

Workgroups and Meetings

The SWQPP staff stays up to date on water quality technology and issues by participating in trainings and conferences that strengthen our knowledge and skills to complete our water quality goals. Some examples include the EPA-sponsored Tribal Standards Academy, Aquatic Vegetation Identification course, training on the Spreadsheet Tool for Estimating Pollutant Loads, and macroinvertebrate training courses. The SWQPP staff participate in Lake Charlevoix and Little Traverse Bay Watershed Workgroups, Michigan Tribal Environmental Group meetings, and is the facilitator of the Paradise Lake Pilot Boat Washing Station Workgroup.

What can you do to protect water resources?

- Get involved! Become a member of local, state, tribal, and/or federal water quality groups and organizations
- Stay updated on water quality issues affecting your community
- Implement best management practices on your lawn, dispose of all wastes properly, & provide riparian zones to properties adjacent to water bodies
- Practice control measure to prevent the spread of invasive species by:
 1. Removing or washing boats & trailers after use
 2. Reporting any indication of invasive species to an appropriate agency

Kira Davis collects water samples from a lake during winter sampling.



“Mother is our Earth, the rivers are the veins of our Mother, as nbiish is the blood of our Mother.”

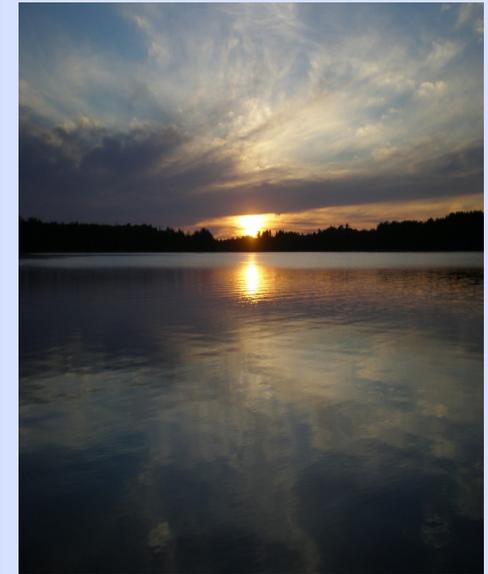


Acknowledgements



Little Traverse Bay Bands of
Odawa Indians

Surface Water Quality Protection Program (SWQPP)



Kira Davis, Water Quality Specialist

Caroline Keson, Water Quality Assistant

Contact Information:

Kira Davis
Phone: (231) 242-1572
kdavis@lbbodawa-nsn.gov
Or
Caroline Keson
Phone: (231) 242-1577
ckeson@lbbodawa-nsn.gov



Surface Water Quality Protection Program



Water Quality Goals

- Continue monitoring surface water to ensure the quality of water resources for the next seven generations
- Continue to be a key stakeholder in making management and water resource related decisions on water bodies within or adjacent to the LTBB reservation using scientific data
- Continue efforts to appropriate Tribal and/or EPA-approved water quality legislation
- Provide comments and participate in tribal, local, state, and federal work-groups and/or meetings pertaining to water resources
- Provide education/outreach to tribal and non-tribal Community
- Continue to research and apply for water resource funding to increase environmental



Caroline Keson (above) completes a yearly habitat assessment at Five Mile Creek, a cold-water fishery.

Monitoring Program

Ten years of consistent, quality-assured data has been collected at fixed baseline sites within and/or adjacent to the LTBB Reservation Boundary. The completion of this baseline assessment allows the Tribe to determine natural variability of each water body monitored. This data will be compared to future data collected at these water bodies to detect any water quality degradation and to continue to assess water quality. Most waters are now monitored on a seasonal basis with the exception of Van and Susan Creeks, as well as some of the baseline sites. Water is analyzed for physical, chemical, and biological parameters. The SWQPP staff continues monitoring as they start new projects and data collection activities.

Marl Comparison Study



A substrate study on O'Neal, Spirit (Wycamp), and Larks Lakes has been undertaken to discern the percentage of marl and organic composition (see map above). This study may be used for future management decisions on these lakes.

Tribal Water Uses and Standards

The SWQPP is drafting LTBB tribal water quality uses for water bodies within and adjacent to the LTBB Reservation. Establishing Tribal water quality uses and standards (pending the finalization of approved Tribal Uses) asserts Tribal Sovereignty and promotes the protection of waters for Tribal needs for the next seven generations.

Quantitative Pebble Counts



Caroline Keson (left) prepares to collect random pebbles along the Maple River in November 2011.

Pebbles (right) are measured using a set of calipers, and measurements are used to determine substrate composition.

The substrate of streams, creeks, and rivers is also being studied through pebble count surveys. Pebble counts provide information on the composition of creekbeds (i.e. sand, clay, pebble, gravel, etc.), which determines the quality of habitat for fish and aquatic macroinvertebrates.

Paradise Lake Pilot Boat Washing Station Project

LTBB was the recipient of a partnership grant with the Michigan Department of Natural Resources and the Paradise Lake Improvement Board to install the first boat washing station in Northern Michigan to help prevent the spread of invasive species into inland lakes, the Great Lakes and connecting waterways. Funding is through the U.S. Environmental Protection Agency's Great Lakes Restoration Initiative.



Kira Davis (left) tests out the boat washer at North Higgins Lake, which is similar to a car wash



Kira Davis (left) asks children participating in an education/outreach program to share what they have learned about macroinvertebrates.