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## FINAL SCHOPPORT Minnesota River Basin Joint Powers Board

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July 31, 2002

AUG 1 2 2002

Legislative Commission on Minnesota Resources Attn: Mr. John Velin 65 State Office Building 100 Constitution Avenue St. Paul, MN 55155-1206

Subject: LCMR Project ML 1999, Chap.231, Sec 16, Subd. 7(g) Minnesota River Basin Initiative: Local Leadership

Dear Mr. Velin:

Enclosed are the five (5) copies of the Final Report for the LCMR sponsored project, "Minnesota River Basin Initiative: Local Leadership."

The Board of Water and Soil Resources, as well as the Minnesota River Basin Joint Powers Board, selected the projects to be completed with LCMR funding. We especially thank LCMR for granting an extension in order to complete some of the projects that were delayed due to a late spring and the weather. As you are aware, some of the projects came in under budget and some projects were unable to be implemented by the sub-applicant. We applaud LCMR for allowing us to apply those savings and slippage to new projects in four different areas – Area II, Cottonwood, Faribault and Redwood Counties.

On behalf of the Minnesota River Basin Joint Powers Board I wish to thank LCMR for this grant and for the working relationship we have had with LCMR. With the assistance of LCMR we were able to assist and facilitate in the development of watershed teams within each major watershed. We were also able to support the implementation of high priority projects within those watersheds. We have appreciated the opportunity given to us by LCMR and we look forward to working with LCMR again in the future.

If you have any questions or concerns, please don't hesitate to contact me at 320-664-4880 or <u>hmadsen2000@yahoo.com</u>.

Respectfully submitted,

& arlan Madson

Harlan Madsen, Chair

#### AUG 1 2 2002

#### LCMR FINAL WORK PROGRAM REPORT

July 1, 2002

LCMR Final Work Program Report Date Submitted: July 31, 2002

Carryforward Language: The availability of the appropriation for the following project is extended to June 30, 2002: ML 2001, 1<sup>st</sup> Special Session, Ch. 2, Sec. 14, Subd. 18, paragraph (a): 007g MINNESOTA RIVER BASIN INITIATIVE: Local Leadership.

Date of Report: Date of Work Program Approval: Project Completion Date: July 31, 2002 June 22, 1999 June 30, 2002

LCMR Work Program 1999

I. PROJECT TITLE: "Minnesota River Basin Initiative: Local Leadership"

Project Manager: Harlan Madsen, Chair

Affiliation: Minnesota River Basin Joint Powers Board

Mailing Address:PO Box 244, 116 Peavey Circle<br/>Chaska, MN 55318

**Telephone Number:** (952) 361-6590

email:mrbjpb@earthlink.netWeb Page Address:mrbdc@mankato.msus.edu

**Total Biennial Project Budget:** 

<b>\$ LCMR:</b>	\$300,000.00	<b>\$ Match:</b>	-as defined-
- \$ LCMR Amount Spent: -	280,828.37	<u>\$ Match Amount Spent:</u>	-N/A-
= LCMR Balance:	\$ 19,171.63	= Match Balance:	-N/A-

A. Legal Citation: ML 1999, Chap. 231, Sec. 16, Subd. 7 (g).

**Appropriation Language:** Carryforward Language: ML 2001, 1<sup>st</sup> Special Session, Chp2, Sec. 14, Subd. 18, paragraph (a): The availability of the appropriation for the following project is extended to June 30, 2002: ML 1999, Chp 231, Sec. 16, Subd. 007(g)"Minnesota River Basin Initiative; Local Leadership \$150,000 the first year and \$150,000 the second year are from the trust fund to the board of water and soil resources for a cost share agreement with the Minnesota River Basin Joint Powers Board for landscape planning and demonstration, and restoration and management projects for the Minnesota River on a cost-share basis."

**Status of Match Requirement**: All demonstration projects will be established according to the existing Board of Water and Soil Resources matching criteria of 75:25 (project \$: local \$) with the State share not to exceed 75%.

#### II. and III. FINAL PROJECT SUMMARY

This project was twofold - organizing 13 major watersheds in the basin into Watershed Teams based upon logical relationships and secondly, implementing projects on the ground in those watersheds.

The watershed team approach allows for a more consolidated look at planning and project implementation that makes use of regional tools available by cooperators and partners. This approach also accelerates the distribution of information within the basin. The Watershed Coordinators continue to meet periodically to address basin-wide issues and to advise the MRBJPB.

Projects were implemented basin-wide. The total cost was \$264,679.13 (\$180,828.37 from LCMR, \$6,800 from other state and federal organizations, and \$85,548.51 from either local or private contribution). There were 226 rock inlets replacing open tile intakes with blind inlets in Carver, Cottonwood, Faribault, Scott, Le Sueur and Redwood Counties. In Stevens and Scott Counties there were streambank stabilization projects along with grade stabilization. Area II MRB Projects, Inc. installed a floodwater retention project on Taylor Dam #3 and constructed a small dam on Lake Marshall. BERBI implemented 5 projects that included drainage ditch streambank stabilization, grade stabilization, installation of terraces, sediment basin construction, waterways and gully stabilization. These projects will reduce sediment and phosphorus in the river thereby improving water quality. Soil loss reduction varied from project to project, from 0.5 ton to 55 tons per year. Phosphorous load reduction amounts also varied between projects, from 0.6 pounds to 730 pounds. Improved wildlife habitat and recreation were side benefits in some of the projects. Data collection is on-going and working with partners will further assess the benefits of these projects. Project information has been disseminated to a large audient -through board meetings, the MRBJPB annual report that goes out to many organizations, at the MRBJPB annual conference and on the web site.

#### **IV. OUTLINE OF PROJECT RESULTS**

#### **RESULT 1) IDENTIFICATION OF WATERSHED PROJECTS:**

• 1a) Coordinate the development of watershed teams within the basin: The Minnesota River Basin Joint Powers Board will coordinate the creation and development of

The Minnesota River Basin Joint Powers Board will coordinate the creation and development of watershed-based planning and project teams within the basin.

Watershed Team Status and Update, July 31, 2002 (See Attachment 1a: Minnesota River Basin Watershed Team Matrix)

 Upper Minnesota River Watershed District Dianne Radermacher, Administrator 342 NW 2<sup>nd</sup> Street, Ortonville Mn. 56278 Phone: 320-839-3411

Dianne Radermacher is the Administrator for the Upper Mn. Watershed District. The team is comprised of the members of the Big Stone County Water Plan Committee, which is directed by Darrin Wilke, the Big Stone Environmental Officer.

The Upper Minnesota Watershed is the largest watershed in the basin, encompassing the headwaters of the Minnesota River. Of the 1,341,917 acres, 64% lay in South Dakota with the remaining 36% in Minnesota. The Upper Minnesota has 99 minor watersheds, and is sparsely populated with approximately 9000 residents in the Minnesota portion.

The mission of the Upper Minnesota Watershed is to improve surface water quality in the lakes, streams, and river within the watershed. High priorities in the watershed are public information, well sealing, septic system improvements, household hazardous waste collections, shore land management, and addressing BMPs on the land.

The Watershed team has no staff and no encumbered financial budget; the team exists through the support given by the Watershed District and Big Stone County Water Plan. A basic need is resources for administration and coordination of all the efforts in the Watershed and procuring project dollars.

 The Pomme De Terre Watershed: Organized by the Pomme De Terre Joint Powers Board Sheila Faber, Coordinator WesMin RC&D 900 Robert Street #104, Alexandria, MN 56308 Phone: 320-763-4733

The Pomme De Terre Watershed begins in the most northerly geographical area of the Minnesota Basin. Its headwaters begin as a small stream in Stalker and Long Lakes, located in southern Otter Tail County. The Watershed is in portions of six counties. Acreage of 559,966 is subdivided into 52 minor watersheds and contains over 100 lakes. The Pomme De Terre joins the Minnesota River near Appleton in Swift County and is twelfth in size of the thirteen major watersheds in the Minnesota Basin.

The core of the Watershed Team is a five county Pomme De Terre Joint Powers Board (PDT.), comprised of one County Commissioner and one SWCD supervisor from each county, with the technical assistance of each county's water planner, and SWCD manager. The Joint Powers Board was originally organized in 1981, became inactive, and was reactivated in 1999 to address surface water quality issues for the entire Pomme De Terre watershed and to join in with the efforts of the Minnesota River Basin Joint Powers Board.

The mission of the PDT is to improve the water quality and overall health of the river. To that end the immediate goals of the PDT are to consolidate existing watershed data, begin citizen monitoring, identify high priority area's in the watershed, encourage a variety of BMP's to the individual landowners, and increase public awareness about the watershed through educational efforts.

The Pomme De Terre JPB, with assistance from Wes Mn RC&D, applied to MPCA for a \$50,000.00 dollar grant to gather and compile existing water quality and diagnostic data currently on file in the Watershed. After being awarded the grant, Amy Shogren of Wes Mn RC&D was contracted to serve as Watershed Coordinator to begin the data-compiling project. Upon receiving the preliminary data report the Board will decide the appropriate next steps- either applying to MPCA for a Phase I or Phase II Clean Water Partnership Grant or other funding opportunities. This reactivated Joint Powers Board is moving forward once again.

3. Lac qui Parle Watershed Team Lac qui Parle Clean Water Partnership Mary Homan, Coordinator Courthouse, 600 Sixth Street, Madison, MN 56256-1296 Phone: 320-598-3319

This Watershed resides in three Counties, and is the eighth largest <sup>in</sup> the basin. With a total of 702,119 acres, 35% of these acres (214,783) in South Dakota, with 65% (487,336 acres) in Minnesota. The Watershed is sparsely populated with six towns and approximately 12,000 people in the Minnesota portion.

The Lac qui Parle Team is made up of the members of the Lac qui Parle-Yellow Bank Watershed District, county water planners, SWCD managers and supervisors, county environmental officers, and representation from the Area II Board. The Watershed District has been in existence since 1970. Given the sharp elevation changes across the watershed, the Watershed District Board has done many projects for water management and flood control. A major project of the Watershed District (the Lazarus Creek Project) remains an un-funded high priority for the Watershed District.

Formation of an inclusive Watershed team marks an effort by the entire watershed to work together and coordinate individual efforts into a unified watershed approach. With no formal budget or structure, members of the team assist each other as needed

Goals of the Watershed Team are synonymous with the entire basin - water monitoring, improved water quality, more BMP practices and projects on the ground.

With the assistance of Randy Nelson of the Prairie Country RC&D, a Clean Water Partnership (Phase I) application was submitted by the LqP-YB Watershed District (the Sponsor) to MPCA in October of 2000. In early January 2001, the Watershed was awarded a Clean Water Partnership (CWP) grant in the amount of \$262,510.00 for a three-year period. The Watershed will now have resources to conduct water monitoring, public awareness education and to identify the broad needs of the watershed for improved surface water management. On January 1, 2002 Mary Homan was hired for the position vacated by Cindy Schmidt.

#### 4. Yellow Medicine River Watershed Sponsored by Yellow Medicine River Watershed District Terry Renken, Administrator 215 North Jefferson, Minneota, MN 56264 Phone: 507-872-6720

The Yellow Medicine Watershed is the tenth largest watershed in the Minnesota basin. It's 630,080 acres lay in three counties with 14 towns and an estimated population of 16,500 people. A unique fact about the watershed is the dramatic elevation change across the watershed from west to east. From the highest reaches of the Couteau de Prairie (Buffalo Ridge) to the confluence of the Minnesota River, the Yellow Medicine River drops approximately 1000 feet. To express it another way, there is as much fall across the Yellow Medicine Watershed to the confluence of the Minnesota River, as there is from that point thereon to the Gulf of Mexico.

The Watershed team is lead by Terry Renken, Administrator for the Yellow Medicine Watershed District. The Watershed District was established in 1971 to promote water management and flood control. In 1997 a Phase I Clean Water Partnership (CWP) was initiated to monitor water quality and move the District into a new era of surface water management. After Phase I was completed, a Phase II CWP was applied for in October of 2000. In January of 2001 the MPCA approved a \$302,500.00 grant and \$405,000.00 of loan dollars for the Yellow Medicine Watershed District. The Watershed will now have the resources to continue the monitoring, public awareness education, to make a meaningful dent in meeting project needs and to improve surface water management in the watershed.

The goals of the Watershed team are to activate the Implementation Plan developed for the watershed and systematically address the identified priority areas that will improve surface water quality and control issues in the watershed. This will be accomplished by using Watershed team including members of the Watershed District, the county water planners, a citizen member of the county water plan committee, the SWCD manager and one supervisor from each county, a Commissioner from each county, and representation from both MPCA and BWSR.

