



ECOSYSTEM HEALTH AND SUSTAINABLE FISH POPULATIONS: HABITAT PROTECTION AND RESTORATION - PROJECT PROFILE -



SYNOPSIS

PROJECT TITLE: Coastal Lake Huron Watersheds Road/Stream Crossing Inventory

GRANTEE ORGANIZATION: Huron Pines

PROJECT TEAM:

- Josh Leisen, Watershed Project Manager, Huron Pines, josh@huronpines.org
- Huron Pines AmeriCorps Program – Year 2016 AmeriCorps Members
- Lisha Ramsdell, Associate Director, Huron Pines, lisha@huronpines.org
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CONTACT PERSON: Josh Leisen, Watershed Project Manager, Huron Pines, josh@huronpines.org

GRANT AMOUNT: \$16,000.00

TIME FRAME: 7/7/2015 through 12/31/2016

FOCUS AREAS: EHSFP Habitat Protection and Restoration

BRIEF PROJECT SUMMARY: Huron Pines completed a comprehensive inventory of all 253 road/stream crossings in Northeast Michigan's small coastal Lake Huron watersheds following the Great Lakes Road/Stream Crossing Inventory Protocol. The inventory data and associated photographs are publicly accessible at www.northernmichiganstreams.org and will be used by Huron Pines, county road commissions and other conservation partners to help prioritize future on-the-ground restoration work. With this project completed and plans to complete a comprehensive road/stream crossing inventory in the Thunder Bay River Watershed in 2017/2018 (also funded by Great Lakes Fishery Trust), total inventory coverage of road/stream crossing across Northeast Michigan will be achieved.

PROJECT IN CONTEXT

Several small river systems in Northeast Michigan drain directly to Lake Huron. Many of these streams support brook trout and other native aquatic species year-round and also provide spawning habitat for migratory Lake Huron fish including salmon and steelhead. A leading concern for fisheries and river health in these watersheds is aquatic habitat fragmentation, primarily due to undersized or perched road/stream crossings. To better understand the condition of these coastal watersheds and help prioritize future restoration efforts, Huron Pines completed a comprehensive road/stream crossing inventory of all the small coastal watersheds draining to Lake Huron (please see www.northernmichiganstreams.org).

GOALS OF THE EFFORT

The goal of this effort was to comprehensively inventory all road/stream crossings in fourteen small coastal watersheds draining to Lake Huron. This inventory data increased our knowledge of existing watershed conditions and to serve as a tool for prioritizing future on-the-ground restoration. All data was collected using the Great Lakes Road/Stream Crossing Inventory Protocol, helping complete full inventory coverage of all road/stream crossings throughout northern Michigan (Huron Pines will inventory the Thunder Bay River Watershed in 2017/2018, with GLFT support, which will complete total coverage for our 12-county service area across Northeast Michigan). These comprehensive inventories enable conservation partners to use limited restoration funding more efficiently to maximize ecological and socioeconomic benefits in future on-the-ground projects.

RESULTS

A total of 253 road/stream crossings were inventoried throughout 14 coastal Lake Huron watersheds, from the Mackinaw Bridge down the coast to Saginaw Bay. A standardized data sheet was completed and a series of photographs taken at each individual crossing site to capture information about the crossing structure(s), the roadway and stream characteristics. Land Information Acquisition Association (LIAA) was contracted to upload all data and photographs to www.northernmichiganstreams.org, which houses resource inventory data completed by Huron Pines and conservation partners across northern Michigan. This data is publicly available and shared directly with the local county road commissions.

The inventory data was analyzed by the Huron Pines project manager and a list of potential top priority sites has been developed. These sites were chosen based on severity (related to habitat connectivity), potential benefits (in terms of upstream miles that would be reconnected and/or sediment load reduction potential) and spatial context (presence/absence and location of other fish passage barriers in the river system). These are first steps in prioritizing sites for restoration—additional factors to consider include project cost, landowner authorization and contribution, alignment with partner (e.g., road commission) goals/priorities, funding availability, invasive species concerns, habitat quality and desirable aquatic species present that would benefit from the crossing improvement. Eight potential high-priority crossings, which are also not identified as important for invasive sea lamprey control, include:

- **GCBM-008:** Elliot Creek/Seffren Rd; **GCBM-006:** Elliot Creek/Alpena State Rd (will be restored)
- **GCBM-012:** Mulligan Creek/Sandpiper Lane; **GCBM-011:** Mulligan Creek/Pine Tree Trail
- **GCBM-003:** Grace Creek/Grace Harbor Road
- **GCBM-014:** Lone Pine Creek/Mulligan Creek Trail
- **BC-009:** Chub Creek/Main Street Road; **BC-012:** Chub Creek/Janish Road

*See www.northernmichiganstreams.org for full data and photographs for each site listed above. Additional problematic sites, that currently act as important invasive sea lamprey barriers, are identified in the full narrative report.

PRODUCTS AND RESOURCES

The primary product of this project is an online road/stream crossing inventory of all small coastal watersheds draining to Lake Huron. This inventory data builds on existing inventories for the Au Sable, Au Gres, Black, Cheboygan, Rifle and Tawas river watersheds, and the planned inventory of the Thunder Bay River Watershed will complete coverage of recent inventories throughout Northeast Michigan. Partner organizations, including Conservation Resource Alliance, have completed several additional watersheds in Northwest Michigan using the same protocol and datasheet. This allows multiple stakeholders to objectively evaluate potential restoration sites at the regional level, which ultimately promotes more efficient use of limited funding to complete restoration work in Michigan.