstrate the cost-effectiveness of various alternatives for streambank erosion control on two farms adjacent to the Buffalo River in Clay County.	\$42,700
Douglas	Lake Le Homme Dieu Shoreline Stabilization Proposal to correct water quality problems in the lake, including problems caused by the runoff from the adjacent state highway, erosion due to concentrated flow, and incorrect placement of septic tanks within the water table of the lake.	\$21,675
Lake of Woods	City of Baudette-Bay Park Seawall Proposal to replace the existing seawall at a public park facility on the Baudette River. Soil erosion behind the existing wall has created both a safety hazard, as well as adding sediment into the river. Corrective measures include reshaping the existing bank, as well as adding filter fabric, rock and sheet piling to the site.	\$37,625

Martin	City of Fairmont-Sylvania Park Stabilization Proposal to correct erosion occurring at a city park bandshell, as well as preventing sediment loading into Sisseton Lake. Measures include placing rip rap on the lakeshore.	\$27,000
McLeod	City of Hutchinson-Crow River Park Stabilization Proposal to reshape and protect a heavily used recreation area along the Crow River. Measures include placing filter fabric and rip rap on the bank.	\$41,500
Pennington	St. Hilaire Cemetary Stabilization Proposal to stabilize the outer bank of the Red Lake River, by placing rip rap on the banks, reducing erosion to protect the adjacent cemetary.	\$22,750
Pennington	Thief River Falls Streambank Project Proposal to stabilize the east bank of the Red Lake River, also protecting a public recreation area. Measures to be used include reshaping and resloping the river bank, as well as rip rapping the bank and stabilizing the area above the rock.	\$48,100
Pine	Mikrot Road- Kettle River Twp. Ditch Stabilization Proposal to stabilize gully erosion adjacent to the township road, causing the resulting sedimentation to deposit into a wetland and a lake.	\$10,000
Pine	Norman Township Road Ditch Stabilization Proposal to alleviate concentrated flow on a township road which results in public safety hazards, as well as sediment flow into an adjacent wetland and Willow River.	\$7,000
Root River	Caledonia Stormwater Outlet and Gully Control Proposal to repair the erosion in a road ditch adjacent to Crooked Creek. In addition, a city storm sewer is scouring the banks of the river. Both problems are causing a significant increase in the sediment loading into the creek. Corrective	\$22,455

measures to be installed include repairing the gully, and realigning the storm sewer outlet so as to reduce the velocity of the outlet striking the streambank, which will also be repaired.

Root River	Yucatan Stabilization Project on the So. Branch of the Root River Proposal to stabilize the streambank, thereby maintaining the existing channel. Measures include placing rip rap and filter fabric on the sides.	\$16,170
Sherburne	Elk River-Rip Rap of the Mississippi River Proposal to install rip rap west of Elk River. Continuation of a proposal funded in 1991.	\$17,500
Traverse	Diversion Channel Repair Proposal to stabilize a scour hole at the edge of a diversion channel leading to a DNR Protected Water. Corrective measures include repairing the hole, as well as the placement of filter fabric and rip rap at the head of the channel leading to the Protected Waterway.	\$7,500
Traverse	Lake Valley Township Road Stabilization Proposal to stabilize the ditch and banks between a township road and Twelve Mile Creek. Measures include placing filter fabric and rip rap, and stabilizing all exposed areas.	\$6,725
Wadena	Old Wadena History & Nature Center Proposal to fund the stabilization of the Crow Wing River at a recreational area adjacent to the Old Wadena History and Nature Center through the installation of stairways accessing the water, as well as stabilizing the bank where traffic caused erosion is taking place.	\$2,000
TOTAL AMOUNT OF REQUESTS		\$397,725

FY1993 SPECIAL PROJECT APPLICATIONS

DISTRICT	PROJECT DESCRIPTION	REQUEST AMOUNT
Anoka	Labelle Pond Erosion Protection Proposal to provide for the stabilization of the top of a slope adjacent to a public park and pond, which is eroding, endangering a number of homes in the area. Corrective measures include erecting a retaining wall, as well as stabilizing the slope, and vegetating the slope.	\$29,938
Big Stone	Wetland Water Quality Assessment of the Stein Wetland Proposal to examine the catchment area of a wetland to be restored as well as analyzing the water quality and quantity in the wetland.	\$7,000
Big Stone	Sunset View Shoreline Stabilization on Big Stone Lake Proposal to treat 500 feet of shoreline, including reshaping, resloping, riprap on top of a gravel-filter fabric bed. Continuation of a project first funded in 1990.	\$47,779
Big Stone	Shady Oak Shoreline Stabilization on Big Stone Lake Proposal to treat 800 feet of eroded shoreline, to be treated similarly to the Sunset View site.	\$65,855
Cass	Leech Lake Watershed Monitoring Proposal to measure in-flow water quality of the major tributaries flowing into Leech Lake.	\$10,000
Dakota	City of Farmington Wetland Inventory Proposal to conduct an inventory of wetlands lying within the municipality, so as to be able to identify critical areas in need of protection.	\$21,500
Goodhue	Stabilization Technical Assistance for Nature Area Proposal to provide the SWCD with additional funding to provide technical assistance in the stabilization of a Nature Area	\$7,035

Goodhue	Nature Area Grade Stabilization Structure Proposal to stabilize a gully area within a proposed Nature Area, for which funding has been secured from a number of public and private sources.	\$12,375
Lake	Lake Superior Erosion Control Projects (2) Two projects proposed for installation so as to stabilize up to 1000 feet of eroding shoreline, using both sheet piling as well as rip rap installations.	\$50,000
Lyon	Yellow Medicine River Stabilization Project Proposal to remove snag and deadfall trees from the river at certain points where flow is restricted, replacing them at other points so as to act as an erosion controlling device.	\$100,000
Mower	East Side Lake Technical Assistance Proposal to fund the provision of technical assistance to landowners within the watershed of the lake, so as to prevent agricultural pollutants from ultimately entering the lake.	\$7,500
Ramsey	Gervais Lake Treatment Pond Construction Proposal to fund the construction of a sediment pond adjacent to the lake, which will result in the reduction of phosphorous loading into the Phalen Lake chain.	\$20,000
Scott	Prior Lake Wetland Restoration Proposal to restore a wetland area adjacent to the lake through the removal of existing sediments, as well as construction of an empoundment area that will act as a stormwater basin, reducing the nutrient load entering into the lake.	\$22,615
So. St. Louis	Lester Park Golf Course Erosion & Sediment Control Proposal to complete the funding of a drainage system which will assist in carrying runoff from a poorly drained site. The runoff and sediment ultimately reach Lake Superior.	\$13,359
Stearns	Lake Koronis Shoreline Stabilization Proposal to fund the stabilization of up to 600 feet of a high banked area of lakeshore damaged during a major storm event in 1991.	\$100,000

Traverse	Tubex Tree Protector Installation Proposal to use cost-share funding to install Tubex tree shelters on field windbreaks.	\$1,065
Winona	Whitewater River Technical Assistance Proposal to continue the funding of additional technical assistance provided to landowners in the Whitewater River watershed area. Originally funded in 1991.	\$30,000
Winona	Kronebusch Farms Wetland/Ag Waste Drainage Proposal to assist in the creation of a wetland area placed to act as a nutrient catch basin for waters which will be collected through other projects undertaken by the landowner.	\$9,800
TOTAL AMOUNT OF REQUESTS:		\$555,821

FY1993 SLR/SPECIAL PROJECT SCORING PROCESS

JAN-FEB 1992 BWSR sends application ==> reminder to SWCDs	MARCH 1992 BWSR Staff works with SWCDs to complete applications	APRIL 1, 1992 Deadline for applications ==> for both programs	APRIL-MAY 1992 Proposals reviewed by ==> BWSR Staff
MAY-JUNE 1992 Comments received from ==> Staff and Agencies	JUNE 1992 Compiled information and recommendations provided to the Board		

FY1991-1992 SINKHOLE PROJECT PROCESS

MAY 1991 BWSR Board given responsibility for the Sinkhole Project	JUNE-JULY 1991 Workplan prepared for ==> LCMR review and approval	SUMMER-FALL 1991 SWCDs notified of the Sinkhole Project and asked to provide insight & feedback SCS contacted for engineering assistance commitment
FALL 1991 Sinkhole-familiar agencies asked to discuss the project and provide assistance ==> in selecting sites to be treated	DECEMBER 1991 Agencies meet to clarify intent of site treatments, and to plan further ==> cooperative efforts	JANUARY-APRIL 1992 SWCDs asked to solicit landowners to begin identifying sites to be treated in 92-93
APRIL 1992 BWSR begins to solicit engineering assistance for project site work with ==> individual SWCDs	MAY-JUNE 1992 BWSR prepares workplan amendment so as to provide engineering assistance to the SWCDs; engineer selected	JUNE 1992 BWSR Staff submits list of SWCD applications to the Board for the purpose of providing allocation to the SWCDs
JULY 1992 BWSR provides grant funding to the SWCDs; ==> engineer begins working with the SWCDs	JULY-NOVEMBER 1992 Construction on sinkhole sites is conducted following preparation of an approved plan and design	

SPECIAL PROJECTS

<u>DISTRICT</u>	<u>PROJECT</u>	<u>REQUEST AMOUNT</u>	<u>SCORE</u>	<u>RECOMM. FUNDING</u>	<u>CUMULATIVE TOTAL</u>
Clay	Buffalo River Erosion Control	\$ 42,700	85	\$21,350	\$ 21,350
Ramsey	Gervais Lake Pond Construction	\$ 20,000	74.5	\$20,000	\$ 41,350
Scott	Prior Lake Wetland Restoration	\$ 22,615	73.5	\$22,615	\$ 63,965
So. St. Louis	Lester River Golf Course Erosion Control	\$ 13,359	72.5	\$13,359	\$ 77,324
Stearns	Lake Koronis Lakeshore Erosion Control	\$100,000	72.5	\$31,250	\$108,574
Lake	Lake Superior Erosion Protection	\$ 50,000	72.5	\$30,000	\$138,574
Anoka	Labelle Pond Erosion Protection	\$ 29,938	70	\$24,000	\$162,574
Goodhue	Cannon Valley Trail Nat. Ctr. Erosion Protect.	\$ 19,410	66	\$19,410	\$181,984
Big Stone	Shady Oak Shoreline Stabilization	\$ 65,855	62		
Big Stone	Sunset View Shoreline Stabilization	\$ 47,779	59.5		
Wadena	Old Wadena Nature Center	\$ 2,000	56.5		
Lyon	Yellow Medicine River Stabilization	\$100,000	55		
Winona	Kronebusch Farms Ag Waste System-Wetland Creation	\$ 9,800	54		
Winona	Whitewater River Technical Assistance	\$ 30,000	52		
Mower	East Side Lake Technical Assistance	\$ 7,500	51		
Big Stone	Dale Steen Wetland Water Quality Monitoring	\$ 7,000	36.5		
Cass	Leech Lake Water Quality Monitoring	\$ 10,000	36		
Dakota	City of Farmington Wetland Inventory	\$ 21,500	30		
Traverse	Taylor Township Scour Hole	\$ 7,500	27		
Traverse	Tubex Installation	\$ 1,065	NS	MFIP	

TOTALS:

a. Available Funding:

SLR: \$159,000

Special Projects: \$181,984

b. Total Requests

SLR: \$319,063

Special Projects: \$608,021

SUMMARY OF SLR/SPECIAL PROJECT APPLICATION REVIEW
FY1993

STREAMBANK, LAKESHORE AND ROADSIDE

<u>DISTRICT</u>	<u>PROJECT</u>	<u>REQUEST AMOUNT</u>	<u>SCORE</u>	<u>RECOMM. FUNDING</u>	<u>CUMULATIVE TOTAL</u>
Pennington	Red Lake River Erosion Control	\$48,100	61	\$48,100	\$ 48,100
Martin	Sylvania Park Erosion Control	\$27,000	60	\$27,000	\$ 75,100
L.O.W.	Bay Park Seawall Construction	\$37,625	60	\$37,625	\$112,725
Douglas	Lake Le Homme Dieu Erosion Control	\$21,675	56	\$10,838	\$123,563
Cass	Portage Lake Emergency Funding	\$ 3,913	55	\$ 3,913	\$127,476
McLeod	Crow River Park Erosion Control	\$41,500	53.5	\$20,750	\$148,226
Carver	City of Waconia Erosion Control	\$43,800	53	\$10,774	\$159,000
Sherburne	Mississippi River Erosion Protection	\$17,500	53		
Traverse	Lake Valley Road Streambank Stabilization	\$ 6,725	44.5		
Carver	City of Victoria Erosion Control	\$15,600	43		
Pine	Norman Township Road Stabilization	\$ 7,000	39.5		
Root River	Caledonia Erosion Control Project	\$22,455	38		
Pine	Mikrot Road (Kettle River Twp.) Stabilization	\$10,000	35		
Root River	Yucatan Erosion Control Project	\$16,170	32		

SPECIAL PROJECTS

OTHER
FUNDING
SOURCES

<u>DISTRICT</u>	<u>PROJECT</u>	<u>REQUEST AMOUNT</u>	<u>OTHER FUNDING SOURCES</u>
Clay	Buffalo River Erosion Control	\$ 42,700	Clay County, Buffalo River WD
Ramsey	Gervais Lake Pond Construction	\$ 20,000	Ramsey Washington WD
Scott	Prior Lake Wetland Restoration	\$ 22,615	City of Prior Lake-50%
So. St. Louis	Lester River Golf Course Erosion Control	\$ 13,359	City of Duluth-50%
Stearns	Lake Koronis Lakeshore Erosion Control	\$100,000	Landowners-50%
Lake	Lake Superior Erosion Protection	\$ 50,000	Landowners-50%
Anoka	Labelle Pond Erosion Protection	\$ 29,938	City of Columbia Heights & Landowners
Goodhue	Cannon Valley Trail Nat. Ctr. Erosion Protect.	\$ 19,410	County Land Use Mgmt. Dept.
			Cannon River Watershed Partnership
			City of Cannon Falls
			Cannon Falls School Board
			Cannon Valley Trail Board
			Blandin Foundation
Big Stone	Shady Oak Shoreline Stabilization	\$ 65,855	Landowners-50%
Big Stone	Sunset View Shoreline Stabilization	\$ 47,779	Landowners-50%
Wadena	Old Wadena Nature Center	\$ 2,000	Wadena County Parks Dept.-50%
Lyon	Yellow Medicine River Stabilization	\$100,000	Yellow Medicine WD, Westerheim & Eidsvold Townships
Winona	Kronebusch Farms Ag Waste System-Wetland Creation	\$ 9,800	Landowner-50%
Winona	Whitewater River Technical Assistance	\$ 30,000	SWCDs-25%
Mower	East Side Lake Technical Assistance	\$ 7,500	East Side Lake JPB, County Depts, City of Austin, J.C. Hormel Nature Center
Big Stone	Dale Steen Wetland Water Quality Monitoring	\$ 7,000	USF&W, MPCA, Upper Minnesota River WD, Lake Association
Cass	Leech Lake Water Quality Monitoring	\$ 10,000	Leech Lake Band Tribal Council, SWCDs, EPA
Dakota	City of Farmington Wetland Inventory	\$ 21,500	City of Farmington-
Traverse	Taylor Township Scour Hole	\$ 7,500	Landowner
Traverse	Tubex Installation	\$ 1,065	Landowner

TOTALS:

a. Available Funding:

SLR: \$159,000

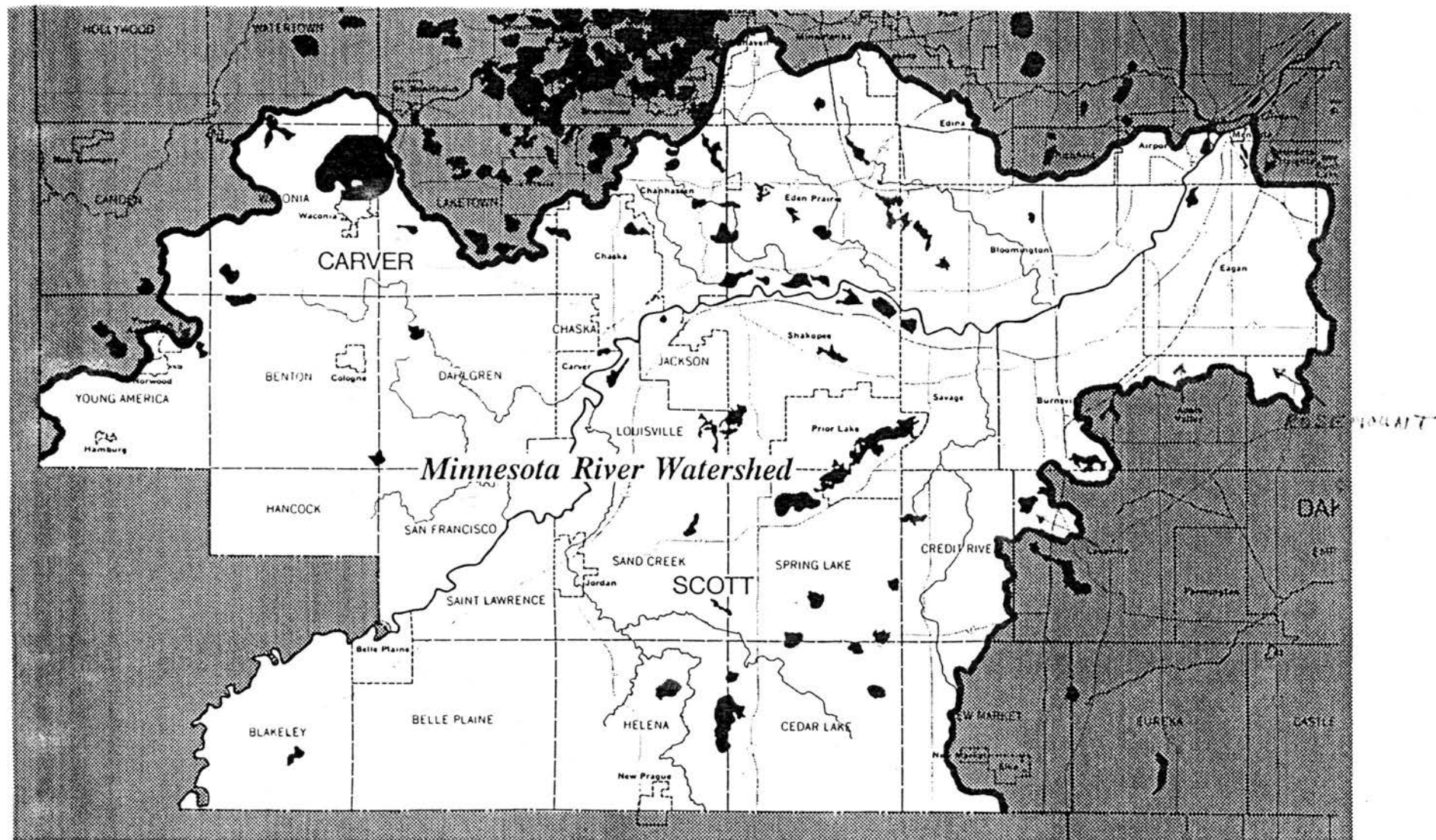
Special Projects: \$174,185

SUMMARY OF SLR/SPECIAL PROJECT APPLICATION REVIEW
FY1993

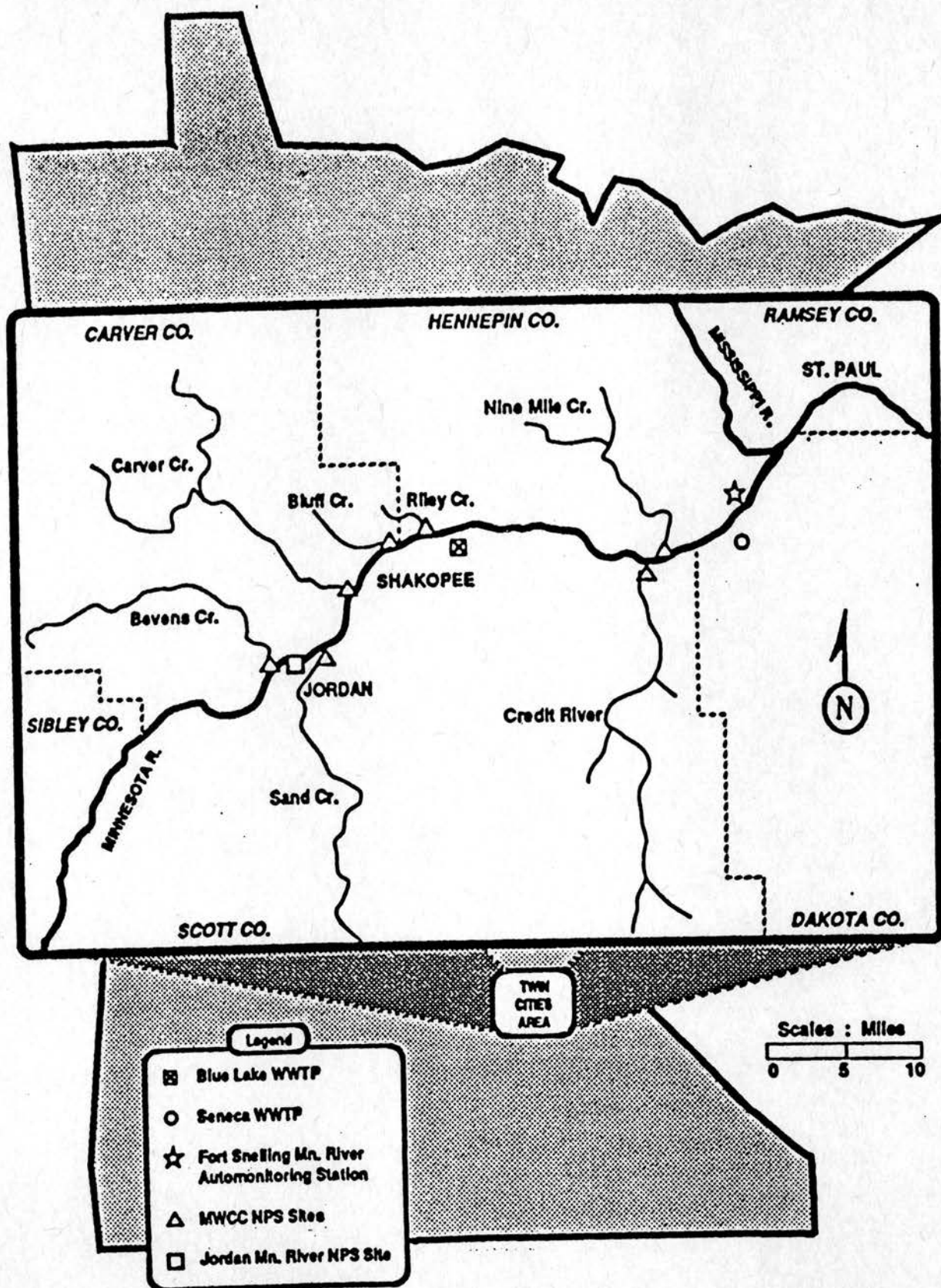
STREAMBANK, LAKESHORE AND ROADSIDE

<u>DISTRICT</u>	<u>PROJECT</u>	<u>REQUEST AMOUNT</u>	<u>OTHER FUNDING SOURCES</u>
Pennington	Red Lake River Erosion Control	\$48,100	Red Lake WD-50%
Martin	Sylvania Park Erosion Control	\$27,000	City of Fairmont-50%
L.O.W.	Bay Park Seawall Construction	\$37,625	City of Baudette-50%
Douglas	Lake Le Homme Dieu Erosion Control	\$21,675	County Park fund-25%, MNDOT-50%
Cass	Portage Lake Emergency Funding	\$ 3,913	Leech Lake Tribal Council-50%
McLeod	Crow River Park Erosion Control	\$41,500	City of Hutchinson-50%
Sherburne	Mississippi River Erosion Protection	\$17,500	City of Elk River-50%
Carver	City of Waconia Erosion Control	\$43,800	City of Waconia-50%
Traverse	Lake Valley Road Streambank Stabilization	\$ 6,725	Lake Valley Township-50%
Carver	City of Victoria Erosion Control	\$15,600	City of Victoria-50%
Pine	Norman Township Road Stabilization	\$ 7,000	Norman Township-50%
Root River	Caledonia Erosion Control Project	\$22,455	Houston County-50%
Pine	Mikrot Road (Kettle River Twp.) Stabilization	\$10,000	Kettle River Township-50%
Root River	Yucatan Erosion Control Project	\$16,170	Houston County-50%