#### 5. Hawk Creek Watershed:

A Clean Water Partnership Loren Engleby, Coordinator Renville County Courthouse 500 East DePue Ave., Olivia MN 56277 Phone: 320-523-3672

Hawk Creek gets its name from the European Kestrel (a small falcon). The headwaters of the Hawk Creek begins at Eagle Lake, north of Willmar, and joins the Minnesota River southeast of Granite Falls. It is the

ninth largest watershed in the Minnesota Basin with 679,504 acres. The watershed lies in the counties of Chippewa, Kandiyohi, and Renville and has sixteen towns and approximately population of 29,000.

The Hawk Creek Watershed Project began in early 1997 by concerned citizens and local government officials and with the help of a start-up grant from MPCA. The basic goal of the group was to identify surface water quality issues and possible solutions or improvements. The group (team) consists of county commissioners, county water planners, SWCD managers and board members, NRCS staff, citizens and Prairie County RC&D staff. The team meets monthly.

Renville County served as Project Sponsor with Randy Nelson of Prairie County RC&D providing technical guidance and serving as fiscal agent for the project.

In April of 1999, a Phase I Clean Water Partnership (CWP) was received from MPCA. With the CWP grant and local resources of cash and in-kind, informational gathering and water quality monitoring data was collected to help the Watershed Team provide information and awareness education to the citizens of the watershed. A technical committee was established to help identify areas and projects to be included in the implementation plan for the watershed.

In conjunction with the CWP grant, a 319-water quality grant of \$320,000.00 was received to financially assist erosion control and water quality projects in the watershed. Randy Nelson of Prairie County RC&D was able to secure \$250,000.00 of federal dollars through the EQIP program. These dollars are available for cost sharing practices as allowed by NRCS rules.

For public outreach, the education committee held several informational open houses in the watershed, combined with starting a watershed newsletter. After completion of the Diagnostic Study Report and implementation plan, a Phase II CWP application was submitted to MPCA in October of 2000. In January of 2001, Hawk Creek was awarded a Phase II CWP grant for three years, and \$230,000.00 of loan money to be used in the implementation phase.

In December of 2000, Pam Skon was hired as the outreach technician, and Dean Dambroten was hired as the field technician. In March of 2001, Loren Engelby was hired as Watershed Coordinator to replace Erin Toedter who served as the first Watershed Coordinator for Hawk Creek. In October of 2001 Pam accepted a position with the North Dakota Department of Health and is working in water quality,

 Chippewa River Watershed Project A Clean Water Partnership Kylene Olson, Executive Director
 629 North 11<sup>th</sup> Street, Montevideo, MN 56265 Phone: 320- 269-2139 ext 116

The Chippewa River Watershed is technically the second largest watershed in the Minnesota Basin having 1,333,541 acres. However, it is the largest watershed in the Minnesota Basin because all acreage is within state boundaries. The Chippewa River Watershed spreads north from the confluence with the Minnesota River at Montevideo for over 130 miles to the highest elevations of the Glacier Ridge in Otter Tail County. The Watershed covers eight Counties, 26 towns, 95 lakes, and a population of over 41,000 people.

The Chippewa River Watershed Project (CRWP) effort officially began in early 1998 with the award of a Phase I Clean Water Partnership (CWP) grant from MPCA. However, it should be noted that many planning meetings were held earlier with citizens, local, state and federal government officials, and Prairie County RC&D.

Executive Director Kylene Olson, with strong support from Randy Nelson of RC&D, has assembled the most inclusive Watershed team in the Minnesota Basin. The team is made up of citizens, county commissioners and staff, SWCD supervisors and staff, lake associations, non-profit organizations, RC&D, NRCS, BWSR, DNR, COE, FSA and other interested groups.

The goal of the CRWP was clearly defined in the beginning of the project, and is relevant today. "The Chippewa River Watershed Project seeks to improve water quality and flooding problems within the Chippewa River Watershed while promoting a healthy agricultural, industrial, and recreational based economy for the basin."

The Watershed team meets on a monthly basis. The team works closely with all the members and associate members of the project to bring a wide perspective to the issues of surface water management on a watershed scale. The team uses many avenues to reach out to the citizens of the watershed such as meetings, displays, canoe trips, tours, citizen monitoring, newsletters, video's, news articles, and annual meetings. To further promote the Chippewa River, Kylene and her team actively lobbied the State Legislature to authorize the lower 43 miles as a canoe and boating route. Using formal site water monitoring, citizen monitoring and information gathered by the project, an extensive Diagnostic Study Report and Implementation plan has been developed. This report compiles water quality data, and priority issues and areas within the watershed. The report also identifies cost and resources needed for systematic improvement projects coupled with public awareness and education.

In October of 2000 the CRWP applied for a Phase II Implementation Grant from MPCA. In January of 2001 the CRWP was awarded a \$469,372.00 grant to continue that work. Additionally, the Shakopee Creek Headwaters Project, which is the first of six priority sub-basins within the Chippewa River Watershed, received both CWP loan dollars, and State 319 grant dollars.

Rob Spitzley serves as the Project Coordinator for the Shakopee Creek Headwaters project. His work involves meeting individually with landowners to discuss BMPs and incentive-based programs. Rob also coordinates a volunteer monitoring program, education outreach, monthly meetings with cooperating partners, and other public awareness issues. The Shakopee Creek Headwaters Project is a pilot project located near Games and Norway Lakes in Kandiyohi County, and is approximately 4% of the Chippewa Basin.

In October of 2001 the CRWP applied for and received \$120,840 Phase II Implementation 319 dollars from the MPCA for the East Branch Chippewa River, the second priority sub-basin of the Chippewa River Watershed. These implementation dollars will be used for BMPs such as buffer strip incentives, shoreline naturalization, livestock exclusion, nutrient management, education and biomonitoring.

CRWP also partnered with Rivers Council of Minnesota who funded biomonitoring training for the CRWP staff and Benson High School Biology teachers. Training was conducted by Fortin Consulting, Inc. As a result of the training, an EPA Environmental Education grant was applied for and received to bring biomonitoring to all nine high schools in the watershed.

7. Redwood - Cottonwood Rivers Control Area (RCRCA) Eight-County Joint Powers Board James Doering, Executive Director 1241 E. Bridge Street, Redwood Falls, MN 56283 Phone: 507-637-2142

Eight counties and eight Soil and Water Conservation Districts (SWCD) established RCRCA in 1983. The governance structure is a joint powers agreement whereby one county commissioner, and one SWCD supervisor from each member county serve on the Joint Powers Board. The eight- member counties are Brown, Cottonwood, Lincoln, Lyon, Murray, Pipestone, Redwood and Yellow Medicine with corresponding SWCD's.

The original goals were to develop and implement plans to reduce flooding and sedimentation, combined with improving water quality in the rivers and lakes of the two major Watersheds. Together these efforts continue to improve recreational and wildlife opportunities, and enhance the economy of the two Watersheds.

The Redwood River Watershed begins on the Couteau des Prairie (Buffalo Ridge) at an elevation of 1,850 feet and drops to an elevation of 1,140 feet as the water moves west to east and joins the Minnesota River at north Redwood Falls. The Watershed is 451,257 acres in size, with 14 towns, 30 lakes and approximately 23,000 people. The Redwood River Watershed is the smallest of the 13 major watersheds in the Minnesota Basin.

The Cottonwood River Watershed also begins on the highlands of the Buffalo Ridge in Lyon and Murray Counties. It flows west to east, dropping 750 feet in elevation, to the confluence with the Minnesota River at New Ulm, Minnesota. With 840,190 acres the Cottonwood Watershed is the sixth largest major watershed in the Minnesota Basin. It has 21 towns, 40 lakes and approximately 36,000 people.

Given the similarities of the Redwood and Cottonwood Watersheds in terms of land use, topography, soils, and climate, it was deemed reasonable and prudent to organize together in the framework of RCRCA. RCRCA, in total, makes up approximately 12% of the entire Minnesota River Basin.

From modest beginnings in 1983, RCRCA successfully pooled resources from the member counties, state and federal agencies. Coupled with grants from Northwest Area Foundation and McKnight Foundation, RCRCA began a systematic watershed study. Later, using MPCA Clean Water Partnership funding, a Phase I CWP diagnostic study was completed first the Redwood River Watershed. By 1995, this study later evolved into a Phase II CWP implementation plan. Starting in 1996, a Phase I CWP on the Cottonwood River was implemented and later evolved into a Phase II CWP implementation plan project by the year 2000.

The larger challenge was, and is, engaging the public citizens to provide them with awareness education of the complex issues surrounding non-point source pollution, offering BMP solutions and practices acceptable to the public. To that end a major effort has been advanced through advertisements, publications, demonstration projects, group meetings, tours, and ultimately one- on-one conversations by the RCRCA and associate member staffs. Helping residents of the two Watersheds understand their role and responsibility related to water quality and quantity issues. Congruently offering technical and financial assistance available through the various Federal, State, and Local programs targeted at environmental issues. RCRCA continues to advance improved surface water management, and awareness of non-point source pollution in the Minnesota River Basin.

#### Watonwan River Clean Water Partnership Project Bruce Johnson, Project Coordinator Watonwan County Environmental Services P. O. Box 518, St. James, MN 56081 Phone: 507-375-1225

The Watonwan River Watershed is the Eleventh largest major watershed in the Minnesota Basin. The Watonwan lays in 6 counties, with an area of 561,620 acres, over 30 lakes, 12 Towns, and approximately 21,000 population. The main stem of the Watonwan begins as a small creek in N. W. Cottonwood County and flows easterly over 110 miles to the confluence with the Blue Earth River near Garden City. 57 miles of intermittent streams and approximately 300 miles of perennial streams join the main stem.

The Watonwan River Watershed has been monitored and studied with a variety of efforts, beginning with the U.S. Geologic Survey in the 1940's. In 1975, MPCA published a Minnesota River Basin plan, focusing on point source pollution. In 1977 the Southern Minnesota Rivers Basin Commission issued a report on flooding, water quality, and non-point source pollution. In 1982 MPCA published an assessment of nonpoint source pollution issues. In 1985 the DNR published a Biological Survey of the Minnesota Basin. In the mid - 1980's the South Central Minnesota County Comprehensive Water Planning Project, (SCMCCWPP) also known as the 13 County Board, a Joint Powers Board of 13 Counties was formed, to collectively do State Mandated local water planning. From 1990 to 1993 MPCA conducted the Minnesota River Assessment Project (MRAP). This study included the three watersheds of Watonwan, Blue Earth, and LeSueur Rivers, which are referred to as the Greater Blue Earth Basin. In 1993 seven SWCD's of the Greater Blue Earth Basin, formed a Joint Powers Organization called the Blue Earth River Basin Initiative (BERBI). BERBI received additional funding to manage and coordinate conservation practices, and implementation projects in the member SWCD counties.

Beginning in 1996, the 13 County Board and Mankato State University's – Water Resources Center, received funding from MPCA for a Phase I CWP study of the Greater Blue Earth Basin. In 1998, with funding from the MPCA, the Watershed Implementation at the Local Level (WILL) was started with cooperation of the Mankato State University – Water Resource Center (MSU-WRC) and the 13 County Board. The (WILL) effort was initiated to organize the involvement of local government and citizens into what is referred to as a watershed team. Each major watershed in the Greater Blue Earth Basin decided to be organized individually, because of their size, population, geography and land use. The WILL process stalled for lack of support and leadership continuity. The MSU-WRC and the 13 County Board collectively revived the WILL process, and assigned a new WILL Coordinator.

With renewed commitment to watershed management, the Watonwan River Watershed Team continued to meet and prepared a Phase II CWP implementation grant application that was submitted to MPCA in December of 1999.

With the completion of the Phase I diagnostic study and the sun setting of the WILL process in March of 2000, the watershed Coordinator position was to be finished, too. MPCA, the Three Rivers RC&D, and the 13 County Board combined efforts to retain a part-time Coordinator in each of the three Watersheds in the Greater Blue Earth Basin. This action was taken to continue the efforts begun, and to keep the faith with local citizens and local leaders who worked hard to build a watershed Team effort in the three watersheds.

In March of 2000 the Watonwan River Watershed was awarded a Phase II CWP Grant from MPCA, of \$500,000 in grants dollars and \$2.176 million in low interest loan money.

The goals of the Watonwan River Watershed Project are.

