

# Muskegon Lake AOC Habitat Restoration

## Collective effort is restoring “Michigan’s most beautiful mile”

The Muskegon River habitat restoration at Veterans Memorial Park will improve habitat for fish and wildlife by restoring wetlands, creating natural shorelines, and re-establishing fish passage for juvenile, adult and spawning life stages.



### Project Highlights

- ◆ Re-establish the hydrological connection to the Muskegon River by replacing an aging water control structure, allowing fish passage
- ◆ Restore 2,257 linear feet of shoreline fish habitat, 1 acre of fish habitat, 2.3 acres of emergent wetland and 6.8 acres of native plant buffer
- ◆ Restore 5.3 acres of open water wetland by removing 19,000 metric tons of sediment
- ◆ Complete restoration of Muskegon Lake to remove it from the list of Great Lakes AOCs or “toxic hotspots” as early as 2018
- ◆ Funding is provided by the Great Lakes Restoration Initiative (GLRI) and U.S. Environmental Protection Agency through the National Oceanic and Atmospheric Administration (NOAA) and the Great Lakes Commission (GLC)
- ◆ The West Michigan Shoreline Regional Development Commission (WMSRDC) is implementing this project
- ◆ The Grand Valley State University Annis Water Resources Institute (GVSU AWRI) is monitoring the impact of restoration on the aquatic ecosystem

#### Environmental Benefits

Improve 15 acres of habitat for native plants and animals  
Bring the AOC closer to the 2018 de-listing date

#### Economic Benefits

One of the nation’s earliest memorial parkways is drawing increased tourism through the West Michigan Pike and the Lake Michigan Water Trail

#### Community Benefits

Fishing, kayaking canoeing wildlife watching, picnicking and improved park appearance

## Background of the Area of Concern (AOC)

Within the lower Muskegon River watershed, lies the Muskegon Lake AOC, a drowned river mouth lake that flows into Lake Michigan at a shoreline that is part of the world's largest assemblage of freshwater sand dunes. Muskegon Lake was designated an AOC in 1985 due to ecological problems caused by industrial discharges, shoreline alterations and the filling of open water and coastal wetlands. Since 1992, community groups, governmental and nongovernmental organizations have worked collaboratively to remediate contaminated sediments and to restore and protect fish and wildlife species and their habitats. Historic sawmill debris, foundry sand and slag filled 798 acres of open water and emergent wetlands in the AOC. Nearly 25% of Muskegon Lake's open water and shallow wetlands were filled and approximately 74% of the shoreline was hardened with wood pilings, sheet metal and concrete. This resulted in the loss and degradation of shallow water benthos communities, isolation and fragmentation of coastal wetlands, and the associated degradation of water quality and fish and wildlife populations. With completion of this and several other projects in development, the U.S. Environmental Protection Agency (U.S. EPA) now expects to remove Muskegon Lake from the list of Great Lakes "toxic hotspots" as early as 2018/2019.

## History of the Park

Veterans Memorial Park is located along a historically significant parkway at the east end of Muskegon Lake. The park was created between 1928 and 1934 when the parkway was developed, by excavating and filling wetlands along the Muskegon River.



Two ponds were excavated, the channel was straightened and the adjacent wetlands were filled, eliminating wetland, nursery and foraging habitats for native fish and wildlife. Installation of a water control structure in 1970 further degraded habitat by eliminating passage of desirable fish species from Muskegon River to the south pond. The structure also altered surface water flow between the Muskegon River and the south pond, which severely degraded water quality, aesthetics and desirable fish populations.

*"The members of [The Northside Lions] club could not be happier with the combined partnerships that have restored the park. It is a testament of support for the sacrifices of all our veterans."*

-Dennis Cobler

Vietnam Veteran and former Club President

## Project Progress

Today, there is very strong community support for restoration to increase public uses of the park for passive outdoor recreation. Several partners support the project including the Muskegon County Board of Commissioners, Muskegon County Veterans Council, Northside Lions, Muskegon Lake Watershed Partnership, Lakeshore Museum Center, City of Muskegon and City of North Muskegon. Construction is scheduled to begin in 2017. Major construction will be completed by fall 2017, with some final vegetative installations and maintenance in 2018.

## Funding and Partners

Approximately \$2.6 million is available for this project through the GLRI, a regional program that is supporting implementation of a comprehensive restoration plan for the Great Lakes, including cleaning up the AOCs. The project funding comes from NOAA through a partnership with the GLC. The project is being managed locally by WMSRDC and ecological monitoring is being performed by the GVSU AWRI.

## For More Information Contact:

Heather Braun, Project Manager for Habitat Restoration  
Great Lakes Commission, 734-971-9135, hbraun@glc.org

Kathy Evans, Project Manager  
West Michigan Shoreline Regional Development Commission,  
231-722-7878 x 17, kevas@wmsrdc.org / www.wmsrdc.org

