



**Federal Clean Water
Section 319 Grant**
Tracking code: 2004-0155



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Sebewaing River Watershed Alternative Cropping Practices Project

April 1, 2005, through December 31, 2007

Project Fact Sheet

The Sebewaing River Watershed is made up of approximately 66,000 acres of mostly agricultural land draining into Saginaw Bay. The two major water quality issues are nutrient and sediment loading and ice blockage leading to flooding in the Village of Sebewaing. The project goal was the successful implementation of the Information & Education Strategy contained in the Watershed Management Plan. Activities demonstrated that everyone impacts water quality and everyone--from the smallest lot owner to the largest agricultural producer--has a responsibility to improve and maintain water quality. This project also resulted in a watershed plan that meets EPA's nine planning elements.

Grant Amount: \$ 300,000
Match Funds: \$ 238,296

Total Amount: \$ 538,296

Best Management Practices: (goals)

- Corn Stalk Residue (4,100 acres)
3853 acres implemented \$10/ac
- Comparison Plots (1,200 acres)
721.6 acres implemented \$10/ac
- No-Till (5,100 acres) 6,380.2
acres implemented \$5/ac
- Tillage Demonstration Plot
(40 acres) 40 acres implemented
- Zone Building (250 acres) 377.6
acres implemented \$7.50/ac
- Pre-Sidedress Nitrogen Testing
(5000 acres) 1966 acres
implemented \$1.50/ac
- Global Positioning Satellite soil
sampling (3000 acres) 3687.7 acres
implemented \$4/ac

Total Load Reductions:

- Sediment: 26,182 tons
- Phosphorus: 36,132 pounds
- Nitrogen: 67,140 pounds

Information/Education Activities:

- Storm Drain Stenciling-Village of Sebewaing
- McNeil Demo Plot
- Sebewaing Sugar Festival
- Stream Monitoring
- Benthic Study



Partners involved:

- Natural Resources Conservation Services
- Farm Service Agency
- Huron Drain Commission
- Tuscola Drain Commission
- Monsanto
- Cooperative Extension
- Michigan Sugar
- Brookfield Township
- Columbia Township
- Village of Sebewaing
- McNeil Farms
- Cooperative Elevator
- Greenstone Farm Credit
- Sugar Beet Advancement
- American Crystal
- Northern Star Mineral
- MSU Extension



**Storm Drain Stenciling
Village of Sebewaing**



McNeil Tillage Demonstration Site Before:

A typical sugar beet field after harvest within the Sebawaing River Watershed is left with no residue to protect the soil from wind and water erosion over the winter months. This site has drains on three sides.



McNeil Tillage Demonstration Site After:

Randomized and Replicated Strips have been established on this site to compare convention and zone tillage. Photo shows corn stalk residue left over winter to provide protection. Zone built strips have been installed and in the spring planting will be done directly over these slots without additional tillage.



A typical fall plowed field within the watershed. This field is prone to wind and water erosion. The proximity to the drain leads to sediment and nutrient loading.



Corn stalk residue left over winter reduces wind and water erosion and sediment and nutrient deposition. Corn stalks also provide wildlife cover and a winter food source.