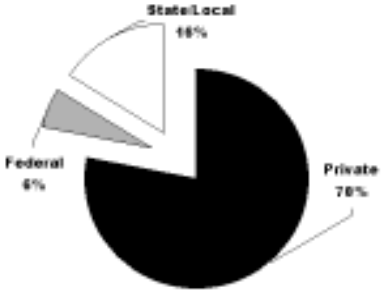
# WATER & SOIL CONSERVATION 2003

Minnesota Board of Water & Soil Resources

**Clean air. Clean water. Abundant fish and wildlife habitat.** Minnesotans have come to expect these basic elements of a healthy environment. But how does Minnesota ensure that water and soil resources are appropriately managed and conserved on the state's 41.7 million acres of private land?

The Minnesota Board of Water and Soil Resources (BWSR) believes that effective soil and water conservation on the state's private working lands is best accomplished through state-local-federal partnerships. Because 78 percent of the state's land is held in private ownership, the agency's emphasis on those private lands is critical for the state in attaining its water and soil conservation goals. If these working lands—Minnesota's farms, forests, and urban areas—are managed wisely, the citizens of Minnesota can be assured of a healthier environment and a high quality of life.



**Land Ownership in Minnesota**

Resource needs on these private lands are serious. According to the federal government's Natural Resources Inventory (1997), 45 percent of cultivated cropland in Minnesota is eroding above the "tolerable" level of five tons per year. Soil erosion—and the nutrients it carries—is considered the single most significant source of non-point pollution in the state.

PHOTO: NRCS

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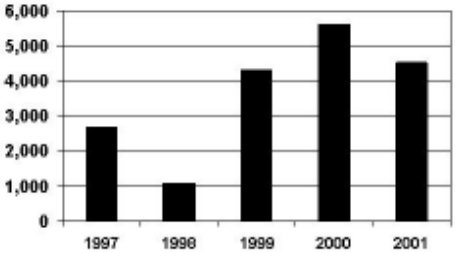
BWSR, working through local units of government, protects and enhances Minnesota's natural resources by implementing a number of state programs, including soil and water conservation, comprehensive local water management, and the Wetland Conservation Act. Using a core delivery network of 200 organizations, BWSR provides financial, technical, and administrative assistance for local implementation of soil and water conservation programs to help get conservation projects on the ground. The agency's innovative approach to optimize financial and human resources available at the local, state, and federal levels serves the state well in its efforts to ensure clean water, clean air, and abundant fish and wildlife habitat.

## BWSR Programs

**State Cost-Share.** Funding is provided to soil and water conservation districts to implement water quality and erosion-control practices. Landowners are required to match a percentage of the total project cost, using their own funds or by combining other state, federal, or local sources. This program is aimed at addressing erosion and water quality concerns on agricultural land, small feedlots, streambanks, lakeshore, roadsides, and forests, to name a few.

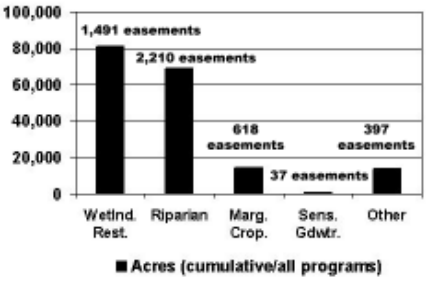
**Wetland Protection.** Minnesota's stewardship of its wetland resources is largely accomplished by 400 units of local government that implement the state's Wetland Conservation Act (WCA). The purpose of WCA is to achieve a no net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands. As part of its overall responsibilities to implement WCA statewide, BWSR provides a range of assistance—through technical evaluation panels, financial assistance with grants, dispute resolution, and coordination with the U.S. Army Corps of Engineers and the



U.S. Department of Agriculture—to ensure that local decisions about wetland protection are made with input, sound science, and due process.

In addition, BWSR works directly with individual landowners through the Minnesota Wetland Banking Program. This allows landowners a convenient option of purchasing wetland credits resulting from previously restored or created wetlands. BWSR has led complex, diverse wetland restorations on large parcels of land for this bank, in part to create credits needed to replace wetlands lost through safety-related repair and rehabilitation of existing public roads, as required by state statute.

**Conservation Easements.** BWSR's flagship easement program, Reinvest in Minnesota (RIM) Reserve, continues to be a major success story for Minnesota's soil and water conservation efforts. The primary goal of RIM is to increase public and private investment in private lands to improve the state's fish and wildlife habitat, improve water and soil resources, and enhance recreational opportunities. These private-land conservation activities administered in partnership with SWCDs focus on enrolling wetland restorations and highly erodible, riparian, and sensitive groundwater lands into conservation easements.




