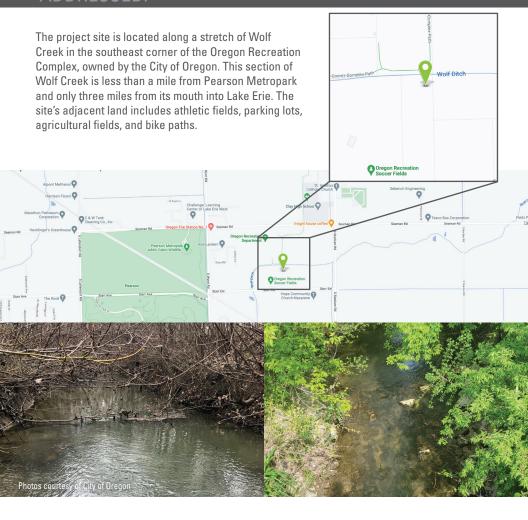
## Stream Restoration at Oregon Recreational Complex

WHAT'S BEING ADDRESSED: BUI 6: Degradation of Benthos BUI 14: Loss of Fish Habitat



**PARTNERS:** 

This project is led by the City of Oregon. The City received a Great Lakes Restoration Initiative grant from US EPA's Great Lakes National Program Office.



## PROJECT BENEFITS:

Coastal Lake Erie habitat was historically dominated by grassy and forested wetlands. Human activities dramatically altered this landscape, resulting in a loss of more than 90% of historic wetlands. The stream restoration on Wolf Creek will improve habitat for fish and benthos. Benthos are organisms that live in the sediment or near the bottom of a water body. Benthos make up the base of aquatic food systems and are vital to ecosystem health. Restoration of this coastal Lake Erie waterway provides the following benefits:

- Improvement of Wolf Creek stream morphology and a reduction in channel incision fosters new instream, floodplain, and wetland habitat for fish and benthos.
- Reduces sediment and agricultural runoff into Wolf Creek from unstable streambank slopes, improving overall water quality within the Maumee Area of Concern.
- Provides passive recreation and educational opportunities for recreational complex users via a new stone walking path and boardwalk platforms.

## PROJECT OBJECTIVES:

- Improve 5,300 feet of streambank through regrading and vegetating.
- Improve sinuosity (curves and bends) of stream channel.
- Restore approximately 3.5 acres of floodplain habitat, including the creation of 1.5 acres of wetland.
- Install 2.5 acres of riparian buffer.
- Collect and slow runoff from 36 acres.

## MANAGEMENT PRACTICES:

- A two-stage channel design will stabilize eroding stream banks by shaping at a more stable 3:1 slope. Partway down the banks, a step covered with vegetation creates a supportive plateau, before sloping down gently again to reach the creek bed. Widening the creek bed itself will promote habitat features like meanders, pools, and riffles.
- The creation of 1.5 acre floodplain wetland approximately 1' above baseflow elevation and directly connected to Wolf Creek to allow floodplain access during rain events.
- The project also reduces nonpoint source pollution by intercepting agricultural drainage and capturing nutrients and sediment, routing it through a constructed wetland system in the floodplain habitat.











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