- 1. To reduce bacterial levels in the river.
- 2. Reduce Phosphorus, nitrite, and nitrate levels in the water.
- 3. Reduce Total Suspended Solids (TSS)
- 4. Reduce all non-point source pollutants
- 5. Increase Public Awareness and Education
- 6. Promote Recreational Activities on the river
- 7. Improve management of the Riparian Corridor
- 8. Promote BMPs on the land

The Watonwan Watershed Team is made up of individuals from the 6 counties in the watershed,. Membership consisting of County Water Planners, County SWCD personal, County Commissioners, representatives from the Towns, interested citizens and other property owners. The Watershed Team meets on a regular basis, under the direction of the Project Coordinator is responsible for implementing CWP grant and loan dollars.

 Blue Earth River Watershed Michele Stindtman, Coordinator Faribault County Ag Center 415 South Grove Street, Suite 8, Blue Earth, MN 56013 Phone: 507-526-2388

The Blue Earth Watershed is the fourth largest watershed in the Minnesota Basin. With a total area of 992,034 acres, including 21 Towns, 40 lakes, 115 minor watersheds, and approximately 56,900 population in the Minnesota portion. The Blue Earth headwaters begin in the Northern Iowa counties of Kossuth and Winnebago, which make up 21% (216,444 acres) of the Blue Earth River Watershed Basin. The Blue Earth flows north to its confluence with the Minnesota River at Mankato.

The Blue Earth River Watershed like the other two Major Watershed (Watonwan and LeSueur) in the Greater Blue Earth Basin have been studied or monitored in many ways, beginning with a U.S.Geologic Survey in the 1940's. In 1975 MPCA published a Minnesota River Plan report that detailed point-source pollution issues. In 1977 a report on flooding, water quality, and non-point source pollution was released. In 1982 M.P.C.A. published an assessment of point and non-point source pollution, based on monitoring samples taken in 1980 and 1981.

In 1985 the DNR published an up-dated Biological Survey of the Blue Earth Watershed. In the mid-1980s the five counties of the Blue Earth Watershed began State Mandated local water planning. This planning was done in cooperation with the South Central Minnesota Counties Comprehensive Water Planning Project, (13 County J.P.B.). From 1989 to 1993 the Minnesota River Assessment Project (MRAP) was coordinated and conducted by M.P.C.A. In 1993, Blue Earth River Basin Initiative (BERBI) was created to receive additional funding to implement conservation practices and projects for its SWCD member counties. Beginning in 1996, a MPCA Phase I CWP diagnostic study was started on the Blue Earth watershed with cooperation of Mankato State University's Water Resources Center, and the 13 County Board. In 1998 the Watershed Implementation at the Local Level (WILL) effort was begun to organize the involvement of local government and citizens into a watershed team. In March of 2000, when funding for the WILL program ended, the MPCA 13 County Board and 3 Rivers R.C.&D. combined resources to continue the position of a part-time Watershed Coordinator. The Blue Earth Watershed team completed a Phase II CWP grant application and submitted it to MPCA in October of 2000 for funding. The application was not funded during this appropriation period.

The Blue Earth River Watershed applied for and received a Phase II CWP for Center and Lily Creek Sub Watersheds in 2001. Selection of these sub watersheds as priority management areas is an approach toward successful implementation and education at a smaller scale. These two sub watersheds are of a manageable size to contact and work individually with local citizens to educate and implement best management practices on the land. They were also selected due to the 1996 Diagnostic Study results, Center Creek's listing on impaired waters, and their upstream nature.

The Watershed team will continue to meet to organize and plan efforts in Lily and Center Creek priority sub watersheds. The team believes that small successes will facilitate the movement of additional projects throughout the entire Blue Earth River Watershed.

The Watershed Team, which is made up of county water planners, county SWCD personnel, county commissioners, state agency staff, representatives from the town and interested citizens in the Watershed, has completed watershed goals. These goals are identified as broad-based goals applying to the entire watershed, and focus goals that apply to specific areas or issues. A detailed listing of the goals is presented in the Blue Earth Major Watershed Implementation Plan of March 2000 that is available from Michele Stindtman, Watershed Coordinator. The Watershed Team will continue to inform and involve citizens in watershed management issues as time and resources allow.

#### Le Sueur River Watershed Julie Conrad, Coordinator 410 South 5<sup>th</sup> Street, Mankato, MN 56002-3566 Phone: 507-389-8386

The Le Sueur River Watershed is the seventh largest watershed in the Minnesota River Basin with a total area of 711, 838 acres, 20 towns, over 30 lakes, 86 minor watersheds and an approximate population of 43,200 people. The Le Sueur River Watershed lies within six counties and has 1,200 miles of collecting streams that flow north and west to the eventual confluence with the Blue Earth River north of Mankato.

The Le Sueur River Watershed, like the other two watersheds of Blue Earth and Watonwan in the Greater Blue Earth Basin, has been studied and monitored over time, beginning with a U.S. Geologic Survey in the 1940's. In 1975 M.P.C.A. published a Minnesota River Plan report that detailed point-source pollution issues. In 1977 a report on flooding, water quality, and non-point source pollution was released. In 1982

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M.P.C.A. published an assessment of point and non-point source pollution, based on monitoring samples taken in 1980 and 1981.

In 1985 the DNR published an up-dated Biological Survey of the Le Sueur Watershed. In the mid-1980s the six counties of the LeSueur River Watershed began State Mandated local water planning. This planning was done in cooperation with the South Central Minnesota Counties Comprehensive Water Planning Project, (13 County J.P.B.). From 1989 to1993 the Minnesota River Assessment Project (MRAP) was coordinated and conducted by M.P.C.A. In 1993, Blue Earth River Basin Initiative (BERBI) was created to receive additional funding to implement conservation practices and projects for its SWCD member counties.

Beginning in 1996, a MPCA Phase I CWP diagnostic study was started on the Le Sueur River Earth Watershed with cooperation of Mankato State University's Water Resources Center, and the 13 County Board. In 1998 the Watershed Implementation at the Local Level (WILL) effort was begun to organize the involvement of local government and citizens into a watershed team. In March of 2000, when funding for the WILL program ended, the MPCA, 13 County Board and 3 Rivers R.C.&D. combined resources to continue the position of a part-time Watershed Coordinator. The Le Sueur River Watershed team completed a Phase II CWP grant application and submitted it to MPCA. in October of 2000 for funding. The application was not funded during this appropriation period. The Watershed team will continue to meet and decide if it will re-apply for a Phase II CWP grant or look for other available funding. The Watershed Team, which is made up of county water planners, county SWCD personnel, county commissioners, state agency staff, representatives from the town and interested citizens in the Watershed, has completed watershed goals identified in the Le Sueur Watershed Implementation Plan.

11. Middle Minnesota River Watershed Paul Davis, Acting Coordinator Brown County Courthouse
14 South State Street, New Ulm, MN 56073 Phone: 507-233-6641

The Middle MN River Watershed is the fifth largest watershed in the Minnesota River Basin. The Watershed has parts of eight counties that border the main stem of the Minnesota River. Starting at the town of Morton, the Middle MN River Watershed straddles the main stem for approximately 80 miles downstream to the town of Ottawa in Le Sueur County. Many first and second-order streams feed the Middle MN River, with the largest tributary being the Big Cottonwood River. The Big Cottonwood begins near Balaton in Cottonwood County and flows over 147 miles to join the Minnesota River near New Ulm. The Middle MN Watershed has a total are of 862,060 acres, with 20 towns, 104 minor watersheds, over 40 lakes and approximately 60,500 in population. The Watershed is home to five wildlife management areas, the largest being Swan Lake. Swan Lake is considered one of the largest areas (10,000+ acres) and the highest quality of fresh water marshes in North America. The Watershed also has three state parks, with Minneopa Falls near Mankato as one of the best known. The Watershed has an intertwined and deeprooted history with the Native American Indians that long preceded settlement and statehood. Seven historical sites and the presence of the Lower Sioux-Mdewakanton Community at Jackpot Junction serve as a reminder of this past and present day tie to that heritage.

The Middle Minnesota River Watershed has been studied and monitored in many ways but never collaborated into a singular effort. Brown, Nicollet, Cottonwood – Water Quality Board has done many water quality efforts and a CWP on the Little Cottonwood River. Area II has been active with projects like the Wellner-Hageman Watershed project. This current work is in addition to the past efforts of MPCA's monitoring and the study of point and non-point source pollution issues during the 1970s. The Minnesota River Assessment Project (MRAP) done over a four-year period (1989-1993) to quantify non-point source loadings in the Minnesota River, and recommend BMP's to help correct the problems. These efforts plus a variety of conservation improvement projects by the individual county SWCD's, county water plans and

water quality improvement projects for city waste water treatment and urban storm water runoff all add to improved surface water management.

Many individuals, citizens and local government staff in the Watershed are willing to be partners in a collaborative effort. However, until funding is located and secured, efforts to build and coordinate an inclusive watershed team will be limited.

#### 12. Lower Minnesota River Watershed Kevin Bigalke, Executive Director 200 4th Avenue West Shakopee, MN 55379 Phone: 952-496-8842

The Lower Minnesota River Watershed begins on the mainstem of the Minnesota River, near Ottawa in Le Sueur County, and continues to the confluence with the Mississippi River at Fort Snelling. This section of the river is considered relatively flat, dropping 90 feet in elevation over the 70-mile stretch of mainstem. The Watershed is the third largest Major Watershed in the Minnesota Basin. The total area is made up of 1,165,229 acres, 51 Towns, 143 minor watersheds, over 200 lakes, and a population of approximately 400,000. The Lower Minnesota River Watershed encompasses approximately 1/3 of the county. The land use is mostly agricultural with the City of Lafayette lying in the western end of the watershed. We have only two sub-watersheds in our part of the Lower Minnesota River Watersheds. The majority of the Rush River and the Barney Faye (Fry) Creek Sub-watersheds. The majority of the Rush River sub-watershed lies in Sibley County. The county townships that have land within the Lower Minnesota River Watershed are Lake Prairie, New Sweden, Bernadotte, Lafayette, Brighton, Granby and Traverse.

The Watershed lies in parts of eleven counties, and varies in land use from metropolitan St. Paul to the rural setting of western Sibley County. Eight large creeks serve as tributaries to the mainstem as do many first and second order steams. The Lower Minnesota is approximately 60% agricultural land, with the balance of the watershed in developing and fast growing cities and towns.

The Lower Minnesota River Watershed has seven Watershed Districts that provide oversight to approximately 35% of the Lower Minnesota River Basin. One district's mission (the Lower Minnesota River Watershed District) was initially established to serve as the local partner to the U.S. Army Corps of Engineers to assist with dredging and maintaining a nine-foot deep channel for commercial barge navigation from Savage to the Mississippi River. Since its initial formation, the Lower Minnesota River Watershed District has also addressed issues concerning the resources of a portion of the Lower Minnesota River Valley. The largest Watershed District (High Island), at 153,219 acres was formed to improve and maintain a drainage system in parts of Sibley, McLeod and Renville Counties. The High Island Watershed District is currently doing a Phase I Clean Water Partnership diagnostic study to help guide them with future water quality and quantity issues. The other five Watershed Districts were formed to address issues concerning individual lakes or creeks, and are each actively engaged in water management issues.

The Lower Minnesota Watershed has, over the years, been studied and monitored by many agencies (Metropolitan Council, DNR, MPCA, USFW, BWSR, MDA, MDH, etc.) for a variety of reasons. Until recently, no group has tried to organize and provide coordination of efforts for the entire basin. Efforts that were begun by Minnesota Extension and advanced by Diane Lynch of Lynch and Associates have blossomed into an active group of citizens, agency personal, the county water planners and The Friends of the Minnesota Valley, under the direction of Nelson French. They are actively working to assemble and coordinate a comprehensive watershed team. Their work established four committees Public Outreach, Data Collection, County Water Planners, and a Coordinating Committee to begin the task of assembling and coordinating watershed efforts in such a large and diverse basin. A fifth committee was formed with the water planners from each county and managers of the watershed districts to facilitate coordination of the different water management plans.

The Minnesota Valley National Wildlife Refuge Center is located on the bluffs of the River Valley, immediately adjacent to the Minneapolis-St. Paul International Airport. The Wildlife Center, with its governing board (Friends of the Minnesota Valley) work to improve the environmental health of the River Valley, promote public recognition and awareness and encourage recreational opportunities of the Minnesota River Valley.

