



**Conservation  
Resource Alliance**

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## East Branch Pine 220<sup>th</sup> Avenue (site P-73)

January 2007 through October , 2008

An important cold water tributary to the Manistee River, the Pine River system begins in Osceola County and flows westerly through the counties of Lake and Wexford before joining the Manistee River in Manistee County. This headwaters crossing has been a target for restoration for a number of years and had been failing and contributing sediments to the Pine for decades.

CRA, in cooperation with the Osceola County Road Commission, sought grants from the Forest Service, the Fish and Wildlife Service, NRCS, and Trout Unlimited to raise the balance of funds necessary to implement a timber bridge solution at the site. In late 2007, funds were made available to the road commission, and construction was scheduled for summer of 2008 and completed in September of the same year.

Osceola County Road Commission contributed in excess of \$90,000 of labor and equipment to the project, while the balance of costs were covered by Burdell Township (\$165,000) and grants awarded to CRA.

**Project Cost: \$350,000**

### **Contributors:**

US Fish & Wildlife Service  
Osceola County Road Commission  
CRA's River Care Fund  
Paul Young and Pine River  
Chapters of Trout Unlimited  
Burdell Township  
USDA NRCS  
USDA Forest Service  
Pine River Association  
Pine River Enhancement Fund

### **Location**

Section 28 of Burdell  
Township Osceola Co., MI  
GPS N44.42079 degrees  
W85.40757 degrees.



### **Best Management Practices:**

- removal of failing arch
- Installation timber bridge
- road and ditch runoff control
- pavement and curbing
- revegetation
- stream channel enhancement
- streambank stabilization and scour protection

### **Project Benefits:**

- Estimated 15 tons/yr reduction in sand loading to the river, benefiting many aquatic and terrestrial species
- Enhanced passage for fish
- Improved aesthetics
- Reduced flooding potential and maintenance costs

### **Partners involved:**

Conservation Resource Alliance, Osceola County Road Commission, US Fish & Wildlife Service, Michigan Department of Environmental Quality, Michigan Department of Natural Resources, Fisheries Division, Burdell Township, USDA Forest Service, Pine River TU, Paul Young TU, Pine River Association, Pine River Enhancement Fund, USDA NRCS



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.