



**Conservation  
Resource Alliance**

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# Carp River/Oliver Road Timber Bridge Project

April 2003 through December 2006

In 1999 a regional Needs Assessment identified the crossing at Oliver Road as the single biggest negative impact to water quality and fish habitat in the Carp River, a small river near the Mackinac Bridge and the popular Wilderness State Park. The river is popular for steelhead and salmon fishing, paddling, and hiking. The existing double culverts, combined with a flood-prone drainage area, was causing excessive sediment erosion, artificial pools and high velocities, which adversely impact fish survival and migration.

The beautiful Michigan-made timber bridge structure, installed in September 2006, allows fish passage and unrestricted flow, helps manage runoff away from the river, and provides benefits to many species as well as local people. The project also served as a demonstration of how to accomplish an in-stream project with minimal impact to the federally- endangered Hungerford's crawling water beetle, present in the Carp and nearby Maple River. Future projects in the area will build on the experience gained by partners in this project.

**Project Cost: \$ 224,000\***

### Contributors:

US Forest Service Wood in Transportation  
US Fish & Wildlife Service  
Emmet County Road Commission  
Emmet County Revenue Sharing Board  
Baiardi Family Foundation  
Frey Foundation  
Petoskey-Harbor Springs Area Community Foundation  
Paradise Lake Association  
USDA Conservation Innovation Grant  
CRA's River Care Fund

\* Plus in-kind contributions of \$17,600

### Location

Sections 5 & 32 of Carp  
Lake and Wawatam Twps.,  
Emmet Co., MI  
N 45.723894; W 84.830136



### Best Management Practices:

- removal of existing culverts
- temporary, portable bridge
- timber bridge construction
- road and ditch runoff control
- pavement and curbing
- revegetation
- stream channel enhancement
- streambank stabilization
- collection and relocation of federally endangered Hungerford's beetle prior to construction

### Project Benefits:

- Estimated 10 tons/yr reduction in sand loading to the river, benefiting many aquatic and terrestrial species
- Enhanced passage for migratory fish, and access to ~11 upstream miles
- Improved appearance
- Reduced flooding potential and maintenance costs

### Partners involved:

•Conservation Resource Alliance •Emmet County Road Commission  
•Northwest Design Group •US Fish & Wildlife Service  
•Michigan Department of Environmental Quality •Little Traverse Bay Bands of Odawa, Great Lakes Ecosystems, Little Traverse Conservancy, Michigan DNR, Paradise Lake Association, U of M Biological Station



**Double Culverts  
Before Project**



**Culverts Removed,  
Temporary Bridge  
at Left**



**New Bridge Installed**



**Pavement and Runoff Control**