Friends of the Minnesota Valley Lori Nelson, Executive Director 2450 West 105<sup>th</sup> Street, Bloomington, MN 55425 Phone: 952-858-0706

The Friends of the Minnesota Valley have contracted with the engineering firm of Bonestroo and Associates, under the direction of Ismael Martinez, to develop an integrated strategic action plan for the Lower Minnesota River Watershed integrating all the above committee work. The goals of the Strategic Action Plan will be to identify and organize the many feasibility studies, monitoring data, and other pertinent information into an understandable document and plan. This plan will make recommendations to address the various point and non-point pollution issues in the Lower Minnesota Watershed. The plan will also provide action steps for communities and organizations working to build an inclusive watershed team dealing with surface water management.

#### IV. OUTLINE OF PROJECT RESULTS

#### **RESULT 1) IDENTIFICATION OF WATERSHED PROJECTS:**

• 1b) Identify High Priority Projects by Watersheds: (See Attachment 1b: Minnesota River Basin Joint Powers Board Water Quality Improvement Projects – LCMR 1999 Local Leadership Grant Applications)

Watershed teams will apply for funding to use a portion of the funds available to identify high priority projects that will improve water quality. Specific output will be GIS support for implementation projects in demonstration watersheds. All available GIS data will be collected and compiled for the project watershed areas. Additional priority data will be created for the project watershed areas with the final results mapped, reported, and placed on the Minnesota River Basin Data Center Web Site. <u>http://mrbdc.mankato.msus.edu</u>. FYI: The web site is currently under construction and does not follow the order in which the projects are listed in this report and on the matrix.

MRBDC	\$35,000.00	Data support and inventory
LCMR Budget:	\$17,500.00	Completion date of March, 2000 – June 30, 2002
Balance:	\$ 0	Completed October, 2000

**Outcomes:** Identify High Priority Projects by Watersheds

- 1) Develop inventory of information describing each implementation project by major watershed.
- 2) Digitize a point, line, or polygon to display the location of each project.
- 3) Develop database to describe project such as project name, type, minor watershed, major watershed, township, range, section, county(ies), project ID etc.
- 4) Chronicle progress of implementation projects from data provided by MRBJPB and BWSR.

Deliverables: The Minnesota River Basin Data Center has delivered the following products.

- 1) Text, Data Base and Photos;
- 2) Arc Info, Arc View;
- 3) Data Base; and
- 4) Additional Text.

Please log on to the Minnesota River Basin Data Center <u>http://mrbdc.mankato.msus.edu</u> and review the LCMR Local Leadership Funded Water Quality Improvement Projects identified by the cover page attached.

#### **RESULT 2) DEMONSTRATION PROJECTS:**

#### (See Attachment 1b: Minnesota River Basin Joint Powers Board Water Quality Improvement Projects – LCMR 1999 Local Leadership Grant Applications)

• 2a) Watershed teams that have identified high priority projects within each of the 13 major watersheds will be eligible to apply for project funds. The MRBJPB's Major Projects subcommittee and the BWSR will distribute project funds. The MRBJPB will coordinate the watershed teams and manage the projects on a basin-wide perspective. Technical assistance including funding for staff working on these projects should not exceed 25% of the total dollars available for project funding.

Project Funds:	\$200,000.00	Project funds available to watershed teams.
LCMR Budget:	\$200,000.00	Completion October 1999- June 30, 2002
		(a one-year extension granted)
Project Funds Used:	\$180,828.37	Total LCMR Contribution for projects
Balance:	\$ 19,171.63	Remaining and returned back to LCMR

• 2b) Provide Project Outcomes and Outreach Materials: Locally led watershed teams will provide a summary of outcomes from the project. Specific information will include either monitored or modeled water quality benefits, the importance of the project to the watershed, and the need for further projects in their watershed. The MRBJPB will use these reports to evaluate the success of the project and inform BWSR and the LCMR committee on water quality improvement progress and need for future funding.

MRBDC	\$10,000	Developed data and place in inventory
LCMR Budget:	\$10,000	Completion April 2000 June 30, 2002
Balance:	\$ 0	

#### WATER QUALITY IMPROVEMENT PROJECTS NARRATIVE (See Attachment 1b)

#### Taylor Dam #3 Floodwater Retention – Area II MRB Projects Inc.

- **DESCRIPTION:** This project was completed in October 2001, with final payment made to the contractor in May 2002 after the seeding showed acceptable emergence and growth. The project is located in the SE ¼ of Section 5 of Sodus Township in Lyon County upon an unnamed tributary to Meadow Creek, a major tributary to the Cottonwood River. Construction involved a 13' high earthen embankment with a 18" reinforce concrete pipe outlet. The 3' deep permanent pond is controlled by a 12" outlet within the 48" RCP riser structure. The project provides peak flow reductions ranging from 6 to 42 cfs (47.6% to 61.8%) across the range of storm events.
  - **COST:** Funding paid for the entire construction cost of this project. The total cost was \$29,929.54 of which LCMR provided \$22,447.16 and the landowner paid \$7,482.38. The landowner also paid for a geotechnical exploration (\$450.00).

OUTCOME:	The finished project provides temporary storage of floodwaters which also
	provides sediment trapping and reduction of nutrients. In addition, the
	permanent pond creates wildlife habitat for waterfowl and deer.

Lake Marshall 29	– Area II MRB Projects Inc.
DESCRIPTION:	This project is located in the SE ¼ of Section 29 of Lake Marshall Township in Lyon County upon an unnamed tributary to Meadow Creek, a major tributary to the Cottonwood River. The project will involve construction of a 15' high earthen embankment with a 60" reinforced concrete pipe outlet. The 3' deep permanent pond will be controlled by a 18" outlet within the 60" RCP riser structure. The project provides peak flow reductions ranging from 20 to 67 cfs (17.1% to 58.7%) across the range of storm events.
COST:	The estimated project cost is \$89,254.00. Grant funding is \$10,746.75 with \$8,059.84 from LCMR and \$3,132.66 from Area II (local match). Other local funds are \$9,000.00 from RCRCA, \$9,245.15 from Area II and \$35,213.55 from Lyon County, with the State of Minnesota contributing \$27,735.46. Bids were opened on July 1 <sup>st</sup> and the contract awarded to Kockelman for \$77,449.20 (13% under estimate). Work will begin August 19 <sup>th</sup> and anticipated completion date a month later.
OUTCOME:	The finished project provides temporary storage of floodwaters which also provides sediment trapping and reduction of nutrients. In addition, the permanent pond creates wildlife habitat for waterfowl and deer.
Rock Inlet	Carver SWCD
DESCRIPTION:	This project has rock inlets completed in Carver County as follows: Benton Township – 3 inlets in Section 1, 4 in Section 14, 8 in Section 27 and 3 in Section 35. Dahlgren Township – 3 inlets in Section 10. Hancock Township – 1 inlet in Section 7, 2 in Section 10 and 1 in Section 11. Laketown Township – 4 inlets in Section 17. Waconia Township – 2 inlets in Section 31, 4 in Section 34 and 1 in Section 35. Young America Township – 3 inlets in Section 16, 6 in Section 22 and 4 in Section 35.
	The rock inlets replace surface tile intakes and other Best Management Practices (BMP's). The project design is a trench 3 feet by 15 feet, with a muck pipe placed on the bottom of the sloped trench and backfilled with pea rock. The Carver SWCD Technician assisted or reviewed the installation of the rock inlets and Landowners are responsible for operation and maintenance.
COST:	The initial cost was estimated at \$150 per rock inlet, with \$120 coming from State and \$30 from the landowner. \$15,000.00 was requested for the project, with \$3,000.00 targeted for technical assistance. A total of 49 rock inlets were installed, with a total cost of \$8,046.24 (\$5,985.96 LCMR contribution and \$2,060.28 local or private contribution). That averaged out to \$164.21 per installation. The remaining \$9,014.04 was returned to the state.

**OUTCOMES:** A total of 49 rock inlets have been installed with LCMR cost-share monies. The goal of these installed inlets is to reduce sediment and phosphorus loading. It is estimated that one-half ton of soil is saved each year per rock inlet. That is a total of 24.5 tons of soil saved and 13.5 pounds of reduced phosphorus loading.

#### Alternative Tile Intake Program

#### Cottonwood SWCD

**DESCRIPTION:** Funding for intakes in Cottonwood County have been in great demand with Blue Earth River Basin Initiative (BERBI) funding working in the Watonwan River Watershed, the Redwood-Cottonwood Rivers Control Area (RCRCA) funding working toward the Cottonwood River, Cottonwood County Water Plan funding working in the Des Moines River Watershed. With the LCMR funding, the Little Cottonwood River Watershed was selected because it did not have any other available funding sources and the remaining funds were used in the Cottonwood River Watershed.

Participating landowners worked with the NRCS District Conservationist and SWCD Technician to design the type of intake replacement necessary for the area. Landowners were able to choose from a rock intake or tile option. Mick pipe was used the first year of replacing intakes but standard tile has been used lately. Rock inlets have been a minimum of 15 feet for a 5-inch or 6-inch tile opening to 30 feet (or double) for 8-inch and the 10-inch opening. A single costs as low as \$225 up to \$300. The cost difference depends mostly on where the rock is purchased for the project.

For the tile option the Iowa guidelines were used. For each 0.1 acre ponded area 50 feet of standard drain tile is installed at tile depth, on a 10-foot spacing. If a rock filter costs \$250.00, 150-200 feet of tile can be installed to replace an open intake in a 0.3-0.4 acre ponded area. A total of 15 rock inlets were installed.

- **COST:** The total cost of construction is \$5,375.74, with \$4,000.00 provided by LCMR grant money and \$1,375.74 by the landowner.
- **OUTCOME:** The goal of this project is to reduce sediment and phosphorus run-off. There were 5 contracts with a total of 15 tons of soil saved each year and 13 pounds of phosphorus reduction per year.

Contract	Inlets	Annual Soil Saved	<b>Phosphorus Reduction</b>
	Applied	(tons/ year)	(lbs/year)
LCMR-02-01	2	2	2
LCMR-02-02	1	1	1
LCMR-02-03	3	3	1
LCMR-02-04	3	3	3
LCMR-02-05	6	6	6

#### Rock Inlet Implementation Project

#### Faribault SWCD

- **DESCRIPTION:** Several landowners requested cost-share funding for installing blind inlets and 29 existing open tile intakes were replaced with blind inlets. Research has indicated that approximately 50% of the sediment that is delivered through standard surface intakes is conveyed through the blind inlets. Besides improving water quality, farmers can farm directly over the inlet area and don't have to go around anything. Protecting and improving surface water quality and reducing sedimentation are identified in many of the goals and objectives in the Faribault County Comprehensive Water Plan. Replacing the existing open intakes with blind inlets will reduce the amount of sediment, nutrients and pesticides entering drain tile systems which outlet into drainage ditches, rivers and lakes.
  - **COST:** The total cost to install the 29 inlets was \$6,009.00 with cost sharing of \$3,805.50 from LCMR and \$2,203.50 from landowners. LCMR grant money was for \$4,000.00 and the remaining balance of \$194.50 was returned to the State of Minnesota
  - **OUTCOME:** Protecting and improving surface water quality and reducing sedimentation are identified in many of the goals and objectives in the Faribault County Comprehensive Water Plan. Replacing the existing open intakes with blind inlets will reduce the amount of sediment, nutrients and pesticides entering drain tile systems which outlet into drainage ditches, rivers and lakes.

In talking with several of the cooperators, they were all very satisfied with the blind inlets so far.

#### **Rock Vane Streambank Stabilization**

#### **Stevens SWCD**

- **DESCRIPTION:** About 600 feet of the Chippewa River bank has been eroding and cutting into the adjacent Swan Lake Township road in the north edge of Section 25, Stevens County, Minnesota. The erosion caused a water quality problem as well as a public safety hazard. An estimated 1,200 cubic yards of earth had been eroded from the stream bank and roadside. Survey and design of stream bank protection using rock barbs was done by the Minnesota River Source technical staff out of Montevideo and the NRCS Area Office out of Fergus Falls and construction by Riley Brothers Construction of Morris. These are the first stream barbs ever installed in Stevens County.
  - **COST:** This project cost a total of \$10,660.75 (\$7,995.56 for installation on 3 sites and \$1,504.44 for technical assistance from LCMR, along with \$2,000 from local government. No monies were returned to the State.
  - **OUTCOMES:** Reduction of sediment in the Chippewa River, reduction of damage to the Swan Lake Township road and prevention of public safety hazard, and improvement in water quality.

