LAKE SUPERIOR

LAKEWIDE ACTION AND MANAGEMENT PLAN

2020 ANNUAL REPORT

Lake Superior. Source: E. Chiriboga.

In this Issue

What is the Lake Superior LAMP?

Under the Great Lakes Water Quality Agreement (GLWQA), the governments of Canada and the United States have committed to restore and maintain the physical, biological and chemical integrity of the waters of the Great Lakes.

The Lake Superior Lakewide Action and Management Plan (LAMP) is an ecosystem-based strategy for protecting and restoring Lake Superior water quality. The LAMP is developed and implemented by 34 government agencies around the lake, together known as the Lake Superior Partnership.

The Partnership is led by the U.S. Environmental Protection Agency (U.S. EPA) and Environment and Climate Change Canada (ECCC) to facilitate information sharing, set priorities and assist in coordinating environmental protection and restoration activities.

The most recent Lake Superior LAMP can be found online.

OVERVIEW

The Lake Superior Partnership agencies successfully implemented the 2015–2019 Lakewide Action and Management Plan (LAMP) through projects aimed at protecting and restoring the water quality and ecosystem health of this magnificent lake. A special insert highlighting the 2015–2019 LAMP accomplishments is included in this report. The new 2020–2024 LAMP is currently in development.

We will also be participating in the 2022 Great Lakes Public Forum in September 2022 in Windsor, Ontario. The Forum is held every three years to engage the public on the state of the Great Lakes, progress achieved over the past three years, and priorities to guide the science and actions for the next three years.

Lake Superior continues to be in good condition. The lake is a safe, high-quality source of drinking water, with many healthy coastal wetlands and other habitats. While the lake is doing well, protective actions are necessary to reduce existing—and prevent additional—chemical contamination, invasive species, and nutrients and algae, as well as conserve habitats and species.

Whitefish Bay. Source: S. Parish.

In the following sections of this annual report, the Lake Superior Partnership provides updates on our activities reducing chemical contamination, managing nutrients and algae, preventing and controlling invasive species, and restoring and protecting habitat and species.

REDUCING CHEMICAL CONTAMINATION

Lake Superior fish are a nutritious food source, but consumption guidelines continue to exist in part due to mercury contamination. Consuming too much mercury has been linked to various physical ailments including neurological effects.

Significant advancements have occurred in reducing emissions from industrial processes, coal-fired power plants and mercury in products. There are now lower levels of mercury in fish compared to the 1980s; work continues toward the goal of safe fish consumption without concern for harmful pollutants. Selected examples of recent chemical accomplishments are below.

Remediating Contaminated Sediment in Ontario

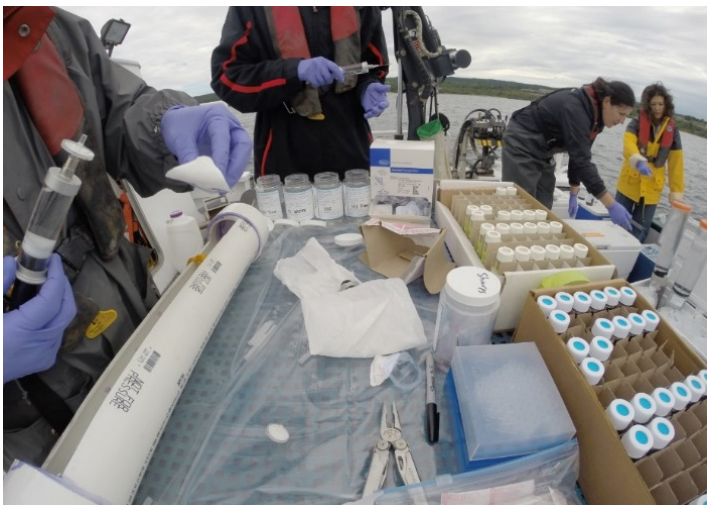
The Peninsula Harbour Area of Concern (AOC) contains elevated levels of mercury and PCBs in sediment due to historical releases from a former pulp mill and chlor-alkali plant.

To address these contaminants, in 2012 a 15–20 cm (6–8 in) thin-layer cap of sand was placed over 23 hectares (57 acres) of sediment with the highest total mercury concentrations in Peninsula Harbour. A 20-year long-term monitoring plan (LTM) was established to assess the performance of the cap in meeting specific monitoring goals with respect to stability, reducing contamination to below the clean-up target and ecological recovery.

