

## **2015 EPA-GLRI Grants:**

### **City of Sterling Heights**

Clinton River Corridor Habitat Restoration

\$4,500,000

Award Date: 08/18/2015

This project will improve habitat along a nine mile section of the Clinton River upstream from its confluence with the Red Run Drain. The project will improve habitat diversity, accommodate a wide range of river flows, and resolve sedimentation, incision, and bank erosion issues impairing habitat by addressing in-stream, riparian, and wetland features. Actions will include channel morphology enhancements, including creation of riffle-pool sequences, woody debris management, bank stabilization, multi-stage channel development, invasive species control and native species planting.

### **County of Macomb - Public Works**

Macomb County Habitat Restoration: Partridge Creek Commons, McBride Drain, & Clinton River Spillway

\$6,300,000

Award Date: 09/24/2015

This grant will restore habitat in Partridge Creek Commons, McBride Drain, and the Clinton River Spillway within the Clinton River Area of Concern. Combined, the three projects will restore more than 32,000 linear feet and almost 90 acres of in-stream, riparian, and associated upland habitat. Specifically, the projects will control invasive species, plant native vegetation, stabilize and naturalize shoreline, increase habitat diversity through restoration of riffle and pool complexes, and improve habitat connectivity. Completion of this project will contribute to the removal of two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Loss of Fish and Wildlife Habitat and (2) Degradation of Fish and Wildlife Populations.

- Partridge Creek: \$2.3M – Specific actions include: 44 acres of aquatic and associated terrestrial habitat (invasive species removal, native species planting and seeding, reconnection of oxbows, wetlands, and associated uplands, including 5 acres of wetland restoration and 20 acres of Oak Opening restoration) and 5,500 linear feet of open channel restoration (creation of multi-staged channels, streambank stabilization, improve channel morphology, installation of in-stream habitat cover).
- McBride Drain: \$2.5M – Specific actions include: 21,750 linear feet of aquatic and riparian enhancement (improve channel morphology, creating in-stream habitat cover, reconnecting oxbows, wetlands, and associated uplands), 30 acres of native vegetation planting of riparian areas, 1,500 feet of shoreline naturalization (including bioengineering and soft armoring), and 10 acres of invasive species control.
- Clinton River Spillway, Phase II: \$1.5M – Specific actions include creation of 0.25 acres of off-channel habitat, 3,500 feet of bank stabilization (removing hardened banks, replanting shoreline with native species, and bioengineering and soft armoring of banks), 1 acre of floodplain shelf excavation, 2,000 square yards of pool habitat, and stabilization of 2 stormwater outfalls.

### **Huron-Clinton Metropolitan Authority**

North Branch Clinton River Riparian Corridor Restoration

\$335,374

Award Date: 09/30/2015

The Huron-Clinton Metropolitan Authority will restore sections of the north branch of the Clinton River floodplain to native grassland and forested wetland systems. This work is part of a long term strategy to address the adverse stormwater impacts to the watershed. Specifically, natural vegetative buffers (including native grasslands) will be established and fragmented forests will be connected. In addition to restoring significant stormwater retention in this area, this habitat restoration will benefit wildlife species currently in decline, such as pollinators and grassland birds. Completion of this work will contribute to removing two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Degraded Fish and Wildlife Populations and (2) Loss of Fish and Wildlife Habitat.

Specific activities include:

- Restore 60 acres of wetlands and associated uplands along the north branch of the Clinton River,
- Restore hydrology by removing agricultural drain tile within the restoration site,
- Restore forest and upland habitat connectivity through tree planting and native plant seeding.

### **City of Auburn Hills**

Galloway Wetland Restoration

\$140,000

Award Date: 09/30/2015

This project will restore 2-acres of wetland adjacent to Galloway Creek in the City of Auburn Hills. The primary work consists of removal of significant construction debris dumped in this area. Native, organic-rich soil will be exposed to allow for the natural establishment of native wetland vegetation. Flow from Galloway Creek will be reestablished in this area, recreating the historic ecologic function. The vegetation will create a buffer for greater storm water retention, enhancing water quality in Galloway Creek. This is important because Galloway Creek is a key tributary of the Clinton River watershed. Completion of this project will contribute to the removal of two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Loss of Fish and Wildlife Habitat and (2) Degradation of Fish and Wildlife Populations.

### **2015 EPA / USACE Interagency Agreement (IA) Projects**

An interagency agreement between EPA and USACE was signed on September 18, 2014.

Funds transferred from EPA to the ACOE through IAs will be allocated to design and construction support for four projects in the AOC:

- Harley-Ensign/Clinton River Mouth Project

\$2,694,201.00

The project is expected to improve fish and wildlife habitat and restore former coastal wetland habitat at the mouth of the Clinton River with Lake St. Clair. Restoration components include invasive species control, establishment of 14 acres offshore wetlands and fish habitat, restoration of 4 acres of upland habitat, as well as 6000 lineal feet of shoreline softening. Completion of the project will contribute to the removal of two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Loss of Fish and Wildlife Habitat and (2) Degradation of Fish and Wildlife Populations.

- Shelby Township Project

\$914,412.00

The project will restore 1 mile of stream channel and 6 acres of aquatic and terrestrial habitat on the main stem of the Clinton River through Shelby Township. The project includes placement of woody debris and log jams to prevent stream bank erosion and allow re-establishment of near-shore habitat. The project is expected to improve geomorphic stability (bank stabilization), provide in-channel aquatic habitat, improve riparian habitat, and improve water quality by reducing sedimentation. Completion of the project will contribute to the removal of two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Loss of Fish and Wildlife Habitat and (2) Degradation of Fish and Wildlife Populations.

- The Galloway Creek Project

\$2,202,000.00

The Galloway Creek project, located on the property of Oakland University, will restore approximately 3,000 linear feet of the channel and two acres of riparian habitat. The restoration efforts are expected to improve floodplain connectivity, increase geomorphic stability, provide in-channel aquatic habitat, increase habitat diversity, and increase shade for riparian wetlands. Completion of the project will contribute to the removal of two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Loss of Fish and Wildlife Habitat and (2) Degradation of Fish and Wildlife Populations.

- The St. Lawrence Cemetery Project

### **Other**

#### **Macomb County**

- Red Run Master Plan – not yet awarded, dollar amount pending.

The goal of the Master Plan is to identify water quality and quantity improvements to the Red Run Watershed to provide for conditions necessary for successful habitat restoration. Completion of the project will contribute to the removal of two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Loss of Fish and Wildlife Habitat and (2) Degradation of Fish and Wildlife Populations.

- Clinton River Spillway – Phase I

Award Date: Fall 2014 through NOAA grant

\$2,500,000

This Project is located at the mouth of the Clinton River Spillway and will restore 0.35 lineal feet of channel restoration, 2000 lineal feet of bank restoration, 4,000 syds of pool habitat and 0.65 acres of bottomland hardwoods. Completion of the project will contribute to the removal of two Beneficial Use Impairments in the Clinton River Area of Concern: (1) Loss of Fish and Wildlife Habitat and (2) Degradation of Fish and Wildlife Populations.

#### **City of Troy**

Sylvan Glen Restoration

\$375,000

Award Date: 12/15/2014

This project will restore 3,500 linear feet of headwater stream, reducing sediment from reaching the Clinton River and resulting in improved connectivity and in-stream habitat for aquatic life. This project works toward removal of the Loss of Fish and Wildlife Habitat Beneficial Use Impairment of the Clinton River Area of Concern.