**BERBI...OVERALL OUTCOMES:** The total project cost was \$69,520, with the state's share at \$34,760 and the local share also at \$34,760. The total estimated cost of the five identified high priority sites within the watershed was \$43,500.00. Five projects have been completed out of the 6 proposed. The remaining project money (\$9,000.00) has been encumbered with the remainder (\$8,740.00) returned to Board of Water and Soil Resources. Pollution abatement is estimated at 332 tons per year sediment reduction and 311 pounds of phosphorus per year reduction. Specifics projects are listed on the following page.

<b>Drainage Ditch S</b>	treambank Stabilization	Watonwan Co. (BERBI)
DESCRIPTION:	This project involved the repair of 300 caused by erosion on Section 31 in Riv and vegetation. Bob Sorenson, Landov	erdale Township by using rip-rap
COST:	The estimated cost was \$12,038.00. T a return of \$4,515.00 to BWSR.	The actual cost was \$7,523.00, with
OUTCOME:	Work was completed August 2000. The phosphorus load. Soil loss reduction is load reduction of 76 pounds per year.	
Crada Stabilizati	on Project - Watenwan - projec	et was withdrawn (REDRI)
DESCRIPTION:	on Project – Watonwan – project Construction of a side inlet structure ir	
COST:	Cost share amount was projected at \$	3,000.00.
OUTCOME:	Projected sediment reduction was anti withdrawn due to landowner disengag this project in conjunction with putting additional funding available at this time about putting some of the adjacent ac landowner was not sold on CRP.	ement. The landowner wanted to do in rip-rap but there was no e. There was also some discussion
Maple River		Blue Earth County (BERBI)
DESCRIPTION:	This project involved installation of ter Section 3 and 4 of Sterling Township, progression of seven large draws erod	races adjacent to Maple River in Blue Earth County to stop the
COST:	The cost was \$12,318.00 (\$9,000 LCM owners) for waterway and terrace wor	
OUTCOME:	Work was completed June, 2002. The phosphorus load. Anticipated soil loss and the phosphorus load reduction is 7	reduction is 1,387 tons per year
Sediment Basins		Waseca County (BERBI)
DESCRIPTION:	Construction of three sediment basins Waseca County, were proposed to con erosion by using waterways and holdir Landowner.	in Section 8, Alton Township, trol approximately 900 feet of gully
COST:	The cost was \$5,004.62 ( \$3,637.00 Lo landowner.	CMR grant and \$ 1,367.62 by
OUTCOME:	The project was completed May 2000.	The goal is to reduce soil loss and

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phosphorus load. Soil loss reduction is 237 tons per year and the phosphorus load reduction is 280 pounds per year.

Waterway Project	t Waldorf, MN - Waseca County (BERBI)
DESCRIPTION:	Waterways and tile were installed to replace approximately 3,200 feet of old waterway at Section 34 and 35 of Freedom Township, Waseca County, to prevent gully erosion and sedimentation flowing to the Little Cobb River. Ruth Hodgkins, Landowner.
COST:	The project was estimated to cost \$9,825.00. The actual cost was \$7,834.00 with \$1,991 returned to Board of Water and Soil Resources.
OUTCOME:	The project was completed October 2000. The goal is to reduce soil loss and phosphorus load. Soil loss reduction is 333 tons per year and the phosphorus load reduction is 390 pounds per year.
<b>Gully Stabilzation</b>	n Project Cottonwood County (BERBI)
DESCRIPTION:	A gully stabilization pond with a tiled outlet will be constructed in response to the formation of a gully where water drops to the river. Location is in Section 15, Midway Township, Cottonwood County, next to the Watonwan River. Arnold Regier, Landowner.
COST:	Total cost was \$9,021.70. Completion of this project was October 2000 at a realized cost of \$6,766.00 LCMR grant and \$2,255.70 by the landowner. \$2,234.00 was returned to the State of Minnesota.
OUTCOME:	The goal is to reduce soil loss and phosphorus load. Soil loss reduction is 55 tons per year and the phosphorus load reduction is 60 pounds per year.
Agricultural Drai	n Tile Inlet Inventory Scott County Public Works
DESCRIPTION:	17 rock inlets were installed in Scott County in cooperation between the Scott SWCD and three landowners. A surface water inlet system replaced the standard stand pipe with a 6" muck pipe, filter sock and end cap. The muck pipe was connected to the subsurface drainage system and covered with $\frac{1}{2}$ " round river rock.

- COST: 17 rock inlets were installed at a cost of \$5,391.16. Approximately 70% of the cost was paid for using the \$3,750.00 LCMR grant dollars. The landowners paid 30% of the cost of the practice (\$1,641.16).
   John Mahoney 4 rock inlets. Total practice cost was \$1,300 with program cost share of \$705.69 and landowner cost of \$594.31.
   Kevin Koepp 6 rock inlets. Total practice cost \$1,758.75 with program cost share of \$1,295.00 and landowner cost of \$463.75.
   Bill McCue 7 rock inlets. Total practice cost \$2,332.41 with program cost share of \$1,749.31 and landowner cost of \$583.10.
- **OUTCOMES:** Total estimated annual sediment reduction is 17 ton per year and 77 pounds of nutrient reduction per year.

On the John Mahoney property sediment reduction is 4 ton per year and phosphorus reduction is 18 pounds per year. At Kevin Koepp's the sediment reduction is 6 ton per year and phosphorus reduction is 27

pounds per year. The rock inlets at Bill McCue's the sediment reduction is 7 ton per year and a phosphorus reduction of 32 pounds per year.

Follow-up with landowners have produced favorable comments.

# Blind Tile InletsLe Sueur SWCDDESCRIPTION:Rock inlets were installed in the Lower Minnesota River Watershed and<br/>Middle Minnesota River Water within the Minnesota River Basin in Le Sueur<br/>County. This project replaced approximately 100 surface tile inlets in the<br/>Watershed with rock inlets consisting of ½ inch round rock placed over a<br/>muck pipe with a sock and end cap. Le Sueur SWCD supervised the<br/>installations and provided the design, with the landowners maintaining a<br/>good rock filter.COST:The Blind Tile Inlets project had an estimated cost of \$25,000.00, with

**COST:** The Blind Tile Inlets project had an estimated cost of \$25,000.00, with 20% of that cost to be used for technical assistance. The anticipated installation of approximately 130 rock tile inlets had a 75% cost share-\$20,000 from state and \$6,667 from local. Of the original \$25,000 targeted for this project, \$10,000 had been returned during the original deadline and then was revised to \$15,000 when the grant was extended another year. The actual cost of the project was \$10,211.45. LCMR contributed \$7,443.91 for cost-share payments to landowners and \$5,000.00 for SWCD technical assistance. The total landowner contribution was \$2,767.54 and the remaining \$2,556.09 was returned to the State of Minnesota.

## **OUTCOMES:** There were 56 inlets installed throughout the Minnesota River Watershed in Le Sueur County. Landowners are pleased with the simplicity and function of the inlets and many more will likely be installed without cost-share in future years. Weather conditions during spring and fall during the project years prevented installation of some planned projects.

The goal of this project is to reduce sediment and phosphorus run off. Based on past research, the 56 installed inlets should prevent half the sediment and two-thirds of the phosphorus from entering the tile lines. Soil loss reduction is 0.5 tons per year per inlet, with phosphorus reduction of 0.6 pounds per year per inlet.

#### **Rock Inlet Implementation Project**

#### Redwood SWCD

- **DESCRIPTION:** For the past 5 years the issue of alternative intakes has been discussed. They had a long list of landowners who wanted funding to install alternative intakes. There were contracts with four individuals to install 30 alternative intakes but there was demand for 100 intakes if more funding had been available. Three of the four individuals installed more alternative intakes at their own expense.
  - **COST:** Total cost for the 30 intake installation was \$6,136.00, with \$204.53 being the average cost per intake. The cost of an intake ranged from \$160.00 to \$297.00 which is lower than most other counties have been paying.

**OUTCOME:** Although there isn't a good formula for estimating reduction in soil loss and pollutants, discussions lead them to believe that these intakes could save up to 15 tons of soil per year and reduce as much as 17.25 pounds of phosphorus per year. There were no problems with the implementation of the grant money other than there were many more interested landowners than what there was grant money.

#### Storm Water Control and Gruetzmacher Grade Stabilization Scott SWCD

- **DESCRIPTION:** The purpose of this project was to build a grade stabilization structure for storm water control. An earthen structure with a pipe drop water control assembly was installed across an existing gully. The structure drops water from one stabilized grade to another and prevents gullies from advancing up a slope.
  - **COST:** Estimated cost of the project was \$27,000.00. The actual cost of construction was \$25,775.00 with \$15,831.00 from LCMR, \$3,500.00 from the Agricultural Conservation Practice(ACP) Program and \$6,445.00 from the landowner.
  - **OUTCOME:** The goal was to reduce soil loss and phosphorus load. Soil loss reduction comparison is from 16.2 ton per year to now only 1.0 ton per year. The phosphorus load has been decreased- from 73 pounds per year reduced to now only 5 pounds per year.

Also, a wildlife pond was constructed on the upstream side of the structure to provide habitat for water fowl.

#### Koepp Water and Sediment Basins

#### Scott SWCD

- **DESCRIPTION:** In Section 23, Blakeley Township, Minor Watershed #33140, Scott County, two water and sediment basins were built to correct gully erosion in the cropland field. An embankment was built across a depressional area of concentrated water runoff, acting similar to a terrace. It traps sediment and water running off farmland above the structure, preventing it from eroding the cropland below.
  - **COST:** The estimated cost of construction was \$12,400.00. The actual cost was \$12,818.00. The cost-share payment was \$9,300 \$6,000 from LCMR and \$3,300.00 from BWSR-Erosion, Sediment Control and Water Quality Cost-Share Program. Landowner cost was \$3,518.00.
  - **OUTCOME:** The project was completed on December 6, 2000. The goal of this project is to reduce sediment and phosphorus run off. Soil loss reduction before this project was 7.5 tons per year and now is 1 ton per year. The prior phosphorus level was 34 pounds per year and that is now reduced to 5 pounds per year.

#### Streambank Stabilization

#### Scott County SWCD

**DESCRIPTION:** A streambank stabilization project was identified for Porter Creek, Section 34 of Sand Creek Township, Scott County. Water quality monitoring by Metropolitan Council found Sand Creek to be a high contributor of non-point source pollution to the Minnesota River. It is part of a DNR protected

watercourse. Not only was the streambank stabilized but a building site was protected and non-point pollution was reduced by using rip-rap and bio-engineering. Doug Carlson, Landowner.

The project utilized concrete blocks from the local concrete company. The 2x2x6' blocks were created by pouring excess concrete from cement orders into forms. These blocks were used to line the bank. A fabric filter was placed behind the blocks. Rock rip rap was placed at the toe of the blocks to prevent undermining. Boulders were placed on steep areas above the design height of the block wall. A permanent vegetative cover was established on all areas above the structural protection.

- **COST:** The estimated cost of this project was \$17,500.00. The actual cost was \$18,110.50. \$14,195.00 was received from LCMR but with a cost share of \$13,125, \$1,070.00 was returned to the State of Minnesota. The landowner's cost was \$4,985.50.
- **OUTCOME:** The project was completed in September 8, 2000. The goal of this project was to reduce sediment and phosphorus run off. Soil loss before this project was 54.4 tons per year and now is reduced to 1 ton per year. The phosphorus level prior was 245 pounds per year and is now reduced to only 5 pounds per year.

#### Picha Streambank Stabilization

**DESCRIPTION:** 

In this project is located on a stream bank in Sandcreek sub-basin, Section 34 of Louisville Township, Minor Watershed #33131, Scott County. The eroding site is the bank of a DNR protected watercourse. The Scott SWCD has identified Sand Creek as a high priority watershed. The stream channel bottom is eroding causing the toe of the streambank to undermine and slough into the stream channel. The erosion will continue to escalate and cause a loss of property and threaten the access road and bridge to the homesite. The project used cable concrete on the pre-shaped stream bank slopes. A permanent vegetative cover was established on all exposed soil areas not protected by the cable concrete practice to reduce non-point source pollution.

- **COST:** The estimated cost of the project was \$40,000 \$30,000 from the state and \$10,000 from the landowner. The actual cost was \$36,449.00. Of the \$30,000.00 grant from LCMR only \$27,337.00 was used with \$2,663.00 returned to the State of Minnesota. The landowner's cost was \$9,112.00 and he used the State Revolving Fund Loan Program for his share of the practice cost.
- **OUTCOME:** The goal of this project is to reduce sediment and phosphorus runoff. Soil loss reduction before this project was 60 tons per year and now is 1 ton per year. The phosphorus load was 270 pounds per year and is now reduced to only 5 pounds per year.

