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# Project Cost: \$527,965 incl. match

#### **Contributors:**

- USDA Forest Service
- MDNR Fisheries HIA
- US Fish & Wildlife Service
- National Forest Foundation
- CRA's River Care Fund
- USDA NRCS Conservation Innovation Grant
- Funding from the American Recovery and Reinvestment Act of 2009 was awarded to this project and administered through the Forest Service and Fish and Wildlife Service.
- Plus in-kind services over \$5,000

# Silver Creek/State Road (P126)

### January 2007 through October 2010

The Silver Creek road crossing at State Road, located under a quarter mile upstream from the confluence of Silver Creek and the Pine River, blocks all fish passage from the Pine into Silver Creek, a cold-water tributary and nursery stream for rainbow, brown, and brook trout. Because the site poses no transportation problems, the replacement of the structure is a low priority for the local road commission, particularly in the present economic times. The primary objective of this project was to establish fish passage upstream into Silver Creek from the Pine River by removing a perched culvert and installing a bottomless arch structure. Providing fish passage at the site has been a priority for both the USFS and Michigan Department of Natural Resources Fisheries Division personnel. This project is a great example of how local watershed partnership models function and come to consensus on appropriate BMPs, obtain funding for implementation, and carry out large scale restoration projects.

#### Location

Section 18 of Dover Township Lake Co., MI GPS N44.118771 W85.683444



#### **Best Management Practices:**

- Removal of perched culvert
- Installation precast concrete arch
- road and ditch runoff control
- Pavement and curbing
- Revegetation
- Stream channel enhancement
- streambank stabilization and scour protection

#### **Project Benefits:**

- Enhanced unrestricted passage for fish and other aquatic organisms (over 5 miles)
- Improved aesthetics
- Reduced flooding potential and maintenance costs
- •Improved nutrient and sediment transport

## Partners involved:

Conservation Resource Alliance, Lake County Road Commission, US Fish & Wildlife Service, Michigan Department of Environmental Quality, Michigan Department of Natural Resources, Fisheries Division, USDA Forest Service, National Forest Foundation, Elmer's Crane and Dozer, Inc., Pine River Watershed Restoration Committee, USDA-NRCS, Wade Trim, Inc.



Perched culvert on Silver Creek completely blocking aquatic species passage approximately 400 yards from confluence with Pine River.



The completed structure includes paved approaches, runoff controls, and a clear span of the stream channel with virtually unlimited space for stream flow beneath the structure.