TWIN CITIES METROPOLITAN AREA COMMUNITIES
IN THE MINNESOTA RIVER WATERSHED

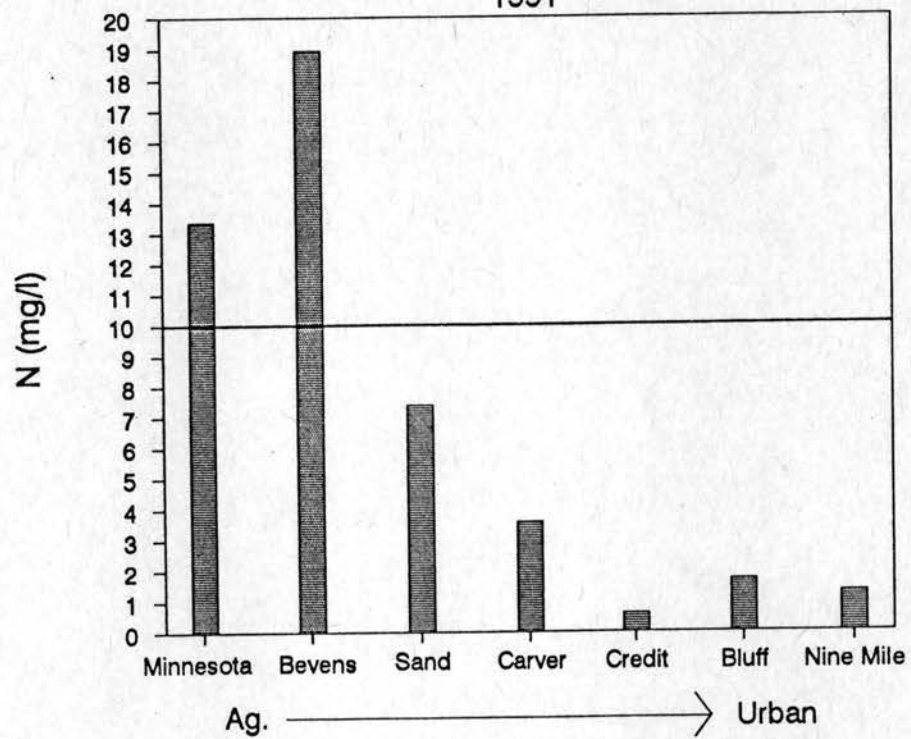


MWCC NONPOINT SOURCE POLLUTION MONITORING SITES

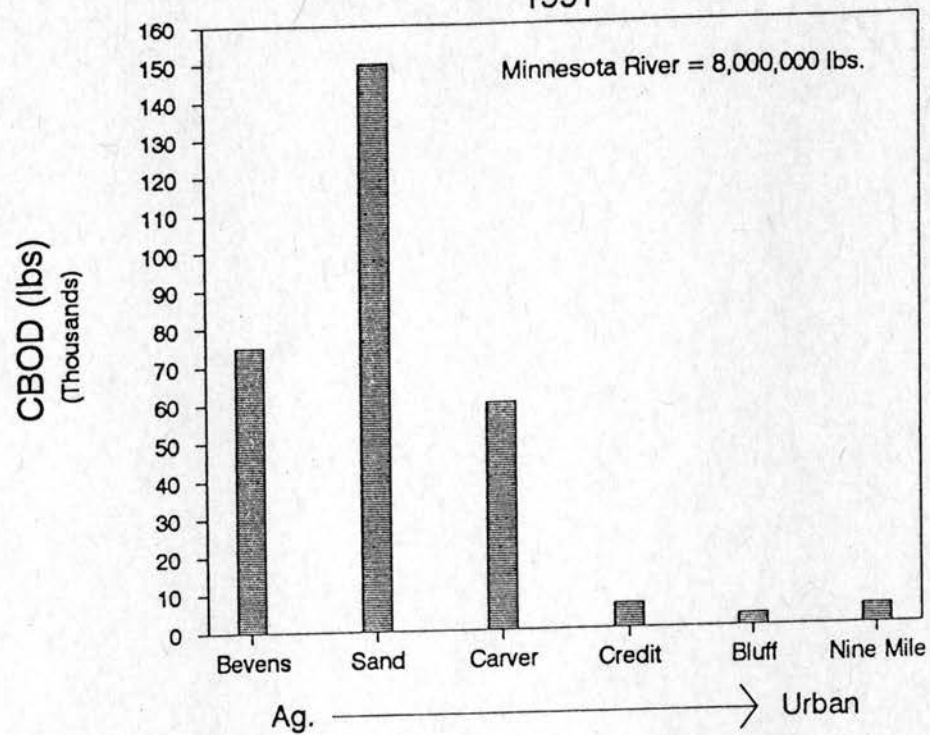


Mean Nitrate-N Concentrations in Metro Tributaries

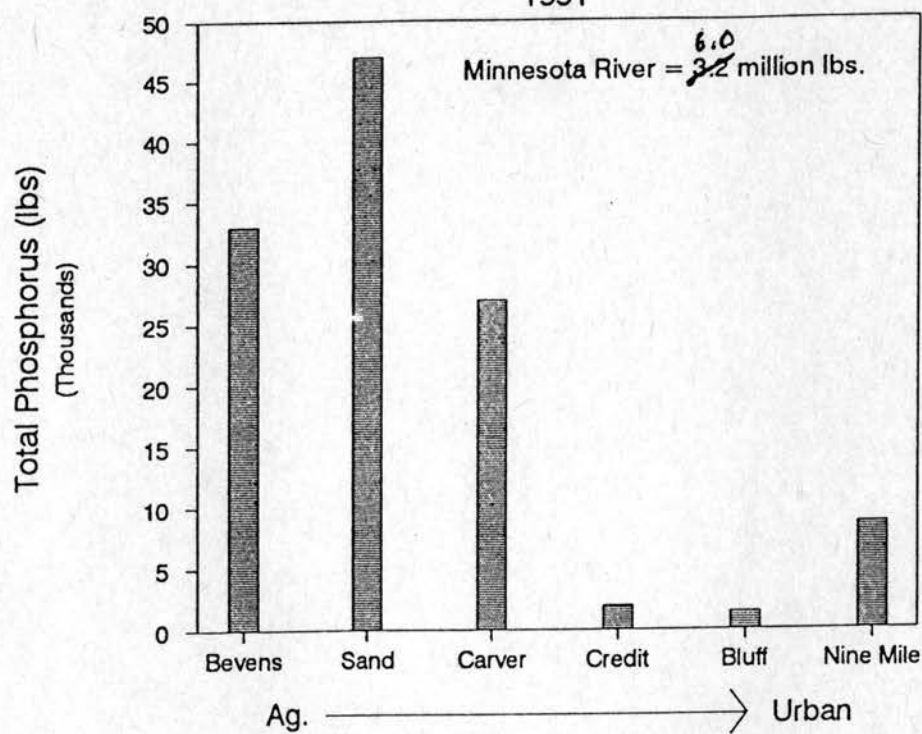
1991



CBOD Loading by Metro Tributaries 1991



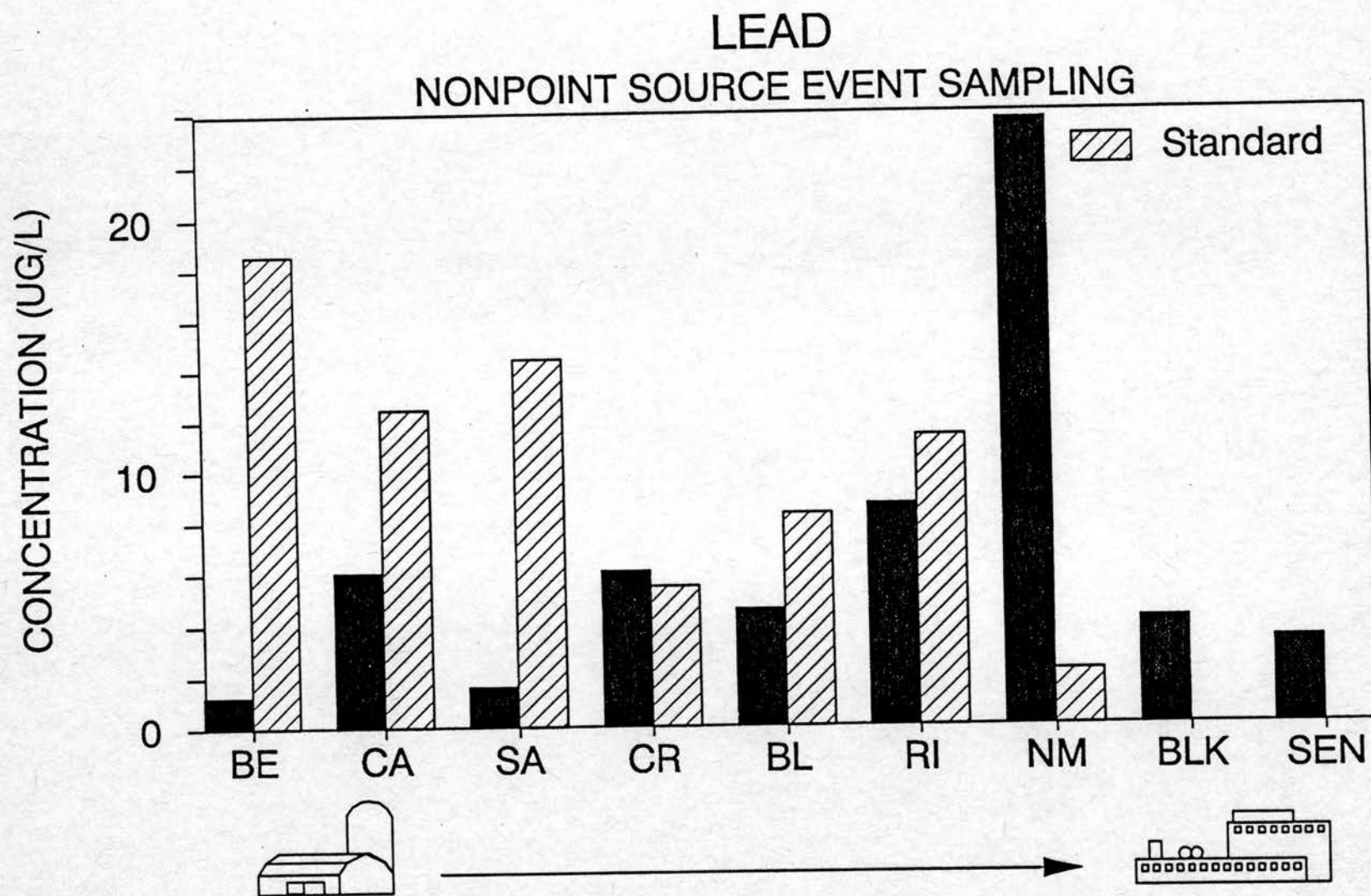
Total Phosphorus Loading by Metro Tributaries 1991



