



# Soil and Water Conservation

## Conservation Program Summary

# 2003

This year we celebrated the 30th anniversary of Iowa's first-in-the-nation Conservation Cost Share Program. A huge debt of gratitude is deserved by those leaders who had a concern for Iowa's soil resource and the vision to institute such an enduring program. Where do we go from here? Protecting the precious soil that supports Iowa's vast agricultural economic engine continues to be very important. But in the 21st century, we have become concerned with other important resources. Water is on that list. Water quality is impacted by eroded soil and the movement of nutrients. The Division is striving to integrate our programs with both federal USDA and EPA programs and local concerns to improve water quality around the state. We have a long way to go. The Division and its partners rely on technical assistance, education and financial incentives to bring about the positive changes that will reduce soil erosion and improve water quality. Iowa's dedicated soil and water conservation district commissioners, in cooperation with the Natural Resources Conservation Service and the Division of Soil Conservation, stand poised to assist Iowa's landowners for another 30 years!



### Soil Conservation Cost Share

*The "cornerstone" of soil and water conservation practice application in Iowa.*

The Division of Soil Conservation implements the Cost Share program in cooperation with Iowa's 100 soil and water conservation districts (SWCDs). SWCD commissioners set local priorities for the use of these funds, and field office staff are available for conservation planning and practice design. Practices installed are subject to maintenance agreements to assure their long-term, successful performance.

Funds are matched by landowners, spent locally to hire private construction contractors, and reinvested into the economies of local communities. In addition to soil conservation and water quality protection, local jobs and businesses benefit from these financial incentives.

On July 1, 2003, the state cost-share program, or the Iowa Financial Incentive Program, as it is known today, has been funded for 30 years. Iowa became the first state in the nation to appropriate state cost-share funds for conservation practices such as terraces, waterways, structures and water and sediment basins. To date, over \$180 million has been appropriated to the program. The Division estimates that cost-share work in SWCDs in the past 30 years has stopped over 18 million tons of fertile topsoil from escaping Iowa's fields.

### No-Interest Loans

Since 1983, when the program was established, 823 no-interest loans have been approved for eligible landowners for the construction of permanent soil conservation practices.

This year, 41 new loans were granted with the funds received from current loan payments.

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## Mining Reclamation

The Division had \$3.8 million of reclamation work under contract in 2003 on 11 projects in Marion, Mahaska and Monroe Counties. Reclamation efforts include both federally funded Abandoned Mine Land (AML) sites and bond forfeiture projects where coal operators failed to complete reclamation required under issued permits. The Division's Mines and Minerals Bureau develops, designs and manages construction activities at the sites, working with private consulting engineering firms and the US Office of Surface Mining. The Bureau also responds to Emergency Program inquiries where citizens have damage or hazards on their property related to past underground coal mining activity.

The Division qualified for more than \$2 million in federal funds for its mining program. Available state funds are leveraged at a 1:16 ratio.

Minerals operations in Iowa that extract limestone, gypsum, sand and gravel are also required to register their activities with the Division and post reclamation bonds for some 1100 sites statewide.

## Iowa's Unique Conservation Partnership

Iowa's 100 Soil and Water Conservation Districts (SWCD's), USDA's Natural Resources Conservation Service (NRCS), and the Iowa Department of Agriculture and Land Stewardship's Division of Soil Conservation (DSC) have been working on conservation and environmental issues since the 1940's. This Conservation Partnership works with rural landowners and operators to reduce erosion, enhance production and improve water quality. Voluntary efforts protect the landscape and prevent millions of tons of sediment from reaching Iowa's waterways. Urban conservation programs reduce the impacts from construction and stormwater runoff.

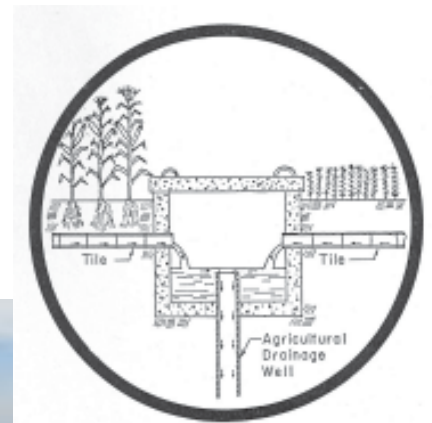
Iowa's partners jointly share the responsibility for providing tools and resources needed to implement conservation programs. The Conservation Partnership is able to effectively and efficiently implement programs working through local SWCD's. Created in Iowa Code Chapter 161A, SWCD's provide the strong, local structure needed to meet the growing challenges and demands on Iowa's soil and water resources.

## Agricultural Drainage Well Closure Assistance Program

*Eliminates the environmental risk to drinking water supplies associated with these wells.*

The Agricultural Drainage Well Closure Assistance Program protects drinking water aquifers by cost-sharing with landowners the closure of high-priority agricultural drainage wells and development of alternative drainage outlets to surface streams. Landowners throughout the state with agricultural drainage wells apply for assistance and projects are selected under established priority criteria. Projects are typically constructed through existing or new drainage districts, although some have been completed with individual landowners.