The five-year post-cap LTM survey results show that the cap has effectively reduced the movement of mercury to the overlying waters. The average total mercury concentration (0.37 µg/g) in the surficial sediment overlying the cap surpassed the remedial clean-up target of 3 µg/g. The cap also effectively reduced the concentrations of methyl-mercury and PCBs to overlying waters.

Biological surveys have indicated that the sediment has been colonized with benthic invertebrates, that coverage of submerged aquatic vegetation continues to increase, and contaminant levels in fish tissue have decreased.

A recent assessment by Environment and Climate Change Canada and Ontario Ministry of the Environment, Conservation and Parks suggests that the AOC delisting criteria for the Degradation of Benthos Beneficial Use Impairment (BUI) have been met, and therefore Canada and Ontario are proposing to re-designate the BUI to ‘not impaired’.



Collecting samples during the long-term monitoring survey aboard Ontario’s Great Lakes Guardian vessel. Source: Ontario Ministry of the Environment, Conservation and Parks.

Investigating Mercury Emissions from Forest Fires

Forest management often includes prescribed burns to reduce the risk of large wildfires. Following a large wind blowdown event in the Superior National Forest in northeast Minnesota in 1999, National Forest Service mangers set out to better understand how both prescribed burns and wildfires could potentially affect the cycling of mercury in the environment and subsequently contribute to mercury in fish.

After a decade of research comparing fish from lakes in burned and unburned watersheds, the main finding indicates that fires ranging from light to moderate severity do not lead to increased mercury in fish. This result is great news for

the Superior National Forest managers as they continue to use prescribed fire to manage the threat of a large wildfire in the blowdown area.

First Nation Environmental Monitoring

Anishinaabeg, including the Ojibwe nation, have called Gichigami home for thousands of years.There are over 20 Tribal and First Nation communities located along the coast or within the Lake Superior Basin, and they continue to be stewards of the lake.

In recent years, Pays Plat First Nation and Red Rock Indian Band, with support from Environment and Climate Change Canada, Lakehead University and other constituents, have enhanced the environmental monitoring of their traditional territory. Pays Plat First Nation has been sampling water, soil and sediments for mercury, phosphates, nitrates and more to help determine current environmental conditions. Red Rock Indian Band have increased the tracking of science and monitoring occurring in their traditionally territory; are continuing their own field observations and invasive species monitoring; and are developing a new environmental monitoring plan.

MANAGING NUTRIENTS AND ALGAE

Beaches and the waters close to the shore continue to provide good opportunities for swimming and recreational use. Nutrient concentrations in the lake today are similar to historic values, indicating acceptable ecosystem conditions.

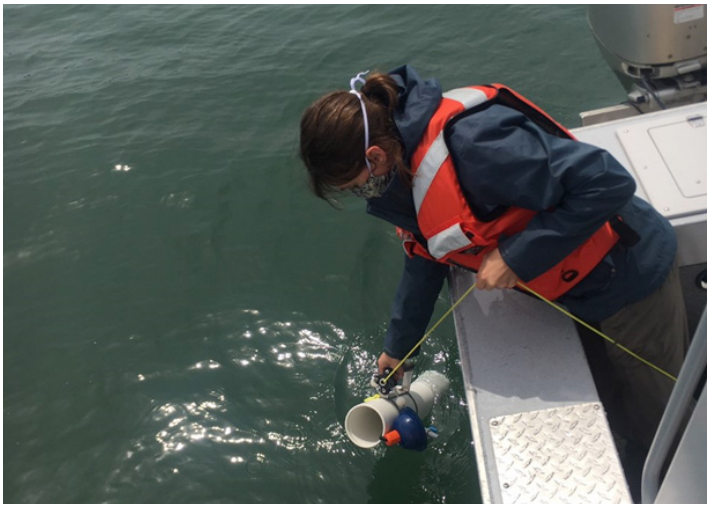
Traditionally, harmful algal blooms and nuisance algae have not been of much concern for Lake Superior with few reported observations. However, beginning in 2012, a number of short-lived non-toxic blooms of cyanobacteria have occurred, most notably in the area between Duluth Harbor and Apostle Islands.

