

## ROUGE RIVER AOC HABITAT - COLONIAL & VENOY RESTORATION

**Project Cost:** \$1,834,000  
**Organization:** Alliance of Rouge Community (ARC)  
**Project Location:** City of Inkster and Westland, Michigan  
**Project Duration:** May 15, 2020 – May 14, 2022

### 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 at Wayne County's Colonial Park and Venoy Dorsey Park were considered as having significant impact on the removal of the BUIs. The result of these activities when implemented will result in restoration of 6 acres of wetland habitat creation, 3 acres of wetland habitat improvement, 5 acres of tree plantings/reforestation, and 0.5 acres of meadow habitat creation.

### PROBLEM STATEMENT

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).

Many 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 in order 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 were two projects priority projects:

- Colonial Park Restoration – proposes creating wetlands and managing invasive species.
- Venoy Park Restoration -proposes to create and restore wetlands, manage invasive species, and stabilize banks on portions of the Lower Rouge River

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 wetland restoration as a key element 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.

## **ANTICIPATED OVERALL RESTORATION OUTPUTS (Pending Implementation/Construction)**

### Outputs

- 6.0 acres of riparian wetland habitat created
- 3.0 acres of riparian wetland habitat improved
- 5.0 acres of tree plantings/reforestation
- 4.0 acres of invasive species management
- 0.5 acres meadow habitat created
- 150 feet of streambank stabilized

### Measures

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

- **Focus Area 2: Invasive Species - Objective 2.2. Control established invasive species.**
  - 2.2.1. Aquatic/terrestrial acreage controlled: 4 acres of invasive species management
- **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: 14.5 acres of habitats.

Each of the two Rouge River AOC Habitat Restoration Project activities conducted under this grant are discussed below

## **COLONIAL PARK RESTORATION**

Colonial Park is located adjacent to the Lower Rouge River in the City of Inkster. Much of the park area is routinely mowed and used for active recreation. However, the park is low and often floods. This project plan proposes creating wetlands in maintained lawn areas by establishing wet meadow habitat and depression wetlands to provide habitat and manage floodwater. Additionally, invasive species will be treated and managed in the proposed wetland enhancement areas. Wetlands will be restored in maintained lawn areas by excavating shallow depressions and planting a native wet-meadow seed mix. 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. Wetland diversity in the maintained lawn areas will also increase through the excavation of shallow depressions in low lying areas that store floodwater. The more diverse topography will increase plant diversity by creating varying hydrological conditions.

### **Colonial Park Restoration Outputs and Outcomes**

The Colonial Park Wetland and Reforestation Project will produce the following outputs and outcomes:

Outputs:

- 3.0 acres of riparian wetland habitat created
- 5.0 acres of tree plantings/reforestation
- 0.5 acres meadow habitat created
- 1.0 acres invasive species management

Measures

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

- **Focus Area 2: Invasive Species - Objective 2.2. Control established invasive species.**
  - 2.2.1. Aquatic/terrestrial acreage controlled: 1 acres of invasive species management
- **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: 8.5 acres of habitats.

**VENOEY PARK RESTORATION**

Venoy Dorsey Park is located along the Lower Rouge River with sections in both the City of Inkster and the City of Westland. Portions of the park area are routinely mowed and used for active recreation. However, the park is low and often floods. Some areas in the park are forested wetlands but many wetlands are not hydrologically connected. This project plan proposes to create and restore wetlands in the park by establishing depression wetlands which will hydrologically connect existing wetlands. Additionally, biotechnical streambank stabilization methods will be implemented on portions of the Lower Rouge River. Fish habitat structures will be used to improve fish and aquatic organism habitat and minimize streambank erosion. Lastly, invasive species will be treated and managed in a portion of the existing riparian and wetland habitat.

**RESTORATION OUTPUTS AND OUTCOMES**

The Venoy Dorsey Park Wetland and Fish Habitat Structures Project will produce the following outputs and outcomes:

Outputs:

- 3.0 acres of riparian wetland habitat created
- 3.0 acres of riparian wetland habitat improved
- 3.0 acres of invasive species management
- 150 feet of streambank stabilized

Measures

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

- **Focus Area 2: Invasive Species - Objective 2.2. Control established invasive species.**
  - 2.2.1. Aquatic/terrestrial acreage controlled: 3 acres of invasive species management
- **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: 6 acres of habitats.