Because Minnesota has the RIM program, BWSR can leverage money from the federal government through the U.S. Department of Agriculture to further extend the state's work in securing conservation easements. That's done by combining RIM Reserve with the federal Conservation Reserve Program (CRP). The combined effort, known as the Conservation Reserve Enhancement Program (CREP), most recently focused on the Minnesota River Basin and resulted in more than 100,000 acres of easements targeted to frequently flooded and riparian cropland and wetland restorations.

**State Soils Office.** The State Soils Office is a joint venture between BWSR and the University of Minnesota Department of Soil, Water, and Climate. The office also works closely with the USDA Natural Resources Conservation Service. Located on the U of M's St. Paul Campus, the office has three primary areas of emphasis. The first is to increase the usefulness of current soils data. Work involved in this area helps ensure that current data is digitally correct and technically reliable. Another area involves managing a project to update aging soil surveys in the state. In keeping with BWSR's mission, the Soils Office also offers technical support, training, and other soil services to local government.

**Engineering and Technical Services.** Among the services in this arena, BWSR gives expert input, with a focus on impacts to private landowners and local government, into federal and state agricultural and non-point source pollution policy discussions and development of rules and regulations. The agency also supports local units of government in its defense of permit decisions related to WCA and develops standards for soil conservation engineering practices. Design and engineering services are provided for wetland projects restored through RIM/CREP and the Minnesota Wetland Banking Program. Specialized large lake/coastal engineering is also available.

**Local Water Management.** In the late 1970s, the Minnesota Legislature decided that local governments should play a principal role in achieving the state's surface water and groundwater management goals and objectives. That resulted in the Legislature adopting water planning authorities, including the Metropolitan Surface Water Management Act (authorized in 1982), Comprehensive Local Water Planning (1985), and Metropolitan County Groundwater Planning (1987). BWSR was given oversight

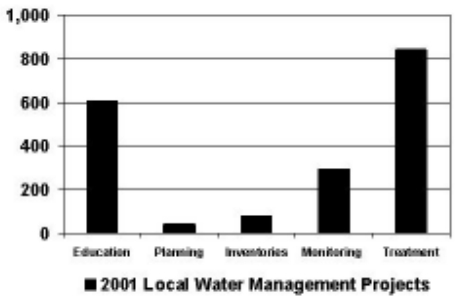



PHOTO: NRCS

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responsibilities to ensure that local water plans are prepared and coordinated with existing local and state efforts, and that plans are implemented effectively.

Covering the whole state with that model still makes sense today. The Local Water Planning Program provides an avenue for citizens to be involved in a planning and implementation process at the local level. BWSR's role in these efforts ensures that local and state goals and objectives are being met.

To assist counties in carrying out priority projects in their plans, BWSR provides financial assistance to them through the Natural Resources Block Grant. Additional funding is available to counties, watershed districts, and watershed management organizations via challenge grants funded through the Legislative Commission on Minnesota Resources.

## CONSERVATION PARTNERS

**Soil and Water Conservation Districts.** Soil and water conservation districts (SWCDs) are the grassroots of Minnesota's conservation delivery system. Comprised of 455 supervisors and 350 employees, SWCDs work primarily on a one-on-one basis with private landowners, aiming to connect landowners with the financial and technical resources they need to put conservation practices on the land. SWCDs operate from annual and comprehensive work plans that indicate local conservation priorities, resource treatment needs, and construction schedules. Minnesota's 91 SWCDs cover the entire state.

**Watershed Districts.** Watershed districts, organized on hydrologic boundaries, provide a framework to address water management issues that transcend political boundaries. Their projects and activities include flood control structures; public drainage systems; lake level controls; septic system improvements; and construction of storm water treatment ponds and sediment basins. Minnesota has 45 watershed districts.

**Federal Government.** BWSR links with several federal agencies on a variety of conservation programs and issues. For instance, the agency works with the USDA's Natural Resource Conservation Service and the Farm Service Agency on implementing the conservation provisions of the federal Farm Bill. BWSR partners with the U.S. Army Corps of Engineers and the Environmental Protection Agency on wetland regulations. It also restores wetlands with the U.S. Fish and Wildlife Service.

**Counties.** Minnesota's 87 counties play a crucial role in developing and implementing local water plans. As a general-purpose unit of government, counties, with their planning and land-use authorities, are uniquely positioned to link many land-use decisions with local goals for surface and groundwater protection and management. Local water planning provides a means to link state goals and objectives with the objectives and priorities local governments set for managing water and related land resources in their jurisdictions.

