



Michigan's
Nonpoint Source
Program

**Federal Clean Water Act
Section 319/CMINPS Grant
2016-0002**



The Watershed Center Grand Traverse Bay
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Green Infrastructure and Stream Restoration in the Kids Creek Watershed

9/30/16 through 8/31/19

The Grand Traverse Bay watershed contains 976 square miles of land and contains more than 50 municipalities and township. Sediment and excessive nutrient loading are the two highest ranking pollutants that are threatening the watershed, with stormwater being their primary entry points. In fact, a portion of Kids Creek, a major tributary to the Boardman River and Grand Traverse Bay, is on the State's Impaired Waters List due to impacts related to stormwater. This project built upon TWC's continuing work in the Kids Creek area by installing BMPs aimed reducing the quantity and improving the quality of stormwater entering the creek at a new parking structure planned for Munson Medical Center, as well as replacing an undersized road crossing structure and other BMPs aimed at creating a stable stream channel to restore natural function to the Creek. Additionally, this project built upon previous work with the City of Traverse City to both educate and help them embrace water quality protection in their master plans and ordinances.

Grant Amount:	\$598,600
Match Funds:	\$334,700
Total Amount:	\$933,300

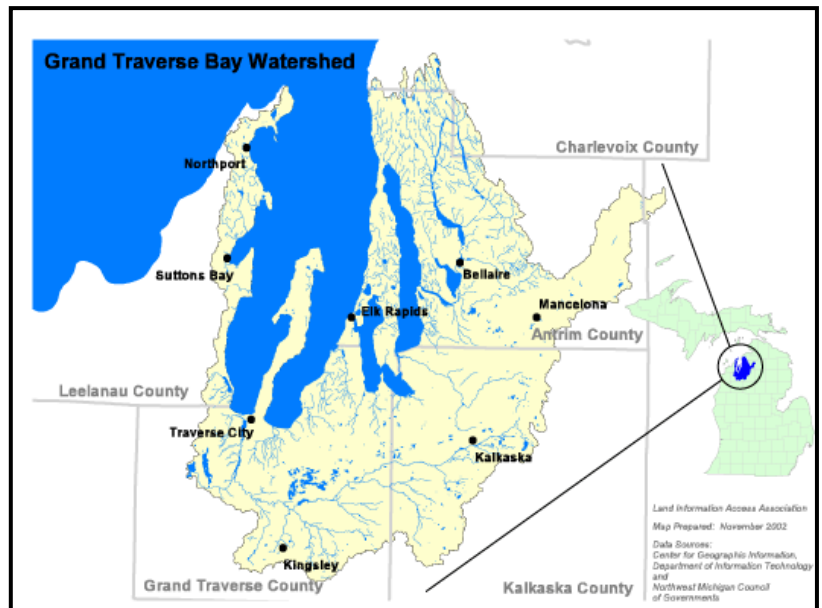
Best Management Practices

Munson Medical Center

- Capture/slow-release stormwater system installed at new parking garage
- 1 Road Crossing replacement
- Floodplain reconnection and vegetated buffer

Pollutants Reduced

- 0.19 tons sediment
- 0.1 lb Phosphorus
- 1.2 lb Nitrogen



Partners involved:

Munson Medical Center, Oleson Foundation, City of Traverse City

I&E Activities:

- TWC website and social media postings re project activities



Munson Emergency Room Entrance @ 7th Street - road crossing replacement



Upstream Side



Downstream Side



Munson Emergency Room Entrance @ 7th Street - floodplain reconnection and planting (looking downstream)



During Construction

Munson Parking Garage - capture/slow-release stormwater BMP



During Construction

