Springbrook Bridge Project on the North Branch of the Boyne River  
2010 - 2012

The North Branch of the Boyne River is a high quality, coldwater stream and a state designated “Blue Ribbon Trout Stream.” It has the highest quality habitat in the overall Boyne River Watershed. Brook trout, brown trout and mottled sculpin as well as 14 species of mayflies, caddisflies, and stoneflies have been documented in the stream.

Two 36” diameter culverts at Springbrook Road perched on a spillway of boulders (site #BV-3) blocked fish passage, changed the shape of the stream, and impounded water and sand. The newly constructed 28’ span timber bridge allows full passage of fish, wildlife and aquatic insects. The original, natural stream channel dimensions are now returning with a structure that fully accommodates the North Branch of the Boyne River. Impounded sand is washing through revealing gravel beds and woody debris, both invaluable for fish, wildlife and aquatic insect habitat.

**Contributors:**
- US Fish & Wildlife Service - Great Lakes Fish & Wildlife Restoration Act and Fish Passage Programs
- Natural Resources Conservation Service – Conservation Innovation Grant
- Great Lakes Restoration Initiative
- CRA River Care Program
- Charlevoix County Community Foundation
- Friends of the Boyne River
- Charlevoix County Road Commission
- Paul H. Young Trout Unlimited Chapter
- Larry & Virginia Maltby

**Best Management Practices:**
- Timber bridge 28’ span
- Rock riprap placement & revegetation
- Grading & pavement to route runoff
- Channel restoration upstream of bridge
- Guardrail

**Location**
Boyne Valley Twp. Section 14  
Charlevoix County, MI  
N45.171266 W84.876558

**Project Benefits:**
- Reconnect 13 miles of the North Branch & tributaries to 5 miles downstream to next impoundment
- Restore passage of fish, wildlife, aquatic insects
- Restore natural movement of woody debris, gravel & sediment
- Ensure safe roadway for vehicle traffic
- Eliminate flood risk from undersized culverts

**Partners involved in engineering & construction work:**
Conservation Resource Alliance, US Fish & Wildlife Service, Charlevoix County Road Commission, Michigan Department of Environmental Quality, Michigan Department of Natural Resources - Fisheries Division, Friends of the Boyne River, Team Elmer’s, Northwest Designs Group.
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Before

After
Springbrook Bridge on the North Branch of the Boyne River

During construction - pile driving and assembling the timber bridge

Upstream of the bridge the river is narrowing up & forming floodplains. Impounded sand is washing away unburying woody debris & gravel beds that are invaluable for fish and aquatic insect habitat.

Downstream of the bridge the river is starting to narrow up & form floodplain areas, too. The plunge pool that used to be at the outlet is now gone and streambank erosion is no longer an issue.