



1. Before – fallen trees impeded stream flows.

2. After – pulling trees from the center of the stream helped restore sinuosity and provides instream habitat.

## Platte River & Burnt Mill Woody Debris

October 2010 through October 2011

Another negative impact of the undersized culvert at Burnt Mill Road, was that the pooling and widening of the stream at the outlet caused river banks to cave in and nearby trees to fall into the stream. A healthy stream has large amounts of woody debris for fish to seek cover in, and aquatic insects to feed on. However, when multiple trees fall completely across a river and impede flows, the stream becomes wider and additional bank erosion occurs.

After the Burnt Mill Bridge was constructed, CRA worked with Kanouse Outdoor Restoration to complete 1,200 feet of woody debris work downstream of the bridge to restore a more natural shape and sinuosity to the Platte River. Fallen cedars and willows were cut and anchored at an angle along sensitive streambanks to deflect the strongest current to the center of the channel. Log structures along banks simulate undercut streambanks, and provide hiding and resting cover for fish and wildlife. Instream wood provides food and attachment spots for mayflies, caddisflies and stoneflies during their various life stages. These aquatic insects are an indicator of excellent water quality and are a vital food source for a variety of fish and wildlife. Wood is good for a river.

**PROJECT COST: \$8,500**

**LOCATION:** N 44.685132 W 85.889311

### BEST MANAGEMENT PRACTICES:

- 1,200 feet of woody debris work including whole tree revetments, tree platform structures, log deflectors, and streambank protection

### PROJECT BENEFITS:

- **Improve stream morphology & function, in regards to channel width, depth & sinuosity**
- Improve passage for fish & aquatic species
- Provide instream cover for a variety of fish, wildlife & aquatic insects
- Improve the natural movement of woody debris & substrate
- Protect sensitive streambanks

### PARTNERS:

- Adams Chapter Trout Unlimited
- Paul Young Chapter of Trout Unlimited
- Michigan Wildlife Conservancy
- Trout & Salmon Foundation
- Conservation Resource Alliance
- Grand Traverse Band of Ottawa and Chippewa Indians
- Michigan Department of Natural Resources
- Michigan Department of Environmental Quality
- Kanouse Outdoor Restoration
- \* Environmental Protection Agency