Summary of NPS Loading in 1991
 . from Seven Tributaries, the Minnesota River at Jordan,
 and the Blue Lake and Seneca Wastewater Treatment Plants

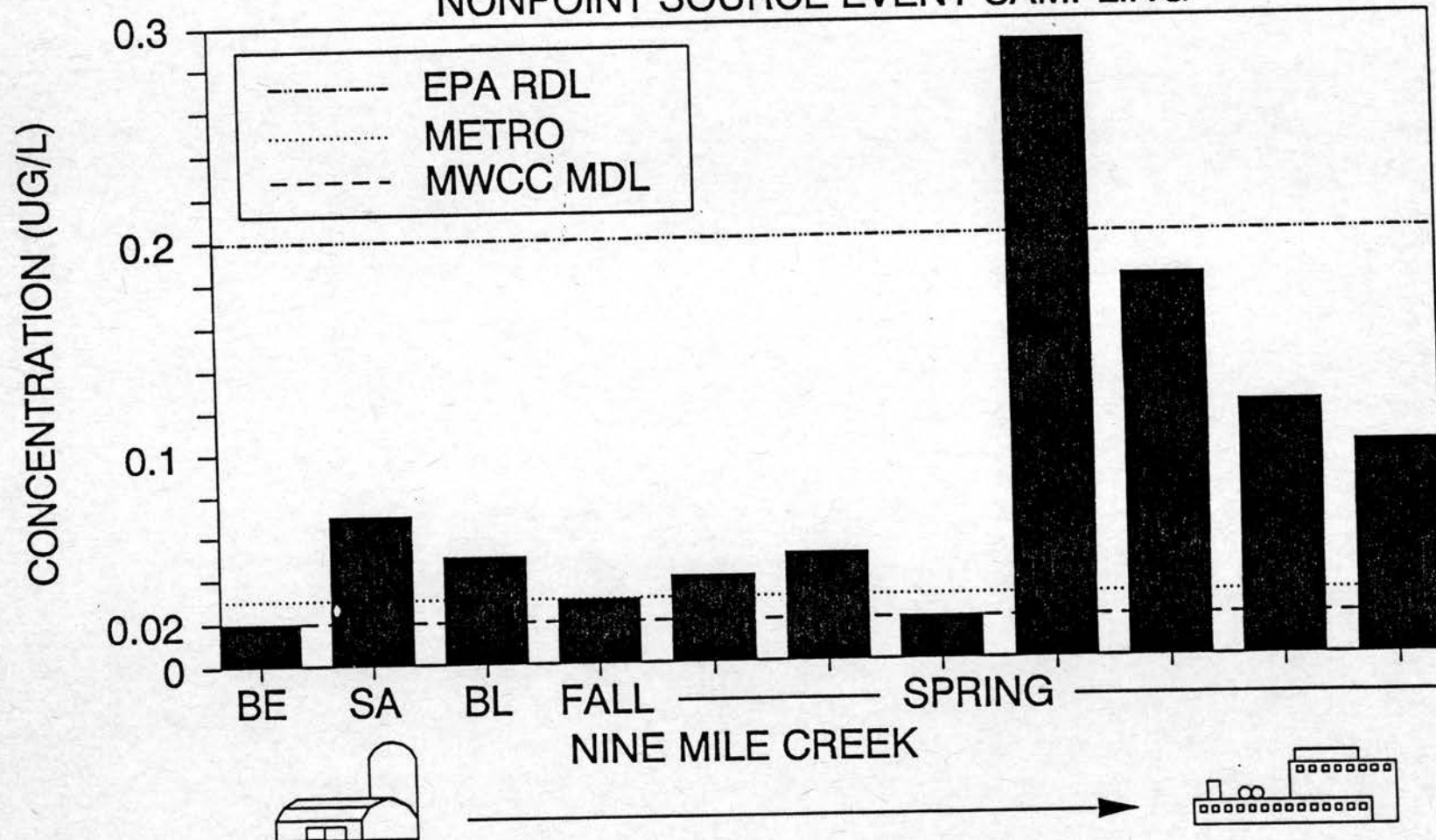
	COD	CBOD	TSS
	----- Tons of Loading -----		
Seven Tributaries	5,800	150	25,000
Minnesota River (J0)	110,000	4,000	600,000
Blue Lake + Seneca	2,500	200-300	300-400

* Estimated annual value for upgrades that went on-line in the summer of 1991.



PCB

NONPOINT SOURCE EVENT SAMPLING



FY1993 ALLOCATIONS TO SOIL AND WATER CONSERVATION DISTRICTS

FINAL RECOMMENDATION (JUNE 24, 1993)

	COST	SHARE		GENERAL			TOTAL
DISTRICT	REGULAR ALLOCATION	SPECIAL PROJECTS	SINKHOLE PROJECT	SERVICES	SLR		SERVICE GRANTS
ATKIN	\$ 4,479.00			\$ 9,321			13,800
ANOKA	\$ 6,332.00	\$ 24,000		\$ 9,537			39,869
BECKER	\$ 28,990.00			\$ 9,110			38,100
BELTRAMI	\$ 10,263.00			\$ 9,185			19,448
BENTON	\$ 9,835.00			\$ 9,148			18,983
BIG STONE	\$ 15,796.00			\$ 9,088			24,884
BLUE EARTH	\$ 23,028.00			\$ 9,193			32,221
BROWN	\$ 13,870.00			\$ 9,110			22,780
CARLTON	\$ 4,306.00			\$ 9,185			13,491
CARVER	\$ 21,848.00			\$ 9,215	\$ 10,775		41,838
CASS	\$ 7,030.00			\$ 9,358	\$ 3,912		20,300
CHIPPEWA	\$ 11,538.00			\$ 9,088			20,626
CHISAGO	\$ 12,220.00			\$ 9,253			21,473
CLAY	\$ 21,330.00	\$ 21,350		\$ 9,148			51,828
CLEARWATER	\$ 8,590.00			\$ 9,125			17,685
COOK	\$ 1,841.00			\$ 9,103			10,944
COTTONWOOD	\$ 16,902.00			\$ 9,103			26,005
CROW WING	\$ 5,242.00			\$ 9,373			14,615
DAKOTA	\$ 26,430.00			\$ 9,313			35,743
DODGE	\$ 11,966.00			\$ 9,088			21,054
DOUGLAS	\$ 18,201.00			\$ 9,403	\$ 10,838		38,282
FARIBAUT	\$ 14,945.00			\$ 9,110			24,055
FILLMORE	\$ 28,303.00		\$ 90,000	\$ 9,125			127,428
FREEBORN	\$ 19,711.00			\$ 9,073			28,784
GOODHUE	\$ 30,260.00	\$ 19,410		\$ 9,140			58,810
GRANT	\$ 10,905.00			\$ 9,148			20,835
HENNEPIN	\$ 12,305.00			\$ 10,253			22,558
HUBBARD	\$ 5,825.00			\$ 9,110			15,035
ISANTI	\$ 7,284.00			\$ 9,118			16,402
ITASCA	\$ 4,904.00			\$ 9,351			14,255
JACKSON	\$ 18,351.00			\$ 9,118			27,469
KANABEC	\$ 6,094.00			\$ 9,148			15,242
KANDIYOHI	\$ 18,902.00			\$ 9,125			28,027
KITSON	\$ 8,008.00			\$ 9,110			15,119

	COST	SHARE		GENERAL			TOTAL
DISTRICT	REGULAR ALLOCATION	SPECIAL PROJECTS	SINK-HOLE PROJECT	SERVICES	SLR		SERVICE GRANTS
KOOCHICHING	\$ 2,010.00			\$ 9,163			11,173
LAC QUI PARLE	\$ 25,668.00			\$ 9,118			34,786
LAKE	\$ 4,053.00	\$ 30,000		\$ 9,170			43,223
LAKE OF THE WOODS	\$ 2,948.00			\$ 9,193	\$ 37,625		49,766
LE SUEUR	\$ 19,711.00			\$ 9,170			28,881
LINCOLN	\$ 13,839.00			\$ 9,080			22,919
LYON	\$ 17,839.00			\$ 9,185			27,024
MAHNOMEN	\$ 7,799.00			\$ 9,058			16,857
MARSHALL-BELTRAMI	\$ 4,910.00			\$ 9,163			14,073
MARSHALL	\$ 9,834.00			\$ 9,068			18,922
MARTIN	\$ 25,583.00			\$ 9,110	\$ 27,000		61,693
MC LEOO	\$ 16,135.00			\$ 9,155	\$ 20,750		46,040
MEEKER	\$ 20,473.00			\$ 9,163			29,636
MILLE LACS	\$ 8,988.00			\$ 9,246			18,234
MORRISON	\$ 25,409.00			\$ 9,278			34,685
MOWER	\$ 9,869.00		\$ 8,000	\$ 9,073			26,742
MURRAY	\$ 14,262.00			\$ 9,163			23,425
NICOLLET	\$ 10,000.00			\$ 9,125			19,125
NOBLES	\$ 27,899.00			\$ 9,163			36,892
NORMAN	\$ 17,072.00			\$ 9,073			26,145
OLMSTED	\$ 37,911.00		\$ 12,000	\$ 9,148			59,059
EAST OTTER TAIL	\$ 23,541.00			\$ 9,238			32,779
WEST OTTERTAIL	\$ 24,732.00			\$ 9,238			33,970
PENNINGTON	\$ 9,251.00			\$ 9,073	\$ 48,100		66,424
PINE	\$ 10,263.00			\$ 9,200			19,463
PIPESTONE	\$ 15,368.00			\$ 9,110			24,478
EAST POLK	\$ 11,623.00			\$ 9,099			20,722
WEST POLK	\$ 18,944.00			\$ 9,099			28,043
POPE	\$ 24,582.00			\$ 9,103			33,685
RAMSEY	\$ 9,163.00	\$ 20,000		\$ 9,366			38,529
RED LAKE	\$ 6,009.00			\$ 9,073			15,082
REDWOOD	\$ 11,030.00			\$ 9,125			20,155
RENVILLE	\$ 10,771.00			\$ 9,073			19,844
RICE	\$ 17,913.00			\$ 9,110			27,023
ROCK	\$ 15,953.00			\$ 9,095			25,048
ROOT RIVER	\$ 22,513.00			\$ 9,058			31,571
ROSEAU	\$ 11,369.00			\$ 9,103			20,472

	COST	SHARE		GENERAL			TOTAL
DISTRICT	REGULAR ALLOCATION	SPECIAL PROJECTS	SINKHOLE PROJECT	SERVICES	SLR		SERVICE GRANTS
NORTH ST. LOUIS	\$ 3,119.00			\$ 9,358			12,477
SOUTH ST. LOUIS	\$ 8,858.00	\$ 13,359		\$ 9,509			29,724
SCOTT	\$ 20,303.00	\$ 22,815		\$ 9,749			52,867
SHERBURNE	\$ 3,800.00			\$ 9,253			13,053
SIBLEY	\$ 12,871.00			\$ 9,236			22,107
STEARNS	\$ 48,858.00	\$ 31,250		\$ 9,418			87,524
STEELE	\$ 9,840.00			\$ 9,125			18,965
STEVENS	\$ 22,805.00			\$ 9,118			31,723
SWIFT	\$ 11,115.00			\$ 9,065			20,180
TODD	\$ 22,007.00			\$ 9,248			31,253
TRAVERSE	\$ 8,438.00			\$ 9,110			15,548
WABASHA	\$ 21,487.00			\$ 9,148			30,635
WADENA	\$ 5,328.00			\$ 9,088			14,416
WASECA	\$ 9,757.00			\$ 9,155			18,912
WASHINGTON	\$ 12,581.00			\$ 9,343			21,904
WATONWAN	\$ 8,307.00			\$ 9,155			17,462
WILGN	\$ 10,861.00			\$ 9,073			19,934
WINONA	\$ 17,410.00			\$ 9,200			26,610
WRIGHT	\$ 18,337.00			\$ 9,488			27,823
YELLOW MEDICINE	\$ 16,818.00			\$ 9,170			25,988
SUBTOTAL	\$ 1,314,820.00	\$ 181,984.00	\$ 110,000.00	\$ 836,657.00	\$ 159,000.00		\$ 2,602,481
PROGRAM TOTAL	\$ 1,496,804		\$ 250,000	\$ 883,054	\$ 159,000		
ALLOCATED TOTAL	\$ 1,496,804		\$ 135,000	\$ 836,657	\$ 159,000		
BALANCE	\$ 80		\$ 115,000	\$ 26,397	\$ 0		

Notes:

Grant's Cost-Share allocation has been reduced by \$ 782 for program violations.