Enhancing Algae Monitoring and Research

In order to better document and understand these emerging algal bloom issues in the Lake Superior Basin, monitoring efforts intensified in 2020. Blooms were observed at several locations, including the Portage Canal near Houghton, Michigan, and previously affected areas like Bark and Siskiwit Bays along Wisconsin's Lake Superior shoreline. Suspected blooms sighted in Amethyst Harbour near Thunder Bay, Ontario, and the Steel River (east of Terrace Bay, Ontario) were too transient to confirm. In addition, toxin analysis from these locations, as well as the Portage Canal event, indicated that toxins were below detection limits and the public health threat was minimal.

In 2020, there was also an increase in coordination on algal bloom response, monitoring, and research, due to the Lake Superior Partnership's Algal Bloom Subgroup coordination efforts. The group gained many new members from institutions throughout the basin, and developed additional plans for the Lake Superior Cooperative Science and Monitoring Initiative field year planned for 2021.

If any member of the public spots a bloom, they are encouraged to contact their state or provincial pollution tips hotline or participate in citizen science using Bloomwatch.



Collecting water for chemical and algal community analysis as part of interagency bloom monitoring efforts. Source: U.S. National Park Service.

PREVENTING AND CONTROLLING INVASIVE SPECIES

Lake Superior's ecosystem continues to be dominated by native species with fewer new aquatic non-native species finding their way

to Lake Superior compared to decades past. Invasive species that have established in the area, however, have altered Lake Superior's ecosystem at all trophic levels and have reduced the ecosystem's resilience.

Phragmites and Zebra Mussels are two invasive species of management priority in Lake Superior, because they have the potential to cause harm, but their presence is relatively low compared to the other Great Lakes.

Managing Phragmites Infestations

Phragmites (*Phragmites australis* subsp. *australis*), also known as European Common Reed, is a perennial wetland grass that outcompetes native plants and displaces wildlife.

A native strain of Phragmites is found the Lake Superior Basin; however, the non-native invasive strain is unique in its rapid and dense growth, greatly affecting hydrology, recreational and aesthetic value, and poses risks to infrastructure.

Although Phragmites' presence in the Lake Superior Basin is relatively low, infestations have been found in many locations around the lake. Many federal, Indigenous, provincial, state and local government agencies are monitoring and undertaking eradication projects when necessary.

Parks Canada, for example, uses aerial and ground surveys to monitor for non-native Phragmites at the Lake Superior National Marine Conservation Area. After an infestation was found in Nipigon Bay in 2018, Parks Canada led a team with staff and volunteers from the Red Rock Indian Band to manually remove the Phragmites and monitor the site.

In the U.S., the Red Cliff Band of Lake Superior Chippewa continues to monitor the results of a project designed to eradicate one of the only known sources of non-native Phragmites in the Chequamegon Bay region. The project included its removal, careful disposal, and replacement with the native subspecies of all dewatering reed bed material in three local wastewater treatment facilities in order to help protect 14,000 acres of nearby coastal and inland wetlands.

Members of the public can report sightings of invasive species directly to their relevant state or provincial agencies or through the citizen science tool EDDMapS.

Removing Zebra Mussels

In late 2018, the discovery of zebra mussels at a high-traffic Isle Royale dock triggered an intensive early detection and removal effort in several Lake Superior national parks.

In 2020, manual removal efforts at the affected Isle Royale dock continued, with zebra mussel catch per unit effort continuing to decrease since the initial detections in 2018. Similar survey and manual removal efforts continued at an invaded Apostle Islands shipwreck in cooperation with partners from Northland College and the University of Minnesota.

Additionally, the National Park Service and partners conducted dive-based early detection surveys at multiple sites in the Isle Royale and Apostle Islands archipelagos. Isolated zebra mussels were detected at a small number of new locations, but no large infestations were detected at either park.

As a complement to dive-based surveys, National Park Service staff deployed passive samplers at Isle Royale. This effort will be expanded to other Lake Superior parks in the upcoming year in collaboration with the U.S. Fish and Wildlife Service's Aquatic Invasive Species Early Detection and Monitoring Program.

Results from the Isle Royale manual removal work offer promise that small, localized infestations of invasive mussels can be effectively controlled in Lake Superior waters if detected early. Many online resources are available to learn about invasive species in your specific area, and what can be done to prevent further spread. To learn more about some the larger prevention and control efforts, visit the Great Lakes Commission's Invasive Species webpage.

