



Minnesota Board of Water and Soil Resources.
Minutes.

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**BOARD OF WATER AND SOIL RESOURCES
CONFERENCE ROOM, ONE WEST WATER STREET
ST. PAUL, MINNESOTA 55107
JANUARY 27, 1999**

AGENDA

9:00 a.m. Call Meeting to Order

Adopt Agenda

Approval of Minutes of December 16, 1998

New Board Member Introductions

Reports

- Chair - Kathleen Roer
- Executive Director - Ron Harnack
- Dispute Resolution Committee - Glenn Annexstad
- Education and Public Relations - Paul Krabbenhoft
- Cost-Share/Soil Conservation Committee - Dwain Otte
- Wetlands Committee - Darrell Bruggman
- Financial Oversight Committee - Ginny Imholte
- Administrative Advisory Committee - Kathleen Roer

Agency Reports

- Minnesota Extension Service
- Department of Health
- Department of Agriculture
- Pollution Control Agency
- Department of Natural Resources

Committee Recommendations

1. Watershed Management Plan, Prior Lake-Spring Lake Watershed District
 - Metro Water Planning Subcommittee - DECISION
2. Scott County Groundwater Plan - Metro Water Planning Subcommittee -
 DECISION
3. City of Stewart Petition for Boundary Change Between High Island and
 Buffalo Creek Watershed Districts - Doug Thomas - DECISION

New Business

1. Petition for Intervention from the Headwaters Rural Utility Association - Jim Haertel - DECISION
2. FY2000 - 2001 Local Water Planning Challenge Grants - Doug Thomas -DECISION
3. Minnesota River Basin Joint Powers Board Report - Steve Hansen - PRESENTATION and DISCUSSION
4. Minnesota River Basin Water Quality Improvement Projects -Jeff Nielsen - DECISION
5. Minnesota River Flood Plain (GIS) Project - Jeff Nielsen - INFORMATION

Advisory Comments

- MAWD
- MAT
- NRCS
- MACDE
- MASWCD

Upcoming Meetings

- NACD Annual Meeting, January 31-February 4, San Diego
- Next BWSR Meeting, February 24, 1999 in St. Paul
- MAWD Legislative Breakfast, March 12

12:30 p.m. **Adjourn**



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Field Offices

Northern Region:

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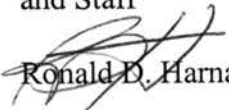
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Metro Region:

One West Water Street
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DATE: January 19, 1999

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

FROM:  Ronald D. Harnack, Executive Director

SUBJECT: January 27, 1999 BWSR Meeting

The Board of Water and Soil Resources (BWSR) will meet on Wednesday, January 27, 1999, beginning at 9:00 a.m. The meeting will be held in the BWSR conference room at One West Water Street, St. Paul. The following is some background information regarding the agenda items:

Committee Recommendations

1. Watershed Management Plan, Prior Lake-Spring Lake Watershed District--Metro Water Planning Subcommittee: The "second generation" Prior Lake-Spring Lake Watershed District Watershed Management Plan has been reviewed by the Metropolitan Water Planning Subcommittee and is recommended for Board approval. See attached draft Order. DECISION
2. Scott County Groundwater Plan--Metro Water Planning Subcommittee: The Scott County Groundwater Plan has been reviewed by the Metropolitan Water Planning Subcommittee and is recommended for Board approval. See attached draft Order. DECISION
3. City of Stewart Petition for Boundary Change Between High Island and Buffalo Creek Watershed Districts: A petition to the BWSR from the City of Stewart was filed in October 1998 requesting a boundary change that would affect both High Island Watershed District and Buffalo Creek Watershed District. The petition states that the area of concern (approximately 55 acres) be added to the High Island Watershed District and removed from the Buffalo Creek Watershed District. This area is within the city limits of the City of Stewart. On January 14, 1999, BWSR members Glenn Annexstad and Dwain Otte facilitated a public hearing in the City of Stewart to take public comment on the proposed boundary change. Glenn and Dwain will provide their report and recommendation to the full BWSR for action. See attached draft Order. DECISION

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New Business

1. Petition for Intervention from the Headwaters Rural Utility Association: A Petition for Intervention was filed with the Board in mid-November by the Headwaters Rural Utility Association (HRUA) and a parallel petition was also filed with the MPCA (see attachments). Written comments have been received from the City of Rockford administrator, engineer, and attorney; the developer's attorney; and HRUA's attorney (see attachments). At issue is an MPCA investigation into development of the Woodhill Ridge Subdivision and municipal separate stormwater system in the City of Rockford and Rockford Township, Wright County. It is questionable if HRUA has standing and authority to bring the petition and if the MPCA investigation falls under the definition of "proceeding" for intervention. However, staff find that the magnitude of the impact alleged in the petition to be small, that no important question of water policy is presented, and that intervention in the public interest is not justified. Further, the MPCA is well qualified to conduct the investigation. Additional supporting materials can be reviewed by contacting Jim Haertel. Based on all the information in the record, staff recommend the petition be denied and the Board not intervene in the MPCA investigation per attached draft Order. DECISION
2. FY2000 - 2001 Local Water Planning Challenge Grants: In August of 1998 the Minnesota Legislative Commission on Minnesota Resources (LCMR) approved a project which would add \$735,000 to the BWSR local water planning (LWP) challenge grant program beginning in July of 1999. In December of 1998 and January of 1999 BWSR staff along with water planners from around the state looked at ways the LCMR funding could be combined with the regular BWSR challenge grants funds in order to have a single challenge grant program during the next biennium. Included in the Board packet is the proposed LWP/LCMR challenge grant process. Staff will be updating the Board on the proposed grant process and requesting approval to move ahead and announce the availability of grant funds. DECISION
3. Minnesota River Basin Joint Powers Board (MRBJPB) Report: Steve Hansen, Executive Director of the MRBJPB, will overview what the Board is about, review their accomplishments in 1998 and plans for 1999. BWSR's relationship with the MRBJPB is through staff assistance, a \$125,000 biannual grant to them for administrative purposes, and administer a \$475,000 grant for water quality improvement projects. PRESENTATION AND DISCUSSION
4. Minnesota River Basin Water Quality Improvement Projects: The 1997 Minnesota legislative session resulted in an appropriation of \$475,000 for completion of water quality improvement projects within the 12 major watersheds of the Minnesota River Basin. The projects must utilize practices that are proven effective, must have landowner support, and must be prioritized by the Minnesota River Basin Joint Powers Board (MRBJPB) and the Minnesota Board of Water and Soil Resources. The BWSR shall appropriate only for those projects where the local landowners and counties provide fifty percent (50%) of projects costs in cash.

Late 1997, the BWSR and the MRBJPB jointly announced the process for local governmental units (LGUs) to apply for these grant funds. The Major Project Review Team (representatives from MRBJPB, BWSR, others) reviewed and then made its funding recommendation to the MRBJPB and then the BWSR. Seven LGUs were allocated funds in January 1998. Due to project completions and cancellations, a balance of \$296,163 is still available.

On September 3, 1998, the BWSR and MRBJPB jointly announced a second round application opportunity to LGUs. The Major Project Review Team met on January 6, 1999, to review, discuss and make its second round funding recommendation decision. The team's funding recommendation was presented to and approved by the MRBJPB at their meeting on January 11, 1999. The funding recommendation will be presented to BWSR on January 27, 1999, for their approval. Please refer to the attachment for specific information. DECISION

5. Minnesota River Flood Plain Geographic Information System (GIS) Project: Through the Water Resources Center at the University of Minnesota-Mankato, Jeff Nielsen had student interns map the land use in the 100-year floodplain along the Minnesota River using GIS. The project gave students hands on experience in using GIS to help solve resource problems. The outcome is that SWCDs and counties will have this tool to help them prioritize parcels of land into programs like RIM, CREP or other land uses beneficial to the river's environment. INFORMATION

If you require additional information, please feel free to give me a call. If bad weather conditions exist in your area and you are unable to attend the meeting due to travel restrictions, please notify the board office by noon on Tuesday, if possible. Travel safely, I look forward to seeing you on the 27th!

**BOARD OF WATER AND SOIL RESOURCES
CONFERENCE ROOM, ONE WEST WATER STREET
ST. PAUL, MINNESOTA 55107
JANUARY 27, 1999**

PRELIMINARY AGENDA

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- Education and Public Relations - Paul Krabbenhoft
- Cost-Share/Soil Conservation Committee - Dwain Otte
- Wetlands Committee - Darrell Bruggman
- Financial Oversight Committee - Ginny Imholte
- Administrative Advisory Committee - Kathleen Roer

Agency Reports

- Jim Anderson, Minnesota Extension Service
- Pat Bloomgren, Department of Health
- Sharon Clark, Department of Agriculture
- Rod Massey, Pollution Control Agency
- Ron Nargang, Department of Natural Resources

Committee Recommendations

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12:30 p.m. **Adjourn**

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

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In the Matter of the review of the Watershed
Management Plan for the **Prior Lake -Spring Lake**
Watershed District pursuant to Minnesota Statutes
Section 103B.231, Subdivision 9

**ORDER
APPROVING
WATERSHED
MANAGEMENT PLAN**

Whereas, the Board of Managers of the Prior Lake - Spring Lake Watershed District (PLSLWD) submitted a Watershed Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) pursuant to M.S. Section 103B.231, Subd. 9, and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **District Establishment.** The PLSLWD was established by order of the Water Resources Board on March 4, 1970 to conserve the waters and natural resources of the watershed by controlling and maintaining lake levels; preventing and controlling pollution; promoting and improving the recreation uses of the watershed's lakes including the construction and maintenance of fish-rearing ponds; the regulation and control of cesspools and waste disposal; and to provide methods of draining farm areas by construction and regulation of drainage ditches. The district is located in north central Scott County. The major water resource features of the District are Spring Lake, Upper Prior Lake, and Lower Prior Lake. The following is a list of communities that lie partially or entirely within the District.

City of Prior Lake
City of Savage
City of Shakopee
Sand Creek Township
Spring Lake Township

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2. **Requirement to Plan.** The Metropolitan Water Management Act requires the preparation

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of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

3. **Nature of the Watershed.** The PLSLWD is approximately 42 square miles in size. The upper one-half of the PLSLWD is largely developed with residential land use being the predominate use. The lower one-half of the watershed is rural land use comprising small to medium farms. The purpose of the PLSLWD is "to manage and preserve the water resources of the Prior Lake-Spring Lake Watershed District to the best of our ability using input from our communities, sound engineering practices, and our ability to efficiently fund beneficial projects which transcend political jurisdictions".
4. **Local Review.** The PLSLWD circulated a copy of the draft Plan to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7, prior to submittal to the Metropolitan Council.
5. **Metropolitan Council Review.** The Metropolitan Council provided written comment on the plan with recommended amendments. The Council's primary concerns were related to the need for additional physical and hydrologic information, pollutant loading, regulation consistency, and stormwater design criteria.

In its written response, the PLSLWD has stated that the District will solicit additional volunteers from the Council's Citizen-Assisted Monitoring Program, add design criteria as an appendix, and implement shoreland, construction erosion and runoff requirements.

6. **Department of Agriculture Review.** The MDA provided minor comments on the PLSLWD draft Plan. In a letter dated November 2, 1998, the MDA supported the Plan and will coordinate with the PLSLWD in the implementation of the Plan.
7. **Department of Health Review.** The MDH did not provide comments to the Board on the PLSLWD Plan.
8. **Department of Natural Resources Review.** The DNR provided written comment on the Plan and recommended several changes. The DNR's primary concerns were related to providing additional detail on the District's program of retaining water and including more details in the goals and policies section. In its written response, the PLSLWD did address the DNR's concerns. The DNR stated via phone on November 9, 1998 that they have no further comments on the Plan.
9. **Pollution Control Agency Review.** The primary suggestions of the MPCA was the need to develop priority water bodies. In response, the PLSLWD has modified the Plan to incorporate priority water bodies of Upper and Lower Prior, Spring and Fish Lakes.

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The MPCA, via phone conversation on October 28, 1998, stated that "they have no problem with the Plan" and recommended that the District move forward with Plan approval.

10. **Board Review.** On December 18, 1998, the PLSLWD submitted the final watershed management Plan which addressed the comments stated below. A summary of the Plan was presented to the Board metro water planning subcommittee on January 13, 1999.

The initial staff comments from BWSR in a letter dated August 31, 1998 included the need for: 1) incorporation of specific quantitative policies using the data identified in the inventory, 2) clarification of funding options, 3) further specifics on the District monitoring program, 4) a determination on the extent of the PLSLWD's land acquisition program, 5) the District to pursue further control of the Prior Lake outlet channel, 6) PLSLWD's role in the Scott County water plan, 7) integration with the goals and policies of the LMRWD. All comments from the initial Plan review were addressed in the final draft PLSLWD Plan.

The final BWSR staff review included comments on further defining the quantitative resource management standards, identifying a specific public information message, providing further detail on the District's land management program details, and the need to provide a copy of the Prior Lake Outlet Joint Powers Agreement. In response, the PLSLWD included additional language in the goals/policies section outlining public information material. The Plan has been modified to provide the Joint Powers Agreement in Appendix K.

11. **Highlights of the Plan.** The following are some of the highlights of the Plan as amended:
- a. implementation goals and policies unique to the PLSLWD;
 - b. land management plan to acquire upstream property for water quality and quantity;
 - c. improvements to Prior Lake Outlet system including erosion and sediment and control, water quality management and channel reconstruction;
 - d. improvements to protect areas that could be damaged by flood events;
 - e. water quality management plan which continues or enhances existing recreational activities;
 - f. extensive information, education and public outreach program, including a process identifying existing and potential problems;

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- g. 30 proposed implementation actions including substantial funding for wetland storage/acquisition and outlet channel redesign.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.
2. The Board has proper jurisdiction in the matter of approving a Watershed Management Plan for the Prior Lake - Spring Lake Watershed District pursuant to Minnesota Statutes Sections 103B.201, Subd. 9 and 103D.405.
3. The Prior Lake - Spring Lake Watershed District Plan attached to this Order defines water and water-related problems within the PLSLWD boundaries, possible solutions thereto, general objectives and policies of the PLSLWD, and an implementation program.
4. The attached Plan is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251 and 103D.405.

ORDER

The Board hereby approves the attached Plan dated December 17, 1998 as the Watershed Management Plan for the Prior Lake - Spring Lake Watershed District.

Dated at Saint Paul, Minnesota this 27th day of January, 1999.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

DRAFT

BY: Kathleen M. Roer, Chair

Minnesota Board of Water and Soil Resources
One West Water St., Suite 200
St. Paul, Minnesota 55107

In the Matter of Reviewing the Ground Water Protection Plan for
Scott County pursuant to Minnesota Statutes Section 103B.255

ORDER APPROVING
GROUND-WATER PLAN

Whereas, the Scott County Board of Commissioners submitted a Ground Water Protection Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) in September, 1998 pursuant to Minn. Stat. Section, 103B.255, and

Whereas, the Board has completed its review of the Plan,

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. In May, 1990 Scott County passed resolution 90056 accepting \$15,600 in state grant funds to develop a Ground Water Plan.
2. In March, 1991, Scott County passed a resolution directing the Scott County Planning, Inspections, and Environmental Health Department (PIE) in cooperation with the Scott County Soil and Water Conservation District (SWCD) to prepare a county-wide ground water management plan.
3. Minn. Stat. Section 103B.255 authorizes and encourages counties in the 7-county metropolitan area to develop and implement ground-water plans.
4. Scott County SWCD completed a draft Plan in December of 1996, and submitted it to affected local units of government for review and comment, and to the Board, the Departments of Health, Natural Resources and Agriculture, the Pollution Control Agency, the Minnesota Geological Survey, and the Metropolitan Council for preliminary review and comment, pursuant to Minn. Stat. Section 103B.255.
5. On April 15, 1997 Scott County held a public hearing on the draft ground water plan.
6. Scott County SWCD submitted revisions to the draft plan on April 30, 1997.
7. Scott County submitted further revisions to the draft plan on June 18, 1998
8. In September, 1998, Scott County submitted the Plan to the Board, the Departments of

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Health, Natural Resources and Agriculture, the Pollution Control Agency, the Minnesota Geological Survey, and the Metropolitan Council for review and comment.

Minnesota Pollution Control Agency Review: On February 5, 1997 the Minnesota Pollution Control Agency (MPCA) provided written comments on the draft Plan.

On March 18, 1997, Scott County SWCD responded in writing to the MPCA on its Plan review comments. Scott County SWCD listed specific comments and recommended changes that were incorporated into the Plan, and provided explanations for those not incorporated into the plan.

On June 5, 1997, The MPCA provided written comments on the revised draft. The MPCA stated that except for the section on Bio-solids (section 4.8), the plan is consistent with state rules and regulations. MPCA recommended plan approval, but stated that additional revisions to section 4.8 should be made.

Minnesota Department of Agriculture Review: On March 10, 1997 the Minnesota Department of Agriculture (MDA) provided written comments on the draft Plan.

On March 25, 1997, Scott County SWCD responded in writing to the MDA on its Plan review comments.

Minnesota Geological Survey Review: On February 12, 1997, the Minnesota Geological Survey (MGS) provided written comments on the draft Plan. MGS reviewed the Plan for accuracy of the text on geology and ground water described in the Plan. MGS identified a number of suggested additions, changes, and corrections.

On March 18, 1997, Scott County SWCD provided written comments to MGS on its Plan review comments.

Metropolitan Council Review: On February 14, 1997, the Metropolitan Council provided written comments on the draft Plan. In its comments, the Council listed recommended changes and additions. The Council stated that the section on bio-solids was not acceptable, as it was inconsistent with the Council's Water Resources Management Policy Plan. The Council recommended Board approval of the Plan contingent on changes to be made to reflect council's findings and conclusions.

On March 18, 1997, Scott County SWCD responded in writing to the Metropolitan Council on its Plan review comments. Scott County SWCD listed specific comments and recommended changes that were incorporated into the Plan, and provided explanations for those not incorporated into the plan.

On May 29, 1997, the Metropolitan Council provided written comments on the revised Plan. The comments include specific recommended changes and additions. The Council

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recommend that the Board approve the plan with the exception of section 4.8.

On September 18, 1998, the Metropolitan Council stated in a letter that its concerns had been addressed and that BWSR should approve the Plan

Minnesota Board of Water & Soil Resources Review: On January 29, 1997, Board staff provided written comments to the County on its draft Plan. The comments suggested changes or additions to the Plan.

14. **County Response to Agency Comments:** Scott County, in its final Plan submitted to the Board in September, 1998 made all the changes deemed necessary by the Board staff review of October and November, 1998. Scott County also made numerous changes to the Plan as a result of Agency and local comments. Scott County staff worked with Metropolitan Council staff and revised the section on bio-solids to meet the Council's and MPCA's concerns.
15. The Board Metro Water Planning Subcommittee reviewed the Plan for conformance with the requirements of the Metropolitan Water Management Act at its January 13, 1999 meeting.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Ground Water Protection Plan of Scott County, Minnesota, pursuant to Minn. Stat. Section 103B.255.
2. The Scott County Ground Water Protection Plan attached to this Order:
 - (a) covers the entire county area;
 - (b) describes existing and expected changes to the physical environment, land use, and development in the county;
 - (c) summarizes available information about ground water and related resources in the county;
 - (d) states the goals, objectives, scope, and priorities of groundwater protection in the county;
 - (e) contains standards, criteria, and guidelines for the protection of ground water from pollution and for various types of land uses in environmentally sensitive areas, critical areas, and previously contaminated areas;
 - (f) describes relationships and possible conflicts between the ground water plan and the plans of other counties, local units of government, and WMO's in the affected ground water system;
 - (g) sets forth standards and guidelines for the implementation of the plan by WMO's and local units of government;
 - (h) includes a procedure for amending the plan,

as provided in Minn. Stat. Section 103B.255.

ORDER

The Board hereby approves the attached Plan as the Ground Water Protection Plan of Scott County.

Dated at St. Paul, Minnesota, this ____ day of January, 1999.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES
DRAFT

BY: Kathleen Roer,
Chair

DRAFT

Minnesota Board of Water and Soil Resources

One West Water Street, Suite 200
St. Paul, Minnesota 55107

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In the Matter of the Petition for Intervention
by the Headwaters Rural Utility Association,
pursuant to Minn. Stat. § 103A.301-.341

**ORDER DENYING
PETITION FOR
INTERVENTION**

Whereas, on November 13, 1998, the Headwaters Rural Utility Association, Inc., petitioned the Board of Water and Soil Resources (Board) to intervene under Minn. Stat. §§ 103A.301-.341 in an investigation being conducted of the Woodhill Ridge Subdivision development and municipal separate stormwater system in the City of Rockford and Rockford Township, Wright County, by the Minnesota Pollution Control Agency (MPCA); and

Whereas, after receiving a petition, the Board must decide whether there is an important question of water policy and intervention in the public interest is justified; and

Whereas, Minn. Stat. § 103A.311, subd. 1 states: "The board may intervene in a proceeding if a petition is filed with the board for referral of a question of water policy involved in the proceeding" (emphasis added); and

Whereas, Minn. Stat. § 103A.325 states in part: "... If the board decides there is an important question of water policy and intervention in the public interest is justified, the board must issue a brief statement" (emphasis added).

Now Therefore, the Board hereby makes the following Findings, Conclusions, and Order:

FINDINGS

1. On November 16, 1998, the Board received a petition dated November 13, 1998, for intervention in a matter of water policy from the Headwaters Rural Utility Association, Inc.
2. The Board's authority to intervene in a matter of water policy exists under Minn. Stat. §§ 103A.301-.341.

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3. The dispute centers around an MPCA investigation being conducted of the Woodhill Ridge Subdivision development and municipal separate stormwater system in the City of Rockford and Rockford Township, Wright County.
4. The petition cites the MPCA investigation as being conducted under Minn. Stat. § 115.04, subd. 3.
5. There is a question whether the MPCA investigation cited in the petition is a "proceeding" as defined in Minn. Stat. § 103A.301, subd. 5.
6. There are questions whether the Headwater Rural Utility Association, Inc., has standing and authority to file the petition.
7. There is a question whether an important question of water policy exists.
8. There is a question whether intervention in the public interest is justified.

CONCLUSIONS

1. The magnitude of the particular impact alleged in the petition is small.
2. The MPCA is well qualified to conduct the investigation.
3. Questions brought forth in the petition go beyond the context of the MPCA investigation under Minn. Stat. § 115.04, subd. 3.
4. The questions proposed in the petition do not present important questions of water policy and intervention in the public interest is not justified. We note, among other considerations, the following:
 - a. Question (a) raises the question of whether storm water detention ponds should be allowed as wetland replacement credit where such detention ponds are also part of a municipal storm sewer system. The Minnesota Wetland Conservation Act ("WCA") expressly addresses the extent to which replacement credit is available for detention ponds. Minn. R. 8420.0540, subp. 2.
 - b. Question (b) raises the question of whether a wetland replacement plan decision by a local unit of government is subject to a mandatory thirty day notice and comment period. Minn. R. 8420.0230 specifies the notice procedure for wetland replacement plan decisions under WCA. There is no mandatory 30-day public notice and comment period under WCA.

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- c. Question (c) raises the question of whether failure to allow public comment on a wetland replacement decision vitiates the replacement decision. Minn. R. 8420.0230 specifies the procedures relevant to replacement plan decisions. Deviation from the requirements of WCA rules are to be addressed in an appeal from a replacement plan decision under Minn. R. 8420.0250.
 - d. Question (d) raises the question whether the acceptance of a municipal separate storm water system in a subdivision is clearly erroneous or otherwise affected with legal error when it is allegedly based upon a wetland replacement plan that fails to follow WCA. Minn. R. 8420.0250 specifies the procedures for appeal of replacement plan decisions.
 - e. Question (e) raises the question of whether requiring municipal separate storm sewers with appurtenant curbs, gutters and other impervious surfaces with storm holding ponds to discharge onto wetlands or other water bodies off the property is inconsistent with various policies of Minn. Stat. ch. 103A. Municipal separate storm sewers are a long-standing and accepted practice in Minnesota and such systems are regulated under applicable law. Given the long-standing and accepted nature of these systems when properly constructed and operated in accordance with applicable law, no question of water policy is presented. Any need for changes to the existing laws that regulate these systems should be addressed in a legislative or rulemaking forum. The extent to which any particular system deviates from applicable law should be addressed in an enforcement proceeding, not before this Board.
 - f. Question (f) raises the question whether MPCA should adopt regulatory controls that prevent the replacement of natural vegetative cover with curb, gutter, storm water holding ponds, culverts and street and road design and other impervious surfaces. Again, the petition calls for a reexamination of long-standing and accepted development practices in Minnesota. The proper place to address these issues is in a legislative or rulemaking forum, not in the determination of a question of water policy by the Board.
- 5. Since the questions proposed in the petition do not present important questions of water policy and intervention in the public interest is not justified, the Board need not address the issues of whether petitioner has standing and authority to file the petition. Similarly, the Board need not address the issue of whether the MPCA investigation is a "proceeding."
 - 6. The Board's intervention is not mandatory pursuant to Minn. Stat. § 103A.311, subd. 1.

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ORDER

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The Board hereby denies the petition for intervention dated November 13, 1998, brought by the Headwaters Rural Utility Association, Inc.

Dated at Saint Paul, Minnesota this _____ day of January, 1999.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

DRAFT

By: _____

KATHLEEN ROER, Chair

HRUA

Headwaters Rural Utility Association, Inc.
110 Architecture Building
89 Church Street S E
Minneapolis, Minnesota 55455

Telephone (612) 626-9818

Facsimile (612) 624-5743

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NOV 16 1998

November 13, 1998

MR. Jim Haertle
Minnesota Board of Water and Soil Resources
1 West Water Street
Suite 200
St. Paul, MN 55107

Dear Mr. Haertle:

Dear Mr. Haertle:

I am enclosing a Petition to the BWSR for Intervention under Minn. Stat. §§ 103A.301-103A.341 for BWSR Intervention into an existing MPCA investigation into point sources under Minn. Stat. § 115.04 as well as a request for an Investigation into Municipal Separate Storm Sewer Systems in the City of Rockford. I am also enclosing my letter to Commissioner Peder Larson of the MPCA. Thank you.

Very truly yours,

Jon Erik Kingstad
Jon Erik Kingstad

cc: Mr. Peder Larson, MPCA
Mr. Keith Cherryhomes, MPCA
Ms. Nancy Evers, City of Rockford
Mr. Jim Taylor, Rockford Township
Mr. and Mrs. Dave Malinak
Mr. and Mrs. Donald Hurst
Mr. Paul Jacobs, HRUA Board

BEFORE THE MINNESOTA
POLLUTION CONTROL AGENCY

In the Matter of the
Investigation of
Municipal Separate Storm Sewer
Systems in the City of Rockford,
Wright County, Minnesota

PETITION FOR BOARD OF WATER AND SOIL RESOURCES INTERVENTION

TO: Minnesota Board of Water and Soil Resources
1 West Water Street
Suite 200
St. Paul, MN 55107

1. The Petitioners are the Headwaters Rural Utility Association, Inc. Dave and Rebecca Malinak and Donald and Margaret Hurst, and Rockford Township, Wright County, Minnesota.
2. The Headwaters Rural Utility Association, Inc. is a water quality cooperative organized under Minn. Stat. ch. 308A and § 115.58 to reduce, prevent or eliminate point and nonpoint water pollution in the Upper Mississippi Watershed Basin, including the watershed of the Crow River, which is a tributary of the Upper Mississippi and included in that basin. Headwaters files this petition by its attorney in its own right and as agent of Rockford Township, Dave and Rebecca Malinak and Donald and Margaret Hurst through their duly executed powers of attorney.
3. Dave and Rebecca Malinak are residents of Rockford Township, Wright County and owners of land in Rockford Township which abuts a subdivision development in the City of Rockford known as Woodhill Ridge.
4. Donald and Margaret Hurst are also residents of Rockford Township, Wright County and owners of land in Rockford Township which abuts a subdivision development known as Woodhill Ridge.
5. The Petitioners request the Board of Water and Soil Resources to intervene in an investigation being conducted of the Woodhill Ridge subdivision development and municipal separate stormwater system in the City of Rockford and Rockford Township, Wright County by the Minnesota Pollution Control Agency under Minn. Stat. § 115.04, subd. 3.
6. This investigation involves questions of water policy in the areas of water pollution, soil conservation, water conservation, forestry management and municipal planning under Minn. Stat. §§ 103A.301-103A.341 and 103B.345 as follows:

a) Should the National Pollutant Discharge Elimination System program under the Clean Water Act, sections 402 and 404, as authorized in the Minnesota Wetland Conservation Act and the Minnesota Water Pollution Control Act, be construed to allow stormwater detention ponds to be claimed as a wetland replacement credit where such detention ponds are also part of a municipal separate storm sewer system?

b) Is a wetland replacement plan decision by a local unit of government subject to a mandatory thirty day public notice and comment period?

c) Does the failure to allow public comment on a wetland replacement decision vitiate the replacement plan decision?

d) Is a local unit of government's acceptance of a municipal separate storm sewer system in a subdivision clearly erroneous or otherwise affected with legal error where it is based upon a wetland replacement plan which fails to follow the principles established in the Wetland Conservation Act, Minn. Stat. § 103G.222, subd. 1 (b) to avoid or mitigate the filling or destruction of wetlands?

e) Is the City of Rockford's policy of requiring municipal separate storm sewers with appurtenant curbs, gutters and other impervious surfaces with storm holding ponds to discharge onto wetlands or other water bodies off the property inconsistent with:

(i) Minnesota's policy in Minn. Stat. § 103A.305 requiring retention of rain and other precipitated water "in the areas where it falls, as far as practicable";

(ii) Minnesota's policy in Minn. Stat. § 103A.206 to encourage landowners to conserve soil and water resources of the state; or

(iii) Minnesota's policy in Minn. Stat. § 103A.201, subd. 2 (3) to avoid direct or indirect impacts to wetlands which destroy or diminish the quantity, quality or biological diversity of wetlands?

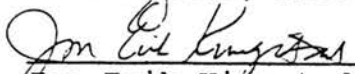
f) Should the MPCA adopt structural or other regulatory controls for an individual municipal separate storm sewer system permit which limits or prevents the City of Rockford from requiring natural vegetative cover to be replaced with curb, gutter, stormwater holding ponds, culverts and street and road design and other appurtenant impervious surfaces in its subdivision and zoning codes?

7. The facts supporting the Petition for Intervention are set forth in the attached PETITION TO COMMISSIONER OF THE POLLUTION CONTROL

AGENCY FOR ORDER ABATING POLLUTION AND TO REQUIRE INDIVIDUAL MUNICIPAL STORM WATER DISCHARGE PERMIT FOR CITY OF ROCKFORD, WRIGHT COUNTY, MINNESOTA.

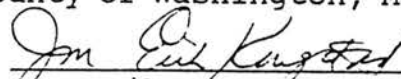
Dated this 13 day of November, 1998.

HEADWATERS RURAL UTILITY
ASSOCIATION, INC. BY:


Jon Erik Kingstad
Attorney

VERIFICATION

Jon Erik Kingstad, being an attorney licensed in the state of Minnesota, states that he is the attorney for the Headwaters Rural Utility Association, Inc. a cooperative incorporated under chapter 308A of the Minnesota Statutes, that the foregoing petition is true to the best of his knowledge and belief, that he resides in Washington County, Minnesota, and that there are no officers of the corporation or party capable of making an affidavit verifying the facts set forth herein within the County of Washington, Minnesota,


Jon Erik Kingstad

HRUA

Headwaters Rural Utility Association, Inc.

110 Architecture Building
89 Church Street S E
Minneapolis, Minnesota 55455

Telephone (612) 626-9818

Facsimile (612) 624-5743

November 13, 1998

Mr. Peder Larson
Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194

RE: Petition for Investigation into Municipal Separate Storm
Sewer Systems in the City of Rockford, Wright County,
Minnesota

Dear Commissioner Larson:

Enclosed please find a Petition for Investigation into City of Rockford's Municipal Separate Storm Sewers under 40 C.F.R. § 122.26 (f)(2)(1997). Mr. Peter Swenson of the U.S. Environmental Protection Agency, Region V, in Chicago, advised me that the MPCA regulates municipal separate storm sewers under the NPDES program. He advised that a petition is properly directed to yourself as the State Director.

Mr. Keith Cherryhomes of the Water Unit, Community and Areawide Program, has been conducting an investigation into one municipal separate storm sewer, known as Woodhill Ridge. The purpose of this Petition is to expand that investigation into the other municipal separate storm sewers in the City of Rockford and abate the pollution which has been resulting from these projects.

I am also filing a Petition with the Board of Water and Soil Resources to address the issues of water policy under its authority raised by this Petition. Thank you.

Very truly yours,

Jon Erik Kingstad
Jon Erik Kingstad

cc: Mr. Jim Haertle, BWSR
Mr. Keith Cherryhomes, MPCA
Ms. Nancy Evers, City of Rockford
Mr. Jim Taylor, Rockford Township
Mr. and Mrs. Dave Malinak
Mr. and Mrs. Donald Hurst
Mr. Paul Jacobs, HRUA Board

In the Matter of the
Investigation of
Municipal Separate Storm Sewer
Systems in the City of Rockford,
Wright County, Minnesota

property of Dave and Rebecca Malinak and Donald and Margaret Hurst in Rockford Township. The system was constructed in such a way as to bypass the storm drains and catch basins during typical storm events and discharge stormwater. Since the system was constructed, it has continually discharged pollutants and storm water into the wetland. The Minnesota Pollution Control Agency has issued two Inspection Reports, attached as Exhibits B and C, describing the pollutant discharges from the City of Rockford municipal storm sewer system into the wetland on the Malinak and Hurst properties.

(e) The Woodhill Ridge municipal separate storm sewer system has also collected stormwater in the storm drains and catch basins in the City of Rockford and conveyed by subdrain pipes or manmade channels or drains into a two cell storm water basin constructed at the south east boundary of the Woodhill Ridge plat and a two cell storm sewer system on the northeast boundary of the Woodhill Ridge plat. The second cells of these two-cell storm sewer systems are designed to be emergent pallustrine wetlands eligible as wetland replacements under the Wetland Conservation Act for filling in 0.43 acres of wetlands on the Woodhill Ridge site. See Minn. Rules part 8420.0540, subp.2E (1997).

(f) Prior to the construction of the Woodhill Ridge municipal separate storm sewer system, the wetland on the northeast boundary of Woodhill Ridge did not encroach onto the Hurst property and the wetland on the southeast boundary of Woodhill Ridge was part of a larger Type I or Type II wetland (according to the U.S. Fish and Wildlife Classification) on the Malinak and Hurst properties that was only seasonally saturated.

(g) That as a result of the drainage and flowage of stormwater into these wetlands from the Woodhill Ridge municipal separate storm sewer system, including the street bypass outfall and the storm water ponds, the wetland on the northeast corner of Woodhill Ridge now drains onto the Hurst property creating an intermittent riverine wetland and the wetland on the Hurst-Malinak property at the southeast boundary of Woodhill Ridge has been converted into a Type III, IV or V wetland with standing water year round.

(h) Prior to construction of the Woodhill Ridge municipal separate storm sewer system, the property was part of a natural maple-basswood forest community which extended onto the Malinak and Hurst properties and enhance the value of the Malinak and Hurst properties.

(i) The construction of the Woodhill Ridge municipal separate storm sewer system also required the clear cutting of a significant segment of the forest on that property except for limited forest protection zones and, as a result of the clear cutting, segmentation of the forest and saturation of the soils on the adjoining Hurst and Malinak properties by the municipal separate storm sewer system, the survival and loss of the forest and the

property of Dave and Rebecca Malinak and Donald and Margaret Hurst in Rockford Township. The system was constructed in such a way as to bypass the storm drains and catch basins during typical storm events and discharge stormwater. Since the system was constructed, it has continually discharged pollutants and storm water into the wetland. The Minnesota Pollution Control Agency has issued two Inspection Reports, attached as Exhibits B and C, describing the pollutant discharges from the City of Rockford municipal storm sewer system into the wetland on the Malinak and Hurst properties.

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(f) Prior to the construction of the Woodhill Ridge municipal separate storm sewer system, the wetland on the northeast boundary of Woodhill Ridge did not encroach onto the Hurst property and the wetland on the southeast boundary of Woodhill Ridge was part of a larger Type I or Type II wetland (according to the U.S. Fish and Wildlife Classification) on the Malinak and Hurst properties that was only seasonally saturated.

(g) That as a result of the drainage and flowage of stormwater into these wetlands from the Woodhill Ridge municipal separate storm sewer system, including the street bypass outfall and the storm water ponds, the wetland on the northeast corner of Woodhill Ridge now drains onto the Hurst property creating an intermittent riverine wetland and the wetland on the Hurst-Malinak property at the southeast boundary of Woodhill Ridge has been converted into a Type III, IV or V wetland with standing water year round.

(h) Prior to construction of the Woodhill Ridge municipal separate storm sewer system, the property was part of a natural maple-basswood forest community which extended onto the Malinak and Hurst properties and enhance the value of the Malinak and Hurst properties.

(i) The construction of the Woodhill Ridge municipal separate storm sewer system also required the clear cutting of a significant segment of the forest on that property except for limited forest protection zones and, as a result of the clear cutting, segmentation of the forest and saturation of the soils on the adjoining Hurst and Malinak properties by the municipal separate storm sewer system, the survival and loss of the forest and the

trees on those adjoining properties is threatened.

(j) The City of Rockford has approved similarly designed municipal separate storm sewer systems in other areas of the City which discharge pollutants into wetlands or other waters of the State of Minnesota or waters of the United States or both situated in Rockford Township. These include the Winfield Ponds municipal separate storm sewer system and the Autumn Oaks municipal separate storm sewer system.

(k) The City of Rockford has indicated that it intends to annex other parcels of land in Rockford Township, which the Petitioners are informed and believe will include the construction of other municipal separate storm sewer systems and the discharge of storm water and pollutants into wetlands and other waters of the State of Minnesota and the United States.

(l) The pollution which has resulted, is currently resulting and will result in the future from the construction of municipal separate storm sewer systems by the City of Rockford contributes to a violation of the water quality standards of the Crow River and the wetlands and other waters into which the pollutants are discharged and collectively are a significant contributor of pollutants to such waters.

(m) The Petitioners, Dave and Rebecca Malinak and Donald and Margaret Hurst have granted permission to the City of Rockford and the Backes Company to mitigate the pollution in the wetland on their properties on the condition that the City of Rockford and/or the Backes Company post a bond, security or guaranty the construction of storm water control structures on their properties to assure that the drainage, flowage and wetlands on their properties is restored to its predevelopment hydrological condition.

WHEREFORE, the Petitioners request that the Minnesota Pollution Control Agency or the Commissioner of the Minnesota Pollution Control Agency exercise his authority as follows:

1. Investigating all of the municipal separate storm sewer systems for the City of Rockford to determine whether such systems have been designed to in fact do discharge storm waters or pollutants to waters of the State or the United States and to determine whether the design of such systems, including the roads, streets, holding ponds, curbs and gutters and other appurtenances and related facilities, contribute to the unnecessary discharges of storm water or pollutants to such waters.

2. Revoking the General Permit Authorizing Discharges of Stormwater Associated With Construction Activity, Permit No. MN R100000, as of the City of Rockford and ordering the City of Rockford to file an application for a National Pollutant Discharge Elimination System

permit for all of its municipal separate storm sewer systems on a jurisdiction wide basis, following the requirements of the proposed rules for small municipal separate storm sewer systems as defined and required in the Notice of Proposed Regulations for the Revision of the Water Pollution Control Program Addressing Storm Water Discharges, 63 Federal Register 1536, 1635-1643 (January 9, 1998) within 60 days of the Commissioner's order.

3. Ordering the City of Rockford to abate the discharge of pollutants from the Woodhill Ridge municipal separate storm sewer system into waters of the State of Minnesota or the United States.

4. Requiring compensation of the Petitioners, and any other residents of Rockford Township for damages or the costs of constructing and operating stormwater control structures on their property to restore the sites to their predevelopment hydrological conditions by:

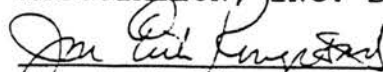
(a) an enforcement action or administrative order for penalties order of the agency under Minn. Stat. § 115.071 or Minn. Stat. § 116.072, or in lieu thereof,

(b) Assuming the powers of the City of Rockford City Council under Minn. Stat. § 115.48 to order forfeiture of the bonds of any developers of municipal separate storm sewer systems, including the Backes Company, as developer of the Woodhill Ridge municipal separate storm sewer system, or to impose such assessments upon property owners benefitted by the municipal separate storm sewer systems.

5. Ordering a hearing on the feasibility of cooperation between the City of Rockford and Rockford Township through a contract which would authorize the owners and occupiers of land in the watershed to receive areawide water quality treatment and management services as members of the Headwaters Rural Utility Association, Inc., to prevent pollution, control and abate pollution of the waters and watershed of the Crow River by storm water runoff.

Dated this 13th day of November, 1998.

HEADWATERS RURAL UTILITY
ASSOCIATION, INC. BY:

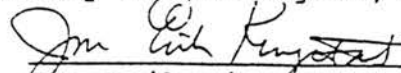


Jon Erik Kingstad
Attorney

VERIFICATION

Jon Erik Kingstad, being an attorney licensed in the state of Minnesota, states that he is the attorney for the Headwaters Rural Utility Association, Inc. a cooperative incorporated under chapter

308A of the Minnesota Statutes, that the foregoing petition is true to the best of his knowledge and belief, that he resides in Washington County, Minnesota, and that there are no officers of the corporation or party capable of making an affidavit verifying the facts set forth herein within the County of Washington, Minnesota,



Jon Erik Kingstad



Minnesota Pollution Control Agency

Storm Water Permit Program for Construction Activity

INSPECTION REPORT

White: MPCA
Yellow: Owner
Pink: Contractor
Blue: On-Site

Form PQ00666, 4/96

Project Name / Location: WOOD HILL RIDGE
Owner: Dennis Buckes Contractor: Schreff, Inc.
Owner Telephone: (612) 566-1524 Contractor Telephone: (651) 451-9056
Date / Time: October 5, 1998 @ 2:00 PM Weather: Clear @ 58°F
Covered by Permit ☒ C00005406 Not Covered by Permit ☐
MPCA Project I.D. Number

Permit Requirements Inspected:

1. Notice of Storm Water Permit Coverage Card: Posted ☐ Not posted ☒ — must be posted!
2. Final Plans and Specifications: On site ☐ Not on site ☐ Did not ask to see ☒ I have copies
3. Erosion Control Practices During Construction:
a) Temporary protection / permanent cover, 100' of all waters of the state
b) Stabilization of drainage ditch bottoms, 100' of a water of the state
c) Temporary or permanent energy dissipation at pipe outlets when connected to a water of the state
4. Sediment Control Practices During Construction:
a) Down gradient perimeter control established
b) Temporary sedimentation basins
5. Maintenance:
a) Erosion and perimeter sediment control practices
c) Drainage ditches and other waters of the state
b) Temporary sedimentation basins
d) Construction site exit locations
6. Records of Inspections, Corrective Actions and All Rainfall Events

Violations / Corrective Actions:

- 3(a) permanent cover on yard at 7961 Bluff Rd. Needs a fiber blanket due to time of year
- 3(a) permanent cover on west side of Woodhill Dr. Must be stabilized 100' from waters of the state.
- 4(a) sediment control - silt fence around the downgradient of retaining wall 7961 Bluff Rd.
- 5.(b) Clean sediment from all wet basins on project.
- 5.(b) Slopes to all wet ponds need to be stabilized. Large wet pond in Phase I not graded & stabilized properly.
5. Woodhill Lane needs sweeping.

The above violations require immediate corrective action.

Comments: Site still remains out of compliance.
All corrections noted on this inspection report
must be corrected by November 7, 1998.

Evidence Collected

- ☒ 35mm photographs
☐ Videotape
☐ Runoff sample

Received by

As the owner, general contractor, employee, and/or agent for either Permittee, I hereby acknowledge receipt of this inspection report. My signature does not imply agreement or disagreement with the information in this report.

Dennis Buckes
Storm Water Permit Inspector

(651) 296-6945
Telephone Number

National Pollutant Discharge Elimination System (NPDES) Program





Minnesota Pollution Control Agency

Storm Water Permit Program for Construction Activity

INSPECTION REPORT

White: MPCA
Yellow: Owner
Pink: Contractor
Blue: On-Site

Form PQ00666, 4/96

Project Name / Location: Woodhill Ridge, Rockford, Wright Co.

Owner: Dennis Backes Contractor: Shreff, Inc.

Owner Telephone: (612) 566-1524 Contractor Telephone: 451-9056

Date / Time: 1:30 p.m. 9/28/98 Weather: Clear - 68°F

Covered by Permit ☒ Not Covered by Permit ☐

MPCA Project I.D. Number

Permit Requirements Inspected:

1. Notice of Storm Water Permit Coverage Card: Posted ☐ Not posted ☒
2. Final Plans and Specifications: On site ☐ Not on site ☐ Did not ask to see ☒
3. Erosion Control Practices During Construction:
 - a) Temporary protection / permanent cover, 100' of all waters of the state
 - b) Stabilization of drainage ditch bottoms, 100' of a water of the state
 - c) Temporary or permanent energy dissipation at pipe outlets when connected to a water of the state
4. Sediment Control Practices During Construction:
 - a) Down gradient perimeter control established
 - b) Temporary sedimentation basins
5. Maintenance:
 - a) Erosion and perimeter sediment control practices
 - b) Temporary sedimentation basins
 - c) Drainage ditches and other waters of the state
 - d) Construction site exit locations

6. Records of Inspections, Corrective Actions and All Rainfall Events (please submit)

Violations / Corrective Actions:

1. Stabilize slopes on 7961 & 7961 Bluff Rd - (5 days)
2. Wetland south of Bluff Rd must be cleaned of sediment. Do nothing until DNR, MPCA & WESWCD provide plans.
3. Remove sediment from all wet ponds (Visible deltas)
4. Dig and restabilize north slope of wet pond west of Bluff Rd. (5 days)
5. Maintenance required on "temp" pond on south Bluff Rd
6. Dead end on Phase II stabilized slopes (5 days)
7. Sweep all streets Phase I & Phase II (5 days)
8. Add emergency spillway to berm on 100 yr pond in Phase II
9. Dig connection on Phase II 100 yr. pond - wait for instruction from Kerry Saxton, WESWCD
10. Protect all inlets Phase I & Phase II.

The above violations require immediate corrective action.

Comments:

Will reinspect October 3, 1998

Evidence Collected

- ☐ 35mm photographs
- ☐ Videotape
- ☐ Runoff sample

Received by

As the owner, general contractor, employee, and/or agent for either Permittee, I hereby acknowledge receipt of this inspection report. My signature does not imply agreement or disagreement with the information in this report.

Storm Water Permit Inspector

Keith Cherry
1651 246-6945
Telephone Number



RECEIVED

NOV 23 1998

Headwaters Rural Utility Association, Inc.
110 Architecture Building
89 Church Street S E
Minneapolis, Minnesota 55455

Telephone (612) 626-9818

Facsimile (612) 624-5743

November 20, 1998

Mr. Jim Haertle
Board of Water and Soil Resources
1 West Water Street
Suite 200
St. Paul, MN 55107

RE: Petition for Intervention in MPCA Investigation of
Woodhill Ridge, City of Rockford, Minnesota

Dear Mr. Haertle:

At a meeting at Rockford City hall on Wednesday, November 18, I met with Mr. Keith Cherryhomes of the MPCA and other parties interested to discuss the question of what terms the petitioners would require the City of Rockford or the Backes Company, the developer of Woodhill Ridge, to enter the properties of Mr. and Mrs. Malinak and Mr. and Mrs. Hurst to remove silt which had discharged into the wetland on those properties from the Woodhill Ridge municipal separate storm sewer system. During that meeting Mr. Cherryhomes indicated that he would be meeting on Thursday to discuss possible orders, including a compliance order, if the Malinaks or Hursts did not allow entry on the premises. A compliance determination by the MPCA would have the effect of releasing the developer of its responsibilities under a development agreement and the Wetland Conservation Act as defined by the rules as well as eliminate an important tool available to the MPCA, the City of Rockford, or the Board, if it chooses to exercise its authority under that Act, to order the developer's bond forfeited to perform a more permanent solution to the problem.

After the meeting, I realized that Mr. Cherryhomes and the other parties were not aware of the effect of the filing of the petition in his investigation. Our petition to the MPCA is to expand the existing investigation to the matters set forth therein. Our petition to the Board of Water and Soil Resources ("Board" or BWSR) is to intervene in his existing investigation of the Malinak and Hurst property under Minn. Stat. § 115.04. Minn. Stat. § 115.04, subd. 3 provides:

Access to premises. Whenever it shall be necessary for purposes of this chapter, chapter 114C, and, with respect to pollution of the waters of the state, chapter 116, the

agency or any member, employee, or agent thereof, when authorized by it, upon presentation of credentials, may enter upon any property, public or private, for the purpose of obtaining information or examination of records and conducting surveys or investigations.

Mr. Cherryhomes's gathering of information on the stormwater general permit conditions and his entry on the premises of the Woodhill Ridge is an investigation of a "point source of water pollution" under Minn. Stat. § 115.04 and is clearly a "proceeding", as defined in Minn. Stat. § 103A.301, subd. 5. This proceeding involves the questions of water policy which the petitioners have set forth in their petition. My point here is that the filing of a petition with the Board:

. . . abates a proceeding until there is a recommendation by the board or until 60 days have passed after conclusion of hearing before the board, whichever is earlier, unless the agency makes a written finding stating reasons that the public interest requires the board to act immediately.

This statute allows Board intervention upon petition in an ongoing administrative agency proceeding, not just a court proceeding. A "proceeding" is defined as "a procedure under any of the laws listed in section 103A.305 that involves administrative discretion or duty." This reinforced by Minn. Stat. § 103A.311, subd. 5:

Period for intervention by board. The petition shall allow intervention in a proceeding by the board if the petition is filed after the proceeding is initiated and before the agency's order is made.

This means that Mr. Cherryhomes and the MPCA can make no further order until the BWSR has acted on the petition. I assume that Board meetings are open meetings under Minn. Stat. § 471.705. I would appreciate knowing when this petition will be considered by the Board so that I may appear and address any questions the Board may have. Thank you.

Very truly yours,

Jon Erik Kingstad
Jon Erik Kingstad

cc: Mr. Peder Larson, MPCA
Mr. Keith Cherryhomes, MPCA
Ms. Nancy Evers, City of Rockford
Mr. Jim Taylor, Rockford Township
Mr. and Mrs. Dave Malinak
Mr. and Mrs. Donald Hurst
Mr. Paul Jacobs, HRUA Board

Mr. S. Todd Rapp, Attorney
for Backes Co.
Mr. John Lampe, Special Assistant
Attorney General



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Associate Principals: Howard A. Sanford, P.E. • Keith A. Gordon, P.E. • Robert R. Pfefferle, P.E. • Richard W. Foster, P.E. • David O. Loskota, P.E. • Robert C. Russek, A.I.A. • Mark A. Hanson, P.E. • Michael T. Rautmann, P.E. • Ted K. Field, P.E. • Kenneth P. Anderson, P.E. • Mark R. Rolfs, P.E. • Sidney P. Williamson, P.E., L.S. • Robert F. Kotsmith • Agnes M. Ring • Michael P. Rau, P.E. • Allan Rick Schmidt, P.E.

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Website: www.bonestroo.com

November 20, 1998

Ms. Nancy Evers, Administrator
City of Rockford
6031 Main Street
Rockford, MN 55373

Re: HRUA Petitions to MPCA and BWSR
Our File 256GEN

Dear Nancy:

As requested, we have reviewed the November 13, 1998 Petitions for Investigation into Municipal Separate Storm Sewer Systems in the City of Rockford. The petitions were submitted by the Headwaters Rural Utility Association, Inc. (HRUA) to Commissioner Larson (Minnesota Pollution Control Agency) and Jim Haertel (Minnesota Board of Water and Soil Resources).

In response to the petitions, our advice to the City is to have the Mayor request meetings with your State Senator and State Representative. You should request that your representatives arrange separate meetings with Jim Haertel of the Board of Water and Soil Resource (BWSR) and Commissioner Peder Larson of the Minnesota Pollution Control Agency (MPCA). The petitions have several factual errors and appear to be an attempt to harass and intimidate the City.

COMMENTS ON PETITION TO MPCA.

The petition to the MPCA seeks to have the MPCA expand their review/investigation of the Woodhill erosion/drainage issues to all storm sewers in the entire City and to "abate" any pollution resulting from the City's storm sewers.

The petition document is lengthy and hard to understand in places. We are unsure what item 5 on page 5 of the petition means. We have limited our review to Item 7 of the first portion of the petition dealing with "facts" supporting the petition. Most of the "facts" are incorrect, distorted, and unsupported.

The following comments relate to Item 7 on page 2 of the petition. We have followed the same lettering format as the petition for our comments. The italicized sentence

summarizes the statement contained in the petition for each item. A copy of the petition is attached for reference purposes.

- (a) *States that Rockford is a municipality under Minnesota law.* No comment.
- (b) *States that the City of Rockford's storm water policy has resulted in the discharge of pollutants into the waters of the State and the United States.* No information is included to support the claim. We believe the statement is untrue.
- (c) *States that the city has accepted the Woodhill Ridge Addition storm sewer system.* This is not true.
- (d) *States that Woodhill design discharges storm water and pollutants into a wetland.* The item refers to the situation at the end of Bluff Road. During the construction process runoff drained off of the end of the road several times. The City and the MPCA issued correction orders to the property owner to correct the problem. A temporary basin has since been installed at the end of the road to collect the runoff. This, along with the paving of the final wear course next year, should prevent water from draining off of the end of the road.
- (e) *Discusses wetland mitigation measures.* The item contains several incorrect statements. There was a total of 0.43 acres of wetland fill on the project. The property owner had a requirement to replace this wetland fill with 0.43 acres (18,731 square feet) of New Wetland Credit (NWC) and 0.43 acres (18,731 square feet) of Public Value Credit (PVC).

The developer went beyond the requirements of the Wetland Conservation Act (WCA) by replacing 0.50 acres of NWC (22,012 square feet) via a purchase of wetland credit from a wetland bank owned by Vaughn Veit (See Attachment A).

Minn. Rules part 8420.0540, subp. 4 (1997) allow stormwater ponding to be utilized for one-half (PVC) of the required replacement at a rate of 75 percent credit for the ponding area constructed to pre-treat storm water runoff prior to discharge to wetlands, public waters, or other water bodies. Under this rule 0.48 acres (20,909 square feet) of ponding is required to satisfy the 0.36 acres (12,682 square feet) PVC amount needed to complete the total wetland mitigation needed. The developer has over 0.65 acres (28,291 square feet) of ponding on-site to pretreat storm water runoff prior to discharge to wetlands, public waters, or other water bodies. This is more than adequate to meet the WCA requirements.

- (f) *Discusses previous conditions on adjacent properties.* We can not determine that a wetland has encroached on the Hurst property unless there is jurisdictional wetland delineation for the area in question completed by a qualified delineator. A delineation report (with a map that includes a surveyed delineation boundary) should be submitted to the Technical Evaluation Panel (TEP) for the Wetland

Conservation Act. The TEP can then make a determination if this is a factual statement.

U.S. Fish and Wildlife National Wetland Inventory maps are not used to determine wetland boundaries on a site. The petitioner provides no documentation of their wetland classifications. The WCA states that Wetland Delineation shall be performed using standard delineation methodology described in the 1987 Army Corps of Engineers Wetland Delineation Manual. The Woodhill Ridge development had a jurisdictional wetland delineation completed in June 1997 (See Attachment B).

- (g) *States that adjacent wetlands have been altered by the Woodhill development.* No information is provided to support this claim. There is a defined drainage-way that indicates there has always been an intermittent stream leaving the northeast corner of the site. The discharge from the storm water pond on the northeast corner of the site is into this defined drainage-way. There has been no observation of the creation of a riverine wetland.

The wetland that is located near the southeast boundary of the site would require another year of monitoring to make a determination of the wetland type that exists. The drainage patterns (topography) have not been altered on the Hurst or Malinak properties. No standing water conditions exist that did not exist prior to the Woodhill development.

- (h & i) *Discusses tree preservation issues.* The city required the property owner to set aside 4.5 acres of Tree Protection Zones. The protective covenants restrict removal of live trees from these areas by anyone including the future property owners. If the city did not have this done the developer or future land owners could have removed all of the trees (See Attachment C). In addition the property owner has attempted to save trees outside the Tree Protection Zones when possible.
- (j) *Discusses Winfield Ponds and Autumn Oaks.* This claim is false. Winfield Ponds and Autumn Oaks have storm water ponds that meet the requirements of the NPDES permits to protect receiving water bodies. Neither development discharges runoff into waters located in Rockford Township.
- (k) *States that Rockford intends to annex additional property.* The NPDES permit requirements to protect receiving waterbodies will be enforced if property owner's petition for annexation and areas of Rockford Township are annexed. Storm water systems will be reviewed by Wright County SWCD and permitted by the MPCA.
- (l) *States that Rockford's storm sewers have polluted waters previously and will continue to do so.* No data is provided to support this claim. We are unaware of any pollution to Crow River that has resulted from Rockford's storm sewers.

- (m) *States that adjacent property owners have granted permission to enter property to mitigate wetland siltation.* This is not true. At a November 18, 1998 meeting held at the Rockford City Hall, the owners refused to allow anyone on their property to correct the minor wetland siltation identified by the MPCA, SWCD, and City. The city agreed to use their performance bond with the developer to protect the adjacent property owners from any damage that might occur during the mitigation process. The mitigation process would be completed with hand labor and would not involve any machinery. The adjacent property owners would only grant a right of entry with several unreasonable conditions.

COMMENTS ON PETITION TO BWSR.

The Petition to the Board of Water and Soil Resources (BWSR) seeks to have BWSR intervene in the MPCA's enforcement review/investigation of the Woodhill erosion and drainage issues.

This petition specifically questions whether the planning process for the Woodhill development followed proper procedures relating to water pollution, soil conservation, water conservation, forestry management, and municipal planning.

The "facts" provided to support the petition are the same as those in the MPCA petition.

We feel that the City has followed the proper review and planning processes required by regulations and practiced by other communities similar to Rockford. Regulatory agencies including the Wright County SWCD, the Board of Water and Soil Resources, the DNR, and the MPCA have publicly stated that the review/planning process was proper.

Some of the questions raised by the petitioner in the BWSR petition relate to statewide and nationwide policy and are in no way specific to Rockford and the Woodhill development. It appears that the petitioner is attempting to use Rockford as a test case for a much larger agenda relating to land use and development issues.

Feel free to contact us if you have any further questions.

Sincerely,

BONESTROO ROSENE ANDERLIK AND ASSOCIATES



Phil Gravel, City Engineer



John Smyth, City LGU Agent

ADMITTED TO PRACTICE
IN MINNESOTA AND WISCONSIN

LAW OFFICES OF
S. TODD RAPP
A PROFESSIONAL ASSOCIATION
~~1035 INTERNATIONAL PLAZA~~
~~7900 INTERNATIONAL DRIVE~~
BLOOMINGTON, MINNESOTA 55425

TELEPHONE (612) 854-5602
FACSIMILE (612) 854-5609

CERTIFIED AS REAL PROPERTY LAW
AND CIVIL TRIAL SPECIALIST
BY MINNESOTA STATE BAR ASSOCIATION

RECEIVED
DEC 07 1998

December 4, 1998

Jim Haertle
Minnesota Board of Water & Soil Resources
1 West Water Street, Suite 200
St. Paul, MN 55107

**RE: My Client: Backes Companies, Inc., Developer
Woodhill Ridge, Rockford, Minnesota**

Dear Mr. Haertle:

As the legal representative to Backes Companies, I have the understanding that you have received a petition entitled "In the Matter of Investigation of Municipal Separate Storm Sewer Systems in the City of Rockford, Wright County, Minnesota." I also have the understanding that you received a copy of a petition, similarly captioned, and submitted to the Commissioner of the Minnesota Pollution Control Agency. With this correspondence, I am forwarding to you a copy of the response made by Backes Companies, the developer of the Woodhill Ridge subdivision in the City of Rockford, to the MPCA petition. To the extent the petition which has been submitted to BWSR incorporates certain "facts" from the petition to the MPCA, the comments contained in the enclosed letter to Commissioner Larson are pertinent.

As to the specifics addressed in the petition forwarded to BWSR, I observe that the premise underlying Item 6 (iii) that there has been any destruction or diminishment of the "quantity, quality, or biological diversity of wetlands" is an as-yet unsubstantiated one except to the extent that certain of the "clients" or "members" HRUA represents have refused access to Backes Companies to remove a minuscule amount of siltation. I would also urge you to consider carefully the significance of the invitation made in ¶6 f. of the petition that the resources of the MPCA and BWSR be marshaled to study whether or not urban residential development occurring henceforth in the City of Rockford (and presumably other developing municipalities) should be undertaken without streets, curbs, gutters, storm water detention facilities, driveways or, presumably, roofs on housing units, since all of these involve impervious surfaces. I also direct your attention to the fact that at least one

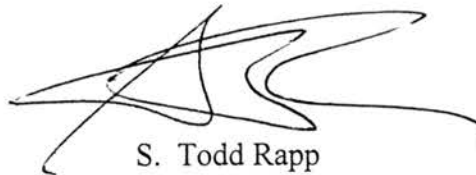
LAW OFFICES OF
S. TODD RAPP

Jim Haertle
December 4, 1998
Page 2

of the objectives of HRUA, set forth in the concluding paragraph in the MPCA petition, is to arrogate to itself not only substantial municipal authority which is apparently being offered up by Township of Rockford, but also that of the City of Rockford.

As in my correspondence to Commissioner Larson, I respectfully request that you inform Backes Companies, through this office, in advance with respect to any proceedings on the petition which has been submitted to you.

Very truly yours,



S. Todd Rapp

STR/tkg

Enclosures

cc: Dennis Backes
Nancy Evers
Jeff Shopek



Nate
Bissonette

201 Division Street West
P. O. Box 777
Maple Lake, MN 55358

RECEIVED
DEC 23 1998

Attorney at Law

320-963-6283

Shadduck Young & Brown, LLP
Of Counsel

December 21, 1998

RON HARNACK, EXECUTIVE DIRECTOR
BOARD OF WATER AND SOIL RESOURCES
1 WEST WATER STREET
SUITE 200
ST PAUL MN 55107

RE: HRUA petition

Dear Mr. Harnack:

Enclosed with this letter are copies of the following documents:

1. Rockford's response to HRUA's PCA petition
2. Proposed order for Commissioner Larson
3. Rockford's response to HRUA's BWSR petition
4. Proposed order for Executive Director Harnack.

If you require additional information, please don't hesitate to call on me.

Sincerely,



Nathan A. Bissonette

NAB:maf

cc: Jon Kingstad, HRUA
Nancy Evers, Administrator
Jim Haertel, BSWR Water Mgt. Spec.

BEFORE THE MINNESOTA
BOARD OF WATER & SOIL RESOURCES

In the Matter of the Investigation of
Municipal Separate Storm Sewer
Systems in the City of Rockford,
Wright County, Minnesota

Response to Petition
For Intervention to Board of
Water And Soil Resources

1. The respondent is the City of Rockford, a Minnesota municipal corporation.
2. The petition for intervention was filed by Headwaters Rural Utility Association, Inc., a water quality cooperative. By statute, a water quality cooperative is not authorized to bring such a petition on its own behalf, nor on behalf of others. It has no authority to accept power of attorney from a governmental subdivision, nor from individual landowners, but only to offer certain services to its membership. HRUA lacks standing to bring this petition and knows it. This action, being conducted outside the scope of HRUA's statutory authority, is void. The petition should be rejected.
3. The petition for intervention is defective because the factual basis which purports to support intervention is set forth in HRUA's petition to PCA, which is itself defective. The petition's major claims are completely unsupported by any documentation. The inspection reports attached to the PCA petition identified minor and ordinary concerns which existed months ago, but do not support the dramatic claims made in the petition. There are no witness statements and, in his verification, Mr. Kingstad as attorney for petitioners, acknowledges that there are no witnesses capable verifying the facts alleged in the petition. Numerous other defects are detailed in the City's response to the PCA petition, a copy of which is attached. As the PCA petition is completely without verifiable factual basis, it should be rejected. Without a PCA petition, there is no "proceeding" upon which to base this BWSR petition, so it should be rejected, too.
4. The purpose of the statute which permits BWSR to intervene in a PCA enforcement proceeding is to afford BWSR the opportunity to clarify the law for agency staff. But the purpose of HRUA's petition to BWSR is to fundamentally and radically revise statewide stormwater policy. Because this petition seeks inappropriate relief, it should be rejected.
5. HRUA's petition to BWSR is inappropriate because there is no proceeding to enforce and no real questions of law to interpret. PCA and Wright County Soil and Water staff have reviewed the site and worked with the developer to correct nearly everything. Staff has determined that the only remaining issue is a small amount of silt which overflowed onto the edge of a wetland. The silted area is about four inches deep at its worst, tapers to nothing, and has been staked for removal. The developer is ready and willing to comply. A couple of workers could shovel it up in an afternoon, if HRUA would let them. But HRUA has refused to allow the developer to clean up the site. Instead, HRUA has demanded to be paid \$100,000 to completely redesign and reconstruct the entire storm

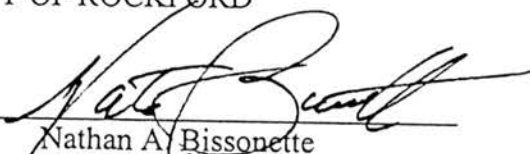
sewer system for the whole residential subdivision. This is not an appropriate use of the petition process, so the petition should be rejected.

6. The specific questions posed for BWSR review are intriguing in an academic way, but they are not questions which need to be answered for PCA staff to proceed with their enforcement efforts. The abatement process at this site should not be halted for as many months as it may take to fully and adequately review the implications of these issues.
7. The specific questions posed for BWSR review represent a fundamental reexamination of water laws and regulations which is not necessary:
 - A. Questions a) - d) address aspects of wetland law and regulation. The present system of wetland replacement credits was a carefully crafted compromise which was only recently worked out after a number of years of negotiation. It is unnecessary to reopen that discussion at this time. The stormwater drainage system in question was built a year ago under the law in effect at the time. There is nothing to be gained from reopening the negotiations again. Significantly, the Pollution Control Agency professional staff does not concur with the petitioner's theories regarding wetlands. This Board need not address them at this time.
 - B. Questions e) i) and ii) raise the illusory argument that modern stormwater drainage systems are inconsistent with Minnesota law. The policy of requiring storm sewer systems to avoid the ponding of stagnant waters, rather than letting the rain fall where it may, is a public health decision which has been well settled for at least decades, possibly centuries. The petition is accompanied by no scientific basis leading one to suppose that society would be healthier if rainwater were to be left standing to provide a breeding ground for bacteria, fungi and insects. This discussion is not necessary.
 - C. Question e) iii) implies that stormwater drainage systems are somehow harmful to wetlands. The petition contains no evidence to support this inference. BWSR is not required to address fanciful hypotheses. But BWSR is required to consider the effects of its actions on local units of government. Many cities and townships drain their stormwater into county ditches or wetlands. It is not appropriate for BWSR to throw out 150 years of ditch law and preempt the counties' local control of their ditches, all in the context of this one small enforcement action.
 - D. Question f) asks whether PCA should require the City of Rockford to rip up its curb and gutter, tear out its tarred streets, fill in its retention ponds, and replace everything with sod, all in an effort to keep the rainwater where it fell. There is no evidence in the petition to suggest that this would be in the public's best interest. Further, if this were a legitimate proposal, why should it be limited to Rockford? Shouldn't PCA also require St. Paul to rip up all its streets? Shouldn't Mn/DOT rip up all the highways and replace them with sod? The obvious implications of the policy suggested by HRUA lead to the conclusion that these matters are not appropriate for BSWR review.

- E. The questions raised by HRUA are policy matters of enormous importance to every developer, every city, every township, every county, and every watershed district in the state. The wide-ranging examination of fundamental concepts requested by HRUA's petition to BSWR is not properly part of interpreting the law for an enforcement proceeding on one small site. Instead, these issues should be examined through the agency rulemaking process to afford maximum input from all affected parties. The petition should be rejected as being overbroad.
8. There is serious doubt about HRUA's good faith in filing these petitions. Robert Sykes, Mr. Kingstad's supervisor, admitted to a Rockford City Council member that HRUA knew of no statutory authority allowing it to bring these petitions, but brought them anyway. And the petition process is intended to be used sparingly, not flippantly. In fact, the process is so serious that the City has been unable to find any instance of such a petition being filed. BWSR need not dignify HRUA's abuse of the petition process.
9. There is inconsistency in the requested relief which raises further doubt about HRUA's actual intentions. The PCA petition requests relief based on a statute which authorizes the Commissioner to issue an emergency order when the public faces imminent and substantial danger as a result of pollution, without notice and without a hearing. This is truly a "panic-button" statute. To support that level of agency action, the pollution danger must be dire indeed.
- Yet HRUA has consistently blocked efforts by PCA staff, Wright County Soil and Water, the City and the developer to bring the site into compliance. Instead, HRUA has filed the PCA petition seeking a financial windfall for itself, and the BWSR petition seeking to freeze cleanup efforts on the site while the entire statewide system of stormwater drainage law is dumped in favor of HRUA's vision of utopia.
- Either the situation in Rockford is a crashing emergency which justifies the use of extreme measures, or it's not. By its actions, HRUA has made plain the fact that it is not truly interested in cleaning up this site. BWSR need not allow itself to become a party to HRUA's abuse of the petition process.
10. The City of Rockford respectfully requests that the Board of Water and Soil Resources reject HRUA's petition and direct PCA agency staff to continue their proceeding.

Dated: December 21, 1998

CITY OF ROCKFORD

By: 
Nathan A. Bissonette
City Attorney

LEONARD, STREET AND DEINARD

PROFESSIONAL ASSOCIATION

RECEIVED

117
JAN 13 1999

January 12, 1999

Keith S. Moheban
651-291-3509
ksm1544@leonard.com

Via Facsimile

Jim Haertle
Board of Water and Soil Resources
1 West Water Street
Suite 200
St. Paul, MN 55107

In Re: Investigation of Municipal Separate Storm Sewer Systems in the City of Rockford

Dear Mr. Haertle:

Enclosed please find Petitioner HRUA's Reply Brief in the above-captioned matter. By copy of this letter, I am serving those parties who commented on the Petition as well as the MPCA.

From our prior conversation, I understand that you believe it is unlikely that the Board would allow oral argument on the Petition. Additionally, you stated that the Board may not receive the actual submittals of the parties, but only a summary prepared by yourself. I would strongly encourage you to submit HRUA's original submittals to the Board, as this is required pursuant to their statutory obligation to consider the Petition. Further, I note that Minn. Stat. §103B.101, subd. 10 provides that the Petition should be considered by a committee of the board. Although you are reluctant to have parties make an oral presentation to the Board itself, perhaps you would consider it more feasible to allow argument before this committee when it convenes.

Jim Haertle
January 12, 1999
Page 2

Obviously, HRUA has concerns about having an opportunity to be heard on its Petition, particularly in light of the lengthy and vehement comments submitted by the other interested parties.

Very truly yours,

LEONARD, STREET AND DEINARD



By
Keith S. Moheban
KSM/kac
Enclosure

cc: Jon E. Kingstad, Esq.
John K. Lampe, Esq.
Matt Seltzer, Esq.
Nathan A. Bissonette, Esq.
Mr. Peder Larson, Commissioner MPCA
Ron Harnack, Executive Director, Board of Water and Soil Resources
S. Todd Rapp, Esq.

**In The Matter Of The Investigation Of)
Municipal Separate Storm Sewer Systems) Petitioner HRUA's Reply Brief
In The City Of Rockford, Wright County, MN)**

1

organization or group of persons with appropriate purpose related to the proceedings” or “a person the Board considers representative of a substantial segment of the state or peculiarly able to present evidence bearing on the public interest.” *Id.*, *subds.* 8-9.

Headwaters is a project of the University of Minnesota intended to provide research and assistance to those interested in protecting rural water resources. As such, Headwaters has an appropriate purpose for these proceedings, and can provide insight, evidence and expertise that would be valued by the Board in its determinations.

3. Mr. Bissonette’s argument that Headwaters lacks the power to bring this petition is also mistaken. Organized under Chapter 308A, Headwaters has the power to “perform every act and thing necessary to the conduct of the cooperative’s business or the accomplishment of the purposes of the cooperative,” and “has other rights, powers, or privileges granted by the laws of this state to other corporations.” Minn. Stat. § 308A.201, subd. 1. It is unclear how Mr. Bissonette derived his conclusion that HRUA’s powers were somehow limited below what its organizing statute expressly provides.

4. Mr. Bissonette then contends that the petition is insufficient because HRUA did not provide witness statements with its petition. At the same time, Mr. Bissonette artfully fails to deny any of the allegations of the petition, instead dismissing the City’s violations as “minor” or “ordinary.” Again referring to the statute governing petitions for intervention, there is no requirement for witness statements or other documentation in the petition for intervention. Minn. Stat. § 103A.311. The statute does not intend for the parties to try the case in the petition. The petition need only “state the

grounds for referral in a general manner with sufficient detail to inform interested parties of the nature of the questions proposed to be presented to the board." *Id.*, *subd.* 2.²

5. The MPCA has unquestionably commenced a "proceeding" by investigating the violations at Woodhill Ridge and by initiating enforcement action. The enforcement action is documented by the MPCA Inspection Reports and accompanying requests for compliance action. These fall squarely within the definition of "proceeding" set forth in Minn. Stat. § 103A.301, *subd.* 5: "'Proceeding' means a procedure under any of the laws listed in section 103A.305 that involves administrative discretion or duty." An inspection clearly is an act of administrative discretion and duty. Moreover, the alleged violations are of statutes expressly listed in Section 103A in the definition of "proceeding."

6. Mr. Bissonette's arguments demonstrate HRUA's point that there are substantial issues of water policy to be decided in this proceeding. The Board should have particular interest in intervention because of the apparent conflict between the Board's wetland conservation rules (chapter 8420) and the MPCA's regulatory and enforcement scheme as implemented at Woodhill Ridge. The development Mr. Bissonette defends (and the preliminary approach the MPCA has taken) conflicts with the Board's rules regarding wetland conservation, wetland sequencing and mitigation. This case provides an ideal mechanism for a dialogue between the MPCA and the Board on wetland and water policy, as the agencies can address these issues in the context of a concrete case, with a real development that demonstrates the serious environmental impacts of poor planning and disregard for the Board's rules.

² Mr. Bissonette's claim that Mr. Kingstad, by signing the pleadings, has somehow conceded that there are no witnesses capable of verifying the facts alleged in the petition, is simply ludicrous.

7. Mr. Bissonette's *ad hominem* attacks on HRUA are counterproductive and inaccurate. At no time has HRUA demanded any payments from the City. The landowners have required that the City provide a bond as a condition of approving any mitigation on their properties. Mr. Sykes made no such "admissions" as alleged in the Response. The statutory authority to bring the petition is set forth above. The tenor of his response demonstrates that the matter has not been resolved, that there are still deep divisions between the parties, and that the Board's intervention in the proceeding is necessary to ensure that proper water policy decision-making takes place despite the highly politicized atmosphere.

For all the foregoing reasons, Petitioner Headwaters respectfully requests that the Board grant its petition for intervention.

Date: January 12, 1999


Keith S. Moheban (#216380)

**LEONARD, STREET AND DEINARD
PROFESSIONAL ASSOCIATION**

2270 MINNESOTA WORLD TRADE CENTER
30 EAST SEVENTH STREET
SAINT PAUL, MINNESOTA 55101
(651) 291-3509

**ATTORNEYS FOR PETITIONER
HEADWATERS RURAL UTILITY
ASSOCIATION, INC.**



STATE OF MINNESOTA

OFFICE OF THE ATTORNEY GENERAL

MIKE HATCH
ATTORNEY GENERAL

SUITE 900
445 MINNESOTA STREET
ST. PAUL, MN 55101-2127
TELEPHONE: (651) 297-1075

January 12, 1999

RECEIVED

JAN 13 1999

Mr. Jim Haertle
Water Management Specialist
Board of Water and Soil Resources
1 West Water Street, Suite 200
St. Paul, MN 55107

Re: Petition for Intervention in MPCA Investigation of Woodhill Ridge, City of Rockford, Minnesota

Dear Mr. Haertle:

I am writing on behalf of the Minnesota Pollution Control Agency (MPCA) concerning the petition filed by Jon Erik Kingstad on behalf of the Headwaters Rural Utility Association, Inc., (Headwaters) on November 20, 1998.

This petition concerns a stormwater construction permit issued by the MPCA to a party engaged in construction at the Woodhill Ridge development. The MPCA has also conducted an investigation concerning that permit. Headwaters contends that this investigation raises a question of water policy under section 103A.305 and that Headwaters has a right to request the Board to intervene in this investigation. As demonstrated below, the MPCA disagrees with Headwaters' interpretation of section 103A.305.

For the Board of Water and Soil Resources (the Board) to have jurisdiction under section 103A.305, there must be, among other things, a proceeding under certain specified statutory provisions. Only two of those provisions are ones enforced by the MPCA. They are Minn. Stat. §§ 115.04 and 115.05.

Under section 103A.305, the Board only has jurisdiction if the agency is making a "decision" in a proceeding concerning a question of water policy. A question of water policy must involve either a "determination of the governing policy of state law," section 103A.301, subd. 6(1), or the "proper application of the policy of state law to facts." Section 103A.301, subd. 6(2).

The MPCA does not view its investigation of a site controlled by an MPCA permit to be a "decision" concerning a question of water policy. It is well accepted that agencies can engage in formal policy decision-making in one of two ways: either by adjudication or by rulemaking. *See, e.g., In re Petitions of D & A Truck Line, Inc. et al.*, 524 N.W.2d 1, 6 (Minn. Ct. App. 1994) (agency has right and discretion to develop policies either by rulemaking or on a case-by-case basis). Rulemaking is the establishment of rules of general applicability. Adjudication is the application of specific law to specific facts.

The investigation of the permittee is clearly not a matter of rulemaking. Rulemaking must be done under the procedures established in Minn. ch. 14 (1998). The MPCA has clearly not initiated a rulemaking proceeding under chapter 14.

In addition, the investigation being conducted by the MPCA is not an adjudication. In fact investigations under the law are distinct from adjudications. *See, e.g., Beck, Minnesota Administrative Procedure*, Sec. 3.2, p. 31 (2nd ed. 1998) (citing *Hannah v. Larche*, 363 U.S. 420 (1960)). They are distinct because an investigation is a fact-gathering process and an adjudication is a proceeding in which the law is applied to those facts to determine individual rights or duties. *Id.* at 15.5.1, p. 287.

In short, the MPCA is not engaged in adjudication or rulemaking with respect to the matter at Woodhill Ridge. It is engaged in an investigation. An investigation does not amount to decisionmaking about policy. Therefore, because no "policy decision" has been made by the MPCA in this investigation, the Board should not have jurisdiction under section 103A.305.

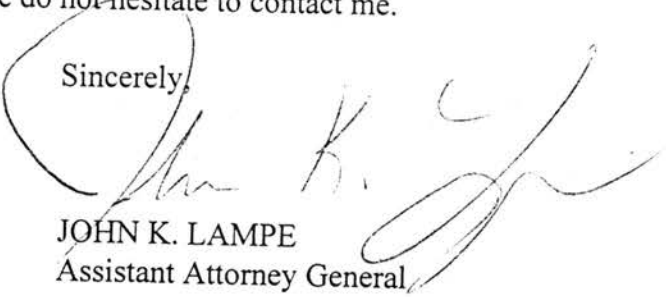
Such an interpretation of section 103A.305 makes sense in light of the legislative purpose behind chapter 103A. The Legislature could not have intended the Board to intervene in every investigation that another agency is engaging in. This is especially true since an agency investigation does not establish formal governmental policy. To interpret section 103A.305 as Headwaters has proposed could bring the investigatory powers of an agency to a halt. Clever parties wishing to avoid agency scrutiny could bring an investigation to a temporary halt by filing a petition for intervention with the Board. This would immediately stop the investigation because of the effect of section 103A.321 under which a proceeding is abated until the Board acts. The agency would not be able to move forward with its investigation until the Board decided how to handle the petition. In instances where emergency or time-sensitive investigations are being conducted, such an interpretation of section 103A.305 could prove disastrous.

The only sensible interpretation of section 103A.305 is to interpret it in light of well-established administrative law. Policy decision-making is done in one of two ways, by adjudication or by rulemaking. In a matter where neither of these is occurring, for example in an investigation such as the one here, the Board should not have the right to intervene. Therefore, the petition brought by Headwaters should be dismissed by the Board.

