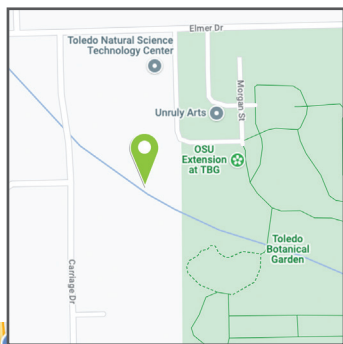


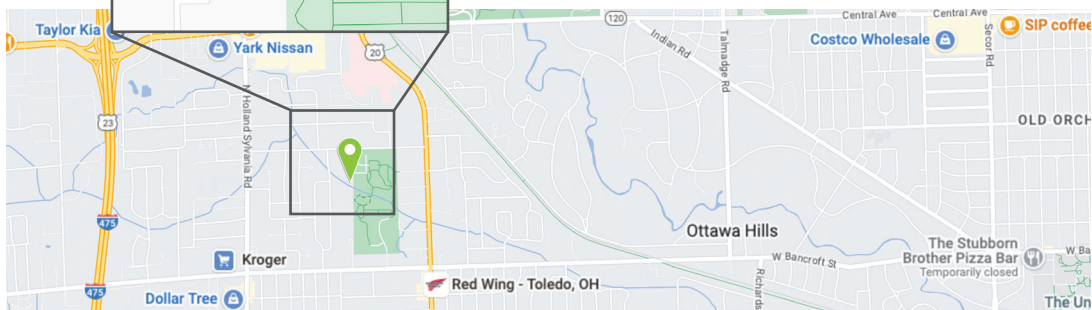
Hill Ditch Restoration at Toledo Natural Science Technology Center

WHAT'S BEING ADDRESSED:

BUI 6: Degradation of Benthos
BUI 14: Loss of Fish Habitat



Hill Ditch has headwaters in Sylvania Township and joins with the Ottawa River just west of the main campus of the University of Toledo. The section of Hill Ditch this project will restore runs south of Toledo Public School's Natural Science Technology Center. It is directly upstream from the Toledo Botanical Gardens, where a stream restoration project was completed in 2013.

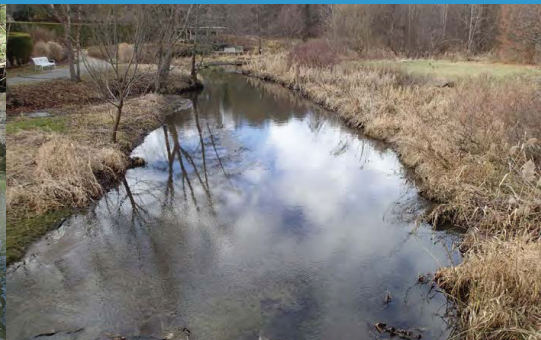


Photos courtesy of Mannik & Smith Group

PARTNERS:

This project is led by Toledo Public Schools. Toledo Public Schools received a Great Lakes Restoration Initiative (GLRI) grant from the US EPA.

Learn more at maumeeaoc.org



Photos courtesy of Mannik & Smith Group

PROJECT BENEFITS:

Hill Ditch is one of the Ottawa River's longest tributaries, running through residential neighborhoods, commercial areas, and the campuses of Toledo Public School's Natural Science Technology Center and the Toledo Botanical Gardens. This project's primary goal is to improve habitat for fish and benthos in Hill Ditch. Benthos are organisms that live in the sediment or near the bottom of a water body, making up the vital base of aquatic food systems. This restoration provides the following benefits:

- Fosters new instream and floodplain habitat for fish and benthos.
- Stabilizes streambanks against erosion, reducing suspended solids sediment pollution.

PROJECT OBJECTIVES:

- Stabilizing approximately 700 feet of eroding stream bank through regrading and by utilizing living shoreline design concepts.
- Enhance 650 feet of riparian (riverbank) buffer through native plantings.
- Improve fish and benthos habitat by installing in-stream structures, including root wads, woody debris, and riffles.

MANAGEMENT PRACTICES:

- Restoring natural curves to the waterway while regrading streambanks to make them less steep. These earthworks decrease the negative effects of past stream channelization.
- Ditch restoration designs include root wads and rock riffle features, which will become homes for fish and benthos.
- Bank stabilization through native plantings prevents loss of sediment due to erosion, maintaining the character of the habitat for years to come.



FUNDING:

This publication was financed through a grant from the U.S. Environmental Protection Agency through an assistance agreement with the Ohio Environmental Protection Agency. The contents and views, including any opinions, findings, conclusions, or recommendations, contained in this product or publication are those of the authors and no official endorsement should be inferred.