**Joint Powers Boards.** BWSR works with a number of joint powers boards that have been formed to address regional water and soil resource management concerns. Those joint powers boards include the Red River Watershed Management Board, Study Area II, Minnesota River Basin Joint Powers Board, the Red River Basin Commission, and metropolitan joint powers watershed management organizations.

## BWSR BOARD MEMBERSHIP

The board consists of 17 members representing local government entities (three from soil and water conservation districts, three from counties, and three from watershed districts or watershed management organizations), state agencies (University of Minnesota Extension, Department of Natural Resources, Pollution Control Agency, Department of Health, and the Department of Agriculture), and three citizens. This unique composition of diverse interests and organizations is well suited to address the complex water and soil management policies and issues for Minnesota. The board sets a policy agenda designed to enhance conservation program service delivery though local governments. It meets 11 times a year. Board members, including the board chair, are appointed by the governor to four-year terms.

## BWSR Staff

The agency's staff members are located in eight field offices: St. Paul, Rochester, Marshall, New Ulm, Brainerd, Bemidji, Fergus Falls, and Duluth. The St. Paul field office is co-located with the central office. This model means that agency staff, who are experts on regional issues and concerns, have access to a network of colleagues across the state. The field staff are the first points of contact for local governments.

## Pollution Reduction Benefits

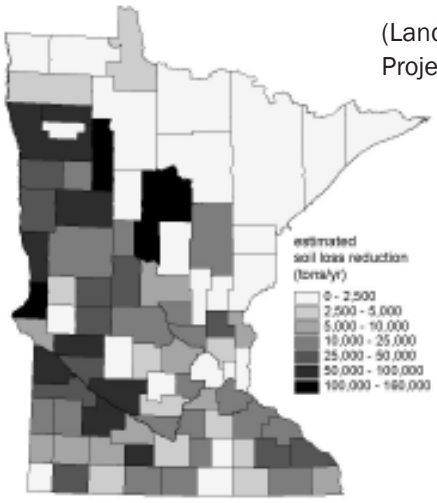
Accountability and reporting measures are built into BWSR's grant programs. Through its reporting system called LARS (the Local Government Annual Reporting System), the agency can monitor dollars spent on programs and the resulting outcomes of soil loss reduction, sediment reduction, and phosphorus reduction.

LARS began to have widespread use by the agency's clientele in 1998. In 2003, BWSR will release a new integrated system called "eLINK" that will help local governments manage and track information and still provide a way to track environmental benefits. This system uses the latest technology and has a built-in reporting system.

The three maps on this page show the pollution reduction benefits from the agency's easement programs and land and water treatment projects through 2001. The data from the programs were combined to provide a more efficient way to present the information.

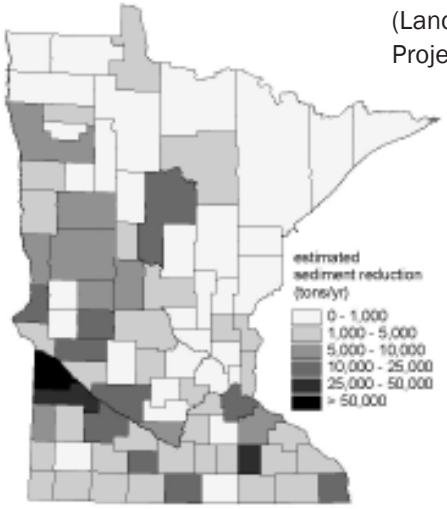
## Soil Loss Reduction 1998-2001

(Land & Water Treatment Projects and Easements)



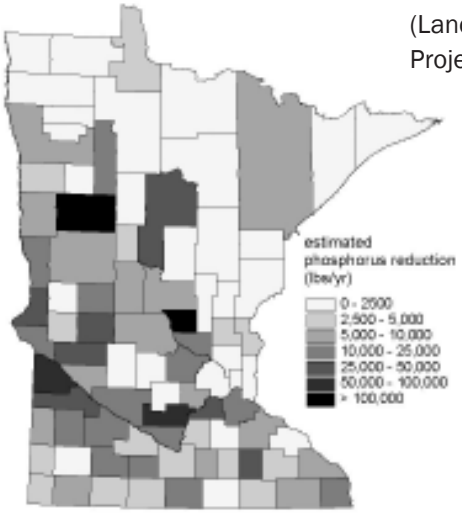

## Sediment Reduction 1998-2001

(Land & Water Treatment Projects and Easements)




## Phosphorus Reduction 1998-2001

(Land & Water Treatment Projects and Easements)

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