Scott SWCD

#### **Pasquarette Grade Stabilization**

#### Scott SWCD

DESCRIPTION:	An earthen dike, with core trench, was constructed with a metal pipe outlet and drain filter at the head of the gully in Section 9 of Sand Creek Township, Minor Watershed #33111, Scott County. The pipe outlet is a 12" diameter CMP with a hood inlet assembly. A drain filter was installed under the dike and along the pipe to intercept subsurface seepage. A rock-lined channel was installed at the outlet of the pipe to prevent scouring.
COST:	The total estimated cost of construction is \$13,000.00, with \$9,750.00 to be provided by LCMR grant money. The actual cost of construction was

**OUTCOME:** The project started in November of 2000 and was completed in the spring of 2002. The goal of this project is to reduce sediment and phosphorus run off. Soil loss reduction anticipated before this project is 22.5 tons per year compared to 1 ton per year after completion. The anticipated phosphorus load reduction is from 101 pounds per year to 5 pounds per year.

to the State of Minnesota. Landowner cost was \$2,375.00.

\$9,500.00 with a cost-share payment of \$7,125.00. \$2,625 was returned

#### St. James Creek Channel Restoration Demonstration project withdrawn

- **DESCRIPTION:** The project area is located in Watonwan County, Rosendale Township, SW 1/4 Section 7 and is located close to the City of St. James and the Environmental Learning Center thus allowing access to the project site for educational reasons. Approximately 1,000 linear feet of channel will be restored on a CREP parcel. The channel was ditched in the late 1950s, bypassing two significant curves in the creek.
  - **COST:** Cost projection is \$32,000, with \$24,000 coming from state and \$8,000 from local sources.
  - **OUTCOME:** Project withdrawn due to technical and administrative factors. The first engineer reported possibly two problems inherent to putting in meanders surface water would be increased by  $1/10^{\text{th}}$  and with lowered velocity there could be sedimentation deposits. A second opinion was being requested but time was running out Previously this project had three times undergone voting applying for the grant, approving the contract and signing the grant agreement with a 3-2 vote for it. At the Soil and Water Conservation District Board meeting the vote was 2-1 against this issue, with the Chairman unable to vote and a board member unable to attend. In the past 3  $\frac{1}{2}$  years this has been the only split vote.

#### Minnesota Rimer Basin ATTACHM 1a WATERSHED TEAMS Matrix

(Population per 1992 census numbers)

W.S #.	Name	Organizational Structure	Coordinator	A Total #	cres % of Basin	Towns	Pop Estimated	oulation % of Basin
22	Upper Mn.	W. S. District County Water Plan	Dianne Radermacher 320-839-3411	1,341,917	12.4	12	8875	1.1
23	Pomme de Terre	5 County Joint Powers	Sheila Faber Wes Min. RC&D 320-763-4733	559,966	5.1	9	19,500	2.6
24	Lac qui Parle	Watershed District Clean Water Partnership	Mary Homan 320-598-3319	702,119	6.5	6	12,000	1.6
25	Yellow Medicine	Watershed District Clean Water Ptn.	Terry Renken 507-872-6720	630,080	5.8	14	16,500	2.1
25	Hawk Creek	Clean Water Partnership	Loren Engelby 320-523-3672	679,504	6.3	16	29,000	3.7
26	Chippewa	Clean Water Partnership	Kylene Olson 320-269-2139 ext 116	1,333,541	12.2	26	48,300	6.4
27	Redwood	8 County Joint Powers Bd.	James Doering 507-637-2142	45,1257	4.2	14	23,000	3.1
28	Middle MN	Developing Stage	Paul Davis 507-233-6641	862,060	7.9	20	60,500	7.9
29	Cottonwood	8 County Joint Powers	James Doering 507-637-2142	840,190	7.7	21	28,000	3.6
30	Blue Earth	Clean Water Partnership	Michele Stindtman 507-526-2388	992,034	9.2	21	56,900	7.4
31	Watonwan	Clean Water Partnership	Bruce Johnson 507- 375-1225	561,620	5.3	12	20,700	2.8
32	LeSueur	Clean Water Partnership	Julie Conrad 507- 389-8386	711,838	6.7	20	43,200	5.7
33	Lower MN	Lower MN River Watershed District	Hiring 952-496-8842	1,165,229	10.7	51	400,000	52
33	Lower MN	Friends of Mn. Valley	Lori Nelson 952-858-0706	1,165,229	10.7	51	400,000	52
	TOTALS			10,849,467	100%	241	766,445	100%

8/9/02 TEAMS^Matrix.doc C:\DIANE\LCMR\Final Report 2002\WATERSHED

#### **ATTACHMENT 1b**

#### MINNESOTA RIVER BASIN JOINT POWERS BOARD WATER QUALITY IMPROVEMENT PROJECTS LCMR 1999 LOCAL LEADERSHIP GRANT APPLICATIONS

APPLICANT	PROJECT TITLE	TOTAL COST OF PROJECT(S)	LCMR CONTRIBUTION	OTHER STATE & FEDERAL CONTRIBUTION	LOCAL GOVT. OR PRIVATE CONTRIBUTION	PRACTICES INSTALLED
Area II MRB Projects, Inc.	Taylor Dam #3 Floodwater Retention and Lake Marshall 29 Small Dam	\$40,676.29	\$30,507.00	\$0	\$10,169.29	2 floodwater retention dams constructed
Carver SWCD	Rock Inlet Implementation Project Replacing Open Tile Intakes with Blind Inlets	\$8,046.24	\$5,985.96	\$0	\$2,060.28	49 rock inlets installed
Cottonwood SWCD	Rock Inlet Implementation Project Replacing Open Tile Intakes with Blind Inlets	\$5,375.74	\$4,000.00	\$0	\$1,375.74	15 rock inlets installed
Faribault SWCD	Rock Inlet Implementation Project Replacing Open Tile Intakes with Blind Inlets	\$6,009.00	\$3,805.50	\$0	\$2,203.50	29 rock inlets installed
Stevens SWCD	Rock Vane Streambank Stabilization Install Rock Vane materials on 3 sites	\$10,660.75	\$7,995.56	\$0	\$2,000.00	600 feet of stream banks or rock vanes installed
	Technical Assistance		\$1,504.44			
BERBI	5 Projects Identified Accelerated Implementation of Conservation Projects	\$69,520.00	\$34,760.00	\$0	\$34,760.00	Terraces, gully stabilization, sediment basin, waterway, streambank stabilization
Scott County Public Works	Rock Inlet Implementation Project Replacing Open Tile Intakes with Blind Inlets	\$5,391.16	\$3,750.00	\$0	\$1,641.16	17 rock inlets installed
Le Sueur SWCD	Rock Inlet Implementation Project Replacing Open Tile Intakes with Blind Inlets	\$10,211.45	\$7,443.91	\$0	\$2,767.54	56 rock inlets installed
	Technical Assistance		\$5,000.00			
Redwood SWCD	Rock Inlet Implementation Project Replacing Open Tile Intakes with Blind Inlets	\$6,136.00	\$4,000.00	\$0	\$2,136.00	30 rock inlets installed
Scott County SWCD	Grade Stabilization	\$25,775.00	\$15,831.00	\$3,500.00	\$6,445.00	Earthen grade stabilization structure
Scott County SWCD	Water and Sediment Basin	\$12,818.00	\$6,000.00	\$3,300.00	\$3,518.00	2 water and sediment basins
Scott County SWCD	Streambank Stabilization	\$18,110.50	\$13,125.00	\$0	\$4,985.00	Streambank stabilization rip rap and bioengineering
Scott County SWCD	Streambank Stabilization	\$36,449.00	\$27,337.00	\$0	\$9,112.00	Streambank stabilization with rip rap
Scott County SWCD	Grade Stabilization	\$9,500.00	\$7,125.00	\$0	\$2,375.00	Earthen grade stabilization structure
	Expense for Signage		\$2,658.00			
	Total	\$264,679.13	\$180,828.37	\$6,800.00	\$85,548.51	

8/8/02

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#### **1999 Project Abstract**

#### Minnesota River Basin Initiative: Local Leadership 007(g) \$300,000, TF

Harlan Madsen, Chair Minnesota River Basin Joint Powers Board PO Box 244, 116 Peavey Circle Chaska, MN 55318

 Phone:
 (952) 361-6590

 Fax:
 (952) 361-6594

 E-mail:
 mrbjpb@earthlink.net

 Web site:
 http://mrbdc.mnsu.edu

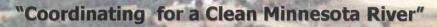
Overall Project Outcome and Results are located on the Minnesota State University, Mankato – Data Center web site: <u>http://mrbdc.mnsu.edu</u>. This project was twofold - organizing 13 major watersheds in the basin into Watershed Teams based upon logical relationships and secondly, implementing projects on the ground in those watersheds.

The watershed team approach allows for a more consolidated look at planning and project implementation that makes use of regional tools available by cooperators and partners. This approach also accelerates the distribution of information within the basin. The Watershed Coordinators continue to meet periodically to address basin-wide issues and to advise the MRBJPB.

Projects were implemented basin-wide with a 75-25 cost share. The total cost was \$264,679.13 (\$180,828.37 from LCMR, \$6,800 from other state and federal organizations, and \$85,548.51 from either local or private contribution). There were 226 rock inlets replacing open tile intakes with blind inlets in Carver, Cottonwood, Faribault, Scott, Le Sueur and Redwood Counties. In Stevens and Scott Counties there were streambank stabilization projects along with grade stabilization. Area II MRB Projects, Inc. installed a floodwater retention project on Taylor Dam #3 and constructed a small dam on Lake Marshall. BERBI implemented 5 projects that included drainage ditch streambank stabilization, grade stabilization, installation of terraces, sediment basin construction, waterways and gully stabilization. These projects will reduce sediment and phosphorus in the river thereby improving water quality. Soil loss reduction varied from project to project, from 0.5 ton to 55 tons per year. Phosphorous load reduction amounts also varied between projects, from 0.6 pounds to 730 pounds. Improved wildlife habitat and recreation were side benefits in some of the projects. Working with partners on data collection will further assess the benefits of these projects. Project information has been disseminated to a large audient -through board meetings, the MRBJPB annual report that goes out to many organizations, at the MRBJPB annual conference and on the web site.

COMPLETION DATE: 06/30/02

## Minnesota River Basin Joint Powers Board ANNUAL REPORT 2001



#### LETTER FROM THE BOARD CHAIRPERSON

Dear Friends and colleagues,

2001! What a way to start the new century. Change is a constant but things are changing at a faster pace. What a century it will be if last year was an indication of things to come.

Change can be both good and bad. A good change was that most counties were able to double their support to the MRBJPB and help in its effort to clean up the Minnesota River. Following that change was a big push to realize the goal of 10,000 acres enrolled in C.R.E.P.

While we were continuing to partner with interested parties, we received an offer from C.U.R.E. to help us with our Summer Conference. I believe it was a great success. We look forward to continued partnering efforts with this group and others.

Steve Hansen's resignation gave us the opportunity to hire Aaron Colson and start a new era for this organization. Aaron brings a different perspective and experience to the job of Executive Director. We look forward to exploring his ideas. I wish Aaron and Steve the best.

The most significant event of 2001 was the terrorist attack on September 11th. It has affected us each individually and collectively. The long-term effects are still unknown. I can only hope the positive changes will outweigh the negative impact of unbelievable suffering and loss for so many people.

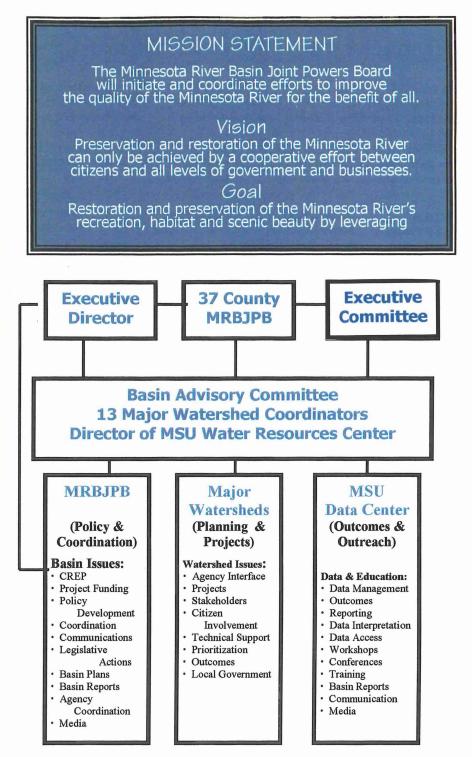
In closing, I would like to thank everyone for your help while I served as your chairperson. A sincere thank-you to Harlan Madsen and Al Bennett for your leadership during some difficult times and to Diane Ovrebo for the extra effort you made in the absence of an executive director.