PROTECTING AND RESTORING HABITAT AND NATIVE SPECIES

Lake Superior habitats are relatively healthy compared to the other Great Lakes. To help

ensure continuing good conditions, many high-quality habitats are being purchased for conservation, public access and sustainable use purposes. The following provides one recent habitat and species project from each of the Lake Superior state and provincial jurisdictions.

Walleye Rehabilitation and Repairing Camp 43 Dam in Ontario

The Black Sturgeon River Camp 43 Dam located in Black Sturgeon River Provincial Park has been the center of attention for more than a decade amongst Indigenous communities and local, regional, provincial and binational stakeholders, in part because of the potential impact on Walleye populations.

Public safety is always a top priority when it comes to managing Ontario's dams. A hydraulic and stability assessment completed in 2019 found that deterioration of the wood and concrete structures of the dam compromised its stability and performance. Based on this assessment, repairs to the dam structure were initiated in the spring of 2020 and are now complete.

To support Walleye rehabilitation, the Ministry of Natural Resources and Forestry has monitored Walleye movements in Black Bay and in the Black Sturgeon River since 2016 using acoustic telemetry. Today, there are 157 Walleye tagged in Black Bay.

So far, the Ministry has learned that Walleye are exhibiting spawning behavior in both the river and portions of Black Bay during the spawning period, typically in May of each year. Other insights include the fact that only about 57% of the tagged Walleye ascend the river in May, and of those, only a handful go all the way to the dam. The other 43% of tagged Walleye are concentrated in the northwest portion of the Bay and about one-quarter of the Walleye leave the Bay during the summer period and then return in the fall.

The ministry will continue to monitor the population to affirm spawning behavior and locations in the Bay itself.

Restoring the Poplar River in Minnesota

Lake Superior's Poplar River, near the town of Lutsen, Minnesota on Lake Superior's North Shore, was delisted from the impaired waters list in 2019 and is now meeting suspended solids water quality standards.

The Minnesota Pollution Control Agency listed the Poplar River as impaired on the Clean Water Act list of impaired waters for total suspended solids in 2004, a condition resulting from tons of sediment entering the river every year. Private, state, federal and local partners worked together, investing resources over several years to stabilize eroding slopes and banks and improve stormwater infrastructure.

The Great Lakes Restoration Initiative (GLRI), through the Sustain Our Great Lakes Program, contributed to this effort. The Poplar River Management Board, a coalition of private businesses and landowners, also was instrumental to the success of this delisting.

Conserving the Two Hearted River in Michigan

The Nature Conservancy and the Michigan Department of Natural Resources completed the last phase of a 15-year project with the transfer of 3,270 acres (1,320 hectares) of land near the Two Hearted River in the Upper Peninsula of Michigan.

The area has a high quality mix of forestland and primarily features hemlock, white pine, northern hardwood and marsh/wetland areas. Hemlocks are especially indicative of good water quality and help shade streams for fish.

This land will be uniquely managed to restore diverse forest characteristics by thinning some of the similar diameter trees to allow others to attain larger sizes faster and promote regeneration of less common trees to improve diversity. The harvested trees will be sold for income to create other conservation projects in the area.

Restoring a Wetland in Port Wing, Wisconsin

In fall of 2019, the Town of Port Wing undertook a project to restore 10 acres (4 hectares) of wetland.

Abandoned wastewater treatment ponds that had been constructed in 1968 within wetlands of the Flag River Estuary along Wisconsin's south shore were reconnected and restored back to wetlands.

This restoration was the result of GLRI funding support and a close partnership between the Wisconsin Department of Natural Resources (WDNR) and the Town of Port Wing, which teamed up to develop and implement a restoration plan.

Students spot a snapping turtle while participating in a wetland monitoring in Port Wing, Wisconsin. Source: Wisconsin Department of Natural Resources.

The Flag River estuary, a high quality coastal wetland complex that includes the Port Wing Boreal Forest State Natural Area and Bibon Lake, is home to a wide variety of waterfowl, unique wetland habitats, and boreal forests that have been developed or lost to invasive species. Several rare plants and animals have been documented at this wetland.

After the first year of construction, the wetland vegetation is well established and some invasive plants are being controlled. Additional vegetation assessment and management is planned for 2021 to ensure that the restoration is successful.

