# Soil and Water Conservation



## Conservation Program Summary

2002

Over 94% of Iowa's land is held in private ownership and over 90% is used for agricultural production. It is crucial to our understanding of both conservation and agricultural issues, that what happens on the landscape has immense consequences to the environmental health of our state.

That is why the Division of Soil Conservation works aggressively with our local and federal partners to implement programs with private landowners designed to preserve our valuable soils and nutrients. Properly installed conservation practices improve and preserve the productive capacity of our farms and keep our water resources clean for drinking, recreation, and wildlife.

Keeping the soil and nutrients on the landscape and out of the water is primary to our mission and it is a Win-Win for all Iowans.



### **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.

In 2002, nearly 2,500 landowners installed practices protecting more than

27,000 acres with terraces, waterways, structures, basins and other measures. Yet, demand for cost-share assistance continues to exceed appropriated funds. FY-03 funding has been allocated to SWCDs, leaving more than \$3,000,000 in requests that could not be met.

### **No-Interest Loans**

Since 1983, when the program was established, 791 no-interest loans have been approved for eligible landowners for the construction of permanent soil conservation practices.

This year, 42 new loans were granted with the funds received from current loan payments.

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Patty Judge, Secretary of Agriculture Russell Brandes, Chair, State Soil Conservation Committee William A. Ehm, Division Director

# Brad Daniels established this shallow water structure on his Fayette County farm.

### **District Initiatives**

The District focuses personal contact and financial incentives to enhance landowner involvement.

The conservation of natural resources and the protection of soil and water on private lands is advanced by the District Initiatives program. Locally-led initiatives prioritize and target sensitive areas by providing funds and resources where they do the most good.

Districts work one-on-one with landowners and operators to deliver conservation programs, increasing Iowa's participation in both state and federal programs. Identifying critical practices and ways to enhance program alternatives will do more to solve resource problems.

Iowa leads the nation in buffers protecting our rivers and streams. As of June 30, 2002, there were 358,568 acres enrolled in the Continuous Sign-Up Conservation Reserve Program. These buffers reduce erosion; remove nutrients and other ag chemicals from shallow, subsurface water; provide wildlife habitat; and increase landscape biodiversity.

### **Mining Reclamation**

The Division is reclaiming abandoned coal mines in Marion, Mahaska, and Monroe Counties with Department of Interior, Office of Surface Mining grant funds. Iowa receives approximately \$1.8 million each year from the Abandoned Mined Land (AML) Trust Fund. Coal mine sites are also being reclaimed with bond forfeiture funds.

Seven AML projects and three bond forfeiture sites will be reclaimed in 2003. The Division was also granted authority in 2002 for administering the Emergency Program for abating subsidence or hazards related to past coal mining activity.

Counties and private mining companies register limestone, gypsum, clay and sand and gravel operations with the Division as well. Reclamation laws and bonding requirements apply to approximately 1109 registered sites statewide.

### 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.

The alternative drainage outlets are typically constructed through formation of drainage districts, although some outlets can be developed by individual landowners. Projects are selected under established priority criteria from applications received statewide from landowners having agricultural drainage wells.



A total of 296 wells have been registered in the state of Iowa. Sixty-six of the wells have been closed through this program since its inception. Over \$2 million of cost-share funds were paid out in 2002. Ten more wells will be closed under projects to be completed in 2003.

Photos provided by the Division of Soil Conservation, National Soil Tilth Laboratory, and Natural Resources Conservation Service.

### **Iowa Watershed Protection Program**

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

Watershed Protection projects are set up to reduce soil erosion, protect water quality, provide flood control and protect natural resources. Since 1999, the Iowa Watersheds Protection Program has provided financial assistance for the development of local watershed initiatives.

In FY 2002, watershed projects saved 1,750,000 tons of soil, which would fill 102,941 dump trucks. Bumper to bumper, these trucks would stretch 488 miles, from Des Moines to Indianapolis.

In FY 2003, 44 new projects are underway and nine watersheds are being assessed for projects in the future. These projects are accelerating protection efforts with cooperation from local, state and

on this Crawford County project.

Landowner Russ Schwartz

and others are cooperators

federal partners. 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 to 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.

### **Staff Training**

The Division provided an on-going program to provide staff with better tools to improve the delivery of conservation technical assistance and programs to Iowans. Thirty-six staff have been participating in web-based training, where the employee and supervisor can develop an individualized training program. In addition, staff continue to participate in training opportunities including integrated crop management, water quality enhancement and watershed protection to improve our customer service.



Ralph Christiansen, Pocahontas
County Supervisor and President
of the Iowa Drainage District
Association, recognizes the
importance of nitrate-removal
wetlands.



### **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 wetlands to remove nitrate from cropland tile-drainage water. The program is being implemented to construct and restore up to 9000 acres of wetlands and buffers over the next three years.

Research at Iowa State University has shown that wetlands meeting the program requirements have the potential to remove 40-90% of the nitrate and 90+% of the herbicide in tile drainage water from upper-lying croplands. The wetlands will also provide wildlife habitat and increased recreational opportunities.

Financial incentives are provided to develop and restore the wetlands. Landowners receive annual land payments over 15 years and reimbursements for costs of wetland and buffer establishment. Additional incentives are provided to maintain the wetlands and buffers under either 30-year or perpetual easements.

To date, nearly 120 potential wetland sites have been identified that meet CREP criteria. Landowners have agreed for over 20 of these sites to move forward to survey and engineering. Currently, two CREP wetlands are under construction.

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 the 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 for water quality protection. Twenty-five percent of these funds support establishment of trees and native vegetation. The remaining 75 percent are used for permanent vegetative cover, livestock waste management, and traditional erosion control to protect high priority public water resources.

Locally-led "Projects" commonly use the watershed approach to address water quality problems. The projects enjoy a high level of community support and include strong public information and education programs. In 2002, 42 projects were underway, nine of which were being completed.

### **Iowa Watershed Coordination Committee**

The Watershed Coordination Committee, made up of 26 organizations, met to follow up to the Watershed Task Force Report completed in FY-01. The Committee began the process of gathering data from the different organizations to develop a database for people working on watershed projects.

### **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 Orientation were held across the state with over 100 commissioners attending. Items covered were history and formation, overview of duties and responsibilities, partnerships and financials. This partnership is working on a module for Commissioner Roles and Responsibilities to be presented in February and March 2003.

# 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 2002, 230 producers, actively engaged in nine projects, demonstrated 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.