Progress has been made but much remains to be done. Our goal continues to be to work together for a cleaner Minnesota River.

Sincerely,

Chaster Buggisberg

Charlie Guggisberg



## **2002 DELEGATES & ALTERNATES**

**Big Stone** Blue Farth Brown Jeanne Krueger Al Bennett **Charles Guggisberg** Alvin Maas Andrew Johnson **Andrew Lochner** 

Carver **James Ische John Sieafried** 

Douglas

Pat Heldt

Chippewa Cottonwood John Oeltjenbruns Nancy Schouweiler Vernon Lorsung **Jim Dahlvang** Kenneth Koenen Kenneth Elg

Dakota **Joseph Harris** 

Faribault **Ralph Prescher** Loren Lein

Freeborn Glen Mathiason **Daniel Belshan** 

Grant Jennes Swenson

Hennepin **Mary Tambornino** 

Peter McLaughlin

Jackson **Edward Yonker Robert Ferguson Richard Larson** 

Kandiyohi Harlan Madsen

LacOui Parle Albert Hoffman **Arvid Gollnick** 

Le Sueur William Stangler **Robert Culhane** 

Lincoln Lyon **Curt Blumeyer** Larry Hansen

**Phil Nelson** 

Martin **Steven Donnelly** Jack Potter

Mcl eod **Ray Bayeri Melvin** Dose

Nicollet Murray Pipestone Pope **Steve Johnson Robert Weets Judy Hanson** Bruce Thorfinnson William Sauer **Cletus Schroepfer Marvin Tinklenberg** Keith Naig

Ramsey Redwood Renville Rice Victoria Reinhardt Deb Hess Francis Schweiss Marybeth Rogers **Rafael Ortega** Joseph Schouvieller Heather Robins **Robert Ryan** 

Scott **Joe Wagner Dallas Bohnsack** 

Sibley Leo Bauer **Charles Woehler**  Steele **Bruce Kubicek James Wagner** 

Stevens Herb Kloos Neal Hofland

Swift Traverse Waseca Watonwan John Thompson **Gerald Kaus** Wendell Armstrong Noren Durheim William Gibson **James Peterson Doug Anderson** John Baerg

Yellow Medicine Jo Ann Coover **Jane Reniger** 

## **2002 Executive Committee**

#### Harlan Madsen

Chairperson Kandiyohi County 15263 - 120th Avenue, SE Lake Lillian, MN 56253 320.664.4880

#### **Judy Hanson**

Treasurer Nicollet County 39384 403rd Avenue St. Peter, MN 56082 507-246-5388

#### **James Ische**

First Vice-Chair Carver County 13080 County Rd 52 Norwood, MN 55368 952.466.5851.

#### John Thompson

Secretary Swift County 800 16th Street South Benson, MN 56215 320.843.2573

### **Office Staff**

#### **Aaron Colson**

Executive Director 116 Peavey Circle Chaska, MN 55318 952-361-6590 612- 396-8537 (mobile)

#### Diane K. Ovrebo Administrative Assistant 116 Peavey Circle Chaska, MN 55318 952.361.6590 dovrebo@co.carver.mn.us



#### Al Bennett

Second Vice-Chair Blue Earth County 48098 State Hwy 60 Lake Crystal, MN 560: 507.726.2158

## **2002 Watershed Coordinators**

MAJOR WATERSHED	COORDINATOR or APPOINTED COORDINATOR*	PHONE	E-MAIL
Blue Earth	* <b>Michele Stindtman</b> Blue Earth-Faribault SWCD	507.526.2388	fcswcd@bevcomm.net
Chippewa River	<b>Kylene Olson</b> Chippewa River Watershed Project	320.269.2139 X116	kao@mnmontevid.fsc.usda.gov
Cottonwood	James Doering RCRCA	507.637.2142	rcrca@rconnect.com
Hawk Creek	Loren Engelby Hawk Creek Watershed Project	320.523.3672	Loren_e@co.renville.mn.us
Lac qui Parle	Mary Homan Lac-qui Parle Yellow Bank Watershed Project	320.598.3319	mahoman@mail.co.lac-qui- parle.mn.us
Le Sueur River	*Julie Conrad Le Sueur-Blue Earth Co. Environmental	507.389.8381	Julie.conrad@co.blue-earth.mn.us
Lower MN River	Kevin Bigalke Lower MN River Watershed Initiative	952.496.8842	kevin.bigalke@lowermn.com
Pomme de Terre	<b>Sheila Faber</b> Pomme de Terre— WesMin RC&D	320.763.4733	sheila.faber@mn.usda.gov
Middle Minnesota	* <b>Paul Davis</b> Brown County Recy- cling & Water Planning	507.233.6641	paul.davis@co.brown.mn. us
Redwood-Cottonwood Rivers	James Doering Redwood-Cottonwood Rivers Control Area (RCRCA)	507.637.2142	rcrca@rconnect.com
Upper Minnesota River	Dianne Radermacher Upper Minnesota River Watershed District	320.839.3411	dkr@mnortonvil.fsc.usda.gov
Watonwan	Bruce Johnson Watonwan County Environmental Services	507.375.1225	bruceej@excite.com
Yellow Medicine River	Terry Renken Yellow Medicine River Watershed Project	507.872.6720	ymrw@starpoint.net

## PARTNERS

The Minnesota River Basin Joint Powers Board counties realize that restoration and preservation of the Minnesota River can only be achieved by local entities- governments, agriculture, business, individual citizens—working in cooperation with each other, and with the support and assistance of all available resources at the local, state and federal level.

A-Frame Farm, Madison, MN Art & Barb Straub Audubon Society of MN **Baumgartner Environics Board of Water & Soil Resources** Bonestroo & Associates **Browning-Ferris Industries Chippewa County Land/ Resource Management Clean Up the River Environment (CURE)** Coalition for a Clean Minnesota River (CCMR) **Cottonwood Creek Hunting** Dawson City **Ducks Unlimited** Farm Bureau **Granite Falls** Hamline University Center for Global Environmental Education HDR Engineering **Jerry Ostensoe** Land Stewardship Program The Legislative Commission of Minnesota Lower Sioux Agency **McKnight Foundation Midwest Cattlemen's Association MN Association of Watershed Districts MN Canoe Association MN Department of Agriculture MN Institute for Sustainable Agriculture MN River Ag Team MN Pork Producers** MN Project—David Minge **MN River Basin Data Center MN Rural Partners MN Valley Alfalfa Producers MN Waterfowl Association Natural Resource Conservation Service Nicollet Conservation Club Office of Environmental Assistance Prairie Land Management Redwood Falls Sportsman Club Rinke & Noonan Law Firm Rivers Council of MN Rural Development** Soybean Growers Southern MN Beet Sugar Cooperative U of MN— Ag Experimental Stations, Extension & Soil/Water/Climate Upper Sioux Agency **US Fish & Wildlife Service** United States Geological Survey Water Resources Center, Mankato Wetlands Initiative **3M River Rats** 

American Legions Association of MN Counties **Barr Engineering Beef Producers Bolton & Menk Braun Intertec** Cedar Rock Ranch

**Dave Cragmile** Dept. of Natural Resource **Environmental Services Flood Control America** 

Java River John Felton

**MSU Data Center Met Council** MN Association of SWCDs **MN Corn Growers Association MN Historical Society MN Pollution Control Agency MN River Cluster** MN River Educational Initiative MN State University—Mankato MN Valley Testing Labs Montevideo **New Ulm Sport Fishermen** Ochs Brick & Tile Co. Pastures A'Plenty **Public Input Committee Region 9 Devipmt Commission River Friendly Farmer Program Ron Shara and Raven** Salix Ecological Resources Struxness Farms Sustainable Farming Assn of MN **US Army Corps of Engineers USDA Farm Service Agency** Wabasso Implement Itsch Eqpmt U of M

Willow Creek Farm



On July 12, 2001, the Minnesota River Basin Joint Powers Board (MRBJPB) celebrated 6 years of working on coordinating the restoration of the Minnesota River. The first five years of the Board's efforts are characterized as "Process Years" where data were gathered, interpretations were made, work was organized into watershed teams, and there was a general "relationship building effort" within the basin. We are now entering the "Project Years" where our many partners are focusing on implementation of projects that are necessary to restore the guality of the Minnesota River.

#### January

■ The Board gathered to ring in 2001 with Charles Guggisberg, Brown County as Chairperson, Harlan Madsen, Kandiyohi County as 1<sup>st</sup> Vice- Chair, James Ische, Carver County as 2<sup>nd</sup> Vice-Chair, Jo Ann Coover, Yellow Medicine County, as Treasurer and Al Bennett, Blue Earth County, as Secretary.

■ Resolution No. 12201:1 The MRBJPB signed, asking for support of full funding of the Minnesota River CREP. The MRBJPB is proud to join the CREP Coalition in supporting CREP.

■ The Full Board had requested that Steve Hansen ask CURE to co-host the next Summer Conference with the MRBJPB. CURE has agreed and planning has begun.

■ Resolution of Support for the 2002 Farm Bill signed by the MRBJPB. The purpose of this support is tying conservation efforts in with food production.

■ Watershed Institute held "Involving Citizens in Watershed Efforts" in New Ulm at the Holiday Inn on January 10th and 11th. Over 100 in attendance.

#### MARCH

Challenge Grant Application submitted.

St. Peter Biomass Project was presented by David Ostlie. Ed Mohring from BWSR reported on pollution reductions in the Minnesota River Basin.

#### MAY

■ The Full Board of the MRBJPB, upon recommendation of their Executive Committee, agreed to transfer the duties, responsibilities and financial support for the Minnesota River Watershed Institute from the MRBJBP to Minnesota State University, Mankato effective July 1, 2001.

The Challenge Grant proposal by the MRBJPB was not awarded.

■ Steve Hansen presented "The Bus," an analogy of the MRBJP. Funding is a major issue. The Board voted to double dues for one year (2002) to allow time to determine the direction of the MRBJPB.

Senate supports full funding for CREP.



#### AUGUST

■ 2nd & 3rd The 6<sup>th</sup> Annual Minnesota River Basin Summer Conference was co-sponsored by MRBJPB and CURE—first time ever cosponsored with the intent on focusing on citizen involvement. The two-day conference was held in Montevideo, Minnesota with a focus on "Clean Water in our Lifetime." Over 240 people participated in the two-day event. Highlights included six tours that highlighted this diverse area.

Steve Hansen, former Executive Director, gave notice to Chairperson Charles Guggisberg and the Executive Board on August 6th, 2001. The Full Board accepted his resignation on and August 31, 2001 was his last day with the MRBJPB. The Full Board wished him well in his new endeavors with Bonestroo & Associates.

Working at a Watershed Level planning continues.

#### SEPTEMBER

10-14th Working at a Watershed Level conference takes place in St. Cloud at the Civic Center despite the Trade Towers bombing. Council of State Governments, MPCA and the MRBJPB host this event, and share in the costs.

#### OCTOBER

The hiring process is underway, with the Executive Director posting sent out to all 37 counties and in the Sunday Tribune for a two-week period. Also, those counties with web sites assisted by posting this position and the MRBJPB thanks them for their assistance.

#### NOVEMBER

Interviews held for the Executive Director's position. Over 50

applicants sent resumes, with six being interviewed by a special committee— Charles, Guggisberg, Jim Ische, Harlan Madsen, Judy Hanson, Al Bennett, Marybeth Rogers and William Stangler.

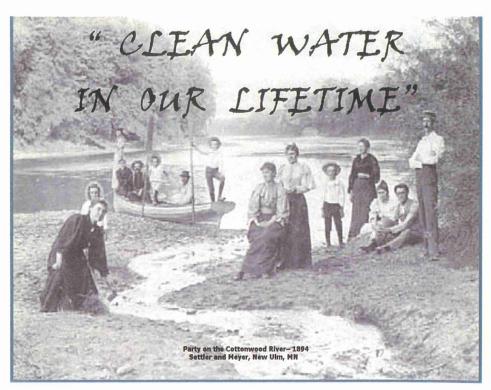
 Aaron Colson accepted the offer presented by Chair Guggisberg on behalf of the MRBJPB. Aaron will begin his duties as the Executive Director on January 14, 2002.

#### DECEMBER

A request for the third installment of the McKnight Grant was submitted along with an interim report. The McKnight Foundation approved the proposed budget and report, and payment of \$ 57,000 was received. See page 18 for a general accounting.