Mr. Jim Haertle
January 12, 1999
Page 3

Should the Board need further clarification concerning the MPCA's response to the petition submitted by the Headwaters, please do not hesitate to contact me.

Sincerely,



JOHN K. LAMPE
Assistant Attorney General

(651) 296-7293

cc: Jon Erik Kingstad
Keith Cherryholmes, MPCA
Glenn Skuta, MPCA
Nathan Bissionette, Attorney for City of Rockford
S. Todd Rapp, Esq.

AG:172389 v1

mja

FOR YOUR INFORMATION

- 1999 Mileage Rate Increase
- "Board Member Update"
- Letter from Kevin Kassenborg, Clay SWCD, regarding Clay County Wetland Management Plan Meeting
- Letter from Jim Haertel regarding WCA Wetland Banking Appeal, File 98-9
- Letter from Jim Haertel regarding Comfort Lake-Forest Lake Watershed District Establishment Petition
- Memo from Jim Haertel regarding Comfort Lake-Forest Lake Watershed District Establishment Petition
- Letter from Bruce Sandstrom regarding Rahr Malting Wetland Banking Application
- Memo from Ron Harnack regarding Koochiching Wetland Plan Agreement
- "Minnesota Policy Reform 1991-1999"
- "Comprehensive Local Water Planning, A Decade of Protection 1989 - 1999"
- "Red River Basin Flood Damage Reduction Work Group Agreement and Technical Papers"
- "Minnesota Wetland Report 1996"

From: Helen Bohrer
To: #-Everyone at BWSR
Date: Fri, Jan 8, 1999 10:06 AM
Subject: 1999 mileage rate increase

*Board Members
FYI*

The following labor agreements and compensation plans call for an increase in mileage reimbursement effective 1/6/99.

MAPE
MMA
LAW ENFORCEMENT
MGEC
NURSES
COMMISSIONER'S PLAN
MANAGERIAL PLAN

The new rate that will apply when a state vehicle is:

available: .24/mile
not available: .31/mile

AFSCME remains at the same rate as the 1997-1999 contract reads:

available: .23/mile
not available: .29/mile

Concerns or questions: Check your contract book or ask payroll clerk.



Board member Update

January 1999

General BWSR news

Ron Harnack and Jim Birkholz attended the 1999 North Central Region Partnership meeting in Chicago on January 5 and 6. The meeting is an annual event to get leadership of the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), soil and water conservation districts (SWCDs), and state conservation agencies together to do business on emerging issues. Hot topics included a federal budget proposal for an additional \$300 million for NRCS for technical assistance. Conventional wisdom holds that much of this new money would land directly in SWCD offices but there are some differences of opinion as to whether this would be local SWCD or federal staff positions. BWSR continues to believe that states should be given an opportunity to creatively match and leverage any new federal conservation funds with additional state funds. Animal feeding operations (AFO) guidance issued jointly by

USDA and the Environmental Protection Agency (EPA) was also the topic of discussion. Many criticized the guidance because it does not take into account current state and local efforts to deal with feedlot and manure management.

The six hour van ride out and back allowed Ron, Jim, BWSR Board Member Dwain Otte, Minnesota Association of Soil and Water Conservation Districts (MASWCD) President Owen Knutson, MASWCD Executive Director LeAnn Buck and Hennepin SWCD Supervisor Joe Newberg ample time to solve most of the remaining soil and water conservation problems of the world.

Hot topics included a federal budget proposal for an additional \$300 million for NRCS for technical assistance.

Metro region

Staffing

Metro staff continue to operate short-handed but the end is in sight. Interviews for filling the position of metro region supervisor will be on February 10. The newly hired supervisor will be given the task of filling the vacant board conservationist and metro region secretary position. Jim Birkholz will lead the interview.

Doc continues to work with Carver and Scott counties as each develops "second generation" water plans.

process and will be assisted by BWSR and Metropolitan Council staff. Jim would like to invite any board members who have suggestions regarding the metro region supervisor position to contact him at 651-296-0879 before February 10.

Water planning

Doug (Doc) Snyder, metro board conservationist, has been working with Hennepin Conservation District (HCD) on ways to improve record-keeping practices after completing its 1996 Cost-Share closeout. HCD is also doing a countywide inventory of drained wetlands. BWSR has provided supplemental funding for this effort, which will help identify wetland road replacement sites. This work is taking place primarily in the Elm Creek and Pioneer/Sarah Creek watershed management organizations (WMOs) on the western side of the county.

Doc continues to work with Carver and Scott counties as each develops "second generation" water plans. Both counties are working on creating a comprehensive water plan that combines groundwater and surface water plans into a single document. Scott County recently presented its groundwater plan to the BWSR metro subcommittee; the plan can also be found on the Internet at www.co.scott.mn.us. Scott County's Citizen Advisory Committee will meet for the first time on January 21, 1999. Committee members include many past board

members of failed WMOs. (Recall that all of the WMOs in Scott County failed and disbanded, which is why the county is now responsible for groundwater and surface water planning.) Scott Allen, Scott County water planner, expects 30 to 40 people to attend.

Carver County staff is currently working on its comprehensive land use plan, after which staff members plan to turn their attention to the water plan. The county would like to finish the water plan by the end of 1999.

Phil Belfiori, metro board conservationist, has been working with Ron Struss, education coordinator, on a formal partnership with the Ramsey Soil and Water Conservation District (SWCD) and Ramsey County to assist in the development of the Capital Region Watershed District Plan. County Commissioner Janice Rettman and Science Museum of Minnesota drama team *Splish and Splash* will help the district formally introduce itself to the community at its February 25, 1999, kick-off meeting.

Phil has also spent time along with BWSR Water Planning Coordinator Doug Thomas on the Washington County Water Governance Study. Phil has worked closely with the Washington SWCD on issues related to the study. The purpose of the study is to develop an efficient delivery structure for solving the county's water resource management issues. Look for the conclusion of this study about mid-1999(?)--many others are watching this with interest.

Ron and Phil also are teaming up on an ongoing project to help the Carnelian-Marine Watershed District develop a watershed plan and establish an active citizen's advisory committee. Phil is working with Prior Lake-Spring Lake Watershed District (WD) and Lower Minnesota WD on final review of their watershed plans.

Education and outreach

Ron just completed editing the Vermillion River WMO newsletter, and will be starting a review of past Dakota County environmental education programs as the first step towards developing an educational strategy for the Vermillion's second generation plan. Ron recently assisted Dakota County Extension Environmental Educator Coordinator Charlotte Shover with a discussion session on stormwater education with Dakota County public works directors and environmental educators.

Phil and Bill Sands, metro intern, are creating a guidebook on alternative stormwater best management practices (BMPs) for the Valley Branch Watershed District and the cities of Woodbury and Afton. This is an outgrowth of a cooperative project with DNR.

March 8, 1999, is the date for *Stormwater Management for Today and Tomorrow*, a one-day conference targeted at city engineers and planners, consultants, and water resource specialists, to be held in St. Paul. Ways of increasing stormwater infiltration in urban areas will be the topic of

both regional and metro area presenters. A BWSR education grant has allowed the registration to be kept at a very affordable \$25. Contact Ron Struss at 651-215-1950 for registration information.

Tim Thoreen, metro area assistant board conservationist, and Ron have taken on the final editing and production of the *Water Education Resource*, an impressive collection of urban water resource educational materials gathered from across the nation. This resource is a joint effort of WaterShed Partners, a metro area water education group, and the Metropolitan Council, who provided the funding. BWSR oversees the project grant, with BWSR staff member Jim Haertel providing overall management and coordination. The *Water Education Resource* will be distributed on February 17 and 18, 1999, at two Water Education Resources Workshops. Contact Tim at 651-282-9969 for more information on the workshops and the *Water Education Resource* guide.

Miscellaneous

The Association of Metropolitan Soil and Water Conservation Districts (AMSWCD) is meeting to discuss ways of building the technical capacity of metro districts. The current idea is to hire an urban conservationist to assist district staff throughout the metro area. Doc has been working on this with AMSWCD.

Ron just completed editing the Vermillion River WMO newsletter, and will be starting a review of past Dakota County environmental education programs as the first step towards developing an educational strategy for the Vermillion's second generation plan.

Engineering and Technical Services Section

Nonpoint Engineering Assistance

Feedlots was a hot topic, including the status of the rule update, challenges with unpredictability of state and county permitting, status of the General Environmental Impact Statement (GEIS) on animal agriculture and expected cost-share availability.

Al Kean, chief engineer, and Justin Jeffery, training and design engineer, met with engineers and technicians from SWCD Joint Powers Areas (JPAs) 7, 8, 9, 10 and 11 on January 19 at the Blue Earth SWCD office. This was a coordination meeting to discuss various topics from program management and front line technical assistance perspectives. Feedlots was a hot topic, including the status of the rule update, challenges with unpredictability of state and county permitting, status of the General Environmental Impact Statement (GEIS) on animal agriculture and expected cost-share availability. Other major topics included program budget status, status of implementing the latest versions of Eagle Point design software, maintenance of Geodimeter total station surveying equipment, as well as roles and responsibilities. Al and Justin are making arrangements for similar meetings with other JPA staff in February.

Al recently updated a draft reference document defining roles and responsibilities of the BWSR, MASWCD, joint powers boards, host district boards, host district managers, JPA staff and member

SWCDs for the nonpoint engineering assistance (NPEA) program. Previous drafts have been provided to joint powers boards, host district managers, JPA staff and BWSR board conservationists. Last September, NPEA committee members asked that the definition of member SWCD roles and responsibilities be added to this reference document. The updated draft will be circulated for review and reference.

A joint meeting of SWCD, BWSR and NRCS engineers has been scheduled for March 9 - 11 in St. Cloud. This has become a very valuable annual event for training about case studies and new technologies, coordination of technical assistance efforts and building working relationships.

Lakeshore Engineering

Gene Clarke, lakeshore engineer, and Al recently collaborated on drafting two applications for Great Lakes Commission (GLC) grants. These proposals involve investigation of the effects of certain types and locations of septic systems on Lake Superior shoreline instability and development of a geographic information systems (GIS) database with an initial focus on shoreline erosion hazard areas and critical fish habitat areas. The proposals reflect initial coordination with the DNR, North Shore counties and SWCDs. The BWSR has administered many successful grants from the GLC since 1993.

The Lake Superior Clean Water Partnership project continues to move ahead (albeit slowly) with

implementation through counties and SWCDs. This project involves low interest loans and grants for lakeshore stabilization and septic system upgrading. Gene is an active technical consultant to the implementation team.

Easement Programs

Following are the latest brief statistics on the Conservation Reserve Enhancement Program (CREP) implementation:

- 52 applications approved, involving 1,700 acres, since September 1998
- apps have been received from Brown, Chippewa, Lincoln, Lyon, Nicollet, Redwood, Renville, Watonwan and Yellow Medicine counties
- 49 completed agreements for easements
- 6 easements sent out for recording
- state cost = \$1,045,326
- state cost if we had funded solely via the Reinvest in Minnesota (RIM) Reserve Program = \$2,098,919
- savings to state = \$1,053,593

Wetland Reserve Program (WRP) partnership statistics to date:

- partnering on 82 easements with NRCS
- total acres = 4,500
- state cost = \$1,962,369
- state cost if we had funded

solely via RIM = \$4,424,186

- savings to state = \$2,461,817

NRCS funding for the WRP program was reduced this fiscal year from the previous year. Many of the partnership easements to date were initially approved as RIM easements. Most of the new partnership easements started out as partnered. We continue to have some coordination challenges with partnering efforts. Because the BWSR is providing the lion's share of technical assistance for these projects, we also have associated workload challenges.

The RIM Reserve Advisory Committee met on January 16 to discuss the status of CREP and RIM/WRP partnership implementation, alternatives for integrating the processing of conservation easements and wetland banking easements and several housekeeping topics.

General local government assistance

Justin is preparing and making arrangements for three 5-day training sessions on construction inspection in February, March and likely June that he and others will deliver. One series will be held in Montevideo, one in the metro area and one in northwest Minnesota. The partnership training needs inventory has identified this as very high priority training for SWCD and NRCS staff. This is a critical skill to ensure quality conservation practice implementation and avoid controversy during and after con-

We continue to have some coordination challenges with partnering efforts.

Al and Greg Larson, land and water section administrator, have made arrangements for a coordination forum regarding nutrient management technical assistance on February 17, 1999, at the BWSR central office.

struction. Sign-ups have been very active since these courses were posted on the Schedule of Events used by BWSR, NRCS and SWCDs via e-mail.

Gene and Brad Matlack, lakeshore engineering technician, report that since the BWSR lakeshore engineering assistance program was started in 1992, North Shore and lake country SWCDs have been assisted with more than 100 projects -- a bit of a milestone.

Gene recently met with R.C. Boheim, the new So. St. Louis SWCD manager and JPA 3 host district manager, to discuss the BWSR lakeshore engineering assistance program and associated coordination with the SWCD and joint powers board and staff. Gene reports that Mr. Boheim seems to be an energetic and perceptive person with a variety of conservation experience, mostly in Wisconsin.

Hot Topics

Al and Greg Larson, land and water section administrator, have made arrangements for a coordination forum regarding nutrient management technical assistance on February 17, 1999, at the BWSR central office. Representatives from MASWCD, SWCDs, NRCS, the Minnesota Extension Service (MES), the Minnesota Department of Agriculture (MDA), the Minnesota Pollution Control Agency (MPCA), Cenex/Land-O-Lakes, Farmland Industries and the association of Certified Crop Advisors have been invited. We hope to better define

who's doing what and how we should proceed with public/private partnering for nutrient management technical assistance. Comprehensive nutrient management plans are a key component of the updated draft Minnesota feedlot rules, as well as the USDA-EPA Draft Strategy for Animal Feeding Operations. Public and private capability to address this need are a concern.

The citizens advisory committee (CAC) for the GEIS on animal agriculture is wrestling with the question of what kind of feedlot inventory to recommend. The GEIS technical resource group (TRG), involving agency and University of Minnesota staff, have helped outline alternatives and associated costs. The current cost estimate for a full-blown statewide Level 3 inventory (the most detailed level) is around \$7-8 million, which is much higher than previous off-the-cuff estimates. Al has suggested a Level 3 inventory based on a statistical sample of feedlots that would cost much less and would not undermine existing incentive programs for counties to conduct feedlot inventories. The TRG and Minnesota agriculture statistics staff are preparing to provide input to the CAC before their next meeting on February 9-10.

Cost-share program policy for feedlot relocations, as well as roofs over feedlots to keep rainwater off, have been hot topic questions of late.

Northern region

The calendar has rolled over to another new year, but the list of work activities just drones on. Here is a sample of life in the north region circa December 98/January 99.

Wetlands

Dan Eklund, wetland specialist, continues his work with Koochiching, Lake, and Marshall-Beltrami on their Comprehensive Wetland Management Plans (CoWProMP). Clay County has also fired up the planning engines and plans to begin development of a wetland plan. BCs Dan Steward and Dale Krystosek met recently with the Clay County folks to help get them started. Clay will be dealing with issues such as flood damage reduction, gravel mining, urban sprawl, and agricultural drainage in its plan. Clay County feels that the Wetland Conservation Act (WCA) is not sensitive enough to its water management needs and hopes the CoWProMP will give them needed flexibility.

The Duluth office put the wraps on plans to do a wetland refresher course for local government units. The one day training is planned for January 29 and will be held in Duluth. This type of area-wide program refresher training is often requested by our local government partners. Mark Nelson, Duluth BC, and Dan Eklund will facilitate this event.

Cooperation between BWSR,

DNR Forestry, the JPA engineers, and the Kanabec SWCD has resulted in an all-systems-go wetland banking site on state forest land. This site takes advantage of an old beaver dam site. Keith Grow, Brainerd BC, states that he hopes this type of partnership will catch on, particularly in the 80-plus counties where options for wetland restorations are limited.

Mark recently met with Cook SWCD, Cook County, and the city of Grand Marais to decide how the city will handle WCA. Fill availability from MNDOT road projects has drawn attention to WCA administration in Grand Marais. John Jaschke, WCA administrator, and Dan Eklund are providing support as Mark deals with this touchy situation that has reached the local newspapers.

Education

Water Resources Education Coordinator Kamal AlSharif reports that he attended the Environmental Natural Resources (ENR) specialization meeting. Kamal was one of the presenters during the limnology session. Kamal had an opportunity to meet and talk with many educators who teach about water quality at this session.

Kamal attended a recent PICKM (Pine, Isanti, Chisago, Kanabec, and Mille Lacs) team meeting. The team discussed some future activities, including educating decision-makers about alternative septic systems, individual shoreland volunteers training, and environmental camps for kids.

Cooperation between BWSR, DNR Forestry, the JPA engineers, and the Kanabec SWCD has resulted in an all-systems-go wetland banking site on state forest land.

Brian Dwight, Bemidji BC, has been cooperating with the Audubon Society, the DNR, consultants, and now the Red Lake Watershed District looking at alternatives to the controversial cleaning out of State Ditch #83.

Watershed district activities

Brian Dwight, Bemidji BC, has been cooperating with the Audubon Society, the DNR, consultants, and now the Red Lake Watershed District looking at alternatives to the controversial cleaning out of State Ditch #83. This group has also been working with the petitioners to get them to look at some alternatives as well. Brian thinks that this may be a first big step in playing out the recently signed Red River Valley Mediation Agreement.

Brian has also been working with the Roseau River Watershed District on the Hay Creek Restoration project. This project will restore 6.5 miles of river and river floodplain. The project consists of a combination of stream alignment, ag levies, and vegetative cover. Funding sources are being put in place for this innovative project.

Bemidji BC Bill Best attended the final meeting with the landowners, the Wild Rice River Watershed District, and agency folks on the Dahlen Coulee Interagency Work Team Conclusion Document. This document has been about one year in the making. The purpose of the document is to describe the process that will be used to resolve issues and address alternatives for water management in Dahlen Coulee, a ravine tributary to the Red River of the north that is the site of ongoing controversy about water management issues. This is just another example of local resource managers meeting with

state and federal resource managers to resolve differences. Some points of discussion over activities in Dahlen Coulee still remain, but the agreement will go a long ways to addressing how these issues can be resolved.

Forestry

Jim Lemmerman, BWSR forester, tells us that technical assistance contracts (using funds from BWSR, DNR and MDA) for local governments in Tornado Alley are moving forward. Cottonwood, Nobles, Nicollet, and Brown SWCDs will have contracts to assist landowners with replacing shelter belts destroyed by last year's tornados.

Board
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**CLAY SOIL AND WATER
CONSERVATION DISTRICT**

2223 E. Highway 10
Moorhead, Minnesota 56560
Telephone: 218-287-2255

**MINNESOTA
SOIL AND WATER CONSERVATION DISTRICTS**

RECEIVED

JAN 11 1999

To: Ron Harnack, Executive Director - BWSR

From: Kevin Kassenborg, Clay SWCD Manager
Steve Hofstad, Clay County Water Plan Coordinator

Re: **Clay County Wetland Management Plan Meeting
January 21, 1999 at 9:30 am
Buffalo-Red River Watershed District Office
Barnesville, MN 56514**

January 6, 1999

Dear Mr. Harnack,

In accordance with Minnesota Rules 8420.0650, Subpart 1, A and B, the purpose of this letter is to inform the agency of Clay County's intent to begin development of a Comprehensive Wetland Management Plan. Please note the above meeting time and date - we would appreciate representation from your agency at this meeting and throughout the Comprehensive Wetland Management Planning process. The meeting agenda will include determination of roles and responsibilities, estimation of costs, and project time line.

As of January 1, 1999, the Clay Soil and Water Conservation became the local governmental unit (LGU) for the Wetland Conservation Act in Clay County. In light of changing land use (i.e., development, gravel mining, feedlots, et.), and to aid in the administration of WCA, the decision was made to initiate the development of a Wetland Management Plan.

At this point, we have made the decision to use a "phase approach" to a county-wide Wetland Management Plan. Phase I will focus on completing the planning process for the Stony Creek watershed, a subwatershed of the Buffalo River watershed. By concentrating on a subwatershed entirely within the County's boundaries, it was felt that the first phase could be handled in a timely manner thus producing a quality product.

Again, we would greatly appreciate representation from your agency at this meeting and throughout the Comprehensive Wetland Management Planning process. If you cannot attend, please call us at (218) 287-2255 by January 20th.

Sincerely,


Kevin Kassenborg


Steve Hofstad



Board
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December 28, 1998

Arnold Bechtold
32679 - 65th Avenue
St. Cloud, MN 56301

RE: WCA Wetland Banking Appeal, File 98-9

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St. Paul, MN 55107
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Dear Mr. Bechtold:

We are in receipt of your December 24, 1998, letter requesting withdrawal of the above referenced appeal. Accordingly, your appeal has been withdrawn and your enclosed check # 11680 in the amount of \$200.00 is hereby returned.

Since speaking with you on December 23, 1998, I have been in contact with Jenny Lee and Pete Waller. By the time you receive this correspondence, the Technical Evaluation Panel should have been in contact with you to arrange a site visit and discuss the steps necessary to enroll your land in the wetland bank.

Please feel free to contact me at (651) 297-2906 if I can be of further assistance.

Sincerely,

Jim Haertel
Water Management Specialist

Enclosure

cc: Kathy Roer, Chair

Ron Harnack

Matt Seltzer, A.G.O.

Jenny Lee, Stearns County Environmental Services

Doug Thomas

John Jaschke

Ron Shelito

Dan Eklund

Pete Waller



Board
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FYI

January 25, 1999

Jackie Anderson
25460 E. Comfort Drive
Forest Lake, MN 55025

One West Water Street
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RE: Comfort Lake-Forest Lake Watershed District Establishment Petition

Dear Jackie:

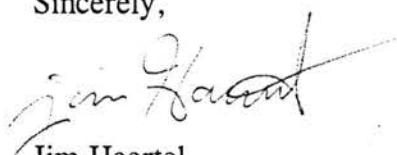
The Chisago County Auditor's certification of petitioner signatures has been received.

As we have discussed, the petitioners must file a copy of the establishment petition with the commissioner of the DNR, the director of the DNR-Division of Waters, and the auditors of the counties affected by the proposed watershed district. Signed statements of delivery or receipt of such must be filed with BWSR. To date, we have not received such, although it may not be an urgent issue in consideration of my December 30, 1998, letter regarding completion of the Washington County Water Management Governance Study.

This matter should go before the BWSR Board on February 24, 1999. The earliest the establishment hearing could be held would be late March to early April. However, the staff recommendation will be to schedule the establishment hearing upon the timely completion of the Washington County Water Management Governance Study, or June, whichever is earlier.

Please feel free to contact me at (651) 297-2906 if I can be of further assistance.

Sincerely,


Jim Haertel
Water Management Specialist

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cc: Kathy Roer, Chair; Barb Cobb; Dwain Otte; Ron Harnack; Jim Birkholz;
Doug Thomas; Phil Belfiori; Keith Grow



MEMORANDUM

December 30, 1998

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TO: List of Addressees

FROM: *Jim Haertel*
Jim Haertel, Water Management Specialist

RE: Comfort Lake-Forest Lake Watershed District Establishment Petition

A citizen petition to establish a watershed district in the Comfort Lake area of Chisago County and the Forest Lake area of Washington County has been filed with the Board of Water and Soil Resources (BWSR). The purpose of this correspondence is to inform you of how BWSR intends to proceed with the processing of the petition.

The earliest an establishment hearing could be held is late February, with a March hearing date more likely. However, last spring Washington County started a Water Management Governance Study. The study is on schedule to be completed this spring. Many people, including BWSR staff and Washington County staff, strongly feel the establishment hearing should be held after the study is completed. Thus, the hearing would be delayed until June. BWSR Board approval will be sought to hold the establishment hearing upon completion of the study.

While BWSR is concerned about the management of the water resources in these areas, it appears prudent to delay the hearing for three months so the study can be considered. Of course, this assumes Washington County continues to move forward in a timely manner to complete the study.

We will continue to keep communications open with the parties, and welcome any comments you may have. Please contact me at (651) 297-2906 if you have any questions, comments, or wish to discuss this matter further.

Enclosure - List of Addressees

c: Kathy Roer, Chair, Barb Cobb, Dwain Otte, BWSR staff: Ron Harnack,
Jim Birkholz, Doug Thomas, Phil Belfiori, Keith Grow

List of Addressees
Comfort Lake-Forest Lake WD Establishment Petition
December 30, 1998

Chisago County Board of Commissioners

Washington County Board of Commissioners

Jackie Anderson, Establishment Petition Contact

Jim Thoreen, Chisago County Administrator

Jim Shug, Washington County Administrator

Herb Grossman, Chisago Lake Township Clerk

Chip Robinson, City of Forest Lake Administrator

Dorothy Baland, Forest Lake Township Clerk

Dolores Peterson, New Scandia Township Clerk

Dennis Coryell, City of Wyoming Administrator

Lisa Hughes, Wyoming Township Administrator

Forest Lake Watershed Management Organization

Chisago County SWCD

Washington County SWCD

Jane Harper, Washington County Planner

Dale Homuth, DNR-Metro Waters

Mel Sinn, DNR-Waters



January 11, 1999

Ryan C. Brandt
North American Wetland Engineering
20920 Keewahtin Ave. N.
Forest Lake, MN 55025

Dear Mr. Brandt:

Re: Rahr Malting Wetland Banking Application

Your letter of November 2, 1998 to me regarding the above matter generated in-depth discussions with Executive Director Ron Harnack and MPCA staff involved with the Rahr Malting pollution crediting agreement. In consideration of these discussions, the BWSR has concluded that your two wetland banking applications cannot be considered valid applications based on existing rules that wetland banking applications must comply with. (Minn. Rule 8420.0740, Subpart 1, Item C. states: "After July 1, 1993, wetlands restored or created without prior local government unit approval as specified in this part are not eligible for deposit into the wetland bank.") It is clear based on our review of the documents you sent me that wetland restoration work that might qualify for wetland banking was completed prior to receiving LGU approval of the applications. In addition, BWSR staff has serious questions about the amount of wetland that would be restored due to the lack of hydric soils present over considerable areas.

While the concept of integrating projects that contain elements of wetland banking and pollution crediting has merit, both the BWSR and the MPCA has significant concerns about the subject projects. We feel that there may be instances where the two programs may compliment each other and further the goals of your client. Both the BWSR and MPCA would be willing to have a joint meeting with you and Rahr Malting to discuss these possibilities at a time that is convenient for all parties. If you have any questions about this determination or desire me to arrange for a meeting please call me at 651-297-4958.

Sincerely,

A handwritten signature in dark ink, appearing to read "Bruce Sandstrom".

Bruce Sandstrom, Wetland Bank Administrator
Board of Water and Soil Resources

cc BWSR: Ron Harnack, Chris Hughes, Jeff Nielsen, John Jaschke,
Barbara Ohman
MPCA: Rod Massey, Wayne Anderson, Jim Klang
Brown Soil and Water Conservation District

m:\banking\rahr.ltr

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MEMO

January 11, 1999

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To: Ronald Nargang, Commissioner, Department of Natural Resources
Rod Massey, MN Pollution Control Agency
Al Linder, Koochiching Soil and Water Conservation District
Charles Lepper, Koochiching County Commissioner

From: Ronald Harnack, Executive Director
Board of Water and Soil Resources

A handwritten signature in dark ink, appearing to read "John Jaschke".

RE: Koochiching County Wetland Plan Agreement

Attached is an executed copy of the mutual agreement between Koochiching County, Board of Water and Soil Resources, Koochiching Soil and Water Conservation District and the Minnesota Pollution Control Agency to proceed toward development of a Comprehensive Wetland Protection and Management Plan for Koochiching County.

We look forward to working with your organization to complete the wetland plan over the next several months.

If you or your staff have any questions about progress of the planning effort, please contact Mark Nelson in our Duluth office at (218) 723-4923 or Dan Eklund in our Brainerd office at (218) 825-3015.

RDH/jj

Attachment

c: DNR
Doug Norris
Dave Holmbeck

BWSR
Mark Nelson
Dan Eklund
Ron Shelito
John Jaschke

MPCA
Larry Zdon
Roger Bjork

Koochiching SWCD
Tom Toratti

USCOE
Steve Eggers
Jeff Koschak

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JAN 07 1999

MUTUAL AGREEMENT
between the
COUNTY OF KOOCHICHING
and
THE MINNESOTA BOARD OF WATER AND SOIL RESOURCES
and
THE KOOCHICHING SOIL AND WATER CONSERVATION DISTRICT
and
THE MINNESOTA DEPARTMENT OF NATURAL RESOURCES
and
THE MINNESOTA POLLUTION CONTROL AGENCY

STATE OF PURPOSE

These parties along with the US Army Corps of Engineers agree to come together to assist the citizens of Koochiching County in developing a local wetland plan under the Wetland Conservation Act of 1991. Although each party has its respective resource responsibilities, they recognize the need to improve wetland permitting procedures in Koochiching County. The goal of this group is to utilize local wetland planning as a way to coordinate local, state, and federal regulatory efforts and reduce unnecessary redundancy. The state and local agencies listed above agree to participate in the plan's development as described by Minnesota Rule 8420.0650. While the Army Corps has declined to be a signature for administrative reasons, they are to participate in this planning effort.

IT IS UNDERSTOOD THAT:

This agreement establishes a framework for cooperation and assistance between the parties in the development of a local wetland plan. It realizes that the County has already expended efforts to identify desired flexibility and will use that information as the basis for initiating the plan. Further, it recognizes that Koochiching County by initiating this planning effort has the intent to manage its wetlands consistent with the local wetland plan provisions of the Wetland Conservation Act of 1991.

Signatories of this agreement recognize Koochiching County has a unique landscape situation. Large areas of the county are classified as wetland and are protected from impacts by public ownership. Additionally, the county is not densely populated and does not contain the threats to wetland resources found in other areas of Minnesota. Therefore, the planning effort will strive to offer more flexibility and coordinated regulatory responses to affected citizens while maintaining a no-net-loss of public values.

The target date for finalizing the plan is within five months of the signing of the agreement. However, the completion date may be extended if necessary to achieve an effective plan that meets the identified criteria.

The County agrees to establish a citizen participation process and the agencies will (within 30 days) assign staff to work with the county in finalizing a comprehensive wetland plan that addresses the County's unique situation.

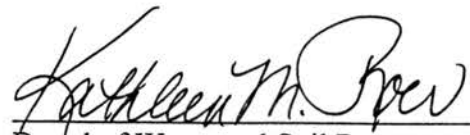
Specifically, agencies will provide the following services to Koochiching County to implement the WCA:

- BWSR:
 - Assist in coordination of the planning process.
 - Provide GIS support for the plan.
 - Provide continued assistance in the administration of WCA.
 - Work with the County Environmental Services and Soil and Water District on technical matters related to a WCA/local wetland plan.
- SWCD:
 - Will coordinate the development of a local wetland plan in association with the County Environmental Services.
 - Serve on the Technical Evaluation Panel.
 - Administer the WCA/local wetland plan program.
 - Provide information on WCA/local Plan to county residents.
- Minnesota DNR:
 - Will participate through local staff with expertise in Koochiching County resources in the development of a local wetland plan as described by rule.
 - Assist the County when possible in obtaining resource information that is pertinent WCA/local wetland planning and administration.
 - Coordinate DNR responsibilities relating to wetlands or waters with the County.
 - Provide comments and technical assistance to the TEP and County on WCA/local plan issues.
- U.S. Army Corps of Engineers:
 - Will participate in the development of a local plan.
 - Coordinate Section 404 permits with the County when appropriate and desirable to reduce duplication of efforts.
 - Participate in TEP meetings where determined to be mutually appropriate and desirable.
- Minnesota Pollution Control Agency:
 - Coordinate 401 certificates with the USCOE.
 - Participate in the CoWProMP process.

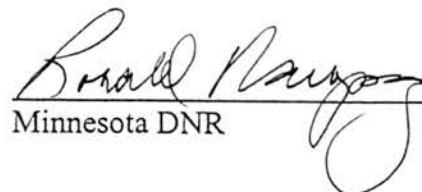
This mutual agreement is a working tool designed to show intent of the County to work with the pertinent state and federal regulatory agencies to develop a local wetland plan. Because this agreement is a call to participate, nothing in this agreement or lack of compliance with it creates any cause of action for damages. This mutual agreement can be canceled or revised upon agreement by all parties.

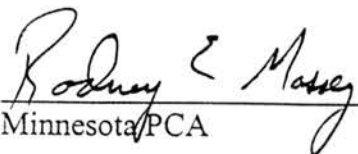
Signed:


Koochiching County Date

 12/16/98
Board of Water and Soil Resources Date

 1/4/99
Koochiching SWCD Date

 12/16/98
Minnesota DNR Date

 12/16/98
Minnesota PCA Date

MINNESOTA POLICY REFORM, 1991-1999
MINNESOTA PLANNING

MINNESOTA

POLICY REFORM

1991-1999

Minnesota Policy Reform, 1991 – 1999 was coordinated by Minnesota Planning, 658 Cedar St., St. Paul, MN 55155, 651-296-3985.

Upon request, *Minnesota Policy Reform* will be made available in an alternate format, such as Braille, large print or audio tape. For TTY, contact Minnesota Relay Service at 800-627-3529 and ask for Minnesota Planning.

November 1998

Overview

Minnesota Policy Reform 1991 – 1999

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Minnesota Planning would like to thank the following individuals who provided valuable information for this report: Morrie Anderson, Carol Arnold, Sen. Linda Berglin, Charlie Bieleck, Scott Brener, Cindy Brucato, Paul Burns, David Doth, Jenny Engh, Jan Gallagher, Dave Gruenes, John Gunyou, Beth Hargarten, Ronald Harnack, Susan Heegaard, John Hultquist, Sandy Hyllengren, Cindy Jepsen, Curt Johnson, Mary Kennedy, Kate Kimpan, Laura King, Linda Kohl, Leroy Koppendrayner, Ron Nargang, Patsy Randell, Sen. Jane Ranum, Christina Rich, Kristin Robbins, Barb Schlafer, Nanette Schroeder, Wayne Simoneau, Karen Smigielski, Ed Stringer, Cindy Turnure, and Barb Yates.

Overview

Minnesota is often cited for its progressive policies and far-sighted reforms. *Minnesota Policy Reform: 1991–1999* shows some of what Minnesota accomplished and how change happened under the leadership of Governor Arne H. Carlson. Its purpose is to serve as a tool for future leaders, policy-makers and students of the political process in Minnesota and the nation who want to know, “How did they do that?”

Gov. Carlson took office in 1991, having won an extraordinary election that attracted national attention. Only two weeks before Election Day, Carlson, who finished second in the Republican primary, replaced the party’s endorsed candidate, who withdrew amid allegations of sexual impropriety.

In November 1990, the nation was in the midst of a recession fueled in part by a foreign policy crisis in the Persian Gulf that was raising oil prices and lowering consumer confidence. At the same time, Minnesota faced a state government budget that was growing faster than inflation or projected revenues.

In his brief campaign, Carlson stressed the need to provide strong financial management, control state spending and increase accountability. He vowed to be a hands-on manager of the state’s finances and use the governor’s veto power to eliminate unnecessary and wasteful spending. Carlson opposed raising taxes to balance a projected state budget deficit and promised to move aggressively to reduce property taxes on business. He also campaigned to bring greater accountability to local government spending and to reform the bonding process to limit the growth of state debt.

Carlson sought accountability in education as well as in government spending. Recognizing the critical link between the education system and economic development, he believed that schools should be held responsible for student achievement.

His economic development plan focused on creating jobs to spur economic growth. In addition to supporting property tax cuts for business, Carlson saw reforming the workers’ compensation system as essential for improving the state’s business climate and strengthening the ability of Minnesota companies to compete with those from neighboring states.

Just weeks after Carlson’s election, the Department of Finance announced a \$197 million shortfall with six months left in the fiscal year and a long-term revenue

shortfall of \$1.8 billion. Finding a solution to the budget crisis would become Gov. Carlson’s top priority in his first term, and the financial practices adopted early in his administration would have long-term effects.

Adding to these challenges was a Legislature controlled by Democrats, whose party had just lost the governor’s office. With Governor-elect Carlson promising greater use of the veto pen, both sides expected legislative conflicts to intensify, and they did.

Despite these challenges, in eight years Gov. Carlson and his administration achieved an impressive array of reforms, changing government systems, improving the lives of children, fostering a vibrant economic environment and enhancing the quality of life. *Minnesota Policy Reform: 1991–1999* highlights 10 initiatives that are a legacy of Minnesota’s longest-serving Republican governor and examines how they were achieved.

Reforming government systems

Eliminating the budget deficit and making government accountable for spending was a primary focus throughout Carlson’s term in office. Efforts in this area led to the passage of “price of government” and “truth in taxation” legislation and resulted in structural reforms that have included long-range budget planning and spending control.

Gov. Carlson’s support of the judicial selection process enacted before his election reflected his commitment to a high-quality judiciary and his understanding of the long-term influences of judicial appointees.

The creation of a single department designed to serve children from birth to their entry into the work force was one of the most significant systems reforms achieved by the Carlson administration. Believing that collaboration and cooperation among government programs are necessary to best serve all Minnesotans, Carlson led the effort to combine programs scattered throughout state agencies into a single Department of Children, Families & Learning.

Improving the lives of children

Gov. Carlson’s commitment to children also was evident in his education initiatives, which focused on improving school and student performance. The culmination of these efforts was the passage of the Students First initiative in 1997, which included tax credits and deductions for education expenses.

He also worked for the passage of MinnesotaCare, which created a subsidized health insurance program

that ensured that low-income Minnesotans could obtain health care without having to be on welfare. The program also attempted to improve the accountability of the health care system through a comprehensive package of strategies focused on controlling costs and increasing quality.

Finally, Gov. Carlson and First Lady Susan Carlson led efforts to enact legislation aimed at preventing and reducing the harm to children from alcohol use during pregnancy that results in fetal alcohol syndrome and effects.

Fostering a vibrant economic environment

From his election in 1990, Gov. Carlson supported an overhaul of the state's welfare system. The resulting program, the statewide Minnesota Family Investment Program, is designed to provide temporary assistance and reward recipients for work. A strong state economy has helped recipients begin to move from welfare to work.

Creating a competitive business environment has been the impetus for other economic reforms in the state. The Governor sought to reform the workers' compensation system and restructure the property tax classification system. Both reforms have helped to reduce businesses' costs in Minnesota and create a friendlier environment. In addition, taxes on capital equipment were eliminated, bringing Minnesota in line with the policies of other states.

Enhancing the quality of life

Gov. Carlson recognized early in his term the importance of providing continued opportunities for Minnesotans to enjoy a rich variety of cultural events and recreational opportunities. Among his efforts in this area, the first — and one of the most visible — was the creation in 1991 of the Wetland Conservation Act, which has helped halt the loss of critical wetlands throughout the state.

Components of success

An examination of these initiatives of the Carlson administration reveals that many involved several common strategic components.

■ **Timing and patience.** Knowing when the time is ripe to pursue an initiative takes a keen understanding of the underlying issues. Achieving change through the legislative process often goes at a seemingly glacial pace. A year can be spent introducing an idea, another educating legislators and the public on the need for the change and yet a third on getting the legislation passed. The Department of Children, Families & Learning, the Wetland

Conservation Act, MinnesotaCare and workers' compensation reform all took three or more years to achieve.

■ **Using the veto.** Gov. Carlson understood the power of the veto and recognized that the threat of its use could be more effective than a veto itself. As a result, he often found an openness to compromise among the legislative leadership. The backing of Republican House members, who successfully upheld all override attempts, strengthened his position and led directly to the successful passage of landmark legislation, such as the 1998 education tax credits and deductions, which were a direct result of the Governor's willingness to use his veto power when early agreement could not be reached.

■ **Bipartisan support.** Support from members of other political parties is critical, especially when different parties control the legislative and executive branches. A hallmark of the Carlson administration has been its ability to work on a bipartisan basis to meet its goals. The creation of a children's department, workers' compensation reform and MinnesotaCare are examples of initiatives in which the cultivation of bipartisan support was imperative.

■ **Strong allies and coalitions outside of government.** Achieving bipartisan support is easier when allies and coalitions of supporters outside of government are identified and enlisted to help lobby for legislation. Coalitions of supporters are often more difficult for lawmakers to ignore than other politicians. Education choice, fetal alcohol syndrome and tax reform legislation were passed in part because coalitions were created to support the effort.

■ **Compromise.** Fetal alcohol syndrome and wetlands legislation are two examples of how a carefully crafted compromise can result in public policy changes. While the ideal goal may be to institute reforms entirely as envisioned, the reality of the political process often dictates that changes must be made incrementally. The Carlson administration recognized that some change is better than none and that public policy often is improved and support for it strengthened when it comes out of compromise.

■ **Working outside the legislative committee process.** The sometimes contentious atmosphere of legislative hearings is not always the best place to craft public policy. While all changes to law must move through the legislative hearing process to give supporters and opponents alike an opportunity to voice their opinions, much of the groundwork for public policy change can be successfully laid by task forces and advisory councils. Participants have endorsed these groups because they offer an atmosphere in which questions can be asked, differences debated and solutions sought.

Minnesota Policy Reform: 1991–1999 reveals a governor with a tough-minded attitude toward government programs and spending who nonetheless appreciated — and used — the power of government to create opportu-

nity, particularly for families and children. Willing to use his veto to control spending and push for policy objectives, Carlson led a remarkable turnaround in the state's economic circumstances, while protecting and expanding programs that emphasized three things of primary importance to him and most Minnesotans: "jobs, kids and quality of life."

Preparing for change

Having decided not to run for a third term as governor and following through on his commitment to good government, Gov. Carlson set a tone of cooperation and committed staff to assist in the transition from his to the next administration. Early in 1998, he directed agency heads to preserve 50 percent of their annual budgets for a new administration and prepare briefing books on the operations and responsibilities of each department to provide an overview for the new governor and his staff. Gov. Carlson also instructed the Department of Administration to prepare transition headquarters with adequate computers and telephones from which the new administration could begin its work.

Restoring fiscal stability

Minnesota's fiscal health is a hallmark of Gov. Carlson's tenure, especially considering the state's financial condition when he assumed the office.

Within weeks of the 1990 election, Minnesota faced a \$197 million budget shortfall with six months left in the fiscal year and a \$1.8 billion deficit in the coming two-year budget. The deficit was not a complete surprise to Minnesota's new governor, but it was nearly double what he had been warning the state to expect. With the state's fiscal house in disarray, the early work of the Carlson administration focused on erasing the deficit and controlling spending, not on burdening the state with new programs. From the beginning, the Governor's fiscal goals were clear: restore the state's AAA bond rating, maintain spending below the rate of personal income growth, provide for an adequate budget reserve, return money to taxpayers and ensure the state's long-term fiscal stability.

Tight-fisted spending and ample use of the Governor's veto power along with a positive turn in the state's economy led to a budget surplus of nearly \$2 billion in February 1998. In addition, the Carlson administration has achieved institutional budget reforms designed to engender long-term fiscal stability, including fiscal

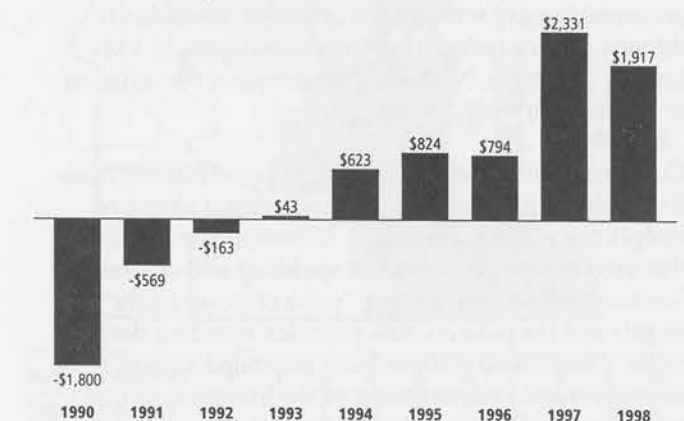
accountability and sound management practices, strategic and long-range budget planning, and spending control.

The administration insisted on increasing fiscal accountability for both state and local governments through "price of government" and "truth in taxation" legislation. The "price of government" is a measure of all state and local government taxes and other revenues as a percent of individual personal income. Using this standard reinforces the belief that government spending should not outpace growth in personal income. The price of government is targeted to drop 1 percentage point, from 18.1 percent in 1994 to 17.1 percent in 2001. Each one-tenth of a percent equals more than \$120 million in annual savings for Minnesota taxpayers.

The "truth in taxation" legislation was designed to give taxpayers a stronger voice in local spending and taxing decisions. It increases accountability by requiring local governments with taxing authority to publicly propose an annual budget and corresponding property tax levy for the following year. Among other things, the legislation requires that county auditors mail each taxpayer a statement of proposed property taxes and each local taxing authority hold a public hearing to discuss the proposed budget and tax levy.

The Carlson administration also supported legislation that encourages sound financial management of the state's resources. As a result, Minnesota now has both a cash flow account and a budget reserve or "rainy day" account. The cash flow account, currently \$350 million, or 3.1 percent of annual expenditures, provides a buffer for normal fluctuations in revenues and expenditures,

Minnesota has gone from a \$1.8 billion deficit to a \$1.9 billion surplus under Governor Carlson



Notes: All amounts shown in millions. The 1997 and 1998 data reflects the February general fund balance forecast. All other data comes from the November annual forecast.

Source: Department of Finance

and allows bills to be paid on time, even when revenue collection is behind schedule. The budget reserve legislation designates the amount of state funds that must be set aside in a reserve account each biennium, currently \$613 million, and the conditions that must exist before those funds can be tapped. Today, Minnesota's budget reserve represents 5.4 percent of annual expenditures.

Strategic and long-range budget planning has been the center of fiscal reform during the Carlson administration. This included initiating four- and six-year planning horizons, reforming the capital budget planning process and preparing for federal budget reforms.

Long-term planning horizons furnish advance warning of potential budget problems, providing the legislative and executive branches with a chance to solve problems while they are still manageable. In this kind of planning, the long-term effects of budget decisions are tracked; this has significantly altered how budget decisions are made. When outlining the fiscal implications of proposed legislation, the Finance Department and legislative fiscal staff make a more concerted effort to include the long-term effects, or "fiscal tails." This causes the Legislature to carefully consider not only how an appropriation will affect the current budget but also how it will influence future budget cycles.

The Carlson administration also initiated other important planning tools: base-line budgeting and performance reporting. Base-line budgeting subjects all programs to review. Previous budgeting practices fostered the attitude that historical spending bases were a given, and increases to the base were automatically necessary to fund greater workloads and new programs.

In their 1994-1995 and 1996-1997 biennial budgets, state agencies were required to finance all growth and program changes within their existing base of funds through service redesign and the elimination of low-priority programs. No automatic increases for inflation or higher salary costs were provided.

Combined with other fiscal management reforms, base-line budgeting has altered the fundamental nature of budget discussions. No longer is there an assumption that government revenues and spending will continue to increase indefinitely. Setting "price of government" targets and tax policies now precedes spending decisions. These fiscal reforms have generated a greater awareness and understanding of the limited nature of resources available to government and the need to assess the results of programs.

From the beginning, the Carlson administration focused on results. Measuring progress became a management approach, and *Minnesota Milestones* became a statewide framework for measuring success. Performance-based budgeting expanded the use of performance data in determining program funding. In the past, spending levels were the starting point however the program was working. Performance-based budgeting has shifted the discussion to tying investment to proven success.

The state's capital budget process also was changed to accomplish the goals of making wiser investment decisions and to manage existing assets more effectively. Capital budget proposals are now examined to ensure that they meet the long-term strategic planning goals of state agencies; they also are carefully managed in one year so as not to limit the size of future capital budgets. Planning has become a formal part of the predesign and design stages of any capital proposal.

The revised process has substantially improved the information available to the Governor and the Legislature for capital project decisions. State debt as a percent of the state's general fund budget has remained well below established guidelines.

The Carlson administration also demonstrated foresight in planning for federal budget changes, beginning in 1993 to monitor congressional budget actions and coordinate activities among agencies affected by federal cuts. These efforts made Minnesota a leader among states in preparing for losses in federal funding and dealing with significant changes in federal programs and requirements. Contingency reserves were established that allow Minnesota to plan for potential changes in federal funding, especially in health and human services programs.

A priority for Gov. Carlson was the desire to carefully examine the future of financing public services in Minnesota. To aid in that effort, Minnesota Planning and the Department of Finance worked on two reports examining the cost of government in Minnesota. Minnesota Planning's *Within Our Means: Tough Choices for Government Spending* was widely used by the Legislature, public policy groups and citizens to define and develop choices on how to control government spending.

The second report, *An Agenda for Reform: Competition, Community, Concentration*, was the result of a study conducted in 1995 by Vin Weber, a former Republican congressman, and John Brandl, a former Democratic state senator, at the request of Gov. Carlson. This report, coordinated by Minnesota Planning, identified growing pressures on state finances due to an increasing demand for services. As a result of this study, Minnesota Planning and the Department of Finance collaborated to

develop budget and law modifications needed to implement long-term program and spending changes.

When strategic planning and accountability initiatives failed to engender sound legislative fiscal policy, Gov. Carlson used the veto pen to control government spending and push for particular policies. In his eight years in office, he issued 179 vetoes, more than the combined total of vetoes cast by all Minnesota governors since 1939. None was overridden. By some estimates, more than \$1.5 billion in new taxes, spending and fees were avoided by the Governor's vetoes.

In eight years, Gov. Carlson has achieved the financial goals outlined at the start of his administration. The resulting policies, along with a booming state economy, gave investor service organizations the confidence to restore Minnesota's AAA bond rating, which had been lost in the early 1980s. Minnesota is one of only eight states to be rated AAA by all three bond rating services. Over 20 years, this rating will save Minnesotans \$1 million for every \$100 million of bonds sold.

Ensuring a top-quality judiciary

Through his or her judicial appointments, a governor's influence can extend far into the future. Recognizing this, Gov. Carlson sought to ensure that his choices would improve Minnesota's courts.

Gov. Carlson's appointments to the bench and his efforts to improve the gender, race and age diversity of the courts have earned him praise and resulted in a judiciary that more closely reflects the makeup of the state as a whole.

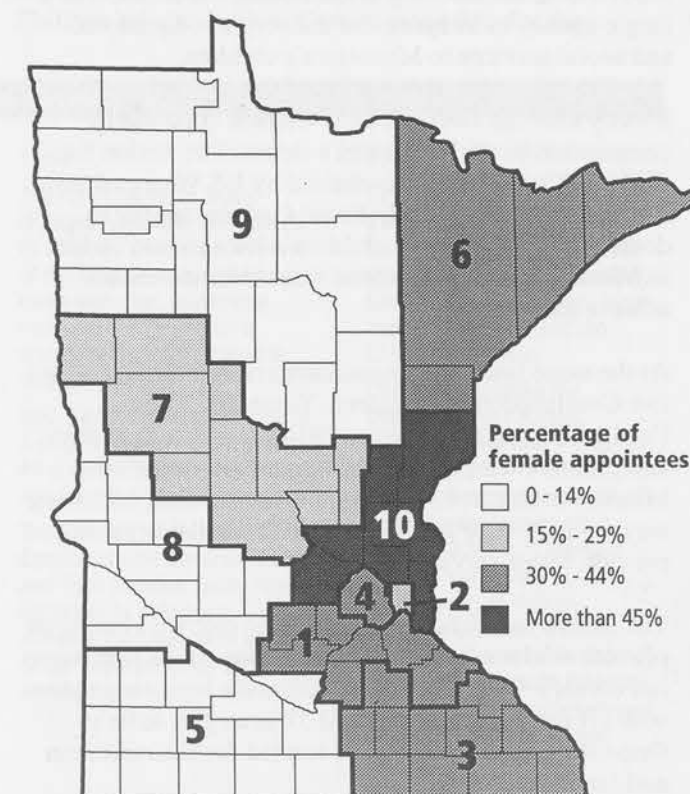
To help keep judicial appointments from being caught up in cronyism and political wrangling, the Legislature created the Commission on Judicial Selection in 1990, one year before Gov. Carlson took office. The Legislature was prompted to take this action by a growing understanding that a selection process outlined in statute could improve the recruitment and appointment of qualified judicial candidates, including women and minorities. Realizing that most state judges are appointed by the governor and retain office through uncontested election, the public and the Legislature saw a need for judicial appointments to be based on merit. The commission was charged with recommending three to five candidates that the governor could consider in

filling a district court vacancy. This charge was expanded in 1992 to include candidates for the Workers' Compensation Court of Appeals.

While Gov. Carlson did not create this process, he has elevated the commission's role by encouraging it to first identify the needs of the court in which a vacancy has occurred and then to look for candidates who have the skills and experience to meet those needs.

Gov. Carlson has honored the process by basing every one of his 93 appointments to the district court bench on the commission's recommendations. He also has appointed six Supreme Court justices, eight Minnesota Court of Appeals judges, six Workers' Compensation Court of Appeals judges, five Tax Court judges and two Office of Administrative Hearings chief judges.

Governor Carlson has appointed more women to the district court bench than any other governor



Judicial district	1	2	3	4	5	6	7	8	9	10
Total appointees	11	13	5	22	4	7	8	7	8	8
Female appointees	4	3	2	9	0	3	2	1	1	4

Note: Data reflects the total number of appointments for each district through October 14, 1998.

Source: Governor's Office

Gov. Carlson has appointed more women in percentage (31 percent) and in number (29) to the district court bench than any previous governor, and he named Kathleen Blatz to be the first female chief justice of the Supreme Court. He also appointed the first female, Anne Simonett, to be chief judge of the Minnesota Court of Appeals, followed by the first African American, Edward Toussaint, Jr. In addition, he named the first Asian American, Tony Leung, and the only current sitting American Indian, Robert Blaeser, to the district court bench.

Integrating children's services

An intensive focus on children's issues by the executive and legislative branches that began in 1991 and lasted well into Gov. Carlson's second term led to several innovations, the most significant being the creation of a single agency to integrate the delivery of educational and social services to Minnesota's children.

Shortly after his election, Gov. Carlson appointed a commission to study children's issues. The Action for Children Commission, co-chaired by US West executive Ron James and First Lady Susan Carlson, set out to develop a vision of what children's lives should be like in Minnesota and recommend ways the state could achieve that vision.

At the same time, the Legislature created the Legislative Commission on Children, Youth and Their Families to make recommendations on how to ensure and promote the present and future well-being of Minnesota children, youth and their families, including ways to help state and local agencies collaborate to provide better service.

The Action for Children Commission met with hundreds of citizens around the state before it issued its first report in February 1992. The report outlined a long-range plan with six recommendations and 37 strategies to help shape the future Minnesotans wanted for their children and families.

Recognizing the need to bring the various children's service programs together into an integrated delivery system, the commission recommended the creation of a Children's Cabinet made up of the heads of state agencies that had responsibility for children's programs. The cabinet, created by the Governor in 1992 and established

statutorily in 1993, was responsible for developing and overseeing children's policy and creating an integrated children's budget for the 1993-1994 biennium.

In the midst of these efforts, The Pew Charitable Trusts invited Minnesota through the Governor's office to compete with other states for a grant of up to \$2 million a year over nine years to reform service delivery systems for children. With the help of state agencies, communities and members of the Legislative Commission on Children, Youth and Their Families and the Children's Cabinet, Minnesota Planning developed the application that resulted in the state receiving a planning grant in December 1992.

The Pew Charitable Trusts required that the implementation plan show both legislative and executive branch commitment to systemic change of service delivery systems, so work on the plan became a joint project of the legislative commission and the Children's Cabinet — one of the first cooperative efforts between the legislative and executive branches to address children's issues. The working relationships between legislators and key Carlson administration leaders that developed out of this effort would prove invaluable in creating a children's department.

Both the Action for Children Commission and the Children's Cabinet had found evidence supporting the idea that to help children succeed, many state government services should be integrated. Gov. Carlson agreed and in his 1993 State of the State address proposed creating a single department that could address all the needs of children and offer families easy access to the programs they needed.

The Carlson administration also was interested in encouraging collaboration at the local level by creating "family centers" that would offer one-stop access to programs. At the same time, the legislative commission was proposing family services collaboratives as a way of coordinating funding and service delivery between agencies. The two approaches were combined, and with strong bipartisan support, legislation authorizing the creation of the family services collaboratives was enacted in 1993. In a year when state agency budgets were cut across the board, \$8 million was appropriated for grants to family services collaboratives. Gov. Carlson's proposal for a new children's department, however, failed that year and in 1994.

A 1994 change in leadership at The Pew Charitable Trusts led to the cancellation of its Children's Initiative, along with the opportunity for grant money. But the work Minnesota had done in anticipation of this opportunity yielded solid proof of how collaboration and

cooperation at the local level could help children and youth. Numerous examples of success generated new interest in a single children's department to accomplish at the state level what was under way at the local level through the family services collaboratives. Having worked together so well to create the collaboratives, the Children's Cabinet and the legislative commission decided to jointly tackle the challenge of creating a single department for children.

The two bodies agreed on goals, developed a vision and drafted legislation for a single children's department. In 1995 Gov. Carlson proposed replacing the Department of Education with a Department of Children and Education Services. This time, there was bipartisan support, especially in the Senate, and the bill began to move forward.

The journey, however, would be indirect and contentious. The bill was heard and voted on in numerous Senate committees, but it received only one hearing and was not brought to a committee vote in the House because the leadership thought it did not have the momentum to pass. They underestimated, however, the determination of Gov. Carlson and the Senate leadership.

Opposition to the bill came from many corners. Some senators feared losing influence over policy decisions for certain programs that were slated to move to the new department; some agency staff voiced concern over what would happen to various programs; and advocacy groups were afraid consolidation would make future cuts in children's programs easier to achieve. A reorganization would bring various programs under one roof, leaving some agencies with fewer resources, and this meant some legislative committees would have fewer dollars to appropriate.

The bill nearly died numerous times as it traveled to a Senate floor vote, but its final drama came on the last day of the 1995 legislative session. Administration supporters of the bill and Senate authors realized that the only hope for keeping the reorganization effort alive was to attach it to a bill that was headed to a conference committee and slated to be resolved in an upcoming special session. At the last moment, Senate authors amended it onto the omnibus education bill. Seeing the strong support for a new department that existed in the Senate and the administration, the House attached a pared-down version of the bill to its omnibus education bill. Encouraged by the Children's Cabinet, Gov. Carlson stood firm for the

Creating a children's department took commitment and tenacity

1991

Gov. Carlson appoints the Action for Children Commission.

Legislature creates the Legislative Commission on Children, Youth and Their Families.

1992

Action for Children releases its report, *Kids Can't Wait*, containing six recommendations and 37 strategies.

Carrying out a strategy of the Action for Children Commission, Gov. Carlson creates the Children's Cabinet.

Minnesota is invited to apply to The Pew Charitable Trusts for funds to improve the service delivery system for children and families. In December 1992, Minnesota becomes one of five states to receive one of the foundation's planning grants. The Pew Charitable Trusts' Children's Initiative becomes a joint project of the Children's Cabinet and the Legislative Commission on Children, Youth and Their Families.

1993

Gov. Carlson proposes the creation of a new state agency, the Department of Children and Education Services. The proposal gets no support in the Legislature.

Bipartisan legislation to create grants for family services collaboratives is introduced.

The Legislature formalizes the membership of the Children's Cabinet, provides funding and assigns to the cabinet the administration of \$8 million in family services collaborative grants.

1994

The Pew Charitable Trusts changes leadership and cancels its Children's Initiative. In place of the funding that might have come from that, Minnesota receives \$1.5 million for a scaled-back plan to integrate children's services.

Gov. Carlson pushes the idea of a single children's department for a second year, again finding no support in the Legislature.

The Children's Cabinet and the Commission on Children, Youth and Their Families jointly hire a facilitator to help them examine the creation of a single department for children's services.

1995

Gov. Carlson proposes creating a new children's department for a third time, this time with the support of the Legislative Commission on Children, Youth and Their Families and the Children's Cabinet.

Legislation creating the Department of Children, Families & Learning is enacted. The Department of Education is abolished on September 30, and the new department is born on October 1. Selected children's programs in the departments of Human Services, Economic Security, Corrections, and Public Safety, as well as Minnesota Planning transfer to the new department between July 1, 1996, and July 1, 1997.

Senate version, and the Senate did not waiver. Bowing to pressure, the House gave in, and the omnibus education bill, with language creating the Department of Children, Families & Learning, was passed.

On September 30, 1995, the Department of Education was abolished, and on October 1, 1995, the Department of Children, Families & Learning was created. Programs from the Department of Education moved to the new department immediately, while selected children's programs from the departments of Economic Security, Human Services, Corrections and Public Safety, and Minnesota Planning were transferred between July 1, 1996, and July 1, 1997.

The creation of the new agency also resulted in changes at the Legislature, especially in the Senate, which created a single children, families and learning policy committee, with separate budget divisions to address family and early childhood education, kindergarten-through-12th-grade education and postsecondary education. The House maintained an education policy committee but has finance divisions that mirror the budget divisions in the Senate. These changes have resulted in a more centralized and focused legislative approach for dealing with children's issues.

While other states have improved the collaboration between children's programs at the state level, Minnesota was hailed nationally for combining education and key children's programs from other agencies into a single children's department. The abolition of the Department of Education was powerfully symbolic. It signaled that Minnesota was serious about addressing the needs of the whole child and showed that problems can be solved — indeed, need to be solved — by looking for comprehensive, cooperative solutions.

Giving parents choices in their children's education

Gov. Carlson first outlined his vision of school choice in his 1996 State of the State address. Built on the state's policy of open enrollment for public schools and the overall need for more education options for families, his vision was to expand choice for low- and moderate-income families to include private and parochial schools. "With choice, we not only get more freedom, we get more competition. And we want to promote competition between schools," he declared in that address. "The truth is that competition spurs excellence. Competition keeps the focus on outcomes."

The school choice initiative was a key component of the education reforms that Gov. Carlson began when he first took office in 1991. The impetus for these reforms came out of growing evidence that Minnesota's education system was not preparing students for the world of the 21st century and a conviction that education should not be a one-size-fits-all endeavor. Testing of public school students by an independent company in 1996 produced disturbing results. In some urban districts, 53 percent of students performed below a passing score in math, and 60 percent had less than a passing score in reading.

The Carlson administration believed that competition, through school choice, could improve public education by encouraging top performance and compelling districts to focus on student learning and achievement. In June 1997 Minnesota became the first state in the nation to enact statewide school choice. In reporting on this historic reform, the *Wall Street Journal* called Minnesota a "model for the nation," and numerous states have sought Minnesota's guidance on how to achieve this reform of their own systems.

The education reforms of the Carlson administration occurred in several areas, including spending, technology, testing and graduation standards, and charter and lab schools. Total funding per pupil has increased by 38 percent, before inflation, since Gov. Carlson took office, giving Minnesota an annual education budget exceeding \$6.7 billion. To prepare students for the future, the state invested \$130 million in new computer technology, which will give it the highest ratio of students to computers of any state by the year 2000.

Statewide testing was implemented so student and school performance by school site could be measured. New graduation standards were also put in place to ensure that students have mastered basic skills such as

reading, math and writing by the time they graduate from high school. Scores on eighth-grade basic standards tests have already shown improvement. Overall, 68 percent of eighth-graders passed the reading test in 1998 — the first year testing was mandatory — compared with 59 percent in 1997.

Minnesota created the first charter schools in the nation in 1991, with the first school opening in September 1992. Each charter school offers a unique educational program. Funding to help charter schools pay for building leases and additional funding for school startups was approved during the 1997 legislative session, and the number of charter schools allowed by law was increased. Other changes allowed public and private higher education institutions to sponsor charter schools and public schools to become charter schools with the approval of a majority of their teachers.

Many of these reforms reflect recommendations made by former state Sen. John Brandl and former U.S. Rep. Vin Weber in a report commissioned by Gov. Carlson in 1995. In that report, *An Agenda for Reform: Competition, Community, Concentration*, Brandl and Weber called for education vouchers that could be used by low-income families at private and parochial schools and for independent learning and home schooling. They also recommended removing the cap on the number of charter schools, amending legislation to encourage their development and establishing a mechanism to monitor and report on school performance.

Minnesota's plan for school choice did not come easy. The first school choice proposal, brought forward during the 1996 legislative session, was a voucher plan that received only one vote of support. The plan would have created a pilot project in which low-income families in some communities would receive money from the state to send their children to private schools. Opponents saw the voucher plan as a direct assault on public education funds and as a way for private schools to draw off the best students, leaving the public schools to deal with more challenging children. In addition, concerns were raised over the constitutionality of the voucher proposal, and the plan lacked a broad base of grass-roots support because Minnesotans did not understand how it would benefit them. The effort also taught an important lesson about the power of language: parents and policy-makers were uncomfortable with the term *voucher* and more open to such names as "scholarship program" or "education certificates."

In 1997 Gov. Carlson proposed "Students First," a comprehensive package that paired education reform plans with a proposal for expanded tax deductions and new tax credits for low-income families. The package

contained a proposal for a statewide testing program in which every school would test students and publish the results, allowing parents to compare school performance. It also included proposals for site-based management of schools, strengthening opportunities for charter schools to succeed, establishing lab school grants to test the very best educational practices and increasing spending on technology.

The tax deduction and credit plan sought to triple the existing education tax deductions, allowing parents to take up to \$3,000 a year off their taxes for qualifying educational expenses. The plan also proposed giving parents earning less than \$39,000 a year an educational tax credit of up to \$1,000 per child. Those who were schooling their children at home also could receive a credit of up to \$1,000. The plan aimed to improve overall student achievement by allowing the deduction or credit to be used for computers and software, educational camps, tutors and educational enrichment programs, in addition to private school tuition.

The shift to a plan for tax deductions and credits was an attempt to overcome the objections and concerns of voucher opponents by allowing parents to choose what educational options would work best for their children. It also had a firm constitutional foundation, since the U.S. Supreme Court in 1983 had upheld a Minnesota statute allowing parents with children in private or public schools to take tax deductions for transportation, books and tuition.

The Democratic-controlled Legislature balked at the proposal. Teachers' unions and school boards flooded legislators with faxes and phone calls, voicing their opposition to the plan. The proposal was attacked as being against public schools and public school teachers. A coalition of proposal supporters called Minnesotans for School Choice countered with its own lobbying effort, joined by a group of 12 leading state business organizations. Also backing the plan were members of minority communities whose support was gained when proposal supporters bypassed the leaders in those communities and went directly to the members to learn their concerns.

While many of the elements in the Governor's Students First proposal moved forward, the plan to expand tax deductions and create tax credits received, at best, lukewarm support from the Legislature. When the final education bill was passed, it contained everything in the Students First proposal, except the deductions and credits. As a result, Gov. Carlson vetoed it, saying that while the bill makes "important steps forward in reforming our education system, [it] does not empower parents and provide needed choice and competition. Therefore,

it does not achieve this administration's fundamental goal of reforming the education system and allowing choices for all Minnesota families."

The Governor's veto began a month-long standoff with the legislative leadership. In May 1997, Minnesotans for School Choice commissioned a survey that found that 65 percent of respondents favored the Governor's proposal to use a tax credit or deduction for tutoring, summer school, home education, home computer equipment or private school tuition. Despite growing public support for the governor's plan, the debate remained intense. The administration still had to overcome the argument that tax credits and deductions would take money out of public schools and thereby weaken them. The Governor argued that choice and accountability would benefit all students and all schools, and that the Students First plan used new money to pay for the tax credits and deductions and did not take money from public school funding.

In the midst of this tension, Rep. LeRoy Koppendray, a Republican and staunch supporter of the Governor's school choice efforts, and Rep. Becky Kelso, Democratic chair of the House K-12 Education Finance Committee, were working behind the scenes to forge a compromise. While Kelso did not support the governor's school choice plan, she and Koppendray, who had worked together in the past, wanted to see the debate progress. Each acted as a messenger and kept the debate moving, quietly bringing proposals from their respective camps. As the two sides got closer, legislative leaders and the Governor's office held direct negotiations to iron out details.

Progress remained slow, however, and was complicated by the impending shutdown of the Department of Children, Families & Learning and the layoff of hundreds of state employees, along with the potential delay of funding for schools. With the veto, the department's funding would expire on June 30, and school districts could not plan for the coming school year. To force a resolution, Gov. Carlson set June 25 as the date for a special session.

Then, on the evening before the special session was to convene, Gov. Carlson, House Speaker Phil Carruthers and Senate Majority Leader Roger Moe announced a compromise on the school choice issue. Families earning less than \$33,500 per year would be eligible for a \$1,000 refundable tax credit to be used for various education expenses, except private school tuition. In addition, the education tax deduction was increased from \$1,000 to \$2,500 for each child in junior or senior high school and to \$1,625 for others. The deduction could be used for any purpose, including private school tuition.

Despite vehement opposition from the teachers' unions, the Legislature approved with strong bipartisan support a two-year education package that raised funding for public education by nearly 15 percent, implemented statewide testing and graduation standards, and provided \$260 million in new money for tax deductions and credits.

In July 1998 the departments of Children, Families & Learning and Revenue launched a campaign called "Take Credit for Learning" to make families aware of the new tax credits and deductions. In addition, bridge loan programs are being developed to help families avoid the financial hardship of having to pay tuition bills in the fall but wait until the following spring for the tax refund.

Helping all Minnesotans obtain health care

By the time the nation's health care system became a primary campaign issue in the 1992 presidential election, Minnesota's subsidized health insurance program — MinnesotaCare — was already up and running.

Minnesota leaders had been discussing health care reform since the 1980s, and in 1987 Minnesota became the first state to implement an insurance plan for children who are ineligible for Medicaid. The Children's Health Plan, as the program was called, went through changes in the following two years and became the model for the MinnesotaCare legislation of 1992.

Legislation to provide universal access to health care for adults as well as children was first introduced in 1988, but it took four years of study and debate to become law. HealthRight legislation, later renamed the MinnesotaCare Act, was signed by Gov. Carlson in 1992; it provided a comprehensive package of strategies focused on controlling costs and improving quality. The act also created MinnesotaCare, a subsidized health insurance program for Minnesotans who do not have health insurance. There are no health condition barriers, but applicants must meet income and program guidelines to qualify and must pay a premium based on their family size and income.

In 1988, the first universal health care access bill, Healthspan, called for expanding existing programs to provide a more comprehensive and cost-effective benefit

package for all uninsured Minnesotans. The bill got bogged down in side issues and never made it through committees; many legislators also opposed expanding programs at that time.

A second Healthspan bill was put forward in 1989, this time with the support of major health organizations, but it failed to advance in part due to opposition from businesses. The Legislature did, however, form the Minnesota Health Care Access Commission to develop a plan to provide universal access to health care. The commission was composed of 28 members representing consumers, employers, labor unions, health care providers, health plan companies and state agencies.

After 15 months of research into the problem of access to health care in Minnesota, the commission reported in January 1991 that 370,000 Minnesotans were uninsured, 11,000 were refused health care and 50,000 delayed seeking medical care because they had no insurance. The commission recommended sweeping reform measures and called on the state to play a pivotal role in ensuring access to needed health care.

Legislation based in part on the commission's recommendations passed both the House and the Senate in 1991 but was vetoed by Gov. Carlson in a politically unpopular move. Although the Governor supported comprehensive reform of the health care system, he had grave concerns that the bill did not provide a stable funding mechanism and would place Minnesota's taxpayers at long-term financial risk. The financing plan for the 1991 bill was a new 5-cent-a-pack tax on cigarettes that would take effect July 1, 1992, and a 2 percent tax on medical receipts that would be levied on hospitals beginning January 1, 1993, and on other medical providers a year later. Since the state was in the midst of dealing with a \$1.8 billion budget deficit over the coming two-year cycle, Gov. Carlson felt compelled to veto the bill.

After the veto, Gov. Carlson took a more active role through the Department of Health and senior staff in his office to come up with a workable plan for Minnesota. In his view, health care reform legislation had to address three key issues: access to affordable quality health care, the control of skyrocketing health care costs and the development of a funding mechanism that would keep the state free of huge fiscal burdens in the future.

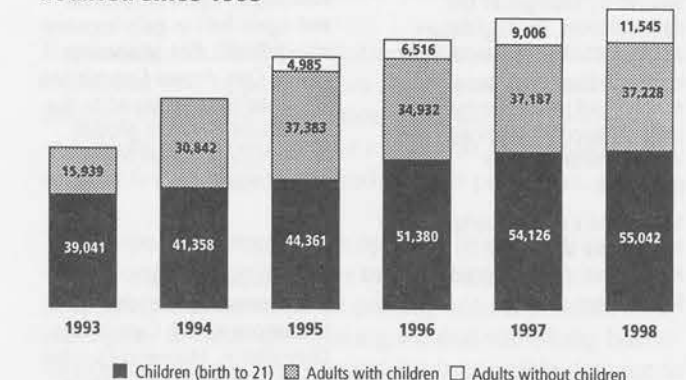
In November 1991, the Carlson administration, led by the Department of Health, unveiled its health care reform proposal — called the HEART plan, for "Healthcare Efficiency and Reform Today" — which outlined what the Governor required from health care legislation and provided a starting point for negotiations.

Also that fall, Dave Gruenes, a Republican representative, approached a House colleague, Paul Ogren, a Democrat, to seek ways to bridge the differences in the debate over health care reform. The two men brought together five other legislators who wanted comprehensive health care reform — Republicans Sen. Duane Benson and Rep. Brad Stanius and Democrats Sen. Linda Berglin, Sen. Pat Piper and Rep. Lee Greenfield. This group, which became known as the Gang of Seven, began working to create a reform bill that would be acceptable to the Legislature and Gov. Carlson.

Early negotiations among the Gang of Seven took place without the involvement of the Carlson administration, though proceedings were followed by Health Department staff. According to Sen. Linda Berglin, the group's early efforts focused on developing a common base of understanding and then shifted to searching for ways to bridge the gaps in how to approach the problems. From all accounts, this was a thoughtful and deliberative process away from the heat of legislative committees.

The financing plan for the 1992 bill included a short-term cigarette tax, enrollees' premiums and health care provider taxes. The latter included a 2 percent tax on gross patient revenues of hospitals and surgical centers beginning in 1993 and was expanded in 1994 to the gross revenues of licensed health care providers. In 1996, a 1 percent gross premium tax on nonprofit health maintenance organizations and health service companies was added and later repealed. Legislation in 1997 cut the 2 percent MinnesotaCare tax to 1.5 percent for the 1997-1998 budget cycle, although this tax will return to 2

Annual enrollment in MinnesotaCare has nearly doubled since 1993



Notes: Data reflects annual enrollment for fiscal years ending June 30 from 1993 through 1998. Adults without children were not eligible for MinnesotaCare until 1995.

Source: Department of Human Services

percent on January 1, 1999. In addition, beginning fiscal year 1996, Minnesota won approval for Medicaid funding for payments it makes for children and pregnant women enrolled in MinnesotaCare. This federal contribution covered about 55 percent of MinnesotaCare's enrollees in July 1996.

When the Gang of Seven's bill was drafted and introduced, it faced tight committee deadlines. To prevent possible snags from dooming the whole bill, the group divided the bill into small, categorical sections that could be steered through the various committees and reassembled in higher-level policy committees. While this process kept legislative committees focused on specific sections of the bill, lobbyists complained that the strategy was unfair. Supporters of the process, however, countered that too many special-interest groups were involved for the bill to be written in legislative committees. Drafting the bill in closed-door meetings allowed legislators to try out ideas and ask questions, they maintained, and the Gang of Seven meetings provided an atmosphere of cooperation and collaboration that is rarely found in legislative committees.

Minnesota pioneers in providing universal access to health care

1987

Minnesota Legislature creates the Children's Health Plan to provide health care to pregnant women and children under the age of 6 who meet certain eligibility requirements.

1988

Spurred by changes at the national level, the Legislature changes Children's Health Plan eligibility to exclude pregnant women and infants under age 1 (now covered by Medicaid) and include children age 1 through 8.

Minnesota's first universal health care access bill, Healthspan, is introduced but fails to pass.

1989

Children's Health Plan is again revised to expand eligibility to include children between the ages of 1 and 18 and alter service coverage. As a result of this expansion, enrollment grows to more than 29,000 by the end of 1991.

Healthspan again introduced and again fails to gain approval of legislators. The Minnesota Health Care Access Commission is formed to recommend to the Legislature a plan to provide access to health care for all Minnesotans.

1991

Based in part on the recommendations of the Minnesota Health Care Access Commission, Minnesota's third health care access bill, House File 2, passes but is vetoed by Gov. Carlson because it lacks cost-control provisions and an adequate funding source.

The Gang of Seven continued to meet regularly once the HealthRight bill, as it was called, was introduced and began traveling through committees. This allowed for regular checkups on the progress of the bill and a chance to troubleshoot problems and efforts to defeat the bill. The Legislature passed the HealthRight legislation, later renamed MinnesotaCare, in April 1992, and Gov. Carlson signed it shortly after.

MinnesotaCare has proven to be an important tool for moving Minnesotans to self-sufficiency. Welfare caseloads declined as a result of this law, according to a 1996 study by the Minnesota Department of Human Services. The study found that 4,600 fewer families were on welfare than would have been had MinnesotaCare not been in operation, resulting in net savings of \$2.5 million per month, after subtracting the monthly MinnesotaCare subsidies for these families.

In addition, Minnesota's rates of uninsured individuals have remained steady over the past several years, while national rates have climbed. In 1996 Minnesota ranked fourth nationally in the overall number of insured residents. Today, more than 100,000 people receive their insurance coverage through MinnesotaCare.

1992

"Gang of Seven" legislators work with Carlson administration to craft a health care reform plan, called HealthRight and later renamed MinnesotaCare, that includes a subsidized health care program for uninsured Minnesotans. The bill is passed and signed into law.

Health care access is a hot-button issue in the presidential election.

1993 - 1995

Various amendments to MinnesotaCare are enacted, and the program is expanded to include adults without children.

1995 - 1996

Minnesota gets approval for federal Medicaid funding for pregnant women and children enrolled in MinnesotaCare.

Preventing the tragedy of fetal alcohol syndrome

Minnesota took significant strides in 1998 to address the preventable tragedy of fetal alcohol syndrome, becoming one of only a few states to approach this problem comprehensively. This was the result of efforts spearheaded by First Lady Susan Carlson. Her concern for children affected by prenatal exposure to alcohol stemmed from her work as a Hennepin County juvenile court referee, where she witnessed the devastation caused by drinking by pregnant women.

Fetal alcohol syndrome and fetal alcohol effects — a condition that includes some but not all of the characteristics of the syndrome — can occur when pregnant women drink alcohol. Fetal alcohol syndrome is characterized by abnormal facial features, slow growth and permanent brain damage; its traits include poor impulse control and social skills, and problems with memory, attention or judgment. Children do not outgrow fetal alcohol syndrome or effects. They often have trouble communicating and getting along with others, and fail to consider the consequences of their actions. Many have problems that make it difficult for them to function independently as maturing teens and adults.

While the prevalence of fetal alcohol syndrome and effects has only been estimated, the annual costs of providing health care and support services for Minnesotans who suffer prenatal alcohol exposure is believed to run into the millions of dollars.

Susan Carlson sought to raise public awareness of this problem and to obtain legislative funding for programs designed to prevent fetal alcohol syndrome. Gov. Carlson was a staunch supporter, making an impassioned plea in his final State of the State address for funding a comprehensive initiative. "The tragedy is that it's all preventable," he said. "The bottom line is this: pregnant women cannot drink alcohol."

In 1997, Susan Carlson led an effort that resulted in a legislative appropriation of \$1.25 million to provide transitional chemical dependency services for pregnant women and to educate medical professionals on how to conduct alcohol screening and referrals for pregnant women and identify affected children so they could get appropriate services. An additional \$500,000 was earmarked for a public awareness campaign. While this was a step in the right direction, it did not go far enough in Mrs. Carlson's eyes.

In July of that year, Gov. Carlson created the Task Force on Fetal Alcohol Syndrome to recommend a comprehensive approach to preventing and reducing the harm from prenatal alcohol exposure. Co-chaired by Susan Carlson and Hennepin County Juvenile Court Judge Joan Ericksen Lancaster and initially staffed by the Department of Health with assistance later from Minnesota Planning, the task force was made up of state agency commissioners, legislators, community advocates, health care professionals, judges and lawyers, family members of affected individuals, media representatives and an alcohol industry representative.

In hearings around the state, the task force learned, among other things, that Minnesota lacks adequate data on the breadth and severity of the problem, key professionals have too little knowledge of fetal alcohol syndrome and effects, and poor coordination of programs hampers prevention, diagnosis and services.

The task force detailed nine findings and 62 recommendations in a report to the governor in January 1998 called *Suffer the Children: The Preventable Tragedy of Fetal Alcohol Syndrome*. These recommendations became the basis for proposed legislation.

Focusing on prevention and intervention strategies, the executive committee of the task force decided to push for a controversial recommendation to expand the Civil Commitment Act and mandatory reporting provisions to require medical and other professionals who suspect alcohol abuse by a pregnant woman to refer her for chemical screening and assessment. Under the proposed change, a positive test showing alcohol use and a failure to follow a physician's recommendations to cease using alcohol would result in an emergency commitment to a treatment program. Minnesota already had a law on the books that required pregnant women who were using illicit drugs to be committed to a treatment program.