This project was made possible by Michele Wheeler's leadership and dedication to working with the Town of Port Wing to incorporate their community needs as well as the needs of the natural resources. This site is dedicated to her in memoriam.

OUTREACH AND ENGAGEMENT

GLWQA Engagement Opportunities

You can keep up to date on GLWQA engagement opportunities in the Engagement section of Binational.net. Information on many of our partner organizations' upcoming outreach and engagement opportunities can also be found at the Great Lakes Commission's "Great Lakes Calendar".

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Implementing the 2015-2019 Lake Superior LAMP

SPECIAL INSERT - LAKE SUPERIOR LAMP 2020 ANNUAL REPORT

2020 ANNUAL REPORT

Lake Superior. Source: J. Bailey.

Lake Superior and the LAMP

Lake Superior contains 12% of the world's surface freshwater and is in the enviable position of having relatively intact fisheries, wildlife and habitat.

While Lake Superior is in the best ecological condition of all of the Great Lakes, it is not uniformly good in all locations. The ecosystem is threatened by chemical contaminants, invasive species, degradation of habitats, nutrients and bacterial pollution, and climate change impacts. While remediation and/or restoration projects are needed and necessary, management actions prioritizing protection are critical to maintaining this valuable ecosystem.

Under the Great Lakes Water Quality Agreement (GLWQA), the governments of Canada and the United States have committed to restore and maintain the physical, biological and chemical integrity of the waters of the Great Lakes.

The Lake Superior Lakewide Action and Management Plan (LAMP) is an ecosystem-based strategy for protecting and restoring Lake Superior water quality. The LAMP is developed and implemented by government agencies around the lake, together known as the Lake Superior Partnership. The Partnership is led by the U.S. Environmental Protection Agency (U.S. EPA) and Environment and Climate Change Canada (ECCC) to facilitate information sharing, set priorities and assist in coordinating environmental protection and restoration activities.

2015-2019 LAKE SUPERIOR LAMP IMPLEMENTATION

This special insert to the Lake Superior LAMP 2020 Annual Report provides examples of projects and actions delivering on commitments in the 2015–2019 LAMP.

Cooperation among **27** Lake Superior Partnership government agencies, along with over **170** other organizations and communities.

Implementation of **29** lakewide priorities to address chemicals contaminants, invasive species, habitat degradation and climate change impacts.

Completion of an additional **754** projects, including:

- **127** Remediation or restoration projects;
- **75** Protection actions;
- **274** Monitoring, research, or modeling projects; and
- **203** New reports, workshops and other outreach materials or events.

Restoring and protecting Lake Superior is a goal shared by many people and organizations. Lake Superior Partnership agencies support many local and regional organizations who are among the most knowledgeable and effective people to truly protect this precious resource. **Thank You!**

Pukaskwa National Park. Source: D. McChristie.

PREVENTING INVASIVE SPECIES

Lake Superior is currently home to 97 non-native aquatic species. Fewer new aquatic non-native species are finding their way to Lake Superior compared to decades past; however, there have been recent discoveries of a number of new non-native zooplankton.

The implementation of the 2015–2019 LAMP made further strides to prevent further invasions through expanding early detection monitoring and response, boat inspections/cleanings and "surrender" events for unwanted fish and reptiles.

The 2015–2019 LAMP also targeted invasive species already established within Lake Superior. For example, there is a lakewide effort to eliminate *Phragmites australis* subsp. *australis* (European common weed) from the Lake Superior Basin.

In response, many different agencies surveyed large areas and treated hundreds of acres for invasive Phragmites, including portions of the St. Louis River Estuary, Chequamegon Bay and the Lake Superior National Marine Conservation Area.

Phragmite australis management. Source: Red Cliff Band of Lake Superior Chippewa.

PROTECTING HABITAT AND SPECIES

Lake Superior's habitat and species are in relatively good condition compared to the other Great Lakes due in part to the limited human development, a significant amount of natural coastline, and a cold climate that is not suitable for many invasive species.

However, habitats are still stressed by land-use changes, climate change impacts and invasive species. The 2015–2019 LAMP contributed to implementation of the Lake Superior Biodiversity Conservation Strategy and rehabilitating native species. For example, progress was made in restoring Brook Trout by improving stream habitat, removing fish passage barriers, monitoring and research and continued stocking. The Red Cliff Tribal Fish Hatchery alone has stocked more than 1.2 million Brook Trout into Lake Superior since 1994.

