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Oakwood Lakes-Poinsett Project: A Rural Clean Water Program

Cooperative Extension South Dakota State University

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Oakwood Lakes-Poinsett Project

a Rural Clean Water Program

Cooperative Extension Service
South Dakota State University
U.S. Department of Agriculture
Wouldn't you like some long term technical and financial assistance in running your farm operation? You can indeed get these benefits. How? . . . by taking part in a voluntary USDA-sponsored plan for farm operators and landowners in the Oakwood Lakes-Poinsett watershed. Called the Rural Clean Water Program (RCWP), the plan is designed to protect soil and water resources in agricultural areas.

The Oakwood Lakes-Poinsett Project is one of just 21 RCWP demonstration areas in the nation. It takes in the 85,000-acre watershed surrounding the natural lakes for which it is named. More than 280 farms in Brookings, Hamlin, and Kingsbury counties are included, along with approximately 2,500 year-round residents.

What we hope to do

Reducing surface and ground water pollution by adapting various management practices is our goal. Objectives are

1) to better manage nitrogen fertilizers and pesticides,
2) to better utilize animal manure, and
3) to reduce the amount of runoff, sediment, and related pollutants.

Most of the land in the Oakwood-Poinsett watershed is used for agriculture. Three of four ag acres produce corn, wheat, soybeans, and oats. The rest is in pasture and hayland. According to Soil Conservation Service estimates, only half of the agricultural land in the watershed is adequately treated to control soil erosion.

Most of the watershed's grain and forage is marketed in the form of animal products. With the trend toward larger animal facilities, larger manure handling systems are needed. Correctly designed systems take full advantage of the manure's fertilizer value, as well as prevent pollution of surface or ground water.

The Big Sioux Aquifer underlies 40% of our project area. It's the principal source of household, livestock, and irrigation water. Preliminary studies by South Dakota's Department of Water and Natural Resources found high nitrate levels in some wells. Although the sources of pollution have not been identified, nitrogen fertilization and livestock feedlots may be contributing to the problem.

Oakwood Lakes and Lake Poinsett, along with several smaller lakes, provide a regional, water-based recreation industry. More than 600 cabins are located on the lake shores. Because spring runoff is the key source of water, the condition of the lakes is directly related to our use and management of the land.

How to apply

To participate, apply at your local Agricultural Stabilization and Conservation Service (ASCS). You will need to indicate which management practices interest you.
Your choices

As a project participant, you can choose from these 13 management practices.

- Permanent vegetative cover
- Animal waste management
- Stripcropping
- Terraces
- Diversions
- Grazing land protection
- Grassed waterways
- Field windbreaks and cover crops
- Conservation tillage
- Permanent vegetation in critical areas
- Sediment control structures
- Fertilizer management
- Pesticide management

Major emphasis will be given to four practices—conservation tillage and fertilizer, pesticide, and animal waste management. These have the most potential for reducing water pollution and are most cost-efficient.

Several practices which reduce water pollution are shown in these photos, identified clockwise from the top.

(Top) Feedlot waste must be handled properly to prevent pollution. (Middle) Grassed waterways such as this one carry excess water off sloping land and prevent gully erosion. (Bottom right) Conservation tillage practices such as chisel plowing reduce erosion and runoff as well as save fuel. (Bottom middle) Good management of fertilizers and pesticides produces high yields without polluting. (Bottom left) Better use and management of our land will improve the quality of our water for all uses, including recreation.

Help you can receive

A 75% cost share will be available for most practices from the ASCS, which is administering the project. The Cooperative Extension Service will provide technical assistance on fertilizer and pesticide management; the Soil Conservation Service will provide this for the remaining practices.

A committee of representatives from both the Agricultural Stabilization and Conservation County Committee and Conservation District Board from each county involved is coordinating the project.

South Dakota's Department of Water and Natural Resources will be monitoring surface and ground water to determine the impact our project has on water quality. The East Dakota Conservancy Subdistrict and Farmers Home Administration are also cooperating.