Expanding the Civil Commitment Act was certain to encounter stiff opposition, so the executive committee decided to have the legislation introduced in two pieces, one containing commitment expansion and the other a request for \$5 million to fund various programs.

The proposed changes were opposed by medical professionals and women's groups out of fear that they would keep pregnant women from seeking critical prenatal care. Advocates of these changes argued that something had to be done to prevent the potential for irreversible damage to the unborn children of women who continued to use alcohol during pregnancy. In the first hearing in the House Judiciary Committee, a compromise was crafted: changes in the Civil Commitment Act were dropped and the mandatory reporting requirement became a voluntary one,

allowing health care and other professionals to refer for further testing and possible treatment women who they believed were at risk of doing lasting harm to their child. With this compromise, the legislation moved forward and passage seemed imminent.

On the floor of the Senate, however, an attempt was made to amend the bill with a ban on partial-birth abortions. This led to a week-long delay until the amendment was withdrawn. The bill to include voluntary reporting of alcohol abuse during pregnancy passed unanimously, and Gov. Carlson signed it on April 6, 1998.

The second piece of legislation — the \$5 million appropriation — also got snagged in the abortion debate. The same amendment banning partial-birth abortions that had been defeated in the Senate was backed by a majority of House members in that chamber's version of the health and human services appropriation bill, which contained the funding for fetal alcohol syndrome programs. With the Senate and House at odds over this appropriations bill, the fetal alcohol syndrome appropriation seemed doomed. To get around this, the funding measure was attached to the education supplemental appropriation bill with a rare clause that would void the appropriation if the money also were included in the health and human services supplemental appropriation bill. As it happened, the health and human services bill made it through conference committee with the \$5 million appropriation for fetal alcohol syndrome programs intact and was signed by Gov. Carlson.

The \$5 million will be used for a variety of purposes, including:

- Funding a statewide public awareness campaign
- Studying the prevalence and incidence of fetal alcohol syndrome and effects
- Expanding maternal-child substance abuse projects
- Providing intervention and advocacy programs for at-risk and chemically dependant women
- Creating a statewide network of regional diagnostic clinics
- Developing professional training about fetal alcohol syndrome and effects

The legislation also created a fetal alcohol syndrome coordinating board, made up of representatives from the public and private sectors. Unique to Minnesota, the board will help ensure an integrated, comprehensive and statewide approach to preventing fetal alcohol syndrome and effects and to providing services for those affected.

The legislative victory was largely due to an expanded coalition that included advocates, legislators, commis-

sioners, the First Lady and Gov. Carlson. This strategy of bringing together a broad range of interest groups and participants to work cooperatively for a common goal was used often by the Carlson administration.

Moving Minnesotans from welfare to work

Gov. Carlson has long supported efforts to help families move out of poverty and to reduce dependence on welfare. This vision, developed into a plan over many years by the Department of Human Services and other state agency staff, was the foundation for welfare reform legislation crafted by a bipartisan group of legislators and signed into law by Gov. Carlson in 1997.

The sweeping 1996 federal reform of welfare led Minnesota and other states to make historic changes in their assistance programs. In revamping the nation's 60-year-old system, Congress declared that welfare will be a program of temporary assistance, not a lifetime entitlement, except for families with serious hardships.

Minnesota was well positioned to act on the federal changes. It had begun planning a new model for welfare 10 years earlier, after the Legislature had threatened to cut welfare benefits that were the fifth highest in the nation. A bipartisan commission on welfare reform was created to debate benefit levels, but the group of county officials, nonprofit providers and advocates for the poor undertook a broader task and studied the Aid to Families with Dependent Children welfare program and identified ways to improve how government responds to families in crisis. The commission's key findings were instrumental in shaping the objectives for restructuring welfare in Minnesota. It recommended shifting the focus of AFDC from an income maintenance program to a transitional program to help long-term recipients move toward self-sufficiency.

In 1987 the newly created Office of Jobs Policy was assigned the task of implementing the commission's recommendations, and under its leadership an inter-agency team examined how Minnesota would reform welfare if there were no federal restrictions. The group developed an initial plan that evolved into the Minnesota Family Investment Program. The Legislature authorized the program in 1989, and Congress passed legislation allowing Minnesota to test it.

In January 1991, despite budget worries, the Carlson administration made the Minnesota Family Investment Program a priority and supported efforts to fund pilot projects in seven counties. Gov. Carlson saw the pilots as an important early step that could lead to long-term, comprehensive reform of the state's welfare system. Eighteen months after the pilot projects began in 1994, 52 percent of long-term urban participants were working, an increase of almost 40 percent over the control group, who were receiving traditional AFDC payments.

In this trial program, assistance was fundamentally redefined. Recipients did not lose financial help once they got a job. Families continued to receive a state grant until their income reached 137 percent of the federal poverty level. In addition, the state increased funding for subsidized child care and created access to health care through the MinnesotaCare program so that families no longer eligible for welfare assistance still had support for maintaining their independence.

The Carlson administration continued to work to advance and enact the ideals of the Minnesota Family Investment Program until the program finally became the model for statewide welfare reform in 1997.

Federal welfare reform legislation passed in August 1996 was to take effect in January 1998, leaving little time for legislators, administrators and advocates to understand and study the mandated changes and craft a plan for Minnesota. Fortunately, Minnesota already had a successful model in place — the Minnesota Family Investment Program pilot projects — that could be the foundation for comprehensive reform.

To help the state craft a welfare reform plan, Minnesota Planning worked to educate legislators and bring constituents together to discuss Minnesota's options. It issued a report, *Work in Progress: Federal Welfare Reform in Minnesota*, in January 1997 that focused on the potential impact of the federal law's work requirements and the implications for Minnesota's children and immigrants.

The report brought together the information a broad audience needed to understand the implications of this reform for welfare recipients, institutions, organizations and the state as a whole. It tackled the jargon and mechanics of welfare reform to explain the ramifications of the changes, the reasons the changes were made and their anticipated effects.

As part of its *Work in Progress* effort, Minnesota Planning co-sponsored with the Minnesota Legislature a conference on welfare reform aimed at creating a broad awareness of the choices available for reforming the

state's welfare program. Legislative leaders canceled all floor sessions and committee hearings for the day of the conference and encouraged legislators to attend. At the conference, legislators, advocates, government agency staff and welfare recipients together discussed the pending changes.

While the conference helped highlight the issues facing the state and generate ideas, the detailed work of designing Minnesota's reform plan remained to be done. Policy-makers had to examine the lessons from the Minnesota Family Investment Program pilot projects and determine how to include elements of that program into a comprehensive, affordable reform plan that would meet all the federal requirements.

At the invitation of Gov. Carlson, Senate and House leaders were asked to send a small group of key legislators to meet with agency commissioners in closed-door sessions away from the Capitol to discuss options for welfare reform and draft a bill. This task force was loosely modeled after the bipartisan Gang of Seven that crafted the MinnesotaCare legislation. Unlike that effort, however, the Carlson administration from the start participated actively in the welfare reform negotiations.

The administration through the Department of Human Services also provided a starting point for welfare reform discussions — a statewide expansion of the Minnesota Family Investment Program. In these meetings, legislators were able to examine and discuss each issue thoroughly, along with related technical and policy issues. State agency staff helped them crunch numbers for various policy options.

The task force's work generated some controversy. Opponents of the welfare reform effort accused the task force of violating Minnesota's open meeting law and crafting state policy without public input. After the protestors came to a task force meeting to complain about the process, the task force opened the meeting to them and then completed its work in legislative committees.

It was not the intent of the Legislature or the Carlson administration to bypass the public legislative committee process. Working under a tight federal deadline for a state plan, the task force wanted to have broad agreement on the elements of a welfare reform bill before sending it through the committee process. The Department of Human Services had sought broad community and local government support in developing the initial Minnesota Family Investment Program pilot projects and the proposed statewide plan modeled on the program. In addition, legislators held daily hearings on welfare reform while they crafted the reform plan.

The bill was passed by the Legislature and signed by Gov. Carlson on April 30, 1997. The statewide Minnesota Family Investment Program, which took effect January 1, 1998, transformed the state's welfare system into one that expects, supports and rewards work. Participants are expected to work to support their children, while the state helps with quick job placement, child and health care, and an income supplement. Families leave the program when their income is 120 percent above the poverty level. There also is a five-year lifetime limit on receiving assistance.

The success of the Minnesota Family Investment Program pilot projects in moving people off welfare and into jobs was bolstered by other programs and policies. This same success is expected under the statewide welfare reform plan adopted in 1997. Early data shows that the number of families enrolled in public assistance has fallen from an average of 64,000 in 1994 to 49,000 in April 1998, a decrease of 23 percent.

In addition, the state's strong child care subsidy program helps welfare recipients go to work and working parents remain independent, and its low-cost health insurance program, MinnesotaCare, helps people get off and avoid welfare. The state's national leadership in child support collection measures, which were in place before the federal reforms, have been augmented by new tools, including a law under which the state can suspend the driver's license of a parent who owes child support. Minnesota counties collected a record \$396 million in child support payments in fiscal year 1998.

Making the workers' compensation system fair and affordable

From the beginning, the Carlson administration promoted efforts to make the state's workers' compensation system a fair system, competitive with those of neighboring states and affordable to businesses. Gov. Carlson viewed the workers' compensation system of the early 1990s as a barrier to the creation of jobs and a successful economic future. He vowed in his first State of the State address to work for worker's compensation reforms that had passed in prior sessions only to be vetoed.

The need for meaningful workers' compensation reform was made more urgent by anecdotal evidence that the state was losing some of its more mobile industries, such as trucking, in part because of the costs of workers' compensation. In addition, firms located near Minnesota's borders complained about the high cost of doing business in Minnesota, particularly workers' compensation insurance rates, and the competitive disadvantage they had in bidding for jobs against businesses from neighboring states.

The 1992 Legislature enacted a reform bill that provided permanent savings by implementing systems that helped cut workers' compensation medical and rehabilitation costs. The reforms included using state-certified managed care organizations, treatment parameters and a medical fee schedule based on the Medicare fee schedule. Both business and labor supported these changes.

The Carlson administration continued to push for additional changes. Minnesota's benefit costs remained high, especially compared to Wisconsin's. Businesses continued to leave the state, citing high workers' compensation costs or taxes as the most significant factor in their decision to move.

In 1995, fresh from his re-election, Gov. Carlson moved aggressively for reform. In his State of the State address that year, he declared, "I want Minnesota to enact meaningful reform that addresses the major cost drivers in the system. Let's vow not to lose one more employer to high workers' compensation costs."

The Carlson administration, through the Department of Labor and Industry and with support from key Democratic and Republican legislators, proposed legislation to

change the system by reducing litigation, requiring more oversight of insurance rates, controlling the cost of benefits and increasing compliance provisions for insurers and employers.

The unions were split over the bill. The Teamsters, which had endorsed the Governor in his re-election bid, came to support the proposal near the end of the session, while the Minnesota AFL-CIO opposed it. Trial lawyers also objected to it.

With Republicans in the minority in both the House and Senate, the administration had to work hard to make sure the votes were in place in committees and on the floor. To do this, it used three specific strategies:

■ **Establish goals and principles.** Gov. Carlson set out goals and principles that legislation would have to reflect if he were to sign it. These expectations formed the basis for all the administration's efforts with legislators and lobbyists to pass a bill.

■ **Build a bipartisan coalition.** Staff from the Department of Labor and Industry and the Governor's legislative relations office regularly held one-on-one conversations with legislators to build a bipartisan coalition in support of the bill. Staff also developed briefing books to help legislators debate issues during committee and floor sessions.

■ **Enlist the help of business lobbyists.** Staff also developed and met regularly with a coalition of business lobbyists. This spread the lobbying effort out among a large group of people and kept efforts focused on passing a bill the governor would approve.

Despite these efforts, passage of the bill was not certain. Authors managed to get a bill through the committees, but it was not one the governor wanted to sign. When finally called to the floor, the committee bill was amended to reflect the Governor's desires. No advance copies of the amendments had been available for review, which led to criticism of the administration. To combat this charge of secrecy, the administration held open meetings on the provisions included in the bill that had been passed by the House until the Senate was ready to consider it.

The outcome in the Senate, which had a larger Democratic majority than the House, was uncertain because the administration needed the support of at least 10 Democrats. Despite hard lobbying against it by labor and trial lawyers, the bill passed with only minor amendments.

Along with reforms affecting litigation, insurance rates, benefit levels and compliance, the legislation provided

safety incentives for employers and focused on getting injured workers back to work more quickly. The safety incentives have reduced workplace accidents and significantly lowered workers' compensation costs. The 1992 and 1995 reforms have resulted in total systems savings of \$360 million since 1994. Preliminary 1997 data suggests that estimated total systems costs have dropped 26 percent, to slightly more than \$1 billion, since 1994.

Evidence also exists that the reforms of 1992 and 1995 have helped to improve Minnesota's business climate. The Department of Trade and Economic Development reported that among businesses moving out of the state, the percent citing high workers' compensation costs as the most significant reasons for their move decreased in recent years. In addition, an annual *Twin Cities Business Monthly* survey showed the percent of business executives citing federal and state business regulations as the most important issue facing companies in the Twin Cities fell from 26 percent in 1995 to 10 percent in 1997.

Besides accomplishing reforms that give Minnesota a more favorable business climate, the Carlson administration learned how to build cross-sector, bipartisan coalitions for effecting change. This knowledge proved invaluable in Gov. Carlson's final term as he pushed for changes in public education and the property tax system.

Cost of workers' compensation insurance per \$100 of covered payroll has dropped



Note: Data for 1996 and 1997 is preliminary.
Source: Department of Labor and Industry

Tackling taxes to improve Minnesota's business environment

Throughout his term in office, Gov. Carlson regularly promoted increasing jobs and improving the quality of life. Reforming Minnesota's overall tax policy and returning money to taxpayers were important underlying strategies for accomplishing these two goals.

The Carlson administration through the Department of Revenue pushed for reform of the state's property tax classification rate structure and the elimination of the tax on new and replacement capital equipment for production industries. Both actions will continue to significantly affect Minnesota businesses.

Tax cuts expected to total nearly \$2.8 billion from 1991 through 2001 have come from property tax rebates, education tax credits and deductions, the working family credit, reductions in the capital equipment replacement tax and levies on miscellaneous small business expenses.

For Gov. Carlson, property tax reform was fundamental to making the state's system more fair and equitable. In 1991 his administration proposed a comprehensive plan to lower the tax burden on businesses and rental properties. At the time, Minnesota ranked first among all states in commercial property taxes and second in property taxes on apartments. The heavy tax burdens on businesses undermined Minnesota's competitiveness, and those on rental residential properties adversely affected the state's quantity and quality of affordable rental housing.

The administration proposed but received little support for increasing taxes on lower-priced homes while lowering them on rental and business properties. The defeat of this reform effort in 1991 showed the way to success in 1997 and 1998.

The primary obstacle to property tax reform was political: legislators on both sides of the political fence did not want to be responsible for raising the property taxes of their constituents, and any change that cut taxes on business and rental properties would boost them for homeowners and meet with intense resistance.

Having learned from the 1995 workers' compensation reform effort that a strong coalition of supporters could help convince legislators of the need for change, the Carlson administration put together such a group of

supporters of property tax reform. With Minnesota having a projected surplus of nearly \$800 million in November 1996, many groups felt the time was right to again seek property tax reform. The Department of Revenue began sifting through the numerous legislative, business and local government plans on the table and pulled out what it viewed as the strongest piece of each proposal. These pieces were then combined into a single property tax reform plan. By taking the best each plan had to offer, the administration had a built-in network of lobbyists who could advocate for the bill.

The primary objectives of the property tax policies adopted in 1997 and 1998 were to begin reforming the property classification system and reduce the state's reliance on the property tax in funding public education. The reform plan, passed over a two-year period, shifted the structural tax burden from businesses and rental properties to homeowners. To protect homeowners from these initial tax shifts, the Education Homestead Credit was implemented to give back to homeowners between 1998 and 2000 a portion of their taxes used for public education. The state's share of funding for public education will increase to nearly 70 percent in the year 2000, up from about 60 percent in the mid-1980s. This increase in state funding will lower the demand on local property taxes to pay for public education.

The reforms are expected to reduce property taxes by \$510 million, or more than 10 percent. The largest reductions occurred for rental residential properties of one to three units, where taxes are estimated to be reduced by \$54 million, or 29 percent. The two-year tax reduction for apartments of four or more units is expected to total \$35 million, a cut of almost 15 percent. Business property tax cuts are estimated to total \$168 million, or nearly 11 percent, and homestead tax relief is estimated at \$186 million, or more than 9 percent.

Recent estimates also indicate that as a result of these new policies, the property tax will no longer be the most significant source of state and local tax revenue. Current revenue projections show that by fiscal year 2001, the property tax will generate about 26 percent of total state and local tax revenues and the individual income tax, 32 percent. This is significant because a tax on income is more progressive and fair than one on property.

To improve the state's competitiveness and enhance investment incentives for production industries, Gov. Carlson supported the elimination of the sales tax on machinery and equipment. With capital increasingly mobile in a global economy, Minnesota risked becoming a less attractive place for business investment. Most other states have reduced or eliminated this tax.

All sales of capital equipment were taxable at one rate in Minnesota until 1984, when a 2 percent refund was enacted for machinery and equipment used directly in making a product at a new or expanded facility; sales of replacement equipment remained fully taxable. Capital equipment purchased and installed for a business by a construction contractor did not qualify, a restriction that limited the reduction's effectiveness. This 2 percent refund was expanded to a full refund in 1989, but none of the other definitions or exclusions was changed.

Fiscal concerns were the main obstacle to further reform of this tax. Although many legislators understood the need for broader action, there was a reluctance to accept the revenue loss that would come with expanding the capital equipment refund program. Changes began to be made incrementally in the early 1990s, however.

The Department of Revenue in 1992 began allowing the sales tax exemption for capital equipment to be used for research and development of products, and in 1993 the Legislature amended the law to exempt new and replacement equipment used in taconite mining and production and new equipment used in providing computerized online data retrieval services, such as Westlaw and Lexis.

The next year, the Legislature established a Capital Equipment Advisory Council composed of six legislators, the commissioner of Revenue and eight members of the public to evaluate the capital equipment program and

recommend modifications of the exemption. Several of its recommendations were adopted by the 1994 Legislature, including:

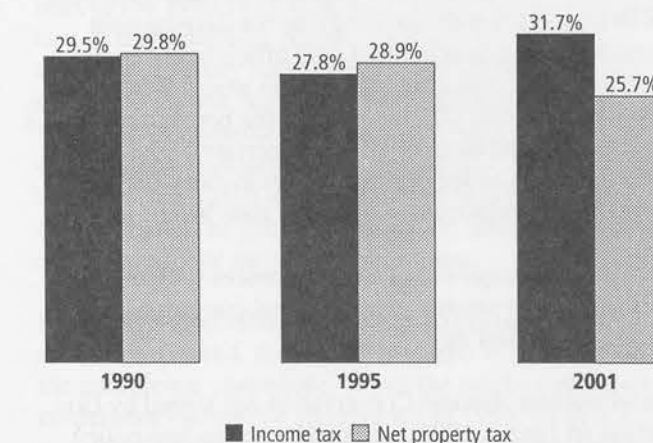
- More precise definitions of such terms as *equipment* and *manufacturing*
- Adoption of an "integrated production process" standard for capital equipment. Under this standard, machinery and equipment used or required to operate, control, or regulate the actual production equipment also qualify for the exemption. This change broadened the tax relief given in Minnesota compared to many states that give sales tax breaks only to capital equipment that directly affects the product.
- A new sales tax benefit for replacement capital equipment. Besides machinery, replacement equipment was defined to include repair and replacement parts and accessories, certain kinds of software, foundation materials that support machinery and equipment, and special-purpose buildings used in the production process.
- The Legislature rejected the council's recommendation of a complete exemption but did reduce the tax on replacement equipment in phases until a 2 percent rate would be reached in fiscal year 1999.

A 1997 law change eliminated the 2 percent minimum rate for replacement equipment. As of July 1, 1998, both new and replacement capital equipment for production industries are fully exempt. Reduction of the tax on replacement capital equipment put \$10.3 million in the hands of Minnesota employers in 1996 and 1997. Regular capital equipment refunds totaled \$152 million in those two years.

The Carlson administration has made other administrative reforms since 1994, including allowing a business to have its construction contractor act as a purchasing agent when the contractor purchases and installs capital equipment. In this situation, the business may apply for a refund in the same way as if it had acquired the equipment directly. Within the limits of the law, the Department of Revenue takes a liberal view about the activities and machinery that qualify for the exemption.

Reforming the tax system in Minnesota has led to a friendlier environment in the state for business. While the state's specific tax-burden rankings will not be known for several years, the tax reforms made during the Carlson administration likely will go far to improving the competitiveness of Minnesota companies in a global economy.

Income tax is expected to replace property tax as the largest single source of state revenue



Note: Data for 2001 is estimated.

Source: Department of Revenue

Enhancing the arts, recreation and the environment

Maintaining the state's vibrant communities has been a priority of Gov. Carlson, and his efforts have been far-reaching. In 1997 the Governor proposed an arts initiative that resulted in \$12 million to help nonprofit arts organizations provide cultural resources to all Minnesotans. The arts initiative will expand opportunities for all Minnesotans to enjoy the arts first-hand. The funding will:

- Enable arts groups to increase their touring activities outside the Twin Cities area, allowing people in rural Minnesota to experience the performing arts resources of the metropolitan area
- Help communities create their own arts festivals to celebrate and strengthen their cultural identity
- Boost Minnesota State Arts Board grant programs for connecting arts institutions and artists with school children
- Support 11 regional arts councils, which assist community and small arts organizations throughout Minnesota

In addition to his arts initiative, Gov. Carlson has worked to improve recreational opportunities for Minnesotans and to clean up the environment. In 1992 he vowed to make the state's polluted Minnesota River fishable and swimmable within 10 years. Since then, phosphorous and sediment levels have declined, and in 1998 the Minnesota River was removed from a list of the 20 U.S. rivers "most endangered" by pollution. Also in 1998 Carlson proposed and signed a \$141 million "Access to the Outdoors" legislative package — the largest, most comprehensive environmental initiative in state history. The funding will:

- Provide for improvements to all state parks, including new visitor/interpretive centers at Itasca, Forestville and Mille Lacs Kathio state parks
- Create 70 miles of new trails and improve access to waterways with new boat launch sites, fishing piers and shoreline fishing areas
- Provide for flood control and mitigation projects and helps to bridge the gap in federal funding. Minnesota cities ravaged by the floods of 1997 will receive grant assistance to reduce future flood damage.
- Result in the acquisition of vital wildlife, fish and native plant habitats through the Reinvest in Minnesota Critical Habitat Match program

Gov. Carlson's strong support for the environment has earned him awards from the National Audubon Society and the North American Waterfowl Management Plan.

One of Gov. Carlson's greatest environmental achievements was the passage of the Wetland Conservation Act. A severe drought in 1988 raised public awareness of a dangerous decline in the state's wetlands. These lands cleanse water before it re-enters the surface and ground water supply, serve to help control climate fluctuations of wet and dry weather, and provide important habitat for fish and wildlife. By some estimates, 60 percent of Minnesota's wetlands were lost to development and agriculture between 1950 and 1980.

Recognizing that Minnesotans need to act as stewards of the land for future generations, Gov. Carlson made the passage of a no-net-loss wetlands bill his top environmental priority when he took office in January 1991. "No net loss" meant that any loss of wetland acres had to be made up for with at least an equal number of new or restored acres.

The original wetlands proposal came from an advisory group of representatives of farm, environmental, hunting and fishing, and conservation groups, as well as state agencies, that was convened by the Department of Natural Resources in 1988. Attempts were made in 1989 and 1990 to enact this legislation, but they were unsuccessful. This changed under Gov. Carlson's leadership, when state agencies that had held differing views on the no-net-loss issue united to back the legislation.

The goal of the legislation was not only to halt the loss of wetlands but also to accelerate restoration for a net gain in the state's wetlands resources. Passage was not easy. Some farm groups worried that attempts to restore wetlands would take critical farmland out of production, and developers feared that land ripe for development would become untouchable. Local officials and environmentalists were concerned about who would implement the program. Local officials wanted the power to make decisions, but environmentalists, uncertain of the ability and willingness of local governments to carry out the act, preferred implementation at the state level.

Resolving these questions and differences took the full 1991 legislative session, with the final compromise bill passing on the last day.

The Minnesota Wetland Conservation Act signed by Gov. Carlson on June 4, 1991, contained a no-net-loss policy, provided for mitigation of drained or filled wetlands, gave administrative authority to local units of government, authorized the Minnesota Board of Water and Soil Resources to adopt administrative rules and appropriated funds for tax incentives to maintain wetlands.

Almost immediately after the law's passage, opponents began suggesting changes. Both the executive and legislative branches wanted to give the new law time to work before making significant alterations, although some fine-tuning was done between 1991 and 1995. Legislation was passed in 1993 that allowed counties or watersheds that still had 80 percent or more of their wetlands that existed before the area was settled to replace drained or filled wetlands on a one-to-one-acre basis. It also exempted from wetland replacement requirements projects involving up to 400 square feet of wetlands. In 1994 legislation was passed giving local governments some flexibility in adopting a comprehensive wetland management plan and allowing the upgrading of roadways to current construction and safety standards as long as less than one-half acre of wetlands was affected and the impacts were minimized.

An attempt to make more significant changes came in 1995. The Board of Water and Soil Resources, the state agency with oversight of the act, identified six issues that needed attention:

- Regulations on exempt projects
- Balance between state oversight and local control
- Repair and rehabilitation of existing roads
- Drainage ditch repair exemptions
- Streamlining the administrative process
- Compensation and incentives for landowners

The House and Senate each passed bills to address these issues. Late in the 1995 session, the conference committee reached an agreement that the House passed but the Senate rejected.

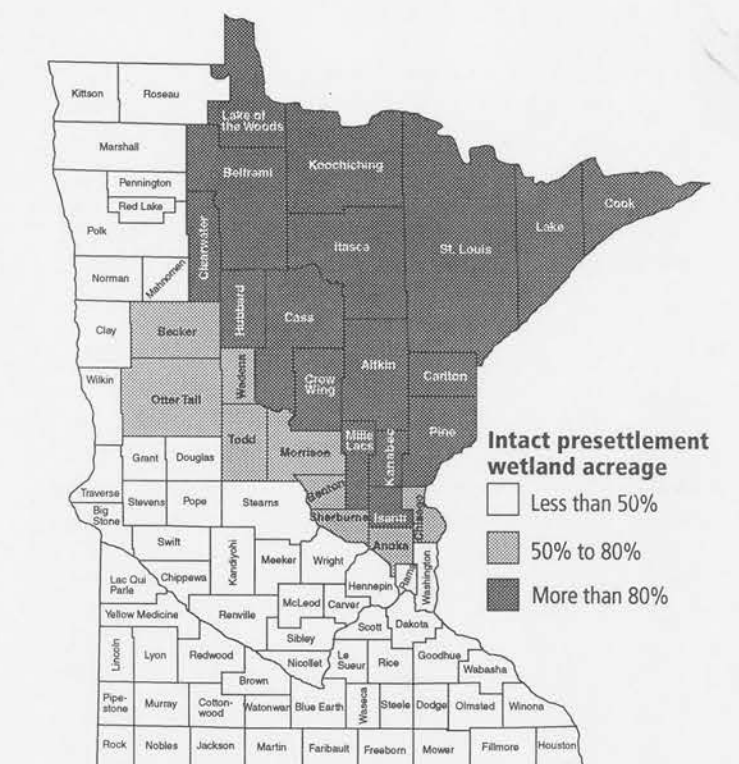
A split vote on the conference committee report left the conference committee open to resume its work at the start of the 1996 session. Gov. Carlson wanted a resolution of the remaining issues, but reaching that was uncertain. In early January 1996, the Governor invited interested groups, legislators and state agency staff to a Wetlands Roundtable in St. Cloud to seek a consensus out of which legislation could be shaped. A member of the Governor's staff also attended to help promote a compromise. The group succeeded in reaching consensus on several of the unresolved issues.

Legislative leadership also sought to bridge the differences. To that end, the Senate replaced two members of the conference committee. When the newly structured conference committee reconvened in 1996, its first act was to adopt as a working draft the agreements that had been reached in the interim. Once the committee reached a final agreement, the Legislature adopted the amendments to the Wetland Conservation Act.

The amendments provided more incentives and flexibility in managing wetlands while maintaining the no-net-loss provision. Local governments have more authority to develop county- or watershed-based comprehensive wetland management plans rather than ones based on a broad statewide standard. Other changes to the law included raising the minimum wetland area that must be replaced based on the state's wetland diversity and distribution, requiring the state to replace wetlands eliminated by road work, allowing certain wetlands to be drained if they affect farmland operations and providing additional financial incentives to protect wetlands.

As a result of Minnesota's efforts to protect its wetlands, Gov. Carlson became the first governor to receive a prestigious national award for protecting and restoring wildlife habitat. In presenting its "Great Blue Heron Award" in April 1995, the U.S. Fish and Wildlife Service lauded Gov. Carlson for advocating strong wetland and watershed protections, citing in particular his leadership in enacting the Minnesota Wetland Conservation Act.

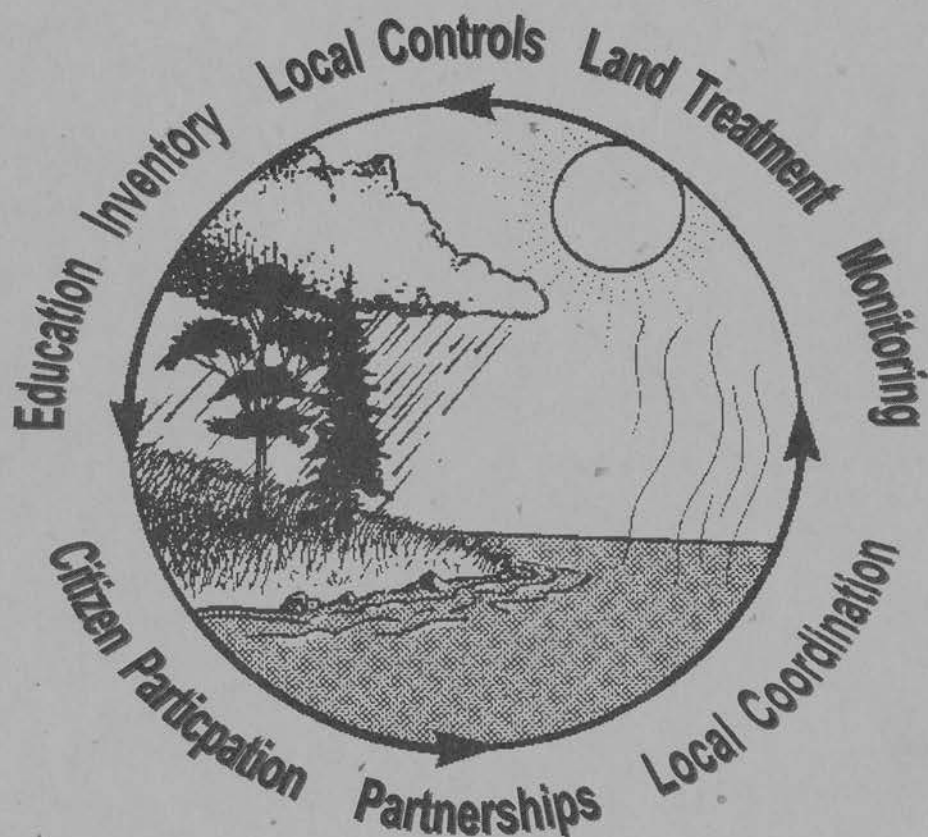
More presettlement wetlands survive in the north



Notes: Wetland areas are derived from data in the 1860s and 1980s. In both data sets, Houston, Wabasha and Winona counties were reported to have no presettlement wetlands.

Source: Minnesota Board of Water and Soil Resources

Comprehensive Local Water Planning



A Decade of Protection 1989-1999



*The mission of
the Minnesota
Board of Water
and Soil
Resources is to
assist local
governments to
manage and
conserve their
irreplaceable
water and soil*

An equal opportunity employer

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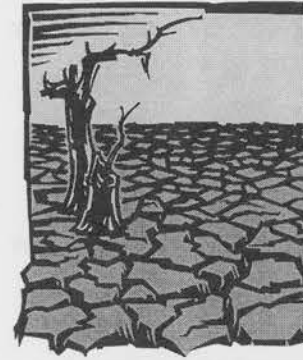
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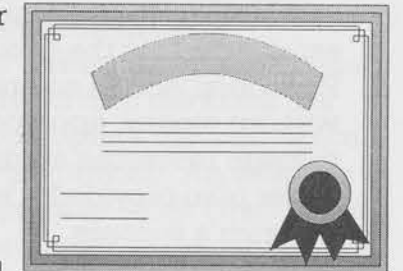
In 1977 Minnesota was stricken by drought conditions that nearly rivaled the infamous drought of the 1930s. As surface and ground water levels receded, the trepidation over the state's water supply escalated. Crisis prompted action, and the Legislature appointed a Water Planning Board to take a look at how the state's water supplies were being managed. Their 1981 study found fragmentation at the state level and poor organization at the local level.

The Legislature responded by passing the Comprehensive Local Water Planning and Management Act in 1985 to encourage counties outside of the metropolitan area to plan for the protection and management of water and water-related resources. Planning began in earnest in 1987. In 1989, Watonwan County submitted the first of many plans to be approved by the Board of Water and Soil Resources. Designed to be an ongoing process, water plans are updated about every five years and many second generation plans have been approved.

Early on critics argued that there were enough plans sitting on the shelf. But local water planning proved to be different, largely because of the process used to develop the plan-- policy and technical committees comprised of local people with varied backgrounds discussing the issues at hand and mapping out a course of action. It is management at the local level, guided by a plan based on scientific information and citizen input.

The counties' accomplishments clearly attest to water planning's success. Many counties have inventoried feedlots, abandoned wells and septic systems. Surface and ground water monitoring programs have been put into place to gather baseline data, which has been used to draft and adopt ordinances. Low cost well testing is another popular activity. Water planners work with lakeshore owners, agricultural producers and students to draw attention practices that protect and improve water quality and quantity.

The program's successes have garnered many accolades over the past ten years, including the National Award Council's Environmental Achievement Award.



Crosscurrents, the 1996 report on water management, recommends the state build upon local water planning. It says, "County comprehensive local water plans can be the vehicle for defining roles and responsibilities at the state and local level . . . These plans also could form the basis for all environmental information in local sustainable development plans."

Read on to find out why local water planning works, what the future looks like and what counties have accomplished.

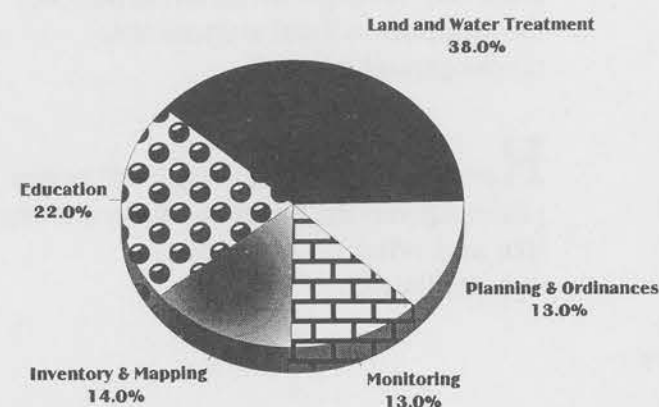
Why Water Planning Works

\$ Funding. The Legislative Commission on Minnesota's Resources (LCMR) recognized that the objective of water planning was for local governments to lay out goals and actions aimed at managing their water resources. LCMR members also knew that it takes money to achieve goals. In 1987, they appropriated over \$800,000 to 52 counties to implement water plans. The success of this pilot project demonstrated that it was money well spent and in 1989 the Legislature passed ongoing appropriation language. The Local Water Resources Protection and Management Program was established via the Ground Water Protection Act. In an era of mandates without money, appropriating funds to manage resources according to the local water plan provided a key to the program's success.

Each county receives a **base grant** aimed at building base level capability to carry out locally-identified priorities in the comprehensive water plan.

Water Planning Activities

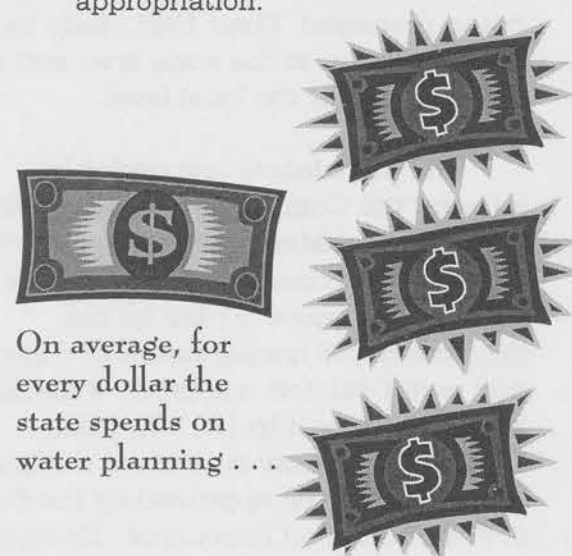
percent of expenditures, 1996



A local match to the state grant is required, and the amount is based on tax capacity as an indicator of a county's ability to pay.

base grant snippets:

- ✂ The minimum state contribution is \$18,750, the maximum is \$36,600, the average is \$30,000
- ✂ the average annual county match is \$95,000
- ✂ the county match ranges from a low of \$18,750 to a high of \$360,000
- ✂ state funding has not increased appreciably from the original appropriation.

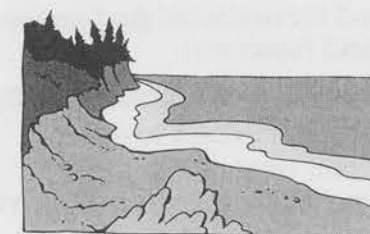


On average, for every dollar the state spends on water planning . . .

the counties spend three dollars!

The program also includes **challenge grants** which assist successful applicants to implement high priority actions listed in their plan. These competitive grants are available to counties, watershed management organizations and watershed districts. More than 15 organizations and agency representatives review and score applications. The grants require a 1:1 match. Over \$3.15 million has been awarded to challenge grant applicants since 1991.

Land Use Authority.



The rocky cliffs of the North Shore are a marked contrast to the farmland of the Coteau des Prairie in southwestern

Minnesota. Likewise, the flat land and large grain farms in the Red River Valley comprise a strikingly different landscape from the blufflands dotted with small dairy farms in the far southeast. Local people understand local conditions. That is why land use authority lies with local government. State and federal agencies have important roles providing education, incentives and regulation pertaining to land use. But it is the county or watershed district that makes decisions impacting land use parcel by parcel, and it is the local soil and water conservation district staff who sit at the table with the landowner discussing land use options.

Protecting and preserving surface and ground water is ultimately dependent on wise land use. This requires a comprehensive understanding of the resource base coupled with knowledge of how particular activities will impact the resource. Local people gathering and interpreting data and trends is the foundation of good resource management.

Local Coordination. CLWP promotes local management, citizen input and coordination among local units of government. Public input into the planning process is required by law. Many counties use task forces that bring diverse perspectives and experience to the planning table to ensure the plans consistently address local priorities.

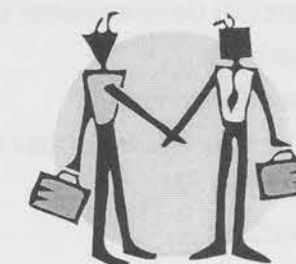
Often the task forces also provide assistance implementing the plan's actions. In addition to citizen input, water planning encourages local units of government to work together to address water issues. Municipalities, special purpose districts, even adjacent counties are working together to protect water resources.

Local task force snippets:

- ✂ the average number of members serving on the task forces is 13
- ✂ task forces meet about four times a year

State-local Partnerships. Local water planning has provided a means for local government to focus on water issues and has resulted in the designation of a water plan coordinator in every county. In turn the state has been able to coordinate the assistance various agencies provide. An example is the Natural Resource Block Grant. This grant provides money to implement the water plan, administer the Wetland Conservation Act (BWSR), administer the state shoreland guidelines (DNR) and administer feedlot permitting (MPCA).

Technical and financial resources are in demand and often they are allocated to problems that have been identified as high priority through a recognized process. Local water planning is recognized by many state and federal programs as a vehicle not only to communicate priorities, but in some cases to deliver programs.



The Future. What is the future of water planning? Water planners from across the state answered this question in a 1998 survey where they provided information regarding their goals, natural resource management trends and what assistance they would like from state agencies. In addition, a focus group of water planners recently drafted a program plan identifying ten initiatives for the BWSR to pursue.

Goals for the next five years:
(starting with the most frequent response)

1. Develop or build upon geographic information systems databases.
2. Develop wellhead protection plans in conjunction with cities.
3. Address nonconforming individual sewage treatment systems.
4. Begin or continue monitoring surface and ground water resources.
5. Address feedlots issues: ordinances, permitting, manure management, etc.
6. Continue education activities.
7. Develop or continue volunteer monitoring programs.
8. Seek out more funding sources.
9. Promote community development.
10. Integrate water management (combine water mgt. offices).

Resource Trends:

1. Large, concentrated livestock operations.
2. Residential development of:
 - a. lakeshore
 - b. other shoreland
 - c. ag land near cities and towns
 - d. bluffland
 - e. woodlots

3. Fewer farms, larger in size.
4. Increased recreational and seasonal use of land (tourism).
5. Fewer small livestock operations.

State Agency Assistance Desired:

1. More base level and challenge grant funding.
2. More technical support.
3. Geographic information system technical support and training.
4. More funding to cost-share best management practices.
5. Watershed management training.

BWSR Water Planning Initiatives

1. Support legislation in the 1999 session to increase base level & challenge grant funding.
2. Enter into agreements with pertinent state and federal agencies to:
 - a. insure that the local annual work plans are recognized as a bonafide way to communicate local priorities
 - b. encourage that mandates tied to the plans be discussed with water planners whenever possible;
 - c. encourage agencies to solicit and consider local recommendations when appointing a representative to the task force; and
 - d. encourage task force agency representatives to compile all agency comments on the annual plan and comprehensive plan updates.

BWSR Water Planning Initiatives

continued

3. Convene an ad hoc committee to review and draft options to the required in-kind matches of the Natural Resource Block Grant programs and the Local Water Planning Challenge Grant.
4. Work with pertinent associations to keep local water planners apprised of legislation that could provide opportunities or challenges for plan implementation at the local level.
5. Seek a legislative appropriation to establish a grant fund that would support the administrative activities of regional water planning groups or support water planning within the boundaries of the 81 major watersheds.
6. Establish a quarterly statewide newsletter and monthly e-mail updates.
7. Continue to hold an annual water planners conference.
8. Use the Local Government Units Annual Reporting System (LARS) to track the progress in meeting resource management goals through the Comprehensive Local Water Planning Program.
9. Revise the Administrative Rules.
10. With guidance from the Local Water Planners Focus Group, develop a process to review and evaluate program administration and implementation at the local level.

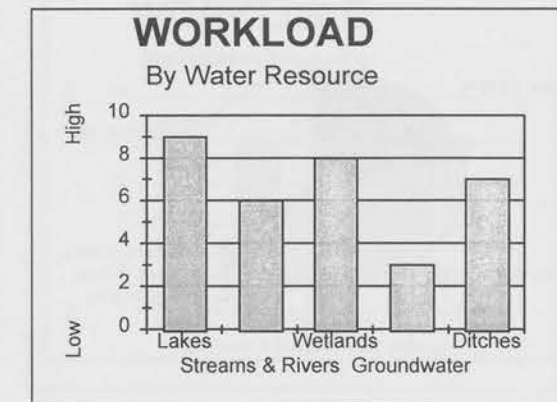
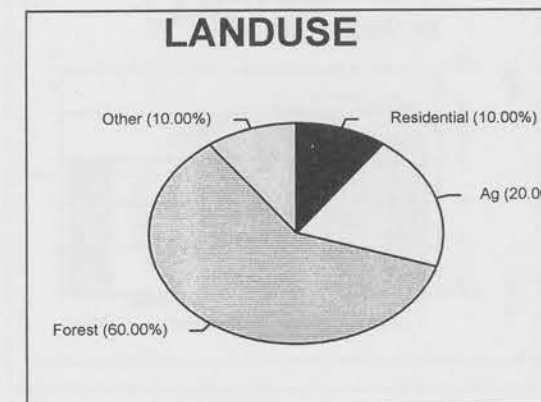
Third Generation Plans. BWSR is confident counties will continue to work toward framing their plans in the watershed context and coordinate the goals and actions within a particular watershed. The plan updates will continue to strengthen working relationships, including those with cities in addressing the quantity of water available for residential use. Third generation plans will build upon the information gathered and lay forth a vision for water management in the twenty first century.

County Accomplishments

People at all levels are supportive of local water planning. But it isn't the plan that has generated the admiration, it's the tangibles that arise from the process: cooperation between citizens, government and others to get things done. The following pages highlight ten accomplishments from each county. Many of these were accomplished with only a half-time water planning position and are in addition to carrying out the administrative aspects of water planning and other job responsibilities.

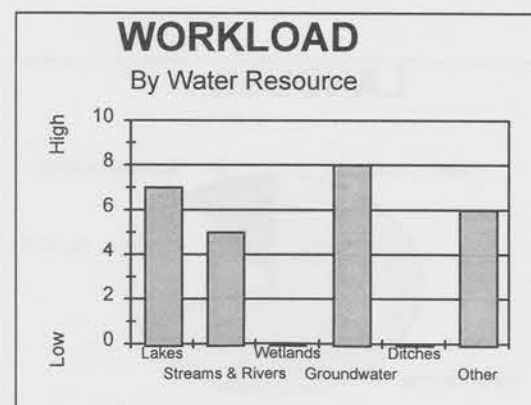
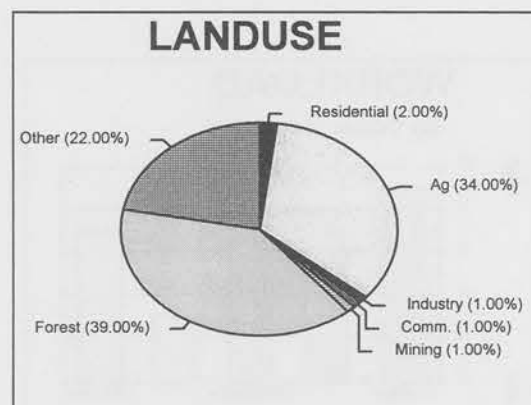
AITKIN COUNTY

1. Incorporated the water plan into the Shoreland Ordinance where appropriate (e.g., protection of riparian vegetation, bluffs).
2. Created Green Shores Program that offers landowners incentives to exclude livestock from lakes and rivers. Completed 12 projects on more than four miles of shoreland.
3. Held a Rivers and Lakes Fair in 1997 and 1998 to educate families on importance of water quality, etc. First year attendance was 350, second year 450.
4. Provide funding and support for upgrading of individual sewage treatment systems. More than 300 notices were sent to owners of nonconforming systems each of the last four years, and more than 80 percent of those receiving notices upgraded their system.
5. Successful at managing resources on a watershed basis with little concern for political boundaries, e.g. cooperative green shores project with Crow Wing SWCD and Water Plan, each county provided half of the funding for a watershed project.
6. Took over the Riverwatch program (started by the Mississippi Headwaters Board) which works with three schools to educate students and monitor water quality.
7. Water Planning has helped leverage approximately ½ million in other funds.
8. Great cooperation on Water Planning Task Force, includes agencies, lake associations, individuals.
9. Formed the Mille Lacs Watershed group which includes: Mille Lacs Band of Ojibwe, three county water plans, three county boards, lake associations, individuals, state, federal and county departments and others.



BECKER COUNTY

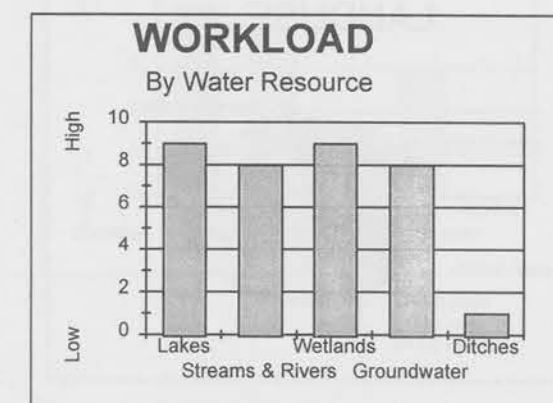
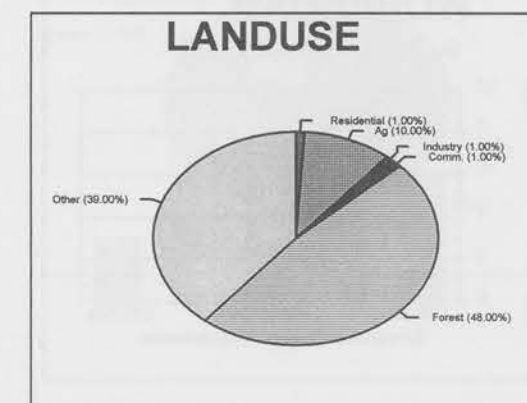
1. Funded one half of the cost of a technician position for the Becker SWCD to work on water plan items.
2. Established a cost-share program to assist in the sealing of abandoned wells. 150 Wells have been sealed to date.
3. Inventoried all Ag waste systems to determine their status. Established a cost-share program to seal abandoned ag waste systems.
4. Cooperatively funded an inventory of septic systems around 23 area lakes. Follow up efforts indicate the average percentage of failing systems has been reduced from 31% to 11%.
5. Sponsor an annual pesticide container collection days in cooperation with two local elevators.
6. Established a lake monitoring program with Becker Coalition of Lake Associations to determine the trophic status of lakes.
7. Conducted a mass balance analysis of Big and Little Toad Lakes and the Toad River, in conjunction with four lake associations.
8. Working with 12 landowners along the Toad River to establish buffer strips.
9. Provided funds to assist with the treatment of an abandoned private dump site that was having direct water quality impacts.
10. Annually conduct free well water nitrate testing during the county fair.



Information provided with assistance from the local water planner

BELTRAMI COUNTY

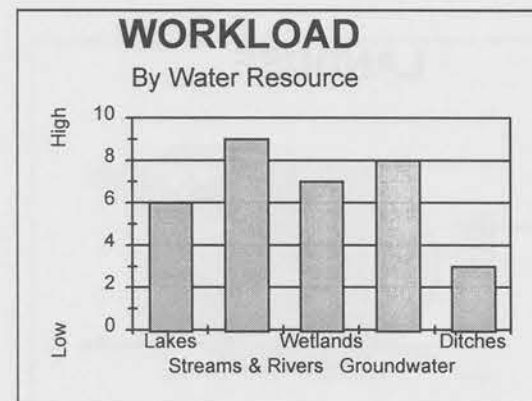
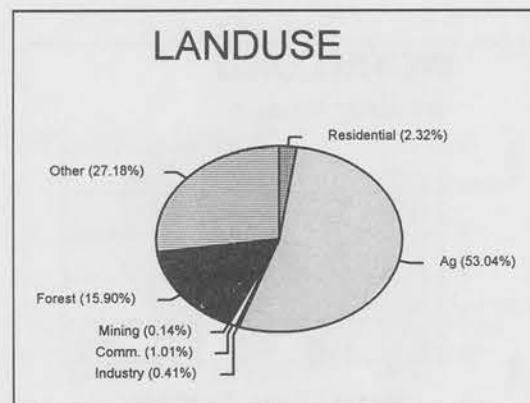
1. Monitored 44 lakes for basic water chemistry and lakeshore volunteers monitored 47 lakes for water clarity (secchi disks).
2. Formed the Friends of Lake Bemidji Lake Association, assisted lake associations already in existence and provided groups of individuals information about developing lake associations.
3. Published four editions of a newsletter and distributed to more than 1,800 lakeshore residents.
4. Drafted language for a septage disposal ordinance that was reviewed by citizens and local units of government but not yet adopted. Local septage pumpers were encouraged to receive MPCA training and certification.
5. Annually test private well water for nitrates and coliform bacteria- about 450 landowners participated in this program over a four-year period.
6. Demonstrated how GIS could successfully address a resource issue in Northern Township.
7. Developed a nutrient management video and brochure and distributed over 100 copies throughout Minnesota and other states.
8. Cooperatively inventoried over 40 wetland restoration and/or enhancement sites for potential wetland mitigation.
9. Provided cost-share incentives to seal the high priority wells.
10. Lead efforts to study potential sedimentation problems on the Mud and Moose rivers in northeastern Beltrami County while gathering water quality information.



Information provided with assistance from the local water planner

BENTON COUNTY

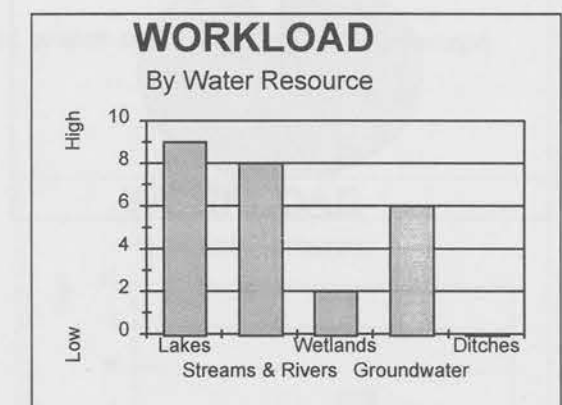
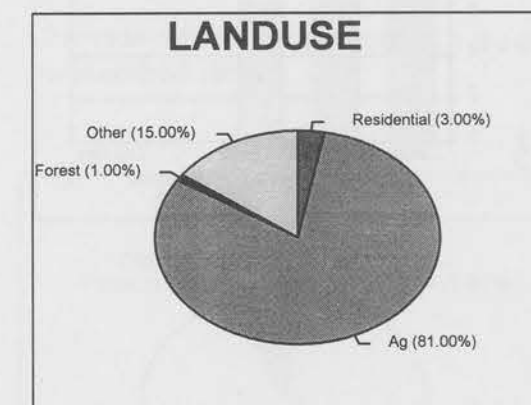
1. Initiated a Joint Powers Agreement with Sherburne and Benton Counties that created Elk River Watershed Association to address surface water quality and quantity and ground water quality. The main strategy to reduce sediment and nutrient loadings focuses on low cost, high return conservation practices.
2. Initiated a partnership with Morrison County to address water quality concerns in the Little Rock Lake Watershed.
3. Participated in the Central Minnesota Sand Plains Monitoring cooperative with Sherburne and Stearns Counties. Also coordinated a public information meeting for residents of the Rice area.
4. Received funding for watershed initiatives from BWSR, USFWS, DNR, USDA and local sources.
5. Conducted inventories of abandoned wells and drained wetlands, and completed a critical impact site evaluation of Little Rock Lake Watershed.
6. Initiated a manure spreader calibration program. Secured funding for set of 4 scales for calibration and for implementation.
7. Was instrumental in initiating the statewide Abandoned Well Sealing Cost-Share program.
8. Hired an intern to accelerate implementation of the CRP Filter Strip Initiative.
9. Conducted a level one feedlot inventory with the assistance of the MPCA.
10. Conducted a Tillage Tour to show local producers alternative tillage operations.



Information provided with assistance from the local water planner

BIG STONE COUNTY

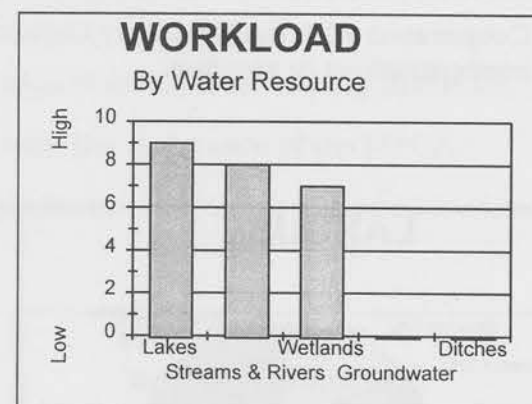
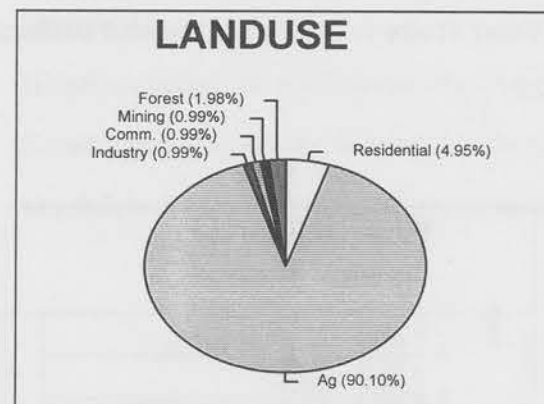
1. Adopted a Sewage Treatment Ordinance that requires county-wide upgrades when property transfers ownership.
2. Provide cost-share to seal abandon wells -- 80 wells have been sealed.
3. Restored 15 wetlands with local 4th grade classes.
4. Distribute a quarterly environmental newsletter to every shoreland owner and farmer in the county (3700).
5. Adopted a Feedlot Ordinance with an emphasis on manure management planning and proper dead animal disposal.
6. Developed a rural well testing program for nitrate contamination. Students have tested 110 wells in 4 townships.
7. Completed the Big Stone Lake Restoration Project.
8. Visit livestock producers. About 16 producers are visited annually by the Manure Resource Management Coordinator.
9. Funded and published a Wetland Benefit Study.
10. Cooperated with the Beardsley Ground Water Study to study nitrate and coliform concentrations in aquifers.



Information provided with assistance from the local water planner

BLUE EARTH COUNTY

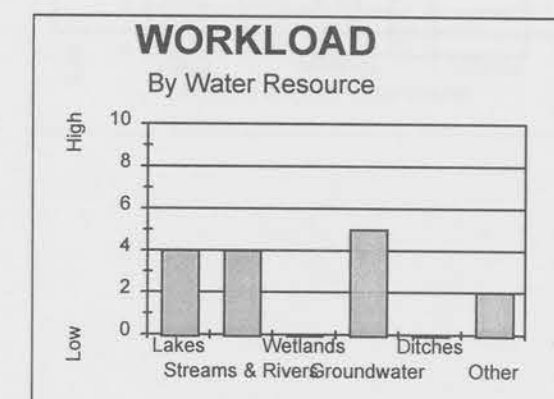
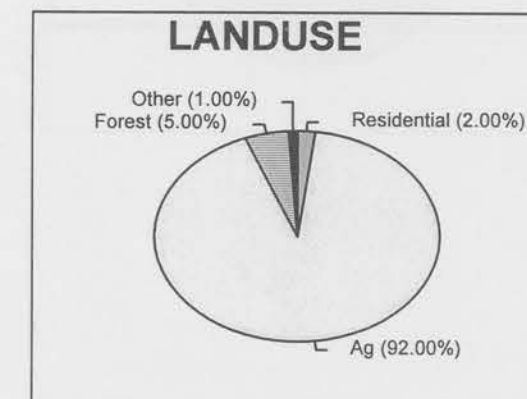
1. Hired staff to carry out water planning.
2. Monitored three major watersheds and five lakes.
3. Distributed septic system information to new home owners with septic systems.
4. Published and distributed an annual newspaper insert describing water and other natural resource information.
5. Support an annual river clean up with the Paddling and Outings Club.
6. Participant in the 13-county South Central Minnesota Water Planning Project.
7. Assembled a Surface Water Hydrology Atlas.
8. Established and use ARCVIEW GIS.
9. Developed detailed feedlot inventory and data base.
10. Developed potential drained wetland inventory.



Information provided with assistance from the local water planner

BROWN COUNTY

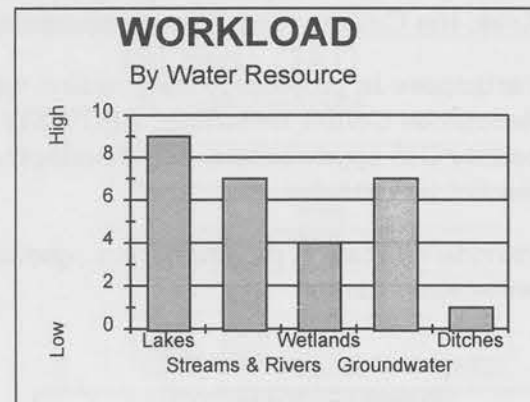
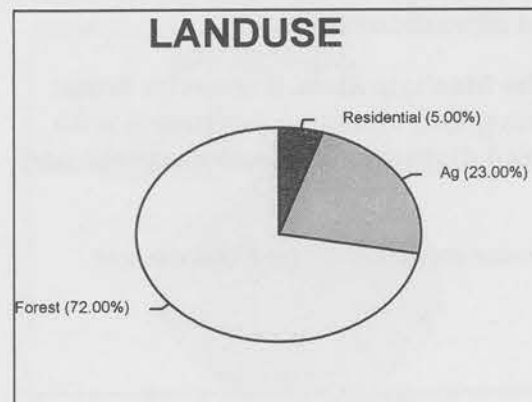
1. Hired a water plan coordinator.
2. Published two issues of *Celebrate Water!* and distributed them by inserting in all county newspapers with a circulation of around 21,000.
3. Provide cost-share to seal abandon wells -- about 250. Early in the project 150 residents attended one of several well sealing demonstrations.
4. Sponsor Conservation Days in May that about 500 fourth grade students attend.
5. Presented ten Teacher Education Workshops, including 2 Project WET workshops.
6. Support the Lake Hanska Watershed Project, which is a multi-county, multi-agency effort to provide educational and on-land help to watershed residents. There have been 4 years of water quality monitoring, 3 newsletters distributed and an outdoor manure management workshop with 70 attending.
7. Cooperative efforts with the Brown/Nicollet/Cottonwood Water Quality Board (Community Health Services). Examples: Ground water Clean Water Partnership Project, Little Cottonwood River assessment project.
8. Participate in a cooperative project with the Redwood Cottonwood Rivers Control Area: the Cottonwood River assessment and education efforts.
9. Participate in projects in conjunction with the Mankato State University Water Resources Center including: ARCVIEW training and technical assistance with county GIS applications, and development and digitizing of abandoned well and feedlot inventories.
10. Provide education programs: e.g., ground water model and the *Enviroscape* watershed model.



Information provided with assistance from the local water planner

CARLTON COUNTY

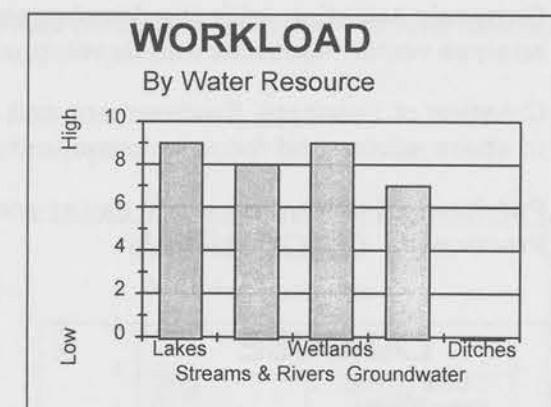
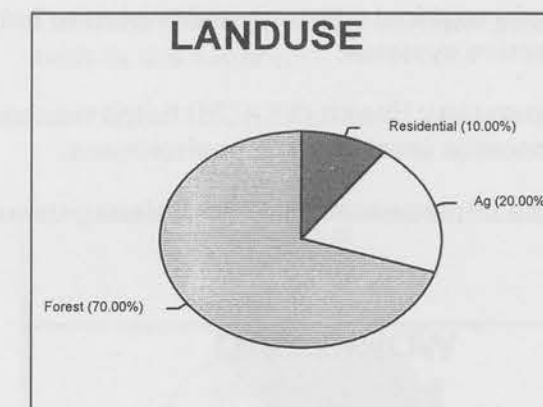
1. Established a Water Plan Coordinator staff position.
2. Established a Recycling Coordinator staff position
3. Established a Septic Inspector staff position.
4. Tested approximately 400 drinking water wells for nitrates and coliform bacteria.
5. Provided baseline monitoring on 13 lakes for phosphorus and chlorophyll A.
6. Formed three lake associations.
7. Formed a county Coalition of Lake Associations.
8. Completed the Nemadji River Basin Project.
9. Completed a feedlot inventory.
10. Developed in cooperation with Arrowhead Water Quality Team the *Lakeshore Best Management Practices* informational folder and videos.



Information provided with assistance from the local water planner

CASS COUNTY

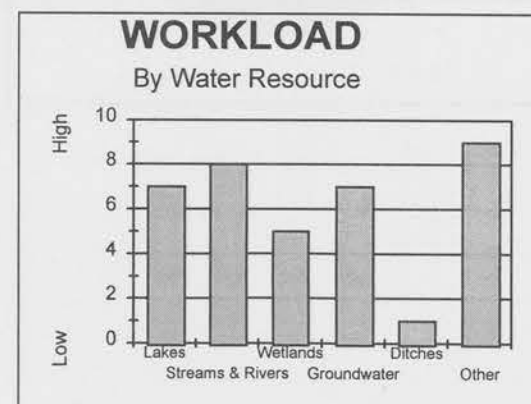
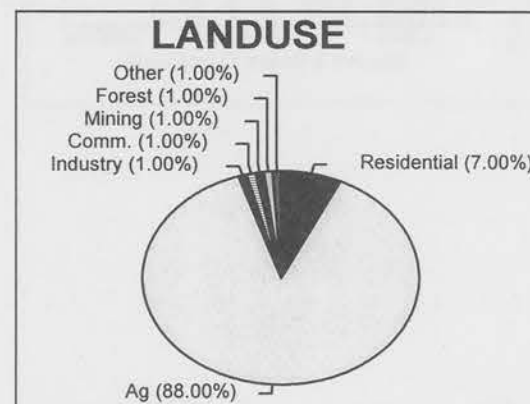
1. Combined all environment-related departments in the county into the Environmental Services Department.
2. Purchased two hydrolabs to test lakes (44) and rivers in the county.
3. Developed a wetland model and an ordinance to protect critical wetlands.
4. Adopted a county-wide zoning ordinance.
5. Created a ground water flow model to assist with wellhead protection planning.
6. Ongoing coordination of volunteer support and dissemination of information through 36 lake associations.
7. Hired the first full-time environmental officer in the state.
8. Organized six Environmental Subordinate Service Districts for community sewer service.
9. Developed GIS capabilities which are used by all county departments.
10. Helped organize watershed groups in Leech, Pine River and Gull Lake watersheds.



Information provided with assistance from the local water planner

CHIPPEWA COUNTY

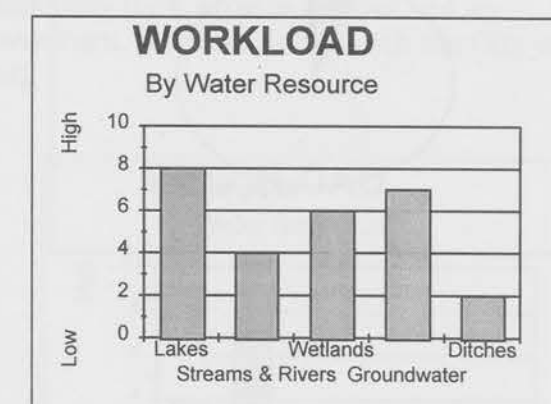
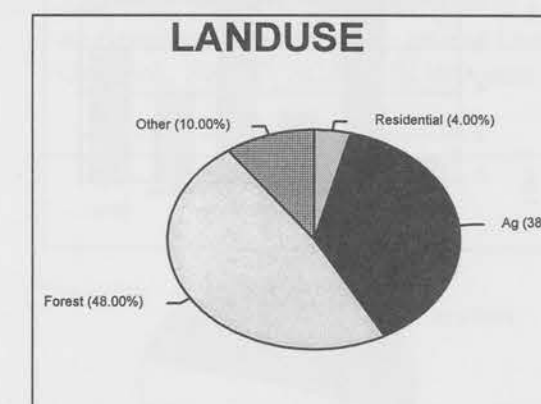
1. Developed innovative Conservation Credit Initiative program to reward environmental friendly farmers with cash payment for protecting the public's resources. Currently 31 landowners are part of the program.
2. Acquired and disbursed hundreds of thousands of dollars in low-interest loans to help local citizens upgrade feedlot and septic systems, to seal wells and to install Best Management Practices.
3. Completed a level 1 feedlot inventory and are currently working on level 2. Made contributions to the Manure Management Program through the MN Extension Service to track manure concentrations and offer assistance.
4. Provided funding and assistance to apply for a Clean Water Partnership Grant for the Chippewa River and Hawk Creek Watersheds. Implementation of this area's needs assessment will begin after the two-year study is complete.
5. Installed 75 acres of riparian buffers through a 10 year county program.
6. Sealed 229 wells through the county abandon well sealing program.
7. Created a new position, Field Planner Technician, from multiple funding sources to assist with the inventory, assessment and implementation of Best Management Practices in a targeted area within the Chippewa River Watershed.
8. Currently assisting with the development of a regional comprehensive plan to help analyze water resources and develop protective systems.
9. Creation of Teachers, Environment and Community Health (TEACH) helps teachers to share advise and focus on community concerns involving the environment.
10. Purchased field equipment to assist with the implementation of Best Management Practices.



Information provided with assistance from the local water planner

CHISAGO COUNTY

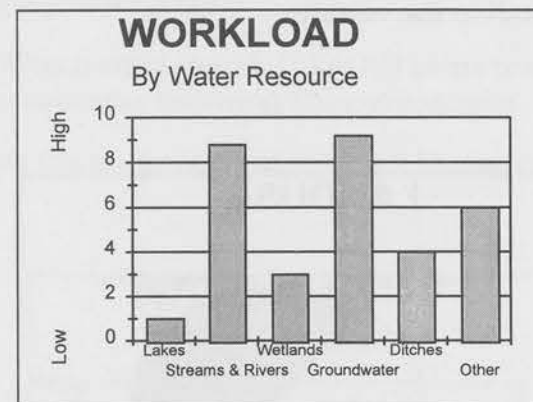
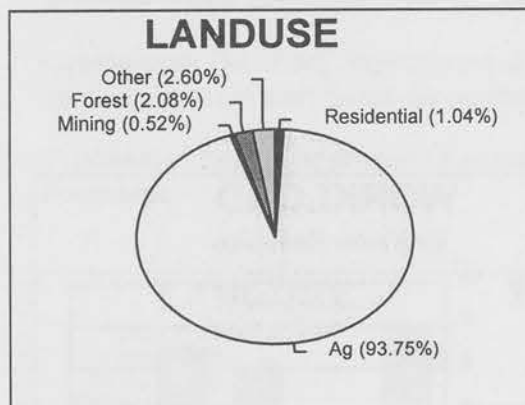
1. Completed the Chisago County Lake Monitoring Report (which tested the water quality of 15 lakes) and distributed it to over 300 organizations and individuals.
2. Provide cost-share to seal abandoned wells--46 wells have been sealed.
3. Provided financial and staff assistance to conduct two Shoreland Volunteer Training sessions held in cooperation with five adjacent counties--60 people attended.
4. Conducting an inventory of drained wetlands and ditches to help locate potential restorable wetlands. The project is about 80 percent complete.
5. Provided funding to purchase well water testing kits for Public Health to use in the Women, Infants and Children Program.
6. Held Water Fairs in 1994 --300 persons attended, and in 1997 -- 250 attended. Performed 215 water tests.
7. Provide funding to Camp Sunrise near Rush City for their Adopt-A-River clean up efforts on the St. Croix.
8. Held two free nitrate testing clinics -- over 180 wells were tested.
9. Publish a water plan newsletter, Chisago County Currents, and distribute to over 16,000 households.
10. Purchase Septic System Owners Guides and distribute to owners of new homes built in the county.



Information provided with assistance from the local water planner

CLAY COUNTY

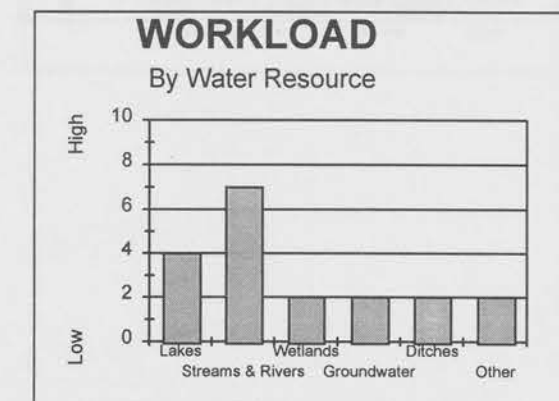
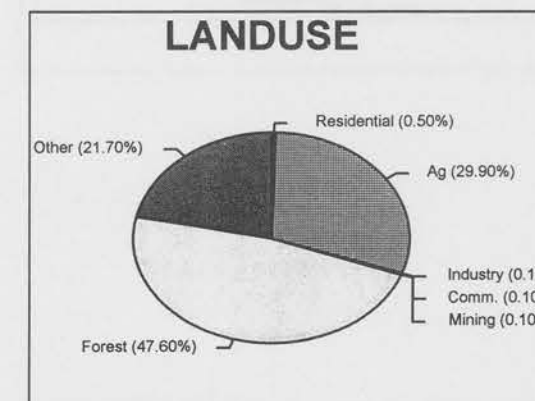
1. Created and expanded the local water plan task force to adequately address water plan concerns and issues.
2. Established a cost-share program to seal abandoned wells.
3. Sealed over 80 abandoned wells (50 high priority).
4. Hosted waste pesticide/chemical container collections.
5. Completed a well water nitrate study for an area of over 30 square miles.
6. Completed a stream bank erosion project on the Buffalo River using traditional engineering and bioengineering.
7. Increased the water plan coordinator position from 25% to 80% and transferred the position to the SWCD.
8. Updated the water plan.
9. Initiated an accelerated effort to establish 2,000 acres of grass buffer strips. (Sharing is provided for landowners to establish buffers via Conservation Reserve Program continuous sign-up. Over 600 acres have been signed up already.)
10. Initiated a bi-county flood mitigation inventory to assist in flood damage reduction.



Information provided with assistance from the local water planner

CLEARWATER COUNTY

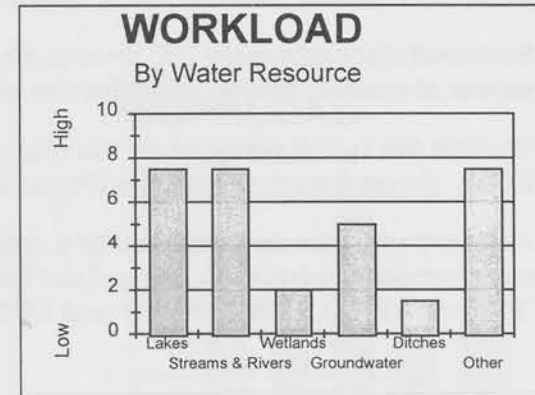
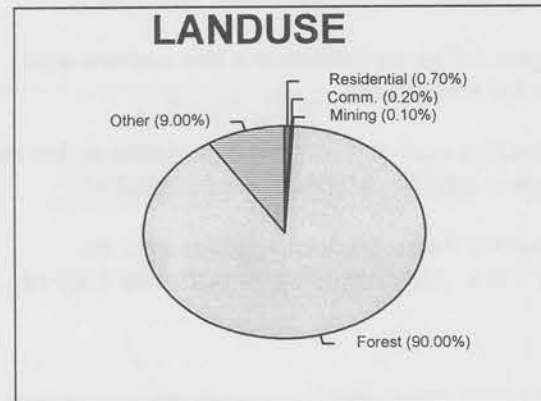
1. Conducted Tri-County Lake Enhancement/Protection Projects which includes baseline water testing and information and education activities. (4 SWCDs, P&Z, HRDC, MPCA)
2. Contributing sponsor of the Lake Bemidji Watershed Clean Water Partnership (CWP) which includes modeling subwatersheds to identify high priority sites, implementing erosion control projects and conducting informational campaigns. (Beltrami Co., SWCD's, HRDC, MHB, MNDNR, MPCA and BSU.)
3. Assisted with Itasca State Park's Peace Pipe Vista Erosion Control Project and long range resource management plan. (SWCD, DNR and NRCS.)
4. Established a lake water quality data base through rotational sampling of major lakes in the county 4-5 times per year.
5. Surveyed 60 miles of pipeline to locate abandon wells and prioritize for sealing.
6. Contributing sponsor of the Clearwater River Nonpoint Study and CWP Project which included subwatershed modeling to identify high priority sites, implementing erosion control projects and conducting informational campaigns. (Other participants include the Red Lake Watershed District, neighboring SWCDs, MPCA.)
7. Enhanced GIS capability through modeling the Pine Lake Watershed (30,000 acres) to determine factors causing water quality degradation. (HRDC and SWCDs.)
8. Surveyed approximately 250 river and stream miles to determine the nature and extent of grazing and to prioritize the sites for treatment.
9. Studied the runoff patterns for the city of Bagley and developed 3 projects to install in 2,000. (In conjunction with the City of Bagley, SWCD, MNDOT and HRDC.)
10. Assisted with the development of a community park, erosion control and an environmental education site at Lost River Park. (In conjunction with the City of Gougeon, SWCD, RC&D, RLWD and DNR).



Information provided with assistance from the local water planner

COOK COUNTY

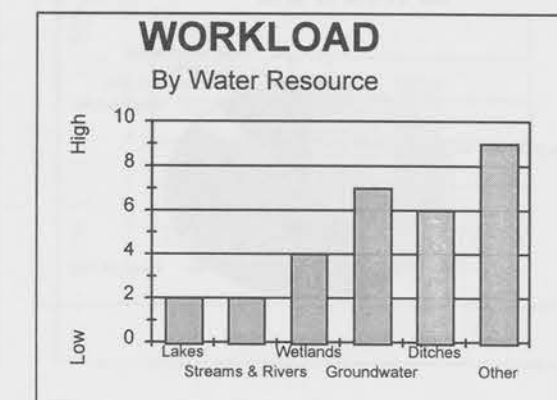
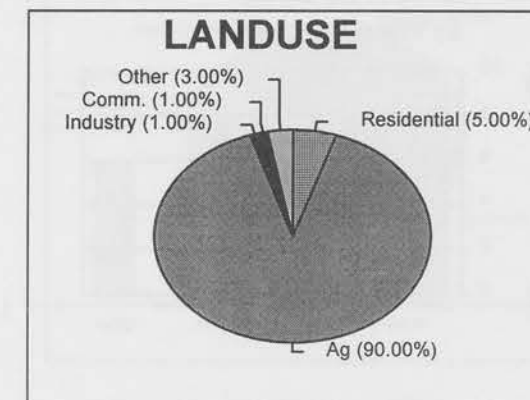
1. Developed education and awareness tools and improved their distribution network.
2. Distributed 5,000 exotic aquatic brochures about purple loose strife and eurasian milfoil to resorts, etc.
3. Presented videos about water conservation, shoreline protection and septic systems to lake associations at six meetings with 40-60 people attending a session.
4. Frequently make presentations at two schools and to home school kids --100 kids every year.
5. Sponsor research such as the MPCA Lake Assessment Program --5 to date.
6. Monitor sediment, phosphorous and coliform bacteria at multiple sites - lake beaches, home drinking water, rivers and lakes.
7. Fund infra-red aerial assessments.
8. Administer the Best Management Practices loan and cost-share programs.



Information provided with assistance from the local water planner

COTTONWOOD COUNTY

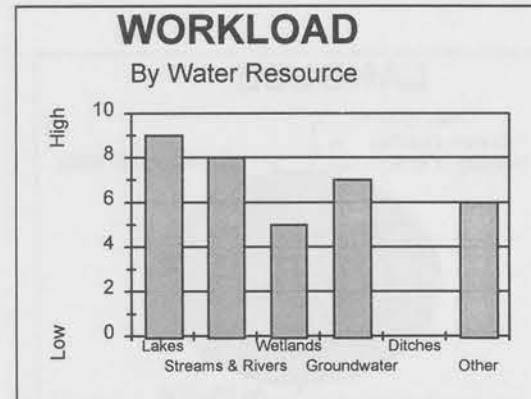
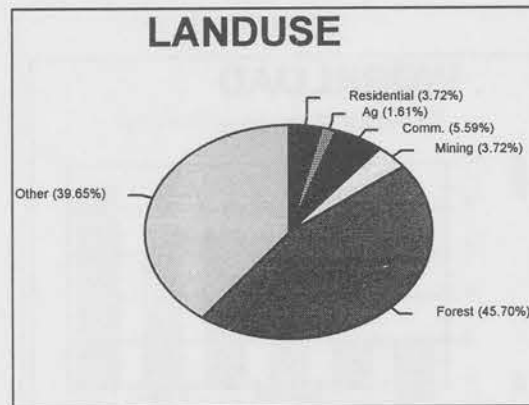
1. Upgraded 200 septic systems.
2. Watershed Projects: Mt. Lake, NE Cottonwood, Brown - Nicollet and Wellner Heggeman.
3. Sealed 200 priority abandoned wells.
4. Updated the feedlot ordinance (1995 & 1997) and permitted 50% of the county's feedlots.
5. Completed road retention projects including downsizing for flood control.
6. Sponsored educational activities such as the Environmental fair/Ecology bus.
7. Cost-share field windbreaks.
8. GIS - ARCVIEW training and capability is up and running.
9. Work with Mankato State University and the South-central water planners.
10. Working to restore Mt. Lake: 1,000 acre basin to be restored to original state after being used as marginal cropland for 60 years.



