



**Clean Michigan Initiative  
Nonpoint Source Grant**  
1999-0051



Macomb County Road Commission  
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## Middle Clinton Road Crossing Improvement

June 17<sup>th</sup> 2002 - October 31<sup>st</sup> 2004

The Clinton River Watershed consists of 760 square miles of industrial, urban, suburban and agricultural land, primarily in Oakland and Macomb Counties. The river was designated as an Area of Concern by the Great Lakes Water Quality Agreement in 1985 and is a significant contributor of pollution to Lake St. Clair.

The goal of this project was to rehabilitate and enhance selected road-stream crossings along the Middle Branch of the Clinton River. The Road Commission of Macomb County worked in conjunction with the Michigan Department of Environmental Quality to design, implement and maintain BMPs to reduce sediment loading from two road-stream crossing sites, RC2 - West Road over Field Drain, and RC3 - Jewel Road over Taft Drain.



Grant Amount: \$ 276,115  
Match Funds: \$ 99,680

Total Amount: \$ 375,796



### Best Management Practices:

- 2 pre-cast concrete culverts
- 2 segmented retaining walls
- seeding, riprap and related

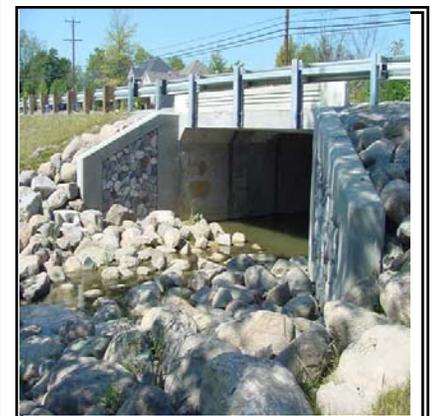


### Annual Load Reductions:

- 13 tons of Sediment
- 15 lbs. of Phosphorus
- 29 lbs. of Nitrogen

### Partners involved:

- Macomb County Health Department
- Macomb County Public Works Office
- Clinton River Watershed Council
- Macomb County Water Quality Board
- Natural Resources Conservation Service
- Local Communities





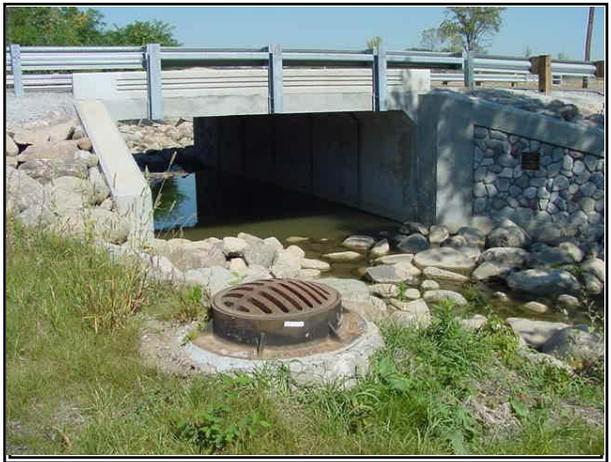
Jewel Road site after placement of riprap.



Jewel Road site after installation of pre-cast concrete culvert.



Middle Clinton Road-stream crossing site after concrete culvert placement structure.



Middle Clinton Road-stream crossing site after implementation of segmented retaining wall.