Douglas' Cost-Share funding will be decreased \$840 for repayment of program violations.

Balance funding in the Cost-Share Program will become part of the Roll-Over allocation to SWCDs at the end of calendar year 1991.

Balance funding in General Services will be used to match the EPA/MPCA funding of the Feedlot position in Marshall.

STREAMBANK, LAKESHORE & ROADSIDE
APPLICATION SCORING CRITERIA

PURPOSE: Grants are available to SWCDs and other local units of government to solve sediment and erosion control problems that are located on streambank, lakeshore and roadside sites.

Cost-share payments (now given out prior to construction) must not exceed 50 per cent of the project costs, or 50 per cent of the local share if federal funds are used.

The desire to no longer prioritize federally funded projects has been expressed, based on the fact that an original objective of the SLR Program (i.e., to be able to bring revenue to a local economy through a SWCD) is not as significant as it once was. However, the aim of the program to assist local units of government was upheld.

1. Degree of Public Benefit: (0 to 20 points)
Public Benefits include:
 - *Public safety considerations
 - *Public education
 - *Water quality impacts (including proximity to protected waters, wetland protection, etc.)
 - *Wildlife & Fisheries benefits
 - *Recreational benefits, including accessibility
2. Cause & Effect: (0 to 15 points)
Will an identified problem be adequately treated, providing a long-term solution to satisfactorily address the causes of subsequent erosion, sedimentation & water quality degradation?
Considerations include:
 - * Is the cause within the applicants control?
 - * Will the problem be adequately treated?
 - * Is the treatment to provide long-term solution?
3. Are Least-Cost Methods employed to control an identified problem? 0 to 10 points
4. Tie-in and identification of the project as it relates to local plans and controls, such as: (0 to 10 points)
 - SWCD Annual Plans
 - Comp Local Water Plans
 - Local Ordinances or Official Controls
 - Other local cooperative efforts
5. Is this a continuation or completion of an on-going project?
0 or 5 points
6. Could this project be completed through the regular Cost-Share Program? 0 or 5 points

SPECIAL PROJECT
APPLICATION SCORING CRITERIA

PURPOSE: To use 10 per cent of Cost-Share Program to fund special projects which address erosion or sediment control, or water quality problems using the administrative procedures set forth in the Cost-Share Program. Special Project funding provides an opportunity for requests of a larger scale to be funded, thus reducing demands on regular cost-share funding, and it also provides a funding mechanism for the installation of innovative methods & approaches for erosion and sediment control and water quality problems.

1. Degree of Public Benefit: (0 to 20 points)
Public Benefits include:
 - *Public safety considerations
 - *Public education
 - *Water quality impacts (including proximity to protected waters, wetland protection, etc.)
 - *Wildlife & Fisheries benefits
 - *Recreational benefits, including accessibility
2. Innovativeness of the project, based on: (0 to 20 points)
 - *New or transferred technology implementation
 - *New methodologies employed
 - *New opportunities identified
 - *The identified/projected life of the project
 - *Multi-agency efforts
 - *Multi-county efforts
3. Tie-in and identification of the project as it relates to local plans and controls, such as: (0 to 10 points)
 - SWCD Annual Plans
 - Comp Local Water Plans
 - Local Ordinances or Official Controls
 - Other local cooperative efforts
4. Cause & Effect: (0 to 10 points)
5. Are Least-Cost Methods employed to control an identified problem? 0 to 10 points
6. Are Cost-Share funds still available locally? 0 to 5 points
7. Could the project be funded through the regular Cost-Share Program? 0 or 5 points
8. Documented or projected effectiveness of the project, (0 to 10 points) based on the data available from:
 - * site investigation
 - * other documentation
 - * post-project reporting & accomplishment

**FY1993 SUMMARY
BOARD OF WATER AND SOIL RESOURCES
GRANT PROGRAMS**

BWSR PROGRAM	WETLAND CONSERVATION ACT	ABANDONED WELL SEALING	ABANDONED WELL INVENTORY	SINKHOLE COST-SHARE	COST-SHARE PROGRAM
FUNDING SOURCE AND AMOUNT:	\$300,000 in LWRPMP funding \$100,000 in General Funding available for implementation grants	\$230,000 in LCMR funding remaining available	\$200,000 in General Funding has been allocated to Counties	\$250,000 in LCMR funding is available for use within the next year	\$1,461,000 available from the General Fund; \$146,100 to be used for Special Projects
CLIENTELE:	Counties	Counties	Counties	Landowners	Landowners or LGUs
LOCAL ADMINISTRATION:	County or other LGUs	County or designated LGUs	County or designated LGUs	SWCDs	SWCDs
APPLICATION INFORMATION:	Announcement in State Register; applications accepted for 60 days	\$158,000 in applications for funding currently under review, expected to be completed in May	Invoices from participating Counties will be processed for reimbursement upon their receipt by the BWSR	Participating SWCDs are expected to send lists of potential landowner-participants to the BWSR. BWSR has also solicited for the services of a consulting engineer to provide technical assistance.	Funding allocated based on formula, or, for Special Projects, based on competitive applications received from districts.
MILESTONES:	April 22: Board approval of allocation process May 4: Notice placed in State Register May 8: Application information mailed to Counties, LGUs By June 15: Notify Review Team July 3rd: Application deadline for WCA interim implementation grants to Counties. Approx. July 15th: Grant Agreements sent to Counties. August: Grant funds sent to Counties	Funding is out to most requesting Counties, with the Board approving the process used to review current proposals Update the Board in July	After April 30th: reimbursements will begin to be processed. It is anticipated that such payments will be made in three installments over the course of the year (and Project) Update the Board in July	May 8th: Deadline for submittal of RFP responses from engineers. May 13th: Deadline for submittal of participating landowners from SWCDs Mid-May: Select Engineer Late May: Review of potential sites for treatment by BWSR Staff & Engineer June-July: Sites selected for treatment July-August: Grant Agreements and funds sent out to SWCDs	April 1st: Deadline for Special Project applications May: Review of applications by G Team June: Staff allocation recommendation given to the Board for approval July: Grant Agreements are sent to SWCDs August: Funding sent to the SWCDs

BWSR PROGRAM	STREAMBANK, LAKESHORE AND ROADSIDE	GENERAL SERVICES	RIM CONSERVATION RESERVE SERVICE GRANT	MINNESOTA FORESTRY IMPROVEMENT PROGRAM	LOCAL WATER RESOURCES PROTECTION AND MANAGEMENT PROGRAM
FUNDING SOURCE AND AMOUNT:	\$159,000 Available from the General Fund	\$849,000 Available from the General Fund	\$750,000 Available from the General Fund	\$120,000 Available from the General Fund, transferred to the BWSR from DNR Forestry	\$2,535,000 from the General Fund
APPLICATION INFORMATION	Applications for competitive funding are accepted annually from SWCDs, acting on behalf of other LGUs.	Amounts given to SWCDs based on a combination of DNR Water Permit service review, as well as need and use.	FY1993 allocations will be based on responses received from a demand-use survey of program demand, as well as projected wetland easement workload per SWCD.	SWCDs apply for funding based on local need and response during a pre-set sign-up period	Applications for Base and Challenge Grants to Counties will be solicited in late 1992.
CLIENTELE:	Local governments	SWCDs	SWCDs receive RIM Service Grants to promote and administer the program locally.	Private landowners	Counties
LOCAL ADMINISTRATION:	SWCDs sponsor applications	SWCDs		SWCDs	Counties or a designated LGU/Water Plan Coordinator
MILESTONES:	April 1: Deadline for submittal of applications from SWCDs April-June: Applications are screened and scored by the Grants Team and other appropriate BWSR staff and state agencies June: Recommendations for funding are brought before the Board for approval July: Grant Agreements are sent to recipients August: Funds are sent out to the SWCDs	May-June: Allocation figures calculated based on funding available June: Staff funding recommendation presented to the BWSR Board for approval. July: Grant Agreements sent to the SWCDs August-September: Funding sent to the SWCDs	April: Survey mailed out to the SWCDs May: Surveys returned, results tabulated and analyzed May-June: Staff and SWCDs work together to create an allocation formula June: Allocation options presented to the BWSR Board July: Allocation decision made by the Board August: Grant Agreements sent to SWCDs August-September: Funds sent to the SWCDs	May: Notice of sign-up period sent to the SWCDs participating in the MIFIP May-June: SWCDs solicit landowners, informing them of the program and practices available for cost-sharing	July-August: levy information to be available from the Department of Revenue September: Application announcement in the State Register; County governments set local levy amounts October: Application period begins for LWRPMP grants December: Counties set final budgets, including commitment of local funding for match to participate in the Program. January 1993: Application periods close for Base and Challenge Grants; Base Grant Agreements are sent out to Counties January 1993: Challenge Grant review process begins January-February: Review Team makes recommendations to the Board February 1993: Board approval of Challenge Grant recommendations

SUMMARY OF SLR/SPECIAL PROJECT APPLICATION REVIEW
FY1993

STREAMBANK, LAKESHORE AND ROADSIDE

<u>DISTRICT</u>	<u>PROJECT</u>	<u>REQUEST AMOUNT</u>	<u>SCORE</u>	<u>RECOMM. FUNDING</u>	<u>CUMULATIVE TOTAL</u>
		\$48,100	61	\$48,100	\$ 48,100
Pennington	Red Lake River Erosion Control	\$27,000	60	\$27,000	\$ 75,100
Martin	Sylvania Park Erosion Control	\$37,625	60	\$37,625	\$112,725
L.O.W.	Bay Park Seawall Construction	\$21,675	56	\$10,838	\$123,563
Douglas	Lake Le Homme Dieu Erosion Control	\$ 3,913	55	\$ 3,913	\$127,476
Cass	Portage Lake Emergency Funding	\$41,500	53.5	\$20,750	\$148,226
McLeod	Crow River Park Erosion Control	\$43,800	53	\$10,774	\$159,000
Carver	City of Waconia Erosion Control	\$17,500	53		
Sherburne	Mississippi River Erosion Protection	\$ 6,725	44.5		
Traverse	Lake Valley Road Streambank Stabilization	\$15,600	43		
Carver	City of Victoria Erosion Control	\$ 7,000	39.5		
Pine	Norman Township Road Stabilization	\$22,455	38		
Root River	Caledonia Erosion Control Project	\$10,000	35		
Pine	Mikrot Road (Kettle River Twp.) Stabilization	\$16,170	32		
Root River	Yucatan Erosion Control Project				