Information provided with assistance from the local water planner

CROW WING COUNTY

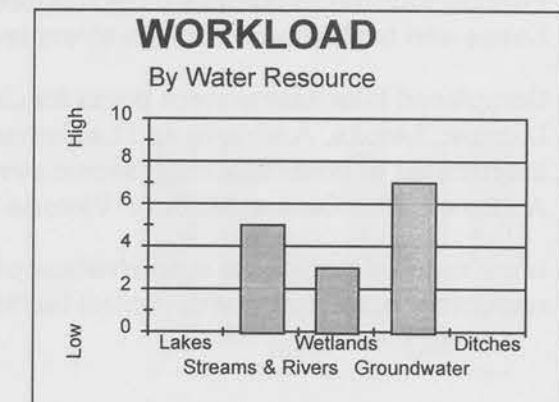
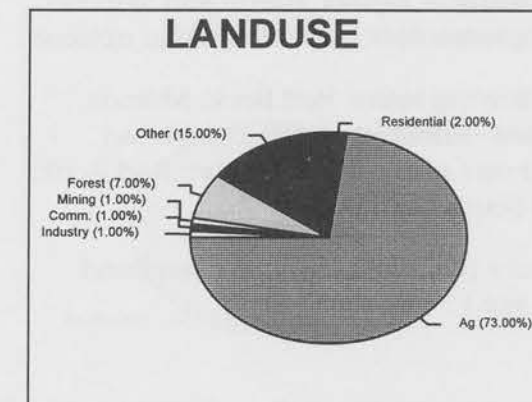
1. Identified and prioritized wetlands in the city of Baxter based on function.
2. Assisted Bay Lake Township to map and manage their water resources.
3. Assist landowners to develop and implement forest stewardship plans in riparian areas.
4. Developed a process for implementing a lake-by-lake septic upgrade program.
5. Coordinate and implement erosion control projects with townships and SWCD.
6. Coordinate well water screening for nitrates systematically by township.
7. Created and administer the Shoreline Impact Reduction program that works with livestock producers to protect water resources and enhance profitability.
8. Sample water quality in Mine Pit Lakes.
9. Complete a Drained Wetland Inventory for the majority of townships.
10. Built local capability for local units of government and respective departments.



Information provided with assistance from the local water planner

DODGE COUNTY

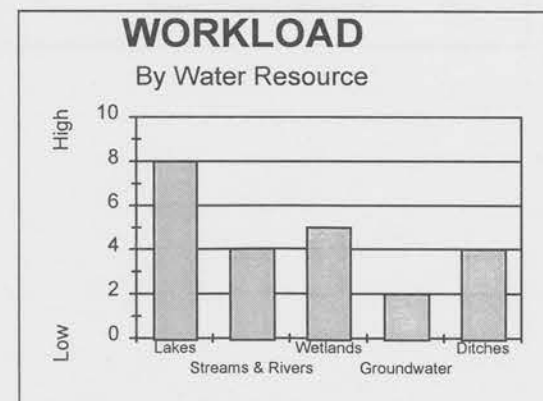
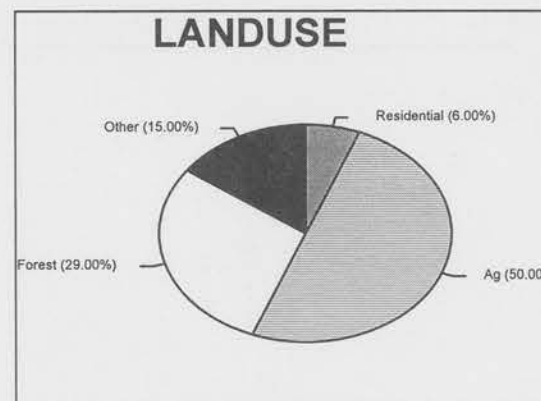
1. Built solid relationship with state agencies.
2. Created an Environmental Atlas to illustrate aquifer sensitivity and potential pollutant sources, prioritize actions and educate.
3. Maintain an aquifer monitoring program which utilizes the county well index in conjunction with the volunteer well water testing program.
4. Provide free well water sampling kits to pregnant mothers and families with infants. Also provide free tests for well owners living in areas with less than 60 feet of soil over the aquifer.
5. Adopt and enforce state septic rules.
6. Help fund the sealing of over 30 wells.
7. Certified over \$300,000 of low-interest loans for Ag Waste System improvements.
8. Helped fund outdoor classrooms at each school in the county.



Information provided with assistance from the local water planner

DOUGLAS COUNTY

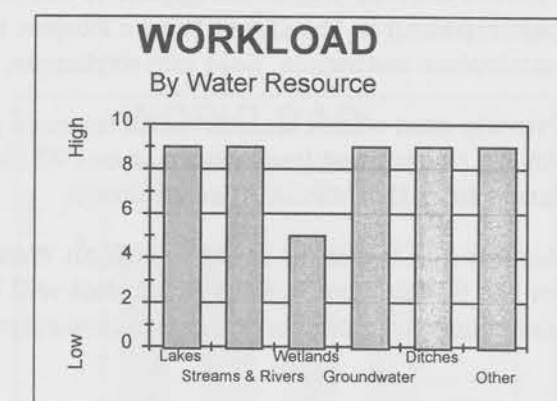
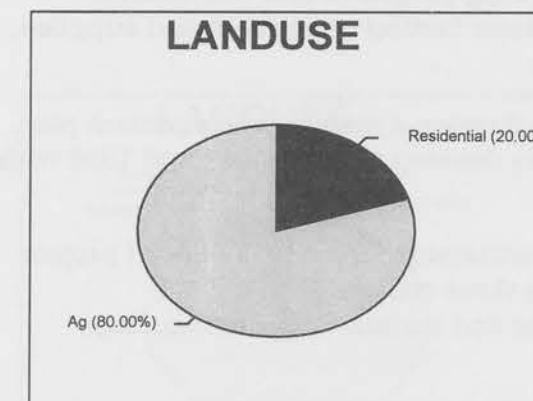
1. Help establish 35 Lake Associations and coordinate activities between lake associations and agencies.
2. Formed a Lake-scaping Committee to focus on revegetation of shorelines with native species and plant demonstration sites.
3. Sponsor watershed open houses for Red Rock, Miltona and Andrews Lakes. Free water testing and watershed-specific information provided to interested individuals.
4. Installed a water control structure on Lake Ellen which also assisted the enhancement of Mud Lake.
5. Eliminated an erosion problem at a public beach on Lake LeHomme Dieu and removed septic tanks from within water table.
6. Established buffer strips on joint ditches 3 & 4 during redetermination of ditch benefits.
7. Conduct an annual kid's Ground water Festival.
8. Provide funding to complete the diagnostic study of Agnes, Henry and Winona Lakes and facilitated meetings to explore implementation and financing options.
9. Completed lake assessment plans for the following lakes: Red Rock, Miltona, Lobster, Latoka, Andrews and LeHomme Dieu. Initiated and/or completed inventories of nonconforming septic systems on Lakes Mary, Lobster, Red Rock, Andrews, Ida, Osakis, Miltona, Victoria and South Union.
10. Implemented numerous conservation practices (waterways buffers, wetland restorations, animal waste control facilities, etc.)



Information provided with assistance from the local water planner

FARIBAULT COUNTY

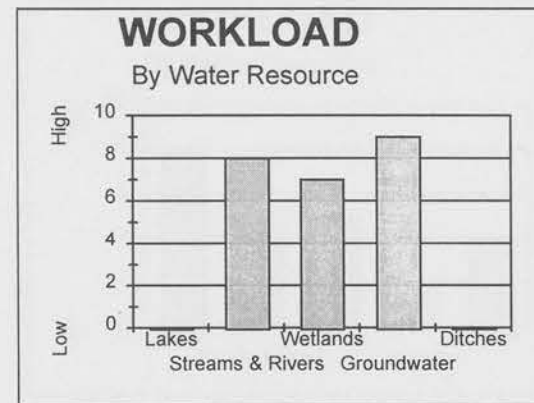
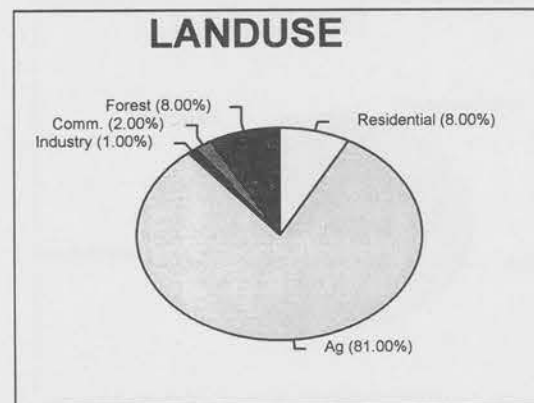
1. Entered into a joint powers agreement to combine county offices.
2. Developed a Feedlot Ordinance.
3. Adopted 7080 (Individual Sewage Treatment Systems).
4. Formed Quad Lakes organization.
5. Added two full-time staff members.
6. Developed a rural land use program.
7. Developed an urban land use program.
8. Coordinated and developed a successful Envirothon program.
9. Established a water monitoring and testing program throughout the county.
10. Established education programs with the local schools.



Information provided with assistance from the local water planner

FILLMORE COUNTY

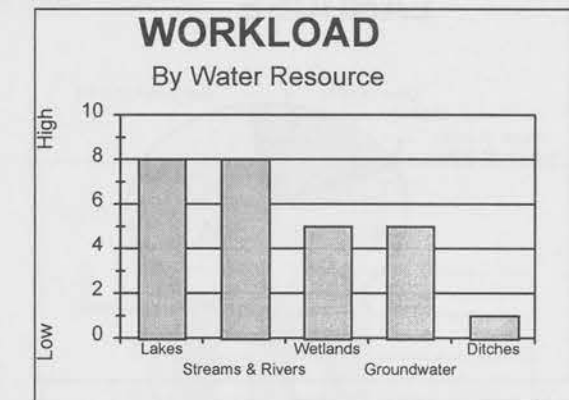
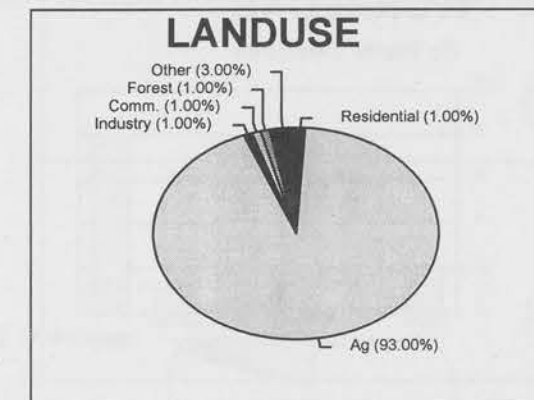
1. Completed the Fillmore County Geologic Atlas and use it as a planning and land management tool.
2. Completed potential contaminant source inventories for wells (active and abandoned), septic systems, storage tanks and feedlots. A dumpsite survey was also completed and one site cleaned up in cooperation with the township and the DNR.
3. Studied eight farms to find ways to reduce pesticide and fertilizer using best management practices.
4. Hold annual demonstrations to view the installation of an on-site septic systems and answer questions.
5. Adopted a feedlot ordinance and was delegated the MPCA Feedlot Program.
6. Completed several sinkhole treatment projects.
7. Offer water test kits at a reduced cost (\$5) through the Public Health Nurses' Well Baby program and the Women's, infants, and Children (WIC) program.
8. Provide annual financial support to the five Vo-Ag programs and two schools participating in the Great Rivers Project for water testing equipment and supplies, curriculum materials, field trip expenses, etc.
9. Provide cost-share incentives to farmers who develop a manure management plan. An Ag consultant has helped about 40 farmers develop plans in 1997 and 1998 with funds from the MPCA Feedlot Grant.
10. Assisted in securing a MPCA Clean Water Partnership Grant for a Phase I project for the South Branch Root River that will have three components: assessment/prioritization, karst investigations and surface water monitoring.



Information provided with assistance from the local water planner

FREEBORN COUNTY

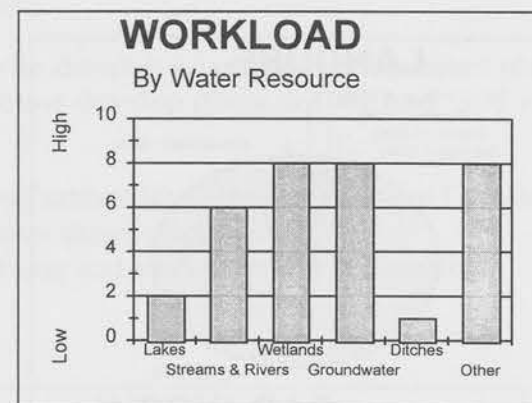
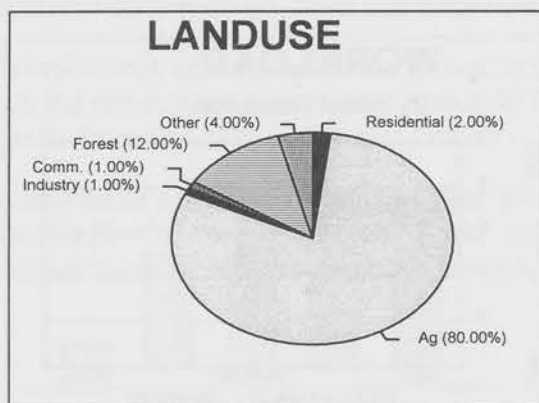
1. Conduct water well testing program and on-site inspection for well placement.
2. Conduct a well sealing program and provide cost sharing to seal wells.
3. Protect soil resources through MDA Agricultural Best Management Practices loans for tillage equipment and conservation practices.
4. Adopted and enforce a solid waste ordinance, and update when necessary.
5. Adopted and enforce a county feedlot ordinance, and accepted permitting delegation from MPCA.
6. Adopted and enforce an ordinance for on-site sewage treatment systems.
7. Revised the county land use ordinance.
8. Conducted clean up projects to remove debris from ditches, creeks and lake shores.
9. Participate in an environmental education program for youth in a multi-county area and published the booklet *Water World*.
10. Developed watershed projects for Bear and Albert Lea Lakes.



Information provided with assistance from the local water planner

GOODHUE COUNTY

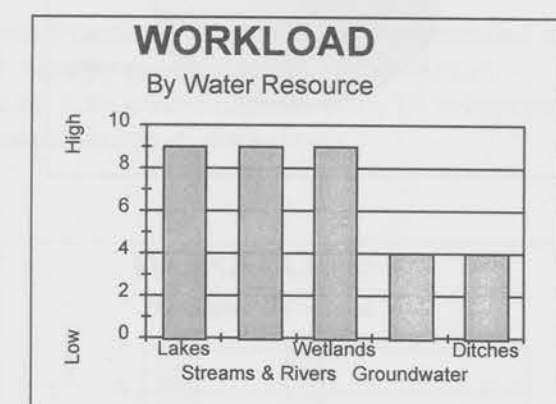
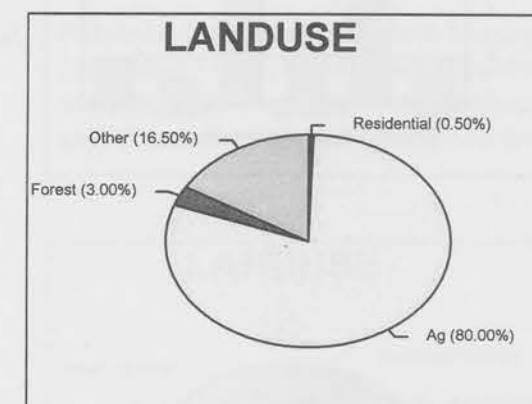
1. Completed a Geologic Atlas for the county.
2. Created a Water Plan Coordinator position.
3. Created Nutrient Management position.
4. Cost-share the sealing of abandoned wells.
5. Administer the Ag Best Management Practices Loan Program.
6. Adopt feedlot ordinance into zoning.
7. Create the Household Hazardous Waste Program.
8. Create a Recycling Program.
9. Promote water sampling.
10. Conduct an educational program for businesses generating hazardous wastes.



Information provided with assistance from the local water planner

GRANT COUNTY

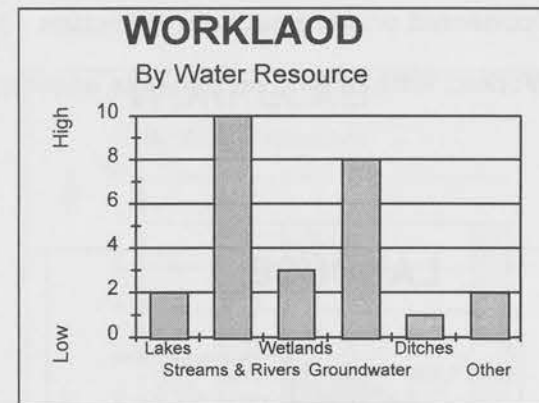
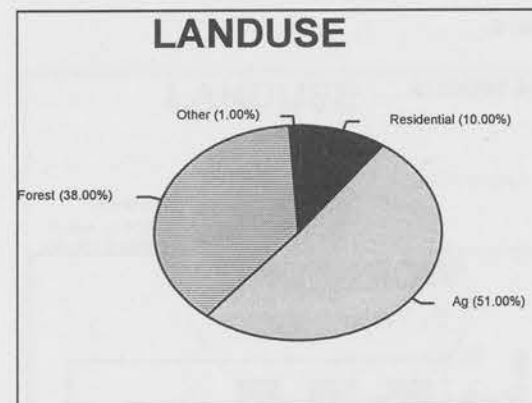
1. Completed five years of baseline water quality monitoring on seven major recreational lakes.
2. Developed an Environmental Learning Center at a west central area school.
3. Promoted and implemented Conservation Reserve Program filter strips on 5,000 acres of cropland.
4. Worked in partnership with DNR, MPCA, Stevens SWCD, Grant SWCD, NRCS, USFWS, Boise De Sioux Watershed District and a local steering committee to improve water quality in the Niemackl Lakes watershed area by implementing best management practices.
5. Developed Wetland Banking Program in the county as an option to restore wetlands.
6. Inventoried feedlots in 1990.
7. Inventoried drained and altered wetlands in the Niemackl Lakes watershed.
8. Annually sponsored a pesticide container collection.
9. Sponsored waste pesticide collection - 3 years.
10. Worked with MPCA on two lake assessment reports.



Information provided with assistance from the local water planner

HOUSTON COUNTY

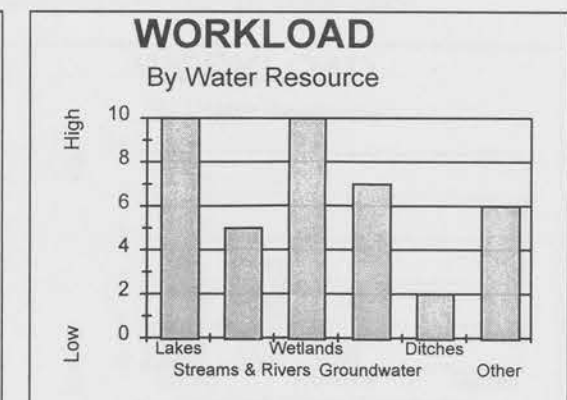
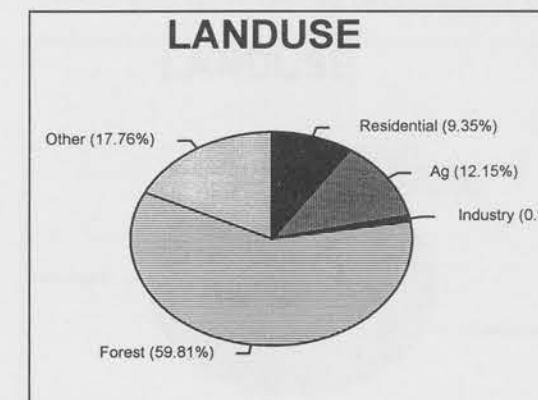
1. Funded household hazardous waste collections.
2. Offer incentive payments to landowners who install water and sediment retention structures.
3. Provided financial support for accelerating county-wide GIS.
4. Provided financial assistance to digitize Houston County's soil survey.
5. Digitized aerial slides for Houston County.
6. Funded a cost share program for rural individual sewage treatment systems.
7. Demonstrated proper well sealing techniques on several well sites.
8. Organized storm drain stenciling programs in several communities.
9. Provided water testing on wells within the county.
10. Assisted with county-wide agriculture pesticide container collection.



Information provided with assistance from the local water planner

HUBBARD COUNTY

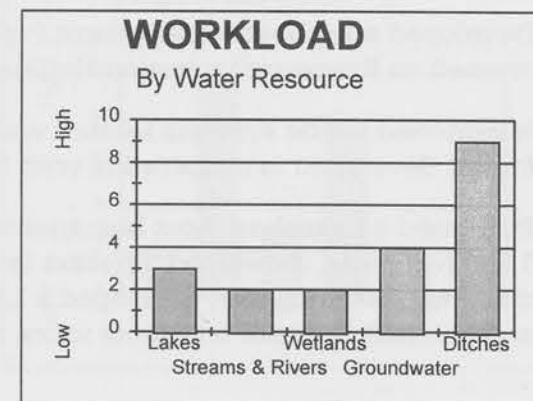
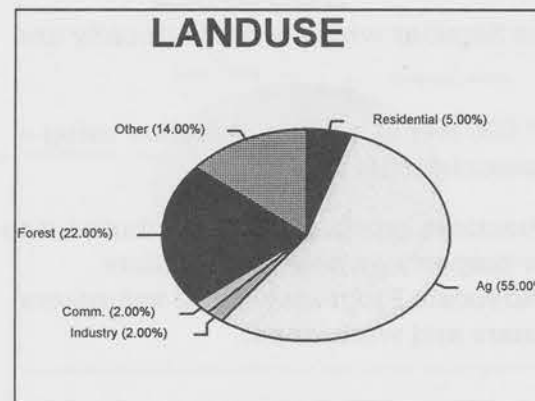
1. Appointed a citizen-based local water task force to advise the county board on water resource-related issues, and hired a Water Plan Coordinator/Wetland Conservation Act Administrator.
2. The water plan is housed in the Environmental Services Department and implemented by three county agencies.
3. Conducted a level 1 feedlot inventory.
4. Sponsor an annual Well Clinic/Water Quality Day where about 125 people take advantage of reduced cost testing for nitrates and total coliform bacteria. The information gathered from these tests is presented on Water Quality Day.
5. Created local GIS capability in SWCD through acquisition of hardware and software and partial funding of a technical position.
6. Created and adopted a Sewage Application Ordinance in 1991 and a County Septic Ordinance in 1996. Solid Waste Plan reviewed and amended in 1990.
7. Developed and expanded the Children's Freshwater Festival for sixth grade students (350 attend annually) and the River Watch Program for three school districts.
8. Developed a Ag Best Management Practices Seminar which is held annually and created an Evapo-transpiration Hotline.
9. Inventoried septic systems located within 1,000 feet of a lake's shoreline using a format developed in cooperation with lake associations.
10. Published a Lakeshore Best Management Practices brochure and distributed it to 1,500 residents, developed a packet for new property owners and Realtors distribute 800 annually, developed a Lake Advocate Program with 12 volunteers and annually sponsor lakeshore tours, seminars and workshops.



Information provided with assistance from the local water planner

ISANTI COUNTY

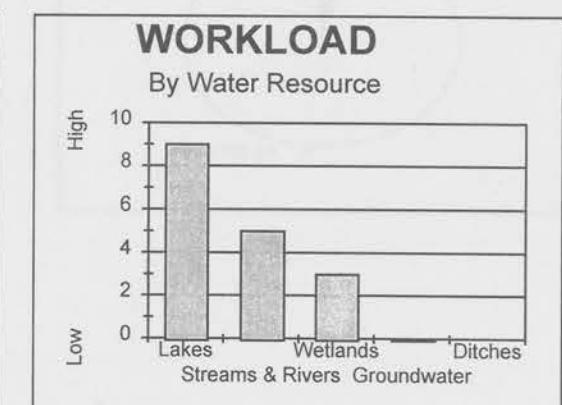
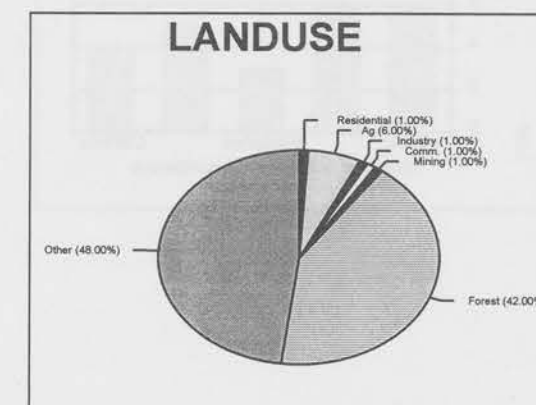
1. Sponsor an annual household hazardous waste collection program-- 300 to 400 people participate in this program annually.
2. Fund the installation of recycling containers at the County Fair Grounds, Library and Courthouse.
3. Publish a newsletter three times a year and distribute to all landowners in the county (16,000-17,000).
4. Provided funds to Pheasants Forever to plant 500-600 acres of native Prairie grasses and 75,000 trees and shrubs.
5. Stencil storm drains in the cities of Cambridge and Isanti with the slogan "Don't Dump - Drains to Rum".
6. Help fund the Minnesota Water line, a 1-800 informational number.
7. Fund an annual well-testing program-- 200 to 300 people participate per year.
8. Provide Lake Advocate Leadership Training.



Information provided with assistance from the local water planner

ITASCA COUNTY

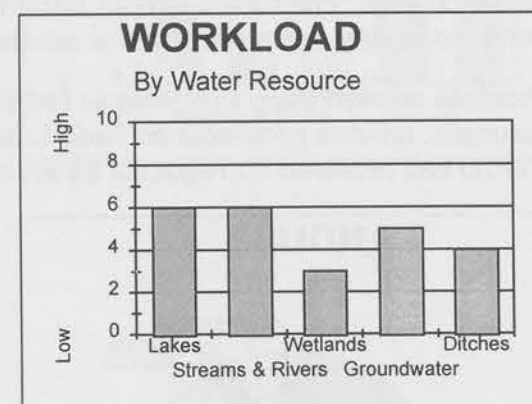
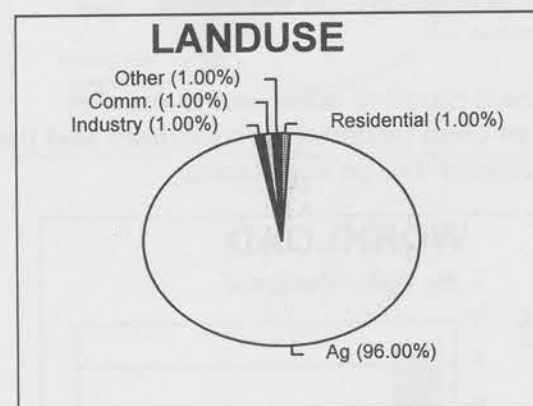
1. Hired a full-time county/SWCD limnologist.
2. Developed a long range, county-wide lake water quality monitoring plan which included ranking of over 170 lakes.
3. Conducted baseline water quality studies on 70 lakes.
4. Developed computer-based lake/watershed assessment reports, including modeling lake conditions, GIS-based mapping and charts and tables linked directly to spread-sheets. Modeled impacts to water quality with land use changes within a watershed.
5. Developed Itasca Currents Newsletter, which was expanded to cover Northeast MN and renamed Arrowhead Currents-- 3,500 issues are circulated twice a year.
6. Through the Arrowhead Water Quality team, produced the shoreland best management practices *Protecting Our Shores* fact sheet series. Subsequently produced five videos, based on some of the fact sheets in the series.
7. Worked with partners to expand the water quality monitoring network: 59 lakes (through MPCA's Citizen Lake Monitoring Program); 55 lake-level gauge readers, 15 rain gauge readers, Purple Loosestrife control volunteers, River Watch high school and college student volunteers and many others.
8. Reactivation of the Itasca County Coalition of Lake Associations, which currently has 21 member lake associations. The number of lake associations in the county has nearly tripled and now numbers 32, with a total membership of over 2,500 individuals.
9. Multi-agency/lake association lake watershed studies on identified "problem" lakes in the county. The Itasca SWCD, administrator of the county water plan, has initiated and/or led most of these studies.
10. Promote conservation practices to reduce direct runoff to lakes and rivers. For example, erosion problems on Sand Lake have been targeted for treatment and the SWCD has received 30 requests for erosion control design assistance.



Information provided with assistance from the local water planner

JACKSON COUNTY

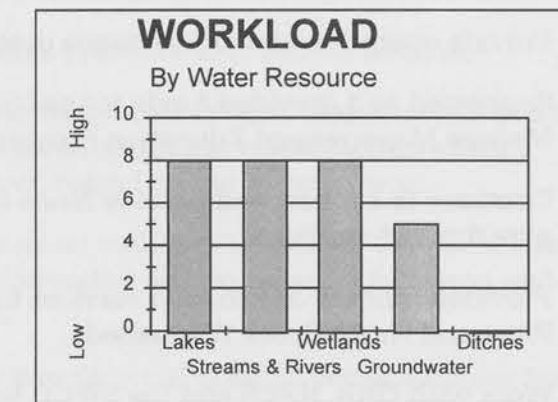
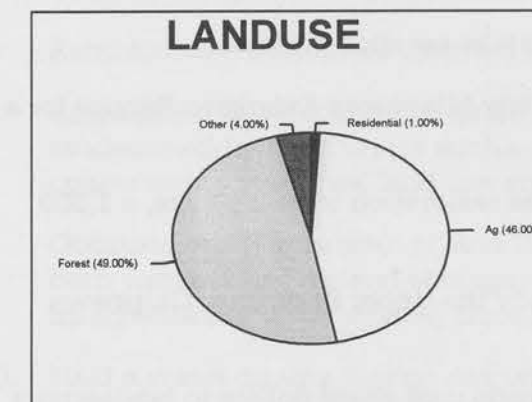
1. Convened a Water Planning Advisory Committee which drafted the original water plan and updated it in 1997.
2. Continue to be involved with the 13 county water planning organization and Mankato State University.
3. Established an abandoned well sealing cost-share program --258 wells sealed.
4. Provide assistance to address waste water treatment in small communities.
5. Support the Heron Lake Environmental Learning Center and development of programs such as Lakes, Rivers and Streams, Wetland Wonders, Prairie Ecology and Forest Ecology.
6. Co-administer the State Revolving Loan Fund Loan Program with the SWCD.
7. Cooperate in the restoration efforts at Heron Lake. This joint project received the *Government and the Environment Award* at the 1998 Partnership Minnesota Awards Program held at the Hubert H. Humphrey Center.
8. Draft changes in the Jackson County Development Code regarding such issues as shoreland development, vegetative removal restrictions, individual sewage treatment standards, feedlot regulations, bulk storage of liquids and the treatment of petroleum contaminated soils.
9. Published four issues of *Shoreline Talk* and distributed to all shoreland owners.
10. Created a new program called the Conservation Use Acres Program in conjunction with the SWCD.



Information provided with assistance from the local water planner

KANABEC COUNTY

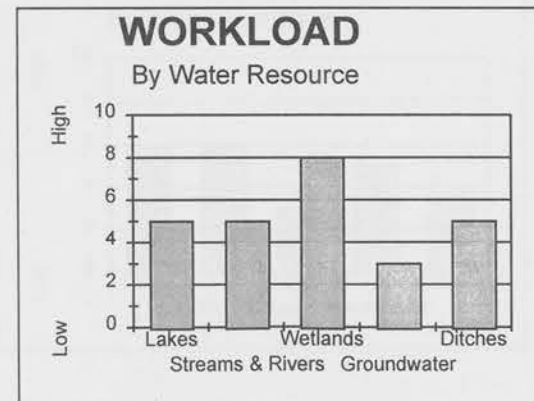
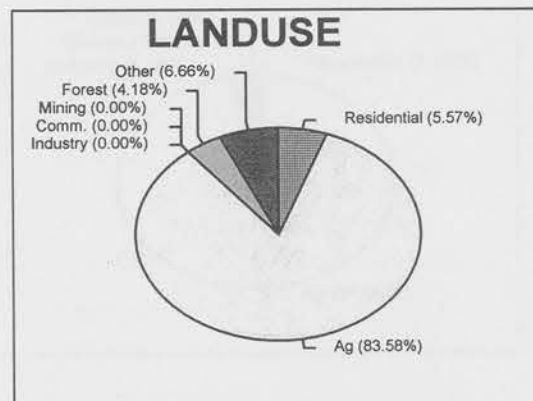
1. Developed a county-wide soil survey.
2. Developed a water plan cost-share program for pollution abatement systems for agricultural waste projects.
3. Implemented water quality projects.
4. Implemented a GIS system for the Snake River Watershed.
5. Implemented How Well is Your Well?, which is a private well testing program every third year.



Information provided with assistance from the local water planner

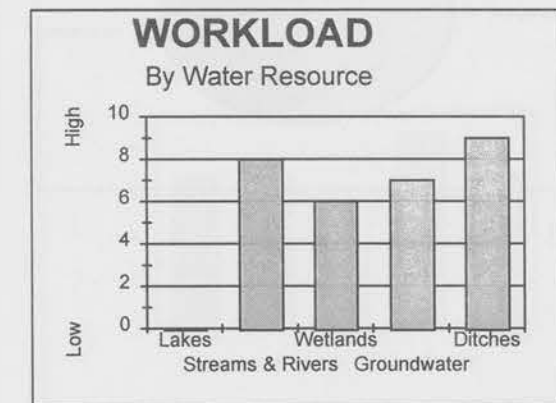
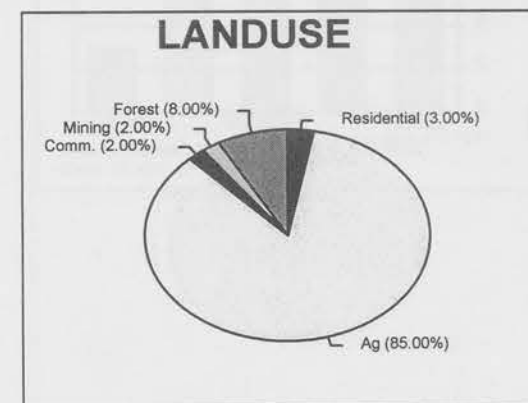
KANDIYOHI COUNTY

1. Provided funding to Big Kandiyo Lake Association for a MPCA Clean Water Partnership (CWP) Phase I study and the Diamond Lake Association for an MPCA CWP Phase I and Phase II study. Administered the MPCA grants for the Lake Associations.
2. Conducted an abandoned well inventory and provided cost-share incentives to seal 148 abandoned wells.
3. Funded a Conservation Credit Initiative program-- 19 farmers participated.
4. Provided funds to the Kandiyo Area Conservation Association, Prairie Woods Environmental Learning Center and the Kandiyo County Lakes Improvement Association for materials and equipment for education programs and workshops.
5. Established a funding mechanism to finance projects proposed by lake associations. Approximately 20 projects have been funded at cost of about \$42,000.
6. Provide operation and maintenance costs for lake aeration systems.
7. Supported and provided funds to the University Minnesota Extension Service for a Manure Management Education Program.
8. Continue to support and provide funds for the restoration of Grass Lake, a 1,300 acre drained wetland.
9. Provided funding and in-kind services to study the Upper Shakopee, Chippewa River and Hawk Creek Watersheds.
10. Work with DNR, NRCS and the SWCD to provide cost-share dollars to landowners who install best management practices that improve water quality/quantity.



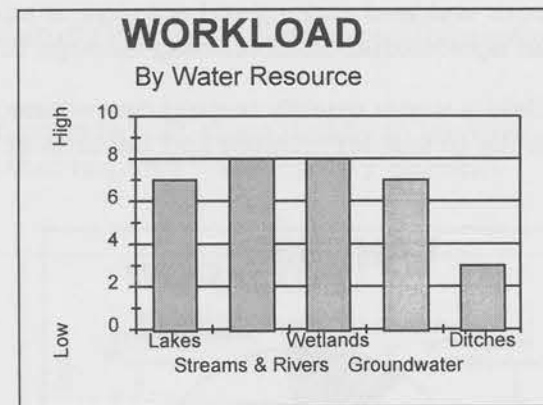
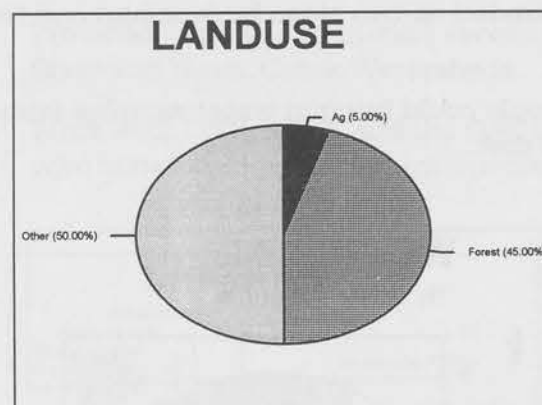
KITTSOON COUNTY

1. Hired a staff position to coordinate and administer the water plan and related programs.
2. Developed and implemented a surface water monitoring program to collect baseline water quality information on three river systems and one coulee. Over 20 sites were monitored for pesticides, ph, nitrogen, phosphorous, sediments, bacteria, etc.
3. Publish the *Northland Conservation News* newsletter which is mailed quarterly to over 900 residents and partners.
4. Collaborated with the DNR Waters to establish one observation well in the county to monitor ground water levels.
5. Established an abandoned well sealing cost-share program--106 high priority wells have been sealed to date.
6. Formed the Kittson County Flood Committee to address flood related issues.
7. Established a cost-share program to install practices that reduce erosion.
8. Established an education program in county schools for first through sixth grade students addressing topics such as soil erosion, ground water characteristics, conservation practices, land use and their impact on the environment.
9. Obtained an 80-acre tract of land to use as an outdoor classroom. This land has both wetland and upland acreage, is surrounded on two sides by farmland and has an agricultural ditch running through it.
10. Held a water quality testing day where people could bring in water samples from wells to test for nitrates and bacteria at no cost.



KOOCHICHING COUNTY

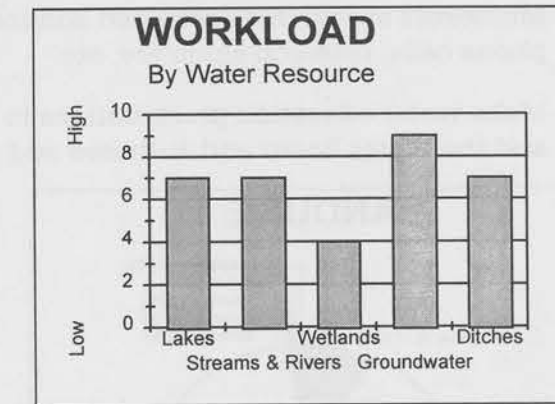
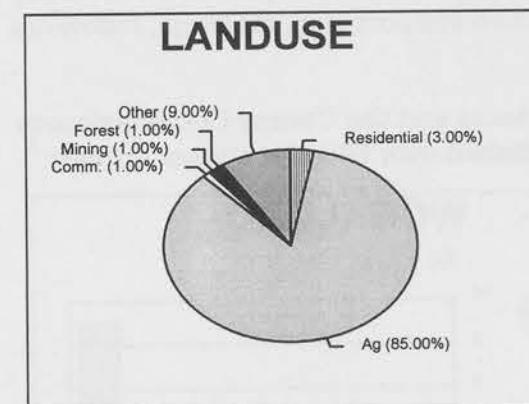
1. Drafted the Local Water Plan and a work plan to implement it.
2. Created an Environmental Services Department to oversee planning, zoning and shoreland.
3. Strengthened the SWCD and reestablished district base programs by increasing staff to two full time positions.
4. Completed River plans for the Bigfork, Rainy/Rapid and Littlefork/Rat Root.
5. Developed Individual Sewage Treatment System Design and Inspection Program.
6. Developed a Reduced-Cost Water Testing Program through the County Health Department.
7. Strengthened educational programs, fairs, school programs, hazardous waste collections, etc.
8. Continued growth of the local rain gauge program.
9. Developed Rainy On-site Septic Solutions.
10. Received growing and on-going support for the water plan through the county board and the public.



Information provided with assistance from the local water planner

LAC QUI PARLE COUNTY

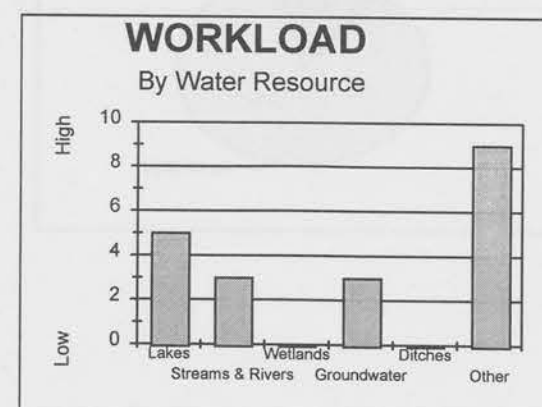
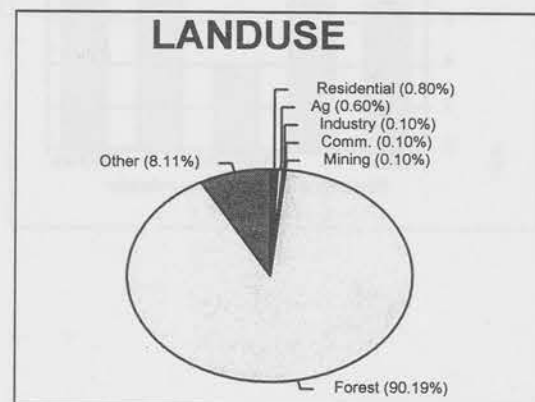
1. Appointed a 29 member Resource Commission that serves as the Water Plan Task Force, Land Use and Feedlot Ordinance Task Force and other natural resource program committees.
2. Established an Abandoned Well Sealing Cost-Share Program --342 wells sealed.
3. Conducted 3 nitrate testing clinics for drinking water-- 250 samples were tested and an unexplained hot spot was discovered in the north west part of the county.
4. Produced a brochure about the effects of high nitrate levels in drinking water for expectant mothers and small children and distributed it to local clinics, hospitals and public health center.
5. Annually co-sponsored (with the SWCD) an Environmental Fair attended by over 2,500 6th graders.
6. Monitored county ditch 3-13A and the results indicate that cropland is the major contributor of contaminants.
7. Support and promote State Revolving Fund for Best Management Practices.
8. Conducted a level 1 feedlot inventory and presently upgrading to a level 2, to be used with the county's GIS.
9. Sponsor the MN Extension Services Manure Management Program with about 20 livestock producers served annually.
10. Radio spots are played on 3 local radio stations daily. The spots are on 12 different water quality related subjects and are aired on a monthly rotation.



Information provided with assistance from the local water planner

LAKE COUNTY

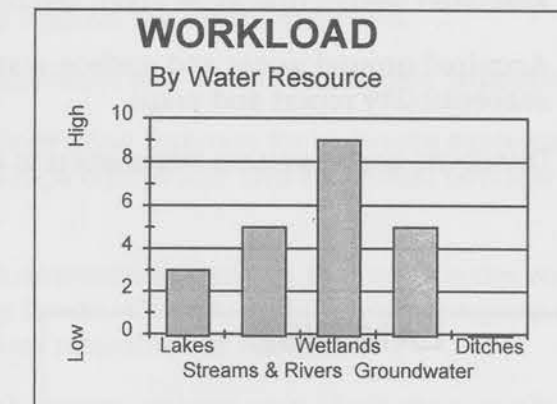
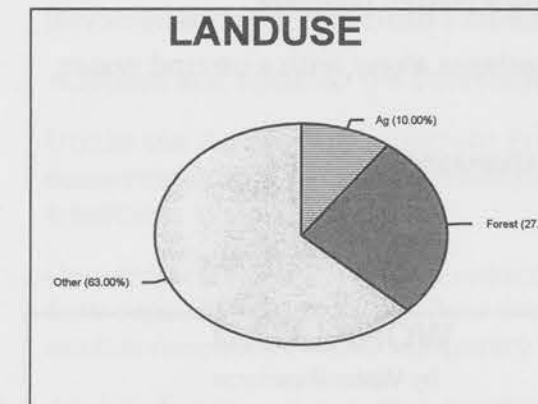
1. Promote water conservation by distributing 1,380 water conservation kits and 3,000 fact sheets, developing a best management practices video, conducting a water fair and retro fitting 65 homes to achieve water savings from 20 to 41 percent.
2. Carry out individual sewage treatment systems activities: teach five classes for 147 participants, distribute Septic Owners Guide and support the use of alternate systems.
3. Carry out well water educational activities: printed and distributed 30,000 educational place mats, tested 173 private wells and gathered data and helped to address the water contamination crisis at Look Out Mountain.
4. Helped establish the Baptism River Watch Program where students and staff studied the river for five years. Provided financial and technical support and media coverage.
5. Provide encouragement, media coverage, presentations and testing supplies free to a growing number participants of the MPCA Volunteer Lake Monitoring program .
6. Completed a junk yard survey and performed soil and water testing at the junk yard sites. Sought media coverage of the issue, met with residents and hosted a public meeting. Provide financial assistance to clean up junk yards.
7. Convened a group of concerned residents and experts to evaluate the quality of municipal water sources in the county and make recommendations to city councils on ways it could improve the water quality.
8. Solicited teams to participate in the area high school Envirothon. Assist in developing and conducting the competition.
9. Provided field testing of the effectiveness of laundry disks as part of a University of Minnesota study. Also provided administrative support, e.g., mailings, follow-up phone calls, research summary, etc.
10. Make water education presentations to students and the County Commissioners and the Water Board and authored and published over 50 educational articles.



Information provided with assistance from the local water planner

LAKE OF THE WOODS COUNTY

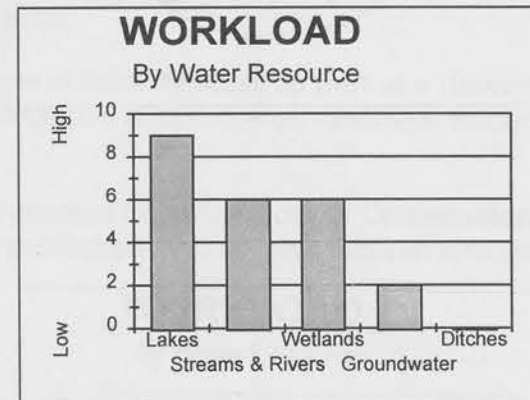
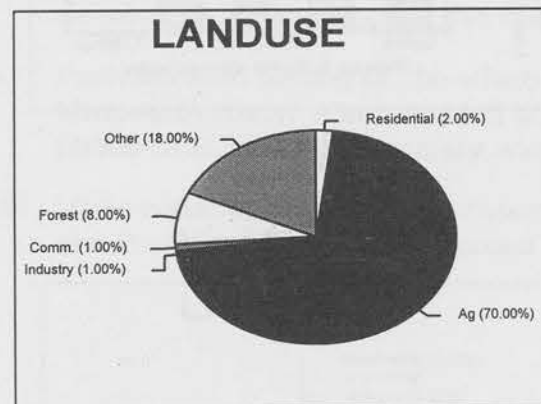
1. Involved SWCD water planning/wetlands implementation planning.
2. Hired staff - zoning/GIS Technician training.
3. Established Monumentation Program - hired county surveyor.
4. Developed and adopted the Rainy Rapid River's Plan.
5. Acquired wetlands and water planning training.
6. Conducted surface water quality testing.
7. Purchased and installed GIS equipment/computers/programs.
8. Conducted a feedlot inventory.
9. Inventoried abandoned wells.
10. Worked with Task Force and GIS committees.



Information provided with assistance from the local water planner

LE SUEUR COUNTY

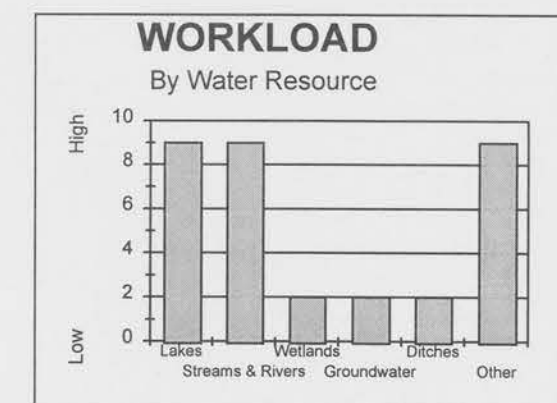
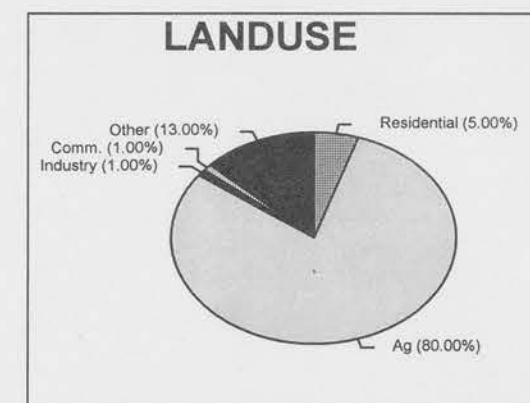
1. Hired a water plan technician to provide service to public regarding water quality/quantity concerns.
2. Established an abandoned well sealing program.
3. Participated in 13 County South Central MN Water Planners Project, Minnesota River Basis Joint Powers and the Common River Watershed Partnership.
4. Received three MPCA Clean Water Partnership projects for both Phase 1 & 2 for German/Jefferson Lakes, Lake Washington and Lake Volney. All are currently in Implementation Phase 2.
5. Revised the land use plan and all associated ordinances.
6. Adopted a feedlot and manure management ordinance and received delegation to administer the MPCA feedlot program.
7. Closed all landfills (permitted and unpermitted) in county.
8. Educated feedlot operators about the county's feedlot program.
9. Acquired ground water and surface water atlases along with a ground water susceptibility report and maps.
10. Distribute septic system information to all shoreland residents.



Information provided with assistance from the local water planner

LINCOLN COUNTY

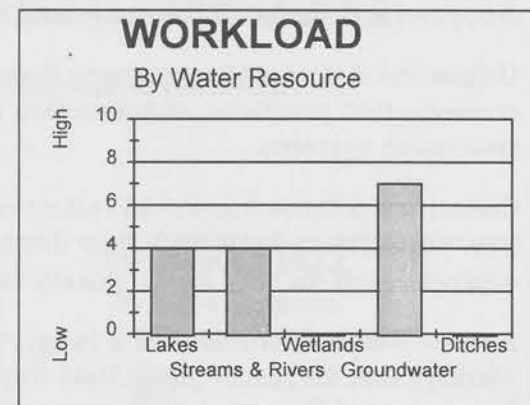
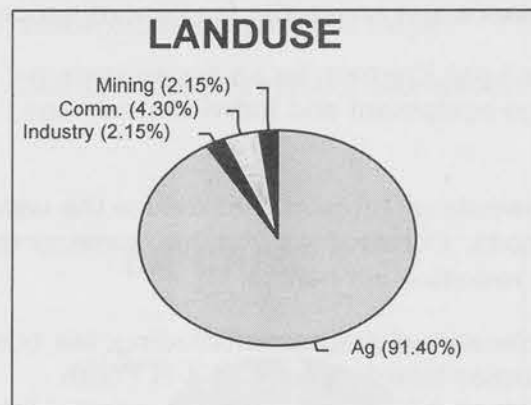
1. Developed a well sealing cost-share program --270 high priority wells sealed.
2. Through the Civil Defense Director, developed a Local Response Plan and purchased chemical spill equipment.
3. Conduct a bi-annual tour to show task force members, county commissioners and state agencies various water plan projects worked on or funded over the years.
4. Lake Projects: 1) Support the Lake Improvement for Everyone Association in their efforts to clean up Lake Benton; 2) Helped secure a 319 EPA Grant from South Dakota for the Lake Hendricks Watershed and continue to help with conservation and education projects; 3) Helped Secure a MPCA Clean Water Partnership Grant Phase 1 and phase 2 for the Lake Shaokatan Project and helped secure the Yellow Medicine River Watershed Clean Water Partnership Grant, Phase 1.
5. Developed a surface water quality monitoring/sampling program. Samples are being used as a benchmark and to monitor water quality changes
6. Addressed issues concerning the Rural Water System and continue to assist in the development of a Well Head Protection Plan on the Verdi Well Field.
7. Adopted and updated the shoreland ordinance and an interim feedlot ordinance.
8. Utilize the Ag Best Management Practices Loan Program for ag waste systems, conservation practices, conservation tillage equipment and individual sewage treatment systems.
9. Constructed three flood road reduction downsizing projects that reduce the water flow capacity and the peak flow during floods. Constructed four dam projects that control runoff and act as temporary water retention silt basins.
10. Assisted with or conducted a variety of educational programs including: fair booth, Ecology Bus for fourth grade field days, display board, Cluster 11 4-H Youth Development Camp, joint agency newsletter and Biology Class wetlands field day.



Information provided with assistance from the local water planner

LYON COUNTY

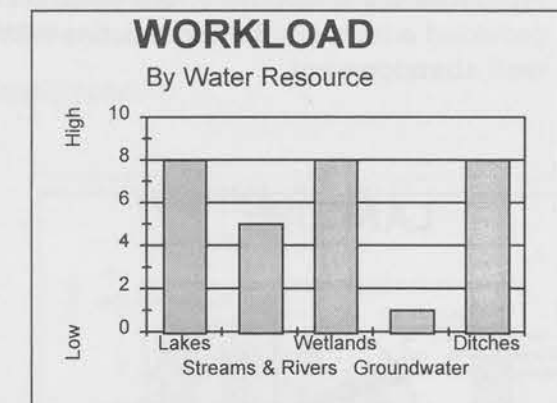
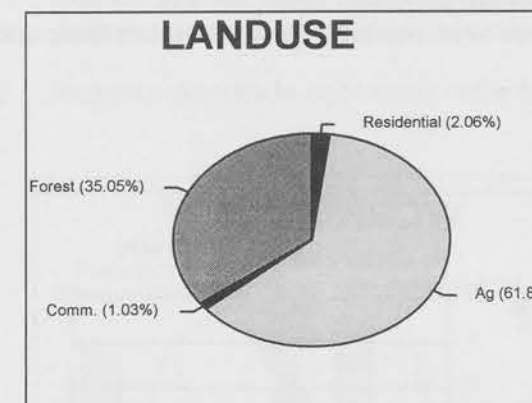
1. Sealed 175 abandoned wells
2. Constructed 9 water retention/flood control projects.
3. Publish a water biannual newsletter and insert it in all papers in the county.
4. Developed and implemented a ground water testing program to gather baseline water quality data (20 wells to-date).
5. Help fund Cottonwood River Diagnostic Study.
6. Developed a tile inlet replacement program.
7. Funded the development of a wellhead protection education brochure and the purchase of a wellhead protection educational model.
8. Help fund sixth grade Environmental Fair held in southwest Minnesota.
9. Provide educational grants to organizations to develop and implement environmental programs.



Information provided with assistance from the local water planner

MAHNOMEN COUNTY

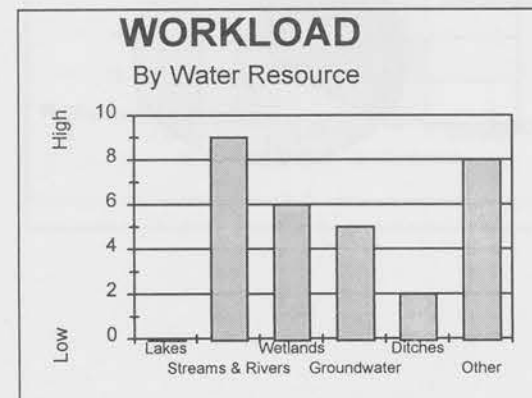
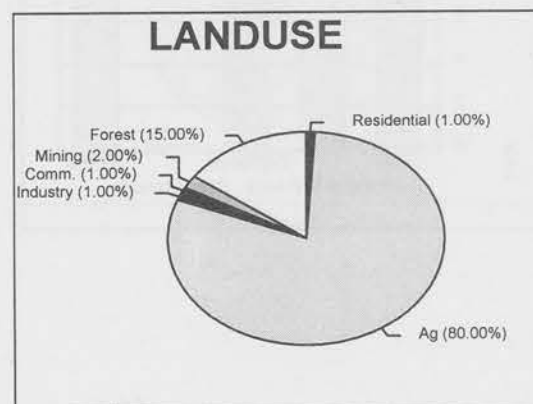
1. Hired new staff.
2. Increased local capacity - survey equipment, computers, etc.
3. Completed a legal ditch inventory.
4. Established ditch committees.
5. Conducted septic surveys on White Earth Lake, North Twin Lake, South Twin Lake and Tulaby Lake.
6. Developed a lake property database.
7. Established a no-till program.
8. Publish a lakes newsletter with a watershed based.
9. Publish a county box holder newsletter.
10. Conduct a windbreak maintenance program.



Information provided with assistance from the local water planner

MARSHALL COUNTY

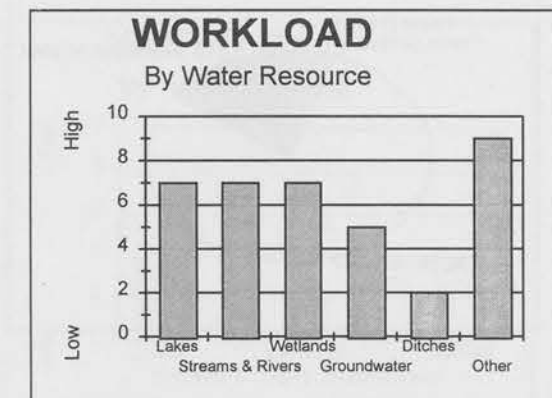
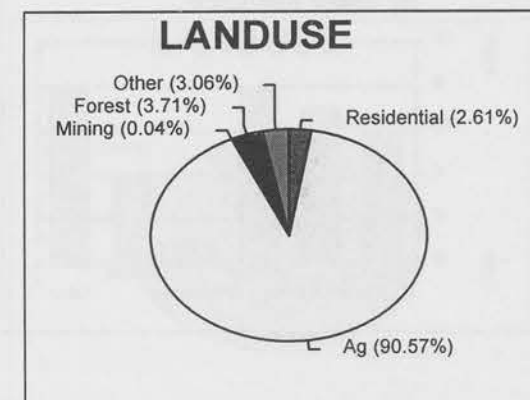
1. Expanded the task force to better represent the wide array of interests in the county and to tap their expertise.
2. Increased the water plan coordinators time spent on water management issues from 50 percent to full time.
3. Annually give a water presentation to fifth and sixth grade students.
4. Conduct an annual Envirothon for area high school students.
5. Published a *Livestock Newsletter* and distributed it to 300 county residents.
6. Developed a Septic Ordinance.
7. Provide cost-share to collect dead animals-- about 30-40 people participate.
8. Assisted the Middle/Snake River Watershed to develop and implement a management plan for the Middle River.
9. Assisted the Red Lake Watershed and Pennington County on the Thief/Red Lake River Basin Study.
10. Promoted the abandoned well sealing cost-share program with the SWCD and provided educational opportunities relating to well sealing, ground water flow and well abandonment.



Information provided with assistance from the local water planner

MARTIN COUNTY

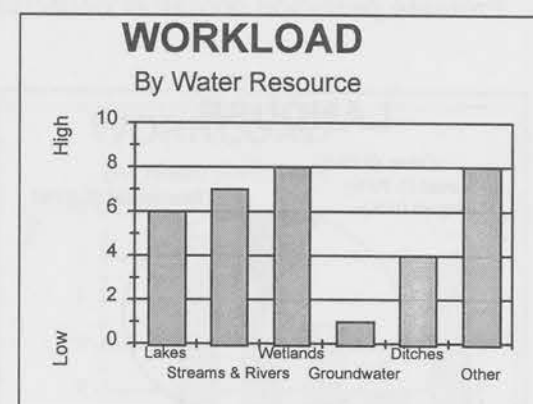
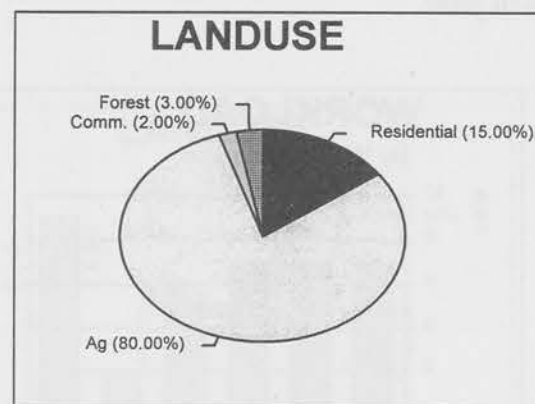
1. Hired a position to administer the water plan.
2. Completed rural water testing for nitrates and continue testing to detect changes in water quality.
3. Sealed over 500 abandoned wells.
4. Built GIS capabilities: EPIC, EPPL7 and ARCVIEW are used to provide GIS information to agencies and the general public.
5. Publish and distribute *Water Talk* which discusses water quality concerns and issues in the county.
6. Developed an educational display to use at the county fair, educational awareness days and other pertinent events.
7. Developed a county geologic atlas and a surface water hydrology atlas, in cooperation with Mankato State University.
8. Inspect feedlots to ensure that manure storage tanks are in operating condition and that water quality is protected and maintained.
9. Continue of working relationships with neighboring SWCDs, local units of government and state and federal agencies.
10. Promote pesticide container collection each year.



Information provided with assistance from the local water planner

MCLEOD COUNTY

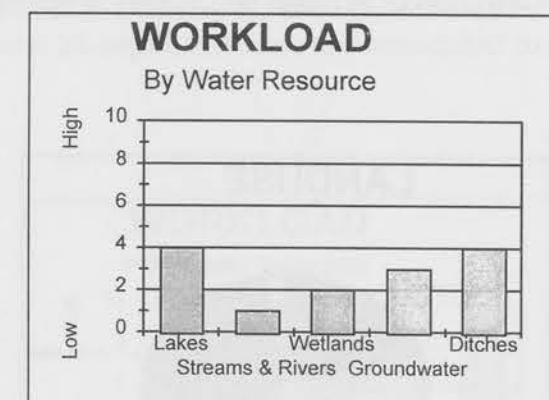
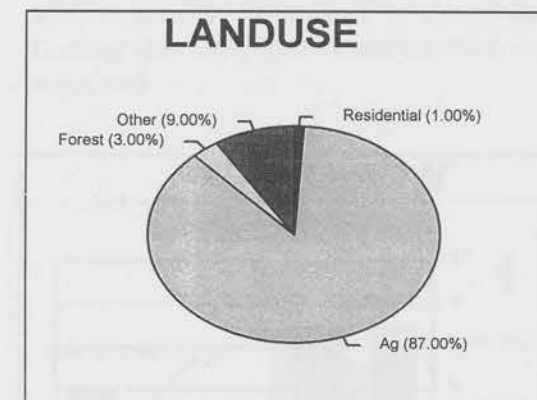
1. Added new staff (3 environmentalists and one environmental technician).
2. Adopted a new county septic ordinance.
3. Recently adopted a new county feedlot ordinance and assisted five landowners with ag waste system upgrades.
4. Monitored three county lakes.
5. Monitored Buffalo Creek for phosphorus, nitrates and fecal coliform levels in cooperation with the Buffalo Creek Watershed District.
6. Provided best management practice assistance to 300 landowners.
7. Established a county coalition of Lake Associations.
8. Received MPCA delegation to administer the feedlot program.
9. Helped Silver Lake Schools with an erosion control project.
10. Held six informational meetings on septic systems and feedlots for over 400 county residents.



Information provided with assistance from the local water planner

MEEKER COUNTY

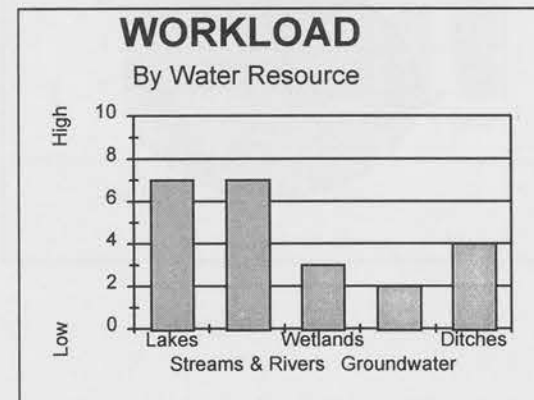
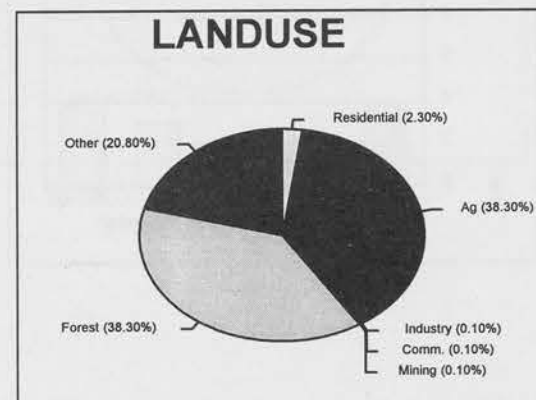
1. Developed a better working relationship with the SWCD and transferred the administration of the Wetland Conservation Act to them.
2. Hired a full-time sewage system inspector.
3. Assisted Lake Minnie Belle Lake Association with successful Phase I and Phase II MPCA Clean Water Partnership studies and applications.
4. Assisted Long and Spring Lakes to successfully apply for a MPCA Clean Water Partnership Grant, Phase I.
5. Provided 1,000 copies of Best Management Practices bulletins to lake shore owners.
6. Currently completing a county feedlot inventory.
7. Provided 250 free well sampling kits and tests for county residents.
8. Assisted lake associations with: aeration systems (2), lake monitoring (5), infra-red study (1), control structures (3) and grant applications (5).
9. Purchased an extensive inventory of lake monitoring equipment for lake associations to use to sample water.
10. Purchased a computer to track individual sewage treatment systems and conditional use permits issued.



Information provided with assistance from the local water planner

MILLE LACS COUNTY

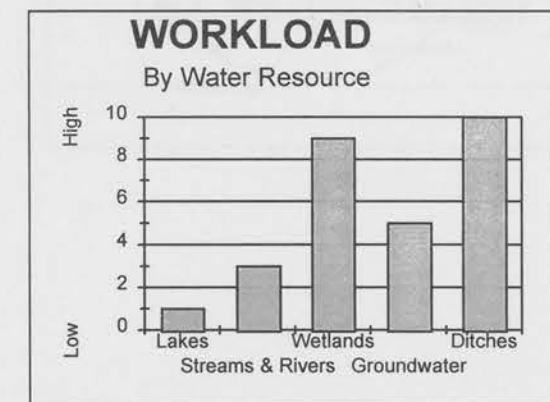
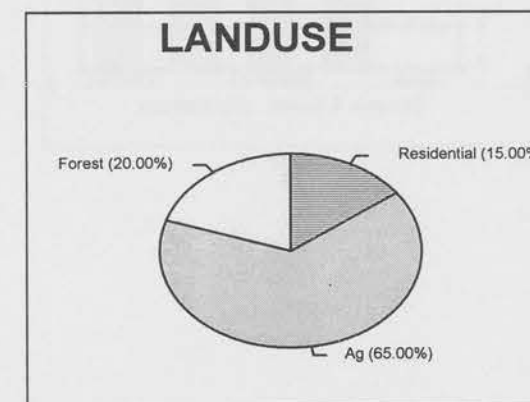
1. Staff the administration of the Mille Lacs Comprehensive Local Water Management Plan.
2. Submitted a Clean Water Partnership Phase I application. It was not funded and will be revised and Re-submitted in the next grant program.
3. Sought and received funding to improve the water quality of Mille Lacs Lake by coordinating efforts to identify and implement comprehensive solutions in the 188 square mile watershed.
4. Installed a shoreland protection project on a visible stretch of Mille Lacs Lake.
5. Monitor the water quality of Mille Lacs Lake, in conjunction with the DNR and Mille Lacs Band of the Ojibwe.
6. Institute a pesticide container recycling program.
7. Acquired GIS capability for planning purposes. New feedlot information has been entered on the system and will be used to prioritize county wetlands for use in water planning efforts.
8. Participate in the Snake River Watershed four-county Joint Powers Board and assist with project implementation.
9. Support the federal cost-share funding in the Rum River Watershed, which encompasses a majority of Mille Lacs County.
10. Continue to support soil survey mapping.



Information provided with assistance from the local water planner

MORRISON COUNTY

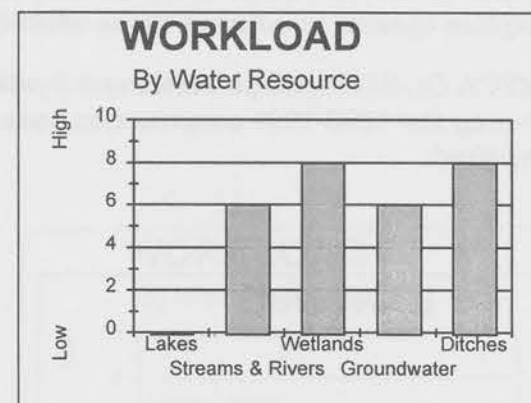
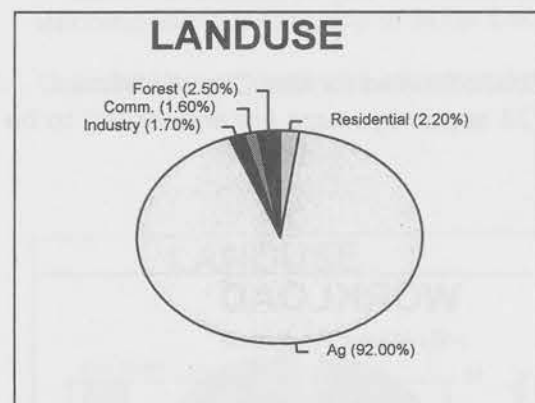
1. Coordinated the MPCA On-Site Sewage System Grants program for the City of Lastrup, resulting in 47 sewers being updated.
2. Constructed the first earthen manure monitoring project in Minnesota to measure flows and seepage below the pit.
3. Completed a feedlot inventory - level 2.
4. Annually hold a County Lake and River Day to provide information to shoreland property owners.
5. Annually hold a Feedlot and Manure Workshop for livestock producers with approximately 120-180 attending.
6. Work with Little Falls High School Riverwatch Program to collect water quality data on the Swan River.
7. Sponsor an annual Water Festival for all sixth-grade students (about 600) at Camp Ripley that focuses on aspects of the water festival and water quality.
8. Assisted five agricultural producers to construct fences, plant filter strips, install alternate water supplies, etc., resulting in approximately 3-4 miles of river shoreline being protected.
9. Assisted in the formation of the Belle Prairie Water Task Force to review ground water quality concerns in the developed area near the city of Little Falls and explore options to address those concerns.
10. MPCA On-Site Sewage Treatment System Grant funded for the City of Hillman. During the 1998-1999 construction seasons 24 septic systems are scheduled to be repaired.



Information provided with assistance from the local water planner

MOWER COUNTY

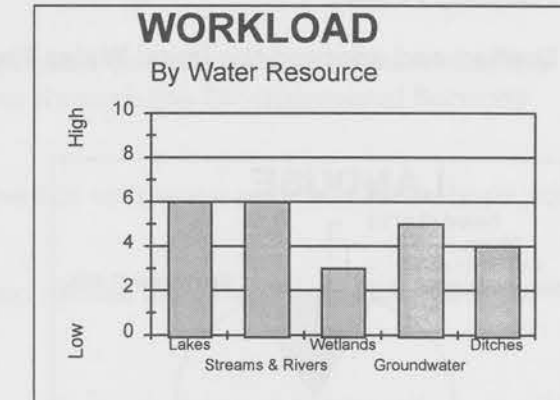
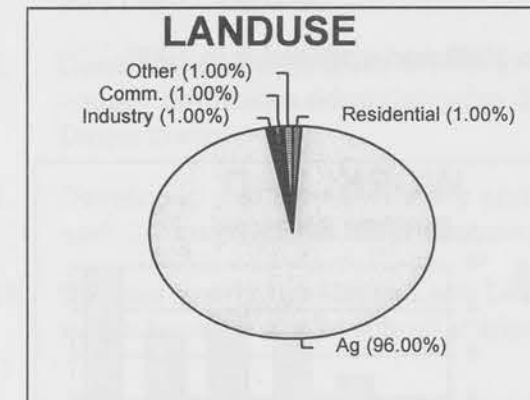
1. Implemented a ground water protection program using an integrated approach of well inventory, testing and sealing, along with well code adoption and enforcement.
2. Developed education programs for pesticide use, storage tanks, sewage treatment, conservation practices and household and hazardous waste.
3. Developed and published the Environmental Messenger which is a county-wide, multiple agency newsletter.
4. Established watershed treatment programs for Eastside Lake, Cedar River and Root River Watersheds.
5. Supported erosion control through coordinated programs for conservation practices.
6. Adopted an innovative soil erosion ordinance.
7. Adopted an individual sewage treatment system ordinance.
8. Conducted a feedlot inventory.
9. Adopted feedlot regulations and enforce them.
10. Conducted a program of flood mitigation in Mower County.



Information provided with assistance from the local water planner

MURRAY COUNTY

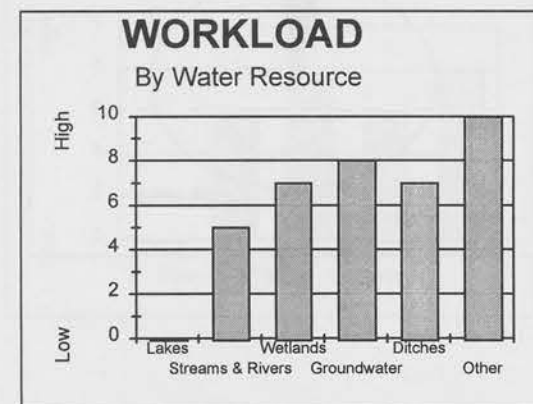
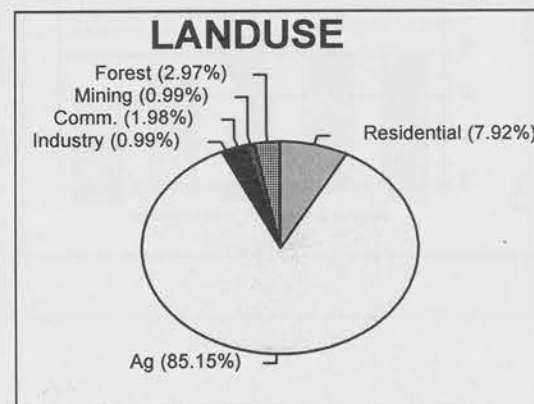
1. Drafted and implemented the original water plan in 1990 and had the plan updated and approved in 1997.
2. Sponsor a comprehensive, county-wide well testing program.
3. Assist with the Lake Shetek Clean Water Partnership, Phase 1 and Phase 2.
4. Completed a lakeshore septic inventory.
5. Implemented the Lake Shetek Area community sewer and water project.
6. Educate livestock producers about proper manure management techniques.
7. Educate youth using the Heron Lake Ecology bus.
8. Install shoreline stabilization projects.
9. Seal abandon wells.
10. Offer low interest loans to install best management practices via the State Revolving Fund program.



Information provided with assistance from the local water planner

NICOLLET COUNTY

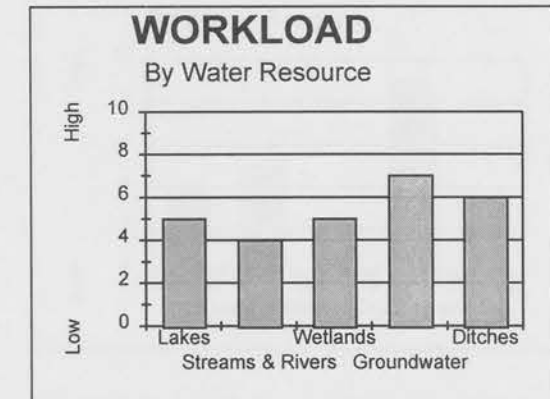
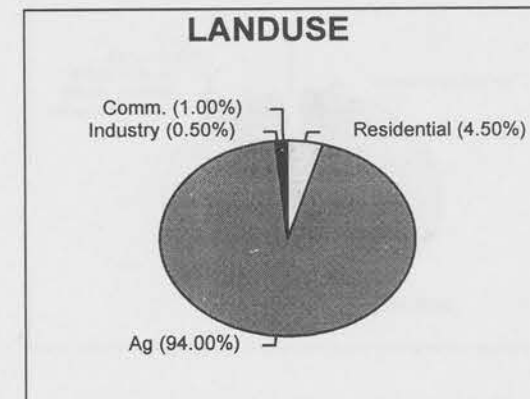
1. Upgrade individual sewage treatment systems for 23 homes in unincorporated Klossner.
2. Participate in the Brown-Nicollet-Cottonwood Clean Water Partnership.
3. Completed over 10,000 individual well tests for nitrates and bacteria for county residents.
4. Administer the Individual Sewage Treatment System (ISTS) and Feedlot Programs and offer low interest loans for upgrading ISTS and feedlots.
5. Clean up a ravine in the 7-Mile Creek County Park as part of MN River Basin Clean Up.
6. Participate in the Tri-County Solid Waste Program.
7. Develop environmental education programs for all ages.
8. Incorporated the planning and zoning office, water planning, feedlot and ISTS programs and Wetland Conservation Act administration into the Environmental Services Department.
9. Participate in the 13 County South Central Minnesota County Comprehensive Water Planning Project.
10. Drafted and adopted the Local Water Plan in 1990 and updated it in 1996.



Information provided with assistance from the local water planner

NOBLES COUNTY

1. Developed a comprehensive water plan to serve as the Nobles County Water Plan, the Nobles SWCD plan, the Okabena-Ocheda Watershed District Plan and the Kanaranzi-Little Rock Watershed Plan.
2. Organized a county-wide Environmental Office. This includes water planning coordination, land use issues agricultural inspections and solid waste activities.
3. Developed and operated a state-certified lab as part of the Dept. of Health's Safe Drinking Water Program. This provides residents with a variety of water tests to insure the safety and quality of their drinking water.
4. Developed a well-sealing program and continue to fund it.
5. Cooperatively developed a cost-share program with area watershed districts and Nobles SWCD to fund a variety of practices to demonstrate water quality benefits. To date, 51 projects have been completed.
6. Worked with the three neighboring counties and the Heron Lake Watershed District, North Heron Lake Game Producers and BWSR to develop and fund an ecologist position for the Heron Lake Watershed.
7. Partnered with Minnesota West Community College, City of Worthington, and Okabena-Ocheda Watershed to do surface water testing of Prairie View Golf Course and Lake Okabena.
8. Contracted with Nobles SWCD to implement the county water plan while the county maintains administrative duties through the Environmental Services Department.
9. Developed a feedlot inventory and a feedlot ordinance and held workshops, tours and demonstrations for producers.
10. Utilized yearly the Heron Lake Learning Center ECO Bus to provide summer workshops for grade school students.

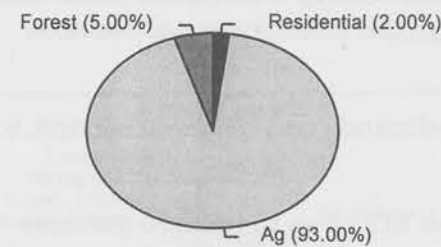


Information provided with assistance from the local water planner

NORMAN COUNTY

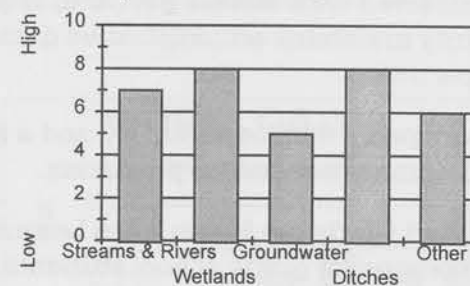
1. Publish the *Who Cares?* newsletter quarterly and distribute it to 1,600 households.
2. Developed a 6th grade outdoor classroom which gives kids hands-on learning about natural resources.
3. Updated the local feedlot ordinance.
4. Updated the local shoreland ordinance.
5. Planted 200,000 trees in the county, most of which were single row windbreaks.
6. Acquired 13 Reinvest in Minnesota Reserve easements protecting 911 acres.
7. Implemented three Agricultural Waste Control Systems.
8. Collected pesticide containers for the last five years.
9. Promoted the Envirothon which is a hands-on learning competition of natural resources for high school students.
10. Digitized 35 mm slides of the County to view the slides from our computer and enhance them to see certain land use features.

