### **Projects funded by the 2017 Aquatic Habitat Grant**

**Brook Trout Habitat Restoration: Improving Regional Priority Road/Stream Crossings** 

Recipient: Huron Pines Funding Received: \$110,000 Matching Funds: \$195,000

*Project Summary*: High quality brook trout habitat will be reconnected by remediating passage barriers at five road/stream crossing sites in Ogemaw and Presque Isle Counties identified as regional priorities based on comprehensive inventory data and input from resource professionals and county road commissions. Collectively, 21.5 upstream miles will be reconnected and sediment loading will be reduced by 11.4 tons/year. Existing crossings will be replaced with appropriately sized and aligned crossing structures that meet/exceed bankfull width and can adequately pass a 100-year flood event at minimum.



Culverts at the intersection of Houghton Creek and East Heath Road, one of five sights that will be remediated

#### Manistique Dam Center Flume Wall Removal

Recipient: DNR Fisheries Division Funding Received: \$ 362,650 Matching Funds: \$ \$1,087,952

Project Summary: Proposed construction of a new Manistique River sea lamprey barrier in Schoolcraft County includes removal of 1,060 feet of the downstream center flume wall. The DNR received funding to remove the remaining 2,240 feet of the center flume wall to improve aquatic habitat and recreational fishing, and to reduce environmental impacts associated with leaving the center flume wall in place. Removal of the entire center flume wall will lower the necessary height of the proposed sea lamprey barrier and, as a result, contribute to a reduction in upstream wetland impacts (only 121 aces impacted versus 466 acres under a partial center flume wall removal scenario). Removal of the entire center flume wall will also reduce total project impacts to the local community by contributing to decreased flooding potential on residential properties within the City of Manistique.



Aerial photograph and design plans of the center flume wall to be removed from the Manistique river.

# **Pigeon River Restoration at Song of the Morning Ranch**

Recipient: Golden Lotus, Inc. Funding Received: \$ \$301,850 Matching Funds: \$ 73,919

Project Summary: Song of the Morning Dam on the Pigeon River in Otsego County was removed in 2015. Channel incision has caused an unstable gully that is eroding muck soils into the river. The purpose of the project is to improve riparian wetlands, manage the legacy sediments, restore the natural river form along 495 feet of river, and increase biodiversity. This is Phase I of an effort to restore 3,500 feet of river overall.



Incised channels in the former Song of the Morning Impoundment will be remediated.

## **Reconnecting the North Branch of the Platte River**

Recipient: Conservation Resource Alliance

Funding Received: \$ 100,000 Matching Funds: \$255,000

Project Summary: This restoration project involves the replacement of deteriorating culverts at three locations in Benzie County with a combination of recessed or bottomless structures on the North Branch of the Platte River and its headwater tributary. The culverts are velocity barriers to aquatic species and are negatively impacting stream morphology, and the adjacent roadways are actively eroding into the stream.



One of the improperly sized culverts on the North Branch of the Platte River, which limits fish passage and will be remediated.

### Grand River Shoreline Restoration and Bayou Connectivity Project at Riverside Park

Recipient: Ottawa County Parks Funding Received: \$ 88,000 Matching Funds: \$ 100,559

Project Summary: This project will improve aquatic habitat quality and fish passage along the Grand River in Riverside Park in Ottawa County by restoring the hydrologic connection between Kirby Bayou and the Grand River. The first phase will install two new culverts. The first culvert replaces a perched culvert that impedes fish passage with a 77"X 52" culvert sunk and lined



Kirby Bayou, which will be be reconnected to the Grand River by the installation of two properly sized culverts.

with natural bed mixes and roughness elements. A similar culvert will be installed on road on the east side of the bayou with the same specification to reconnect the east side of the bayou. This culvert replacement proposal requests funding for the first phase of a two-phase project; phase two would restore shoreline along the Grand River.

#### **Clinton River Restoration at Yates**

Recipient: Clinton River Watershed

Council

Funding Received: \$ 287,500 Matching Funds: \$ \$35,872

Project Summary: The proposed project will restore 495 feet of the Clinton River in Oakland County for anadromous fish habitat as the first phase of a larger scale effort to restore a contiguous 2,500 feet of the river. Restoration will include the Clinton River, riverbanks, riparian areas, and in-stream habitats which will provide diverse fish spawning, rearing, and holding water habitats using a Natural Channel Design approach. Soil bioengineering practices will be used to stabilize the slope next to a high-use trail, stable access will be provided, and riffle/pool morphology restored.



Anglers fish on the Clinton River at Yates Riverside Park, where stream bank and channel restoration will improve fish habitat.