Wild rice is another important habitat and food source for aquatic wildlife; it is also considered a sacred food to the Lake Superior Ojibwe. Unfortunately its abundance has significantly decreased, partially due to past degraded water quality and habitat conditions. Restoration efforts in the St. Louis River estuary have led to hundreds of acres of replanted wild rice and over a thousand acres identified as suitable for planting. Work will continue to establish wild rice in this area over the next decade.

Wild rice planting. Source: Great Lakes Indian Fish and Wildlife Commission.

REDUCING CHEMICAL CONTAMINANTS

Overall, toxic chemicals are lower in Lake Superior than other Great Lakes, and long-term trends indicate that concentrations are declining. However, fish consumption advisories are still necessary, largely due to mercury and polychlorinated biphenyls (PCBs). Pharmaceutical chemicals and Chemicals of Mutual Concern, as described in the Great Lakes Water Quality Agreement, are also present.

Projects from the 2015–2019 LAMP included many outreach and education actions and events to promote the proper use and disposal of pharmaceuticals and other chemicals in order to protect water quality.

Understanding mercury cycling, bioavailability, and pathways into Lake Superior was a specific priority in the 2015–2019 LAMP. Science and monitoring efforts ranged from dragonfly larvae sampling to bioavailability surveys in the St. Louis River, and from atmospheric deposition monitoring to research on how forest fires may affect mercury in fish.

Science results inform management actions, including Minnesota Pollution Control Agency's work with taconite producers to create mercury reduction plans.

Chemical monitoring. Source: Environment and Climate Change Canada.

MANAGING NUTRIENT AND BACTERIA POLLUTION

Traditionally, harmful algal blooms and nuisance algae have not been a concern for Lake Superior due to Lake Superior's cold, oligotrophic waters. Beginning in 2012, however, a number of short-lived, non-toxic blooms of cyanobacteria have occurred, most notably in the area between Duluth Harbor and Apostle Islands. These blooms are thought to be related to the warming waters of Lake Superior as well as the increase in intense rain and storm events, which wash sediments and nutrients into the lake. In addition to affecting beach aesthetics and recreation use, these blooms have the potential to be toxic.

In response, government agencies and academic institutions have made strides to introduce or enhance monitoring of nearshore conditions and to better understand drivers in this unique environment, with special attention to the role of more frequent extreme precipitation, flooding events and warming waters.

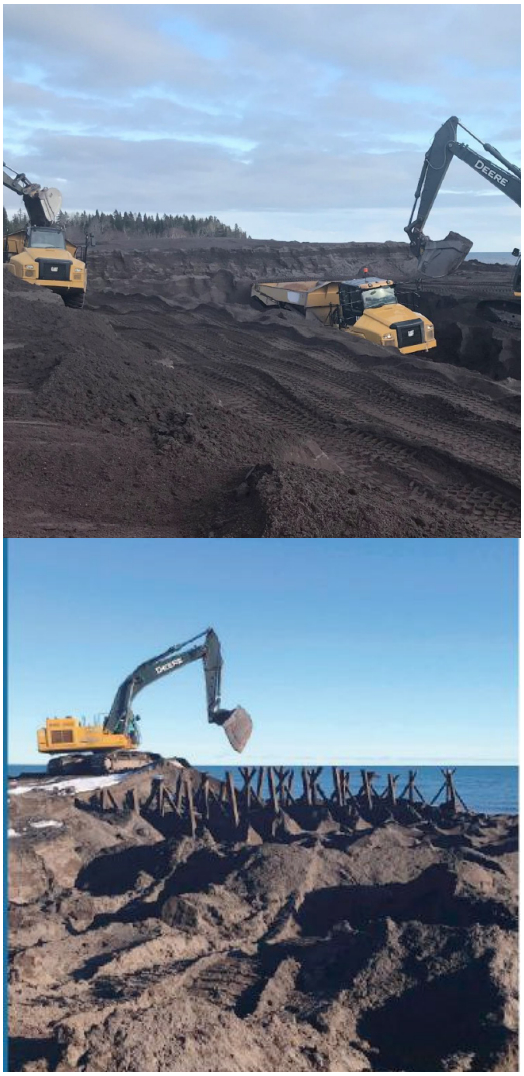

Algae monitoring. Source: U.S. National Parks Service.