LANDUSE



WORKLOAD

By Water Resource

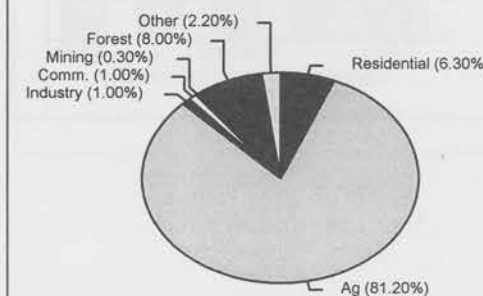


Information provided with assistance from the local water planner

OLMSTED COUNTY

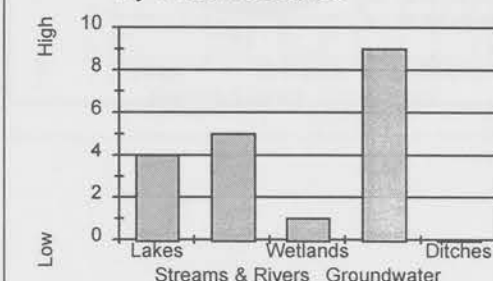
1. Adopted a wastewater management policy -- reduce, reuse, recycle, treat and reintroduce.
2. Implemented a Just-in-time Educational Program that uses interpretive signs with key environmental information in the everyday setting.
3. Established an annual environmental awards program to recognize individuals, businesses, farmers, organizations and others who have significantly contributed to improving the management of local natural resources-- 32 awards have been given.
4. Initiated several landscape management projects demonstrating deep-rooted natural vegetation for water resource protection.
5. The County and the City of Rochester have cooperated in an investigation and assessment of the focused ground water recharge area in the upland and hillside area that surrounds the city.
6. Developed a five-year nutrient budget that evaluates the relative amount of nutrient inputs, outputs and reservoirs.
7. Developed partnerships with school educators to provide information to students about local water resources. Over 500 students have taken part in this program.
8. Coordinated the development and funding of the South Zumbro Watershed Partnerships.
9. Participated in the multi-county Whitewater Watershed Project. The project is focused on reducing the soil erosion and ground water pollution problems that result from land use activities in the headwaters area of the watershed.
10. Completed a series of water and resource-related assessments-- over 8,000 well water quality tests have been assessed.

LANDUSE



WORKLOAD

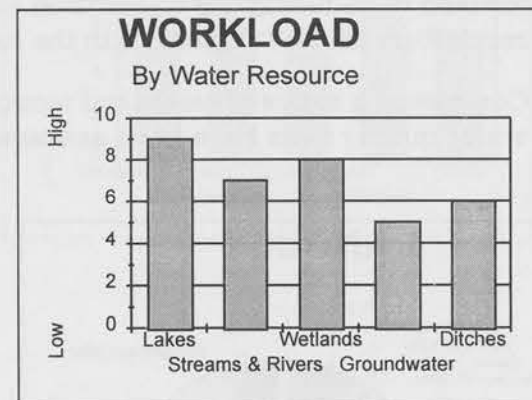
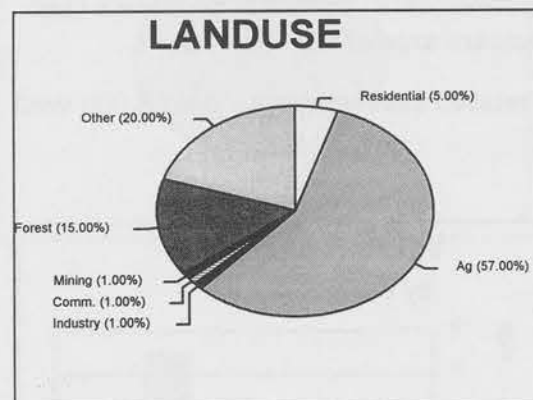
By Water Resource



Information provided with assistance from the local water planner

OTTER TAIL COUNTY

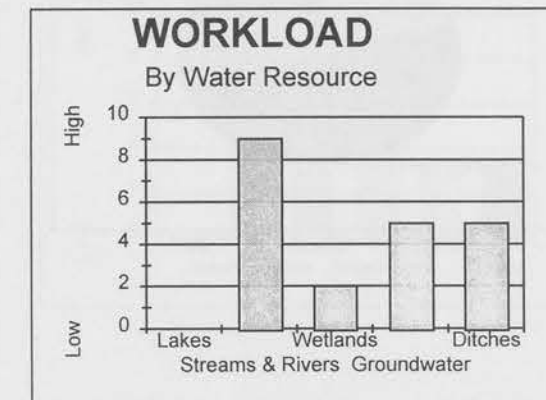
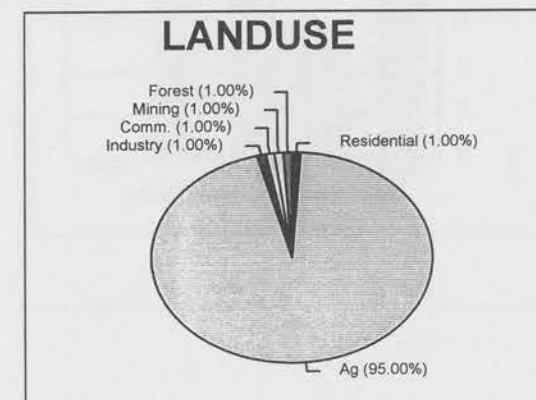
1. Completed sewage system abatements on 35 lakes: lakeshore parcels are reviewed, the sites are visited and abatement (fix orders) are issued if needed.
2. Successfully won the first Wetland Conservation Act court case in the state.
3. Monitor 68 sites on lakes and rivers.
4. Collected baseline information on surface water quality on Big and Little Pine Lake and contributing watersheds. Project resulted in implementation of best management practices such as shoreline and stream bank protection, livestock exclusions, riparian buffers and feedlot treatment.
5. Completed GIS layers including digitized soils, priority wetlands inventory, well data, tax parcels, etc. in four townships.
6. Educational presentations given by county staff to lake associations and 4th grade students.
7. Sponsor a Lake Advocate Program -- 21 lakes involved.
8. Updated the Comprehensive Local Water Plan.
9. Entered into a 20 year cooperative ground water monitoring project with Minnesota Dept. of Ag to study nitrates and pesticides -- 60 wells installed.
10. Improved working relations between East and West Otter Tail SWCDs and NRCS.



Information provided with assistance from the local water planner

PENNINGTON COUNTY

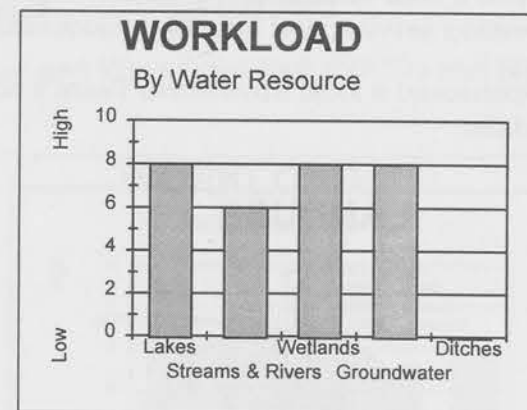
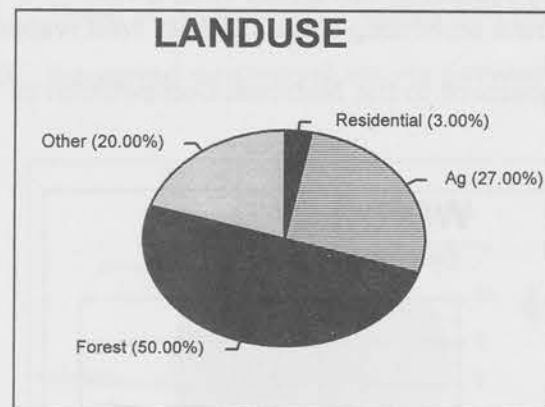
1. Completed a Comprehensive River Basin Study that included Pennington and Marshall Counties, Thief Lake and Agassiz.
2. Completed a study of ground water aquifers in cooperation with Pennington, Marshall, Red Lake and Polk counties.
3. Developed an abandoned well-sealing program.
4. Updated the Shoreland Ordinance.
5. Completed a two-county study to determine if individual sewage treatment systems using trenches adequately treat sewage in Northwest Minnesota soils and used this data to write the septic ordinances.
6. Completed three years of sediment monitoring study of Thief Lake, Agassiz and the Thief River Falls reservoirs.
7. Constructed a handicapped accessible fishing pier/canoe landing below the municipal power dam.
8. Used a combination of water plan and other funds to stabilize a major drainage ditch that empties into the Red Lake River.
9. Held a well sealing demonstration for county residents combined with a well testing service, and held two successful nitrate screening clinics to test well water.
10. Sponsored a local Envirothon Team's advancement to the National Competition in Idaho.



Information provided with assistance from the local water planner

PINE COUNTY

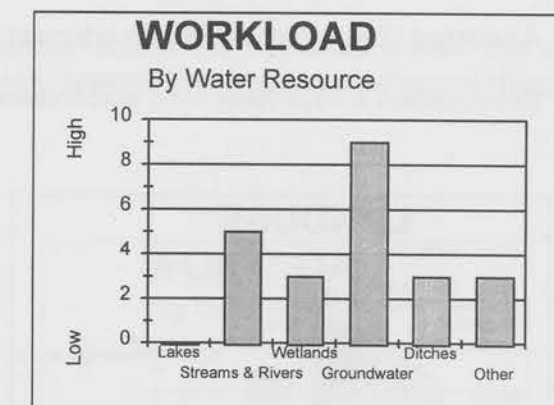
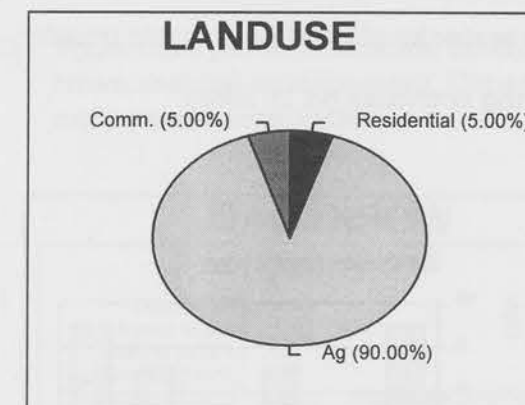
1. Conducted the Askov sinkhole study, well testing and Water Fairs.
2. Completed a geologic atlas and feedlot inventory.
3. Secured a Clean Water Partnership from MPCA for Cross Lake.
4. Secured a Clean Water Partnership for Pokegama Lake.
5. Accepted Sand, Sturgeon, Island and Big Pine Lake into MPCA's Lake Assessment Program (LAP).
6. Publish and distribute a newsletter to all residents twice a year-- about 20,300.
7. Provide services to the Planning Commission such as wetland reviews for all minor subdivision applications and erosion control plans for grading and filling operations within the Shore Impact Zone.
8. Hire two additional full-time employees.
9. Purchased GIS hardware and software and develop GIS layers for Pine County.
10. Update computer hardware and software, purchase a VCR camera and other equipment.



Information provided with assistance from the local water planner

PIPESTONE COUNTY

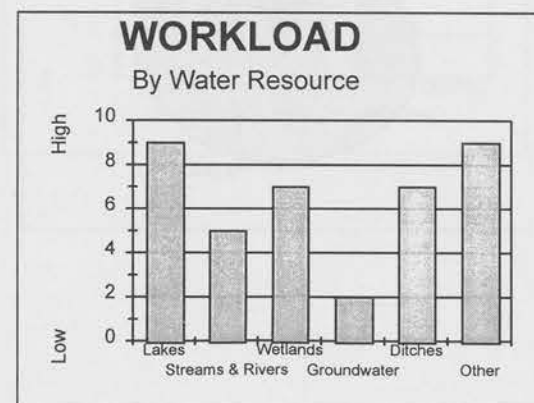
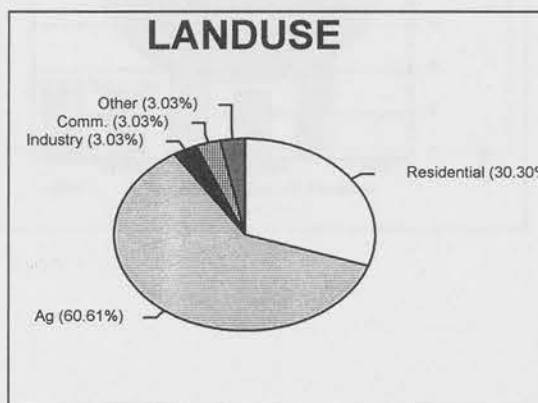
1. Sealed approximately 250 wells.
2. Make a straw mulcher available to anchor mulch on erosion and odor control waste storage projects.
3. Monitor private water wells.
4. Perform ten years of testing to determine the effectiveness of Best Management Practices in controlling nitrogen leaching and runoff.
5. Test water on Pipestone Creek.
6. Complete a Tillage Transect Survey.
7. Give donations to environmental education programs.
8. Promote the biological control of noxious weeds near sensitive water resource areas.
9. Developed a feedlot and septic ordinance.
10. Improved service to landowners with the administration of the Water Plan being in the SWCD and Zoning office.



Information provided with assistance from the local water planner

POLK COUNTY (EAST)

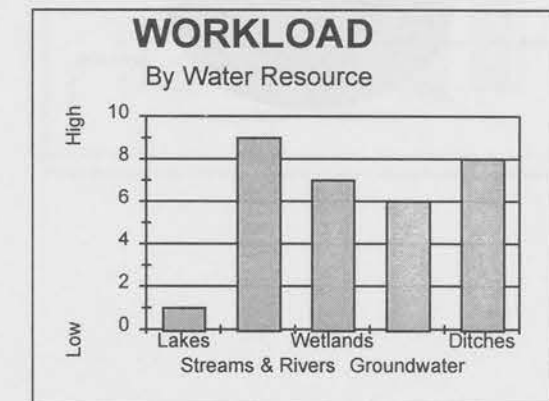
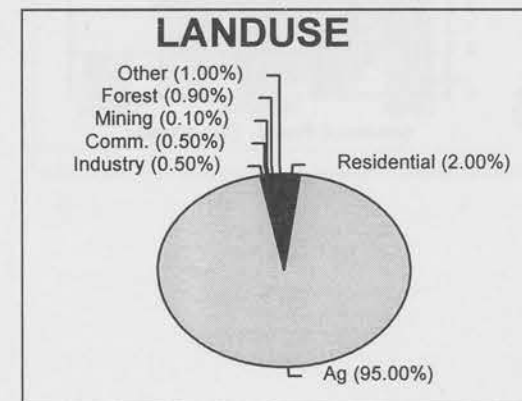
1. Publish a quarterly newsletter and mail to about 1,100 lake owners.
2. Train local volunteers to collect water samples on the three lakes: Maple, Union and Lake Sarah. Use the baseline data to develop lake management goals.
3. Assisted testing 450 wells for lake homes, cities (without city water) and rural owners.
4. Assisted Cross and Turtle Lake landowners by gathering history and any information about the lakes through public meetings and surveys.
5. Educate lake shore owners about Best Management Practices and septic systems. Conducted a door-to-door educational campaign reaching about 390 individual homeowners with information on lawn care, septic systems, etc.
6. Sponsor numerous educational activities: fair booth, tours, education days for 7th graders, River Watch Program, abandoned well inventory and educational newsletters to livestock producers.
7. Establish a rain gauge monitor in every township.
8. Reconfigured the local CLWP task force representation: 15 voting members include county commissioner area representatives (5), cities (3), lake associations (2) townships (2) county commissioners and SWCD (2). Agency personnel are nonvoting technical members.
9. Assisting Union Lake Sarah to address high water levels and poor water quality.
10. Established a volunteer lake watch/monitoring activities on 15 lakes.



Information provided with assistance from the local water planner

POLK COUNTY (WEST)

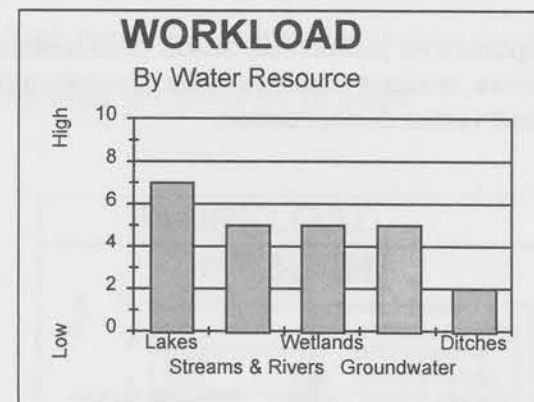
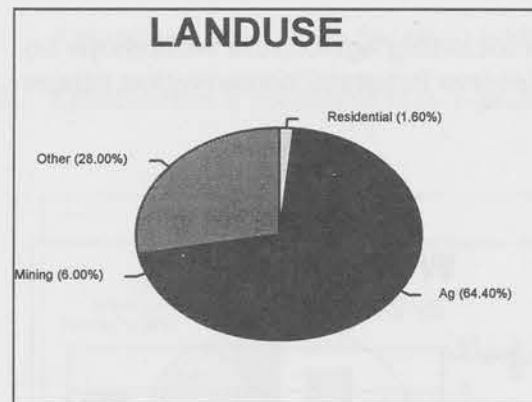
1. Completed implementation of the first three phases of river restoration projects on the Sand Hill River at Climax, MN. Assessment remains ongoing.
2. Installed more than 30 miles of living snow fence and have begun implementing a Living Snow Fence Program along Highway #2 in Polk County.
3. Installed and monitored 39 observation wells in conjunction with the Northwest Minnesota USGS Ground Water Study.
4. Provided cost-share assistance to landowners to seal approximately 60 abandon wells.
5. Developed and completed nine education trunks. These trunks are available to local schools, local organizations and government agencies at no charge.
6. Completed the five year revision of the Polk Co. Comprehensive Local Water Plan.
7. Restructured the Polk County Comprehensive Local Water Plan Task Force in 1997 to increase public input into the water planning process.
8. Assisted with the formation of the Red River Basin Board by participating on the Interim Planning Committee for one and a half year.
9. Sponsored several annual school education projects including the Environmental Education Fall Day, Arbor Day, Envirothon, classroom presentations, education newsletters, workshops, displays and lyceums.
10. Sponsored public education demonstrations including agriculture workshops on trees, residue management, Conservation Reserve Program, conservation tillage and water conservation.



Information provided with assistance from the local water planner

POPE COUNTY

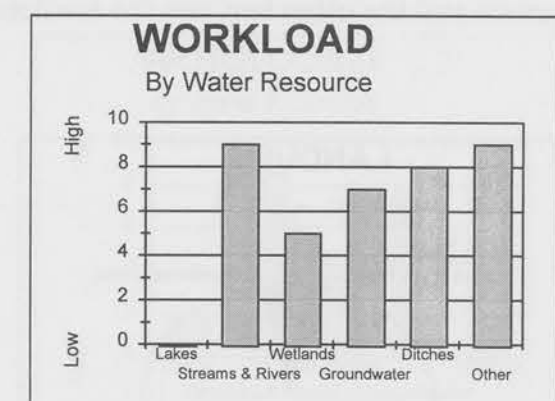
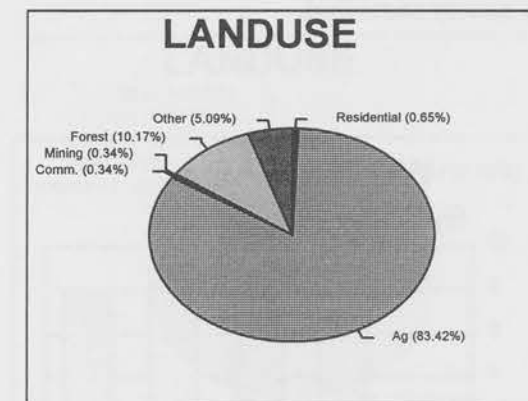
1. Created a half time staff position to implement local water planning activities.
2. Created a staff position to administer the state feedlot permit program and assist with local water planning implementation.
3. Facilitated the organization of nine lake associations into Pope County Coalition of Lake Associations (COLA) and supported five Lake Assessment Project studies.
4. Facilitated organizing COLA's Trophic State Index Lake Monitoring Program.
5. Facilitated organizing COLA's Eurasian Milfoil Awareness Program and creating 20 sets of Burma Shave type signs.
6. Facilitated an annual Lake Conference seminar (now in its eighth year).
7. Established an SRF Low Interest Revolving Loan Program.
8. Established a Cost-Share Program for sealing abandoned/unused wells.
9. Established land treatment projects on several sites.
10. Focused on Trapper's Run Watershed by conducting a diagnostic study, report and implementation plan. Conducted feedlot and septic upgrades, buffers and other Best Management Practices and wetland efforts.



Information provided with assistance from the local water planner

RED LAKE COUNTY

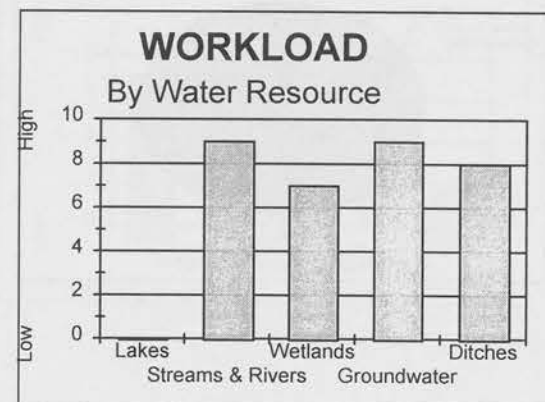
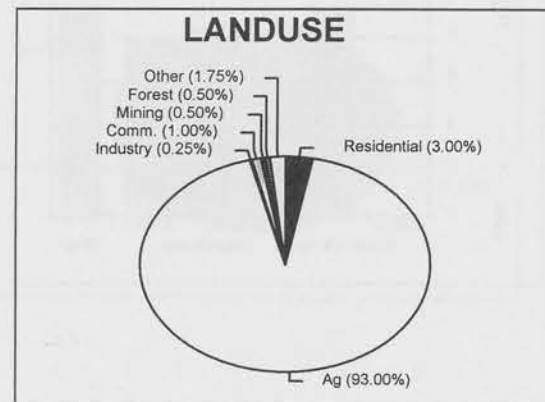
1. Retained a water plan coordinator.
2. Checked water samples for nitrates, hardness, iron and pH in all the townships.
3. Conducted water tests on eight different stock ponds across the county.
4. Completed several inventories of: feedlots, gravel pits, petroleum tanks, dump site locations and abandoned wells.
5. Participate in a Dead Animal Collection Project.
6. Sponsor an educational program for kindergarten through 12th grade students which includes classroom presentations, poster and essay contests, an Environmental Education Day and the Envirothon.
7. Participate on the Technical Steering Committee for the Clearwater River Nonpoint Study.
8. Participate in the DNR Observation Well Program.
9. Carry out an Abandoned Well Sealing Program.
10. Survey field drainage and ditches, cost-share projects, field windbreaks, etc.



Information provided with assistance from the local water planner

REDWOOD COUNTY

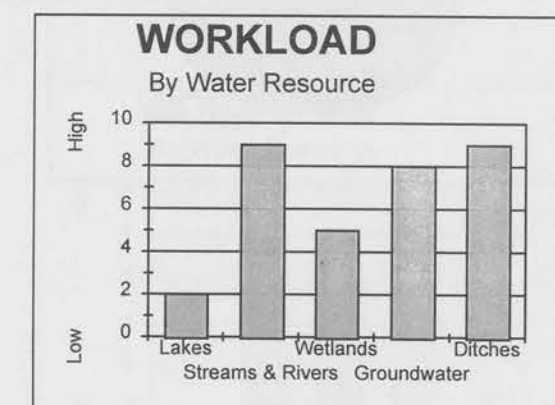
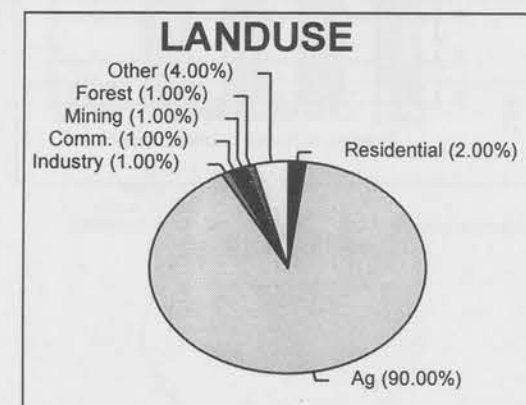
1. Developed a buffer strip program and established 74 acres.
2. Provided technical and financial assistance to install three road retention projects for flood control.
3. Provided funds to seal 36 abandon wells.
4. Publish county-wide newsletters and circulated to 11,000 individuals.
5. Participate in a county-wide tillage transect survey.
6. Completed a county-wide baseline inventory of feedlots, dumpsites and abandoned building sites.
7. Conducted several ground water sampling programs with around 789 participants. Continue to monitor 30 wells with high nitrates.
8. Included private citizens on Water Plan Advisory Board to give a broader spectrum of representation.
9. Included 26 townships and 15 cities in planning and implementation and provided a copy of the updated plan to each entity.
10. Conducted a baseline ground water sampling of 25 wells located within a one mile radius of feedlot systems. In one test site the systems have been in place several years and the other test site the feedlots are newly installed.



Information provided with assistance from the local water planner

RENVILLE COUNTY

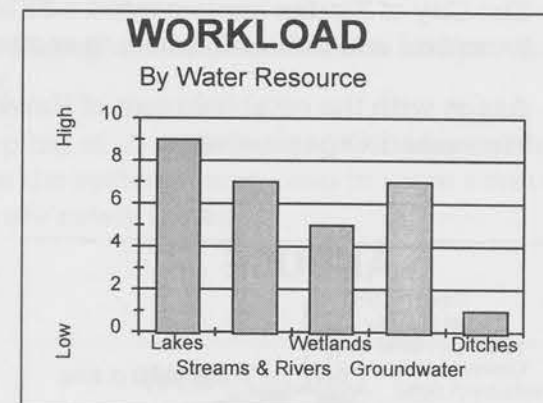
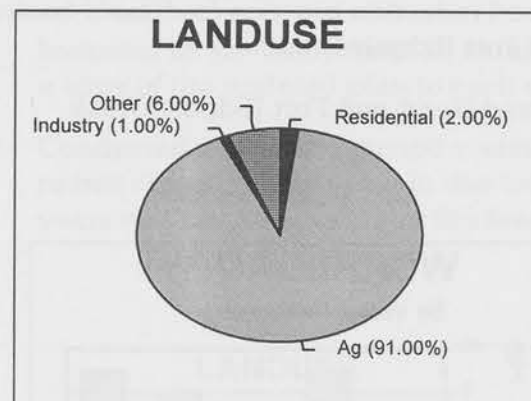
1. Established a well sealing program for county residents.
2. Conducted a Manure Resource Project.
3. Sponsor annual pesticide container and hazardous waste collections.
4. Developed a drainage ditch management guide as an educational tool for maintenance and repair of public and private ditches.
5. Made additional administrative time available due to transfer of plan coordination to the SWCD.
6. Increased baseline water monitoring of all major creeks.
7. Provided technical assistance to communities developing Wellhead Protection Plans and to Lake Associations.
8. Increased awareness and citizen involvement in water quality issues.
9. The City of Fairfax implemented a FEMA flood reduction practice (sediment basins) to control and reduce impacts to sections of Fort Ridgely Creek
10. Assist with the establishment of Hawk, Sacred Heart and Fort Ridgely Creek Watershed Organizations.



Information provided with assistance from the local water planner

RICE COUNTY

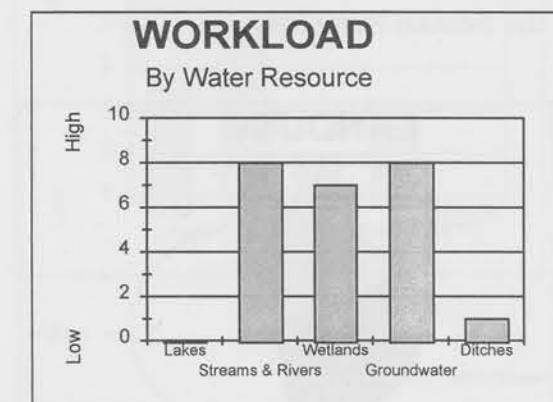
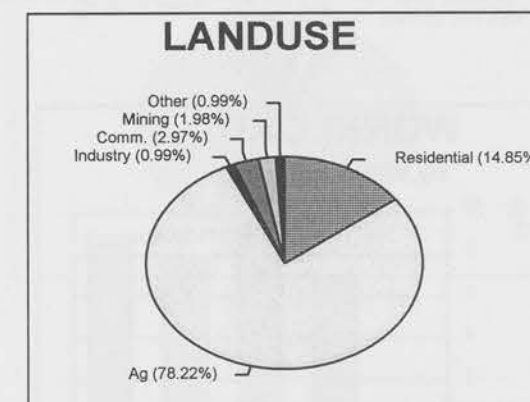
1. Completed land use and feedlot inventories.
2. Developed education and protection programs for agricultural chemical and nutrient use.
3. Developed a geologic atlas.
4. Updated the soil survey.
5. Developed and enforce an individual sewage treatment ordinance.
6. Developed and enforce a feedlot ordinance.
7. Developed a comprehensive solid waste management program.
8. Established the French Lake Improvement Project.



Information provided with assistance from the local water planner

ROCK COUNTY

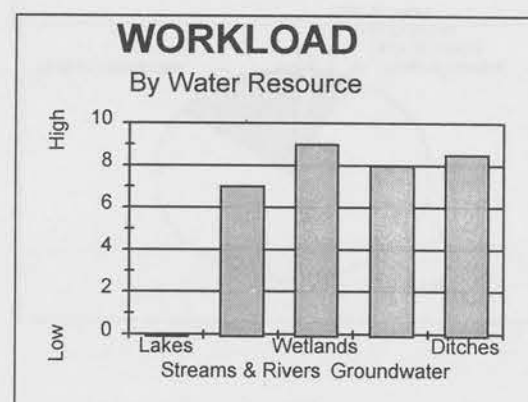
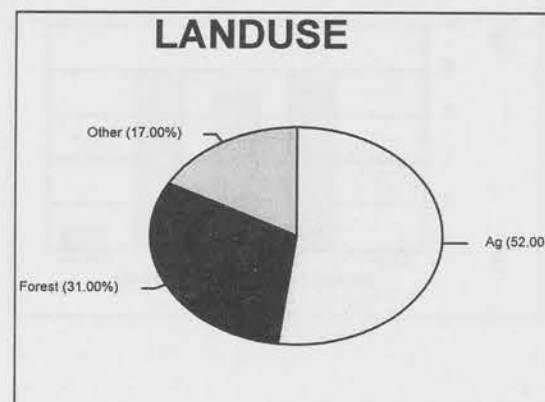
1. Entered into a joint powers agreement between the County and SWCD expand the use of funds and enhance the implementation of the water plan.
2. Merged and reorganized Zoning, Ag inspector, Environmental and SWCD departments and hired two additional staff (one technical and one assistant director).
3. Increased water management staff commitment from half full time to 1½ time.
4. Conduct a water monitoring program.
5. Develop Lands for Conservation Program that pays producers to plant small grain where best management practices will be constructed during the growing season.
6. Develop a individual sewage treatment system cost-share program to promote upgrading failing systems.
7. Developed a well sealing program.
8. Developed a tree cost-share program.
9. Completed a feedlot inventory - level 2 and continue to implement a full scale Feedlot Program including: education, manure management plans, and one-on-one relationships with Ag producers.
10. Worked with NRCS, FSA, and County offices to develop GIS Program.



Information provided with assistance from the local water planner

ROSEAU COUNTY

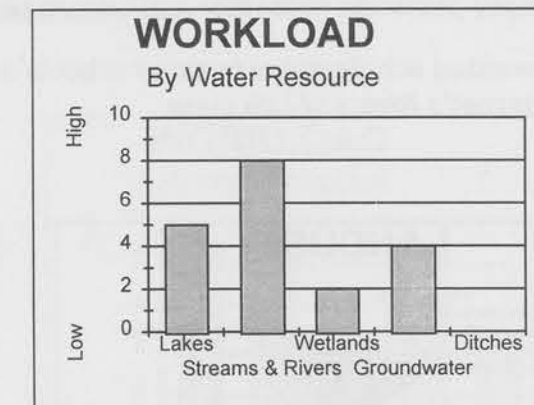
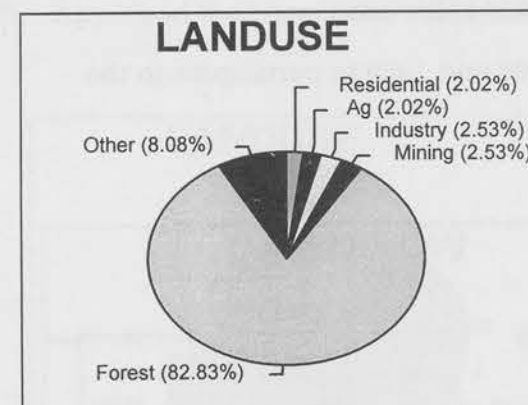
1. Appointed the SWCD the lead implementation agency in to carry out the goals and objectives of the county's water plan.
2. Hired a local water plan coordinator who is responsible for water plan activities.
3. Initiated a well sealing program to offset sealing costs and held well sealing individual sewage treatment system demonstrations.
4. Participate in the development, planning and coordination of the annual area Envirothon.
5. Offered cost-share incentives to landowners through the Pembina Trail Resource Conservation and Development for the removal of dead animals from farmsteads.
6. Assisted initiating a county-wide recycling effort with recycling drop off points being distributed across the county.
7. Assisted in enrolling over 120,000 acres in the Conservation Reserve Program and developing conservation plans on highly erodible land which will help reduce sedimentation into ditches, streams and rivers.
8. Worked with the Minnesota Extension Service to initiate household hazardous waste and fluorescent bulb disposal days and pick-up days for used and unused pesticide containers.
9. Worked with the City of Warroad to develop a wellhead protection plan for the city.
10. Worked with the Roseau River Watershed and county on developing a river plan for the Roseau River Plan.



Information provided with assistance from the local water planner

ST. LOUIS COUNTY

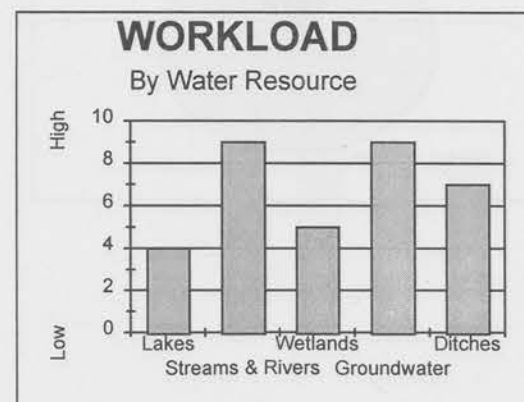
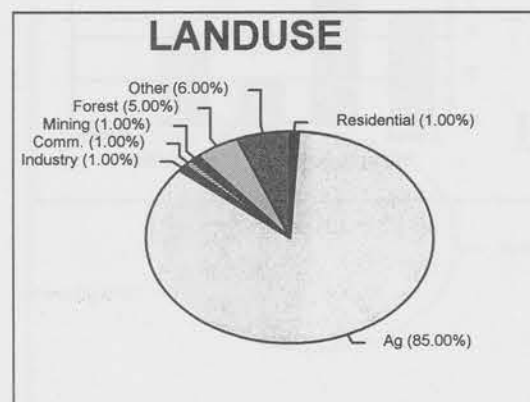
1. Developed a surface water monitoring program. 15 lakes have had comprehensive water quality testing.
2. Cooperated in the development of the Shoreland Best Management Practices books and videos.
3. Implement the revised Shoreland Management Regulations.
4. Improved reclamation of borrow pits.
5. Established a GIS system.
6. Implemented the Wetland Conservation Act.
7. Developed a Local Wetland Plan.
8. Inventoried feedlots.
9. Developed an Enforcement Program using of a Deputy Sheriff and focusing on addressing junk yards and other solid waste issues.
10. Developed the Water Line which provides information through a phone line.



Information provided with assistance from the local water planner

SIBLEY COUNTY

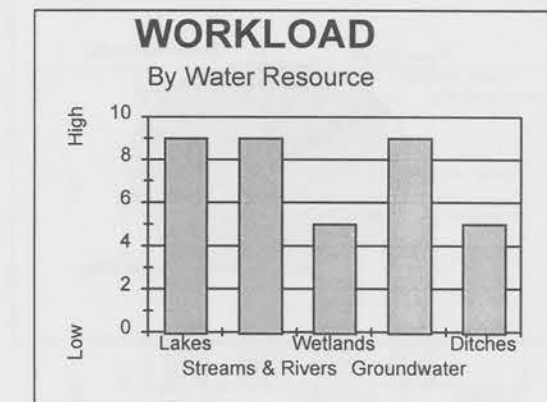
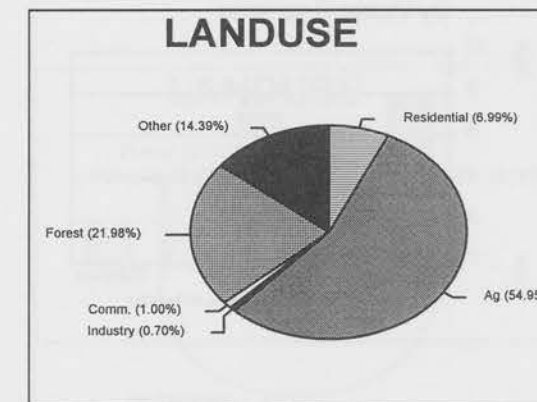
1. Tested 380 farm wells for nitrate and coliform levels and 10 farm wells for triazine. All had less than .1 part per billion.
2. Conducted an abandoned well inventory and located 600 on farm sites, 200 in cities.
3. Provided cost-share to seal 298b abandoned wells. 18 were sealed solely with money from the landowner.
4. Worked to reduce poultry manure application rates -- over 250 *Poultry Manure Application* brochures were distributed to crop producers.
5. Participated in the Bevens Creek project and published a Bevens Creek Watershed Hydrology Study and Water Management Plan.
6. Completed an inventory of 750 feedlots and expanded the database.
7. Developed the Septic System Upgrade State Revolving Loan Fund Program.
8. Sponsored three successful "Minnesota River Basin Clean Up" days. A ravine site was cleaned out, 1400 tires and over 50 appliances were removed along with other debris.
9. Sponsor household hazardous waste collections, tire and appliance collections and empty pesticide container and excess pesticide collections.
10. Awarded scholarships to three schools in 1998 and 1999 to participate in the Internet's *Rivers of Life* class.



Information provided with assistance from the local water planner

SHERBURNE COUNTY

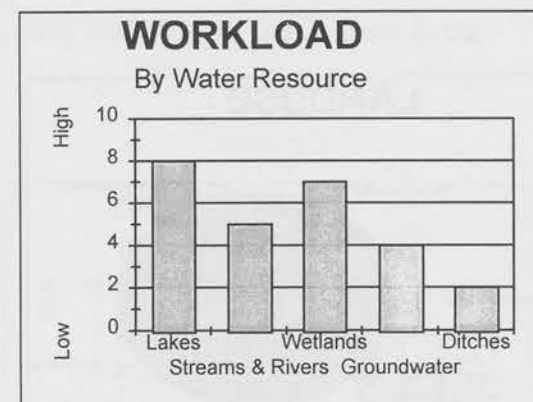
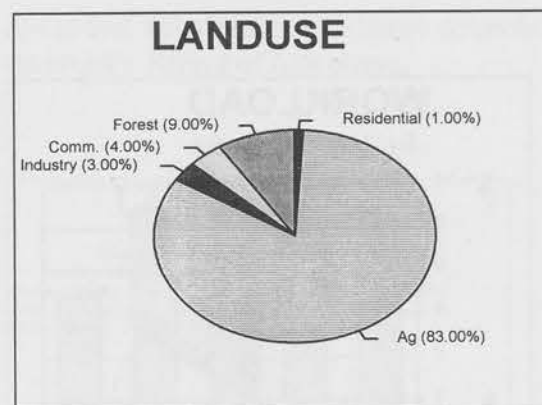
1. Funded Water Resources Specialist position with 80 percent of time for water plan implementation.
2. Created the Elk River Watershed joint powers board.
3. Implemented nutrient management on 549 acres.
4. Sponsored four annual county Lakeshore conferences with a total attendance of 280.
5. Sampled 925 wells for nitrates.
6. Sponsored 28 on-site sewage treatment classes attended by 675 people.
7. Published 22 water resource educational articles and distributed to 18,000 households.
8. Sealed 70 abandoned wells.
9. Conducted Inventories: county wide feedlot inventory, sources of sedimentation in the Elk River Watershed.
10. Approved the Clear Lake Wellhead Protection Plan.



Information provided with assistance from the local water planner

STEARNS COUNTY

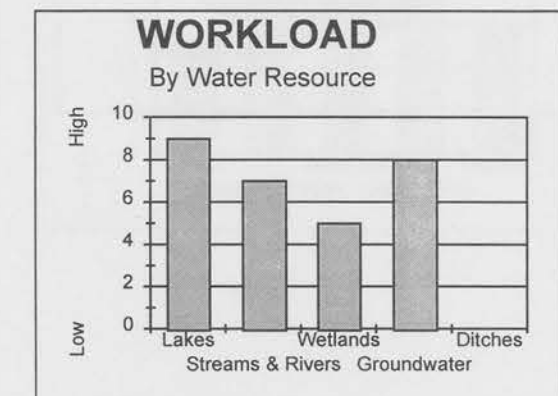
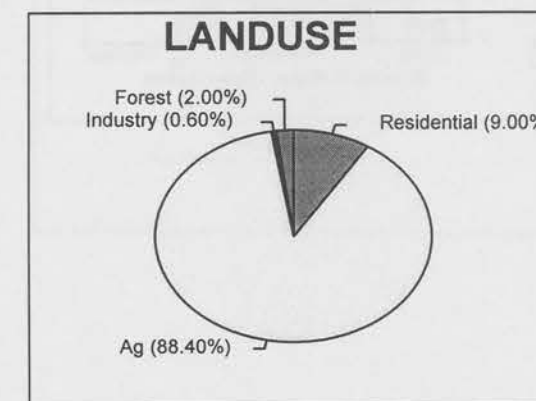
1. Initiated the comprehensive local water plan.
2. Implemented a feedlot program and completed a feedlot inventory.
3. Hired additional staff to enforce individual sewage treatment systems and shoreland ordinances.
4. Established a very effective wetland program.
5. Completed a county Geologic Atlas.
6. Developed a useable GIS database.
7. Digitized the Stearns County Soil Survey.
8. Established a Point of Sale Upgrade Program for individual sewage treatment systems.
9. Completed training for the Planning Commission and the Board of Adjustment and improved their decision making process.
10. Established good working relationships with townships, cities, watershed districts and state agencies, through the water planning process.



Information provided with assistance from the local water planner

STEVENS COUNTY

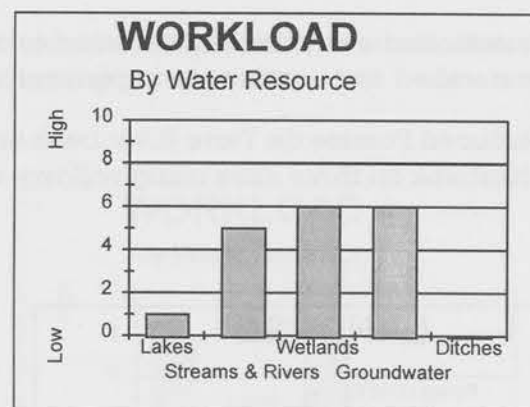
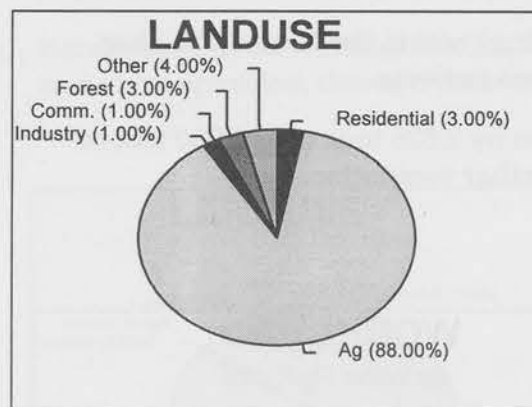
1. Sealed 240 abandoned wells.
2. Organized collections for empty plastic pesticide containers (about 53,000 jugs), waste pesticide (67 people brought in 6,500 pounds) and household hazardous waste (about 820 participants).
3. Sponsor Storm Drain Stenciling Projects. 35 youth stenciled 140 drains in Morris.
4. Organized 4-H club members to test 103 private wells in Darnen, Horton and Swan Lake townships for coliform bacteria and nitrate nitrogen.
5. Monitor water quality on Hattie, Page and Perkins Lakes and the Pomme de Terre River.
6. Completed an erosion control project at the Morris sewage lagoon outlet.
7. Established a tree arboretum that serves as an educational display of trees, shrubs and tree care products.
8. Restored at least five wetland basins totaling more than 130 acres.
9. Inventoried every wetland (drained or existing) within the Niemackl Lakes watershed and continue to implement various projects.
10. Reduced Pomme de Terre River bank erosion by 2,625 tons over 1,000 feet of riverbank on three sites using willows and other vegetation.



Information provided with assistance from the local water planner

STEELE COUNTY

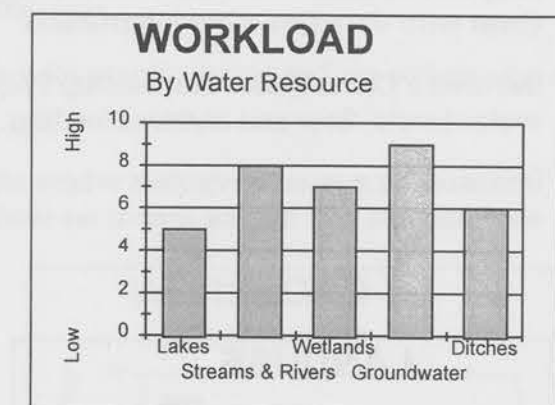
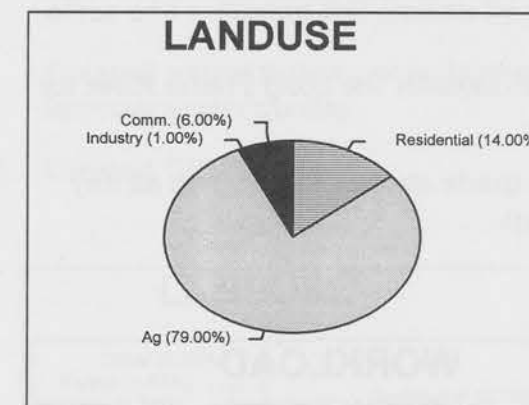
1. Developed a geologic atlas.
2. Developed a surface water hydrology atlas.
3. Provided cost-share to seal 131 abandoned wells.
4. Planted about 30 acres of vegetative buffer strips along private ditches and streams through a compensation program.
5. Adopted wastewater, zoning, floodplain and shoreland ordinances.
6. Established a county-wide rain gauge reader network.
7. Created a digitized/computerized soil information system.
8. Supported the County Extension Services, Environmental, Ag Youth Field Days Program which is attended by 500-600 students each year for 7 years.



Information provided with assistance from the local water planner

SWIFT COUNTY

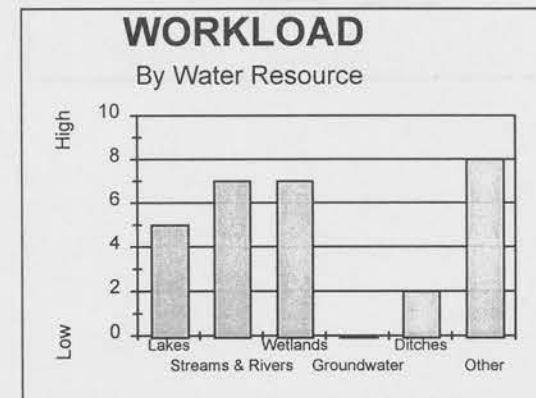
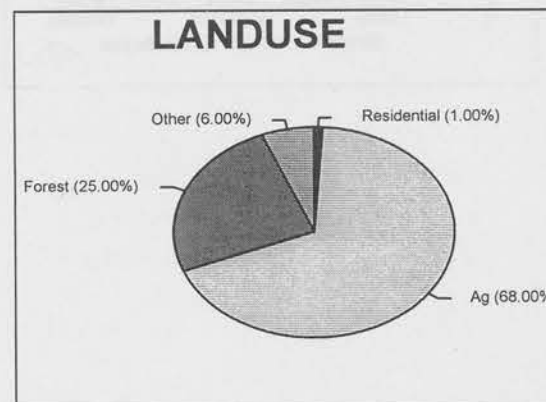
1. Cost-share the establishment of woody riparian buffer strips.
2. Monitor Camp and Marion Lakes.
3. Test well water for county residents.
4. Establish an Abandoned Well Sealing Program.
5. Establish a Feedlot Assistance Program.
6. Provided funding for SWCD technical assistance.
7. Install erosion control projects in conjunction with SWCD
8. Developed a canoe route on the Pome De Terre.
9. Provided funding along with four other counties to sponsor the Bonanza Education Center.
10. Formed (TEACH) teachers, environment and community health along with the four other counties.



Information provided with assistance from the local water planner

TODD COUNTY

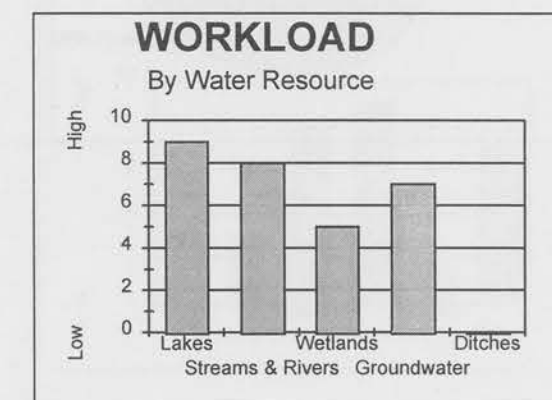
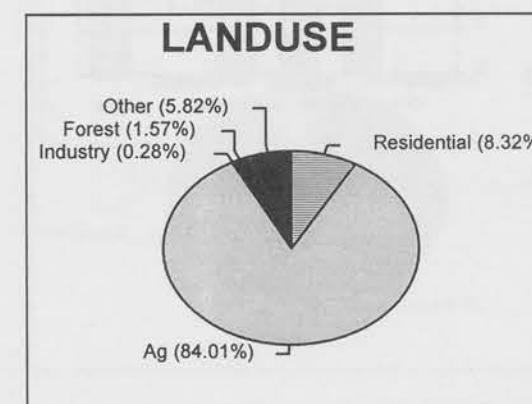
1. Provided cost-share to seal abandoned wells -- 10 to 15 each year.
2. Provide financial support to 18 livestock producers to manage manure in a way that protects water quality.
3. Entered nearly 3,600 new wells and sealed wells into the county well index database and monitor the water levels in 27 wells.
4. Inventoried feedlots and contacted owners for information. The information is being entered into a database that will become a GIS layer for the county.
5. Sponsor Water Wellness Events at several locations each year-- provide free nitrate testing for well water samples, demonstrate the ground water model and hand out surface and ground water information brochures.
6. Sponsor bus tours that show conservation practices, unique farming alternatives, tree planting and monitoring efforts. Tours are attended by the general public and the media.
7. Cooperatively set up days and drop-off locations to collect hazardous waste and pesticide containers for safe disposal.
8. Helped two cities start the Wellhead Protection Planning process and provided them with data and other information.
9. Secured a Clean Water Partnership Project to monitor the Long Prairie River for water levels, flow and nutrient loading.
10. Sponsor the annual Envirofest where all 6th grade students attend an all day environment and natural resources workshop.



Information provided with assistance from the local water planner

TRAVERSE COUNTY

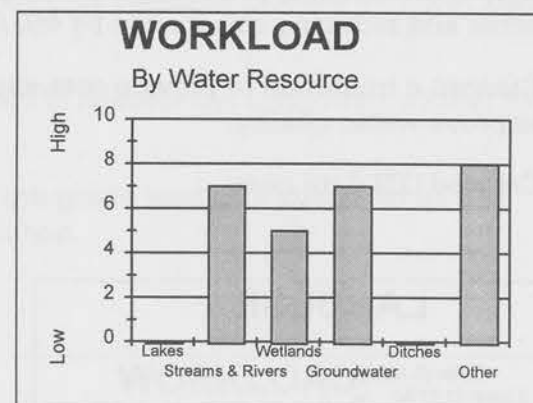
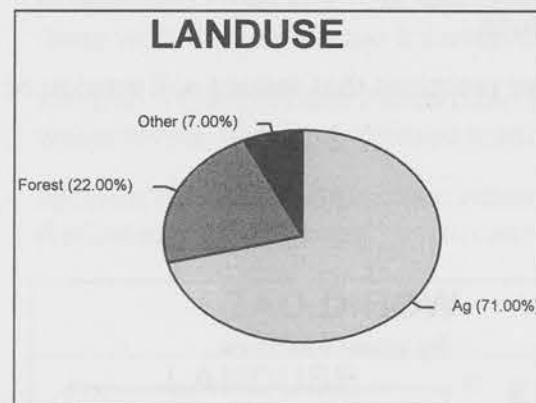
1. Make no-till drills available to local farmers -- an estimated 38,840 tons of top soil have been saved.
2. Expand the tree maintenance program on field windbreaks enabling the trees grow faster and survive to help reduce soil erosion and improve water quality.
3. Sponsored two well sealing demonstrations --108 people attended. Provide cost-share to test wells - 120 to date.
4. Completed a diagnostic study to identify water quality problems in Lake Traverse.
5. Provide cost-share on individual sewage treatment systems and tested arsenic in private wells.
6. Provide financial assistance to the City of Dumont to inventory and evaluate construction of a new sewer system.
7. Collect hazardous waste from the local residence in the county since 1994.
8. Started no-tillage program to provide local farmers opportunity to try no-till on their farms. Since SWCD started the program more than 250 farmers have seeded 23,000 acres. The program has enabled individuals to try this technology and market its use. It's estimated 50 producers have purchased no-till equipment covering 40,000 acres and reducing soil erosion by 460,000 tons.
9. Created a trust fund to provide cost-share for practices that reduce soil erosion or improve water quality.
10. Created GIS data base.



Information provided with assistance from the local water planner

WABASHA COUNTY

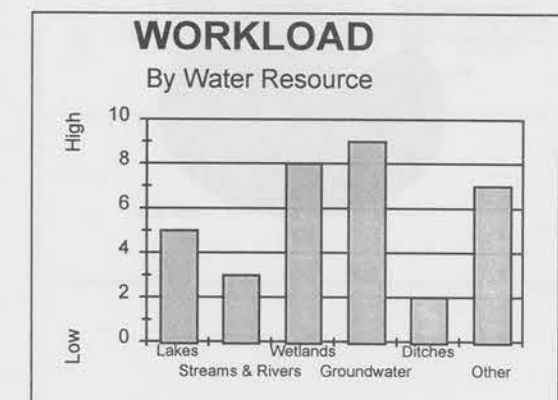
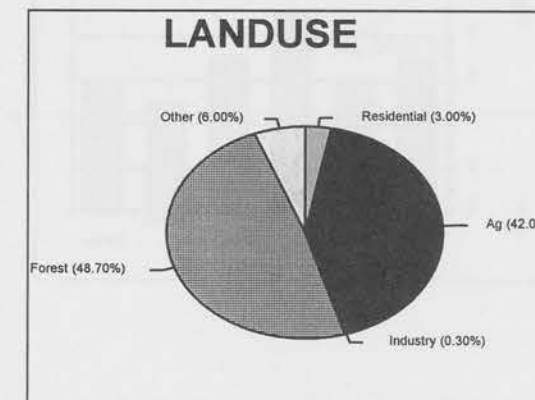
1. Provide cost-share to install Best Management Practices such as waterways, grade stabilizers and diversions.
2. Provide cost-share incentives to seal abandoned wells.
3. Funded and helped develop a Geologic Atlas.
4. Inventoried feedlots, abandoned wells, sinkholes, septic systems and pump sites.
5. Purchased a land use model for use at schools and field days.
6. Provide mothers with newborns free well testing for nitrates.
7. Purchased a bus that is used to pick up reusable products, such as paint.
8. Funded a feasibility study for sewer and water hookup in the Reads Landing community.
9. Purchased and sold water conservation kits.
10. Set up environmental trust fund to help pay for a soil survey update.



Information provided with assistance from the local water planner

WADENA COUNTY

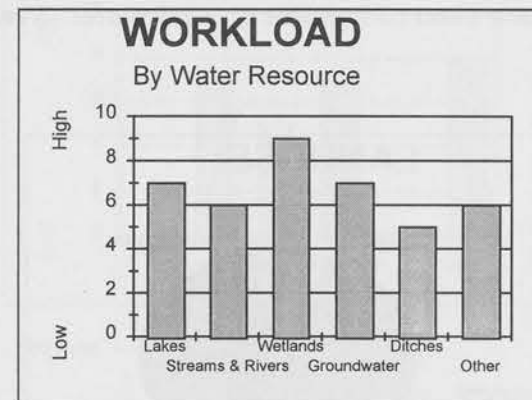
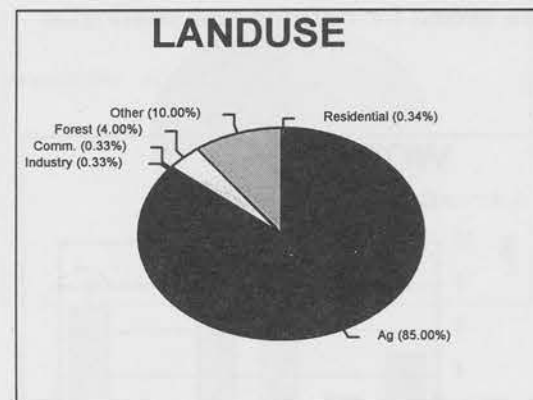
1. Organized a water plan task force committee.
2. Developed a Manure Management Program where manure and soil samples were collected and analyzed for 18 cooperators.
3. Drafted a Water Plan Summary Report and sent it out to local agencies and individuals.
4. Developed brochures about the water plan projects and programs, and distributed them to local landowners.
5. Hold Nitrate Testing Clinics twice a year.
6. Publish news articles on the dangers of abandoned wells, well sealing cost-share, Nitrate Testing Clinics, water quality monitoring project, manure management, conservation tillage, windbreaks and erosion control.
7. Help sponsor Conservation Days where 600 5th and 6th grade students from 10 area schools participate annually.
8. Digitized the Soil Survey information.
9. Provide cost-share incentives to landowners sealing high priority abandon wells.
10. Started a water quality monitoring project to promote and educate landowners on Best Management Practices. Fifteen wells were installed and six observation wells are used to monitor ground water. Wells are tested for nitrates and pesticides.



Information provided with assistance from the local water planner

WASECA COUNTY

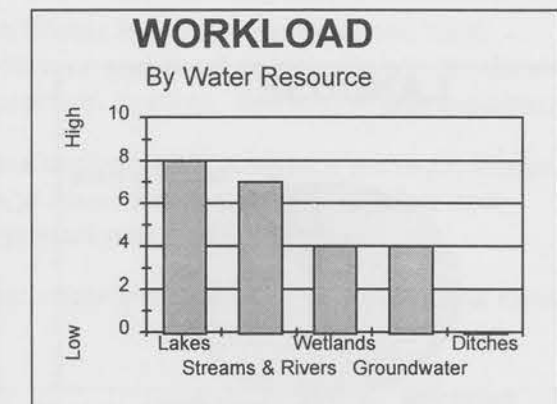
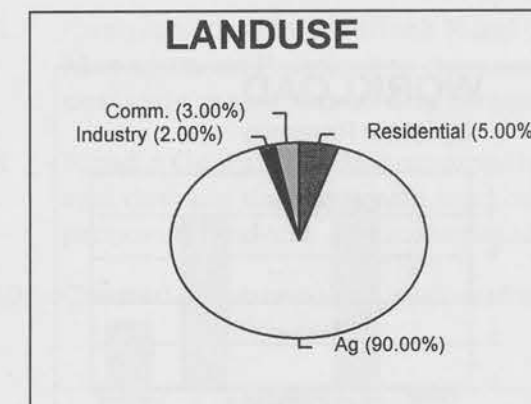
1. Offered a class about individual sewage treatment system in each city in the county.
2. Purchased hardware and software to digitize of data - ARC View GIS.
3. Digitized wells, septic systems and feedlots.
4. Entered into a contract with the Natural Resource Conservation Service to complete a new soil survey.
5. Provide cost-share to seal abandon wells --187 wells sealed.
6. Established a 30 foot buffer along County Ditch number 30 and monitored the ditch for total suspended solids and nitrates.
7. Administered the Ag Best Management Practices Program with the SWCD since its inception in 1995.
8. Have hired and trained 3 water plan coordinators.
9. Developed a septic system property transfer requirement within a newly adopted Ordinance. Provided 2 training sessions to educate affected persons.
10. Assisted with County Waste Pesticide Collection.



Information provided with assistance from the local water planner

WATONWAN COUNTY

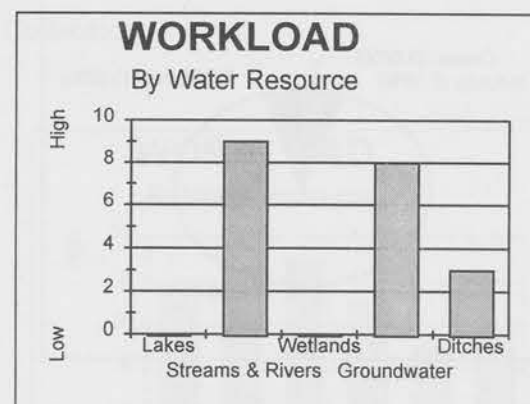
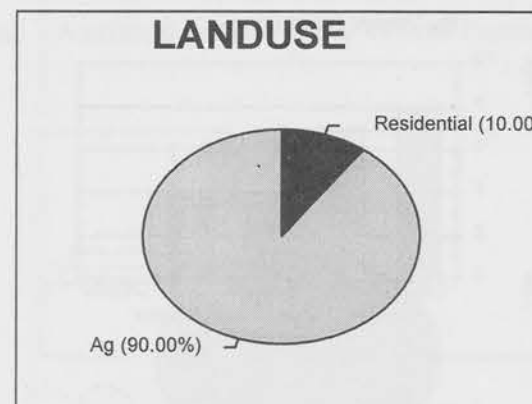
1. Completed an underground storage tank inventory.
2. Completed an abandoned well inventory.
3. Completed a feedlot inventory, level 2.
4. Sponsor on-going environmental education programs in area schools.
5. Provide cost-share to seal abandon wells.
6. Sample water quality in minor watersheds.
7. Create an Ag Best Management Practice test plot.
8. Sponsor an annual "Conservation Day" to educate elementary children.
9. Make annual contributions to the Mankato State University Water Resource Center.
10. Completed a county geological atlas and a county hydrologic map.



Information provided with assistance from the local water planner

WILKIN COUNTY

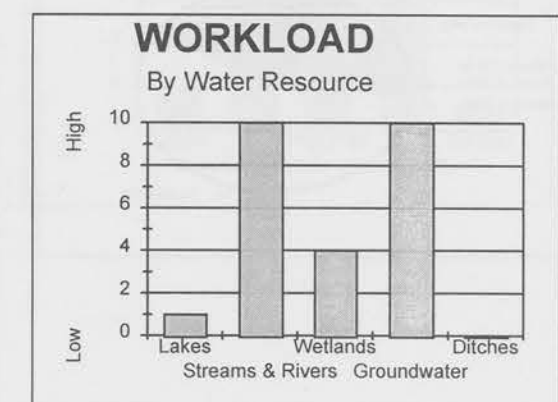
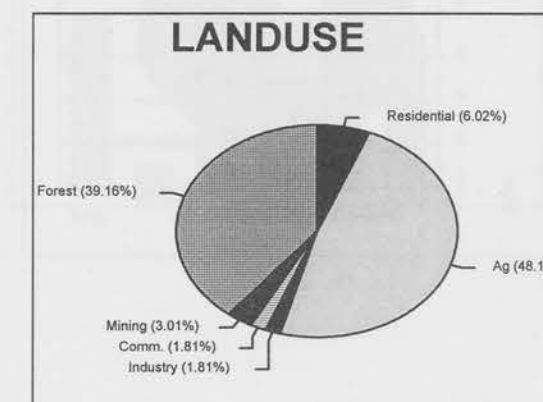
1. Established the Wilkin County Environmental Office and hired an Environmental Officer.
2. Cooperated with the MN Department of Agriculture to sponsor on of the state's first waste pesticide collection.
3. Provide cost-share incentives to seal abandon wells.
4. Began the Otter Tail River bank erosion control program.
5. Inventoried gravel pits.
6. Began the Household Hazardous Waste (HHW) program with a paint exchange.
7. Inventoried septic systems that drain into county road ditches.
8. Publish the "Enviro-Minder" quarterly newsletter.
9. Test water quality of the Otter Tail River.
10. Seed Native Grasses on county road ditches and right-of-way.



Information provided with assistance from the local water planner

WINONA COUNTY

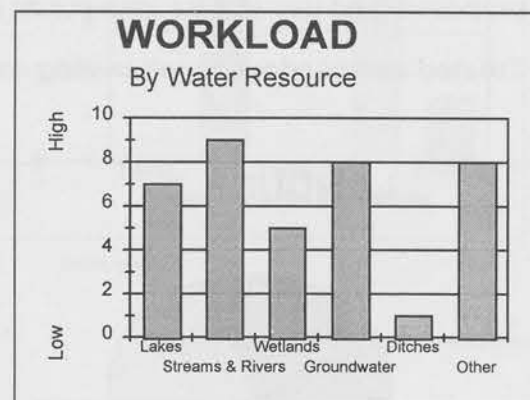
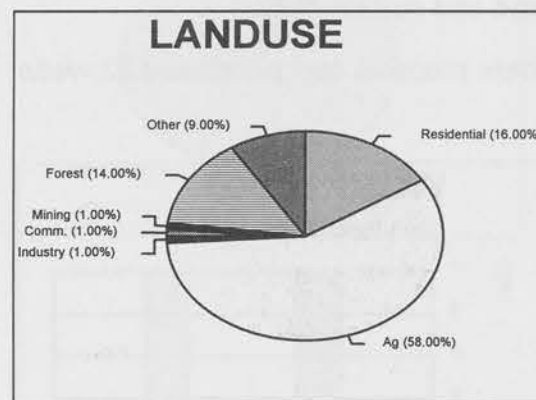
1. Adopt and implement a Feedlot Ordinance and MPCA permitting authority. Hired a Feedlot Officer/Educator.
2. Organize onsite well sealing demonstration projects with property owners and county staff.
3. Update and implement the Winona County Water Quality Ordinance, including well code enforcement.
4. Provide disposal or land spreading of petroleum contaminated soils at the county landfill, and adopted a Land Spreading Ordinance for petroleum contaminated soils.
5. Organized county tours and conducted an inventory of all illegal dump sites.
6. Enhanced the Household Hazardous Waste Program including adding staff for public education.
7. Implement the "Farm -A- Syst" program with the Exension and SWCD. Assess individual farmsteads for goundwater pollution potential. One-on-one education, 150 family farms in Winona, Fillmore and Houston counties have participated.
8. Complete the Garvin Brook Rural Clean Water Project. Implemented Best Management Practices to decrease sediment and fecal coliform loads, fertilizer and pesticide management and Stream Protection system. Soil and water monitoring.
9. Hired a Geographic Information Systems technician to conduct surveys, implement and develop data sets and land coverage maps for analysis of existing and proposed land use and its impacts on ground and surface water.
10. Created an abandoned well sealing cost share program and prioritized 22 wells.



Information provided with assistance from the local water planner

WRIGHT COUNTY

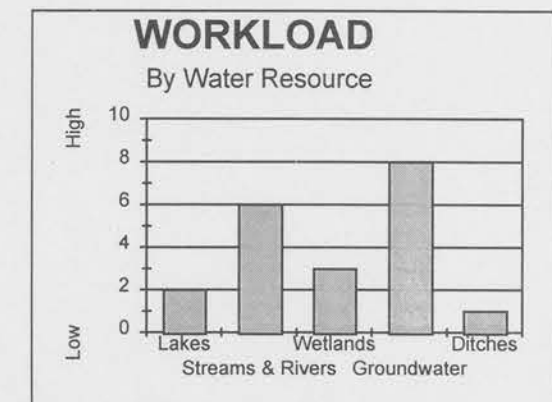
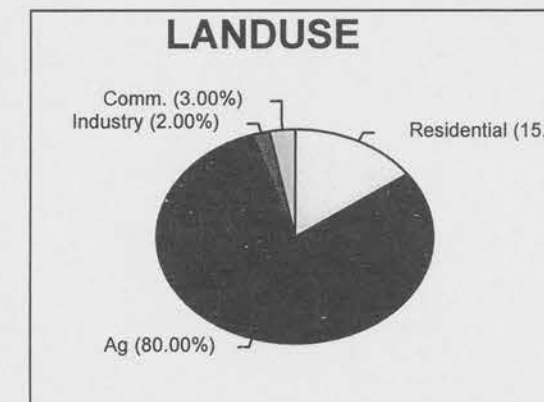
1. Drafted and adopted a "Point-of-Sale" ordinance requiring septic systems to be brought up to code at property transfers.
2. Drafted a feedlot ordinance that is being reviewed by the county board.
3. Supplied an educational video tape on septic system care and maintenance to every homeowner who installs a new or upgraded septic system.
4. Developing a method of prioritizing wetlands to use to determine wetland function and value.
5. Developing storm water management guidelines for residential development.
6. Helped coordinate a community sewer system for a rural subdivision on Ramsey Lake.
7. Provide education/information materials on proper waste disposal and handling methods.
8. Conducted a well testing project.
9. Developing GIS databases of environmental pollution sources.
10. Conducting a trial project locating wells using CPS units in two watersheds.



Information provided with assistance from the local water planner

YELLOW MEDICINE COUNTY

1. Provided water sampling for 1,064 private well owners.
2. Provided cost-share to seal abandoned wells-- about 325 wells sealed.
3. The Science Museum of MN presented the lyceum *Water and Three Rivers* to all second through fifth grade students in the county.
4. Issued permits to upgrade or install a new septic system -- 301.
5. Draft and distribute the *Water Quality Quantity* newsletter to 6,100 households three times a year.
6. The SWCD installed over 76,000 ft. of terraces, 33 acres of waterway and 103,000 ft of field windbreaks.
7. Assist the Yellow Medicine River Watershed District to implement a Clean Water Partnership Grant for the entire Yellow Medicine River Watershed.
8. Conducted a tillage transect survey for the last three years (with the SWCD and NRCS).
9. Developed, adopted and amended a Feedlot Ordinance.
10. Conducting a Regional Hydro geologic Assessment for the area (DNR).



Information provided with assistance from the local water planner

NOTES

NOTES



Minnesota Wetland Report

1996



The Minnesota Board of
Water and Soil Resources

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The U.S. Army Corps of Engineers

The U.S. Natural Resources Conservation Service

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The Minnesota Board of Water and Soil Resources is an equal opportunity employer.

This report meets the requirement in the Minnesota Wetland Conservation Act for an annual report to the Legislature on the status of implementation of state laws and programs relating to wetlands. Estimated cost of preparing this report, including staff time, printing and mailing costs, is \$15,000.

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*Wetland Conservation Act
by capturing a minimum of 100% of the wetland
**Local government units

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**Wetland Conservation Act*

***Local government units*

I. Introduction

In 1991, reacting to public concern about Minnesota's disappearing wetlands, the Minnesota Legislature approved (and Governor Arne Carlson later signed) the Wetland Conservation Act. Considered one of the most comprehensive wetland laws in the country, it recognizes a number of wetland benefits deemed important:

- water quality benefits, including filtering pollutants out of surface water and groundwater, using nutrients that would otherwise pollute public waters, trapping sediments, protecting shoreline, and recharging groundwater supplies;
- flood water and storm water retention benefits, including reducing the potential for flooding in the watershed;
- public recreation and education benefits, including hunting and fishing areas, wildlife viewing areas, and nature areas;
- commercial benefits, including wild rice and cranberry growing areas and aquaculture areas;
- fish and wildlife benefits;
- low-flow augmentation benefits during times of drought; and
- other public uses.

To retain these benefits and reach the legislation's goal of no-net-loss of wetlands, the Wetland Conservation Act (WCA) requires anyone proposing to drain or fill a wetland to first try to avoid disturbing the wetland; second, to try to minimize any impact on the wetland; and finally, to replace any lost wetland and its functions and values. Certain wetland activities are exempt from the act, allowing projects with minimal impact or projects located on land where certain preestablished land uses are present to proceed without regulation.

Local government units (LGUs)--cities, counties, watershed management organizations, soil and water conservation districts and townships--implement the act locally. The Minnesota Board of Water and Soil Resources (BWSR) administers the act statewide, and the Department of Natural Resources (DNR) enforces it.

The WCA took effect with an interim program in 1992 and became fully effective in January 1994. During its first few years, legislators, state and federal agency personnel, local governments and interest groups focused on fine-tuning areas of the legislation that proved controversial and difficult to implement. The Legislature approved several significant changes to the WCA in 1996 and the current law seems to have struck a balance between resource protection and land development.

The law makes allowances for differences in Minnesota's geography by

dividing the state into three sections: a section that has more than 80 percent of its presettlement wetlands remaining, which tends to be northern and northeastern Minnesota; a section with between 50 percent and 80 percent of its presettlement wetlands remaining, which tends to be central Minnesota; and a section with less than 50 percent of its presettlement wetlands remaining, which tends to be southern and northwestern Minnesota (*see Appendix A*). Each of these areas is treated somewhat differently in the law.

This report contains Wetland Conservation Act information from local governments for 1996, the third full year for which data is available.

II. The Wetland Conservation Act in 1996

A. Overview of the 1996 Numbers

As has been the case for the previous two years, data collected from 1996 indicates that a significant number of proposed wetland projects were revised to avoid wetlands entirely. Of the 6,897 project proposals, 73 percent (5,002) were ultimately resolved with no disturbance at all to a wetland. These 5,002 projects, as originally proposed, would have drained or filled an estimated 3,547 acres of wetlands (*see Appendix B and Appendix C*). Where wetland impacts were unavoidable, over 500 acres of wetland were replaced by project sponsors and an additional 183 acres were replaced by the state on its projects and on behalf of local government public road authorities. Clearly, the program is protecting Minnesota wetlands.

Contrary to a common misperception, the vast majority of projects impacting wetlands are not huge shopping malls or condominium complexes, but small activities affecting less than .2 acres of wetlands. While it's easy to dismiss the effects of these small wetland projects as unimportant--and individually, they may be--their cumulative impact is significant. Preventing the unregulated draining and filling of small areas of wetlands is one key to the success of Minnesota's no-net-loss goal (*see Appendix C-5*).

It's interesting to note, too, that many of the significant numbers--such as the number of landowner contacts, the number of wetland acres avoided, the number of wetland acres on which impacts were minimized, and the amount of wetlands acres on which wetland impacts were either avoided, minimized, or replaced--have remained fairly steady (*see Appendix D-1 and D-2*). Although the number of projects resulting in replacement of wetlands dropped significantly from around 400 in 1994 and 1995 to 240 in 1996, that likely is the result of the 1996 changes in the WCA that transferred the responsibility for replacing wetlands lost through repair of public roads from local governments to the state government.

B. Significant 1996 WCA Changes

Road Replacement

As part of the 1996 amendments to the WCA, BWSR assumed the responsibility from local governments for replacing wetlands lost through repair and rehabilitation of existing roads throughout the state. Replacement in most areas of the state must take place at a 2:1 ratio (two wetland acres replaced for every one lost); in the counties with more than 80 percent of their presettlement wetlands remaining, the replacement ratio is 1:1. In addition, replacement of wetlands in the

metro must take place in the metro area.

In the remainder of 1996 after the provision was approved, approximately 54 acres of wetlands were lost due to local government road repair, requiring about 79 acres of wetland replacement. In 1997--the first full year the program was available--local government road work is projected to impact about 300 acres, requiring an estimated 426 acres of replacement (*see Appendix E*).

The cost of these replacement acres varies from \$2,500 per acre in parts of rural Minnesota to more than \$100,000 per acre in some parts of the metropolitan area. The program is funded through state capital improvement funds.

Comprehensive Wetland Protection and Management Plans

Under the 1996 changes made to the WCA, local units of government may develop a Comprehensive Wetland Protection and Management Plan as an alternative to strictly following the state WCA rules. These plans allow increased flexibility in wetland replacement, specifically in the location of the replacement site, the replacement ratio, and the "sequencing" process by which local governments determine the extent to which the applicant has attempted to avoid wetlands.

Nine local governments are developing model Comprehensive Wetland Protection and Management Plans using legislative funding; approximately 14 more have done so on their own. It is anticipated that more local governments will continue to take advantage of this option (*see Appendix F*).

C. Wetland Banking

The Minnesota Wetland Banking Program, first offered in 1994, continues to provide an effective and convenient avenue for wetland replacement. Under the program, landowners draining or filling wetlands have the option to purchase wetland "credits" resulting from previously restored or created wetlands, rather than finding and restoring wetland acres on their own. During 1997, the program grew dramatically, with the number of acres deposited in the wetland bank since the program began increasing to a total of 1,779 acres by March 1998. Approximately 300 of those acres have been purchased or used, leaving a balance of about 1,453 acres. (About 500 acres of those 1,435 have been restored and deposited by the Minnesota Department of Transportation for their future road projects.) Approximately 36 counties have wetlands that have been enrolled in the program (*see Appendix G*).

The cost of wetland credits continues to vary greatly, depending upon location, land value, size and the cost of the restoration construction. Wetland banking credits (the cost per acre) range from about \$1,000 to \$20,000; the price may be even higher in the metropolitan area.

D. WCA Financing

A variety of local units of government--cities, towns, counties, soil and water conservation districts, and watershed management organizations--administer the WCA locally. Local matching funds complemented 1996 state funding of \$1.63 million (allocated to counties as part of the Natural Resources Block Grant) for a total program cost of \$2.83 million at the local level (*see Appendix C-3*). This funding, combined with Board of Water and Soil Resources (BWSR) support in training and in serving on local technical evaluation panels, allowed local governments to implement the program cost-effectively. In many cases, the WCA was incorporated or directly linked to existing planning and zoning or local water planning programs through the development of comprehensive wetland protection and management plans.

E. WCA Enforcement

Department of Natural Resources (DNR) conservation officers and other peace officers enforce the WCA. The DNR has six wetland enforcement officers coordinating the activities of field officers, local governments, soil and water conservation districts, BWSR and the courts to ensure compliance with the law. In 1996, conservation officers issued 131 cease and desist orders to stop unauthorized work until approvals were received. They also issued approximately 93 restoration orders, with technical assistance from the local soil and water conservation districts (*see Appendix B*).

F. WCA Compensation

The WCA includes a provision (MN Statute 103G.237) that provides compensation, in the form of payment for a permanent conservation easement, to landowners who have a legitimate replacement plan denied. The only request BWSR has received for such compensation came from a longtime owner of a shoreland wetland in Pine County. The BWSR approved the request and the owner placed the land under permanent easement and was reimbursed.

A variety of reasons cause this lack of compensation requests. First, the fact that over 16,000 landowner contacts resulted in only 240 replacement plans suggests that most landowners either did not have wetlands, had wetlands that were exempt, decided not to proceed with their project or completed their project with no or minimal wetland impacts. Second, local governments almost never disapprove legitimate replacement plans; typically, local governments work closely with the landowner during the replacement plan development so that by the time a replacement plan is submitted, the landowner and the local government have already resolved all potential issues.

G. WCA Appeals

The act also has an administrative appeals provision (MN Statute 103G.2242). In 1996, seven appeals were filed (up from five appeals in 1994 and three in 1995).

All except one pertained to exemption determinations. The results are as follows: one was withdrawn; one was remanded to the local government unit; one saw the local government unit decision affirmed; one was resolved with a stipulation agreement, a combination of restoration and replacement; one was not heard since compensation was received (the Pine County case discussed previously); and two were resolved before a hearing took place. Appeals administration required about 450 hours from the Attorney General's Office, BWSR staff and the BWSR Dispute Resolution Committee members.

III. Other Programs

A. State Programs

Reinvest in Minnesota (RIM) Reserve Program: One of the components of the RIM Reserve Program pays landowners to restore legally drained wetlands and adjacent uplands to their native condition. In conjunction with the restoration, the state acquires a perpetual conservation easement on the land. RIM Reserve is administered by the BWSR and implemented by soil and water conservation districts (SWCDs) at the local level.