SPECIAL PROJECTS

<u>DISTRICT</u>	<u>PROJECT</u>	<u>REQUEST AMOUNT</u>	<u>SCORE</u>	<u>RECOMM FUNDING</u>	<u>CUMULATIVE TOTAL</u>
Clay	Buffalo River Erosion Control	\$ 42,700	85	\$21,350	\$ 21,350
Ramsey	Gervais Lake Pond Construction	\$ 20,000	74.5	\$20,000	\$ 41,350
Scott	Prior Lake Wetland Restoration	\$ 22,615	73.5	\$22,615	\$ 63,965
So. St. Louis	Lester River Golf Course Erosion Control	\$ 13,359	72.5	\$13,359	\$ 77,324
Stearns	Lake Koronis Lakeshore Erosion Control	\$100,000	72.5	\$31,250	\$108,574
Lake	Lake Superior Erosion Protection	\$ 50,000	72.5	\$30,000	\$138,574
Anoka	Labelle Pond Erosion Protection	\$ 29,938	70	\$24,000	\$162,574
Goodhue	Cannon Valley Trail Nat. Ctr. Erosion Protect.	\$ 19,410	66	\$19,410	\$181,984
Big Stone	Shady Oak Shoreline Stabilization	\$ 65,855	62		
Big Stone	Sunset View Shoreline Stabilization	\$ 47,779	59.5		
Wadena	Old Wadena Nature Center	\$ 2,000	56.5		
Lyon	Yellow Medicine River Stabilization	\$100,000	55		
Winona	Kronebusch Farms Ag Waste System-Wetland Creation	\$ 9,800	54		
Winona	Whitewater River Technical Assistance	\$ 30,000	52		
Mower	East Side Lake Technical Assistance	\$ 7,500	51		
Big Stone	Dale Steen Wetland Water Quality Monitoring	\$ 7,000	36.5		
Cass	Leech Lake Water Quality Monitoring	\$ 10,000	36		
Dakota	City of Farmington Wetland Inventory	\$ 21,500	30		
Traverse	Taylor Township Scour Hole	\$ 7,500	27		
Traverse	Tubex Installation	\$ 1,065	NS	MFIP	

TOTALS:

a. Available Funding:

SLR: \$159,000

Special Projects: \$181,984

b. Total Requests

SLR: \$319,063

Special Projects: \$608,021

May 26, 1992

Ronald D. Harnack, Executive Director
Board of Water and Soil Resources
155 S. Wabasha St., Suite 104
St. Paul, MN 55107

Dear Mr. Harnack:

The Hennepin Soil and Water Conservation District has reapportioned its nominating districts and requests that the Board of Water and Soil Resources approve our request so that the new boundaries may be used for the 1992 election.

Enclosed with this letter is the resolution describing the districts, and a map of the new districts. Some other information regarding the changes are:

1. The district chair and district manager met to develop four alternatives for the district board to consider.
2. Information used included the 1990 Census data as well as redistricting data from: Hennepin County Commission, city of Minneapolis ward redistricting, Minneapolis Parks Commission and Hennepin Parks.
3. Population equality was a major consideration. All districts contain between 19% and 21% of the county's 1990 population. The smallest district (in population) is also a district that is growing in population.
4. One of the supervisors had announced that he was not planning to run for reelection in 1992.
5. Municipal boundaries were followed, so that Minneapolis is the only city split under this plan.

6. The supervisors and manager are not aware of anyone interested in running for a position who is adversely affected by this plan.

If you have any questions, feel free to contact me at 7-3010. I am just a couple of blocks away, in the Revenue Building. I should be available to come to the Board's meeting to answer questions. HCD manager Joel Settles can be reached at 544-8572.

Sincerely,

A handwritten signature in cursive script that reads "David Anderson".

David Anderson, Chair
Hennepin Soil and Water Conservation District

Enclosures

cc: Board Representative Mark Nelson

NOMINATION DISTRICTS RESOLUTION

Be it resolved by the Hennepin Soil and Water Conservation District Supervisors that pursuant to M.S. 40.04, subd. 12, the district be divided into five areas for nominating candidates for the positions of Soil and Water Conservation District Supervisors to be elected at large as follows:

<u>District</u>	<u>DESCRIPTION OF BOUNDARIES</u>
I -	See attached
II -	
III -	
IV -	
V -	

C. Joseph Newberg, Secretary of the Hennepin Soil and Water Conservation District, do hereby certify that the above resolution relating to the division of the Hennepin Soil and Water Conservation District into five nominating areas was adopted by the said District Supervisors at a regular meeting held on May 21, 1992 that I have compared the above copy with the original resolution as set forth in the minutes of said meeting, and it is a true and correct copy of and transcript from said original and the whole thereof. I further certify that said meeting of the Board was duly called and held, that a quorum of members of said Board was present thereat, and that said resolution was duly adopted thereat by a vote of 4 to 0 of the members present.

Signed

C. Joseph Newberg
Secretary, Hennepin Soil and Water
Conservation District

Be it resolved by the Board of Water and Soils Resources that the division of the Hennepin Soil and Water Conservation District into five nominating areas as set forth in the above resolution adopted by the supervisors of said district on _____, 19__, is hereby approved.

I _____, Director of the Board of Water and Soil Resources, do hereby certify that I have compared the above copy of resolution relating to the division of the Hennepin Soil and Water Conservation District into five nominating areas adopted by said Board at a regular meeting hold on May 21, 1992, with the original as set forth in the minutes of said meeting, and that said copy is a true and correct copy of and transcript from said original and the whole thereof. I further certify that said meeting of said Board was duly called and held, that a quorum of members of said Board was present thereat, and that said resolution was duly adopted thereat by a vote of _____ to _____ of the members present.

Signed

Director, Board of Water and Soil Resources

Filed _____ day of _____, 19__

Signed

County Auditor, Hennepin County

Hennepin Conservation District Supervisor Nominating Districts

DISTRICT 1

<u>City</u>	<u>Population</u>
Crystal	23,788
Minneapolis	168,348
(Wards 1-6)	
Robbinsdale	14,396
St. Anthony	5,278
	211,810

DISTRICT 2

<u>City</u>	<u>Population</u>
Minneapolis	200,035
(Wards 7-13)	
	200,035

DISTRICT 3

<u>City</u>	<u>Population</u>
Brooklyn Center	28,887
Brooklyn Park	56,381
Champlin	16,849
Maple Grove	38,736
New Hope	21,853
Osseo	2,704
Plymouth	50,889
	216,299

DISTRICT 4

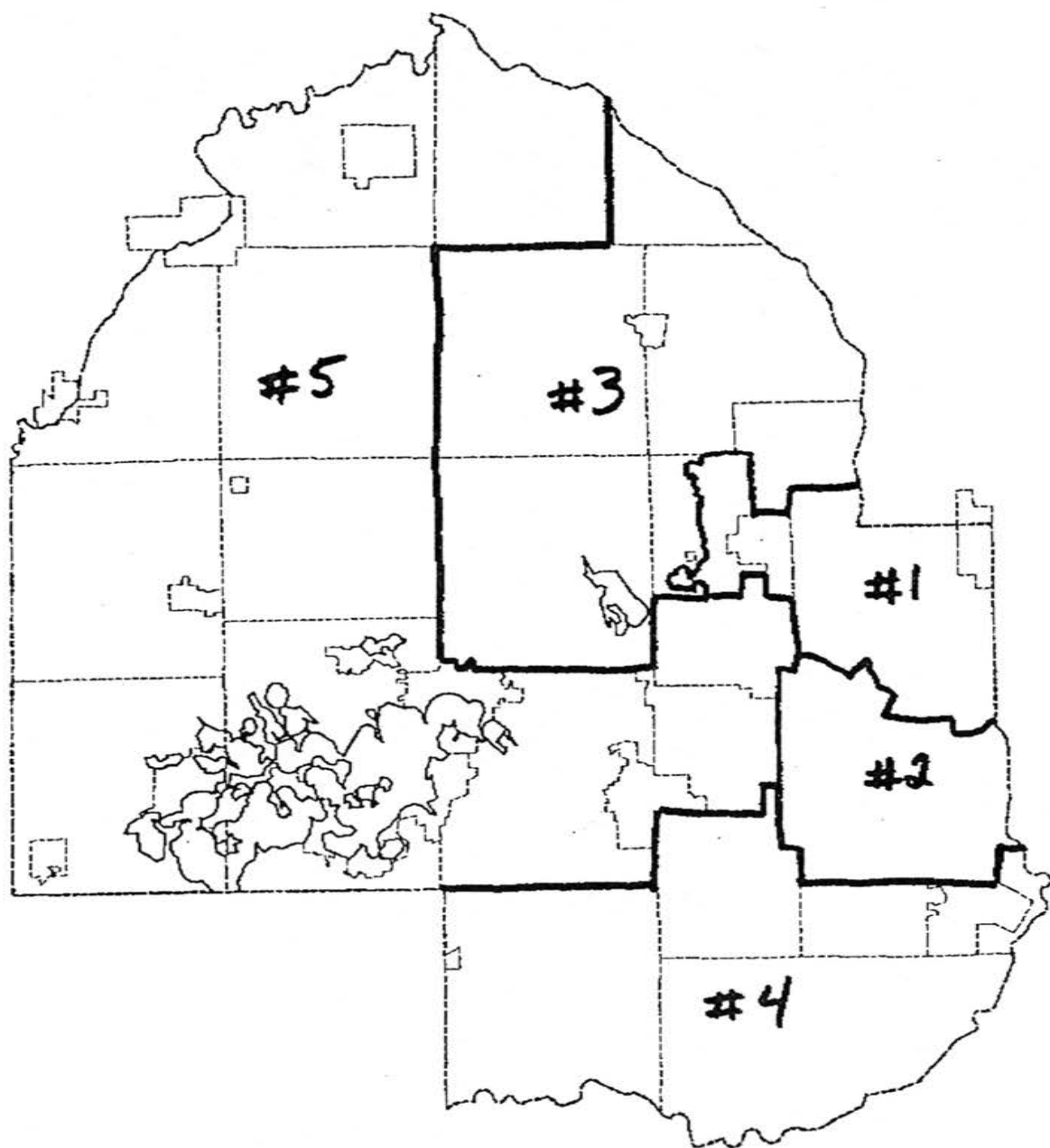
<u>City</u>	<u>Population</u>
Bloomington	86,335
Chanhassan	0
Eden Prairie	34,311
Edina	46,070
Richfield	35,710
Fort Snelling	97
	207,523

DISTRICT 5

<u>City</u>	<u>Population</u>
Corcoran	5,199
Dayton	4,392
Deephaven	3,653
Excelsior	2,367
Golden Valley	20,971
Greenfield	1,450
Greenwood	614
Hanover	269
Hassan	1,951
Hopkins	16,534
Independence	2,822
Long Lake	1,984
Loretto	404
Maple Plain	2,005
Medicine Lake	385
Medina	3,096
Minnetonka	48,370
Minnetonka Beach	573
Minnetrista	3,439
Mound	9,634
Orono	7,285
Rockford	440
Rogers	698
St. Bonifacius	1,180
St. Louis Park	43,787
Shorewood	5,917
Spring Park	1,571
Tonka Bay	1,472
Wayzata	3,806
Woodland	496
	196,764

Total Population 1,032,431
Arithmetic Average 206,486

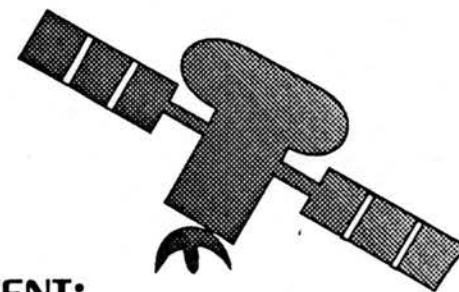
Largest District 216,299
Smallest 196,764
Difference 19,535