A request for the final installment of the MPCA was submitted to MPCA. This completed the Watershed Institute grant money.

 MPCA meets with both the Executive Committee and Full Board to discuss partnering on TMDL implementation.





Co-Hosted by: The Minnesota River Basin Joint Powers Board (MRBJPB) and

Clean Up the River Environment (CURE)

Steve Hansen, Executive Director for MRBJPB, and Lynn Lokken, Executive Director for CURE, were interviewed by KSAX-WCCO



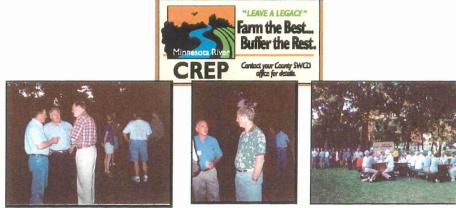


At the end of the Conference three of the CAC Recommendations were selected by the participants to work on during the year 2002.









#### (Developed at the 6<sup>th</sup> Annual Minnesota River Summer Conference Held in Montevideo, MN - August 2<sup>nd</sup> & 3<sup>rd</sup>, 2001)

ACTION PLAN

Questions asked of conference attendees:

• What are the 3 top CAC Recommendations that we could work on as a group in the Minnesota River Basin for the next year and realistically see success?

And then, what are 3 strategies under each recommendation that we could accomplish?

### A. ENGAGE THE GENERAL PUBLIC - Top 3 Strategies

•Launch a mass media communication campaign focusing on the economic benefits, success stories, and ongoing efforts to improve the Minnesota River watershed

•Develop a list of actions citizens can take to help meet Minnesota River goals as defined in the 10 Citizen Advisory Committee (CAC) recommendations

•Hold a rally during the next legislative session to thank legislators for fully funding and recognizing the benefits of the Conservation Reserve Enhancement Program (CREP) and impress upon them the importance of continued efforts to clean up the Minnesota River basin

### B. IMPROVE LAND MANAGEMENT PRACTICES - Top 3 Strategies

 $\boldsymbol{\cdot} \text{Mobilize}$  a united front to assure passage and full implementation of the

Conservation Security Act (CSA)

•Elevate awareness and understanding of existing certification programs and investigate requiring licensing for crop consultants

•Demonstrate systems of field record keeping that work to improve environmental quality and on-farm profitability

### C. RESTORE WETLANDS – Top 3 Strategies

•Assist in efforts to ensure full implementation of the Conservation Reserve Enhancement Program (CREP)

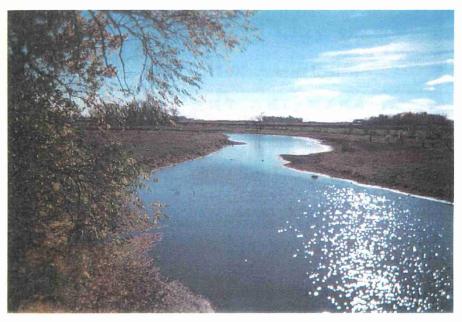
•Mobilize a united front to assure passage and full implementation of the Conservation Security Act (CSA)

### 10 (CAC) Recommendations (1994)

The Minnesota River Citizen's Advisory Committee (CAC) was formed 1992 by Governor Arne Carson to assist the Minnesota Pollution Contr Agency and other collaborators in developing viable options for improing water quality in the Minnesota River. It was hoped these recommendations would provide the framework for continued discussions among those who care about the future of this great river.

> Restore Floodplains and Riparian Areas Restore Wetlands

Manage Drainage Ditches and Storm Sewer as Tributaries Improve Land Management Practices Monitor Water Quality Throughout the MN River Basin Establish a MN River Commission to Oversee the Cleanup Effort Establish Local Joint Powers Agreements Improve Technical Assistance to Local Governments Engage the General Public Enforce Existing Laws



## Minnesota River Watershed Institute



### INVOLVING CITIZENS IN WATERSHED EFFORTS

January 10-11, 2001

SPANNING THE AGES

FOCUS/ KEEP THE 📸 👘

ON THE PRIZE

TURF TIPS

**USING DATA** 

EFFECTIVE MEETINGS

TASK FORCE DEVELOPMENT & MAINTENANCE MEDIA

## Minnesota River Watershed Institute



## Working at a a atershed Level...

a training course

St Cloud, Minnesota September 12-14, 2001

Tuesday, September 11 OPTIONAL PRE-CONFERENCE FIELD COURSE:

Wednesday, Sept. 12 – The Watershed Approach Introduction to the Watershed Approach Hydrology 101 The Basics of Water Chemistry How Land Use Affects What Lives In and Near a Stream Natural and Human Disturbances Affecting Streams Working with Stakeholders

Thursday, Sept.13 – Getting Things Done in the Watershed

The Watershed Approach: Planning and Management Zoning, Site Planning, and Protection Concurrent **Breakout** Sessions



#### (Revised August 17, 2001)

The 37 County Minnesota River Basin Joint Powers Board (MRBJPB) continues to follow the strategic direction identified by the Board during a planning retreat held in November, 2000. The major work items as identified in the plan, are as follows:

Local Leadership: Keep the 37 County Board together.

**Projects:** Outcome oriented. Focus on urban and rural water management issues.

CREP: Meet the mid and long term goals of CREP.

**Watershed Teams:** Provide a planning and coordination role for the basin. Set priorities.

**Funding:** Need more funding from secure sources.

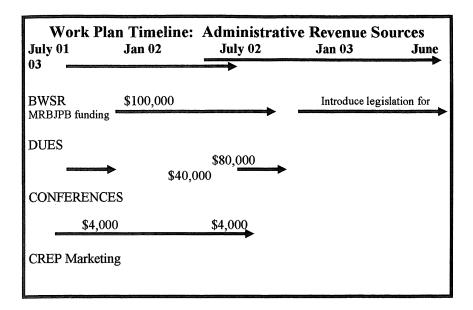
**Cooperation:** Foster cooperation among the Board, the technical staff and cities and towns.

The Board members further agreed to support the creation or continuance of major watershed-based groups. This "new" approach formally recognizes the 13 major watershed coordinators and the Director of Minnesota State University, Mankato Water Resources Center as basin advisors. With this new approach, planning and project implementation will focus on working within the major watershed geography for stakeholder participation, planning and project implementation effort.

This multi-year work plan will provide the following:

Specific tasks, goals, start dates, completion dates and estimated costs for each work plan element.

A timeline for revenue received and expenses associated with each aspect of the work plan.



\$

Work Plan Tim July 01 Jan 02	eline: Antic July 02	ipated Rever Jan 03	nue Sources June 03
July 01 Jan 02	July 02	Jan 05	June 03
TMDL			
Development	9	\$34,500 (MPCA	L)
MN River Basin			
Plan Revi <u>ew</u>			
\$3,000 (M	IPCA)		
\$3,000 (M	IPCA)		

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Task 1: AMENDED WORK PLAN FOR CREP MARKETING : MRBJPB						
September 2000 – August 2001						
CREP Market- ing	Goal:	Funding:	Start:	End:	Total Cost:	
	Enroll 100,000 acres	The McKnight Foundation	Septem- ber 2001	September 2002		
Outreach Co- ordination (MRBJPB)	Administra- tion Costs promoting CREP in 37 counties	\$13,500 BWSR \$20,000 MRBJPB			33,500	
Outdoor Ad- vertising	Place 5 bill- boards over the winter and 1 at Farm Fest	0	NA	NA	0	
CREP Signs on Easements (new)	1,000 @ \$8 each	\$ 8,000	January 2002	Sept. 2002	8,000	
Specialty Ad- vertising: Hats (new)	Intensify pro- motion – 500 hats @ 7.50 each	\$ 3,750	09/2001	09/2002	3,750	
Postage Reim- bursement for SWCDs	Direct mail about CREP info to land- owners in 37 counties	0	Sept. 2001	April 2002	0	
Data Center Updates on MRBJPB web site	Update the website to include all CREP sites.	7,000	Sept. 2001	Sept. 2002	7,000	
Travel and Mileage Reim- bursement (MRBJPB)	Estimated travel to meetings and coalition events.	2,000	January 2002	Sept. 2002	2,000	
CREP Cere- mony- Celebrate our	CREP Cele- bration at the Summer Conference	600	August 2001	August 2001		
Successes	100,000 Acre CREP Cele- bration	2,150	January 2002	Summer 2002	2,750	
TOTAL		57,000			57,000	
		10				

### 2002-2003 Budget

T T a la A	Goal:	E.m.d	04	Prise alla	
Task: 2 Broaden Stakeholder Participation in TMDL Process for the basin	Bring Municipalities, Producer Groups, Environmental and Non-Profit Groups Together	Fund- ing: BWSR MPCA ?	Start: Aug. 01	End: Aug. 02	Cost:
Contact cities and towns within the basin and invite them to participate in watershed planning.	To encourage cities and towns to be- come active in wa- tershed-based plan- ning and projects.	2,000 BWSR 4,000 MPCA	Aug. 01	Oct. 01	6,000
Convene 3 watershed conferences including all watershed groups, cit- ies, discharg- ers and towns.	Lay out basin objec- tives and explain TMDL's and how they apply over the entire watershed.	3,000 BWSR 3,000 MPCA	Sept. 01 Dec. 01 Feb. 02	Mar. 02	6,000
Create matrix of primary stakeholders by Non-Point Sources, Regular Sources and Major Point Sources.	Categorize the uni- verse of potential pollution contribu- tors to Mn River by major watershed.	3,500 BWSR 2,000 MPCA	Feb. 02	Mar. 02	5,500
Total					17,500

### 2002-2003 Budget



Task: 3 Define TMDL allocation process in each major watershed.	Goal: Create a TMDL for each watershed with input from local leaders.	Fund- ing: MPCA ?	Start: March 2002	End: August 2002	Cost:
Convening and Coordinating	To respectfully pull together stake- holders potentially impacted by TMDLs and to create an equitable process for load allocation	\$14,600	March 2002	August 2002	\$14,600
Present re- port to the MPCA	Capture the wishes of the community in a written document.	\$ 2,400	August 2002	Sept. 2002	\$ 2,400
Total					\$17,000

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Task: 4	Goal:	Funding:	Start:	End:	Cost:
Provide policy leadership to 37 counties and the 13 major water- sheds.	Identify and imple- ment high priority projects	BWSR MRBJPB MPCA	July 2001	June 2003	
Provide adminis- trative support for 2 full- time staff.	Keep staff members for an- other 2 years.	\$100,000 BWSR \$ 50,000 MPCA \$ 80,000 MRBJPB	July 2001	June 2003	\$230,000
Hire Com- municatio ns Coordi- nator for the basin.	Ensure progress is commu- nicated to the basin commu- nity.	\$ 57,000	Sept. 2001	June 2003	\$ 57,000
Review and ap- prove the Minnesota River Ba- sin Plan.	Give the MPCA an approved plan	\$ 3,000	October 2001	March 2002	\$ 3,000
Total					\$290,000



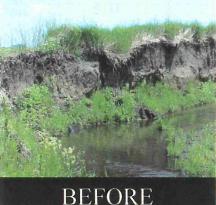
### LCMR GRANT

Approved June 22, 1999, with a completion date of June 30, 2002.

"Minnesota River Basin Initiative: Local Leadership"

\$150,00 0 the first year and \$150,000 the second year are from the trust fund to the Board of Water and Soil Resources for a cost-share agreement with the Minnesota River Basin Joint Powers Board for landscape planning and demonstration and restoration and management projects for the Minnesota River on a cost-share basis. All demonstration projects are established according to the existing Board of Water and Soil Resources matching criteria of 75:25 (project \$: local \$) with the State share not to exceed 75%.

Below is one example of the many projects completed under this grant. All projects can be seen on our website: http://mrbdc.mnsu.edu/

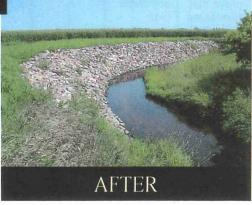


Drainage Ditch Streambank Stabilization-located in Watonwan County, Section 31 of Riverdale TWP

- Repair 300 feet of bank erosion, using rip-rap and vegetation.
- \$12,038.00 cost
- Completed August, 2000.

**SOIL LOSS:** 140 tons/year reduction.

**PHOSPHORUS LOAD:** 76 lbs./ year reduction.





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# Minnesota River Basin Joint Powers Board

"Coordinating for a Clean Minnesota River" 116 Peavy Circle Chaska, MN 55318