



**Clean Michigan Initiative
Nonpoint Source Grant**

Annis Water Resources Institute of GVSU



Telephone: 616-331-3749
Fax: 616-331-3864
Email: stoutn@gvsu.edu

Rogue River Watershed Physical Improvements

July 17, 2001 - December 31, 2004

The Rogue River Watershed is a 167,624 acre watershed in Kent, Newaygo, Muskegon, Ottawa, and Montcalm Counties. The watershed has both a warm water habitat boundary and cool-cold water habitat boundary, which occurs in the southern section of the watershed. Research conducted by Grand Valley State University indicates that the coldwater fish are under stress from increased temperature and sediment loading.

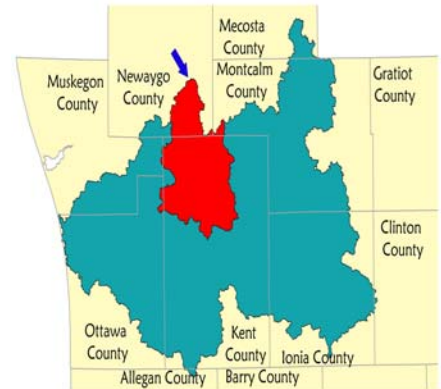
The overall goal of the Rogue River Watershed CMI project is to protect the cold water and warm water fisheries from degradation by restoring existing areas of substantial erosion and sediment runoff, and recreating natural riparian buffers. Excessive sedimentation in the Rogue River Watershed and an increase in temperature loadings make it difficult for aquatic organisms to survive. The Rogue CMI project helped to improve water quality by limiting both pollutants, which, if ignored, could severely degrade the entire system.

Best Management Practices:

- Road Stream Crossing Improvement - Shanver Avenue
- Road Stream Crossing Improvement - Tefft Avenue
- Road Stream Crossing Improvement - Ritchie Avenue
- Road Stream Crossing Improvement - Kosten Drain
- Revegetating of streambank
- Streambank Stabilization
- Boardwalk

Annual Load Reductions:

- 572 tons of sediment



Partners involved:

- Schrems West Michigan Trout Unlimited
- Kent County Road Commission
- Newaygo County Road Commission
- Courtland Township
- Annis Water Resources Institute
- MDEQ
- MDNR



**Grant Amount: \$ 357,516
Match Funds: \$ 188,817**

Total Amount: \$ 546,333

Stream Bank Before



Stream Bank After



Description: Before and after photos above of a streambank that is heavily used by fisherman along the Rouge River in Kent County. As a consequence, seven hundred feet of streambank were eroding and contributing sediment into this section of the river, which is prime spawning area for fish. To control the sediment input, the bank was graded and stabilized with riprap and vegetation. Partners on this project were the Schrems West Michigan Trout Unlimited.

Road Stream Crossing Before



Road Stream Crossing After



Description: Before and after photos above of failing culverts at 128th Street in Newaygo County. The failing culverts at this crossing have resulted in sediment input into Kosten Drain, which is a tributary at the headwaters for the Rogue River. The failing culverts were replaced with a box culvert. Our partner on this project was the Newaygo County Road Commission.