Agricultural Roundtable

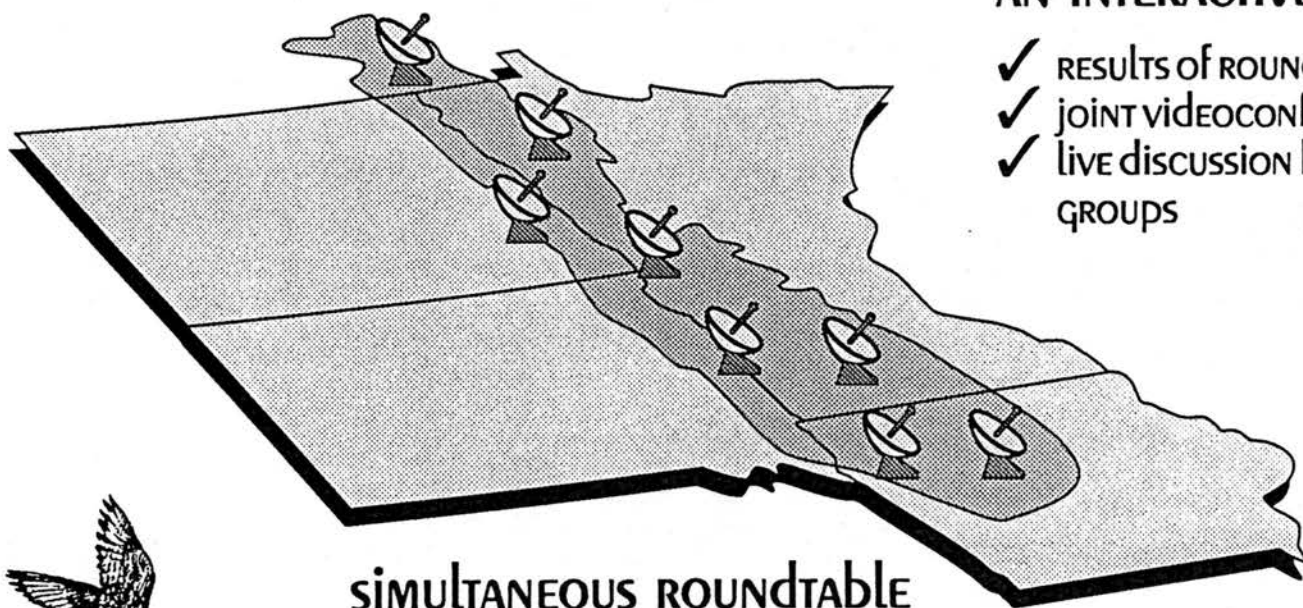


**A HEALTHY ECONOMY AND HEALTHY ENVIRONMENT:
...TURNING LOCAL VISIONS INTO A REGIONAL AGENDA**



AN INTERACTIVE EVENT:

- ✓ RESULTS OF ROUNDTABLE DISCUSSIONS FAXED TO CENTRAL SITE
- ✓ JOINT VIDEOCONFERENCE WITH MODERATOR AND PANEL
- ✓ LIVE DISCUSSION BETWEEN CENTRAL SITE AND ROUNDTABLE GROUPS



**SIMULTANEOUS ROUNDTABLE
MEETINGS AT APPROX. 20
"downlink" sites**



**PANEL AND MODERATOR
AT CENTRAL "uplink" site**

Questions	Issues/Options	Discussion
THE PARTICIPANTS		
What kind of participant are we looking for?	a) official representatives of various agencies and organizations	There may be overlap between these two choices.
	b) change oriented individuals from a cross section of rural society	
How would participants be selected?	a) no selection, open participation	General criteria for the type of person could be set by the sponsors, and selection made at the local level; or selection could be aided by scientific polling techniques/services
	b) invitation offered by the local community	
	c) invitation offered by sponsors or Partnership	
THE EVENT		
Is "Agricultural Roundtable" the appropriate title?	a) Is this title too broad? Does it predetermine the expectations of participants?	Up to now, the title <i>Agricultural Roundtable</i> has been used for convenience for this event. Since people often read a lot into the title, perhaps a closer assessment needs to be made.
What area should the event address?	a) Political, economic, or ecological boundaries?	The Prairie Stewardship Partnership has begun to organize around the "Northern Tallgrass Prairie" region as a way to integrate agricultural and environmental problems
Why type of event should this be?	a) simultaneous, interactive event	This approach may make the event more of a "happening" give a heightened sense of participation common purpose and
	b) series of events: local→state→regional	This approach allows for more systematic processing of results. It would require a series of Roundtable events over a period of weeks or months.
Size and type of event?	a) limited number of sites (3-5) – sites picked by planning group	• participation by invitation or open, 30 - 200 per site • event focus is on regional needs • greatest opportunity for interaction between sites • probably use "professional" facilitation people
	b) moderate number of sites (20-25) – sites picked by planning group, and/or communities have opportunity to "bid" to host a roundtable	• participation by invitation, 20-30 per site • event focus is on a community needs • summarizing site results, questions and answers between roundtable sites and main site important component of event • will train a mix of facilitators for event
	c) maximum number of sites (100+) – open solicitation for roundtable sites	• open solicitation for participants, 10-30 per site • less interactive • purpose of linkage is to provide participants the same information, the same way, at the same time. • coordination, planning and facilitation requirements much greater
Where should the roundtable meetings take place?	a) use sites with existing capabilities	A large number of Extension offices, community colleges, and technical colleges have satellite downlink capabilities
	b) use local meeting places (e.g. VFW hall, community center, church hall, fair grounds)	Hooking up these sites with mobile equipment would require a significant increase in direct costs and logistical effort
THE SPONSORS		
Who sponsors the event?	a) limited group or as many as possible?	To make it a regional event we need to solicit sponsors from other states/provinces?
What does <i>sponsorship</i> mean?	a) different groups offer different capabilities for contributing to the event. What type of commitment makes an organization a sponsor?	• lend name of your organization? • provide staff time/assistance? • help publicize the event? • help sponsor a site? • help with fundraising or provide direct support?

The Results?

Prairie Stewardship Partnership

Vision

Prairie Stewardship is a vision which brings together diverse efforts by landowners, communities, organizations, and government seeking to foster a new era of stewardship in our prairie farmlands. *Prairie Stewardship* is not a top-down initiative driven by a new government program or funding source. On the contrary, it is a response to broad interest in exploring common ground and engaging in cooperative, integrated approaches to environmental and agricultural issues. It is based around the shared principles of:

Partnerships: Working together through cooperative action and mutual agreement to face problems, identify opportunities, and find solutions.

Sustainability: Guiding today's decisions about our use of the land and its resources, with a commitment to maintaining the capacity of the land and its people to provide these and other opportunities tomorrow.

Landscape Focus: Focusing on how we move towards a long-term desired condition of the prairie farmland landscape, rather than singular resource goals.

Environment/Economy: Finding solutions which support economic prosperity, lasting livelihoods, and maintain the land's health, productivity, and natural diversity.

Preliminary Tasks:

Turning the vision of *Prairie Stewardship* into real change will require action at several levels and across multiple agencies, organizations and jurisdictions. Some key task areas include: 1) creating the Prairie Stewardship Partnership forum, 2) modifying current programs to facilitate integration, 3) designing new initiatives to support a landscape approach, and 4) providing for local participation.

Commitments to Prairie Stewardship

A scoping meeting was held July 29, 1991 with a wide range of organizations to assess the value of this initiative. The consensus was to go forward and a charter meeting was held December 13, 1991. The MN Department of Agriculture, the MN Department of Natural Resources, and The Nature Conservancy will share a strong leadership role during the early stages of the Partnership. In the long-term, responsibility for the success of *Prairie Stewardship* will be shared among many Partners.

Participants

A number of participants and their related initiatives will be involved. Membership will shift over time based on the scale and type of issue. A preliminary list of participants being solicited include:

Board of Soil and Water Resources
Ducks Unlimited
Land Stewardship Project
MN Association of SWCDs
MN Dept of Transportation
MN Forage and Grassland Council
Rural Development Board
Soil Conservation Service
UofM Agronomy

ASCS
Farm Business Mgmt Program
Local Sustainable Ag Work Groups
MN Dept of Agriculture
MN Dept Trade & Eco Development
MN Rural Futures
Rural Initiatives Coalition
The International Coalition
UofM Coop F&W Research Unit

MN Farm Bureau
Farm Credit Services
MN Assoc. of Counties
MN Dept of Natural Resources
MN Extension Service
Pheasants Forever
Society for Range Management
The Nature Conservancy
US Fish and Wildlife Service

Principal Contact: Peter Buesseler, DNR Prairie Biologist, (218/739-7576)
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Prairie Stewardship Partnership

for the Northern Tallgrass Prairie

Recognizing that human health and economies depend on protecting the productivity and diversity of natural ecosystems, a Prairie Stewardship Partnership strives for:

shared responsibility — *recognition of the need to work together to address problems and issues,*

sustainability — *provides direction for the partnerships,*

landscape focus — *looking at issues within the context of large ecological units, and*

environment/economy — *focusing on solutions which address both.*

If successful, the Prairie Stewardship Partnership can be a motivator for environmentally sound and sustainable economic development, while protecting the productivity and diversity of natural ecosystems in critical landscape areas of the Northern Tallgrass Prairie.

Critical prairie/farmland landscapes with opportunities for integrated management



EDUCATION STRATEGY

Minnesota Board of Water and Soil Resources

April 1992

TABLE OF CONTENTS

Executive Summary.....	page 1
I. Introduction.....	page 5
II. Definition/Goal.....	page 6
III. Education Strategy.....	page 6
IV. Relationships.....	page 11
V. Implementation.....	page 13
Appendix A--Past Educational Efforts.....	page 15
Appendix B--Overview of the Survey.....	page 19
Appendix C--The survey.....	page 23
Appendix D--Needs Assessment.....	page 27
Appendix E--Audience.....	page 29
Appendix F--Recommendations of 1989 Education Committee.....	page 31
Appendix G--BWSR Strategic Plan Education Activities and Strategies....	page 33

Executive summary

Executive summary--Introduction

When the Board of Water and Soil Resources (BWSR) was created in 1987, the Legislature obviously believed it should have an important educational role. The Legislative gave the BWSR three specific educational mandates:

1)the BWSR shall develop information and education programs designed to increase awareness of local water and soil resources problems and awareness of opportunities for local government involvement in preventing or solving them;

2)the BWSR shall provide a forum for the discussion of local issues and opportunities relating to water and soil resources management; and

3)the BWSR shall facilitate communication and coordination among state agencies in cooperation with the Environmental Quality Board, and between state and local units of government, in order to make the expertise and resources of state agencies involved in water and soil resources management available to local units of government to the greatest extent possible.

Strides have been made toward achieving these goals, particularly goals #2 and #3. However, the BWSR's educational activities have never been the subject of a cohesive and focused effort; rather, much of the activity has taken place as a by-product of other programs or because of a staff member's own personal interest in pursuing a particular educational goal. The current Education Committee was convened to made education the priority it deserves to be.

The committee was charged with developing an education strategy to be submitted for board approval. The committee began meeting in October 1991. Beginning in December 1991, they met monthly through March 1992. Committee membership included:

Diane Jensen, BWSR
LeAnn Buck, MASWCD board member
Warren Rodning, BWSR board member
Kitty Tepley, MACDE
Don Ogaard (chair), BWSR board member
Bob Mostad, MAWD
Don Warner, BWSR board member
Susan Tsakakis, BWSR staff
Chris Hughes, BWSR staff
Tim Wagar, MES
Eric Mohring, BWSR staff

The committee meetings focused on gathering information through hearing presentations from a variety of sources, and discussing the

most appropriate direction for a BWSR education strategy to take, keeping in mind the limited resources available. Committee discussions were lively and input from BWSR members and BWSR clientele forms the basis for the strategy.

The consensus of the Education Committee is that we would both increase our educational activity and get more results from our efforts (i.e. "bang for our buck") if we did two things: 1) devoted more resources to our educational efforts; and 2) coordinated these efforts as part of an overall plan.

