



Tamarack Creek Stream & Wetland Habitat Restoration



In partnership with:



\$2,718,183 in grant funds provided by the Great Lakes Restoration Initiative (GLRI) through the U. S. Environmental Protection Agency (USEPA) for design and implementation

The Tamarack Creek Stream & Wetland Habitat Restoration will:

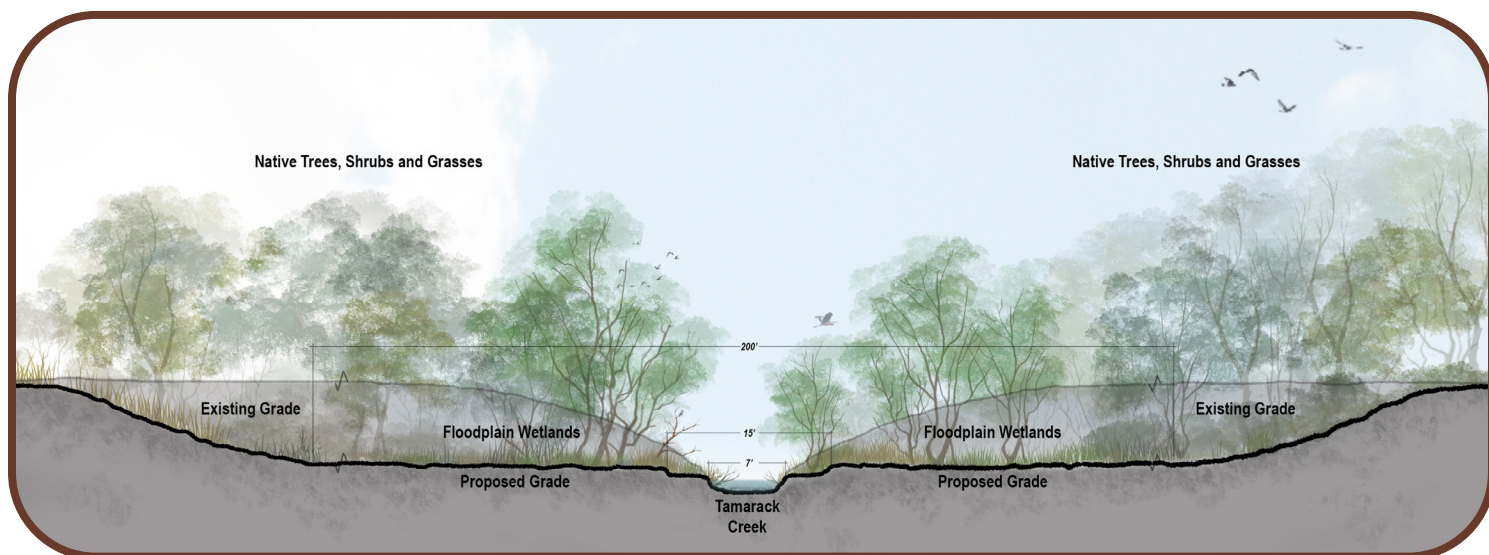
- Restore wetland and stream to provide habitat for valuable fish and wildlife and to manage invasive species.
- Construct habitat structures to increase fish & wildlife diversity.
- Improve water quality within the Rouge River watershed.

The Alliance of Rouge Communities (ARC) received grant funding from the Great Lakes Restoration Initiative (GLRI) U. S. Environmental Protection Agency (USEPA) for design and construction of the Tamarack Creek Stream & Wetland Habitat Restoration Project as part of its effort to restore habitat and improve the water quality in the Rouge River watershed.

The Rouge River watershed is a designated Area of Concern (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, and Loss of Fish and Wildlife Habitat. The Rouge River Advisory Council (RRAC), the Public Advisory Council (PAC) for the Rouge AOC, in March 2016 approved a list of projects that need to be completed to remove the Rouge AOC habitat BUIs. The Tamarack Creek Stream & Wetland Habitat Restoration Project is considered to have a significant impact on the removal of the BUIs.

