CLEAN WATER FUND

CLEAN WATER LAND & LEGACY AMENDMENT

MINNESOTA DEPARTMENT OF AGRICULTURE

Agriculture comprises a significant portion of the state's land use, and the way farmers manage their land can make a big contribution to achieving state goals for resource conservation. The activities described in this brochure are designed to give farmers and ranchers information to help them do their part in ensuring the quality of Minnesota's water resources. Funding from the Clean Water, Land and Legacy Amendment is being used to further enhance MDA's capabilities, develop new partnerships, and support new initiatives.

Research, Pilot Projects and Technical Assistance

$2.265 million for FY10-11 biennium

Funding for individual activities listed below

Clean Water Research Program

$1.250 million for FY10-11 biennium

The Minnesota Department of Agriculture (MDA) is supporting research projects to identify processes that affect water quality and evaluate the costs and benefits of specific agricultural practices. Since 2008, the MDA has announced two requests for research proposals. Any organization, research entity or individual may apply for these funds. The MDA works cooperatively with various research entities and provides administrative support for the program. The MDA's Clean Water Research Program has sponsored over a dozen projects. The goals of the program are to evaluate the effectiveness of agricultural Best Management Practices (BMPs), identify underlying processes that affect water quality and develop technologies to target critical areas of the landscape.

Discovery Farms Minnesota

$250,000 for FY10-11 biennium

The Discovery Farms program is a farmer-led effort to gather information on soil and nutrient movement on farms in different settings across Minnesota. It is designed to evaluate agriculture's impact on water quality and to provide baseline data on the environmental performance of Minnesota farms. The MDA is supporting the Discovery Farms program by providing technical assistance and expertise in water monitoring.

Discovery Farms Minnesota was launched in 2009 by farm organizations and commodity groups, specifically the Minnesota Agricultural Water Resources Coalition (MAWRC), with the support of the MDA and the University of Minnesota Extension.

Discovery Farm site in Goodhue County

Livestock Environmental Quality Assurance (LEQA) Program

$300,000 for FY10-11 biennium

LEQA is an MDA program to help livestock producers address, using a non-regulatory approach, the unique water quality issues on their farms. MDA has contracted with Ag Resource Strategies, LLC, to recruit farmers to enroll in the LEQA program. The company trains technicians to assess farms in separate resource management areas, such as the farmstead, livestock facilities, fields and wooded areas. The technicians then develop an environmental assessment and identify financial assistance for these projects.

Clean Water Research Accountability Database

$85,000 for FY10-11 biennium

This project will create a centralized, web-based inventory of water related research in Minnesota. When complete, users will be able to search for information by research topic, research method, water body, funding source, etc. Organizing information about research projects in a single database will make it easier to find results and coordinate research efforts.

Precision Conservation: Targeting Clean Water Implementation

$35,000 for FY10-11 biennium

Via workshops and case studies, this project is disseminating high-resolution, GIS-based terrain analysis modeling techniques to conservation professionals who work on locally-led water quality projects. In a previous Clean Water Legacy project, the MDA developed terrain analysis techniques that provide a more scientific basis for identifying and prioritizing critical sources of erosion and runoff in agricultural landscapes. Targeting conservation practices to critical source areas can produce greater environmental benefits at a lower cost.

Drainage Demonstration Sites

$86,000 for FY10-11 biennium

The MDA operates a network of drainage demonstration sites around the state of Minnesota, each designed to study the quality and quantity of water and agricultural chemicals moving through subsurface drainage tiles. These sites evaluate different methods of reducing phosphorus and/or nitrogen loss on agricultural lands and provide critical information about the characteristics of agricultural drainage. Clean Water funded sites include the Highway 90 project near Mankato and the Tile Drainage Demo Site in Clay County.

Technical Assistance and Program Administration

$259,000 for FY10-11 biennium

Technical assistance is a vital element of the MDA's clean water activities. Clean Water funding has been used to coordinate clean water projects, enhance communication and outreach, support local partnerships, and foster regional cooperation. This assistance helps to ensure that accurate, scientifically-based information on the costs and benefits of specific agricultural practices is incorporated into environmental plans in Minnesota. These costs are for technical staff and program administration.

Root River Field to Stream Partnership

One time appropriation of $395,000

The Root River Partnership is designed to help southeast Minnesota farmers and policy-makers better understand the relationship between agricultural practices and water quality. The partnership is conducting evaluations of water quality and land management at multiple scales using the latest tools and technology.

This project includes two approaches to addressing water quality/quantity issues in the Root River watershed. One component emphasizes monitoring and the other focuses on implementation strategies for BMPs.

Agricultural BMP Loan Program

$4.5 million for FY10-11 biennium

This water quality program provides zero interest loans to local units of government who in turn provide low interest loans to individuals for management practices that restore or protect water quality. Loans must be used towards practices that reduce soil and water erosion and ensure safe manure and wastewater management. Loans can be used on a farm, a rural home site, in an unsewered community or at a lakeside cabin.

Ground and Surface Water Monitoring

$675,000 for FY10-11 biennium

The MDA has been monitoring the state's water resources continuously for more than 20 years. The purpose of the MDA's monitoring activities is to determine the presence and concentration of pesticides and nutrients in Minnesota's ground and surface water. MDA water quality data is used to evaluate the need for and effectiveness of protective actions for ground and surface water. Clean Water funding has increased the capability and capacity of the water monitoring program through the provision of new analytical instruments in the MDA lab. The new equipment is capable of detecting a broader suite of chemicals at lower concentrations.

Groundwater and Drinking Water Protection

$1.125 million for FY10-11 biennium

Groundwater funding from Minnesota's CWF is being used for activities that help identify potential sources of nitrate contamination and evaluate and implement practices at the local level to reduce nitrates in groundwater.

The MDA is working with many local partners and passing funding through to local government units. Below are a few examples of Clean Water Fund projects.

- Characterizing Nitrates in Private Drinking Water Wells- Central Sands Region

The MDA has signed a Joint Powers Agreement with Wadena County Soil and Water Conservation District (SWCD). Wadena County SWCD is partnering with 13 counties that make up the "Central Sands Outwash". Nitrate analysis of approximately 2,500 private wells will be completed and a subset of these homeowners will be used to establish a long term monitoring network.

- A Public and Private Partnership to Improve Nitrogen Fertilizer Efficiency and Protect Groundwater

The MDA has signed a Joint Powers Agreement with Pope County SWCD. Partners, which include Stearns County SWCD, Prairie Lakes Co-op, and the University of Minnesota (U of MN), will support a demonstration project at the Herman Rosholt Farm near Westport, MN. The project is designed to evaluate the water quality impacts of different nitrogen management practices in a highly vulnerable irrigated setting.

- Crop Irrigation Workshops

The MDA has entered a Joint Powers Agreement with the East Otter Tail SWCD. The EOT SWCD, along with 5 counties, the U of MN, and IAM, will carry out workshops to explain water and nitrogen management to both the new and experienced irrigators in central MN.

- Nutrient Management Survey

The MDA, in partnership with researchers at the University of Minnesota and the National Agricultural Statistics Service (NASS), have pioneered a survey tool for characterizing fertilizer management practices on a regional and statewide scale. Information collected will guide future research and educational activities, provide insight to BMP adoption, and guide policy makers in making informed decisions related to nitrogen use.

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Visit the MDA's Clean Water Fund Website at: www.mda.state.mn.us/cleanwaterfund

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