Executive summary--the strategy

After examining our mission statement and its focus on local government units (LGUs), the committee determined that it was appropriate for our educational efforts to move in the direction of providing assistance to LGUs in *their* educational efforts, rather than adding to or creating BWSR outreach efforts. Specifically, the committee defined BWSR's educational goal as one of meeting our legislatively mandated educational goals through providing assistance to local units of government.

Having thus defined our goal, the committee decided, through input gleaned from committee members, informal feedback, and a survey of BWSR clientele, that we cannot afford, nor do we need, to hire extensive staff and devote extensive resources to an education effort. What is necessary, rather, is to use the staff and resources we have and take full advantage of their educational potential.

Basically, the committee envisions a structured two-way flow of information: from M-Team through a new education coordinator position through the field offices to the clientele, and back up from the clientele through the field offices to the education coordinator. (This two-way flow is demonstrated graphically on page 8.) In addition, the education coordinator would also work to maintain connections with appropriate state, local and federal agencies, associations, etc.

Such a structure answers these important needs:

- it takes advantage of the BWSR's greatest strength: the relationship the field staff have with their clientele
- it is flexible and can be adapted to last-minute changes
- it provides a vehicle for BWSR to encourage its clientele to make BWSR's education priorities their own education priorities
- it provides a structured way for BWSR to ensure that its education efforts are meeting the clientele's needs

The strategy makes a number of recommendations necessary to set up this formal educational structure. These recommendations are:

1. Creation of an education coordinator position.
2. Creation of an education budget.
3. Development of a yearly education plan.
4. Each BWSR board conservationist (formerly called board reps or hydros) and appropriate central office staff members should dedicate a specific portion of his time to education.
5. Each BC and appropriate central office staff member should develop an "education plan" that outlines his educational goals and activities for the year.
6. Staff should seek out feedback from their clientele regarding what types of assistance they need.

These recommendations are further discussed in section III of this paper.

The committee intends the structure to work as follows: if Jane Doe from X County wants to educate the X County Board of Commissioners on (for example) feedlots, she would call her board conservationist (BC). The BC would then contact the education coordinator, who would pull together all of the information on feedlots that he or she has collected. Possibly, the education coordinator (EC) will need to facilitate the development of some new material on feedlots for Jane Doe's presentation; or the information may need to be "localized" for Jane's purposes. Jane, the BC and the EC would all work together to meet Jane's needs. Of course, a BC or the EC could also initiate a project with a given local government unit.

The Education Committee believes that this structure will allow the BWSR to make a significant contribution to environmental education in Minnesota without acquiring a great deal of staff or new resources. Formalizing a BWSR education structure will create an exciting new opportunity for the BWSR to truly begin to realize its educational goals and mandates.

Executive summary--keys to success

This is at least the third significant effort made by the BWSR to institute a formal education strategy. Past efforts have failed largely because the attitude has been "let's wait until we have money and time to devote to this"--and, of course, the money and time never materialize. The truth is that funds and time will always be tight, there will always be a new program to carry out, and there will never be enough staff. Unless BWSR members and staff

make a commitment to education, and a commitment to put time and resources into education now, BWSR will continue to fall short of reaching its legislative mandates. If we wait for extra money and time, nothing will ever happen. This effort can only be successful if BWSR members and staff make education a priority now and back that up by allocating resources to it.

DRAFT

Memo of Agreement between the University of Minnesota Extension Service and the Minnesota Board of Water and Soil Resources

I. Description

Both the Board of Water and Soil Resources (BWSR) and the Minnesota Extension Service (MES) believe that natural resource conservation must begin with a strong educational component. This common priority has led to many opportunities for the two agencies to cooperate in reaching our shared educational goals. Because of this history, the Board of Water and Soil Resources (BWSR) and the University of Minnesota Extension Service (MES) deem it appropriate to formalize their working relationship and agree to jointly fund an education position focusing on water quality and related natural resource issues. Both agencies intend that this MOA build upon the past successes of the two agencies and lead to an expanded and improved educational effort.

II. Purpose

The purpose of this MOA is to define the objectives of the jointly funded educational position, delineate the responsibilities of the MES and the BWSR in relation to the position, and identify the common objectives for the position and the tasks that will achieve those objectives.

III. Authorities

Nothing in this document alters the authorities of the BWSR or the MES. This MOA is intended to help both agencies better achieve their educational goals.

The major role of the BWSR is to enable local government units (LGUs) to provide local leadership in soil and water conservation. The BWSR accomplishes this mission in a variety of ways, including:

- helping coordinate LGU water and soil resources planning activities through plan approval, administration of state grants, and other means;
- providing training on programs, technical knowledge, and leadership;
- making available to local units the expertise and resources of state government; and
- developing information and education programs designed to increase awareness of local water and soil resources problems and opportunities for local government involvement in solving them.

The primary role of the MES is to apply research-based educational information on subjects relating to agriculture, home economics, natural resource management, youth development, and community economic development to the people of Minnesota. These educational programs are based upon the research of the University of Minnesota (a land grant university), the Agricultural Experiment Stations and USDA research agencies. In the implementation of its responsibilities, the MES conducts educational programs relating to the conservation and management of land, water and related biological resources.

The BWSR and the MES agree that the natural resource functions of both organizations would be served by jointly funding a position to work with local units of government, BWSR staff, and MES staff in reaching their target audiences.

IV. Provisions

The primary mission of this position is to provide water quality education and information to local government personnel, MES staff and BWSR staff, primarily to enable them to reach their target audiences. As a secondary goal, this information may also be for their own use.

Both the BWSR and the MES agree:

1. that funding for the position should be split equally, taking into consideration both cash and in-kind services;
2. that MES will bill the BWSR quarterly for its portion of the contract on the individual's salary;
3. that the individual's time will be devoted to defined tasks of common interest to the BWSR and the MES;
4. to form a coordinating committee composed of the executive director of the BWSR, the communications manager of the BWSR, the chair of the BWSR Education Committee, the person in the position, the director of MES, and the MES water quality coordinator. This committee will approve the original workplan devised by the individual in this position (henceforth known as the water quality education coordinator), and will meet on a quarterly basis to approve changes and to provide direction and assess the success of the project;
5. to fund the position from August 1, 1992, through July 30, 1993;
6. that the position will serve on the BWSR northern region, which includes these counties: Traverse, Stevens, Pope, Todd, Morrison, Mille Lacs, Isanti, Chisago, Kanabec, Pine, Aitkin, Carlton, St.

Louis, Lake, Cook, Itasca, Koochiching, Cass, Wadena, Crow Wing, Grant, Douglas, Wilkin, Ottertail, Becker, Clay, Hubbard, Beltrami, Lake of the Woods, Clearwater, Mahnomen, Norman, Polk, Red Lake, Pennington, Marshall, Kittson, and Roseau;

7. that, following evaluation of the person and the program, the MES and the BWSR will consider extending the position past the July 30, 1993, date; and

8. that, following evaluation of the person and the program, the MES and the BWSR will consider the addition of two similar positions, one serving the southern part of the state and one serving the metro area.

The BWSR agrees:

1. that the position will be located in the Duluth office of the BWSR;
2. to provide office space, clerical support, supplies, communications, and a state vehicle and fuel for travel;
3. to provide program supervision; and
4. to be responsible for day-to-day management of the position.

The MES agrees:

1. to provide fringe benefits and reimbursement for non-vehicle travel expenses for the position;
2. to provide administrative supervision of the position; and
3. to provide the formal evaluation of the person's performance. The evaluation will take place after a meeting of the coordinating board, during which time the BWSR participants will have the opportunity to provide written and verbal evaluations of the person's performance. These evaluations will be included as part of the formal MES evaluation.

V. Budget

	BUDGET		
	TOTAL	MES	BWSR
Salary:	\$42,000	\$22,500	\$19,500
Fringe:	\$10,000	\$10,000	
Office space:	\$3,000		\$3,000
Support Staff:	\$5,000		\$5,000
Paper, postage, phone, and misc.:	\$3,000		\$3,000
Travel:	\$5,000	\$3,000	\$2,000 (car/fuel)
Equipment:	\$1,000		\$1,000
Printing:	\$5,000		\$5,000
Publications:	\$3,000	\$3,000	
TOTAL:	\$77,000	\$38,500	\$38,500

POSITION DESCRIPTION

TITLE: Water quality education coordinator (WQEC)

TARGET DATE: August 1, 1992

LOCATION: Duluth, Minn., serving the BWSR's northern region, which includes 38 northern counties: Traverse, Stevens, Pope, Todd, Morrison, Mille Lacs, Isanti, Chisago, Kanabec, Pine, Aitkin, Carlton, St. Louis, Lake, Cook, Itasca, Koochiching, Cass, Wadena, Crow Wing, Grant, Douglas, Wilkin, Ottertail, Becker, Clay, Hubbard, Beltrami, Lake of the Woods, Clearwater, Mahnommen, Norman, Polk, Red Lake, Pennington, Marshall, Kittson, and Roseau.

DESCRIPTION: The water quality education coordinator position will increase the capacity of BWSR staff, MES staff, and local government personnel to educate target audiences on water quality and related natural resource issues in a 38-county area of northern Minnesota. The position is responsible for carrying out tasks achieving common priority objectives.

RESPONSIBILITIES: The primary responsibility of the education coordinator is to enable the staff of local government units, BWSR and MES to educate their target audiences on water quality and related issues.

1. Use existing MES needs assessment and other information from BWSR staff, MES staff, and local government personnel to determine the greatest needs for education on water quality and related natural resource education.

(completed informal needs assessment document by 9/92)

2. Based on needs assessment, develop and carry out an education workplan. The plan must include at least 10 projects or activities over the course of the year that directly involve working with one or more local units of government, in coordination with BWSR and MES staff, to raise the capacity of the local units of government to educate their target audience (s). BWSR and MES staff will be active in identifying and prioritizing these projects or activities. These projects or activities should be chosen with consideration given to the following factors:

- maintaining a balance between service provided to SWCDs, WDs, and counties;
- applicability to other LGUs in Minnesota; and
- level of interest and follow-through ability of LGU.

The workplan will integrate the northern regional workplan (see #3 below) and the BWSR training plan.

(Plan development well underway by 10/92; this process will be ongoing)

3. Part of the workplan development process will include development of an education workplan for the BWSR northern field staff region. The regional workplan will build on the interests and abilities of staff and will be integrated into the 10 projects outlined in the overall workplan.

(Regional workplan completed 10/92; ongoing)

4. As part of these projects, the WQEC will work with the BWSR communications manager to develop appropriate communications material, including written, audio-visual, display, media outreach, etc. The material will enable the local governments to better educate their audiences.

(ongoing)

5. To avoid duplication of efforts and to make existing material available to local governments to the greatest extent possible, the water quality education coordinator will become aware of and acquire as possible existing water quality information, including publications, videos, curricula, and displays.

(ongoing)

ADMINISTRATION AND PROGRAMMING: The person in this position will report to the MES northwest district director and the communications manager of the Board of Water and Soil Resources.

APPOINTMENT: This is a full-time appointment beginning Aug. 1, 1992, and extending through July 31, 1993, with potential for continuation depending upon funding availability. This person's title will be water quality education coordinator.

TRAVEL: Travel through the 38 county area will be necessary. The person will use a BWSR-assigned state car.

QUALIFICATIONS: Interested persons must be currently employed in faculty or academic positions in the Minnesota Extension Service. In addition, the applicant must hold a masters degree in Geology, Hydrology, Agriculture or related field of science with a background in informal education. Experience in working with county, state and federal board and agencies is highly preferred.

SALARY AND BENEFITS:

Salary: This person will receive salary in accordance with University policy.

Benefits: The benefit package will follow the policy of the University of Minnesota.