Tamarack Creek is a tributary of Evans Creek and the Middle Rouge River. As much of its drainage area is urbanized, it receives large quantities of uncontrolled stormwater runoff. The high channel velocities caused by large peak flows have led to bank erosion and sedimentation of instream habitat. Additionally, excessive velocity is destabilizing substrates that are important for fish and macroinvertebrate habitat. The Tamarack Creek Stream and Wetland Restoration project addresses these habitat impairments and increases fish and wildlife diversity and productivity.

In order to address the habitat impairments, restoration of Tamarack Creek was necessary in conjunction with wetland restoration to help improve hydrology and in-stream flows. Wetland restoration was included the repair of wetland hydrology, management of invasive species, and planting native wetland plants to diversify the flora. The stream habitat was restored by expanding the floodplain to allow Tamarack Creek to convey larger stormwater flows without causing excessive velocities and destabilizing substrate. Approximately 600 LFT of new stream was constructed to provide additional sinuosity. The new floodplain was planted with native plants and trees, which add wildlife habitat diversity and value. The banks and stream bed were further stabilized with woody debris habitat structures.



This project is funded through grants from the Great Lakes Restoration Initiative Environmental Protection Agency (grant number GL-00E02344-0 & GL-00E02478-0)

The completion of the Tamarack Creek Stream & Wetland Restoration project will produce:

- 20 habitat structures will be constructed to increase fish & wildlife diversity.
- 4.5 acres of created/restored wetland/riparian habitat.
- 1,950 feet of restored stream.
- Increased storage capacity within the wetland & control flow into the creek.

Conditions before restoration:



Existing stream conditions



Existing wetland conditions

Conditions after restoration:

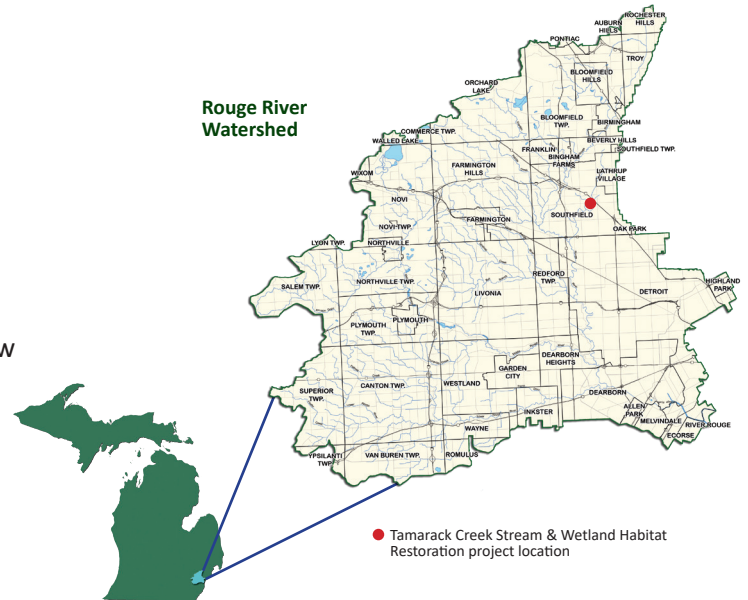


New floodplain



New stream and pocket floodplain wetlands

Rouge River Watershed



● Tamarack Creek Stream & Wetland Habitat Restoration project location

About the Alliance of Rouge Communities

The ARC is a 501(c)(3) non-profit organization consisting of local municipalities, counties, educational institutions and stewardship groups working together to improve the Rouge River. Founded in 2005, the ARC is funded by membership dues from local governments and supported by grants. The ARC and its partners work cooperatively to meet water quality requirements mandated by the state's stormwater permit and to restore beneficial uses, such as canoeing, fishing and other recreational activities, to the Rouge River. That means better water quality for less cost to its members!

For more information about this project and other ARC activities visit our website at: www.allianceofrougecommunities.com

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