

www.rivercare.org

Email: <u>info@rivercare.org</u> Telephone: 231-946-6817



Project Cost: \$42,000 Project Match: TBD (BCRC)

Contributors:

- US Fish & Wildlife Service Partners Program
- Mark & Kathy O'Neill, Landowners
- National Fish & Wildlife
 Foundation Sustain Our Great
 Lakes Program
- Michigan Department Natural Resources
- Benzie County Road Commission

Betsie River Bridge Abutment Removal & Restoration Project

November 2015

The Betsie River is a State Designated Natural River and is well known for its paddling and fishing recreation opportunities. The Betsie River is a Lake Michigan tributary and it flows through Grand Traverse, Benzie, and Manistee Counties, with its headwaters starting in Green Lake. The Betsie River Watershed has 106 road/stream crossings/contact points including this abandoned bridge abutment site that ended up actually being owned by the adjacent landowners. In the spring of 2014 the combination of snow melt, rain, frozen ground and road ditch issues contributed to runoff eroding out the area near the bridge abutment. A combination of best management practices were decided upon by partners including concrete removal, streambank and site restoration, and the installation of new road ditch culverts.

Best Management Practices:

- Removal of 25 cubic yards concrete
- Placement of 70 cubic yards fieldstone
- 40' of log terracing, 3" topsoil, mulch blanket, seeding & transplant 6 spruce trees
- 120 lineal feet of woody debris placement
- 3 drainage culvert installations & 1 drainage culvert removal

Project Benefits:

- Halt annual input of up to 5 tons of sediment & 25 cubic yards concrete into the Betsie River
- Instream woody debris habitat for aquatic life
- Ensure safe passage on river for paddlers.

Location:

Sections 17/16, Colfax Twp. Benzie County, MI N44.565033, W85.898110



Partners involved:

Betsie River Watershed Restoration Committee including the Conservation Resource Alliance, Benzie County Road Commission, Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Link Engineering, Knoop Excavating, and landowners, Mark & Kathy O'Neill.

Project Photos

Before – Abandoned bridge abutment was leaning into the river & the erosion behind it was severe.







During – Concrete was removed, broken and buried on site. Area was re-graded, stabilized & planted.



After - Streambank was pulled back, resloped and stabilized.



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After – Adjacent upland area was graded, seeded and planted with transplanted spruces.



 ${\bf After-Woody\ debris\ was\ secured\ along\ the\ toe\ immediately\ upstream\ of\ the\ restoration\ work\ \&\ nearby\ road\ drainage\ culverts\ were\ upgraded.}$



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