

Project Benefits and Assessment

Project Benefits

Fishery Management

- Facilitate fishery management goals
- Controlled sorting of fish
- Invasive sea lamprey control
- Solution to global fish passage issues
- Controlled connection between the Boardman River and Lake Michigan



Water Quality

- Pervious pavers in parking area
- Green roof on research and education building
- Raingardens
- Stable water levels in Boardman Lake
- Naturalized river channel



Improved Access

- Improved pedestrian access
- Dedicated kayak landings with portage rail
- ADA kayak and canoe ramps
- Resistant shoreline protection
- Educational, informational, and wayfinding signage



Project Assessment

FishPass is an adaptive management project whereby assessment data are collected prior to, during, and after construction to allow FishPass operations to be modified annually on the basis of assessment results. See FishPass Assessment Plan here: <http://www.glfcc.org/fishpass.php>

Long-term monitoring

to document changes in the fish community and habitat over time at six stationary sites located throughout the Boardman River (two downstream and four upstream of Union Street Dam). Routine measurements of fish community, water quality, habitat, and stream morphology will be collected at each site for 10 years.



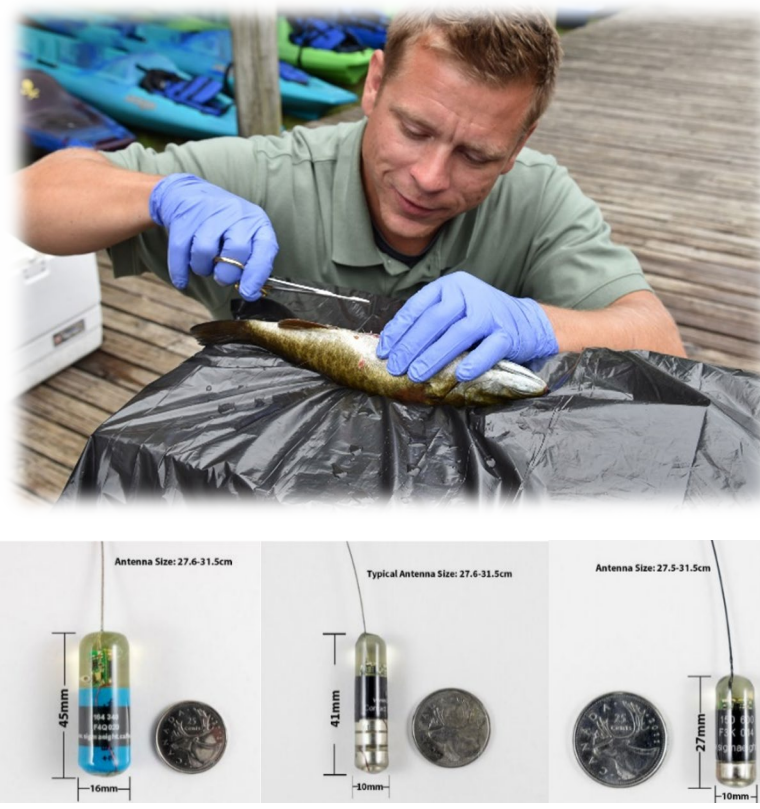
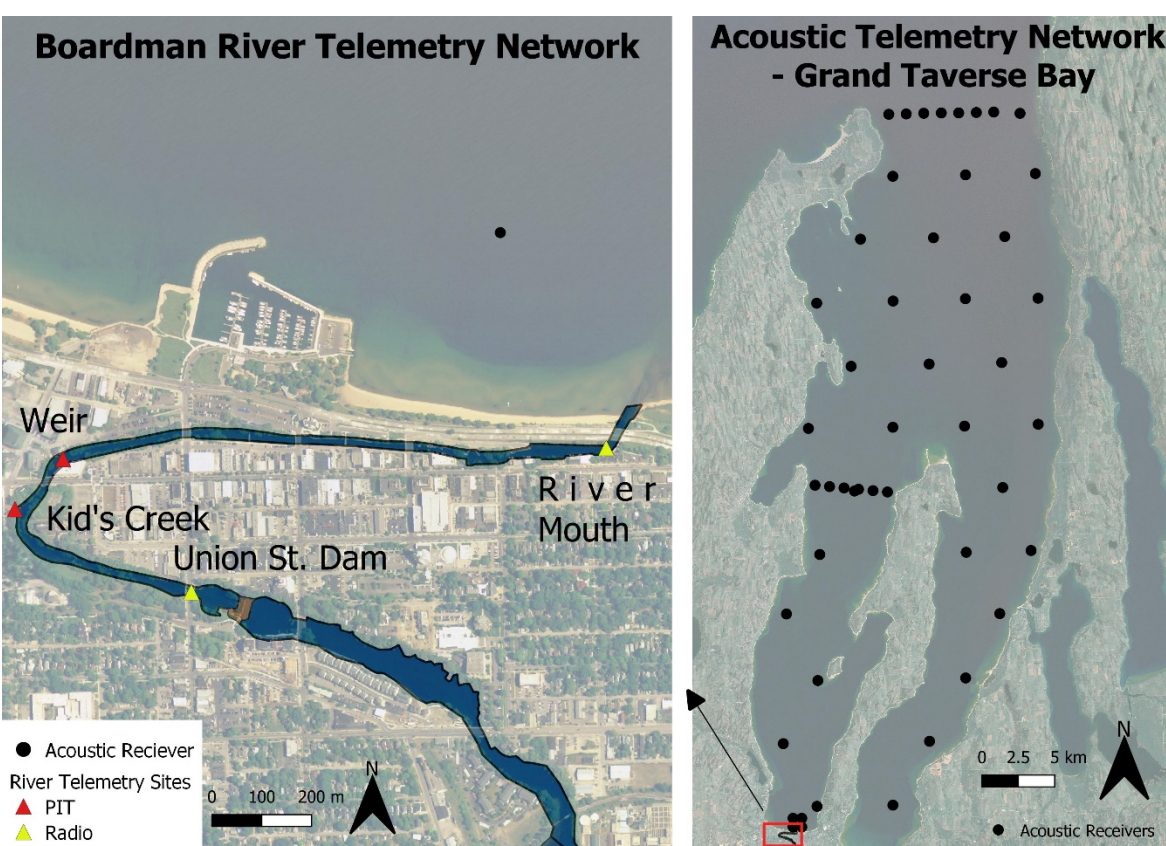
Sea Lamprey monitoring