In 1996, the wetland component of the program enrolled 1,543 acres, restoring 65 basins and 451 wetland acres at an average cost per easement acre of \$869/acre. The majority of restorations are located in the prairie pothole region of the state. From the time the program began in 1986 through 1996, it restored about 6,459.5 acres of wetlands (see Appendix I).

Permanent Wetland Preserves Program (PWP): This program was established by the Wetland Conservation Act and began in 1992. Like RIM Reserve, it is administered by the BWSR and implemented by the soil and water conservation districts at the local level. Through 1996, 264 easements had been acquired under the program, perpetually protecting 10,640 acres of at risk existing type 1, 2, 3 and 6 wetlands and surrounding upland at an average cost of \$570 per acre). Fifteen PWP easements were taken in 1996 for a total of 727 acres of wetland and surrounding upland.

Minnesota Department of Transportation (MnDOT): MnDOT is required to mitigate any wetland losses or impacts that occur in conjunction with state highway projects. The agency reported impacts to 56.4 acres with the replacement of 101.0 wetland acres in 1996.

Minnesota Department of Natural Resources (DNR): The DNR is required to replace wetland impacts resulting from its capital improvement projects. In 1996, the agency reported that 0.7 acres of impacts were replaced with 3.0 acres of restored or created wetlands. The Protected Waters and Wetlands Program issued 32 permits, authorizing impacts to 97.5 acres (mostly for public transportation projects) and requiring 72.2 acres of replacement. In addition, the Division of Fish and Wildlife restored approximately 480 acres of wetlands on lands it owns and purchased lands containing approximately 900 acres of existing wetlands.

B. Federal Programs

U.S. Army Corps of Engineers (USACOE), Department of the Army: The USACOE implements Section 404 of the Clean Water Act, which regulates the excavation or filling of wetlands. In 1996, the USACOE took 1,732 final actions, including issuing 54 individual permits and 1,678 nationwide or general permits.¹

Wetland Acres			
Types of Permit	Requested	Approved	Mitigated
Individual (mining projects)	1,355 acres	1267 acres	1249 acres
Individual (non-mining)	627 acres	600 acres	670 acres
NWPs and GPs	263 acres	241 acres	206 acres
TOTAL	2245 acres	2108 acres	2125 acres

2245 acres of impacts were requested; 2108 acres of impacts were approved; and 2125 acres of compensatory mitigation were required as part of the authorization (including some from the state wetland bank).²

U.S. Fish and Wildlife Service (USFWS), Department of the Interior: The USFWS administers several programs aimed at restoring wetlands on private and public lands. The USFWS places high priority on projects that will benefit migratory waterfowl and strives to restore sites to a condition as close as possible to their former status (e.g., restoring a partially drained wetland to its pre-drainage condition). In 1996, the USFWS restored approximately 3,531 acres on a variety of public and private sites. Agreements on public sites are permanent; agreements on private sites generally extend for ten years. The USFWS estimates that it has temporarily and permanently restored or partially restored 39,783 acres in Minnesota since 1987.

The figures listed here include permanent, temporary and partial restorations completed on acres enrolled in the U.S. Department of Agriculture's Conservation Reserve Program (CRP), on private land, and on federal land holdings in Minnesota (see table on next page).

¹The database upon which these figures are based is in a development stage and this data may contain errors and omissions.

²Included in these acreage figures are impacts and mitigation associated with several large peat mining and/or lake excavation projects. These mining/excavation projects accounted for about 1355 acres requested; 1267 acres approved; and 1249 acres mitigated. Totals without these mining projects are: 890 acres of impact requested; 841 acres approved; and 876 acres of mitigation.

U.S. Fish and Wildlife Service Minnesota Wetland Restorations³

Category	Through FY 1994		FY 1995		FY 1996		Total	
	Sites	Acres	Sites	Acres	Sites	Acres	Sites	Acres
Restoration Location								
CRP	2,573	7,362	41	121	56	143	2,670	7,626
Non-CRP (private land)	4,319	14,619	658	3,298	422	1,838	5,399	19,755
FmHA	594	1,858	18	186	6	38	618	2,082
FWS Land	1,388	4,606	237	1,529	178	1,215	1,803	7,350
Other Public	498	1,932	136	741	69	297	703	2,970
Totals	9,372	30,377	1,090	5,875	731	3,531	11,193	39,783
Cumulative Totals								
1987 - 1996 = 11,193 restored wetlands in Minnesota.								
1987 - 1996 = 39,783 restored wetland acres in Minnesota.								

Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture: NRCS estimates that 535 acres were restored and enrolled in temporary and permanent easements in 1996 through the Wetland Reserve Program (WRP). Since the WRP Program began in 1992, 7,105 acres had been enrolled via 99 contacts with private landowners through 1996. Also, 96 acres of wetlands were restored as required under the mitigation provisions of the "Swampbuster" program in 1996.

C. Nonprofit and private organizations

Many private and nonprofit conservation organizations are involved in wetland preservation and restoration projects, often by providing partnership funds on cooperative projects with state and federal programs. Also, many local sporting groups and private landowners restore or preserve wetlands for their own benefit and use.

See Appendix H for additional details on wetland regulatory programs in Minnesota.

³The USFWS goal is to restore wetlands, as closely as possible, to their former status. Many of the wetlands restored by the Service were in fact wetlands at the time of restoration -- degraded, but they still exhibited wetland characteristics. Many were not restored "from dirt to water". Therefore, the numbers do not reflect net wetland acres gained. For this reason, and because many USFWS programs are cooperative in nature and involve collaboration with other public and private efforts, a very real potential exists to significantly overestimate acres restored (e.g., the same wetland restoration may be counted more than once).

IV. Wetlands in Minnesota

A. Number and Location of Wetlands

How many and what types of wetlands do we have and where are they?

1.) Anderson & Craig (*Growing Energy Crops on Minnesota's Wetlands: The Land Use Perspective*, 1984) determined that there are 8.8 million acres of wetlands in Minnesota, compared to 18.6 million acres of presettlement wetlands (see Appendix J). The amount of presettlement wetlands is based on 1969 Land Use and Soils Data using 40 acre parcels. Although this study is now a bit dated, it remains the best statewide estimate of presettlement vs. current wetlands.

2.) The National Wetland Inventory (NWI) maps include all waters and wetlands and rivers that have measurable area. The NWI summary indicates approximately 10.6 million acres of wetlands currently exist in Minnesota (excluding water areas deeper than two meters). Appendix K shows the distribution of wetland types across the state. Most of this data was mapped during the period from 1982 through 1993 based on aerial photography done from 1974 through 1984. The NWI maps exclude some farmed wetlands and may contain inaccuracies because of land use changes since they were developed. Also, there are mistakes inherent when identifying certain types of wetlands with remote sensing methods. Nonetheless, the NWI is the best and most current statewide data available for existing wetlands. Digitization of the NWI data has been recently completed and information on obtaining versions of the NWI maps can be obtained by calling 1-800-USA-MAPS or on the Internet at <http://www.nwi.fws.gov>. Paper copies of the NWI maps can be purchased from the Minnesota Bookstore by calling 1-800-657-3757 or 612-297-3000.

3.) The Natural Resource Conservation Service has developed the National Resources Inventory (NRI), which is based on field sampling. This study or inventory, which includes farmed wetlands, concluded from 1992 data that a total of approximately 10.6 million acres of wetlands (and 3.6 million acres of water areas deeper than two meters) remain in Minnesota, compared to a presettlement amount of 20+ million acres of wetlands. The NRI data represents a statistical model that is accurate only at a very large scale and is not useful for field work or local planning efforts. The NRI can be accessed on the Internet at <http://www.mn.nrcs.usda.gov>.

B. Wetland Gains and Losses

Despite the impressive wetland savings resulting from the Wetland Conservation Act, and what seems to be a national trend toward less wetland loss, it still is unlikely that Minnesota has reached its no-net-

Wetland Type		1992 NWI		1992 NRI		1969 USFS		1969 USFS		1969 USFS	
Acres	% of State	Acres	% of State	Acres	% of State	Acres	% of State	Acres	% of State	Acres	% of State
1,000,000	1.0	1,000,000	1.0	1,000,000	1.0	1,000,000	1.0	1,000,000	1.0	1,000,000	1.0
2,000,000	2.0	2,000,000	2.0	2,000,000	2.0	2,000,000	2.0	2,000,000	2.0	2,000,000	2.0
3,000,000	3.0	3,000,000	3.0	3,000,000	3.0	3,000,000	3.0	3,000,000	3.0	3,000,000	3.0
4,000,000	4.0	4,000,000	4.0	4,000,000	4.0	4,000,000	4.0	4,000,000	4.0	4,000,000	4.0
5,000,000	5.0	5,000,000	5.0	5,000,000	5.0	5,000,000	5.0	5,000,000	5.0	5,000,000	5.0
6,000,000	6.0	6,000,000	6.0	6,000,000	6.0	6,000,000	6.0	6,000,000	6.0	6,000,000	6.0
7,000,000	7.0	7,000,000	7.0	7,000,000	7.0	7,000,000	7.0	7,000,000	7.0	7,000,000	7.0
8,000,000	8.0	8,000,000	8.0	8,000,000	8.0	8,000,000	8.0	8,000,000	8.0	8,000,000	8.0
9,000,000	9.0	9,000,000	9.0	9,000,000	9.0	9,000,000	9.0	9,000,000	9.0	9,000,000	9.0
10,000,000	10.0	10,000,000	10.0	10,000,000	10.0	10,000,000	10.0	10,000,000	10.0	10,000,000	10.0
11,000,000	11.0	11,000,000	11.0	11,000,000	11.0	11,000,000	11.0	11,000,000	11.0	11,000,000	11.0
12,000,000	12.0	12,000,000	12.0	12,000,000	12.0	12,000,000	12.0	12,000,000	12.0	12,000,000	12.0
13,000,000	13.0	13,000,000	13.0	13,000,000	13.0	13,000,000	13.0	13,000,000	13.0	13,000,000	13.0
14,000,000	14.0	14,000,000	14.0	14,000,000	14.0	14,000,000	14.0	14,000,000	14.0	14,000,000	14.0
15,000,000	15.0	15,000,000	15.0	15,000,000	15.0	15,000,000	15.0	15,000,000	15.0	15,000,000	15.0
16,000,000	16.0	16,000,000	16.0	16,000,000	16.0	16,000,000	16.0	16,000,000	16.0	16,000,000	16.0
17,000,000	17.0	17,000,000	17.0	17,000,000	17.0	17,000,000	17.0	17,000,000	17.0	17,000,000	17.0
18,000,000	18.0	18,000,000	18.0	18,000,000	18.0	18,000,000	18.0	18,000,000	18.0	18,000,000	18.0
19,000,000	19.0	19,000,000	19.0	19,000,000	19.0	19,000,000	19.0	19,000,000	19.0	19,000,000	19.0
20,000,000	20.0	20,000,000	20.0	20,000,000	20.0	20,000,000	20.0	20,000,000	20.0	20,000,000	20.0
21,000,000	21.0	21,000,000	21.0	21,000,000	21.0	21,000,000	21.0	21,000,000	21.0	21,000,000	21.0
22,000,000	22.0	22,000,000	22.0	22,000,000	22.0	22,000,000	22.0	22,000,000	22.0	22,000,000	22.0
23,000,000	23.0	23,000,000	23.0	23,000,000	23.0	23,000,000	23.0	23,000,000	23.0	23,000,000	23.0
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71,000,000	71.0	71,000,000	71.0	71,000,000	71.0	71,000,000	71.0	71,000,000	71.0	71,000,000	71.0
72,000,000	72.0	72,000,000	72.0	72,000,000	72.0	72,000,000	72.0	72,000,000	72.0	72,000,000	72.0
73,000,000	73.0	73,000,000	73.0	73,000,000	73.0	73,000,000	73.0	73,000,000	73.0	73,000,000	73.0
74,000,000	74.0	74,000,000	74.0	74,000,000	74.0	74,000,000	74.0	74,000,000	74.0	74,000,000	74.0
75,000,000	75.0	75,000,000	75.0	75,000,000	75.0	75,000,000	75.0	75,000,000	75.0	75,000,000	75.0

loss goal. How far we are from that goal is difficult to judge, since significant wetland losses take place through activities that require no approvals or permits, making them impossible to accurately track. Examples of these types of activities include:

- Exemptions from the Wetland Conservation Act. The 1996 legislative amendments expanded some of the exemptions, most notably: i) the de minimis exemption, which now ranges from 400 square feet to a maximum of 10,000 square feet per project and which can be deducted from the amount of wetland to be replaced; and ii) several agricultural exemptions for drainage projects to improve land for crop production. In 1996, local government units made 1,004 exemption determinations *upon request* by landowners. These exemptions resulted in at least 355 acres of wetlands drained or filled. As noted above, since exempt activities *do not* require government approval there are unreported wetland losses (i.e., beyond those noted here) that cannot be tracked.
- Exemptions and nationwide permits not requiring mitigation from the U.S. Army Corps of Engineers Federal Section 404 Program.
- Non-agricultural wetland impacts approved by the U.S. Department of Agriculture for farm program participants.
- Unreported violations of all programs.

As difficult as it is to estimate wetland gains and losses on an acreage basis, it is even more difficult to measure the functional gains and losses resulting from wetland projects. Wetlands are important because of how they function in the hydrologic and ecological systems. However, quantitative information on wetland functions, while even more relevant than total acreage, is not available.

C. Further Needs and Analysis

Although completion of the NWI digitization represented a giant leap forward in wetland data analysis, it is based on photography that in many cases is more than 15 years old and it does not provide the ability to compare present and past conditions to generate guidance for the future. Digitally updating the NWI, starting with the areas of the state experiencing the greatest land use change, would give citizens and staff of local, state and federal governments modern information and possibly the ability to analyze trends in areas where the original maps were developed using methods consistent with today's techniques. When digitized soil data is available statewide a thorough analysis will be possible. Until then, local governments with access to data developed through local studies may be able to use this information to analyze trends, inventory drained/filled wetlands and prepare local wetland plans. Meanwhile, state efforts will focus on refinement of existing data to assess information on a variety of aspects of wetlands, including subwatersheds, eco-regions, ownership, basin size, conservation program results, and regulatory program effectiveness.

V. Wetlands in the U.S.

A. Trends in Losses of U.S. Wetlands

The U.S. Fish and Wildlife (USFWS) Service recently released its report on the status and trends of wetlands in the conterminous U.S. for the period from 1985 to 1995. Using a new projection methodology, the USFWS estimated average national losses of wetlands at 117,000 acres for the period, with a 95 percent confidence interval of 60,000 to 175,000 acres. This represents a 60 percent reduction in the rate of loss from the period of 1975 to 1985. Past USFWS reports had estimated net losses at about 460,000 acres per year through the mid-1970s and 290,000 acres per year through the mid-1980s.

The numbers reported by the USFWS differ from recent reports by U.S. Department of Agriculture. Vice President Gore, in his October 1997 announcement of Clean Water Act initiatives, directed that the differences in the approaches be reconciled for future reports. An inter-agency working group is developing a plan to accomplish this directive. For more information and debate on wetland gains and losses for the United States see the July-August and November-December 1997 editions of the *National Wetlands Newsletter*, 1616 P Street, N.W., Suite 200, Washington, D.C. 20036, telephone: 202-939-3800; email: orders@eli.org.

It's important to remember that the statewide or national measure of wetland gains and losses is much less critical than that measure for a local community or watershed. Wetland protection and management at the local level can account for the unique state of the natural resources of a particular community. Without stated goals, wetland protection means little; such goals are best developed and achieved through planning efforts of local communities, with support and oversight by state and federal partners. The 1996 amendments to the WCA provide a mechanism for local governments to develop comprehensive wetland protection and management plans to address the unique requirements of their community. *Appendix F* shows which communities are involved in wetland planning efforts and the status of their work thus far.

B. National Viewpoint: A Net Gain of Wetlands

Excerpt from article by John Meagher, Director of the Wetlands Division, U.S. Environmental Protection Agency.

On October 18, 1997, the 25th anniversary of federal clean water legislation, Vice President Gore announced a new Clean Water Initiative. Included in that announcement was a goal of a net gain of up to 100,000 acres of wetlands in the United States per year starting in 2005. Federal estimates of recent wetlands trends in the U.S. are in the range

of about 100,000 acres of loss per year. This reflects significant environmental progress from a loss rate of about 460,000 acres per year through the mid-1970s and about 290,000 acres per year through the mid-1990s. These figures represent estimates of the net change in wetlands--the acreage converted from wetland to non-wetland status minus the acreage converted from non-wetland to wetland status.

To achieve the Vice President's goal, at least 100,000 more acres will have to be added to the wetlands inventory in the U.S. than are lost from that inventory in the year 2005 and in each thereafter. This will require a reversal of historic patterns that have resulted in a net loss year after year, and a cumulative loss estimated to be over 100 million acres in the contiguous U.S., or more than half of the wetlands that existed at the time of European settlement.

Plans to meet the milestone will not require that we disrupt the uses to which our wetlands have been converted as the nation has developed. If a net gain of 100,000 acres of wetlands were achieved each year for twenty five years, it would represent a return only of about two and one-half percent of the total wetland area in the U.S. that had previously been converted.

Since many former wetland areas are no longer economically productive or are only very marginally so, restoration to wetlands can be accomplished without detrimental economic effects. The conversion of many of our wetlands would never have been economically advantageous, except for government incentives that were provided before the values of wetlands and the economic risks of conversion were well understood.

However, we must consider not only acreage of wetlands lost and gained, but also the environmental functions they provide. There have been many projects where restoration or creation of wetlands to offset loss of natural wetlands has resulted in a net loss of functions, even in circumstances where there may have been a net increase in acreage of wetlands. In many cases the wetlands restoration or creation projects were poorly conceived, planned, designed, constructed or managed. In other circumstances it is unclear what the mitigation projects were intended to achieve or what should be measured to assess their level of success.

As we move towards a net gain of wetlands, there are many lessons to be drawn from these experiences. Our policies and programs should continue to emphasize avoidance of impacts to existing wetlands, thereby limiting losses to circumstances where there are no practicable alternatives and impacts are minimized to the extent feasible.

Much work has been done in recent years to improve the science of wetlands restoration and creation and that should remain a priority area of scientific inquiry. Improved understanding of how wetlands function

on both site-specific and landscape scales is important to ensure that mitigation projects provide environmentally appropriate compensation for functions adversely impacted by human activity. Indicators of the biological health of wetlands should continue to be developed and refined, and monitoring protocols established, so that wetland functions lost and those regained can be more accurately measured.

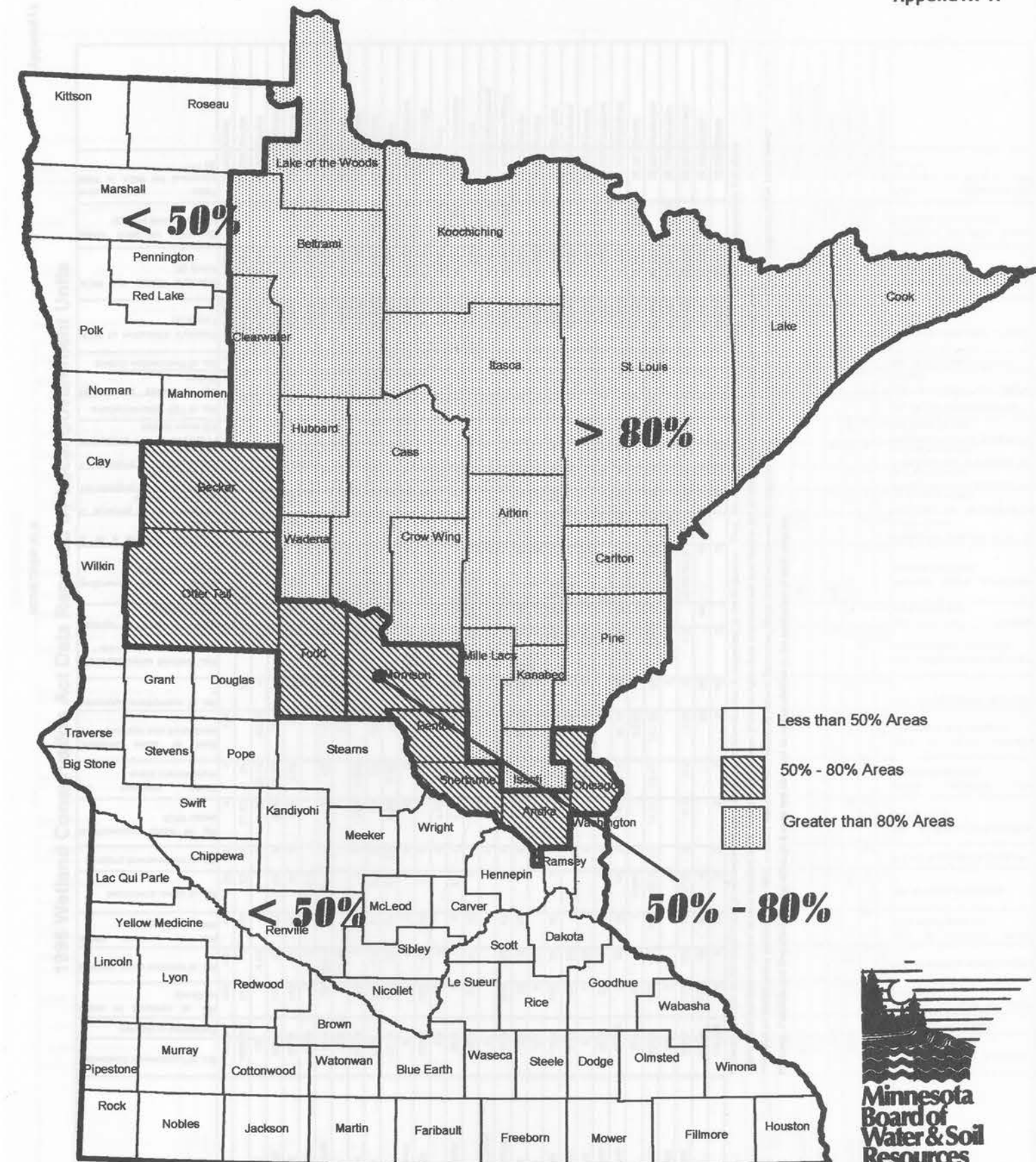
Program practices should continually be updated to reflect our growing body of knowledge of what works and what doesn't in all phases of wetlands restoration and creation, from the initial setting of objectives to long-term wetlands management and monitoring. Wetlands mitigation banking, a recent innovation in wetlands regulation, is providing much information that will be useful in making functions an important consideration in the efforts to meet the Vice President's wetlands objective.



Minnesota Wetland Conservation Act

Pre - Settlement Wetland Areas

Appendix A



1996 Wetland Conservation Act Data Reported by Local Government Units

	No. of Landowner Contacts	Estimated or Known	No. of contacts to avoid wetlands	No. of wetland acres avoided	No. of contacts which minimized impacts	No. of acres minimized	No. of replacement projects	No. of Acres drained/filled under WCA	Acres replaced via replacement plans	Sum of acres avoided, minimized and replaced	No. of exemptions approved ^	Est. wetland acres impacted via exemption approvals ^	No. of determinations	Wetland types generating biggest workload	Proposed projects 0 to .2 acres in size	Proposed no. of projects .2 to .5 acres in size	Proposed no. of projects .5 to 1 acre in size	Proposed no. of projects 1 to 3 acres in size	Proposed no. of projects > 3.0 acres in size	No. of TEP Determinations	No. of Cease and Desist Orders	No. of Restoration Orders	County's Allocation of WCA Funds (\$)	County's Match for WCA funds (\$)	Carryover of WCA funds from previous year (\$)	Total administrative expenses for WCA in 1996 ^^^ (\$)		
Aitkin	150 e		100	100	40	20	8	4	4	124	8	2	0	2,6	40	100	10			10	6	6	19,200	19,200	0	38,400	Aitkin	
Anoka	1000 k/e		142	73	86	52	25	27.63	56		37	1.5		2,3						3	9	9	40,500	60,884		101,384	Anoka	
Becker	16		6	4.89			4	0.45	35.74	40.63	4	3.15	3		6	11	3	1	2		5		24,200	24,200		24,200	Becker	
Beltrami	386 e		110	23	112	17.25	3	0.45	0.45	40.7	10	4	25	2,68286	65	10	2	4	1	11	2	2	36,000	41,365		77,365	Beltrami	
Benton	457 k		149	39	93	19	3	1.48	2.96	61	23	17.5	0	1,286	162	106	7	2	1	6	1	0	36,000	36,000	15,145	72,000	Benton	
Big Stone	25 e		1	1.5	1	2.5				4	2	1	1		2		2	2					10,000	10,000	9,754	6,758	Big Stone	
Blue Earth	91 e		56	120.8	7	21.1	1	2.6	5.2	147.1	8	1.78	3	182	3		1	1	2	7	1	1	19,200	19,200		19,200	Blue Earth	
Brown	11 k		2	0.75						0.75			1	182			1			1			10,000	10,000		20,000	Brown	
Carlton	100 e		96	7	4	1	2	1.209	1.209	8	4	0.366	15	286		1		1		2			19,200	18,700		38,400	Carlton	
Carver	418		213	118	11	5.2	5	1.3	2.6	125.8	8	1.5	1	1,2,3	3	2	1		2	10	7	2	36,000	16,849	16,799	34,676	Carver	
Cass	167 k		132	29	24	8.6	11	6.98	6.98	44.6	12	13.5	4	28687	151	9	7			2	1	1	51,000	51,000	6,355	114,711	Cass	
Chippewa	5		4	4	0	0	0	0	0	0	4	1	0.3	0	2	1	2	1	1	0	0	0	10,000	10,000	0	20,000	Chippewa	
Chisago	450 e		380	25	330	15	5	1.2	3.8	43.8	25	2.16	18286	30	9	1				4	4	3	26,700	64,640		74,640	Chisago	
Clay	6 e		2	1		1		3.58	7.16	8.16	1	0.2	2	1,2,3	1				1	1			5,000	5,000	4,116	780	Clay	
Clearwater	36 k		3	1	6	0.5	1	0.25	0.25	2	14	6.5	4	2,3	13	7	1	1	1	8	1		14,101	14,101	5,099	33,246	Clearwater	
Cook	365 e		25	10	10	1				11	2	3.68	165	68788	2							1	7,200	7,200		25,000	Cook	
Cottonwood	1					1		1	1	1				2		1				1			10,000	10,000	0	10,000	Cottonwood	
Crow Wing	644 k		579	25	62	3	3	1.44	1.4	29.4	54	1.24	3	286	59	1	1	1	1	6	1		36,000	36,000	11,531	37,419	Crow Wing	
Dakota	75 e		12	5	25	5	9	6.38	11.47	16.47	20	3	6	2	4	2	2		1	6			41,000	41,000		43,155	Dakota	
Dodge	15 k		2	1.75						1.75	3	1	1		3		1	1		2			16,700	16,700		8,590	Dodge	
Douglas	175 e		150	30	10	7	3	0.94	1.9	41.9	10	7.91	27	182	27	32	15	4		5	3		19,200	19,200		32,674	Douglas	
Faribault	54 k		50	50						50	4	10	182				1		1	1			10,000	10,000		20,000	Faribault	
Fillmore	4		1	22			1	13.8	13.8	35.8	1	13.9		1	1			3					10,000	10,000		20,000	Fillmore	
Freeborn	40 e		32	8	3	6	2			14			2,3				6	8	2	4			5,000	5,000		4,200	Freeborn	
Goodhue	39 e/k		5	20	15	10	2	2.57	5.14	35.14	3	3	12		2	10	1	1	2		4	1	1	16,700	16,700		45,033	Goodhue
Grant	35 e		20	5	1	0.092				0.092				3					4	2			13,980	16,381	3,980	26,381	Grant	
Hennepin	1553 e		150	71	106	30.2	24	14.91	29.41	131.16	30	8.57	6	2	6	5	1	5		26	4	2	36,000	36,000		72,000	Hennepin	
Houston	19		1								5	1		1	18		1						12,200	12,200	14,679	20,779	Houston	
Hubbard	300 k		123	100	12	21.6	3	0.3	0.3	122	8	0.8		3868783.6	207	42	15	15	33	4	6	3	26,700	26,700		60,654	Hubbard	
Isanti	110 e		110	10	40	8				18	50		40		6	30				3	2		27,500	27,500		27,500	Isanti	
Itasca	140 k/e		20	5	20	1	2	2	2	8	10	2		7		1		1					36,010	36,010		72,020	Itasca	

*Exempt activities do not require local government unit approval unless a determination is requested by the landowner. Thus, the numbers listed here are very incomplete. In particular, the exemption that allows agricultural activities which are on land enrolled in the federal farm program (Federal Agriculture Improvement and Reform Act of 1996) are not tracked by local government units.

***Based on BWSR policy established in 1993, a county can choose to spend its Natural Resources Block Grant monies and the required match in any proportion amongst the different programs (WCA Local Water Planning, Feedlots and Shoreland Zoning) although it must first carry out its responsibilities to the particulars of each program.

	No. of Landowner Contacts	Estimated or Known	No. of contacts to avoid wetlands	No. of wetland acres avoided	No. of contacts which minimized impacts	No. of acres minimized	No. of replacement projects	No. of Acres drained/filled under WCA	Acres replaced via replacement plans	Sum of acres avoided, minimized and replaced	No. of exemptions approved	Est. wetland acres impacted via exemption approvals^	No. of determinations	Wetland types generating biggest workload	Proposed projects 0 to .2 acres in size	Proposed no. of projects .2 to .5 acres in size	Proposed no. of projects .5 to 1 acre in size	Proposed no. of projects 1 to 3 acres in size	Proposed no. of projects > 3.0 acres in size	No. of TEP Determinations	No. of Cease and Desist Orders	No. of Restoration Orders	County's Allocation of WCA Funds (\$)	County's Match for WCA funds (\$)	Carryover of WCA funds from previous year (\$)	Total administrative expenses for WCA in 1995 (\$)		
Jackson	4		2	40.01						40.01	2	0.5	2	2	2	1	1	0	0	2	2	2	10,000	10,000		20,000	Jackson	
Kanabec	6		0	0	0	0	0	0	0	0	4	0.24	2	3	5	1	1	0	0	2	2	2	0	0	11,878	11,878	Kanabec	
Kandiyohi	190	e	124	550		3.6		10		553.6	12	21	40	1,2,3		24	40	60	20	15	4		19,200	19,200	1,551	18,715	Kandiyohi	
Kittson	13	k	1	3						3	2	4		2&6		1	1	3		1			16,700	16,700	11,044	11,222	Kittson	
Koochiching*	255																						5,000	8,775	104	13,879	Koochiching*	
Lac Qui Parle	623	k	1	3						3				1&2	35			1				1	10,000	10,000		22,639	Lac Qui Parle	
Lake	150	e	25	5	25	10				15			6								3		11700	11700		23700	Lake	
Lake of the Woods	50	e	15	30	20	4	2	217	2.7	36.67	1	4	10	2,6,7						1		1	26,700	25,700		42,530	Lake of the Woods	
Le Sueur	50	e	30	60	4	19.4	1	1.2	2.4	81.8	6		7	0	1&2	1	10	10	10	10			16,700	19,526		36,226	Le Sueur	
Lincoln	40	e	4	19						19				1,3			1		3				10,000	11,563	194	10,194	Lincoln	
Lyon	8		1		1	0.52	2	3	1	1.52	3		2		3	4	1	1	2	3	1	1	10,000	10,000		20,000	Lyon	
McLeod	120	e	8	19	4	3.5	1	4	4.5	27	11	20	3	1&2	2	5	3	1	3	19	3	3	16,700	16,700	2,016	35,334	McLeod	
Mahnomen	50	e	20	10	1	0.25	1	0.23	0.69	10.94			10	1	2&3					1	1	1	12,200	12,200		30,000	Mahnomen	
Marshall*	280	k	41	12	10	2							42	1,2 & 6									14,200	14,200		29,164	Marshall*	
Martin	250		83	15			1	0.8		15					2	1	1	1	1	1	1		10,000	10,000	0	20,000	Martin	
Meeker	46		37	92	7	7	2	3		99	3	2	39	2&3			2		2	3			19,200	26,700		21,531	Meeker	
Mille Lacs	70	e	26	5	10	5	10	5	3	13	18			2,6		8	2	2	1		6	6	19,200	19,200			Mille Lacs	
Morrison	264	k	64	180	41	23	1	0.09	2.3		31	20	20	2&6		40	25	10	5	2	4	3	26,700	20,000		46,700	Morrison	
Mower	60		60	37.5							3	0.75			2						1	1	12,200	12,200		19,782	Mower	
Murray	31	k	4	3.9			2	0.83	11.61	15.51	25	1.11	25		2	25	2	3	1	2			10,000	10,000	659	20,659	Murray	
Nicollet	55	e	4	17						17			2	1	1&2		2	1		1			16,700	16,700	4,815	37,340	Nicollet	
Nobles	340	e	3	1	0	0	0	0	0	0	0	0	0	1&2		0	0	0	0	0	0	0	10,000	10,000		20,000	Nobles	
Norman	69	k	67	90						90	2	0.3	67	1&2						4			12,200	12,200	595	31,805	Norman	
Olmsted	44		5	1.63	1	4.66	5	4.1	7.2	13.49	25	0.14	14	1&2		33	3	7	1		6	3	1	26,700	28,861	8,288	57,723	Olmsted
Ottertail	131	e	35		15			2.6	2.6		18	1.06		2,3		30	10			3	3	3	33,200	33,200			Ottertail	
Pennington	27	k	26	12			1	0		22				1,2,6						2			6,200		4,610	4,605	Pennington	
Pine	273	k	200	300			1	0.14	0.14	300.14	31	7.2	4	2&6		12	5			2	1		36,700	36,700	2,268	70,132	Pine	
Pipestone	30	e	7	5						5	1	1	1	1&2			3	3	1				10,000	10,000		7,000	Pipestone	
Polk	120	e	10	5	1	0.2	2	3.27	0.2	5.4	4	1.2	5	2,3,4	2		1	2	1				16,700	16,700		35,449	Polk	
Pope	400	e	.7	9	1	0.25	1	0.23	0.46	9.7				2&3	1	4	1	1	2	5			15,200	15,200		30,438	Pope	
Ramsey	155	e	27	12.5	36	13	8	2.71	5.73	31.23	12	1	80	1&2		5	3	1		10	3	3	26,700	26,700	12,765	54,064	Ramsey	

^aExempt activities do not require local government unit approval unless a determination is requested by the landowner. Thus, the numbers listed here are very incomplete. In particular, the exemption that allows agricultural activities which are on land enrolled in the federal farm program (Federal Agricultural Improvement and Reform Act of 1996) are not tracked by local government units.

^{***}Based on BWSR policy established in 1993, a county can choose to spend its Natural Resources Block Grant monies and the required match in any proportion amongst the different programs (WCA Local Water Planning, Feedlots and Shoreland Zoning) although it must first carry out its responsibilities to the particulars of each program.

	No. of Landowner Contacts	Estimated or Known	No. of contacts to avoid wetlands	No. of wetland acres avoided	No. of contacts which minimized impacts	No. of acres minimized	No. of replacement projects	No. of Acres drained/filled under WCA	Acres replaced via replacement plans	Sum of acres avoided, minimized and replaced	No. of exemptions approved ^	Est. wetland acres impacted via exemption approvals ^	No. of determinations	Wetland types generating biggest workload	Proposed projects 0 to .2 acres in size	Proposed no. of projects .2 to .5 acres in size	Proposed no. of projects .5 to 1 acre in size	Proposed no. of projects 1 to 3 acres in size	Proposed no. of projects > 3.0 acres in size	No. of TEP Determinations	No. of "Cease and Desist" Orders	No. of Restoration Orders	County's Allocation of WCA Funds (\$)	County's Match for WCA funds (\$)	Carryover of WCA funds from previous year (\$)	Total administrative expenses for WCA in 1995 (\$)		
Redwood	30		30	78.4						78.4					3	6	2	4	12	7				10,000	10,000	0	20,000	Redwood
Red Lake	15	e	2	3					0.36	3.36			13	1&2		13	1	1					12,200	12,200	1,743	17,106	Red Lake	
Renville	50	e	46	18			4	25.23	25.23	43.23				2&3			1	1	2	4			10,000	10,000		20,000	Renville	
Rice	48	k	22	65	2	2.8				67.8	8	1.6	16	2,3		9	16	9	4	2	3	7	5	19,200	19,200		19,200	Rice
Rock	9	k	6	123	2	85	1	3.8	11.5	219.5			2		1		1			9			10,000	10,000		20,000	Rock	
Roseau	50	e	5	10	25					10	1	2.5	1	2&6									5,000	12,190		12,190	Roseau	
St. Louis	2000		207	35	77	17	9	9	4.5	56.5	124	25	25	1,6,7		18	46	12	7	1	78	5	5	36,700	88,000		88,000	St. Louis
Scott	390	e	185	50	56	10	5	6	13	73	40	15	2	1&2		15	25	19	1	1	10	4	4	36,000	36,000		78,800	Scott
Sherburne	263	e	192	65	37	10.5	3	0.33	0.66	62.16	1	4.78	24	2&6		19	1	1	1	2	7	1	1	36,000	51,757	15,757	87,757	Sherburne
Sibley	781	e	300	150						150				1&2						1	1			12,200	12,200		24,000	Sibley
Stearns	265	k	235	235	235	235	23	8	15	685	11		137		250	5	5	5	1	37	10		51,500	51,500		103,000	Stearns	
Steele	58	k	17	31	5	8				39	8	0.74		1&2		8	10	4	6	4	3		12,200	489		12,689	Steele	
Stevens	12	e	2	10						10	3	7	2	1,2,3						3	2	2		10,000	10,000		10,000	Stevens
Swift	55	e	7	10	4	3				13	3	25		1,2,3		2		1	3				12,200	12,200	24,400	30,370	Swift	
Todd	262		13	117	2	30	6	11.2	10	7	117	(E)2281^a	7	2,3		69	17	8	11	40	6		19,200	9,600	0	16,940	Todd	
Traverse	25	e					0	0	0	0	25										0	0		10,000	10,000	15,000		Traverse
Wabasha	2		0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	12,200	12,200	6,953	6,953	Wabasha	
Wadena	42	k	10	6	6	2				8	26	4	6	6&7		32		10					21,700	21,700	1,668	32,680	Wadena	
Waseca	87	e	19	23.1						23.1			13	1&2			11	4	2				12,200	12,200		25,500	Waseca	
Washington	175	k	16	5.525	8	0.138	10	2.62	6.169	11.832	8	0.207	4	2&3		11	2	1		8	6	5	36,000	36,000		72,000	Washington	
Watsonwan	67	k	46	42.7	1	0.52	1	4.06	4.06	47.28			19	1&2		0	2	0	0	0			10,000	10,000	5,443	11,340	Watsonwan	
Wilkin	1	k	1	1						1													10,000	10,000			Wilkin	
Winona	9		2	0.5			2	2	14	14	14.5	4	3		2	6	1			2	3	1	12,200	12,200	0	27,807	Winona	
Wright	106		14	3.42	0	0	16	117.98	186.52	189.94	37	48.83	19		2	81	15	3	3	7	20	15	13	36,000	40,374		76,374	Wright
Yellow Medicine	460	e	12	16.5						16.5	17	5		2&3			4	4	3	1	3		10,000	10,000	4,241	11,169	Yellow Medicine	
TOTALS	16,353		5,002	3,547	1,655	761	240	555	528	4,428	1004	356	976		1,587	595	250	202	175	411	131	93	1,630,691	1,738,364	223,449	2,827,747	TOTALS	

^aExempt activities do not require local government unit approval unless a determination is requested by the landowner. Thus, the numbers listed here are very incomplete. In particular, the exemption that allows agricultural activities which are on land enrolled in the federal farm program (Federal Agriculture Improvement and Reform Act of 1996) are not tracked by local government units.

^{aa}this large amount was reported by the Todd County U.S. Department of Agriculture office. Since such records are not available or were not provided in other counties it is not included in the total.

^{***}Based on BWSR policy established in 1993, a county can choose to spend its Natural Resources Block Grant monies and the required match in any proportion amongst the different programs (WCA Local Water Planning, Feedlots and Shoreland Zoning) although it must first carry out its responsibilities to the particulars of each program.

*Indicates counties which did not feel that this portion of the reporting applied to them.

n/a indicates counties which did not receive WCA funding

MN Wetland Conservation Act **Statewide LGUs = 529**

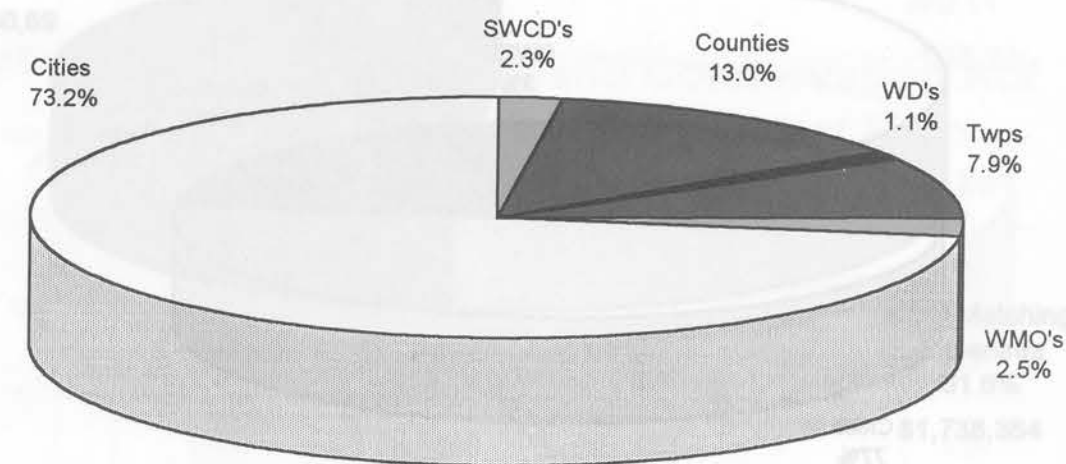


Fig. 1

MN Wetland Conservation Act **Statewide Contact Persons: Total = 267**

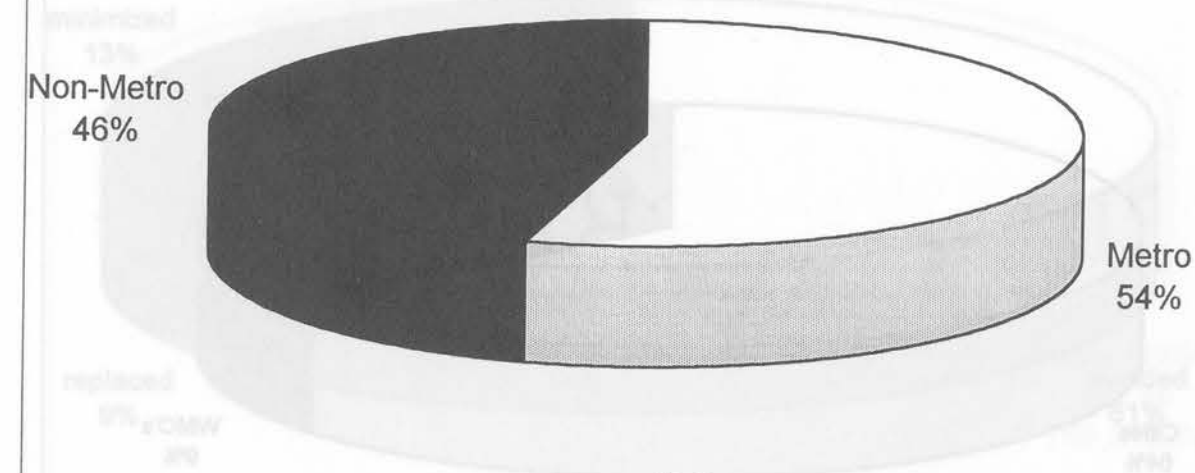


Fig.2

MN Wetland Conservation Act Total Non-Metro LGUs = 366

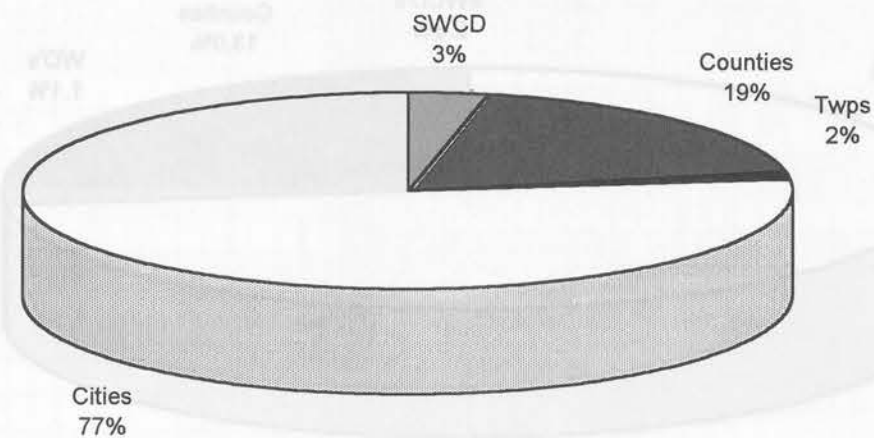


Fig.3

MN Wetland Conservation Act Metro LGUs = 163

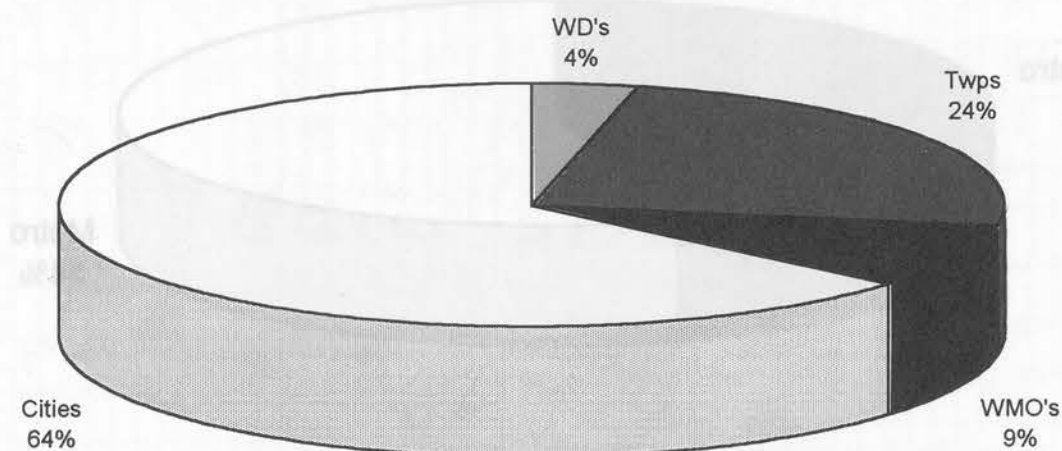


Fig.4

MN Wetland Conservation Act 1996 Funding

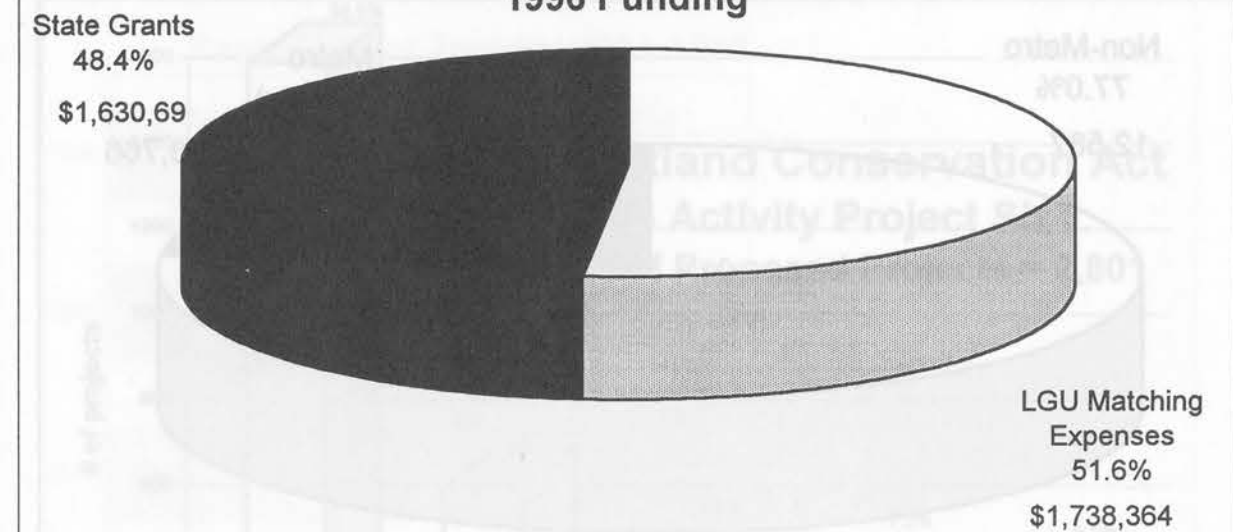


Fig.5

MN Wetland Conservation Act 1996 LGU Activity

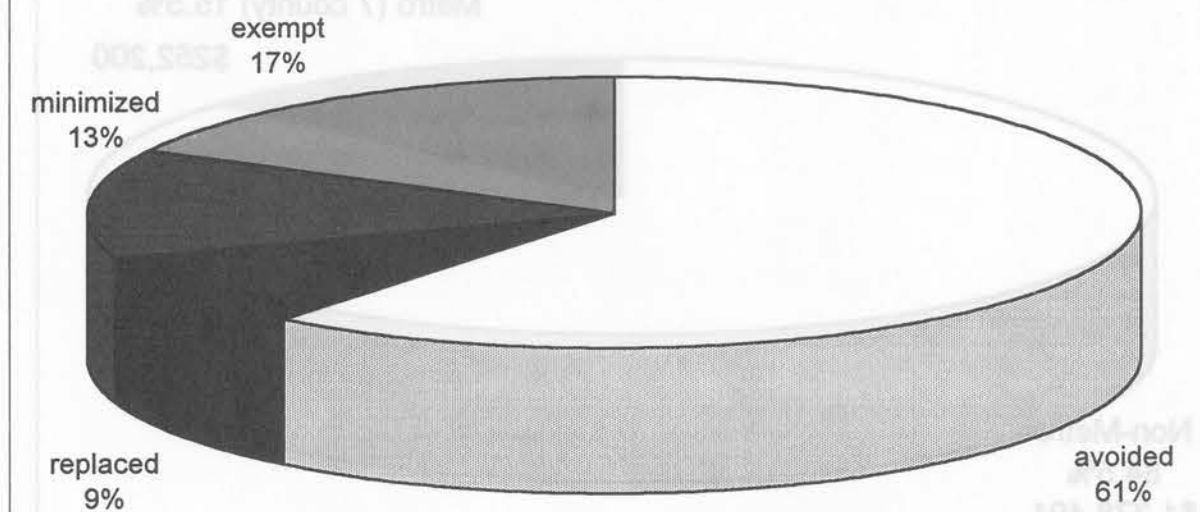


Fig. 6

MN Wetland Conservation Act 1996 No. of Landowner Contacts

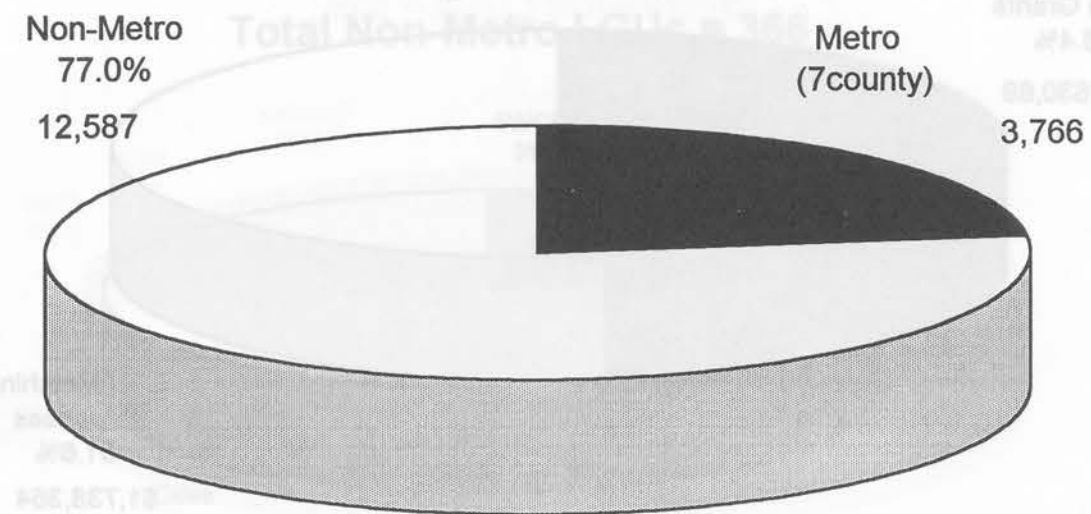


Fig. 7

MN Wetland Conservation Act 1996 Funding - WCA Grants

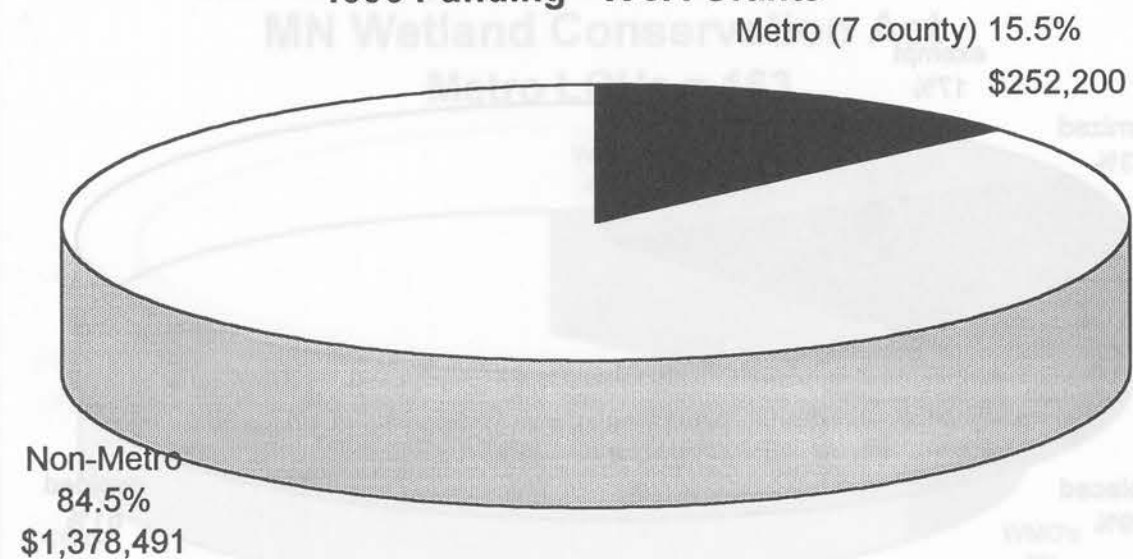


Fig. 8

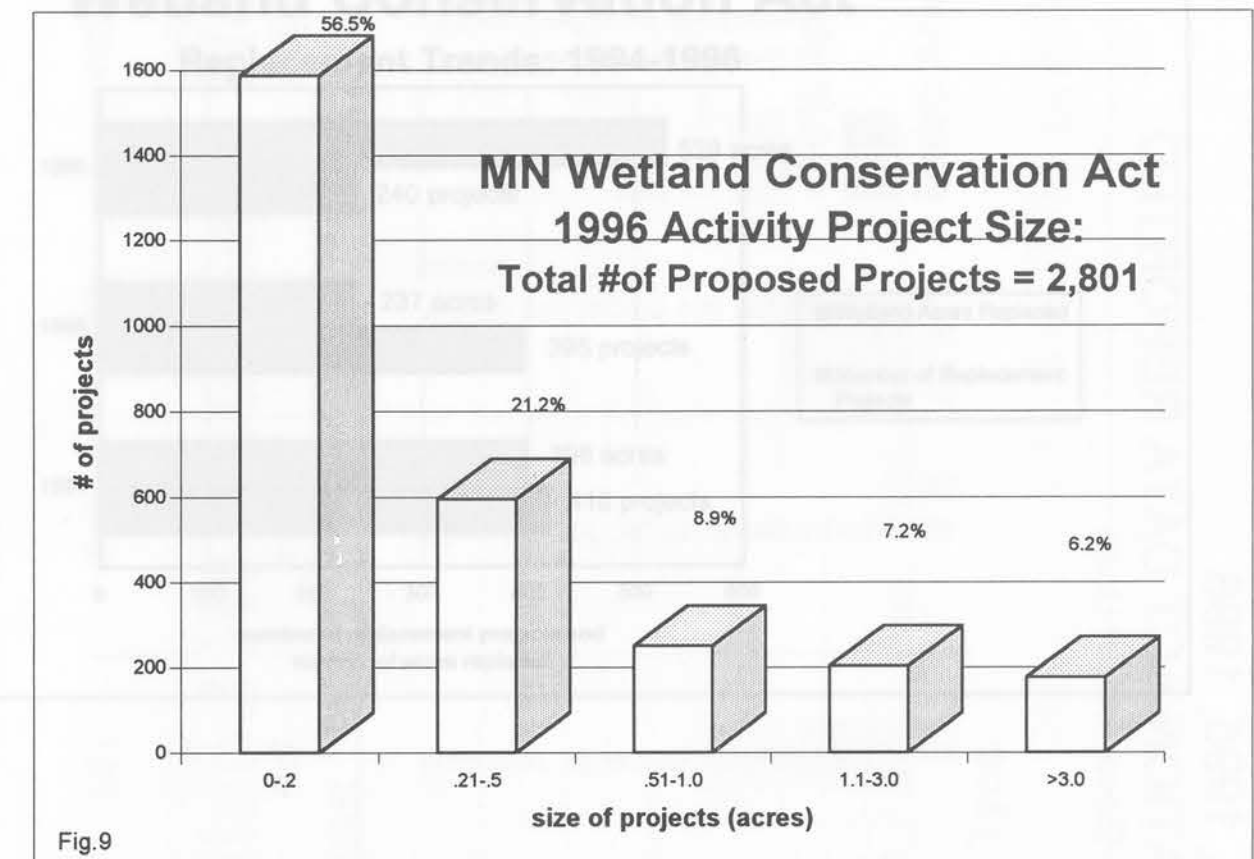
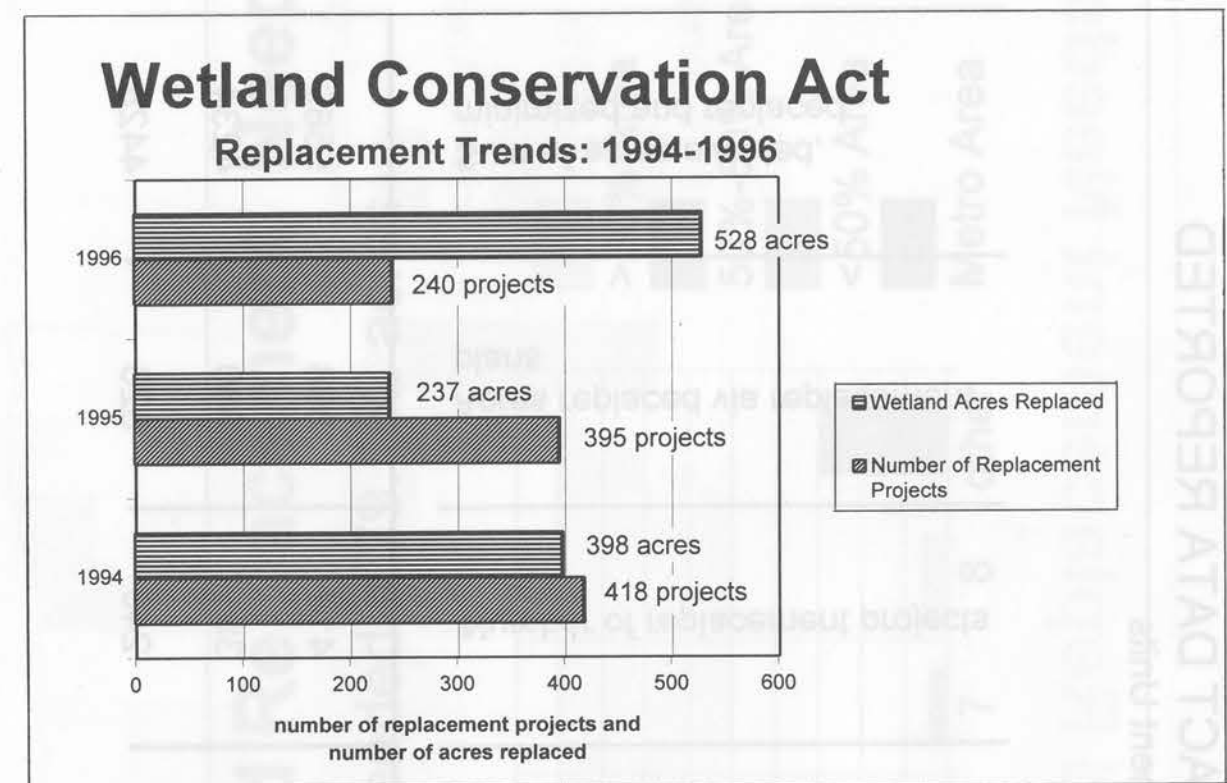


Fig.9

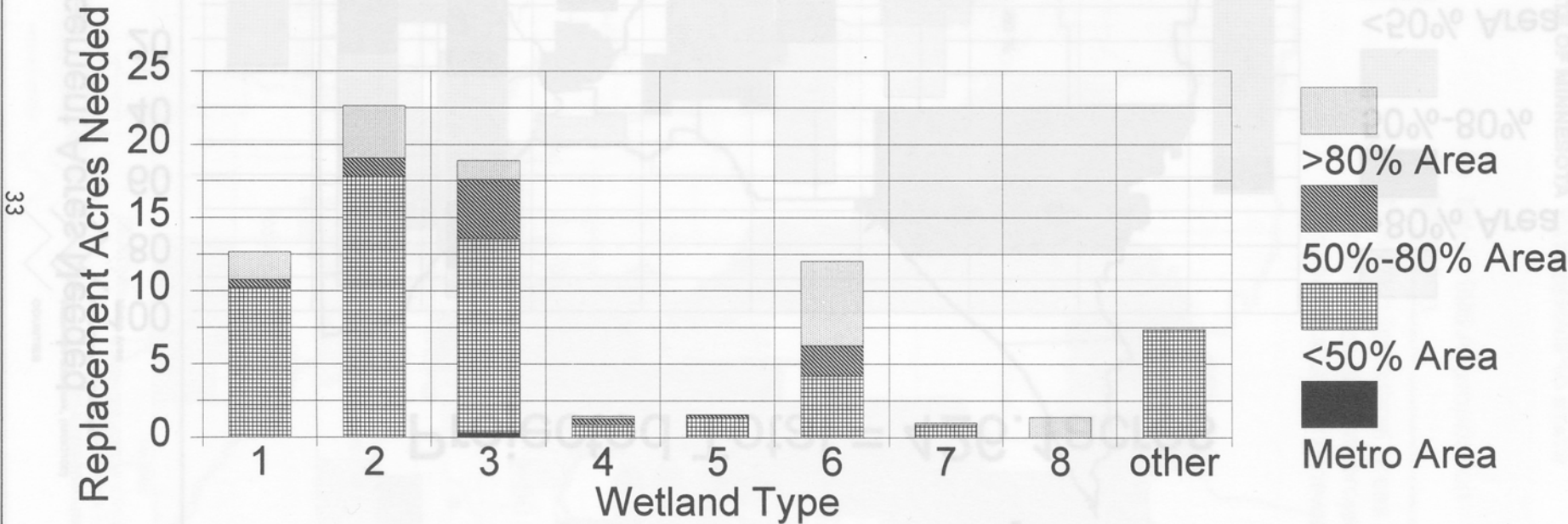


1994, 1995, 1996
WETLAND CONSERVATION ACT DATA REPORTED
By Local Government Units

	Number of landowner contacts	Number of contacts to avoid wetlands	Number of wetland acres avoided	Number of contacts which minimized impacts	Number of acres minimized	Number of replacement projects	Acres replaced via replacement plans	Sum of acres avoided, minimized and replaced
1994	13333	4111	4294	961	842	418	398	5569
1995	17493	5456	3493	843	268	395	380	4234
1996	16353	5002	3547	1655	761	240	528	4428

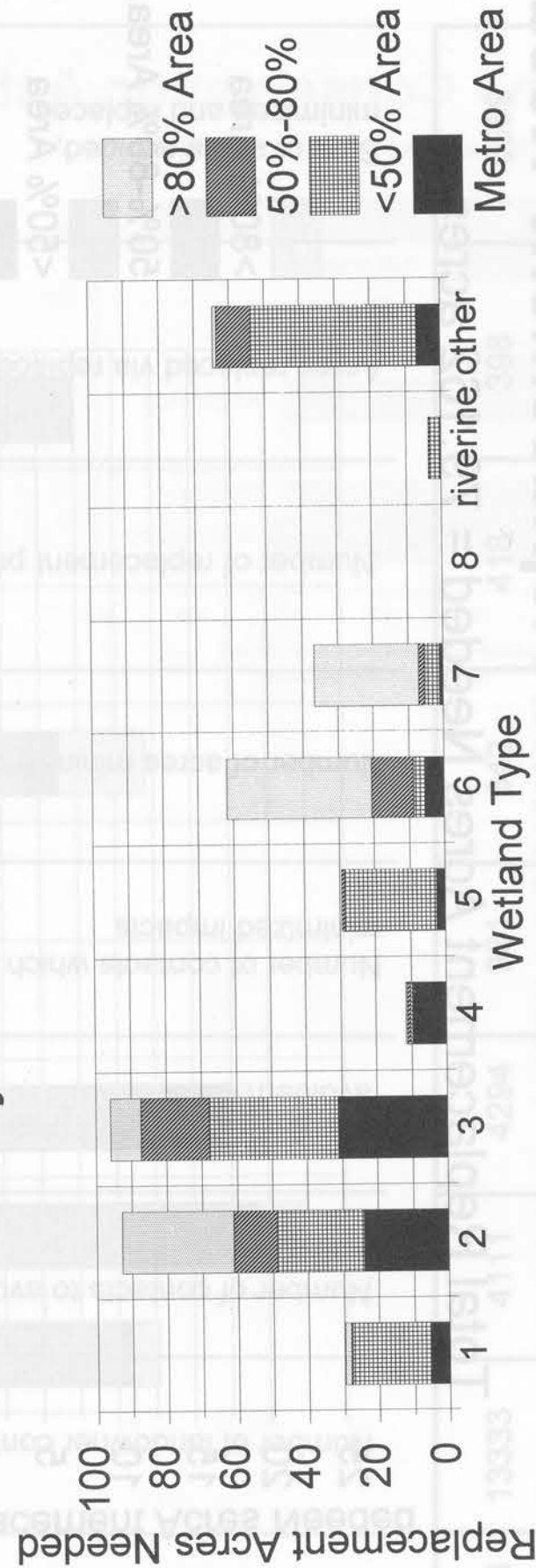
1996 Public Road Wetland Replacement Needs

Total Replacement Acres Needed = 79.162 acres

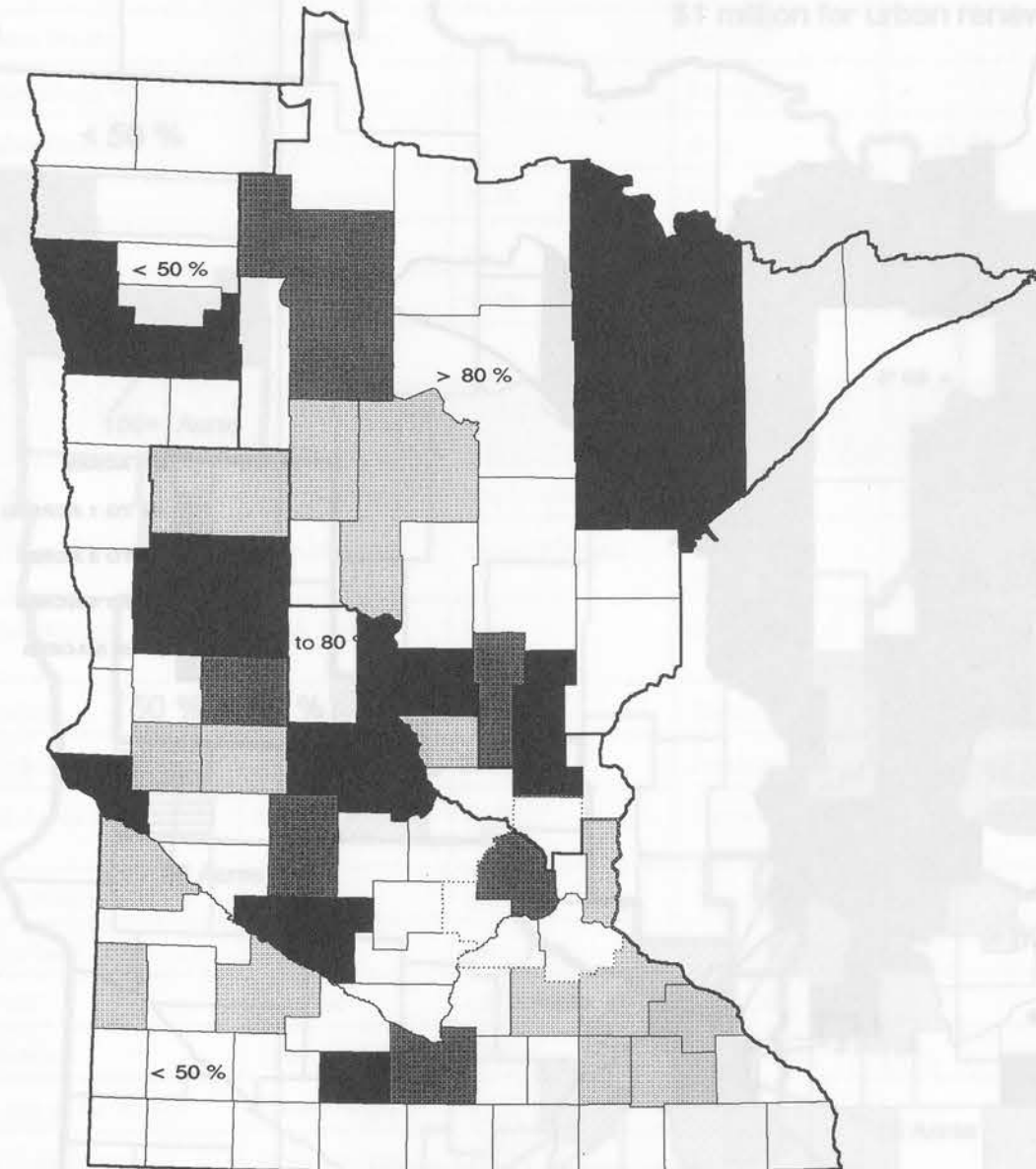


1997 Public Road Wetland Replacement Needs

Projected Total = 426.1 acres



1996 PUBLIC ROAD IMPACTS: REPORTED STATE OF MINNESOTA



Scale: 0 50 mi 100 mi

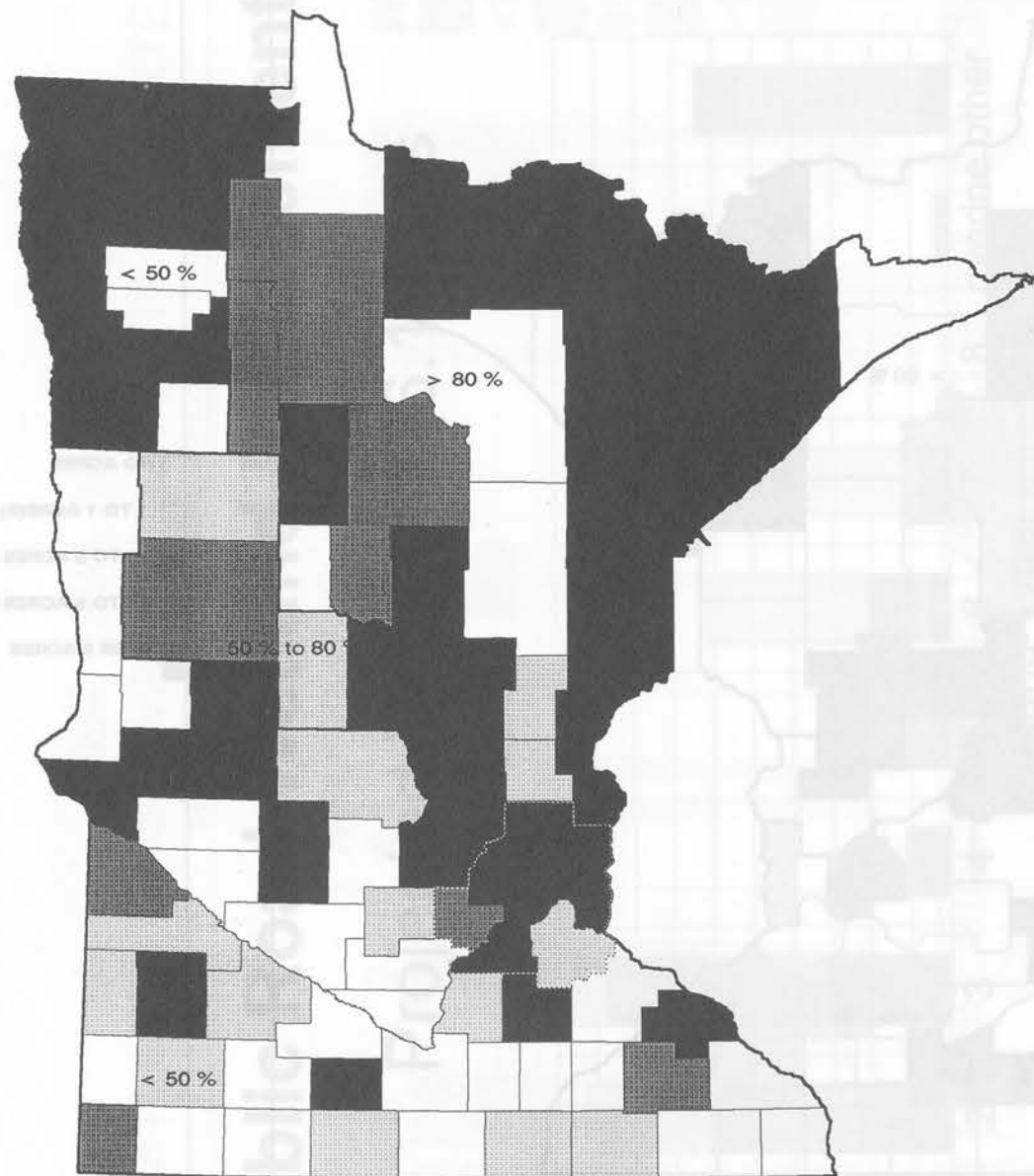
Source: LMIC, Digitized from Minnesota DOT
County Highway Series Maps, 1978-80
MINNESOTA BOARD OF WATER AND SOIL RESOURCES
ONE WEST WATER STREET--SUITE 200
ST. PAUL, MN 55107

2/4/1998

Metro Area
Presettlement Wetlands
Statewide Sitemask, (MGC100)
COUNTIES



1997 PUBLIC ROAD IMPACT : PROJECTED
STATE OF MINNESOTA



Scale: 0 50 mi 100 mi

NOTE: ST. LOUIS COUNTY PROJECTS 77.5 ACRES IMPACTED
ANOKA COUNTY PROJECTS 23.1 ACRES IMPACTED
CARLTON COUNTY PROJECTS 18.48 ACRES IMPACTED

2/4/1998

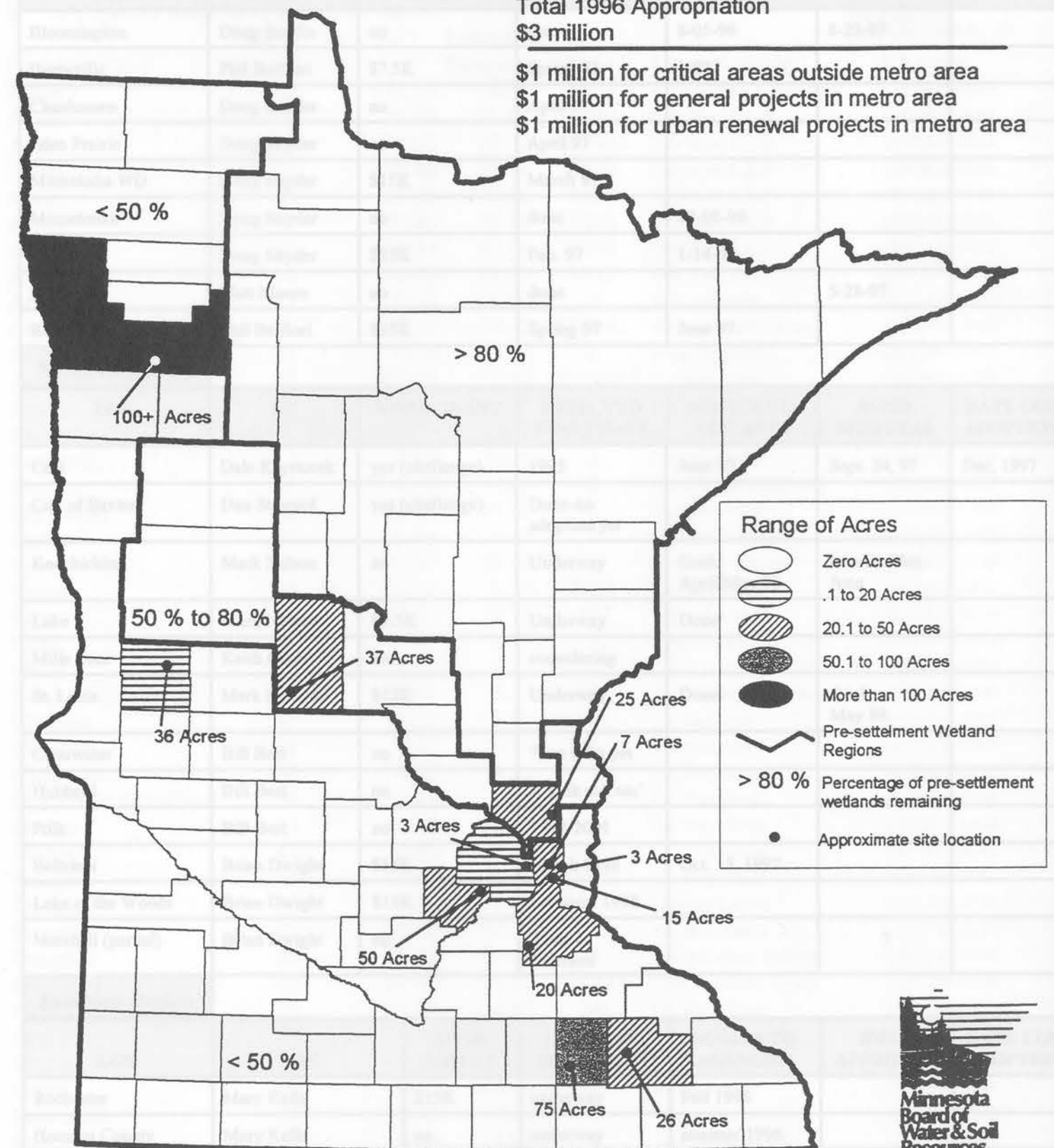
Metro Area
Presettlement Wetlands
Statewide Sitemask, (MGC100)
ADMIN, Counties



Wetland Replacement Sites for Mitigating Public Road Impacts
1997 Program Sites

Total 1996 Appropriation
\$3 million

\$1 million for critical areas outside metro area
\$1 million for general projects in metro area
\$1 million for urban renewal projects in metro area



1/15/98 C:\AV2\PROJ\ROADMIT.APR



**COMPREHENSIVE WETLAND PROTECTION
and MANAGEMENT PLANS**

Appendix F

Metro Region						
LGU	BC	BWSR GRANT	EXPECTED START DATE	NOTICE TO AGENCIES	BWSR APPROVAL	DATE LGU ADOPTION
Bloomington	Doug Snyder	no	done	8-05-96	8-23-97	
Burnsville	Phil Belfiori	\$7.5K	Spring 97	1-97		
Chanhassen	Doug Snyder	no	April 97			
Eden Prairie	Doug Snyder	no	April 97			
Minnehaha WD	Doug Snyder	\$15K	March 97			
Minnetonka	Doug Snyder	no	done	10-08-96		
Plymouth	Doug Snyder	\$15K	Feb. 97	1-14-97		
RWMWD	Matt Moore	no	done		5-28-97	
Rosemount	Phil Belfiori	\$15K	Spring 97	June 97		
Northern Region						
LGU	BC	BWSR GRANT	EXPECTED START DATE	NOTICE TO AGENCIES	BWSR APPROVAL	DATE LGU ADOPTION
Cass	Dale Krystosek	yes (challenge)	1995	June 97	Sept. 24, 97	Dec, 1997
City of Baxter	Dan Steward	yes (challenge)	Done-no adoption yet			
Koochiching	Mark Nelson	no	Underway	Goal: April/May 98	Interim Plan - June	
Lake	Mark Nelson	\$7.5K	Underway	Done		
Mille Lacs	Keith Grow	no	considering			
St. Louis	Mark Nelson	\$15K	Underway	Done	Goal: May 98	
Clearwater	Bill Best	no	?, no talks yet			
Hubbard	Bill Best	no	?, look at Cass'			
Polk	Bill Best	no	1997-2001			
Beltrami	Brian Dwight	\$15K	March 1998	Oct. 15, 1997		
Lake of the Woods	Brian Dwight	\$15K	February 1998			
Marshall (partial)	Brian Dwight	no	Same as Beltrami		?	
Southern Region						
LGU	BC	BWSR GRANT	EXPECTED START DATE	NOTICE TO AGENCIES	BWSR APPROVAL	DATE LGU ADOPTION
Rochester	Mary Kells	\$15K	underway	Fall 1996		
Houston County	Mary Kells	no	underway	summer 1996		



MN Wetland Conservation Act: Wetland Banking Status Report

March 23, 1998

I. Projects deposited in the bank.

Location (Co.)	Water-shed #	Size (ac.) NWC+PVC	Estimated Balance	Type	Account Holder	Phone #
Aitkin**	10	132.40	0.00	1/2/3	Warren/Dixie Enevoldsen	(507)835-3055
Aitkin	10	76.00	76.00	1/2/3/U	Deer Run, L.L.P.	(507)835-3055
Aitkin	10	74.00	72.13	1/2/3/U	Deer Run, L.L.P.	(507)835-3055
Aitkin	10	36.40	36.40	1/2/3	Deer Run, L.L.P.	(507)835-3055
Aitkin	10	33.90	33.90	1/2/3	Deer Run, L.L.P.	(507)835-3055
Aitkin	10	35.90	35.90	1/2/3	Deer Run, L.L.P.	(507)835-3055
Aitkin	10	40.00	40.00	1/2/3	Deer Run, L.L.P.	(507)835-3055
Aitkin	10	36.40	36.40	1/2/3	Deer Run, L.L.P.	(507)835-3055
Anoka	21	0.32	0.02	3	Russ Johansen	(612)434-4640
Anoka	20	19.16	19.16	2/3/4/U	Walls Brothers Farms	(612)464-7060
Anoka	37	0.13	0.13	2	Marge Sygulla	(612)464-5007
Anoka	20	17.36	17.36	01/03/04	Co. Hwy. Dept.	(612)862-4200
Becker	60	55.37	38.91	2/3	Becker Co./SWCD	(218)847-2651
Becker	58	3.26	1.31	3	Jared & Cecelia Grieser	(218)439-6256
Beltrami	7	2.20	0.00	3	City of Bemidji	(218)751-3196
Benton	17	5.00	4.67	3	Larry/Loris VanHooser	(320)387-2835
Big Stone	22	21.50	21.50	3	Co. Hwy. Dept.	(320)839-2594
Carver	33	0.48	0.48	3	City of Chanhassen	(612)937-5739
Carver	33	26.90	26.90	3	City of Chanhassen	(612)937-5739
Carver	33	9.30	9.30	2/3/4	City of Chaska	(612)448-7851
Carver	33	25.60	12.70	3/U	Walter Carpenter	(612)825-9557
Cass	11	6.97	5.12	3	Cass County Env. Serv.	(218)547-3300
Cass	9	2.20	0.77	3	Cass County Env. Serv.	(218)547-3300
Cass (in Grant)	23	10.00	8.43	3	Cass County Env. Serv.	(218)547-3300
Chisago	37	1.20	1.20	4	Lee Sandager	(612)433-3503
Chisago	37	9.00	9.00	4	Lee Sandager	(612)433-3503
Clearwater	66	4.32	4.32	3	Co. Hwy. Dept.	(218)694-6132
Dakota (in Goodhue)	38	3.44	3.44	3/6	Co. Hwy Dept.	(612)891-7100
Dodge	41	45.00	41.87	2	Co. Hwy. Dept.	(507)374-6694
Dodge	41	25.60	1.52	1/2/3	Duane Johnson	(507)477-3441
Douglas	14	14.00	3.82	2/3/6	Co. Hwy. Dept.	(320)763-6001
Douglas	16	9.10	7.97	3	Gregory Larson	(320)763-4733
Douglas	26	50.10	50.10	4/5	Co. Hwy Dept.	(320)763-4733
Douglas	26	10.53	10.44	4	Arlen & Ruby Sabolik	(320)965-2396
Freeborn	48	31.40	25.30	1/2/3/4/U	Glen Jensen/M. Drury	(507)256-4700
Goodhue	38	2.81	2.81	3/6	Co. Hwy. Dept.	(612)388-2812
Grant	55	14.00	0.00	3	Theodore Myron	(218)589-8546
Grant	26	10.00	0.00	3	Arley Ellingson	(320)986-2773
Grant	23	16.36	16.24	3	Randy Reuss	(320)986-2901
Hennepin	20	1.60	1.60	3	City of Minnetonka	(612)939-8200
Itasca	7	5.10	5.00	3	Tom Hammerlund	(218)326-1881

Itasca (in Grant)	55	2.00	1.36	3	Itasca SWCD	(218)326-6595
Itasca (in Grant)	55	10.00	8.00	3	Co. Hwy. Dept.	(218)327-2853

Projects deposited in the bank (cont.)