Seventy-eight wells have been closed through this program since its inception with a total state cost share amount of \$4.8 million. An agreement was entered with a Humboldt County drainage district in the spring of 2003 to close up to seven wells. A total of 158 wells remain that have continued use permits with the State of Iowa.



Photos provided by the Division of Soil Conservation,  
Iowa State University, and  
Natural Resources Conservation Service.

## Iowa Watershed Protection Program

*The watershed approach is comprehensive, efficient and effective resource management.*

Iowa Code authorizes soil and water conservation districts to carry out erosion control, watershed protection and flood prevention projects. The Iowa Watershed Protection Program projects are set up to reduce soil erosion, protect water quality, provide flood control and protect natural resources. The Program has provided financial assistance for the development of local watershed initiatives since 1999.

In FY 2003, 44 watershed projects saved an estimated 4,636,947 tons of soil. That amount of soil would fill 310,000 dump trucks lined end-to-end reaching from Des Moines to Washington, DC.

In FY 2004, 34 projects are underway and 10 watersheds are being assessed for projects in the future. These projects are accelerating protection efforts with cooperation from the Conservation Partnership. State funds are leveraged against over \$2,000,000 of federal money and over \$600,000 of local money.



## Fishkill Restitution Projects

Twelve soil and water conservation districts worked with landowners in 11 projects in FY-03. These projects restore streams and make watershed improvements in streams where fishkills resulted from pollution releases. Funding is derived from the Department of Natural Resources penalties assessed against those responsible for the pollution.



## Conservation Reserve Enhancement Program

*Wetlands strategically designed and located remove nitrate from cropland tile-drainage water.*

The Iowa Conservation Reserve Enhancement Program (CREP) is a major State/USDA initiative to develop strategically located wetlands to remove nitrate from cropland tile-drainage water. Landowners receive annual land payments over 15 years and reimbursements for costs of wetland and buffer establishment. Additional incentives are provided to preserve the wetlands and buffers under either 30-year or perpetual easements.

Nearly 250 sites have been identified that meet Iowa CREP criteria, with 160 of these currently under landowner consideration. Two sites have been completed, four are under construction, and landowners have agreed for over 25 additional sites to move forward to survey and engineering. These sites total nearly 2400 acres of wetland plus buffer and represent over 39,500 acres of watershed treated for nitrate. Research at Iowa State University has shown that these wetlands will remove 40-90% of the nitrate received, equating to over 36,900 tons of nitrate removed over the design life of the wetlands. To accelerate the establishment of CREP wetlands, engineering capacity is being supplemented through contracts to consulting engineering firms. CREP wetlands will also provide wildlife habitat and increased recreational opportunities.



The Division of Soil Conservation prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status.



## Resource Enhancement and Protection Program Soil and Water Enhancement Account

*REAP funds improve water quality through soil conservation measures.*

Since 1990, the Division of Soil Conservation has received funding for the Soil and Water Enhancement Account through Iowa's REAP Program. Each year 20 percent of the REAP funds are deposited in the Division's account and divided equally between Water Quality Protection Practices and Projects.

"Practice" funds are provided directly to soil and water conservation districts. Twenty-five percent of these funds support establishment of trees and native vegetation. The remaining 75 percent is used for permanent vegetative cover, livestock waste management, and traditional erosion control to protect high priority public water resources. Although REAP was not funded in FY 2003, \$68,216 of non-appropriated funds were allocated to districts for practices.

Locally-led "Projects" commonly use the watershed approach to address water quality problems. Projects enjoy a high level of community support and include strong public information and education programs. In 2003, 26 projects were underway, eight of which were being completed.

## SWCD Commissioner Development

The Division of Soil Conservation cooperated with the Conservation Districts of Iowa and the USDA Natural Resources Conservation Service in providing training and commissioner development. Nine sessions of Commissioner Development were held across the state with over 100 commissioners attending. Sessions focused on leadership qualities and commissioner powers and authorities. This Conservation Partnership is working on a modules for "New Commissioner Orientation" and "Reaching Out in Your Communities" to be presented in February and March 2004.

## Integrated Farm and Livestock Management (IFLM) Demonstration Program

*"Input management" is key in balancing agricultural production and environmental protection.*

Through organized IFLM projects, farm operators participate in and demonstrate on their farms new and emerging technologies that refine management input, resulting in decreased environmental risk and an improved bottomline.

In the 2003 crop year, eight projects were initiated actively engaging more than 180 producers statewide, demonstrating to themselves and their communities how to efficiently and effectively utilize animal manure as a commodity rather than a waste, maximize their yield with reduced application of commercial fertilizers, reduce soil erosion and sustain the resource base, and reduce nutrient and sediment loading into Iowa's water bodies. In addition, work continued in 17 projects initiated in previous crop years.