to determine adult sea lamprey abundance and sea lamprey production potential of the Boardman River upstream of Union Street Dam and to monitor for unwanted sea lamprey passage upstream of Union Street



Movement Studies

to assess if and how fish movement and space use change in response to selective fish passage. The monitoring plan specifies telemetry to (1) establish a baseline understanding of fish movement in the Boardman River, especially below Union Street Dam, and (2) identify changes in movement in response to selective passage. A baseline fish movement monitoring program will eventually help distinguish the relative effectiveness each selective fish passage treatment and identify ways to increase efficacy.



Genetic and eDNA sampling

to generate baseline population genetic structure data for species such as walleye, smallmouth bass, yellow perch, white sucker, and rock bass and to develop eDNA as a means to survey fish presence/absence from water samples. These studies will allow determination of potential genetic consequences and benefits of fish passage on fish populations upstream of FishPass. Study led by Dr. Wes Larson at University of Wisconsin – Stevens Point



Contaminant transfer

to assess risk of contaminant transfer to resident fishes prior to and following implementation of selective fish passage. The Boardman River, MI, Union Street Dam removal (2020-2021) and replacement with FishPass will be used as a case study to inform issues related to fish passage and contaminant bio-transport. Study led by Dr. Brandon Gerig at Northern Michigan University.