

Sanborn Creek & Nelson Road Improvement Project Pere Marquette River Watershed

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Conservation
Resource Alliance

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Project Cost:
\$172,608 incl. match

Contributors:

- USDA Forest Service
American Recovery
Reinvestment Act
- Lake County Road
Commission
- CRA River Care Fund

Location
Cherry Valley Twp.
Section 32
Lake County, MI



The Pere Marquette River is a state designated Natural River and Blue Ribbon Trout Stream, and a federally designated Wild and Scenic River. Sanborn Creek is a coldwater tributary to the Baldwin River, a main tributary in the headwaters of the PM Watershed. Sanborn Creek provides spawning and escape cover for trout, and instream habitat for aquatic insects. Sanborn Creek is approximately 13 miles long and this crossing project opens fish passage up to 8 miles of it.

The Nelson road/stream crossing, site #L-60, was comprised of 48” and 36” diameter culverts that were significantly undersized for the stream. Through this project partners designed and completed the installation of a bottomless arch culvert that accommodates the natural stream channel and allows the natural movement of substrate, fish and wildlife. Paved approaches and spillways channel road runoff away from the stream as well.

Best Management Practices:

- Bottomless arch installation
16’2” span, 5’1” rise, 45’ long
- Guardrail 525’
- Fieldstone placement
- Pavement (200 lineal feet)
- 3 spillways
- Grading and revegetation

Project Benefits:

- Natural movement of woody debris, substrate, fish & aquatic insects.
- Reduce sedimentation of stream from erosion of steep road approaches and embankments.
- Stream channel returned to a more natural state, unaltered by undersized, perched culverts impounding water & sand upstream.

Partners involved:

Pere Marquette River Restoration Committee including the following partners – US Forest Service, Conservation Resource Alliance, Lake County Road Commission, Wilcox Professional Services, Michigan Department of Natural Resources and Environment, McDowell Construction & Pere Marquette Watershed Council.

Nelson Road and Sanborn Creek Site #L-60 Photos

Before
Inlet



Outlet



After
Inlet



Outlet



Re-paving, 3 spillways and guardrail were included in the construction phase.



Nelson Road and Sanborn Creek Site #L-60 Photos

Upstream

Before – impounded sediment due to undersized culverts. During – sediment movement is uncovering woody debris.



During – stream bed slope is increasing, uncovering detritus & muck from impounded channel.



After construction, vegetation has encroached exposed sandy areas, channel is deepening and gradient is increasing.



Note leaning snag.