



Clean Michigan Initiative
Nonpoint Source Grant
 2004-0151

The Watershed Center Grand Traverse Bay



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Grand Traverse Bay Watershed Implementation Project - Initial Phase

March 2005 through September 2007

The Grand Traverse Bay watershed is located in northwest Michigan's Lower Peninsula and drains approximately 976 square miles of land. The recently approved Grand Traverse Bay Watershed Protection Plan states that sediment and excessive nutrient loading are two of the highest priority pollutants that are threatening the watershed. Stormwater inputs are a primary concern throughout the watershed because of the resulting changes to hydrologic flow and potential to contribute to excessive sedimentation, nutrients, and toxins entering the system. In addition to stormwater, other primary sources for sediment and nutrient pollution in the watershed include stream bank erosion, road stream crossings, fertilizers, lack of riparian buffer, and reduction of wetlands. The goal of this project was to protect the aquatic life and coldwater fishery designated uses in the Grand Traverse Bay Watershed from further water quality degradation due to excessive sedimentation, nutrient enrichment, and stormwater inputs by implementing a variety of best management practices.

Best Management Practices:

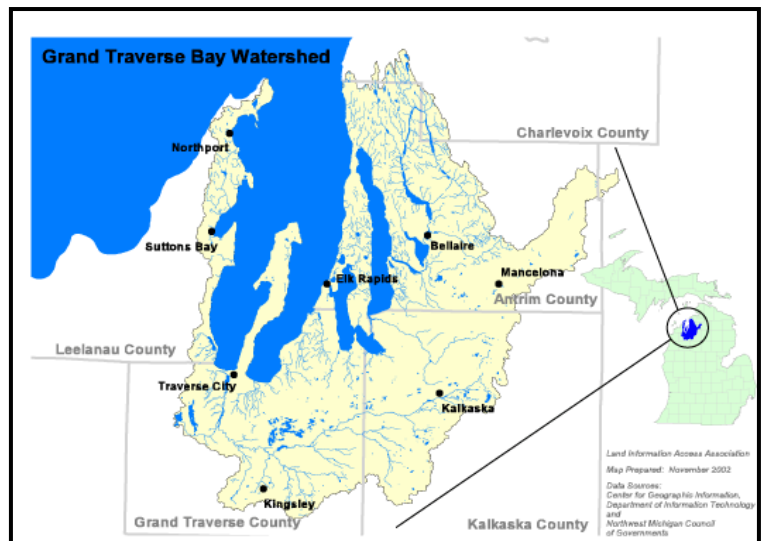
- Stabilized 192 feet of stream bank along the North Branch Boardman River at four locations.
- Restored and/or repaired 4 road crossings (2 in Kalkaska County, 1 in Leelanau County, and 1 in Grand Traverse County)
- Planted filter strips along 700 feet of North Branch Boardman River at Twin Birch Golf Course.
- Installed Constructed Wetland (0.5 acres) and stabilized 200 feet of GT Bay shoreline in Suttons Bay.
- Installed demonstration project to test 4 types of pervious pavement in downtown Traverse City.
- Completed restoration/renovation project at Hannah Park along Boardman River in Traverse City that included: installation of 2 oil/grit separators, stabilization of 1,300 feet of shoreline, planting 0.12 acres of vegetative filter, and constructing 6 fishing access platforms.
- Installed 2 additional oil/grit separators at downtown Traverse City locations.

Annual Load Reductions:

- 918 tons sediment
- 156 pounds P, 364 pounds N



Grant Amount:	\$ 425,300
Match Funds:	\$ 480,600
Total Amount:	\$905,900



Partners involved:

Grand Traverse Conservation District; Grand Traverse County Road Commission; Kalkaska Conservation District; Kalkaska County Road Commission; City of Traverse City; Inland Seas Education Association; Conservation Resource Alliance; Grobbel Environmental and Planning Associates; SRW Contracting, Inc.; Leelanau County Road Commission

September 2007



Hannah Park Restoration Project - Boardman River:
Top left - before picture showing lack of riparian buffer, eroding banks, and failing stormwater outlets.
Right (clockwise from top-left) - Riparian buffer, fishing platform (quarried rock), bank stabilization; stormwater outfall; Oil/Grit Separator at west end of park (Aquaswirl Unit); Wooden fishing platform and stormwater outfall.



Road Crossing Improvements:
 Roubal Rd (left)
 Deal Rd (right)



ISEA Constructed Wetland in Suttons Bay



Pervious Pavement Demo Project - Parking Lot K