Location (Co.)	Water-shed #	Size (ac.) NWC+PVC	Estimated Balance	Type	Account Holder	Phone #
Mille Lacs	21	8.36	4.97	3	Co. Hwy. Dept.	(612)983-3146
Morrison	15	36.40	23.74	6	Co. Hwy. Dept.	(320)632-0120
Morrison	10	1.37	0.95	4	Harold Strom	(320)749-2910
Morrison	21	43.10	38.93	2	Robert Hobson	(320)355-2363
Pope	26	13.17	12.71	3	Co. Hwy. Dept.	(320)634-4561
Pope	26	0.50	0.50	3	Co. Hwy. Dept.	(320)634-4561
Pope	26	2.00	2.00	4	Co. Hwy. Dept.	(320)634-4561
Pope	16	2.97	2.97	3/U	Becky/David Elwood	(320)634-4628
Pope	26	0.80	0.80	3	Co. Hwy. Dept.	(320)634-4561
Pope	26	34.55	34.55	3/4	Co. Hwy. Dept.	(320)634-4561
Pope	26	0.48	0.48	2	Co. Hwy. Dept.	(320)987-3549
Ramsey	20	5.60	5.60	3/4	Richard Leonard	(612)484-3361
Renville	19	4.87	4.87	3	Renville Cty. Hwy. Dept.	(612)523-2135
Rice	33	22.20	22.20	4	Co. Hwy. Dept.	(507)332-6110
St. Louis	3	8.70	7.55	3/6	Alan Palkowski	(218)865-4611
Scott	33	1.96	1.96	3	John Mesenbrink	(612)447-5058
Scott	33	0.46	0.26	3	John Mesenbrink	(612)447-5058
Sibley	33	12.25	10.25	3	Mike & Mary Mueller	(507)647-2305
Stearns	18	55.91	55.43	3/U	Brett Gerken	(320)251-5271
Stearns	16	18.53	17.68	3/U	Frank & Sally Jerkovich	(218)682-2622
Stearns	16	17.71	17.71	3/U	Linus Meyer	(320)987-3549
Stevens	23	8.50	8.50	3	Craig Murphy	(320)392-5176
Todd	16	14.70	10.20	3	Ken Friedrichs	(320)352-3651
Wadena	12	8.25	8.25	2/3	Brian Roth	(218)445-5268
Waseca** (Deer Run)	39	60.00	0.05	1/2/3	Warren/Dixie Enevoldsen	(507)835-3055
Wilkin	56	1.42	1.42	4	Daniel Swedlund	(218)643-3355
Wilkin	57	0.44	0.44	3	Co. Hwy. Dept.	(218)643-4622
Winona	43	4.00	4.00	2	Steven Olbrich	(808)696-4761
Winona	43	8.50	6.60	2/3	Zephyr Valley Co-op	(507)454-8206
Wright	18	11.20	10.90	2/3/4	Co. Hwy. Dept.	(612)682-1933
Wright	18	0.63	0.39	3	Co. Hwy. Dept.	(612)682-1933
Wright	17	1.70	1.70	4	Co. Hwy. Dept.	(612)682-1933
Wright	18	1.20	1.20	3/4	Co. Hwy. Dept.	(612)682-1933
Wright	18	5.80	4.47	4	Hank Potter	(612)963-5476
Wright	18	11.50	11.50	4/U	Hank Potter	(612)963-5476
Wright	18	20.68	20.68	2/3/4	Charles Christian	(612)428-4181
Aitkin** (Deer Run)	10	0.00	64.17	1/2/3	MNDOT	
Cottonwood	31	11.60	6.63	3	MNDOT	
Dakota	20	7.50	7.50	3/4	MNDOT	
Douglas	14	10.60	8.34	4	MNDOT	
Douglas	26	3.10	2.19	3	MNDOT	
Itasca	3	46.10	17.30	4	MNDOT	
Murray	51	35.90	6.60	2	MNDOT	
Otter Tail	56	13.00	11.88	3/4	MNDOT	
Scott	33	12.60	12.28	3	MNDOT	

Stearns* (Miller)	16	22.10	20.94	3/U	MNDOT - Metro	(612)779-5054
Todd	14	208.50	203.20	3/4	MNDOT	
Waseca** (Deer Run)	39	0.00	22.90	1/2/3	MNDOT - Metro	(612)779-5054
Waseca* (Russell)	32	21.30	21.30	1/2/3	MNDOT - Metro	(612)779-5054
Total		1779.03	1453.13			

* complete transfer purchase

** partial transfer purchase (project listed twice, acres listed once)

II. Projects ready for deposit.

Location (Co.)	Water-shed #	Size (ac.)	Type	Account Holder	Phone #
Cottonwood	31	8.2	3	MNDOT - Mankato	(507)389-6351
Benton	17	35.0	3	Larry/Loris VanHooser	(320)387-2835
Sherburne	17	0.8	5	City of Elk River	(612)441-7420
Subtotal		44.0			

III. Potential Projects/Credit Availability.

Potential for wetland restoration projects is great in the agricultural areas of the state (<50% counties) and very limited in the northern forested areas (>80% counties).

MNDOT has enrolled their credits into the state banking system but will likely use them all for state highway projects. County Highway Department may choose to sell credits to landowners as long as the credits are not sold below cost.

Privately held credits are generally available for sale unless the account holder has an anticipated need for the credits.

IV. Cost of Credits.

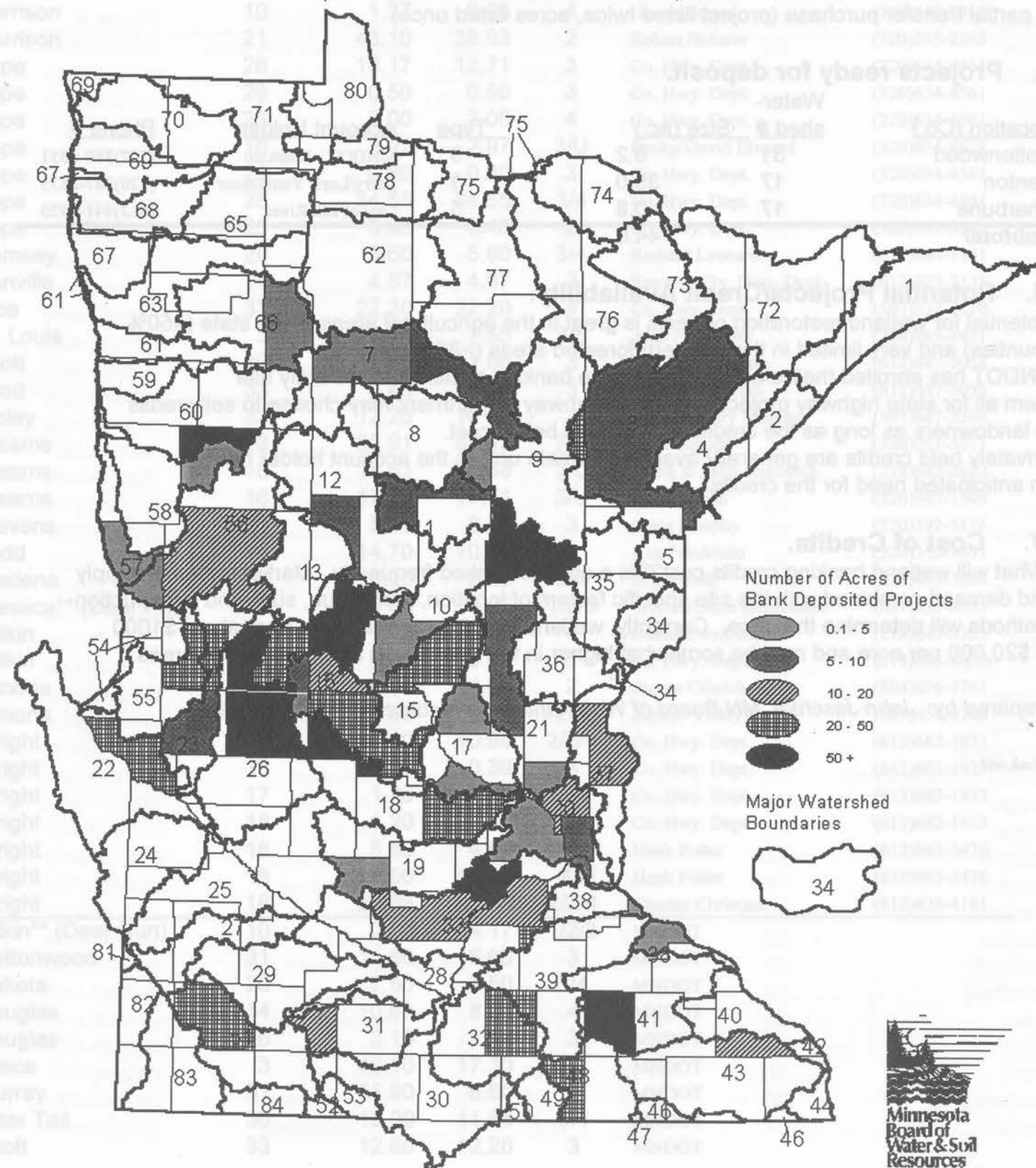
"What will wetland banking credits cost?" is a question asked frequently. Market forces of supply and demand combined with the site specific factors of location, land value, size, and construction methods will determine the price. Currently, wetland banking credits range from about \$1000 to \$20,000 per acre and may be somewhat higher in the Twin Cities and other metro areas.

prepared by: John Jaschke, MN Board of Water and Soil Resources, (612)297-3432

m:bank.wb2

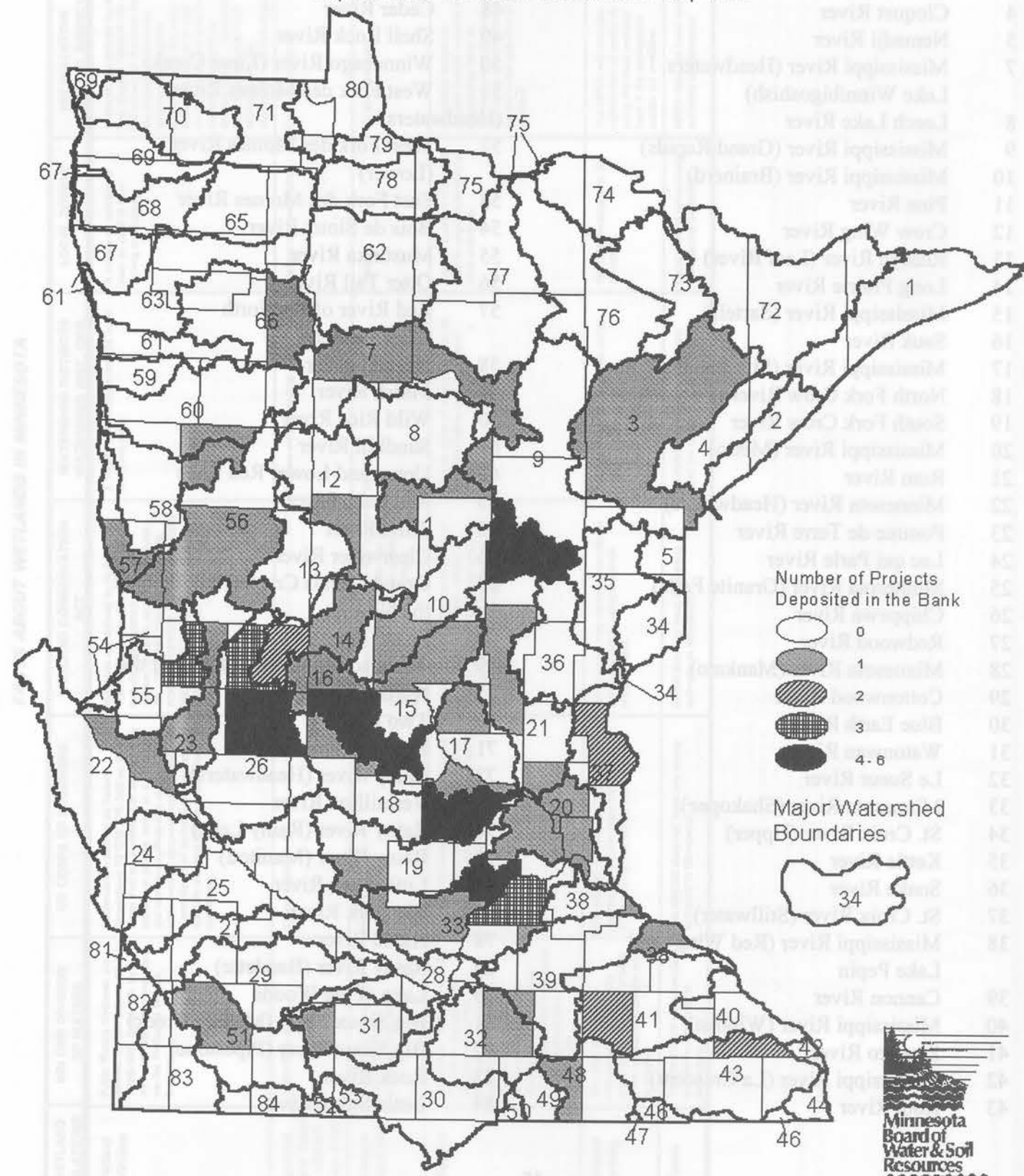
Minnesota Wetland Conservation Act: Wetland Banking Acres

Number of Acres per Watershed within each County
Deposited in the Bank as of March 23, 1998



Minnesota Wetland Conservation Act: Wetland Banking Projects

Number of Projects per Watershed within each County
Deposited in the Bank as of March 23, 1998



LIST OF 81 MAJOR WATERSHED UNITS OF MINNESOTA

1	Lake Superior (north)	44	Mississippi River (Reno)
2	Lake Superior (south)	46	Upper Iowa River
3	St. Louis River	47	Wapsipinican River (Headwaters)
4	Cloquet River	48	Cedar River
5	Nemadji River	49	Shell Rock River
7	Mississippi River (Headwaters, Lake Winnibigoshish)	50	Winnebago River (Lime Creek)
8	Leech Lake River	51	West Fork des Moines River (Headwaters)
9	Mississippi River (Grand Rapids)	52	West Fork des Moines River (Lower)
10	Mississippi River (Brainerd)	53	East Fork des Moines River
11	Pine River	54	Bois de Sioux River
12	Crow Wing River	55	Mustinka River
13	Redeye River (Leaf River)	56	Otter Tail River
14	Long Prairie River	57	Red River of the North (Headwaters)
15	Mississippi River (Sartell)	58	Buffalo River
16	Sauk River	59	Marsh River
17	Mississippi River (St. Cloud)	60	Wild Rice River
18	North Fork Crow River	61	Sandhill River
19	South Fork Crow River	62	Upper and Lower Red Lake
20	Mississippi River (Metro)	63	Red Lake River
21	Rum River	65	Thief River
22	Minnesota River (Headwaters)	66	Clearwater River
23	Pomme de Terre River	67	Grand Marais Creek (Red River of the North)
24	Lac qui Parle River	68	Snake River
25	Minnesota River (Granite Falls)	69	Tamarack River (Red River of the North)
26	Chippewa River	70	Two River
27	Redwood River	71	Roseau River
28	Minnesota River (Mankato)	72	Rainy River (Headwaters)
29	Cottonwood River	73	Vermillion River
30	Blue Earth River	74	Rainy River (Rainy Lake)
31	Watsonwan River	75	Rainy River (Manitou)
32	Le Sueur River	76	Little Fork River
33	Minnesota River (Shakopee)	77	Big Fork River
34	St. Croix River (Upper)	78	Rapid River
35	Kettle River	79	Rainy River (Baudette)
36	Snake River	80	Lake of the Woods
37	St. Croix River (Stillwater)	81	Big Sioux River (Medary Creek)
38	Mississippi River (Red Wing) and Lake Pepin	82	Big Sioux River (Pipestone)
39	Cannon River	83	Rock River
40	Mississippi River (Winona)	84	Little Sioux River
41	Zumbro River		
42	Mississippi River (La Crescent)		
43	Root River		

Appendix H

FACTS ABOUT WETLANDS IN MINNESOTA

MN WETLAND REGULATIONS	MN DNR DIVISION OF WATERS	US CORPS OF ENGINEERS	WETLAND CONSERVATION ACT	WATERSHED DISTRICTS WATERSHED MGT. ORG.	LOCAL ZONING	MN POLLUTION CONTROL AGENCY	USDA
Wetland Definition	Public Waters Wetlands are defined by MN Statute (M.S.) 103G.005, Subd. 18; by a minimum basin size and type via the Protected Waters Inventory.	Wetlands are defined by Federal Regulations 33 CFR 328.3(b) as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.	Wetlands are defined by M.S. 103G.005, Subd. 19, and do not include public waters and public waters wetlands as defined in Subd. 18. The 1987 FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING WETLANDS is used to identify and delineate wetlands.	A variety of definitions may be used in district rules.	A variety of definitions may be used in local zoning ordinances.	Wetlands are defined by MN Rule Chapter 7050.0130 as "all waters of the state that are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface of the land, or the land is covered by shallow water". Wetlands must also have the three attributes of soils, vegetation, and hydrology.	7 CFR, Part 12 states that Wetlands are lands that: 1) have a predominance of hydric soils; 2) are inundated or saturated by surface or ground water at a frequency and duration sufficient to support; and 3) under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions.
Regulated Wetland Types (Per USFWS Circular #39)	Types 3, 4, and 5.	Types 1 through 8.	Types 1 through 8.	Various wetland typing.	Various wetland typing.	Types 1 through 8.	Types 1 through 8.
Minimum Wetland Size	2.5 acres in incorporated areas; 10 acres in unincorporated areas.	No size minimum.	Wetland areas greater than 400 square feet. Depending on location and type, the de minimis exemption may allow impacts to larger areas without replacement.	Variable.	Variable.	No size minimum.	No size minimum.
Mitigation	Under M.S. 103G.245, Subd. 7 if major change in the resource is justified, protected waters permits must include provisions to compensate for the detrimental aspects of change. Commonly used when government units make permit applications for roadway fills.	The loss of wetlands can be mitigated by restoring a converted wetland that has an equivalent value. The mitigation must proceed the conversion.	Under M.S. 103.222, wetlands must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetlands of at least equal public value under an approved replacement plan.	Various types of mitigation may be used depending on replacement plans.	Various types of mitigation may be used depending on local ordinance.	A wetland mitigation process (which requires a sequencing) must be followed when physical alterations of wetlands results in the pollution of a wetland.	The loss of wetlands can be mitigated by restoring a converted wetland that has an equivalent value. After mitigation options such as wetland banking, may also be allowed.
Wetland Banking	The DNR will consider replacement of wetlands using the state wetland bank if the appropriate credits are available.	The USCOE will consider replacement of wetlands using the state wetland bank if the appropriate credits are available.	Landowners may replace unavoidable wetland impacts using the state wetland bank.	Wetland banking may be an option.	Wetland banking may be an option.	The MPCA will consider replacement of wetlands using the state wetland bank if the appropriate credits are available.	The USDA will consider mitigation of wetlands using the state wetland bank if the appropriate credits are available.
Taxes	The DNR-DOW does not have any taxing authority in Minnesota.	The USCOE does not have any taxing authority in Minnesota.	BWSR does not have any taxing authority in Minnesota.	WD/WMO have taxing authority; used for conducting operations.	Local units of government have taxing authority.	MPCA does not have taxing authority in Minnesota.	The NRCS and CFA do not have taxing authority in Minnesota.

MN WETLAND REGULATIONS	MN DNR DIVISION OF WATERS	US CORPS OF ENGINEERS	WETLAND CONSERVATION ACT	WATERSHED DISTRICTS WATERSHED MGT. ORG.	LOCAL ZONING	MN POLLUTION CONTROL AGENCY	USDA (1985 Farm Bill)
Compensation	The DNR-DOW has no compensation programs relative to wetland management.	The USCOE has no known compensation program relative to wetland management.	BWSR provides compensation to eligible landowners who preserve types 1, 2, 3 and 6 wetland through the Permanent Wetland Reserve Program. RIM provides cost-share funding to landowners who propose to establish or restore wetlands. Tax break programs for wetland preservation will be available after high priority areas are identified in local water plans. Landowners who are denied replacement plans may be eligible for compensation.	WD/WMO have no known compensation programs relative to wetland management.	Landowners may be exempted from taxes on protected wetlands. Local governments have acquired wetlands for mitigation purposes as negotiated with resource management agencies.	MPCA has no compensation program relative to wetland management.	1) CRP (Conservation Reserve Program) gives landowners a monetary incentive to take environmentally sensitive land out of production for 10 years. 2) Wetlands Reserve Program (WRP) provides a 30 year or permanent easement options for farmed or converted wetlands, and for other wetlands if the functional values are enhanced.
Farmability	Under M.S. 103G.231, Subd. 1, the bed of wetlands may be pastured or cropped during periods of drought if 1) dikes, ditches, tile lines or buildings are not constructed, and 2) the agricultural use does not result in drainage of the wetland. Also, fill to accommodate wheeled booms on irrigation devices is allowed.	USCOE does not regulate discharge of dredged or fill material in waters of the U.S. associated with normal farming activities in areas of established use. Activities which involve the discharge of dredged or fill material into wetlands that bring an area into a new use usually require Corps permits. Several Nationwide Permits can apply to certain ag activities. Wetland delineations on ag-lands are done by USDA staff.	The Wetland Conservation Act (WCA) lists several agricultural exemptions, and does not prevent landowners from farming or pasturing wetlands.	WD/WMO management plans may allow landowners to farm wetlands in periods of drought.	Local ordinances may allow landowners to farm wetlands in periods of drought.	Exemptions are the same as the USCOE for CWA regulated activities. MPCA discharge permits have no farming exemptions.	The "Swampbuster" provision of the Farm Bill prohibits a landowner enrolled in USDA programs from draining, dredging, filling or otherwise altering a wetland to make crop production possible. In general, maintenance of existing (pre-1985) drainage is allowed.
Violation Penalties	Violations of M.S. 103G.245 are punishable as a misdemeanor with fines up to \$700 and/or 90 days in jail.	Criminal: fines up to \$100,000 per day and 6 years in jail. Civil: fines up to \$25,000 per day. Administrative: a) Class 1 - \$10,000 per violation; b) Class 11 - \$10,000 per day.	Violations of M.S. 103G are punishable as a misdemeanor with fines up to \$700 and/or 90 days in jail. (M.S. 103G.2372)	Violations of M.S. 103D.545 are punishable as a misdemeanor with fines up to \$700 and/or 90 days in jail. Violations may be enforced by criminal prosecution, injunction, action to compel performance, restoration, or other appropriate action.	Penalties may vary depending on local ordinance.	An Administrative Penalty of up to \$10,000 is the final step in the "escalated enforcement matrix" which is followed upon violation of federal, state, or permit requirements pertaining to wetland restoration/renediation are additional. Criminal charges are possible if violation is deemed intentional.	Retroactive graduated penalties from \$750 to \$10,000. Loss of all farm program benefits.
Appeal Process	1) Administrative Law Judge (ALJ) hearing and recommendations, 2) DNR final order, 3) court of appeals, 4) higher courts.	1) District may reconsider permit action based on new information. 2) Suit in Federal Court. Note: Administrative process to be developed.	1) Appeal of wetland replacement plan decision by mailing notice of appeal to board within 15 days of receipt of decision. 2) Appeal heard by BWSR committee for dispute resolution. 3) ALJ hearing. 4) final order. 5) court of appeals, and 6) higher court.	Appeal of WD/WMO orders can be made to district court or secretary of BWSR. Notice of appeal must be filed within 30 days of final WD/WMO order. Board and court orders may be appealed as in other civil cases.	In the case of a county, appeals are made to the Board of Adjustment. For cities, appeals are made to either a Board of Adjustment or to the city council. Further appeals are civil actions in district court.	1) Contest violation facts; 2) seek variance form MPCA Board, and 3) court system.	1) Reconsideration by District Conservationist 2) appeal to State Conservationist; 3) appeal to USDA National Appeals Division for final decision; 4) Federal Court.

Note: None of the wetland regulations allow additional public access or trespass.

RIM Reserve

The Minnesota Board of Water and Soil Resources and your local soil and water conservation district...working together to protect Minnesota's resources.



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

The mission of your soil and water conservation district (SWCD) is to take available technical, financial and educational resources, whatever their source, and focus on coordinating them so that they meet the needs of the local landuser.

For more information on this program, contact your local SWCD; or call the BWSR at 612/296-3767. Hearing or speech impaired can call 800-627-3529 and ask for the BWSR at 612/296-3767.

The information contained in this fact sheet is available in an alternative format upon request.

The BWSR is an equal opportunity employer.

Updated March 1998. Includes 1998 sign-up figures.

The Reinvest in Minnesota (RIM) Reserve Program strives to protect and improve water quality by encouraging landowners to retire environmentally sensitive land from agricultural production. The program reimburses landowners for enrolling their land in a permanent conservation easement, and then provides assistance to restore the area to grasses, trees and wetlands. Other benefits of the program include reduced soil erosion and sedimentation, enhanced fish and wildlife habitat, flood control and groundwater recharge.

The program is managed on the state level by the Minnesota Board of Water and Soil Resources (BWSR). Locally, soil and water conservation districts (SWCDs) implement the program.

Eligible lands:
Sensitive groundwater: lands where there is a significant risk of groundwater degradation from activities conducted at or near the land surface (e.g. sinkholes and areas adjacent to public supply wells).

Riparian lands: lands adjacent to public waters, drainage systems, wetlands or locally designated priority waters identified in a comprehensive local water management plan.

Wetland restoration areas: lands containing legally drained wetlands that are feasible to restore to their pre-drainage condition.

Marginal agricultural cropland: lands that are classified as highly erodible and have been cropped two of the five years prior to the date of application.

Other environmentally sensitive lands: lands such as pastured hillsides, agricultural woodlots and living snowfences, which provide protection of water and soil resources and furnish important fish and wildlife habitat.

Program Accomplishments:
The program has enrolled about 2,650 easements, totaling 81,809 acres (including 19,000 acres of wetland restoration easements), of private land since 1986. Strong partnerships with other agencies and organizations have contributed to the program's success. The following organizations have contributed to RIM Reserve with technical, administrative and financial assistance:

- Pheasants Forever
- Minnesota Waterfowl Association
- Ducks Unlimited
- U.S. Fish & Wildlife Service
- Minnesota Department of Natural Resources
- North American Wetland Conservation Council

3/7/97

REINVEST IN MINNESOTA (RIM) RESERVE WETLAND RESTORATION PROGRAM SUMMARY

YEAR	# OF EASEMENTS	# OF ACRES		# OF WETLANDS
		TOTAL	WETLAND	
1986	19	576.1	113.9	27
1987	44	1,170.2	425.7	62
1988	35	1,009.2	313.3	49
1989	44	1,786.4	714.4	56
1990	36	1,163.3	424.0	55
1991	91	3,179.0	1,347.3	123
1992	17	456.0	178.1	26
1993	55	2,246.4	923.9	63
1994	55	2,695.8	1,062.9	60
1995	40	1,348.5	504.9	55
1996	38	1,543.5	451.1	65
TOTALS	474	17,174.4	6,459.5	641

- Average Easement Size = 36.2 acres [Range 1.5 acres to 294.7 acres]
- Average Size of Restored Wetland = 10.1 acres [Range 0.3 acres to 135 acres]
- Average Upland to Wetland Ratio = 1.7:1
- Average Wetland Restoration Construction Cost = \$385 per acre
- Average Upland Grass Establishment Cost = \$83 per acre
- Average Tree and Shrub Establishment Cost = \$335 per acre
- Average Easement Payment for Lands With Crop History = \$572 per acre [Range \$208 to \$1,490]
- Average Easement Payment for Lands Without Crop History = \$346 per acre [Range \$139 to \$993]
- Average Total Engineering/Technical Cost = \$129 per acre
- Average Total Administrative/Legal Cost = \$69 per acre
- Average Total Cost per Easement = \$869 per acre

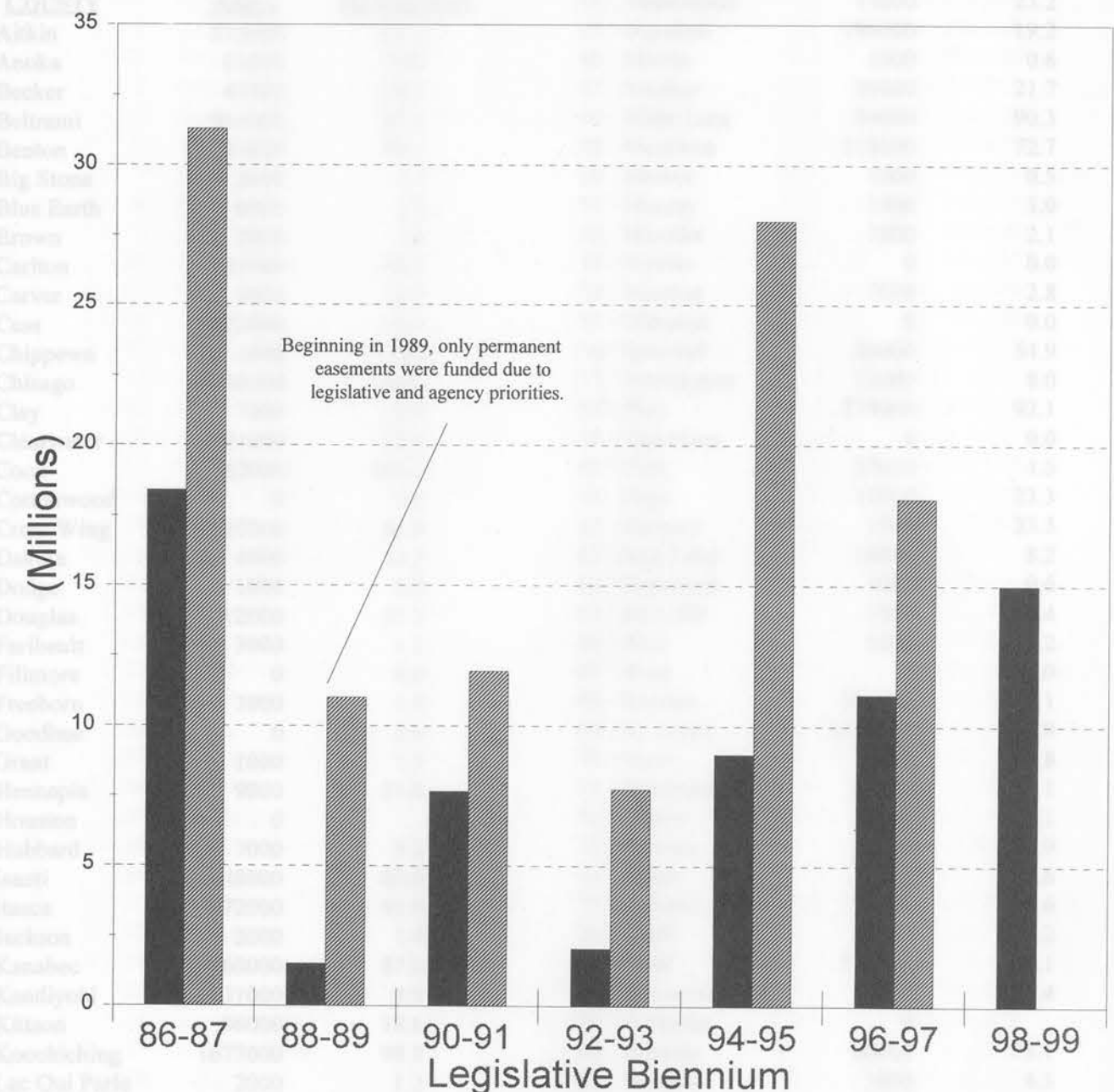
The above costs reflect activity from recent years only



Data from Anderson and Oring (1988) for County-level wetland loss (acres) and the percent of remaining wetlands relative to the pre-settlement wetland base. For example, in 1988, 84% of wetlands were lost in Chisago County (77.64 percent) compared to 19% in Hennepin County (19.14 percent). Source: Anderson and Oring (1988), p. 420. Houston, Wabasha, and other counties are not shown.

CONSERVATION EASEMENT FUNDING

Supply and Demand



April, 1998

Funding L/O Interest

C:\TIM\OFFICE\QUATTRO\SVD.WB2

Data from *Anderson and Craig (1984)* for county current wetland areas (acres) and the percent of remaining wetlands relative to the presettlement wetland area. Data were based upon 640 acre soil landscape mapping units and interpreted for dominance with a 40 acre grid overlay. The reported value for Clearwater county (77.64 percent) corrected by reanalyzing wetland resources upon implementation of M.R. 8420. Houston, Wabasha, and Winona counties were reported to have no presettlement wetlands.

[Anderson, Jeffrey P. And William J. Craig. 1984. *Growing energy crops on Minnesota's wetlands: the land use perspective*. University of Minnesota Center for Urban and Regional Affairs, Publ. CURA 84-3.95 pages]

CURRENT			PERCENT		
COUNTY	AREA	REMAINING	COUNTY	AREA	REMAINING
1 Aitkin	573000	91.1	44 Mahanomen	13000	23.2
2 Anoka	61000	70.9	45 Marshall	194000	19.2
3 Becker	47000	54.7	46 Martin	1000	0.6
4 Beltrami	966000	94.1	47 Meeker	26000	21.7
5 Benton	41000	65.1	48 Mille Lacs	84000	90.3
6 Big Stone	2000	1.7	49 Morrison	218000	72.7
7 Blue Earth	6000	2.2	50 Mower	1000	0.5
8 Brown	2000	1.0	51 Murray	1000	3.0
9 Carlton	125000	93.3	52 Nicollet	3000	2.1
10 Carver	4000	16.7	53 Nobles	0	0.0
11 Cass	372000	91.4	54 Norman	7000	2.8
12 Chippewa	1000	0.5	55 Olmsted	0	0.0
13 Chisago	36000	64.3	56 Ottertail	84000	54.9
14 Clay	7000	2.4	57 Pennington	29000	8.0
15 Clearwater	191000	77.6	58 Pine	279000	92.1
16 Cook	42000	100.0	59 Pipestone	0	0.0
17 Cottonwood	0	0.0	60 Polk	27000	4.5
18 Crow Wing	131000	86.8	61 Pope	14000	23.3
19 Dakota	4000	14.3	62 Ramsey	1000	33.3
20 Dodge	1000	0.9	63 Red Lake	16000	8.2
21 Douglas	12000	35.3	64 Redwood	1000	0.6
22 Faribault	3000	1.1	65 Renville	1000	0.4
23 Fillmore	0	0.0	66 Rice	5000	13.2
24 Freeborn	3000	1.5	67 Rock	0	0.0
25 Goodhue	0	0.0	68 Roseau	361000	44.1
26 Grant	1000	1.1	69 St. Louis	1136000	93.9
27 Hennepin	9000	31.0	70 Scott	2000	11.8
28 Houston	0		71 Sherburne	31000	72.1
29 Hubbard	7000	9.2	72 Sibley	6000	2.1
30 Isanti	48000	80.0	73 Stearns	32000	21.9
31 Itasca	572000	95.0	74 Steele	2000	2.6
32 Jackson	2000	1.4	75 Stevens	1000	1.6
33 Kanabec	60000	87.0	76 Swift	10000	4.2
34 Kandiyohi	21000	9.9	77 Todd	112000	53.1
35 Kittson	96000	18.6	78 Traverse	1000	0.4
36 Koochiching	1677000	98.0	79 Wabasha	0	
37 Lac Qui Parle	2000	1.2	80 Wadena	68000	73.1
38 Lake	198000	97.5	81 Waseca	5000	4.3
39 Lake of the Woods	638000	88.6	82 Washington	6000	42.9
40 Le Seuer	7000	10.1	83 Watonwan	1000	0.9
41 Lincoln	1000	2.5	84 Wilkin	1000	0.2
42 Lyon	1000	0.9	85 Winona	0	
43 McLeod	3000	6.1	86 Wright	6000	22.2
			87 Yellow Medicine	1000	0.8

Wetland Comparison

Comparison of the relative amounts of WETLAND, DEEP WATER, and UPLAND habitats per county. Data are derived from U.S. Fish and Wildlife Service National Wetland Inventory data. DEEP WATER was assumed to be all L1, PUBG, and PUBH habitats. TOTAL COUNTY AREA (ACRES) is the sum of all WETLAND, DEEP WATER, and UPLAND for a given county.

		TOTAL COUNTY			
		PERCENT	PERCENT	PERCENT	AREA
		WETLAND	DEEP WATER	UPLAND	(ACRES)
ID	COUNTY				
1	Aitkin	43.4	7.8	48.8	1,275,882
2	Anoka	27.8	3.1	69.1	285,366
3	Becker	16.1	7.2	76.7	925,024
4	Beltrami	48.4	17.8	33.9	1,954,851
5	Benton	15.6	0.8	83.6	264,069
6	Big Stone	9.1	3.8	87.1	337,853
7	Blue Earth	4.9	1.2	93.9	489,844
8	Brown	4.8	0.7	94.5	395,749
9	Carlton	34.4	1.3	64.3	559,669
10	Carver	15.4	3.4	81.2	240,551
11	Cass	23.8	15.2	61.1	1,544,046
12	Chippewa	3.3	0.7	96.0	376,186
13	Chisago	20.0	4.1	75.9	282,813
14	Clay	5.0	0.7	94.4	674,320
15	Clearwater	25.1	2.9	72.1	659,023
16	Cook	15.8	8.7	75.6	1,027,871
17	Cottonwood	2.6	0.8	96.6	415,260
18	Crow Wing	22.0	12.3	65.8	739,691
19	Dakota	6.5	2.6	90.8	374,907
20	Dodge	1.9	0.0	98.1	281,105
21	Douglas	13.4	10.2	76.4	460,613
22	Faribault	1.7	0.7	97.6	461,497
23	Fillmore	1.2	0.1	98.7	551,380
24	Freeborn	2.4	1.9	95.8	462,093
25	Goodhue	4.2	2.1	93.7	498,996
26	Grant	6.9	3.7	89.4	368,298
27	Hennepin	13.8	7.0	79.2	387,773
28	Houston	5.8	1.1	93.1	363,808
29	Hubbard	12.5	7.0	80.4	639,401
30	Isanti	25.1	2.4	72.5	288,961
31	Itasca	30.7	8.3	61.0	1,871,189
32	Jackson	4.9	0.6	94.5	425,831
33	Kanabec	22.3	1.4	76.3	341,014
34	Kandiyohi	10.9	6.2	83.0	551,512
35	Kittson	10.3	0.2	89.6	706,662
36	Koochiching	66.8	1.1	32.1	2,016,518
37	Lac Qui Parle	5.4	1.0	93.5	464,521
38	Lake	24.8	7.5	67.7	1,462,187
39	Lake of the Woods	66.1	20.5	13.5	1,072,369
40	Le Sueur	11.2	4.0	84.8	303,041
41	Lincoln	5.0	1.2	93.8	351,291
42	Lyon	3.3	0.7	96.0	461,908
43	McLeod	10.3	2.1	87.6	323,428
44	Mahnomen	13.6	4.0	82.4	373,191
45	Marshall	16.9	0.7	82.5	1,160,962
46	Martin	3.3	1.8	95.0	466,699

Wetland Comparison, Including Circular 36, by County

County and subcounty, in order of Circular 36 wetland type. Total Wetland, Total Deep Water, Total Upland, and Total County Area. Data are from National Wetland Inventory, 1980 before classification and/or data (Circular 36) and are presented as U.S. Fish & Wildlife Service Circular 36 wetland type. Data are from National Wetland Inventory, 1980 before classification and/or data (Circular 36) and are presented as U.S. Fish & Wildlife Service Circular 36 wetland type. Data are from National Wetland Inventory, 1980 before classification and/or data (Circular 36) and are presented as U.S. Fish & Wildlife Service Circular 36 wetland type.

Wetland Data from Anderson and Craig

Data from Anderson and Craig (1984) for county current wetland areas (acres) and the percent of remaining wetlands relative to the present wetland area. Data were based upon 640 acre soil landscape mapping units and intersected for comparison with a 40 acre grid overlay. The reported values for Clearwater county (77.64 percent) corrected by reanalyzing wetland resources upon implementation of M.R. 6430. Houston, Webster, and Winona counties were reported to have no present wetlands. (Anderson, Jeffrey F., and William A. Craig, 1984. County wetland maps on Minnesota's wetlands. The last wetland map was published by Minnesota Center for Urban and Regional Affairs, Fall 1984, 54-1 to 54-3 pages.)

		CURRENT		PERCENT	
		AREA	REMAINING	AREA	REMAINING
COUNTY					
1	Aitkin	273000	91.7	273000	91.7
2	Anoka	61000	70.9	61000	70.9
3	Becker	47000	94.7	47000	94.7
4	Beltrami	860000	94.1	860000	94.1
5	Benton	47000	48.1	47000	48.1
6	Big Stone	2000	1.7	2000	1.7
7	Blue Earth	6000	2.3	6000	2.3
8	Brown	2000	1.0	2000	1.0
9	Carlton	122000	91.3	122000	91.3
10	Carver	4000	16.7	4000	16.7
11	Cass	173000	91.4	173000	91.4
12	Chippewa	1000	0.2	1000	0.2
13	Chisago	24000	44.3	24000	44.3
14	Clay	7000	2.4	7000	2.4
15	Clearwater	101000	77.6	101000	77.6
16	Cook	42000	100.0	42000	100.0
17	Cottonwood	0	0.0	0	0.0
18	Crow Wing	131000	80.8	131000	80.8
19	Dakota	4000	14.3	4000	14.3
20	Dodge	1000	0.0	1000	0.0
21	Douglas	12000	12.3	12000	12.3
22	Faribault	7000	1.7	7000	1.7
23	Fillmore	0	0.0	0	0.0
24	Freeborn	1000	1.2	1000	1.2
25	Goodhue	0	0.0	0	0.0
26	Grant	1000	1.1	1000	1.1
27	Hennepin	9000	31.0	9000	31.0
28	Houston	0	0.0	0	0.0
29	Hubbard	7000	0.2	7000	0.2
30	Isanti	4000	80.0	4000	80.0
31	Itasca	272000	92.0	272000	92.0
32	Jackson	2000	1.4	2000	1.4
33	Kanabec	60000	67.0	60000	67.0
34	Kandiyohi	21000	9.9	21000	9.9
35	Kittson	90000	18.6	90000	18.6
36	Koochiching	167000	98.0	167000	98.0
37	Lac Qui Parle	2000	1.2	2000	1.2
38	Lake	19000	97.2	19000	97.2
39	Lake of the Woods	678000	88.6	678000	88.6
40	Le Sueur	7000	10.1	7000	10.1
41	Lincoln	1000	2.2	1000	2.2
42	Lyon	1000	0.0	1000	0.0
43	McLeod	2000	6.1	2000	6.1

ID	COUNTY	TOTAL COUNTY			
		PERCENT WETLAND	PERCENT DEEP WATER	PERCENT UPLAND	AREA (ACRES)
47	Meeker	14.5	4.3	81.3	412,638
48	Mille Lacs	24.2	15.4	60.4	435,921
49	Morrison	23.3	2.1	74.6	737,659
50	Mower	2.0	0.1	98.0	455,114
51	Murray	3.4	1.7	94.9	460,659
52	Nicollet	7.7	1.2	91.1	298,668
53	Nobles	1.7	0.8	97.5	462,362
54	Norman	3.6	0.1	96.3	544,564
55	Olmsted	2.3	0.2	97.5	418,545
56	Otter Tail	14.2	9.9	75.9	1,424,257
57	Pennington	7.9	0.1	92.0	395,891
58	Pine	29.6	1.3	69.1	917,282
59	Pipestone	1.7	0.1	98.3	298,576
60	Polk	7.1	1.2	91.7	1,279,543
61	Pope	14.3	4.5	81.2	455,250
62	Ramsey	9.8	7.4	82.9	108,790
63	Red Lake	5.2	0.1	94.7	276,932
64	Redwood	1.9	0.1	98.1	563,963
65	Renville	3.1	0.2	96.7	631,656
66	Rice	7.8	2.6	89.6	330,040
67	Rock	1.2	0.2	98.7	309,277
68	Roseau	33.1	0.1	66.8	1,074,233
69	St. Louis	30.8	5.9	63.3	4,306,973
70	Scott	15.3	2.7	82.0	235,686
71	Sherburne	18.9	2.3	78.9	288,409
72	Sibley	6.8	1.1	92.1	384,030
73	Stearns	14.3	2.8	82.9	889,142
74	Steele	2.6	0.2	97.2	276,348
75	Stevens	6.5	1.5	92.0	361,763
76	Swift	5.7	0.7	93.6	481,624
77	Todd	19.6	3.2	77.2	626,581
78	Traverse	3.4	1.8	94.8	371,897
79	Wabasha	5.0	3.6	91.4	351,537
80	Wadena	24.7	0.6	74.7	347,421
81	Waseca	5.7	1.0	93.3	276,776
82	Washington	14.3	12.0	73.7	149,595
83	Watonwan	2.9	0.4	96.7	281,419
84	Wilkin	2.7	0.1	97.3	467,396
85	Winona	2.7	2.4	94.8	410,219
86	Wright	16.2	6.4	77.4	456,881
87	Yellow Medicine	2.7	0.3	97.0	488,779
State Totals		19.7	4.7	75.5	53,683,509

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Wetland Comparison, Including Circular 39, by County

County area estimates, in acres, of Circular 39 wetland types, Total Wetland, Total Deep Water, Total Upland, and Total County Area. These data were derived from National Wetland Inventory (NWI) habitat classification polygon data (Cowardin *et al.* 1979) and then approximated to U.S. Fish & Wildlife Service Circular 39 wetland types (Shaw and Fredine 1956, reprinted 1971). Circular 39 types 1 (T1) through 8 (T8) are consistent with the classification method. Riverine systems and Industrial/Municipal facilities, often dike-related impoundments, are listed separately because of no specific Circular 39 classification. Total Wetland is the sum of all wetland types including Riverine and Industrial/Municipal but excluding Deep Water habitats. Deep Water habitats were assumed to be all NWI polygons noted as L1, PUBG, and PUBH. Total Wetland plus Deep Water plus Upland equals the Total County Area. NWI data omissions for portions of Pope, Stevens, Swift, and Wadena counties will be corrected by the U.S. Fish & Wildlife Service by December 1996.

CIRCULAR 39 WETLAND TYPES (Shaw and Fredine 1956)																	Industrial/ Municipal	Total Wetland	Total Deep Water	Total Upland	Total County Area
ID	County	T1	T2	T3	T4	T5	T6	T7	T8	Riverine											
1	Aitkin	906	72,854	22,974	3,194	5,601	164,923	67,136	212,523	3,015	28	553,154	99,707	623,021	1,275,882						
2	Anoka	1,797	5,302	42,886	1,052	3,051	12,744	9,846	1,696	1,034	23	79,431	8,866	197,069	285,366						
3	Becker	2,207	10,564	60,004	3,642	13,701	26,904	8,304	23,026	261	60	148,673	66,843	709,508	925,024						
4	Beltrami	4,335	138,584	37,805	3,546	2,991	262,147	168,592	323,791	825	2,734	945,350	347,737	661,764	1,954,851						
5	Benton	1,306	16,405	14,878	386	569	6,013	904	149	580	37	41,227	2,116	220,726	264,069						
6	Big Stone	2,647	1,745	20,892	997	2,208	425	1,772	0	52	80	30,818	12,926	294,109	337,853						
7	Blue Earth	5,302	153	12,733	262	692	520	1,574	0	2,756	8	24,000	6,006	459,838	489,844						
8	Brown	6,261	325	7,472	267	821	551	1,721	0	1,484	148	19,050	2,895	373,804	395,749						
9	Carlton	508	6,805	5,661	510	548	66,349	24,055	86,592	1,164	529	19,050	7,124	359,824	559,669						
10	Carver	8,694	230	21,542	324	2,900	850	1,929	0	607	45	37,121	8,210	195,220	240,551						
11	Cass	4,691	13,331	82,128	6,680	10,292	115,119	21,354	109,241	2,427	1,435	366,698	234,456	942,892	1,544,046						
12	Chippewa	1,160	971	6,777	278	158	507	1,731	3	891	1	12,477	2,700	361,009	376,186						
13	Chicago	929	18,910	5,309	355	3,811	11,909	8,920	5,054	1,334	98	56,629	11,554	214,630	282,813						
14	Clay	2,037	7,913	15,800	571	903	3,517	1,355	54	979	235	33,364	4,636	636,320	674,320						
15	Clearwater	532	56,962	17,847	3,984	1,958	47,894	7,113	21,220	465	7,238	165,213	18,977	474,833	659,023						
16	Cook	47	3,588	12,486	3,225	3,341	25,535	4,993	106,487	1,197	1,319	162,218	88,978	776,675	1,027,871						
17	Cottonwood	747	64	6,600	121	1,871	75	559	0	506	108	10,651	3,396	401,213	415,260						
18	Crow Wing	473	10,521	30,075	1,976	8,213	58,315	22,671	27,671	2,301	249	162,465	90,628	486,598	739,691						
19	Dakota	5,995	551	12,491	778	1,213	1,188	1,859	0	374	52	24,501	9,872	340,534	374,907						
20	Dodge	2,059	1,125	1,698	22	4	200	186	21	9	7	5,331	117	275,657	281,105						
21	Douglas	2,946	253	41,766	1,973	6,743	3,658	3,994	18	203	44	61,598	47,042	351,973	460,613						
22	Faribault	762	12	5,207	121	275	212	420	0	805	146	7,960	3,280	450,257	461,497						
23	Fillmore	2,929	953	580	98	0	351	88	0	1,259	83	6,341	724	544,315	551,380						
24	Freeborn	765	246	8,797	216	363	278	68	0	193	0	10,926	8,695	442,472	462,093						
25	Goodhue	5,275	1,740	4,979	107	2,833	811	4,592	19	442	12	20,810	10,569	467,617	498,996						
26	Grant	3,958	201	15,229	972	3,894	334	616	0	97	53	329,383	13,561	329,383	368,298						
27	Hennepin	2,293	949	34,450	1,571	2,911	3,564	6,482	115	1,109	47	53,491	27,018	307,264	387,773						
28	Houston	2,567	924	4,088	985	4,105	556	7,357	14	650	1	21,247	3,962	338,599	363,808						
29	Hubbard	805	3,750	18,713	2,403	2,793	32,011	2,667	16,469	552	25	80,188	44,957	514,256	639,401						
30	Isanti	3,524	16,035	15,101	630	1,497	23,455	5,640	5,756	839	10	72,487	6,908	209,566	288,961						
31	Itasca	6,831	24,190	38,937	9,423	4,506	142,712	52,571	286,374	3,720	4,969	574,233	154,776	1,142,180	1,871,189						

CIRCULAR 39 WETLAND TYPES (Shaw and Fredine 1956)										Industrial/ Municipal	Total Wetland	Total Deep Water	Total Upland	Total County Area
ID	County	T1	T2	T3	T4	T5	T6	T7	T8					
32	Jackson	1,903	0	9,748	226	7,308	177	477	0	719	101	20,659	2,672	402,500
33	Kanabec	2,287	27,939	8,815	593	1,255	21,819	7,799	4,593	1,009	5	76,114	4,749	260,151
34	Kandiyohi	4,028	2,899	37,813	2,169	4,194	4,790	3,829	48	57	68	59,895	34,065	457,552
35	Kittson	2,938	42,356	5,112	827	193	17,505	2,290	211	1,141	83	72,656	1,176	632,830
36	Koochiching	6,088	30,806	26,858	3,782	3,767	171,344	96,320	999,520	7,692	57	1,346,234	22,935	647,349
37	Lac Qui Parle	778	2,535	14,463	642	2,675	871	2,706	33	571	5	25,279	4,706	434,536
38	Lake	63	2,991	8,659	4,704	2,868	51,081	19,188	271,008	1,903	48	362,513	109,682	989,992
39	Lake of the Woods	1,877	51,676	7,966	2,152	18,657	197,111	154,217	272,761	1,764	129	708,310	219,346	1,442,713
40	Le Sueur	9,027	327	19,852	177	2,461	702	562	0	640	226	33,974	11,993	257,074
41	Lincoln	2,725	351	11,290	471	2,210	108	179	2	3	66	17,405	4,356	329,530
42	Lyon	2,072	389	10,229	743	986	196	439	0	11	64	15,129	3,434	443,345
43	McLeod	9,964	150	20,528	184	1,017	445	1,021	0	50	28	33,387	6,786	283,255
44	Mahnomen	2,039	7,595	23,954	296	868	8,716	2,545	4,334	474	35	50,856	14,961	307,374
45	Marshall	5,319	52,328	41,201	5,244	2,596	56,192	22,985	8,446	1,073	501	195,885	7,858	957,219
46	Martin	3,677	72	6,764	211	3,144	164	1,168	0	24	25	15,249	8,257	443,193
47	Meeker	5,659	1,277	38,380	1,134	3,520	4,921	4,400	127	416	15	59,849	17,517	335,272
48	Mille Lacs	1,518	38,146	17,499	350	1,281	27,264	10,841	7,621	1,004	82	105,606	67,091	263,224
49	Morrison	4,232	27,690	68,754	1,308	209	48,966	11,355	6,402	2,788	21	171,725	15,606	550,328
50	Mower	4,971	1,347	1,510	74	143	354	188	5	307	77	8,976	277	445,861
51	Murray	1,521	115	11,719	450	1,228	299	423	0	9	80	15,844	7,673	437,142
52	Nicollet	5,030	160	12,841	904	996	418	1,294	0	1,374	13	23,030	3,626	272,012
53	Nobles	1,563	61	5,406	174	575	49	34	0	47	154	8,063	3,620	450,679
54	Norman	2,275	4,032	6,857	217	0	1,921	2,932	216	1,291	94	19,835	612	524,117
55	Olmsted	3,823	2,823	1,575	80	189	549	207	72	338	35	9,691	958	407,896
56	Otter Tail	3,676	10,220	100,587	4,338	13,975	31,227	18,367	18,284	1,133	180	201,987	141,524	1,080,746
57	Pennington	1,726	15,299	3,778	76	0	6,059	1,861	276	1,255	1,012	31,342	374	364,175
58	Pine	4,646	43,255	38,729	447	884	85,005	34,992	60,262	2,853	141	271,214	11,930	634,138
59	Pipestone	1,264	44	3,221	177	60	35	18	0	88	29	4,936	260	293,380
60	Polk	3,763	27,237	26,617	440	2,462	14,800	7,228	1,437	2,600	4,272	90,856	15,449	1,173,238
61	Pope	3,258	1,102	38,893	2,308	9,408	5,702	4,300	0	55	6	65,032	20,593	369,625
62	Ramsey	184	270	5,409	384	1,451	1,579	1,219	44	63	20	10,623	8,023	90,144
63	Red Lake	1,187	5,106	2,156	65	0	2,202	1,903	259	1,450	40	14,368	250	262,314
64	Redwood	2,948	335	5,205	407	212	253	339	0	642	72	10,413	374	553,176
65	Renville	8,327	330	7,401	254	1,012	153	798	0	815	150	19,240	1,491	610,925
66	Rice	4,573	552	16,377	138	2,420	803	266	0	578	0	25,707	8,579	295,754
67	Rock	561	54	1,815	239	0	10	29	0	847	83	3,638	482	305,157
68	Roseau	8,235	119,160	4,149	2,815	1,682	100,511	69,323	49,251	634	139	355,899	1,331	717,003
69	St. Louis	2,934	30,887	43,521	9,975	31,687	274,204	74,891	822,817	9,951	24,825	1,325,692	253,420	2,727,861
70	Scott	9,384	391	20,036	492	664	975	3,006	0	1,019	136	36,103	6,260	193,323

CIRCULAR 39 WETLAND TYPES (Shaw and Fredine 1956)										Industrial/ Municipal	Total Wetland	Total Deep Water	Total Upland	Total County Area
ID	County	T1	T2	T3	T4	T5	T6	T7	T8					
71	Sherburne	2,405	7,466	22,499	1,123	1,068	11,475	5,002	1,054	2,270	131	54,493	6,480	227,436
72	Sibley	8,263	76	13,851	103	1,490	179	1,697	0	491	80	26,230	4,263	353,537
73	Stearns	8,344	2,802	81,058	2,495	3,599	15,555	10,348	1,262	1,416	225	127,104	25,024	737,014
74	Steele	963	256	4,409	103	678	417	322	0	99	0	7,247	419	268,682
75	Stevens	6,150	216	13,447	588	1,569	371	773	0	304	110	23,528	5,520	332,715
76	Swift	494	2,778	16,606	500	1,421	1,508	3,487	0	452	0	27,246	3,464	450,914
77	Todd	2,765	289	62,649	1,609	1,779	42,972	8,024	1,978	731	127	122,923	20,164	483,494
78	Traverse	4,369	0	6,320	814	437	86	558	0	168	0	12,752	6,650	352,495
79	Wabasha	7,327	9	3,281	366	1,994	661	2,543	0	1,319	7	17,507	12,670	321,360
80	Wadena	1,960	4,334	28,499	123	781	36,639	5,971	5,661	1,725	26	85,719	2,119	259,583
81	Waseca	2,645	352	9,763	48	2,029	237	616	0	9	21	15,720	2,783	258,273
82	Washington	1,003	7,660	4,612	218	3,004	1,655	2,613	677	0	5	21,447	17,954	110,194
83	Watsonwan	924	86	4,356	111	1,155	161	1,079	0	103	54	8,029	1,176	272,214
84	Wilkin	1,870	4,134	4,273	205	0	512	346	3	1,021	101	12,465	253	454,678
85	Winona	2,200	670	2,203	252	67	682	4,812	0	211	70	11,167	9,991	389,061
86	Wright	7,092	1,066	43,107	1,937	2,569	7,945	7,773	191	2,383	48	74,111	29,193	353,577
87	Yellow Medicine	1,642	538	8,635	677	371	156	674	0	625	43	13,361	1,360	474,058
State totals		287,747	1,001,195	1,691,160	111,608	247,034	2,274,318	1,063,646	3,765,148	94,145	53,989	10,589,990	2,543,015	40,550,514

Major watershed areal estimates, in acres, of waters / wetlands, upland, and the total watershed. The waters / wetlands are expressed as CIRCULAR 39 WETLAND TYPES(1-8), RIVERINE, INDUSTRIAL / MUNICIPAL, TOTAL WATERS/WETLANDS, ESTIMATED WCA WETLANDS, and the DNR PWI. These data were derived from National Wetland Inventory (NWI) habitat classification polygon data (Cowardin *et al.* 1979) and DNR PWI data from LakesDB. The Cowardin data were approximated to U.S. Fish & Wildlife Service Circular 39 wetland types (Shaw and Fredine 1956, reprinted 1971). Circular 39 types 1 (T1) through 8 (T8) are consistent with the classification method. RIVERINE systems and INDUSTRIAL/MUNICIPAL facilities, often dike-related impoundments, are listed separately because of no specific Circular 39 classification. WCA WETLAND is estimated as TOTAL WATER/WETLAND minus DNR PWI data. TOTAL WATER/WETLAND *plus* UPLAND *equals* the TOTAL WATERSHED AREA. Some NWI data omissions will be corrected by the U.S. Fish & Wildlife Service by December 1996.

ID	Watershed	CIRCULAR 39 WETLAND TYPES (Shaw and Fredine 1956)										Total Waters / Wetlands	Estimated WCA		DNR PWI	Total Watershed Area
		T1	T2	T3	T4	T5	T6	T7	T8	Riverine	Municipal		Wetland	Upland		
1	Lake Superior-North	73	3,432	9,821	2,506	61,123	28,154	6,557	125,331	1,367	1,438	239,802	173,244	780,550	66,558	1,020,352
2	Lake Superior-South	114	1,416	311	576	3,878	10,655	11,908	49,533	0	58	78,449	76,743	325,290	1,706	403,739
3	St. Louis River	1,245	21,893	5,798	1,568	33,399	176,878	41,483	490,184	8,783	5,154	786,385	747,293	1,825,257	39,092	1,038,872
4	Cloquet River	141	3,594	954	542	18,862	34,573	8,676	114,400	9,942	1,344	193,028	161,490	314,816	31,538	507,844
5	Nemadji River	196	1,590	2,760	51	1,830	11,939	6,252	18,339	0	147	43,104	41,308	177,767	1,796	177,767
7	Mississippi River-Headwaters	3,920	17,325	46,843	3,878	178,423	77,021	16,506	111,341	1,637	2,169	459,063	231,660	806,507	227,403	1,265,570
8	Leech Lake River	3,635	8,888	45,110	4,185	164,103	49,025	11,243	65,777	1,433	915	354,314	176,482	500,295	177,832	854,609
9	Mississippi River-Grand Rapids	1,912	45,474	12,327	3,804	63,658	151,710	38,366	216,929	5,067	2,885	542,132	468,255	773,873	73,877	1,316,005
10	Mississippi River-Brainerd	2,703	29,713	56,140	3,258	61,524	116,611	30,100	62,776	280	4,773	367,878	296,844	730,978	71,034	1,098,856
11	Pine River	75	4,310	17,654	2,046	60,915	37,404	5,804	29,001	15	747	157,971	90,452	344,207	67,519	502,178
12	Crow Wing River	2,010	6,227	69,595	3,257	83,841	95,977	9,699	25,195	32	3,150	298,983	199,944	946,111	99,039	1,245,094
13	Redeye River	1,968	10,884	48,541	718	8,326	31,832	15,259	16,445	72	179	134,224	124,517	441,120	9,707	575,344
14	Long Prairie River	2,069	1,654	50,609	1,466	38,646	33,061	7,058	1,673	135	833	137,204	91,690	414,372	45,514	551,576
15	Mississippi River-Sartell	4,959	13,073	72,060	1,637	15,374	25,392	20,907	4,351	102	1,357	159,212	141,323	493,408	17,889	652,620
16	Sauk River	5,999	1,280	58,432	2,003	29,709	8,922	5,394	1	162	730	112,632	73,119	553,948	39,513	666,580
17	Mississippi River-St. Cloud	11,554	4,917	96,658	3,869	57,455	16,646	15,368	1,184	142	4,009	144,942	110,287	576,460	34,655	721,402
18	North Fork Crow River	19,771	661	49,978	754	27,119	2,039	3,277	9	45	418	104,071	60,649	713,014	43,422	817,085
20	Mississippi River	2,574	9,104	50,467	2,273	56,196	11,744	10,965	1,188	105	982	376,721	53,661	819,364	91,937	944,438
21	Rum River	6,674	69,494	47,386	1,586	147,928	58,541	24,417	18,143	163	2,389	367,721	211,250	620,202	165,471	996,923
22	Minnesota River-Headwaters	1,586	3,683	25,336	1,321	21,726	1,148	4,075	1	69	220	59,165	23,553	411,922	35,612	471,087
23	Pomme De Terre River	4,560	752	29,483	1,643	42,582	13,62	2,471	0	113	414	83,380	30,315	493,258	53,065	576,638
24	Lac Qui Parle River	762	1,568	12,150	556	1,566	465	1,223	33	16	363	18,702	11,736	443,461	6,966	462,163
25	Minnesota River-Granite Falls	5,429	1,978	26,746	1,465	12,388	635	2,675	3	255	1,928	53,502	33,490	1,272,602	20,012	1,326,104
26	Chippewa River	5,663	4,168	76,534	4,031	63,587	7,076	7,884	0	20	807	169,770	76,195	1,150,392	93,575	1,320,162
27	Redwood River	2,848	220	9,782	710	5,348	198	457	0	58	212	19,833	11,967	438,114	7,866	457,947
28	Minnesota River-Mankato	14,509	485	25,097	1,251	11,900	999	3,348	0	210	3,158	60,957	34,202	819,364	26,755	880,321
29	Cottonwood River	5,711	278	12,799	753	3,965	432	710	0	272	1,002	25,922	18,721	816,261	7,201	842,183
30	Blue Earth River	3,757	16	7,941	318	9,437	387	1,641	0	63	1,996	25,556	12,978	733,946	12,578	759,502
31	Watonwan River	1,798	127	8,584	192	6,027	319	1,582	0	115	429	19,173	11,266	523,623	7,907	542,796

ID	Watershed	CIRCULAR 39 WETLAND TYPES (Shaw and Fredine 1956)										Total Waters / Wetlands	Estimated WCA		DNR PWI	Total Watershed Area
		T1	T2	T3	T4	T5	T6	T7	T8	Riverine	Municipal		Wetland	Upland		
32	Le Sueur River	4,821	393	17,167	121	10,835	385	1,135	0	136	667	35,660	16,535	670,551	19,125	706,211
33	St. Croix River-Shakopee	34,189	965	65,246	1,557	27,536	2,530	8,349	0	261	3,030	143,663	85,184	1,021,825	58,479	1,165,488
34	St. Croix River-Upper	1,745	9,513	17,063	158	1,351	38,254	18,322	27,936	5	837	115,184	113,361	350,223	8,723	350,223
35	Kettle River	1,972	15,641	24,560	684	11,178	70,769	31,372	73,072	98	1,654	231,000	218,948	441,188	12,052	672,188
36	Snake River	3,483	61,372	17,092	697	9,063	50,062	23,699	29,731	101	1,471	196,771	186,848	448,728	9,923	645,499
37	St. Croix River-Stillwater	2,202	28,962	22,770	1,021	34,591	19,358	14,642	7,611	115	1,893	133,165	82,740	456,948	50,425	590,113
38	Mississippi River & Lake Pepin	7,911	1,267	8,009	318	20,308	1,180	4,018	0	14	98	43,123	26,280	381,916	16,843	381,916
39	Cannon River	8,928	1,824	36,095	367	23,336	2,008	2,510	0	39	1,217	76,324	44,785	946,398	31,539	946,398
40	Mississippi River-Winona	3,764	499	5,177	559	17,531	1,109	7,161	0	38	206	36,044	496	423,167	35,548	423,167
41	Zumbro River	10,903	2,889	5,017	113	2,414	927	501	108	60	1,463	24,395	22,467	886,025	1,928	910,420
42	Mississippi River-La Crescent	404	239	1,665	147	2,922	152	1,547	14	2	28	7,120	11	47,709	11	54,829
43	Root River	6,569	2,817	2,251	235	1,462	733	415	10	140	2,032	16,664	16,344	104,902	320	104,902
44	Mississippi River-Reno	430	379	1,338	738	5,699	287	5,620	0	0	18	14,509	14,049	102,903	460	102,903
46	Upper Iowa River	749	918	269	23	148	104	50	0	19	77	2,357	2,336	139,347	21	139,347
47	Wapsipinicon River	13	6	7	0	1	0	0	0	0	0	27	27	7,998	0	8,025
48	Cedar River	4,010	238	2,415	111	2,031	329	142	0	31	263	9,570	7,005	445,369	2,565	454,939
49	Shell Rock River	186	210	4,334	129	4,665	93	26	0	0	193	9,836	3,814	147,412	6,022	157,248
50	Winnepago River	42	17	1,836	23	767	42	30	0	0	0	2,747	722	45,921	2,025	45,921
51	West Fork Des Moines-Head	2,864	120	18,903	495	18,632	410	1,052	0	234	1,002	43,712	17,112	754,992	26,600	798,704
52	West Fork Des Moines-Lower	159	0	99	7	34	8	83	0	62	202	654	654	55,571	0	56,225
53	East Fork Des Moines	981	72	2,060	84	3,428	55	210	0	0	22	6,912	1,201	106,710	5,711	113,622
54	Bois De Sioux River	2,678	5	5,307	703	7,962	66	494	0	4	302	17,521	7,147	326,051	10,374	343,572
55	Musinkwa River	8,668	16	18,340	853	8,680	193	636	0	55	134	37,575	17,235	524,530	20,340	562,105
56	Outer Tail River	2,646	6,676	76,777	5,179	170,507	26,530	11,910	14,736	169	1,707	316,837	117,350	932,662	199,487	1,249,499
57	Red River of North	692	1,320	836	84	230	40	63	0	231	786	4,282	4,159	267,047	123	271,329
58	Buffalo River	3,450	8,250	32,485	1,242	17,543	4,542	2,027	679	67	359	70,644	45,692	605,841	24,952	676,485
59	Marsh River	911	983	2,133	109	230	972	1,256	144	62	303	7,103	6,741	231,050	362	231,050
60	Wild Rice River	4,443	18,426	41,029	683	30,187	20,948	5,146	13,200	82	1,498	135,642	93,173	898,315	42,469	1,033,957
61	Sandhill River	1,694	2,078	9,469	176	5,013	3,248	1,724	125	13	699	24,239	14,630	337,086	9,609	361,325
62	Upper/lower Red Lake	3,906	28,283	22,026	2,432	298,990	143,657	58,472	318,255	2,598	186	878,805	572,040	384,510	306,765	1,263,315
63	Red Lake River	2,322	104,272	6,398	2,114	2,617	27,610	35,736	6,033	1,154	3,365	181,942	181,942	652,709	9,679	844,330
65	Thief River	3,438	79,582	37,749	5,221	9,566	108,871	93,828	18,510	346	174	357,285	304,926	331,732	52,359	689,017
66	Clearwater River	2,380	40,343	26,952	1,826	21,577	36,939	7,863	9,843	11,195	1,005	159,923	127,838	726,661	32,085	886,584
67	Grand Marais Creek	635	1,715	1,665	29	107	306	408	139	387	1,401	6,792	6,096	377,139	696	383,931
68	Snake River	1,641	13,108	1,170	46	218	8,021	962	1,205	90	50	27,811	24,227	474,572	3,584	502,383
69	Tamarac River	1,718	16,973	5,568	767	1,157	10,721	1,534	585	44	941	38,007	33,101	536,966	4,906	574,973

CIRCULAR 39 WETLAND TYPES (Shaw and Fredine 1956)															
D	Watershed	T1	T2	T3	T4	T5	T6	T7	T8	Riverine	Industrial/ Municipal	Total Waters / Wetlands	Estimated WCA Wetland	DNR PWI	Total Watershed Area
70	Two Rivers	2,831	56,837	3,856	125	1,156	30,276	5,003	2,295	73	266	102,718	98,973	3,745	688,786
71	Roseau River	6,033	89,825	3,432	2,782	2,567	77,894	58,422	51,052	104	677	292,788	270,746	22,042	681,471
72	Rainy River-Headwaters	29	2,910	21,251	6,221	209,501	45,925	11,735	234,067	24	2,416	534,079	274,958	259,121	1,068,996
73	Vermilion River	90	1,092	10,827	2,087	79,428	25,938	12,947	86,822	920	2,380	222,531	128,722	93,809	661,900
74	Rainy River-Rainy Lake	1,932	1,143	17,680	4,511	93,336	20,068	20,044	89,866	0	652	249,232	[]	[]	333,995
75	Rainy River-Manitou	611	10,829	2,539	218	99	23,371	17,413	209,024	25	2,579	266,708	266,695	13	68,428
76	Little Fork River	2,953	9,732	13,916	2,423	21,101	71,595	30,253	322,436	3,892	2,764	481,065	459,277	21,788	698,463
77	Big Fork River	4,403	18,088	22,935	6,768	53,337	103,137	48,412	482,549	43	4,204	743,876	688,001	55,875	582,915
78	Rapid River	1,564	25,408	1,359	992	306	154,732	82,081	273,489	96	463	540,490	539,512	978	32,515
79	Rainy River-Baudette	702	12,924	922	194	431	45,594	38,787	46,725	33	1,377	147,689	147,284	405	47,454
80	Lake of the Woods	1,600	30,868	6,122	1,436	237,760	80,521	71,911	92,706	0	145	523,069	[]	[]	146,811
81	Big Sioux-Medary Creek	29	0	329	48	1	1	2	0	0	1	411	411	0	27,630
82	Big Sioux-Pipestone	996	94	2,702	194	271	29	16	0	16	181	4,499	4,410	89	322,429
83	Rock River	1,319	60	5,871	281	752	49	49	0	145	794	9,320	8,929	391	575,189
84	Little Sioux River	1,414	6	5,652	232	6,518	73	65	0	0	30	13,990	5,500	8,490	185,358
STATE TOTALS		287,634	1,001,192	1,690,959	112,034	2,792,434	2,275,156	1,063,602	3,765,167	53,963	94,216	13,136,357	{9,563,547}	{3,572,810}	40,619,936

Values in brackets [] for watersheds Mississippi River-LaCrescent (42), Rainey River-Rainey Lake (74), and Lake of the Woods (80) are omitted because the NWI and PWI coverages were not compatible. Both PWI areas and estimates of WCA were erroneous. TOTAL WATERS / WETLANDS is a valid estimate for the sum of WCA and PWI.

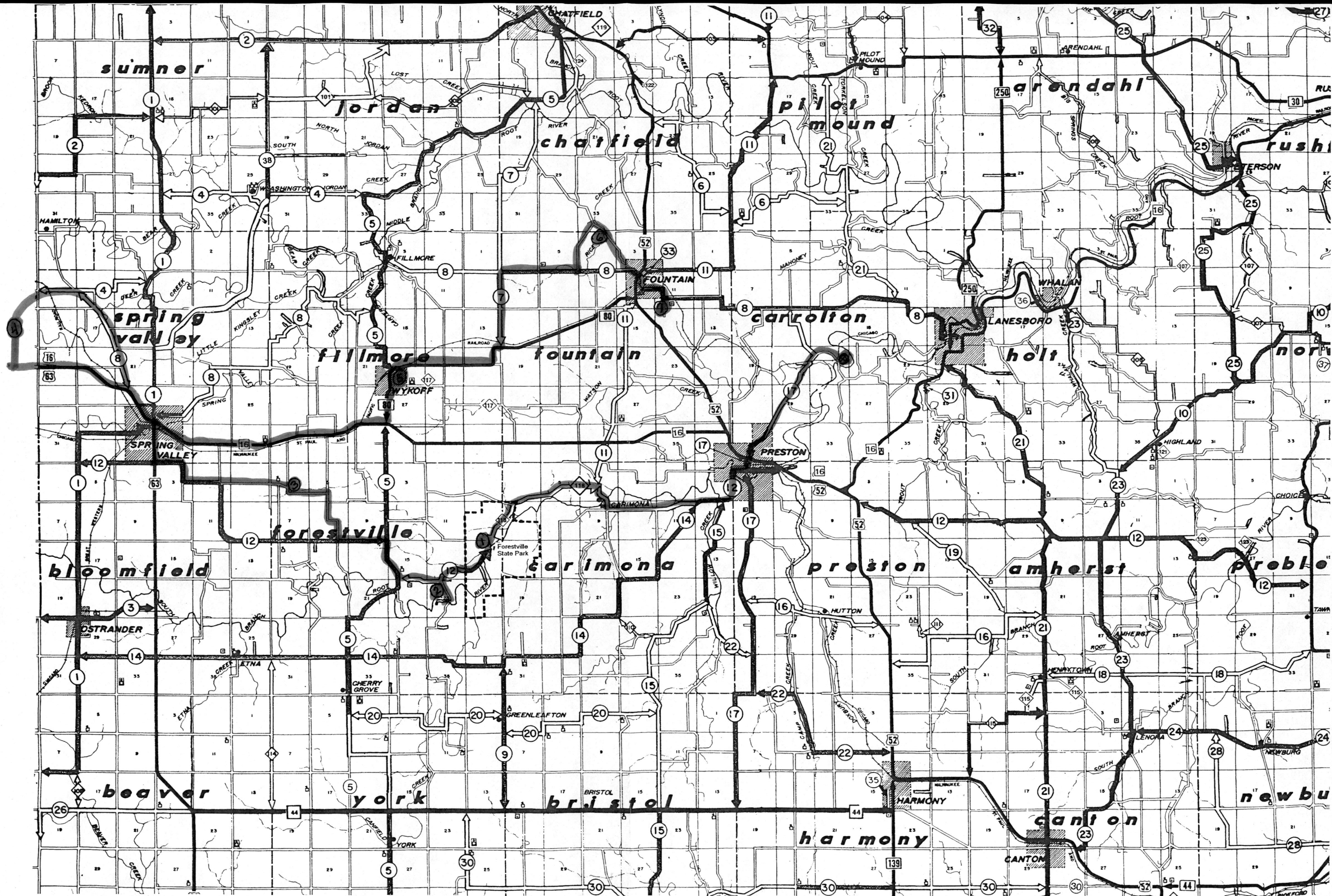
otals in { } are the ESTIMATED WCA WETLANDS computed by subtracting the actual LakesDB sum for both PWI basins (P) and PWI wetlands (W), the DNR PWI, from the TOTAL WATERS / WETLANDS. For the above reported data, the totals for ESTIMATED WCA WETLANDS and DNR PWI, are 9,221,357 and 3,135,579 acres, respectively.



