# Project Profile for GLFT Grant Number #2016.1661

Thunder Bay River Watershed Inventories

**Huron Pines**

**January 16, 2019**

## SYNOPSIS

- **Project Title:** Thunder Bay River Watershed Inventories
- **Grantee Organization:** Huron Pines
- **Project Team:**
  - Josh Leisen, Watershed Project Manager, Huron Pines, josh@huronpines.org
  - Lisha Ramsdell, Associate Director, Huron Pines, lisha@huronpines.org
  - Brad Jensen, Executive Director, Huron Pines, brad@huronpines.org
- **Contact Person:** Josh Leisen, Huron Pines, josh@huronpines.org
- **Grant Amount:** $35,441.70
- **Time Frame:** 7/11/16 — 12/31/18
- **Focus Areas:** EHSFP Habitat Protection and Restoration
- **Brief Project Summary:** Huron Pines completed a comprehensive inventory of road/stream crossings in the Thunder Bay River Watershed. We also inventoried streambank erosion sites on the Thunder Bay River and surveyed for invasive plant species along the Thunder Bay River, Fletcher Pond and Hubbard Lake through funding from Eagle Creek Renewable Energy. The road/stream crossing and the streambank erosion inventory data has been uploaded to the publicly accessible website www.northernmichiganstreams.org and all invasive species observations collected during the project have been reported on the Midwest Invasive Species Information Network (MISIN) site www.misin.msu.edu/. This information is being used by Huron Pines and other resource managers to identify cost-effective and high-impact future restoration projects to implement in the watershed.

## PROJECT IN CONTEXT

The Thunder Bay River Watershed covers 1,250 square miles in Alpena, Alcona, Montmorency, Oscoda and Presque Isle counties of northeast Michigan. It features hundreds

of miles of coldwater streams that support brook trout and many other native aquatic species, and much of the watershed is on public land and accessible to anglers and other outdoor recreationists. Huron Pines had completed inventories of road/stream crossings throughout Northeast Michigan and the Thunder Bay River Watershed represented a gap in our inventory coverage. By completing this project, we've filled that gap and now have complete inventory coverage of road/stream crossings throughout our service area, and combined with data collected by partners to our west, most of Northern Lower Michigan has been inventoried. This information allows resource managers to objectively prioritize restoration work at the regional scale, maximizing cost-effectiveness and positive benefits of this work.

## GOALS OF THE EFFORT

The goal of the project was to fill an information gap by inventorying all road/stream crossings in the Thunder Bay River Watershed. Huron Pines also received funding from Eagle Creek Renewable Energy to inventory streambank erosion sites and invasive species on the Thunder Bay River and Fletcher Pond and Hubbard Lake. Great Lakes Fishery Trust funding supported the Thunder Bay road/stream crossing inventory and upload of all of the data (road/stream crossing, streambank erosion, and invasive species) to publicly accessible web sites so that resource managers can access and use this information to prioritize on-the-ground restoration work. This project was successfully completed within the grant period.

## RESULTS

Approximately 600 road/stream crossings were identified throughout the watershed based on GIS analysis (intersects of hydrology and road shapefiles). All mapped sites were visited in the field, and a total of 248 were fully inventoried following the Great Lakes Road/Stream Crossing Inventory Protocol. Hundreds of additional potential sites were visited but not fully inventoried due to 1) duplicate points on the GIS map or other mapping error, 2) no crossing identified in the field, or 3) located on dry runs, small intermittent streams, road ditches, or seasonal farm drainages with no/negligible potential restoration benefits. The 248 inventoried sites are located on perennial stream reaches. This data is being used by resource managers to prioritize on-the-ground restoration work. For example, Huron Pines applied for and received a $3,038,000 NOAA-GLRI grant (in collaboration with Conservation Resource Alliance) to restore 14 road/stream crossings and support one dam removal effort across Northern Lower Michigan. Five of these sites are top priorities in the Thunder Bay River Watershed, identified through this inventory effort (Gilchrist Creek at Carter Road, Harwood Road and Greasy Creek Road; Thunder Bay River at Hall Road; Hunt Creek at Schmallers Road). All five Thunder Bay River sites are anticipated timber bridge projects and will collectively reconnect approximately 89 upstream miles of high-quality spawning, forage and refuge habitat for brook trout and other aquatic species. These sites will be completed in 2020-2022.

## PRODUCTS AND RESOURCES

All inventory data collected through this project, including the Eagle Creek Renewable Energy match support, is now online at northernmichiganstreams.org (road/stream crossing and streambank erosion) and www.misin.msu.edu/ (invasive species). This information is already informing on-the-ground restoration activities and will serve as a prioritization tool for this watershed, and for making regional comparisons, by resource managers in the future.