

Riparian Corridor Project Profile







Quick Park Riparian Area Stabilization Project

Background

Quick Park in Rockwood is part of the Lower Huron River watershed. The park was created when an adjacent development needed a place to build a stormwater detention system. A detention pond was built on the property and the area was turned into a natural area and park. The pond was seeded and mulched, which promoted grass species on the banks of the pond. The ponds were mowed to the water's edge. Lack of a riparian buffer around this pond decreased the available habitat and did not improve the water quality in this natural park area. Areas devoid of riparian vegetation began to develop around the pond. Erosion at these locations began to occur. Now plans for a passive recreational pathway and fishing piers in the park along the Huron River created an opportunity. It was decided to install a project along the banks of the pond near one of the future park pathways that would demonstrate methods of reducing erosion using soft bioengineering while simultaneously creating wildlife habitat.

Project Overview

Quick Park in the City of Rockwood is adjacent to the Lower Huron River. This area contains a stormwater detention pond from a neighboring development, a wetland mitigation area and a natural riparian forest area along the Huron River. Future plans for this park include passive recreation paths and fishing piers. Much of the area adjacent to the detention pond is mowed to the water's edge, providing little buffer zone for the river. The banks where the lawn is mowed up to the waters edge are devoid of vegetation and are slowly eroding.

Wayne County Department of Environment (WCDOE), in conjunction with the City of Rockwood were awarded a grant from the Great Lakes Commission to create a buffer zone of native plants, 10 feet wide, along with stabilizing 30 feet of streambank. Soft bioengineering techniques were used to stabilize the bank.

The Lake Erie Watersheds Riparian Corridor Management Sub-Committee provided technical advice for the project. WCDOE and the City of Rockwood prepared the site by delivering compost/topsoil. On May 21, 2005, a Riparian Corridor Management Hands-on Technique Training Workshop and Demonstration Project was held for high school, middle school and elementary school student volunteers at the site. This event included a session where participants received information on hands-on stream bank stabilization techniques. The student volunteers, members of the local

environmental group, the Stream Team, completed the demonstration project. Over 40 participants stabilized the eroding streambank by installing 10 linear feet of Live Fascines, 10 linear feet of Brushmattress and 10 linear feet of live posts and stakes (All three are soil bioengineering stabilization techniques.) The toe of the slope was stabilized with coir logs. The top of each slope was planted with grasses and native plants to create a new buffer area.

This project will improve the health of the pond at a minimal cost by creating a buffer zone and stabilizing the bank using natural materials that also provide wildlife habitat. Using volunteer labor and installing interpretive signs help to educate local residents about good riparian practices. The cooperation of a municipality, and local volunteers is an effective strategy at improving the health of the river while simultaneously creating better river stewards.



The streambank is stabilized with installed live fascines, live posts and brushmattress (B. Szczechowski)

Methods Used

Soft Bioengineering (Live Fascines, Live Posts and Brushmattress) Riparian Buffers

Materials Used

Buffer: native plants, topsoil, shovels, trowels, rakes,

wheelbarrows, signs and sign posts

Bioengineering: red osier dogwood and willow cuttings, coir (coconut) logs, stakes, hammer, shovels, wheelbarrows, topsoil, mulch blankets, front-end loader to re-grade, sledgehammer

Other: Refreshments



An Eastern Fox Snake (State Threatened) was found in the adjacent riparian area along the Huron River. (Picture - B. Szczechowski)





Riparian area before work was done. (Picture - B. Szczechowski)

Cost

The total cost of the project materials was \$1973.10, matched with volunteer labor and City support. A grant from the Great Lakes Basin Program for Soil Erosion and Sediment Control covered the costs. The costs fall well below the industry average for this type of project due to the volunteer labor and support.



Riparian area three months later . (Picture - M. Best)

Partners

City of Rockwood, The Stream Team, Lake Erie Watersheds Riparian Corridor Management sub-committee, Dietrich, Bailey and Associates P.C., Wayne County Department of Environment and the Great Lakes Commission



Project Profile:

Quick Park Streambank Stabilization Project

Text and photographs supplied by Matthew R. Best (WCDOE), Bruce Szczechowski and John Nasarzewski (Stream Team.) For more information on this project, please contact Wayne County Department of Environment at (734) 326-3936, 3600 Commerce Court, Building E, Wayne, Michigan 48184

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