ACTION HIGHLIGHT: PROTECTING BUFFALO REEF

Buffalo Reef is located in Lake Superior off the eastern coast of the Keweenaw Peninsula, Michigan, near the town of Gay, Michigan. The reef is 2,200 acres (890 hectares) in size and provides 23% of all Whitefish spawning habitat in the Michigan waters of Lake Superior. The reef is also a critical spawning ground for Lake Trout.

However, this important spawning reef is threatened by stamp sands—residual wastes left over from mining from the early 1900s until 1932. Over time, the stamp sands migrated down the beach, covering miles of white sand beaches with black, gritty stamp sands. The stamp sands also migrated underwater, covering portions of the Buffalo Reef. These stamp sands cover critical areas of the cobble reef, preventing fish from spawning. Other adverse effects include the leaching of mercury and copper into the water. Concentrations of these and other metals in waters with stamp sands can be above toxicity thresholds for many animal and plant species.

Protection of Buffalo reef was a 2015–2019 LAMP priority. This project eventually received Great Lakes Restoration Initiative (GLRI) funds to dredge stamp sands from the beach and harbor and from areas adjacent to Buffalo Reef. The funds enabled Lake Superior partners to successfully remove a 30-ft tall cliff of stamp sand that was eroding approximately 150,000 tons per year directly into Lake Superior; dredge Grand Traverse Harbor and the adjacent beach; remove approximately 112,000 cubic yards of stamp sands from a trough in Lake Superior above the reef; and support telemetry and laboratory studies on Lake Trout and Whitefish. The dredging work serves to buy time while long-term solutions are assessed and considered.



Stamp sands removal. Source: Michigan Department of Natural Resources.

ACTION HIGHLIGHT: CONSERVING COASTAL HABITATS AND WATERS

In Canada, Lake Superior has new protected areas on its northern shores with the acquisition of land along Black Bay and Big Trout Bay by the Nature Conservancy of Canada.

These protected areas include coastal wetlands, upland forests, rivers, creeks, cliffs and 26 km (16 mi) of Lake Superior shoreline. Other land acquisitions include those of the Thunder Bay Field Naturalists, who secured two pieces of land on Michipicoten Island with funding from the Government of Canada and other partners.

In addition, Parks Canada is working collaboratively with the Northern Superior First Nations, the Métis Nation of Ontario, the province of Ontario, local communities and many interested stakeholders to establish and operate the Lake Superior National Marine Conservation Area (NMCA).

Marine conservation areas balance environmental protection with responsible economic activity. They safeguard key elements of the ecosystems while providing lasting benefits to local coastal communities who depend on marine industries such as commercial fishing, sports fishing, recreational boating and shipping.

The Lake Superior NMCA is approximately 10,880 km^2 (4,200 mi^2) in size. It extends across the top of Lake Superior from Thunder Cape at the foot of the Sleeping Giant all the way to Bottle Point just east of Terrace Bay and south to the Canada–United States border.

More information about lakewide management and Lakewide Action and Management Plans are available at binational.net.

Lake Superior National Marine Conservation Area. Source: Parks Canada.

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LAKE SUPERIOR PARTNERSHIP MEMBER AGENCIES, 2015

1854 Treaty Authority • Army Corps of Engineers • Bad River Band of Lake Superior Chippewa • Bay Mills Indian Community • Chippewa–Ottawa Resource Authority • Environment and Climate Change Canada • Fisheries and Oceans Canada • Fond du Lac Band of Lake Superior Chippewa • Grand Portage Band of Lake Superior Chippewa • Great Lakes Indian Fish and Wildlife Commission • Keweenaw Bay Indian Community • Michigan Department of Natural Resources • Minnesota Department of Natural Resources • Minnesota Pollution Control Agency • National Oceanic and Atmospheric Administration • Ontario Ministry of Environment, Conservation and Parks • Ontario Ministry of Natural Resources and Forestry • Parks Canada • Red Cliff Band of Lake Superior Chippewa • University of Minnesota Sea Grant Program • University of Wisconsin Sea Grant Institute • U.S. Department of Agriculture (USDA) Forest Service • U.S. Department of Agriculture (USDA) Natural Resources Conservation Service • U.S. Environmental Protection Agency • U.S. Fish and Wildlife Service • U.S. Geological Survey • U.S. National Park Service • Wisconsin Department of Natural Resources