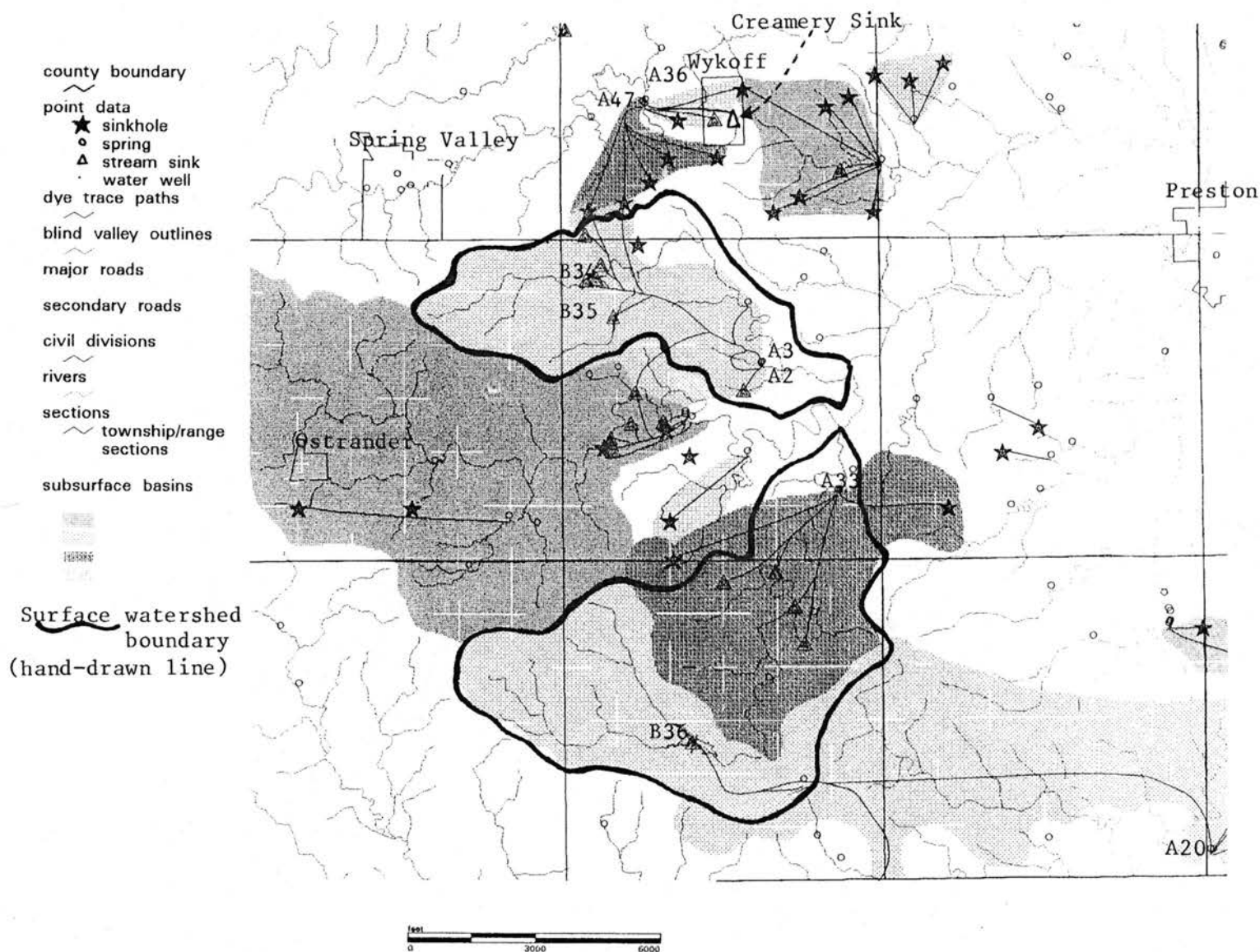
**SOUTHEASTERN MINNESOTA
TOUR**

October 28, 1998
The Old Barn Resort
Preston, Minnesota

Fillmore County
BWSR Bus Tour Route - Oct. 28, 1998



Springshed Boundaries from Fillmore County Geologic Atlas



Map produced from ArcView coverages
produced by the MN Geological Survey
and MN Department of Natural Resources

B34 - Fairview Blind Valley
B35 - Lefevere Blind Valley
B36 - York Blind Valley
A2 & A3 - Moth & Grabau Springs
A47 & A36 - Mahood and Barr Springs
A33 - Canfield Big Spring (Trout Spring)
A20 - Odessa Spring

Springshed Boundaries from the Fillmore County Geologic Atlas Fountain Area

Map produced from ArcView coverages
produced by the MN Geological Survey
and MN Department of Natural Resources

surface watershed boundary

(hand-drawn line)

county boundary

point data

★ sinkhole

○ spring

△ stream sink

• water well

dye trace paths

blind valley outlines

major roads

secondary roads

civil divisions

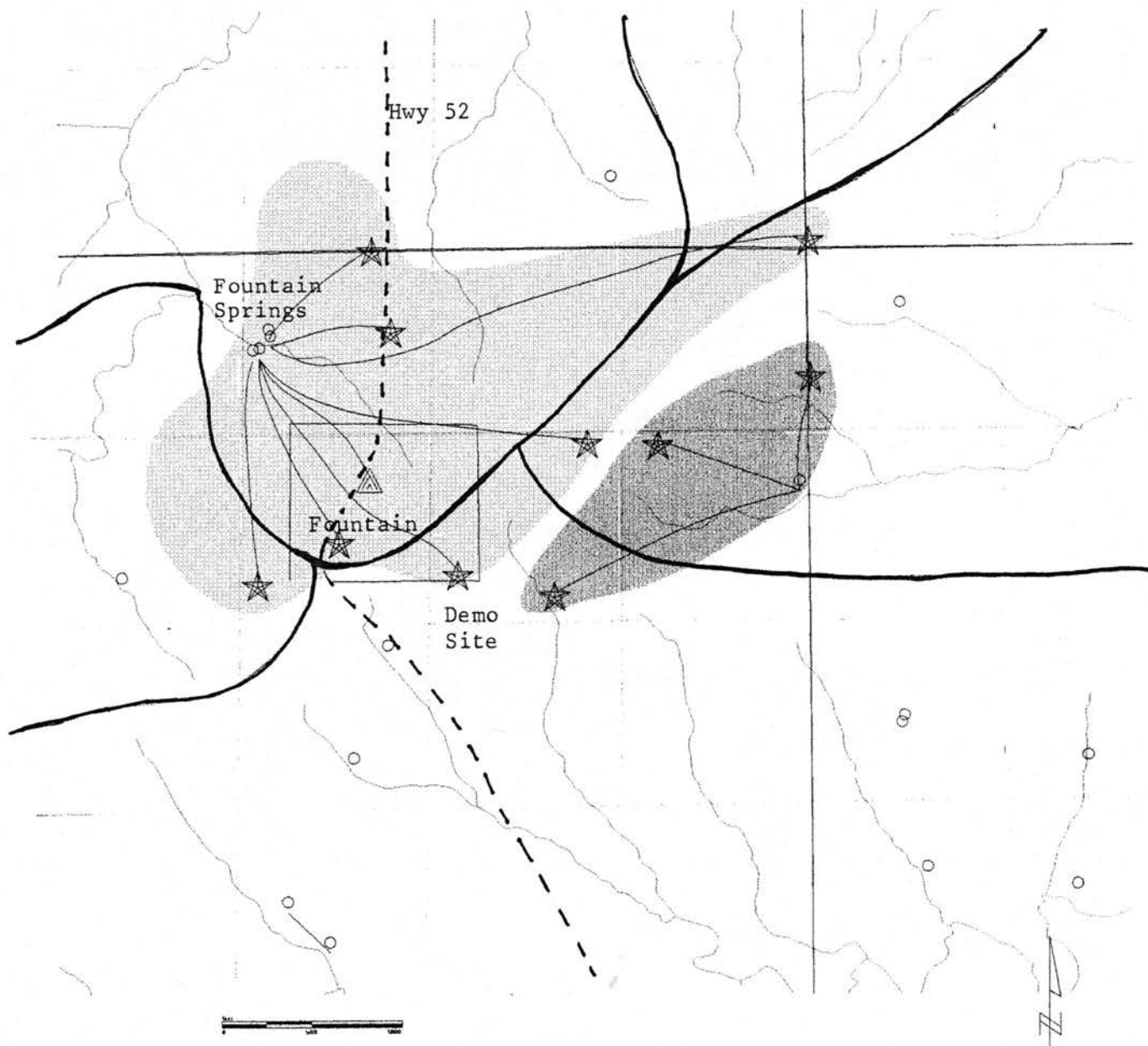
rivers

sections

township/range

sections

subsurface basins



BOARD OF WATER AND SOIL RESOURCES
ATTENDANCE ROSTER

	NAME	AFFILIATION	PHONE #
1.	Donna Rasmussen	Fillmore Co. Water Plan Coord.	(507) 765-3305
2.	Danell Bubke	Fillmore Co. Soil & Water	507 765 3828
3.	Kathy Baarsch	- guest of Al Oehlke	(507) 346-7668
4.	Rob Missey	Mr PCA	(651) 296-7202
5.	Jerry Heil	MDA	(651) 296-1486
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BOARD OF WATER AND SOIL RESOURCES
ATTENDANCE ROSTER

	NAME	AFFILIATION	PHONE #
1.	Tom Fischer	BWSR-New Ulm	507-359-6091
2.	Matt Opat	Fill Co. Atty	507-867-4080
3.	DEREK FISHER	BWSR - NEW ULM	507-359-6090
4.	Merv Tripp	BWSR - Worthington	507-376-6875
5.	Kevin Scheidecker	Fillmore SWCD	507-765-3878
6.	Bernardby	Mower SWCD	507-433-8268
7.	Robert Baurisk	Pork Producer Mower Cty	507-346-2820
8.	Eleanor Jurgens	Fillmore SWCD	507-772-4427
9.	Al Kopp	BWSR	651-297-2907
10.	Jim Dahlgren	BWSR	320-269-8493
11.	Duane Johnson	Dodge Co	507 635 6270
12.	Bart Upgaard	BWSR	
13.	Barbara Cobb	BWSR	
14.	James Otto	BWSR	
15.	Larry Otto		
16.	Elton Pedalen	Farmer	507-268-4461
17.	Paul Burns	MDA	(651)296-1488
18.	Jim Birkholz	BWSR	
19.	Kathleen Roer	BWSR	(612)4750789
20.	Louie Rupp	The Minnesota Project	507-743-8300
21.	WAYNE ZELLMER	BWSR	
22.	Dennis W. Neffendorf	NRCS	651.602.7867
23.	Gretchen Sabel	MPCA	507-285-7343 651-297-7574
24.	DAVE PETERSON	BWSR ROCHESTER	507-280-2874
25.	Ann Purci	DNR	507-280-5076
	Roger Lenzmeier	NRCS	507-281-1959

BOARD OF WATER AND SOIL RESOURCES

FILLMORE COUNTY BUS TOUR – OCTOBER 28, 1998

Depart from the Old Barn Resort – 11:00 a.m.

Items of interest:

- Root River Hardwoods
- East Willow Creek Watershed Project
- DNR Fishing Easements

(1) Forestville State Park

Established in 1963, Forestville State Park was the site of a 19th century European settlement. The parks landscape of blufflands, winding streams and old growth forests makes it a popular place to visit.

(2) Forestville Valley View Development

Perched atop a bluff adjacent to Forestville State Park, this development is a prime example of how blufflands in Southeastern Minnesota are affected by development pressure. A bluffland ordinance is currently under development in Fillmore County.

Items of interest:

- Sinkhole diversion on CRP land

(3) Fairview Blind Valley

This disappearing stream drains acres and discharges at the Moth/Grabau Spring near Forestville State Park. Blind valleys are a point where groundwater and surfacewater are mixed together and can actually feed springs in different valleys.

(4) Baarsch Farms

An opportunity to visit with an agricultural operator that is being affected by non-farm rural development.

Items of interest:

- Harlan Schmidt Feedlot Water Quality Grant Site

(5) City of Wykoff Sinkhole Project

This sinkhole is a discharge point for stormwater from a large portion of the city. The sinkhole will be sealed and stormwater will be conveyed overland to increase filtration.

Items of Interest:

- Scott Winslow SRF low interest loan

(6) Fountain Big Spring

A portion of the water feeding this spring actually comes from a different watershed than the spring is in. This illustrates that springsheds can follow different lines than surface watersheds.

Items of Interest:

- Fountain Quarry

(7) Root River Trail Sinkhole Display

This sinkhole actually feeds the Fountain Big Spring, which we just left. The display illustrates many of the karst features present in Southeastern Minnesota. It was completed with the assistance of the Fillmore Soil and Water Conservation District, Fillmore County Water Plan and the Department of Natural Resources.

Return to the Old Barn Resort by bicycle, van or the bus – 4:30 p.m.

**BOARD OF WATER AND SOIL RESOURCES
SOUTHEASTERN MINNESOTA TOUR**

**OCTOBER 28, 1998
THE OLD BARN RESORT
Preston, Minnesota**

AGENDA

- 8:00 Welcome
Jeff Nielsen, BWSR, Supervisor - Southern Region
- 8:15 "Blufflands Landscape" Slide Presentation
Produced and Developed by Robert J. Hurt, Architectural Environments
Mary Kells, BWSR Board Conservationist
- 8:45 Community-Based Planning Pilot Project in Dodge County
Duane Johnson, Planning Director, Dodge County
- 9:00 Local Application of Land Use Planning Through Common Visions and
Bluffland Protection
Robert J. Hurt, Architectural Environments
Todd Bram, Planning Director, Winona County
- 9:15 Break
- 9:30 Rural Housing and Impacts on Agricultural Development
Bob Baarsch, Farmer
- 9:45 Ag Preservation - Economic Impacts of Land Use and Development
Todd Bram, Planning Director, Winona County
- 10:00 Implementation of Local Ordinances and Case Studies
Matthew Opat, Fillmore County Attorney
- 10:15 Panel Discussion and Questions
- 11:00 Tour Overview
Dave Peterson, BWSR Board Conservationist
Tour Participants - Kevin Scheidecker and Darrell Brekke, Fillmore SWCD;
Donna Rasmussen, Fillmore County; Bev Nordby, Mower SWCD;
Bob Baarsch, Farmer; and Allan and Audrey Oehlke
- 11:30 Forestville Historic Meighen Store
- 12:00 Lunch - Forestville State Park
- 1:00-4:30 Tour Sites
- 4:30-6:00 Free Time
RootRiver Trail Bike or Hike/The Old Barn Resort Hospitality
- 6:30 Dinner - Old Barn Resort



Teamwork at Mayo:

**An experiment in cooperative
individualism**



M a y o C e n t e r f o r H u m a n i t i e s i n M e d i c i n e

Cover:

Teamwork is the essence of Mayo. In this photograph, circa 1913, staff and visitors exchange ideas and information during surgery. The term "Mayo Clinic" evolved from these educational sessions. Today, Mayo continues to value individual initiative and group effort.

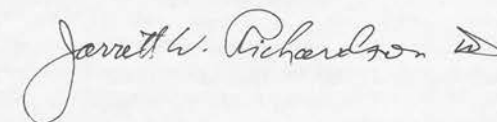
Preserving values and advancing progress

On behalf of my colleagues at Mayo Clinic, I appreciate your interest in the publication, *Teamwork at Mayo: An experiment in cooperative individualism*.

This publication will acquaint you with the heritage and values of Mayo, which guide our work today and help set our course for the future. You will see how Mayo has evolved from a family practice on the Minnesota frontier to become the world's largest and most comprehensive private medical system. You will learn how our programs, buildings and art reflect our primary value: the needs of the patient come first.

The creation of this book is an example of teamwork at Mayo. The author of this volume is Carolyn Stickney Beck, Ph.D., a native of Rochester, cultural anthropologist and coordinator of Mayo Center for Humanities in Medicine. The book is edited by Matthew D. Dacy, Department of Development and a member of the Mayo Foundation Humanities in Medicine Committee. The publication of this book is made possible by the generous philanthropic support of Mayo patient and benefactor, Nancy W. Knowles-Kolden and the Knowles Foundation.

In 1931 on his seventieth birthday, Dr. William J. Mayo wrote: "I look through a half-opened door into the future, full of interest, intriguing beyond my power to describe ..." We share Dr. Mayo's excitement about the future, and we invite your own participation in creating that future with the patients and staff of "the Mayo family."



Jarrett W. Richardson, III, M.D.
Consultant in Psychiatry
Chair, Mayo Foundation Humanities
in Medicine Committee

"An ideal of service"

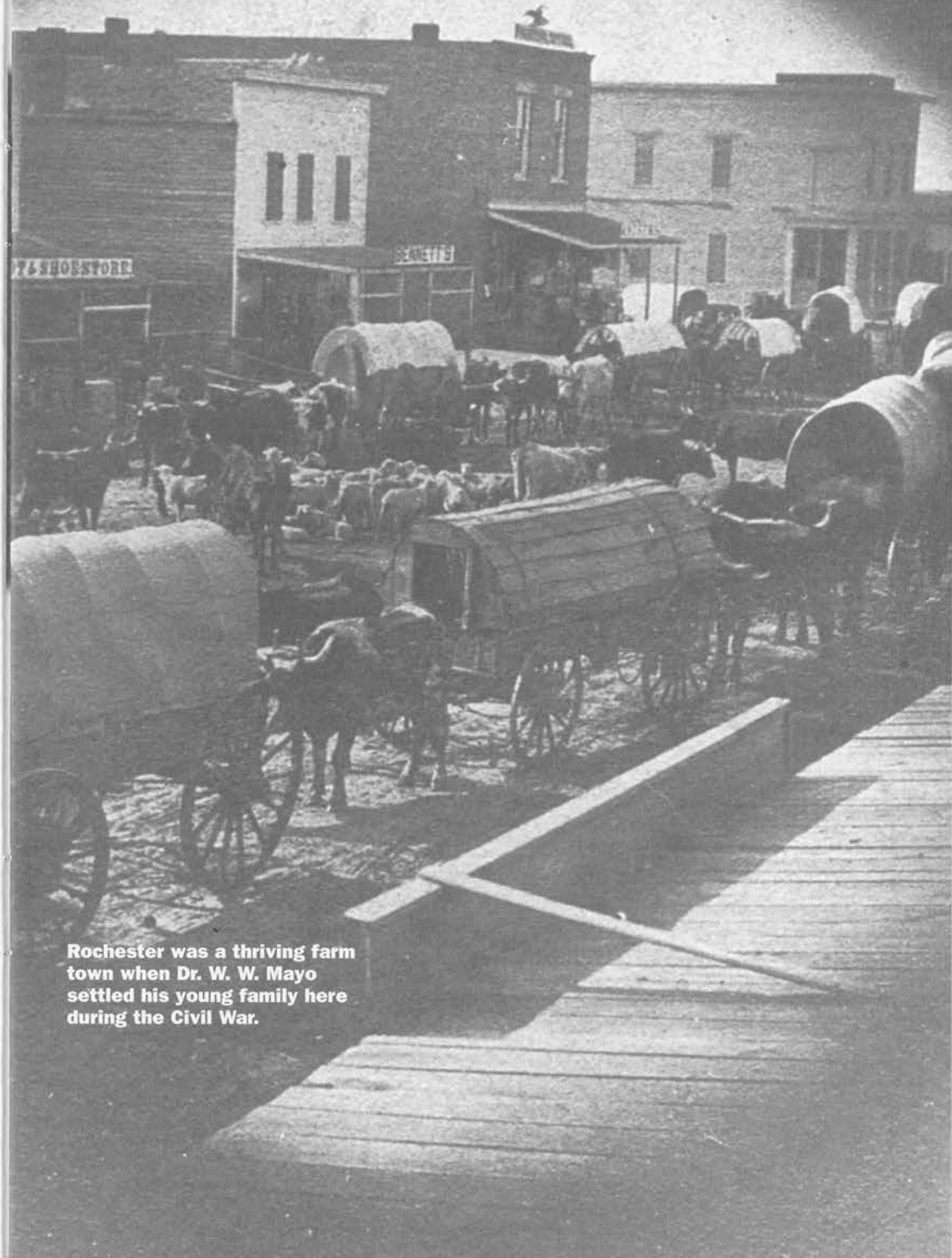
In 1941, the University of Minnesota Press published *The Doctors Mayo* by Helen Clapesattle, which is still regarded as the definitive historical interpretation of Mayo. In addition to interpreting the past, Ms. Clapesattle addresses Mayo's contemporary and future challenges and opportunities.

Ms. Clapesattle highlights three qualities that Dr. William James Mayo deemed vital for the continuation of this institution: an ideal of service rather than personal profit, a primary concern for each patient and every staff member's interest in the professional progress of all staff members. She raises an insightful question: "Whether attitudes and qualities so rare in mankind as those can be perpetuated in an organization beyond the generation of the founders is a social question of the first magnitude. As an experiment in cooperative individualism, the Mayo Clinic deserves watching – and not by doctors alone."

Conversations in Mayo Historical Suite indicate that people from all areas of the nation and the world are intrigued by Mayo. Their interest in comprehending the origins of Mayo is reflected in one of their most common questions: "What is Mayo's founding date?" A close look at that question provides a key to understanding Mayo's past in relation to its present and future.

Connections of caring

There are many important dates in the history of Mayo, but there is no founding date. Developing gradually, the Mayo enterprise of today is the culmination of a family's commitment to caring for the sick. As a result, we must search beyond a temporal framework to discover the essence of Mayo, which is the



Rochester was a thriving farm town when Dr. W. W. Mayo settled his young family here during the Civil War.

principle that the needs of the patient come first. Uncovering that principle reveals how widely and deeply Mayo is rooted. This rooting springs from the Mayos' genius in connecting people across generations and great distances, centering the connection in a timeless principle of caring. This genius for creating caring connections was nourished by their remote location, which demanded both innovation and cooperative effort.

Dr. William Worrall Mayo emigrated from his native England to the United States, arriving in New York on August 22, 1846. He received his first formal medical training in Indiana, where he graduated from Indiana Medical College at LaPorte in 1850. When his mentor, Dr. Deming, joined the University of Missouri Medical Department faculty, Dr. Mayo worked as his assistant, receiving a degree from that university in 1854.

Returning to Indiana, he contracted a malaria-like disease. Impatient with his suffering, he announced to his wife, Louise Wright Mayo, that he was setting off to discover a place where he could regain his health. At the time, there were frequent reports of the healthful climate and beautiful country in Minnesota. So it is not surprising that his explorations led him there. He and his family settled in St. Paul in 1854, moving to Le Sueur in 1856.

Dr. Mayo's decision to move to Minnesota was based on his experience as a patient seeking a cure. His commitment to discovery and dedicated service for the patient's benefit was thus first evident in his own life.

The intensity of that commitment is apparent in its transmission over generations. In 1968, his grandson, Dr. Charles William Mayo, said: "The exacting Mayo



The Mayos traveled extensively to share medical knowledge. Dr. Will's family sails to Russia in 1914.

**"No one is big
enough to be
independent
of others."**

W. W. Mayo

William Worrall Mayo, M.D.

Clinic of today is a reflection of my grandfather's personal style as a doctor. He was a perfectionist who was readily infuriated by sloppy or second-rate work and was always delighted at any opportunity to improve medicine.... The Mayo Clinic (is) the extension of that angry little man's implacable integrity."

Quest for knowledge

Dr. W. W. Mayo's quest for new opportunities and knowledge resulted in long periods of solitary exploration. Balancing this with a commitment to family and community was one of his most notable accomplishments. His sons frequently recalled his precept, "No one is big enough to be independent of others." This precept is one of his most profound influences on his sons.

In 1863, Dr. Mayo's skill as a physician was recognized when President Lincoln appointed him as a Civil War examining surgeon for the Union enrollment board, first Minnesota district. As a result of this appointment, the Mayo family moved from Le Sueur to Rochester, where the enrollment board was headquartered.

Rooting the family enterprise in a small, rural community rather than a metropolitan area has profoundly influenced Mayo's development. Because of this origin, over the years thousands of Mayo staff members have received their fundamental schooling in farming. This training is an important influence in the well-regarded Mayo work ethic.

The Mayo brothers often used farming as an analogy for their practice, saying that they were reared in medicine as farm boys are reared in farming. Their parents understood the important lessons in farming. In 1914, Dr. Will received a letter from Andrew Seeverts,



Harry Harwick established sound business principles and helped foster the partnership between physicians and administrators that is a hallmark of Mayo.

a Byron farmer. Mr. Seeverts recalled a conversation about a cow which Dr. W. W. Mayo offered to buy from him during a visit to the Seeverts' farm to care for their children:

WM: Can't my boys take her down?

AS: No, they are too young.

WM: Will she lead?

AS: No, you put a halter on her and take her out of the stable and she will act just as awkward and mean as she can.

WM: I'll send the boys tomorrow anyhow. It will keep them out of mischief and they will learn something.

In his letter, Mr. Seeverts asked Dr. Will the rhetorical question, "Yes, they learned something, didn't they?" What they learned and taught is aptly summarized in a comment by an English surgeon who trained at Mayo: "The most amazing thing of all about the Mayo Clinic is the fact that hundreds of members of the most highly individualistic profession in the world could be induced to live and work together in a small town on the edge of nowhere, and like it!"

The surgeon's comment highlights one of the keys to Mayo's development: replicating Dr. W. W. Mayo's balance of innovative individuality with commitment to community.

A mother's influence

Much of the credit for this balance rests with his wife, Louise Wright Mayo. According to her grandson, Dr. C. W. Mayo, she was responsible for the family staying in Rochester rather than continuing to move. Mrs. Mayo's talents included a well-regarded business acumen that provided financial stability for the family

"The biggest thing Will and I ever did was to pick the father and mother we had."

Charles H. Mayo, M.D.

and the medical practice in the early years. Dr. Charles Horace Mayo paid tribute to his mother's expertise in patient care:

"Patients used to call at the house for father. There were no telephones, and if mother knew he was out in the country, she would keep the patients interested, discussing their troubles and problems, until he returned, even if she had to prepare a meal for them. Often the neighbors and the country people came to talk to her ... with as much satisfaction from a social standpoint as they got from consulting my father when sickness descended on them. When father was taking special studies in the East or in Europe, patients came to mother to talk about illness and she told them of the simple remedies, which would tide them through the most common illness. Mother was a real good doctor herself." In honoring his parents, Dr. Charlie said: "The biggest thing Will and I ever did was to pick the father and mother we had."

In 1883, Dr. Will joined his father's practice after graduating from the University of Michigan Medical School. Dr. Charlie arrived home from Chicago Medical College of Northwestern University to begin practice with them in 1888. In recognizing the importance of their family, the Drs. Mayo acknowledged the significance of durable human relationships in building a successful organization. The origin of Mayo in a family committed to a common goal is among its strongest assets. Today, the emphasis on collegiality and mentoring expresses this family origin, profiled by Ms. Clapesattle: "The Doctor was vitally interested in the problems and needs of his profession and on those long country drives or in conversation at table or before the fire at home he introduced the boys to

the principles and ethics of the profession." The Mayos' ability to choose partners who could extend their reach without losing the essence of their family enterprise was a noteworthy talent.

The Sisters of St. Francis were the first partners of the Drs. Mayo. Beginning with the devastation of the 1883 tornado, Mother Alfred Moes and Sister Mary Joseph Dempsey joined the Mayos in demonstrating that creative response to suffering could generate professional partnerships between doctors and nurses, men and women, lay people and religious leaders. Speaking of the founding of Saint Marys Hospital in 1889, Dr. W.W. Mayo corrected the misperception that he had founded the hospital, saying that the Sisters of St. Francis deserve credit for the inception and funding of the hospital; he acted merely as an agent to carry out their wishes. Dr. Will Mayo spoke of Sister Mary Joseph Dempsey as the finest of all his nurse and physician surgical assistants. She founded Saint Marys Training School for Nurses in 1906.

Importance of partnership

The Mayos' resolve to work with physicians in other communities was first evident in 1892 when they invited Eyota physician Dr. Augustus Stinchfield to join their practice. Drs. Graham, Millett, Plummer, Judd and Balfour eventually joined as partners. A major advantage of group practice is the opportunity to increase the knowledge and skill provided to patients by traveling to study with other experts. This opportunity also fosters the collegiality necessary for perpetuation of the practice. Leaving the practice in the hands of one's colleagues is an affirmation



Mayo researchers Drs. Edward Kendall (center) and Philip Hench (right) shared the Nobel Prize for their development of cortisone.

**The Mayos
created a system
of healthcare
when there was
no model to
follow.**

of their capabilities. Drs. Will and Charlie and other Mayo staff members followed in Dr. W. W. Mayo's footsteps by traveling extensively in the United States and abroad.

During such national and international trips, the Mayos and their associates established a wide-ranging network of acquaintances who often recommended people that might be interested in joining their practice in Rochester. Through such a recommendation, in 1907 Dr. Will invited Maud Mellish to develop editorial and library services for the staff. She inaugurated the publication now known as *Mayo Clinic Proceedings*. In 1914 she was appointed director of the new Division of Publications, becoming the first woman to head a Mayo Clinic division.

The Mayos' ability to assess the expansive needs of a specialized practice when there was no existing model for it was a mark of their capacity for innovation. Aware that they needed further help in the administration of the practice, they invited Harry J. Harwick to join them in 1908. Mentored by Dr. W. J. Mayo, he pioneered the development of medical administration to free physicians' time to care for patients.

New concepts to house the group practice of medicine

After decades of renting space in existing buildings, the Drs. Mayo and their associates constructed a new building designed specifically for the integrated group practice of medicine, the first building of its kind in the world. It was eventually known as the 1914 building.



The 1914 building incorporated many principles of teamwork and patient care at Mayo. Today, Mayo has greatly expanded, but our values remain the same.

At the cornerstone ceremony for this building, which stood on the site of the current Siebens Building, Dr. Will said: "Within its walls all classes of people, the poor as well as the rich, without regard to color or creed, shall be cared for without discrimination." With the completion of this building, the Mayos' practice was officially called Mayo Clinic, a name used by visiting physicians and patients long before it became official.

Designing and implementing a well-organized group of specialists to provide maximum benefit to patients was a central concern of the Mayos. Reflecting on these early years, Dr. Robert Mussey, founder of Mayo's Obstetrics and Gynecology Section, noted another Mayo innovation: "That the physical examination was complete can be emphasized, for in the second decade of this century, it was rare indeed for the patient to be given a complete physical examination in the office, and not always was he given such an examination when he was in the hospital. It is my opinion that aside from reports of good results of surgical operations performed by the Mayos, the reputation of the clinic in the early years was largely built on the thoroughness of history taking and examination of the patient."

The Mayos' concept of team effort encompassed their loyalty to community and nation. They led the Clinic's effort in World War I by serving on the executive committee of the General Medical Board of the Council for National Defense. The board established 50 base hospitals overseas. In Allerey, France, Base Hospital No. 26 became known as "the Mayo unit," because so many Mayo staff served there.

Drs. Will and Charlie contributed the assets of their medical practice and the majority of their personal savings to create what now is Mayo Foundation.

This hospital was a surgical unit for 10 surrounding base hospitals. Nell Bryant, a nurse from Mayo, was among the staff who served there. In a letter to her sister, she quoted a citation from the commanding general, which said: "...the officers, soldiers and nurses gave proof of a skill and a self-sacrificing devotion to duty that is beyond all praise. Through their ministrations, our wounded received every comfort and assistance that human sympathy could administer."

Planning for the future

Against a background of international crisis, innovation continued at Mayo. In 1915, Mayo Graduate School of Medicine was established. Physicians in training were known as "fellows."

In addition to coordinating specialists to enhance patient care, the Mayos innovated by integrating research and education with practice. Their program became the first in the world to train medical specialists. Today, more than 11,000 alumni of Mayo Graduate School of Medicine are a significant measure of how widely the Mayo approach to medical care is rooted.

In an act of vision and courage, the Mayos completed their gift to future generations of patients by extending their extraordinary generosity beyond the Graduate School of Medicine. In 1919, they founded Mayo Properties Association (today known as Mayo Foundation).

G. Slade Schuster, emeritus head of administration, rightly interprets this act as a "decision of



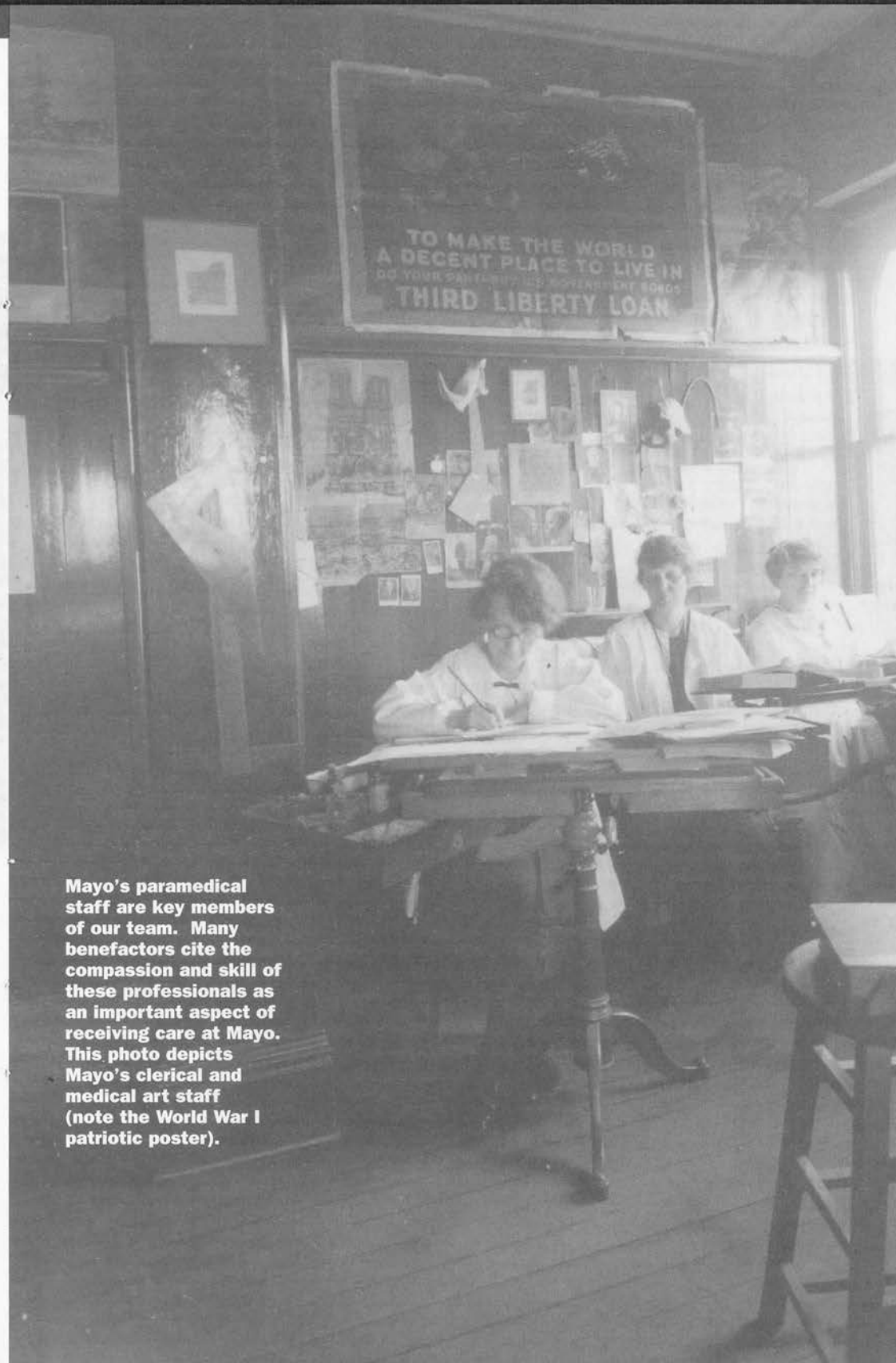
The Sisters of St. Francis were pioneers in nursing and hospital administration at Saint Marys Hospital.

renunciation and dedication," because it meant that the Mayos, their partners and all future Mayo physicians would receive a salary and not profit personally from the proceeds of the practice. All proceeds beyond operating expenses were henceforth contributed to education, research and patient care.

The philosophy of these innovations is summarized in Dr. Will's statement to the press in 1917: "We want to make the medical experience of the past generation available for the coming one and so on indefinitely, so that each new generation shall not have to work out its problems independently, but may begin where its predecessors left off. This foundation, its fund and all that goes with it are the contribution of the sick of this generation to prevent sickness and suffering in the next and following generations."

The Mayos' extraordinary generosity was a measure of their deep commitment to meeting the needs of patients. This encouraged similar dedication in their staff members, whose welfare was a primary concern of the Mayos; they understood that caring for patients also means caring for employees.

Social Service began at Mayo when Willa Murray and Cora Olson were hired to assist young women employed at Mayo with their personal needs. Before long, patients as well as staff were availing themselves of the information they provided. Recognizing these patient needs, Charlotte Bundy initiated the Social Service Section. In association with this section, volunteers initiated an occupational therapy program. This service also included interpreters for patients who did not speak English.



Mayo's paramedical staff are key members of our team. Many benefactors cite the compassion and skill of these professionals as an important aspect of receiving care at Mayo. This photo depicts Mayo's clerical and medical art staff (note the World War I patriotic poster).

Ongoing innovation

Major innovation continued when the Mayos' interest in research culminated in the construction of Institute Hills in 1924. The humane use of animals for experimentation has been a continuing ethical priority of Mayo from the beginning. This facility has been the site of research that has resulted in life-saving treatments for such conditions as heart disease, cancer, leukemia, Hodgkin's disease, gastrointestinal diseases, multiple sclerosis and hemophilia.

Providing innovative facilities is a continuing resolve at Mayo. Dr. Henry Plummer was chiefly responsible for the design and systems of the 1914 and 1928 buildings. The systems he devised included telephone communications, in-house telegraphy, multi-light signals, cross-indexed patient records, a power plant, subways and a pneumatic tube delivery system. His architectural and engineering talents created the physical foundation for the Mayo's integrated group practice.

Dr. Will Mayo gave him the ultimate praise, saying that hiring him was the best day's work he ever did for the Clinic. In addition to acknowledging the genius of Dr. Plummer, this conveys Dr. Mayo's awareness that his associates' talents were as important as his own.

The efficiency of the Plummer Building and its systems is matched by its architectural and artistic beauty, which includes the carillon. The Plummer Building dramatically portrays the Mayos' attention to the total needs of the patient. As carillonneur Jimmy Drummond said, "Here science serves, enthroned by architecture and crowned by music."



Charles Lindbergh worked with Mayo researchers to develop anti-blackout technology for pilots. Innovative research is an essential part of Mayo's practice today in Arizona, Florida and Minnesota.



The Mayo logo depicts three interlocking shields. They represent patient care, medical research and medical education.

The Plummer Building exemplifies the Mayos' dedication to providing a friendly, reassuring environment for patients. From the early 1860s, Mayo staff members have reflected that devotion in their manner of work. Legends have grown up around many of these local heroes, such as Joseph Fritsch, affectionately known as "Joe Clinic." Serving more than 45 years with General Service, he was the Plummer Building doorman from 1928 to 1954, welcoming patients and staff alike.

The Mayos' unwavering concern for the total needs of the patient was a result of their unique ability to comprehend far-reaching dimensions of their immediate concerns. Their understanding of their connections with and responsibility to preceding and succeeding generations also manifests this unique ability. A holistic view of their work is, perhaps, their hallmark.

Sustaining the legacy

As they advanced in years, the Mayo brothers sought assurance that the organization they had created would survive beyond their lifetimes. Accordingly, they stepped down from the Board of Governors in 1932. At that time, a Mayo Clinic scroll was created to express the collegiality that is central to the continuation of their enterprise.

This scroll recognized the individual accomplishments of Mayo physicians who had been elected presidents of numerous medical associations. It says in part: "The Institution whose leaders are so honored shares the obligation thus imposed on its distinguished members as well as the splendid recognition which their peers have conferred upon them, for the institution and its members are obviously inseparable." The Mayos are not treated specially in this scroll; they are listed alphabetically with their colleagues.

During World War II, Mayo offered its services to the government for \$1 per year. Mayo's research led to pioneering advances in aviation medicine. Mayo has had an important influence on commercial and military aviation as well as the space program.

The Mayos were wise in tending to the collegiality that sustains the institution, especially in times of stress. In 1939, the strength of Mayo Clinic was tested by the deaths of Dr. Will, Dr. Charlie and Sister Mary Joseph, all in the same year. Three major leaders passed together, during a period of economic depression and impending war. Mayo was able to survive these challenges, because it had developed wide and deep roots.

The resourcefulness which had been nourished by the Mayos was also evident in the founding of Mayo Clinic Women's Club. Women staff members pooled their energy and finances, establishing the club to provide insurance for unmarried women. This club was eventually housed in the former home of Dr. E. Starr Judd and his family. It became an important residential and social center for secretaries, nurses, desk attendants, laboratory assistants and other women who worked at Mayo. The club continues today as the Friendship Club.

Mayo people challenged by World War II rose to the occasion to provide medical services. In addition, Mayo expanded the research that had resulted in the BLB Oxygen Mask by establishing an aeromedical research unit, offering its services to the government for \$1 per year. The unit developed the anti-blackout "G" suit. A modified version of the original "G" suit is worn today by military pilots. The unit also originated the Mayo-1 or M-1 maneuver. This self-protective technique, in which a flyer takes a deep breath, then slowly forces air through the mouth, increases pressure around the heart so it can pump more blood to the head. The "G" suit and M-1 maneuver saved countless lives and gave the Allies

an advantage for the duration of the war. This aeromedical research has led to advances in patient care at Mayo, including methods and instruments for heart catheterization.

Mayo research achievements were recognized in 1950 when Drs. Kendall and Hench shared the Nobel Prize for the development of cortisone. Innovations in the development of physical facilities to meet the needs of Mayo patients continued with the construction of Rochester Methodist Hospital in 1954. This hospital pioneered the radial unit design, a concept that has been adopted by many other medical centers.

On the site of Central School, where Drs. Will and Charlie had been educated, the Mayo Building was completed in 1955, with an additional eight stories erected between 1966-1970. Like the 1914 and 1928 buildings, it perpetuates Dr. Plummer's systems as a foundation for teamwork in service to patient needs.

"A spiritual quality"

Events such as holiday concerts presented by staff for patients represent Mayo's long-standing musical tradition. This tradition is expressed by Dr. Will in his address to the faculty on November 21, 1932, in the midst of the Depression: "We know only too well the necessity for efficient management, but there is a spiritual as well as a material quality in the care of sick people, and too great efficiency in material details may hamper progress."

This expansive view of medical care was apparent during the Mayo centennial in 1964. The featured event of this extended celebration was a symposium of distinguished scientists and other leaders who

offered their reflections on the Mayo Building murals theme: Mirror to Man. Their presentations focused on human adaptation to an expanding environment. Staff, patients, Rochester citizens and many national and international visitors joined the celebration, which also included exhibits, concerts and parties.

Since there is no Mayo Clinic founding date, 1964 was chosen to celebrate our origins, because it expresses how widely and deeply Mayo is rooted in many places and many lives. It commemorated the births of the Mayo brothers, Will in 1861 and Charlie in 1865. It was also the centennial of Dr. W.W. Mayo's arrival in Rochester, the 50th anniversary of the Mayo Graduate School of Medicine and the 1914 building, as well as the 75th anniversary of the founding of Saint Marys Hospital. With the issue of a special U.S. postal stamp, the nation joined in the Mayo celebration.

Soon after the centennial celebration, there was another Mayo milestone. In 1968, Dr. Charles William Mayo, son of Dr. Charlie and nephew of Dr. Will, died. With his passing, there were no longer any physicians who were direct descendants of the founders on the staff of Mayo Clinic. This transition was honored by the closing of the Plummer Building bronze doors, a rare event. From this time forward, the responsibility to perpetuate the Mayo heritage was transferred to all staff members, who by this time had come to think of themselves as "the Mayo family."

Extending the family

This extended family network was growing rapidly. In 1972, Mayo Medical School was established to expand Mayo's education programs to the undergraduate

**Mayo is committed
to cultural
diversity including
respect for
patients, staff
and communities.**

training of physicians. The training of physicians at Mayo includes reaching out to diverse people and educational opportunities far afield from Rochester.

Dr. Roberta Matern describes her experience: "I grew up as the daughter of medical missionaries in Asia. As a result, I am from Vietnam, Nepal, India, California, Nevada and Arizona. By blood, however, I am Navajo. I continually endeavor to understand my heritage and perhaps not surprisingly, mainstream culture as well. Mayo has provided me with excellent and challenging opportunities to further develop my broad culture in both these areas. In the Fall of 1994, I was able to conduct survey research among Navajo cancer patients. The experience was frustrating almost beyond endurance, yet I cannot deny the invaluable lessons I learned regarding my people and their attitudes toward death, disease, 'outsiders' and Western medicine."

Continuing Mayo's mission to extend its approach as widely as possible without compromising its distinguishing features, Mayo Clinic Jacksonville opened in 1986 and Mayo Clinic Scottsdale in 1987.

Extending Mayo's integrated practice is also a regional effort. Mayo Health System, for example, is a growing regional network that began to proliferate in 1992. Mayo Health System continues the Mayo family's outreach into surrounding communities in the early days of their practice.

Connecting with our heritage

There are many ways in which Mayo people who have grown up with the Clinic, and those who are



Early surgery at Saint Marys Hospital: Dr. W. W. Mayo assists his young sons, Drs. Charlie and Will.

newly associated with Mayo through group and regional practices, can appreciate their commonality as well as their unique histories. Blending of disparate experiences in diverse geographic areas based on commitment to the common goal of meeting patients' needs is a steadfast tradition at Mayo which can serve us well at present and in the future.

The Foundation House, built as a private residence by Dr. Will and his wife, Hattie Damon Mayo, in 1918, is a meeting place for Mayo staff and visitors. It allows us to sense connections with preceding and future generations and with people from diverse backgrounds.

One particular sculpture, depicting an Indian boy on the grounds of Foundation House, symbolizes the Mayos' appreciation of the arts as a means of enhancing communication and understanding. Sculpted by John K. Daniels of St. Paul, this piece reflects Dr. Mayo's philosophy that physicians should be able to "sympathize with all classes and all people in the hour of their need, putting aside all bigotry and intolerance which would defeat the very object of our convictions by putting us out of touch with people of different views." This sculpture reminds us that every person is unique and every patient-caregiver relationship is a distinctive creation.

The Mayos understood nature as a source of new, invigorating perspectives. Dr. Charlie was relaxed and energized by his farms. Dr. Will was especially fond of boating on the Mississippi. They often shared their homes and boats with staff and guests. Today, the landscape retreats, art exhibits and architectural resources throughout the Mayo system continue this

**"The best interest
of the patient is
the only interest
to be considered."**

William J. Mayo

William J. Mayo, M.D.

dimension of the Mayo legacy. They encourage solitary exploration, which can lead to innovation and individual initiative.

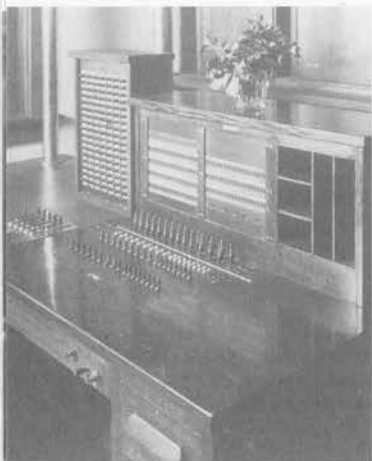
History: a resource for today and tomorrow

Everyone at Mayo makes choices in relationship to the Mayo legacy. Will we use our creativity and individuality to keep this legacy vital? Or will we view this legacy as history disconnected from our present and future? Our answers to these questions will determine the outcome of this experiment in cooperative individualism.

How is Mayo history a resource for the present and the future?

Approximately 20,000 people a year, Mayo staff, patients, visiting clinicians and scholars, visit Mayo Historical Suite on the third floor of the Plummer Building. As they tour the original offices of the Mayo brothers and the original Board of Governors room, they learn details of Mayo history and experience the feeling of the earlier days of the practice. They often express appreciation for feeling connected to Mayo in a new way. Considered in aggregate, their comments draw attention to the Mayo paradox: a blend of homespun comfort and national and international high-tech expertise.

The focus is on homespun comfort when we consider the perpetual fascination with the family relationships that generated the practice: the brothers with each other, with their parents and colleagues. Acclaimed expertise is the focus when staff and visitors see the wide reach of Mayo throughout the world. For many



Mayo's 1914 building had an innovative intercommunicating system. Operators at this switchboard used a telegraphic code to page staff members. The video and satellite systems that now link Mayo sites in Minnesota, Arizona, Florida and beyond continue this tradition of technology focused on the needs of our patients.

people who tour the historical area, the Board of Governors room is particularly meaningful. Visitors from many places and walks of life enjoy seeing the academic regalia, honorary degrees or other awards from their university or native country in the Board of Governors room and hall.

For staff, Mayo history can invigorate dedication by illuminating the importance of human relationships in healthcare. At the same time, sensing the challenges and opportunities facing our predecessors can increase our comprehension of individual creativity and innovation. This comprehension can activate our unique, individual talents for our own benefit as well as patients' welfare. Realizing this, we understand that patients, as well as Mayo staff, are partners in the Mayo legacy.

There are many activities at Mayo which express innovation and cooperation. The Women's Cancer Program, for example, has held a variety of educational programs that address the art and science of medical care, offering patients, their loved ones and care givers a wide range of resources.

The needs of the patient come first

At Mayo, education and research have always been essential to serving patients' needs. The familiar Mayo logo is three intertwined shields. You will note that one shield, which represents patient care, stands forward from the other two, which represent research and education. This logo conveys the fundamental Mayo principle: the needs of the patient come first.

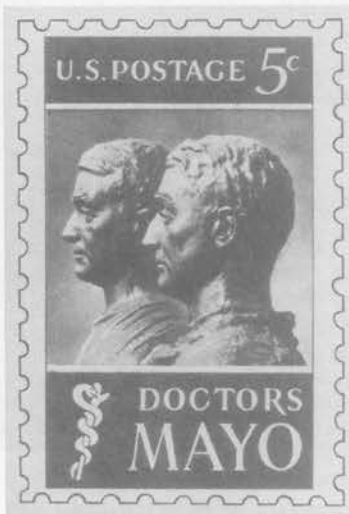
Decision-making at Mayo involves consensus as well as individual initiative.

The interlocking shields highlight the complex, extensive network of people who serve the needs of Mayo patients. Mr. Harwick reminds us of the Mayos' fidelity to both teamwork and individual initiative as foundations for this network.

He notes that Dr. Will found administration more exhausting than medicine and surgery, and then elaborates: "The Mayos believed that no group or individual in any society can have a monopoly on ideas. Believing this, they would discuss all but the most confidential Clinic-related problems with many people, usually those within the Clinic but sometimes those outside of it, and let these other opinions leaven their own thinking. Then, and only then, would they make a decision. Next, they would turn the project over to an individual or small group that they trusted, and allow sufficient time for the project to be put into operation. They would further allow for a period of trial and error, restudy the results, and make changes where necessary before adopting the new policy or procedure permanently. Looking back now, I remember times when this seemed to be an agonizingly slow process, but certainly in the long run the value of this approach to solving problems has been proven time and again.... The Mayos did prefer to act thoughtfully and deliberately. In an emergency, however, they could move with swift, incisive decision."

Mr. Harwick's interpretation of the Mayos' management style conveys its sturdy quality, a well-balanced synthesis of cooperation and innovative, individual initiative. This synthesis is our link to the past and key to the future.

The golden age of medicine is ahead of us



A postal stamp was issued to honor Drs. Will and Charlie during the Mayo Centennial. Today, their creed is our abiding commitment: "to heal the sick and advance the science."

"The needs of the patient come first."

These seven words describe much of our history and help define our future. In this era of rapid change in American healthcare, some have said the golden age of medicine is over. We say the golden age is ahead of us, and within our reach if we are able to change and adapt, while remaining focused on our primary value. We must accept change and work together to enhance the quality of care that we give to our patients.

The quality of care provided to Mayo patients reflects the strength of families and communities associated with Mayo. In turn, as an experiment in cooperative individualism, Mayo can encourage all of us to create healthy families, organizations and communities that adapt pioneering traditions to meet the challenges of today and tomorrow.



The fine arts are represented in this panel from the bronze doors of the 1928 Plummer Building at Mayo Clinic Rochester. The artistic elements that distinguish the building speak of Mayo's mission to unify the art and science of medicine in service to each person who enters the door.

Mayo Center for Humanities in Medicine provides leadership for integrating the arts, history, and ethics with medicine and the biomedical sciences in order to encourage a broader understanding of people in health and illness.

The Center creates channels of coordination and communication for existing humanistic initiatives, as well as didactic experiences through lectures, dramatic performances, art exhibits, music programs, historical displays and interpretations, reports, publications, and conferences. The Center cultivates a lively sense of the past in relation to the present and future among all members of the Mayo family, in order to perpetuate Mayo history as a vital contemporary resource for insuring commitment to the integrity and quality so clearly represented by our founders.

The goal of the Center is to foster compassion, sensitivity, and insight in patient-caregiver relationships and to support professional collegiality. This goal is grounded in Mayo Foundation's commitment to respect for the individual, cultural diversity, and the collective benefit, based on the ideal that the needs of the patient come first.

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**Mayo Foundation for
Medical Education and Research**
200 First Street SW
Rochester, Minnesota 55905

<http://www.mayo.edu>

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MC0912/R0298

There Goes the Neighborhood!!!!

My farm lies on the border with Fillmore County just inside Mower County. I'm a third generation Pork Producer living on a 900 sow farrow-to-feeder farm adjacent to my Grandfather's farmstead. When I went to school in the sixties and early seventies a great deal of change occurred in the cash cropping industry. The Nixon administration greatly expanded foreign demand for grain. Modern technology including chemicals and larger machinery became common place. I remember many older farmers in their sixties that still farmed a quarter section and raised some livestock. Many of these farms have become non-agricultural residences for commuters into Rochester and Spring Valley. The land has become cash rentals to large cash crop farmers.

I also live on the edge of the Southeastern Minnesota karst geological area. This transition between the rolling hills and the prairie makes for beautiful building sites with vistas. My neighbors are good people who for the most part just want to enjoy quiet country life. I'm lucky in that I have good relations with my neighbors. This luck is partly do to the fact, that I'm a third generation resident and they knew what to expect when they moved into the neighborhood, but also we have tried hard to be a good neighbor.

Even though my neighbor relations are good, I will not expand my business at this site. I have chosen a site 2.5 miles west of my current location. I'm still a little weary, but with a one new house in 160 acre rule in Mower County, I felt confident that I would not be surrounded by non-Ag residences in the near future. I also felt that Mower County of any County in Minnesota should maintain a commitment to my industry. Other Counties such as Fillmore have shown less resolve in protecting the livestock industry. It is just too crowded around my farm with eight residences within one half mile to think about expanding. My new site, while being only 2.5 miles away has a separation of .75 miles from all residences except for one. The Southwest winds will only affect one house within one mile. I'm sure there will be those that will smell my 1500 sows that have not smelled them before. My hope is for tolerance and new odor reducing technologies.

I have also decided to expand in Iowa. This year 80% of our expansion in contract finishing was in Iowa. Before 1998 we had no barns in Iowa. Minnesota's regulations coupled with Rochester encroachment is driving my business south.

How does a neighborhood change? Here is a summary of a 3 X 4-mile map surrounding my farm.

Green Dots(14)-Agriculture residences that make the majority of their income off of Agriculture

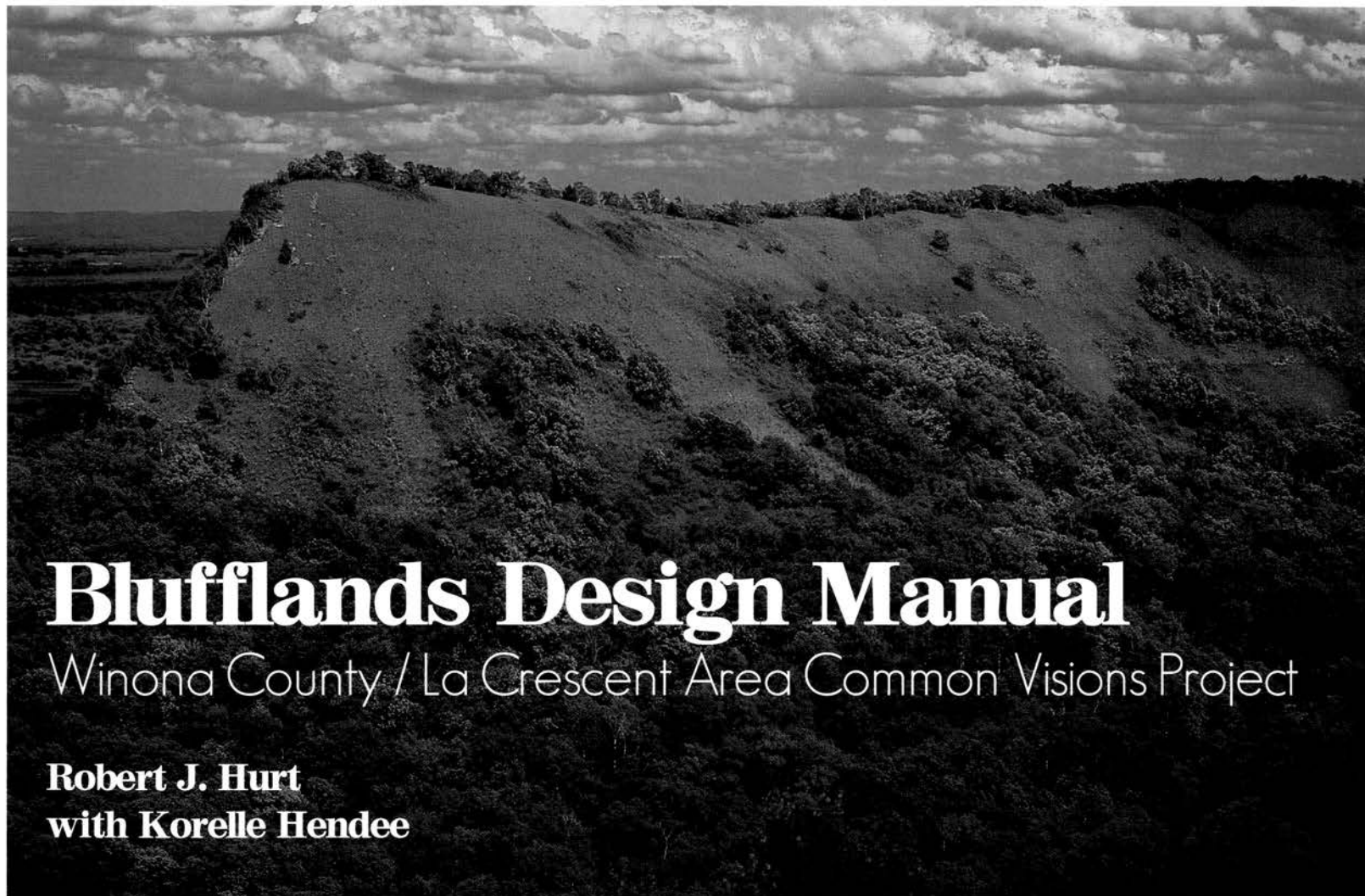
Maroon Dots(30)-Are non-Ag residences that were once working farms and now derive most of their income off farm

Orange and Blue Dots(30)-Are non-Ag residences that in my lifetime has always derive most of their income off farm

Yellow Dots(8)-Are non Ag uses other than single residences. They include: a cemetery, a racetrack, a private campground, a commercial storage rental, a commercial campground, a private pond with a campground, a restaurant, and a new rural subdivision.

X's on the orange, blue and yellow dots means those residences and non-Ag uses have developed on barren sites.

In my 42-year life span so far we have gone from 44 active farms to 14. The non-Ag residences have gone from 16 to 60. In my Township I have only my active hog farm, 3 dairies and two farms with more than 10 beef cows. We have over 250 registered voters the same township.



Blufflands Design Manual

Winona County / La Crescent Area Common Visions Project

Robert J. Hurt
with Korelle Hendee

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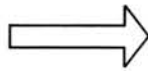
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REVISED PROJECT TIMELINE / SCHEDULE OF ACTIVITIES

August, 1995
through
December 1995



August 1995
through
October 1996



July 1996
through
July 1997



November 1996
through
August 1997



September 1997
through
June 1998

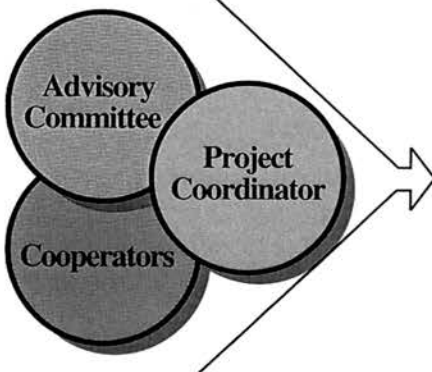


July 1998
and
Beyond

The Winona County / La Crescent Area Common Visions Project

An Interdisciplinary and Cooperative Growth Management Pilot

Introduction of Project to the Public & Kickoff Activities



Project Team

The Winona County / La Crescent Area Partnership

- Coordinate with local, regional, & state Cooperator Groups
- Build support for the project ... provide a series of public information meetings / slide presentations illustrating the value of scenic rural landscapes, historic sites / architecture, & small town life ... and explain some of the growth trends and changes that are taking place that are causing concern regarding the future of these assets. Present case studies of thoughtful solutions in local land-use planning & design.
- Form Citizen Advisory / Steering Committees and Study Groups to assist with the project activities

Gather and Study Related Information
(land-use issues, local concerns, trends, facts, examples, etc.)

- Meet with local people, units of government, and organizations to determine local issues / concerns.
- With the Study Groups examine relevant topics ... growth trends, sprawl development, small town vitality, loss of ag lands, loss of natural areas / scenic landscapes, historic sites, affordable housing, quality of life concerns, etc.
- Review zoning and land-use documents and regulations
- Study "models" of attentive planning initiatives and review creative design tools that allow for economic development and conservation / stewardship

Share Related Information With Local People and Local Government Officials

- Prepare and illustrate relevant information (*trends, facts, figures, issues, concerns, case studies, etc.*) for public presentations
- Continue to build a broader citizen base for the upcoming grassroots planning process. Together with the citizen Advisory / Steering Committees and Study Groups conduct public meetings (*present information to local people and local government officials and seek feedback*)

Conduct a Grassroots Planning Process
(including a Regional Conference)

- Conduct a 2-day Regional Conference on Growth Management, resource protection, & rural land planning issues
- Conduct a series of Participatory Planning Sessions
- Identify a "Common Vision" for the Blufflands Landscape of Winona County and La Crescent Area
- Research and document various long-range planning approaches and land protection tools for the project area (potential Implementation Options)

Develop and Publish a Blufflands Design Manual

- Further research and document various long-range planning approaches and land protection tools for the project area (potential Implementation Options) and create a Blufflands Growth Management Framework Plan
- Develop a Blufflands Design Manual (*The Blufflands Design Manual will photographically and descriptively illustrate the important components of the Blufflands Landscape. It will also illustrate examples of design and planning concepts which can help accomplish the long-range planning goals identified by local citizens throughout the planning process.*)

Anticipated
Future
Outcomes

Implementation Strategies

Winona County Comprehensive Plan

Inter-Governmental Planning and Development

Inter-Disciplinary Planning

Local Officials / Citizen Awareness

Schedule of Activities

Related Background Experience

Robert J. Hurt, Principal of Architectural Environments, Dakota, MN.

Registered Architect

■ Minnesota 1976, Wisconsin 1974, Colorado 1972, and NCARB National Certification 1976

Education

■ Bachelor of Architecture, University of Illinois - Graduated in 1966 with College Honors

Architectural and Planning Experience

Robert Hurt has had 32 years of architectural and planning experience. The most recent 22 years of professional experience is as principal of Architectural Environments, located in Southeastern Minnesota. The ten years prior he practiced architectural and planning in Chicago, IL., Aspen, CO., and La Crosse, WI. Mr. Hurt's architectural practice has had a primary focus on Historic Preservation, Downtown Renovation, City Park & Waterfront Planning, Long-range Planning, Master Site Planning, and new architectural design and land planning that blends with the natural surroundings. Mr. Hurt has received a number of Architectural Awards at national, regional, state, and local levels. Clients have included city, county, & state government, private business, nonprofit organizations and private individuals.

"Common Visions for Minnesota Blufflands" LCMR funded Pilot Project

From 1995 to 1998 Robert Hurt was the Project Coordinator for the Winona County / La Crescent Area "Common Visions for Minnesota Blufflands" project. Mr. Hurt was the recipient of a \$304,000 grant from the Legislative Commission On Minnesota Resources to spearhead a pilot project on Growth Management for the State of Minnesota. The project studied growth and development issues as well as alternative solutions to urban sprawl and scattered rural development trends. The project consisted of working with local citizens and local public officials to raise awareness about the implications of current growth and development trends, to seek out a common vision for the future of the Blufflands landscape, and to study long-term sustainable development solutions for shaping the future of the regional landscape.

Photographic Experience

Robert Hurt has been involved with serious photography work for more than 30 years. For the past 5 years he has been doing aerial photography for his firm Architectural Environments and for the Common Visions for Minnesota Blufflands land-planning project ... and most recently he has been hiring out these services to other organizations.

The aerial work that he does is primarily oblique shooting. Mr Hurt has been achieving extremely high quality results, much of which can be attributed to his technique, artistic abilities, and specialized equipment combination. He uses a Mamiya 645 Pro medium format camera with 3 lenses for most of the aerial work, and a times, a Nikon 35mm camera with Nikon lenses. The piece of equipment that contributes considerably to the high quality images is a photographic gyro-stabilizer which is used with both camera systems. At present there are only 2 portable gyro-stabilizers in Minnesota (Mr Hurt's being one of the two), and no gyro-stabilizers are being used in Wisconsin. The end results consist of highly detailed and sharply focused images with a very rich level of color saturation. Much of the current aerial work concentrates on the Mississippi River and adjoining natural, rural, and community landscapes.

In addition, Mr. Hurt produces synchronized multi-media slide presentations in which he utilizes two Kodak Ektapro 9000 computerized projectors, an Arion Mirage 901 computerized dissolve unit along with a mini-stereo sound system. Recent landscape photography (both aerial and ground) has or will be appearing in publications and/or displays for organizations such as the Wisconsin Department of Natural Resources, Meredith Publishing, The Environmental Management Technical Center, Vermont Life, Iowa Natural Heritage Foundation, Commerce Now, Trust for Public Land, The Minnesota Land Trust, The Minnesota Science Museum, etc.,

architectural environments

625 Main St., PO Box 177, Dakota, Minnesota 55925 Telephone: 507-643-6761





FACT SHEET

Agricultural Development & Land Use Technical Assistance Program
Minnesota Department of Agriculture

Minnesota's Agricultural Land Preservation Programs

It is the policy of the state to encourage the use and improvement of its agricultural lands for the production of food and other agricultural products. (Minn. Stat. § 473H.01 Subd. 2)

METROPOLITAN AGRICULTURAL PRESERVES PROGRAM (MINN. STAT. CH. 473H)

The Metropolitan Agricultural Preserves Act of 1980 established an agricultural land protection program in the Twin Cities Metropolitan Area. This program provides a package of benefits to enable farmers near urban areas to continue farming on an equal footing with those farmers located outside the metropolitan area without pressures to sell or convert their land to other uses. The intent of the law is to protect important agricultural land in the Twin Cities metropolitan area from competing land uses, protect the local agricultural economy and support businesses, promote orderly and planned growth and development of urban and rural land uses, and allow farmers to make long-term agricultural investments with the assurance that their land can continue in agricultural use without interference from urban pressures. Through the Metropolitan Agricultural Preserves Act, local governments identify areas where agriculture is to be preserved, where non-farm growth will be permitted and what standards apply to each area. Farmers receive property tax credits and additional benefits by placing a restrictive covenant on their qualifying land, limiting its use to agriculture.

The Metropolitan Agricultural Preserves statute also contains a provision that local governments may not enact ordinances or regulations that restrict or regulate normal agricultural practices within an agricultural preserve unless the restriction or regulation has a direct relationship to public health and safety.

MINNESOTA AGRICULTURAL LAND PRESERVATION PROGRAM (MINN. STAT. CH. 40A)

Adopted in 1984, the program is modeled after the Metropolitan Agricultural Preserves Act. Any county located outside the Twin Cities metropolitan area is eligible to prepare a proposed agricultural land preservation plan and implementing controls under the program for the Commissioner of Agriculture's review. Elements which must be addressed by county plans and official controls are detailed in the statutes. Counties adopting agricultural land preservation plans and implementing controls may offer agricultural preserves. In a similar fashion to the Metropolitan Agricultural Preserves program, farmers receive property tax credits; additional benefits by placing a restrictive covenant on their qualifying land, limiting its use to agriculture or forestry; and protection for normal agricultural practices.

STATE AGRICULTURAL LAND PRESERVATION AND CONSERVATION POLICY (MINN. STAT. §§17.80-17.84)

Enacted in 1982, this law sets forth state policy on agricultural land preservation and conservation. The law also requires that, unless a project is already subject to the state environmental review process, any state or state-funded project or rule that adversely impacts ten acres or more of agricultural land must be reviewed by the Minnesota Department of Agriculture (MDA). Before the project can commence or the rule can be adopted, MDA must determine if other alternatives exist which would avoid converting agricultural lands.

MINNESOTA AGRICULTURAL PROPERTY TAX LAW (THE "GREEN ACRES" PROPERTY TAX DEFERMENT LAW, MINN. STAT. §273.111)

Adopted in 1967, the Minnesota Agricultural Property Tax Law, commonly known as the Green Acres Law, provides for deferment of assessment and taxes payable on farm lands whose valuations have been increased due to residential or commercial development potential. For preferential/deferred assessment of agricultural land consisting of ten or more acres, property owners who are engaged in agricultural pursuits

can apply for deferment of higher valuations and consequent taxes payable, including special assessments, and continue to have the property valued based upon its valuation for farm purposes.

RIGHT-TO-FARM LAW (MINN. STAT. § 561.19 NUISANCE LIABILITY OF AGRICULTURAL OPERATIONS.)

Under the Right-To-Farm law an agricultural operation cannot be considered a nuisance if it has been in operation for two years. A nuisance is defined as "anything which is injurious to health, or indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property..." The Right-To-Farm law protects from most public and private nuisance actions "agricultural operations" that have operated in substantially the same way for two or more years and that continue to operate according to "generally accepted agricultural practices".

Agricultural operations include facilities and its appurtenances for the production of crops, livestock, poultry, dairy products, but not a facility primarily engaged in processing agricultural products. An agricultural operation is not a nuisance if it is operating according to "generally accepted agricultural practices", located in an agriculturally zoned area, and complies with the provisions of all applicable federal and state statutes and rules or any issued permits for the operation. Some animal operations are exempt from the right-to-farm law protection, such as an animal feedlot facility with a swine capacity of 1,000 or more animal units or a cattle capacity of 2,500 animals or more.

PURCHASE OF DEVELOPMENT RIGHTS AND TRANSFER OF DEVELOPMENT RIGHTS

During the 1997 legislative session, the Minnesota Legislature adopted amendments to the planning and zoning enabling laws for counties and municipalities which authorize local adoption of provisions for "purchase of development rights" and "transfer of development rights" programs. "Purchase of development rights" is authorized in the form of conservation easements, which are authorized under Minnesota Statutes, Chapter 84C.

A conservation easement is a voluntary and permanent transfer of specified development rights from a landowner to a public or private organization. The easement is a restriction on a parcel of land, recorded as part of the land and deed records of the court. A conservation easement typically prevents development of land for residential, commercial, or industrial uses, while allowing farming to continue.

Purchase of development rights (PDR) programs pay farmers to protect their land from development. Landowners sell the development rights to a local government agency or private conservation organization. The agency or organization usually pays them the difference between the value of the land for agriculture and the value of the land for its potential use, which is generally residential or commercial development.

Transfer of development rights (TDR) programs allow landowners to transfer the right to develop one parcel of land (referred to as the "sending area") to a different parcel of land (referred to as the "receiving area"). The sending and receiving areas are generally established through local zoning ordinances. TDR programs can protect farmland by shifting development from agricultural areas to areas planned for growth.

NOTICE OF RESIDENTIAL DEVELOPMENT ON CERTAIN AGRICULTURAL LAND (MINN. STAT. §394.305)

The 1997 Legislature also adopted an amendment to the county planning and zoning enabling law which requires provision of notice of a permit to construct four or more residential units on land zoned for agriculture (or agricultural land in counties without zoning) to owners of all agricultural land within 5000 feet of the perimeter of the proposed development.

For more information, please contact: Becky Balk, Agricultural Land Use Planner
Minnesota Department of Agriculture
(651) 215-0369; or
Becky.Balk@state.mn.us



FACT SHEET

Agricultural Development & Land Use Technical Assistance Program
Minnesota Department of Agriculture

"Reinventing the Agricultural Land Preservation Program" A Project Funded by the Legislative Commission of Minnesota Resources

The state's agricultural land preservation programs and policies were created out of concern over the loss of farm and forest land to development. State leaders recognized the value of agricultural land to the production of needed food and fiber, and to the economies of communities throughout the state. The Minnesota Agricultural Land Preservation Program, working through counties, and administered by the Minnesota Department of Agriculture (MDA), has protected over 155,000 acres of agricultural land since it was established in 1984.

MDA believes that the basic framework to preservation embodied in the program is a sound one: comprehensive land use planning and growth management as a prerequisite to offering agricultural land preservation covenants ("agricultural preserves") and property tax credits to property owners. However, although technical assistance has been provided to over 30 counties since 1984, only three counties have chosen to fully participate in the program and offer agricultural preserves.

The Minnesota Department of Agriculture, through a 1997 grant from the Legislative Commission on Minnesota Resources (LCMR), is conducting three projects to improve the effectiveness of the Minnesota Agricultural Land Preservation Program and related programs and policies:

- An evaluation of the state agricultural land preservation program and related programs, laws, and policies, including recommendations for action.
- "Cost of public service studies" which will examine the fiscal implications (effects on costs and revenue to local government) of alternative patterns of growth in five Minnesota locations. The studies will compare the costs and revenue from scattered rural development (growth in rural areas that lack established infrastructure or services) with the costs and revenue from growth in locations with better access to existing infrastructure and services.
- A "fiscal impact tool kit" to enable local governments to perform their own cost/revenue analyses of alternative growth scenarios at low cost and without special expertise.

These projects are being conducted by consultants, selected through a competitive process. Throughout the project, MDA is being advised by a "working group" composed of representatives of other state agencies, local government, and private organizations interested in agricultural land preservation.

STATE AGRICULTURAL LAND PRESERVATION PROGRAMS EVALUATION

The purpose of this project is to conduct an independent, critical evaluation of Minnesota's agricultural land preservation programs to:

- assess their effectiveness in meeting program goals and objectives; and
- recommend action to improve their effectiveness.

Through a critical evaluation of Minnesota's agricultural land preservation programs, laws, and policies, and a comparison with models for agricultural preservation drawn from other states and literature, MDA intends to determine:

- how effective Minnesota's agricultural land preservation programs have been in meeting their goals and objectives; and
- what can be done to strengthen the programs' future effectiveness in meeting program goals and objectives.

The evaluation will include recommendations on:

- agricultural land preservation devices and tools, and the appropriate mix of those devices and tools for the variety of typical agricultural land scenarios found in Minnesota; and
- State legislative or administrative actions that should be taken to strengthen the effectiveness of Minnesota's agricultural land preservation programs.

COST OF PUBLIC SERVICES STUDIES

Cost of public service studies, and the methodology for local government use (see below), are intended to result a better understanding of the fiscal implications of the pattern and location of development as it relates to existing infrastructure and services, and to provide valuable information to local policy-makers and the public.

In 1989, MDA sponsored a study in Wright County which compared the cost/revenue relationship of growth served by existing infrastructure and services (such as water, sewer, paved roads, schools, and police) with growth in rural areas that lacked established infrastructure or services. The study, *Development in Wright County: The Revenue/Cost Relationship*, found that provision of services to development in rural areas cost four times more outside of built-up areas than inside them.

This "Reinventing the Agricultural Land Preservation Program" project will result in five cost of public services studies similar in content to the 1989 Wright County study, to result in information on the cost/revenue relationship of growth that is:

- up-to-date; and
- relevant to the range of local conditions found in cities, townships, and counties throughout Minnesota.

Such information on the fiscal implications of planning and development decisions will assist local governments in land-use policy-making.

COST OF PUBLIC SERVICES ANALYSIS METHODOLOGY FOR LOCAL GOVERNMENT USE

This project will result in a handbook and software (a "fiscal impact tool kit") that will enable local governments to analyze the cost/revenue relationships of growth at a relatively low cost and without special expertise. The fiscal impact tool kit will provide local governments engaged in comprehensive planning (whether under the Community-Based Planning Act or other enabling laws) with the ability to analyze and compare the fiscal (cost/revenue) implications of alternative growth scenarios.

For more information, please contact: Bob Patton, Local Government Outreach Coordinator
Minnesota Department of Agriculture
(651) 296-5226; or
Bob.Patton@state.mn.us

Winona County Ag. Land Preservation Program

Todd H. Bram,
Winona County Planning Director

MDA Agricultural Land Preservation Program

Established

With passage of the Ag. Land Preservation
Policy Act in 1984 (Minn.... Stat. Chapter 40A)

Implementation of The Law

Minnesota Department of Agriculture (MDA)

Program Goals

- Preserve and conserve agricultural land, including forest land.....;
- Preserve and conserve soil and water resources.
- Encourage the orderly development of rural and urban land uses.

Winona County's Program

Adopted February, 1989

Based on Winona County Comprehensive Plan

As A Result

Farms of 35 acres or more are eligible for tax credit.

Eligibility

Restrictive Covenant

General Farm Characteristics

Source: US Census of Agriculture

	<u>1987</u>	<u>1992</u>
Total Cropland (acres)	204,114	198,375
Total Woodland (acres)	106,211	92,252
# of Farms	1,174	1,090
Average Size (acres)	262	267

Benefits

- A \$1.50 per acre per year property tax credit....
- Annexation proceedings limited...
- Eminent domain proceedings are limited...
- Local governments may not enact ordinances that restrict normal farm practices....
- Public water, sewer and drainage projects are prohibited unless...

Application Procedure

Obtain affidavit from County
Complete restrictive Covenant Form
Agrees to manage land with sound soil and water conservation practices.
\$50 filing fee.
Application Review
Planning / SWCD / County Recorder
SWCD comments to: MDA / Owner / County Planning
Becomes exclusive Ag. use zone after 30 days.
File with County Assessor.

Terms of Covenant

Covenant states:

Land remains in exclusive ag. use and runs with the land.

Covenant Effective **indefinitely**, or;
until expiration initiated pursuant to Minn....
Stat. Sec. 40A.11 becomes final;
terminated by Governor; or
eminent domain.

Funding

- \$5.00 Conservation Fee
- From:
 - Seven Twin Cities Metro. Area Counties.
 - Other Counties Participating.
- 1/2 fee deposited in county conservation account.
- 1/2 fee to Minn.... Conservation Fund.
- Conservation Funds reimburse county

State Program Participants

Three of Five Pilot Counties

Waseca / Wright / Winona

Waseca

Acres Protected (1994): 112,092

Wright

Acres Protected (1994): 9,208

Winona

Acres Protected (1995): 42,892

Seven Metro.

Acres Protected (1994): 193,586