

ROUGE RIVER AOC HABITAT RESTORATION - INKSTER

Project Funding Request: \$1,100,000

PROJECT ABSTRACT

The Rouge River watershed is a designated AOC under the Great Lakes Water Quality Agreement (GLWQA) and has three Beneficial Use Impairments (BUIs) associated with fish and wildlife habitat: Degraded Fish and Wildlife Populations, Degradation of Benthos, Loss of Fish and Wildlife Habitat. The Rouge River Advisory Council (RRAC), the Public Advisory Council (PAC) for the Rouge AOC, finalized a list of projects that need to be completed in order to remove the habitat BUIs in March 2016. As part of that list, restoration of wetlands at Wayne County's Inkster Park was considered as having significant impact on the removal of the BUIs. The Inkster Park Wetland Restoration project will result in restoration of 3.0 acres of wetland restoration, 2.0 acres of lawn conversion to riparian forest, and reduced sediment loading to the Lower Rouge River by stabilizing 250 feet of eroding streambank. Removing the existing tennis courts during wetland construction will result in a reduction in impervious surface of 2,500 square feet.

PROBLEM STATEMENT

Grant funding for Rouge River Area of Concern (AOC) Inkster Park Wetland Restoration Project as part of its effort to delist the AOC is being requested. The Rouge River watershed is a designated AOC under the Great Lakes Water Quality Agreement (GLWQA) and has three Beneficial Use Impairments (BUIs) associated with fish and wildlife habitat: Degraded Fish and Wildlife Populations, Degradation of Benthos, Loss of Fish and Wildlife Habitat.

During the last century, the Rouge River has suffered from declining water quality and increased flood conditions, primarily due to increasing urbanization within the watershed. The flat river slope and the meandering channel could not pass the large flows associated with major precipitation events. Upstream urbanization continued to exacerbate this problem due to increased amounts of impervious surfaces culminating in floods within downstream local communities. Water quality in recent years, though, has improved since 1992 thanks to the federally-funded Rouge Project and post construction stormwater control. For example, 89 of the 127 miles of the larger streams and tributaries in the watershed are now free from public health threats associated with uncontrolled combined sewer overflow discharges. Water quality improvement is exhibited by increased dissolved oxygen levels needed to sustain fish and aquatic life. Increased populations and diversity of benthos, fish and wildlife have been measured along the river since 1999. Also, the U.S. EPA Office of Inspector General declared the Rouge Project "a blueprint for success" (EPA OIG report number 2002-P-00012). Wayne County helped organized the Alliance of Rouge Communities (ARC) to continue and sustain the Rouge AOC efforts.

Many of the previously completed reports [Ex: Habitat Delisting Targets (2008), Rouge River Delisting Strategy (2012), Upper Rouge Delisting Strategy (2012), and Rouge River BUI Report Card (2013)] listed project types, in addition to specific projects, that needed to be completed in the watershed to remove the Habitat BUIs and delist the AOC have been implemented. The USEPA, EGLE, MDNR, RRAC, ARC, FOTR and local members began facilitating the development of the formal list for removal of the Habitat BUIs in 2015. This work resulted in the development of a final Rouge AOC Habitat list that was approved by EGLE in March 2018. On that list is Wayne County's Inkster Park Wetland Restoration Project that was considered a high priority project.

Relevance to Existing Restoration Plans and Priorities - The proposed project responds directly to multiple plans and priorities within the Rouge River AOC:

- The Rouge RAP Advisory Council's *2016 Rouge River Remedial Action Plan Habitat Projects List* identifies these activities as a top priority for delisting the Rouge River AOC.

- The Rouge River Watershed Management Plan, prepared by the ARC supports river and lake restoration as a key elements in the watershed restoration.
- Activities respond to the *Great Lakes Regional Collaboration Strategy* focus on “Riverine Habitats and Related Riparian Areas” and its long-term goals including conservation of rivers and sustaining native/ migratory fish and aquatic biota/ wildlife.

Inkster Park is located adjacent to the Lower Rouge River in the City of Inkster. Most of the park area is routinely mowed and used for active recreation. However, the park is low and routinely floods. The project plan proposes to create a 3.0 acre wetland/wet meadow in actively maintained lawn area. The emergent wetland will contain a diversity of water depths and wetland plants, providing habitat for wading birds, waterfowl, amphibians, reptiles, and aquatic insects. The wet meadow community will contain diverse flowering forbs that provide food for pollinators. Small mammals and birds will benefit by the increased habitat diversity and cover. In addition, 2.0 acres of actively maintained lawn will be converted to riparian forest by planting native trees and shrubs. The reforestation area will be seeded with a forest understory seed mix. Plugs will be planted to create plant diversity in the herbaceous layer.

RESTORATION OUTPUTS

The Inkster Park Wetland Restoration project will produce the following outputs and outcomes:

Outputs

- Total of 5.0 acres of habitat created/enhanced
 - Total of 3.0 acres of wetland/wet meadow created from conversion from maintained lawn
 - Total of 2.0 acres of reforestation habitat created from maintain lawn
- Removal of 2,500 square feet of impervious pavement
- 250 feet of streambank stabilization

Great Lakes Restoration Initiative Action Plan III, Measures of Progress (MoPs) for the overall project when implementation is completed are:

- **Focus Area 4: Habitats and Species - Objective 4.1. Protect and restore communities of native aquatic and terrestrial species important to the Great Lakes**
 - 4.1.1. Acres of coastal wetland, nearshore, and other habitats restored, protected, or enhanced: 5 acres of habitats