

continued

If the sites can be cleaned-up and reused, they are often called brownfields.

The ESP is developing a Tribal Environmental Response program to conduct assessments for brownfields on LTBB properties and within the Reservation, to create codes and ordinances for future protection, to develop a plan for natural resource emergencies (oil spills, chemical releases, etc.), and to provide education and outreach.

Air Quality Monitoring Program

Reservation air quality is often considered pristine, yet there are many sources on and off of the LTBB Reservation that contribute to local air pollution. Air pollution affects the health of Tribal Citizens, especially elders, children, and people with respiratory problems. Some air pollutants, such as mercury, bio-accumulate in fish, plants, and animals used by Tribal Citizens for subsistence.

ESP staff are currently updating the Emissions Inventory for the Reservation and 25-mile airshed. The Inventory compiles and quantifies major sources of air pollution on and around the Reservation. We review and contribute to federal, state, and local air quality decision-making. We also gather information on indoor air quality throughout the Reservation, including radon and mold.

The Environmental Services Program is made possible through funding support from the U.S. Environmental Protection Agency and the U.S. Department of Energy. Thank you to the LTBB Odawa Tribal citizens for continuing to allow us to serve you.

Environmental Services Mission Statement

We respect, honor, and care for Mother Earth and her families, keeping the next seven generations in mind. We will actively participate in local, regional, and national environmental decision making processes affecting Indian Country. We will develop and implement ordinances and policies that will ensure the protection of our natural resources. We will continue to be diligent, honest, and accountable while making a positive difference regarding environmental issues.



Little Traverse Bay Bands of Odawa Indians

7500 Odawa Circle
Harbor Springs, MI 49740

Phone: 231-242-1574

Fax: 231-242-1575

enviro@ltbbodawa-nsn.gov

www.ltbbodawa-nsn.gov

Little Traverse Bay Bands of Odawa Indians

Environmental Services Program



Water Quality

Environmental Policy

Brownfields

Energy Sustainability

Air Quality

- ◆ Daugherty A. Johnson, *Program Manager*
- ◆ Caroline Keson, *Water Quality Specialist*
- ◆ Lauren Dey, *Water Quality Assistant*
- ◆ Aubrey Maccoux-Leduc, *Great Lakes Policy Specialist*
- ◆ Kevin Hurrell, *Environmental Response Specialist*
- ◆ Jon Mauchmar, *Environmental Specialist (Air)*
- ◆ Krystal Kiogima, *Environmental Assistant*

Surface Water Quality Protection Program



O'Neal Lake
Winter

Healthy lakes and streams are vital to Odawa culture and way of life. Impacts to water quality include but are not limited to: point source pollution, land use practices, and the introduction of invasive and exotic species. The ESP has been monitoring

lakes and streams on and near the Reservation for over a decade. We continue to monitor lakes and streams to ensure water quality for the next seven generations. In addition, we assess habitat conditions and conduct biological surveys and research specific to each water body. Data has been used in lake management and watershed plans and will continue to help determine best uses and management strategies for LTBB surface waters. Program staff can also provide surface water expertise, represent LTBB on water quality issues and workgroups, and can provide education and outreach programs to Tribal and non-Tribal communities.

Wetlands Protection Program

Protection of LTBB wetlands are essential for cultural perpetuation. Wetlands are rooted to the traditional reliance on fishing, hunting, and gathering of plants for food, medicine, and crafting, as well as for cultural and spiritual purposes. Wetlands are environments characterized by hydrophytic vegetation, periodic or permanently saturated soils, and an influence from water. They provide many valuable ecological functions such as filtering and



Van Creek

cleansing of water, flood and erosion control, groundwater recharge, and habitat for fish, plants, and wildlife.

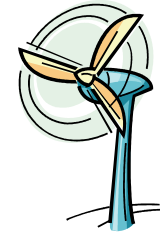
The ESP continues to survey and assess selected wetlands within and affecting the Reservation for functional values and culturally significant plants. Staff provide expertise in wetland ecology, represent LTBB on wetland issues at the state and national levels, partner with Tribal and non-Tribal organizations to complete restoration activities, and complete education and outreach activities.

Great Lakes Policy

The Great Lakes have been a defining characteristic of Odawa culture for generations. From inhabitation on Great Lakes' islands to transportation and subsistence fishing, the Great Lakes have been influential to the Odawa way of life. Together the five Great Lakes create one of the largest freshwater systems in the world – containing 20% of the world's surface freshwater. Despite their size and benefits, the lakes face serious problems. Invasive species, impaired water quality, and habitat loss require coordination and collaboration among governments, researchers, non-profits, and industry. The purpose of this program is to build Tribal Capacity to participate in the Lake Michigan Lakewide Management Plan as well as several other meetings and conferences intended to restore and protect the integrity of the Great Lakes ecosystem. ESP staff also provide tribal input on Great lakes policies, education and outreach, and technical expertise along with cultural knowledge of Great Lakes issues.



Energy Sustainability



Renewable Energy—In 2005, the LTBB Tribal Council adopted a resolution to strive to obtain 25% of our total energy from renewable energy sources by 2020. Environmental Services continues to implement two projects through the Department of Energy, which focus on reducing our reliance on fossil fuels to meet this goal. Through the Energy Advisory Team (EAT) we are pursuing installation of two small wind turbines on LTBB government properties and the making of biodiesel fuel from used cooking oil to fuel vehicles and boats. In addition to reducing our greenhouse gas emissions, both projects will help the Tribe save money through lower operations costs in the future.

Recycling & Solid Waste Management— Do you know that the average person throws away over 4 lbs of garbage each day? Recycling is something everyone can do to help reduce litter, reduce greenhouse gas emissions, and protect our lands and waters for the next seven generations. The ESP continues to provide technical assistance and education on recycling activities to LTBB and Tribal Citizens. Check out our website for more information on recycling and our newest project—composting of food waste at the LTBB Government Center!



Tribal Environmental Response

Protecting our land and water resources from hazardous waste, or the threat of such pollution, is essential to protecting human health and the environment. Sometimes sites that were used for industrial and commercial activities also left behind contamination.

Continued on next page