



Riparian Corridor Project Profile



City of Wayne Woody Debris Management 201 Project

Background

The City of Wayne and members of the Riparian Corridor Management Technical Advisory Committee (RCMTAC) began discussing need for more habitat restoration projects along the Lower Rouge River. The City of Wayne, under its Stormwater General Permit, had already committed to performing habitat restoration and woody debris management projects within its jurisdiction. During the construction of a new City of Wayne Fire Station, an opportunity presented itself. The City of Wayne, Michigan Department of Environmental Quality (MDEQ), and William Craig held meetings to discuss the potential for a habitat restoration project. The City of Wayne made the woody debris management (WDM) 201 project the focus of their stormwater general permit requirements.

Project Overview

In 2001, City of Wayne began demolition and land clearing for construction of a new fire station. Two large trees were cut down and set aside for removal. Local resident and member of the RCMTAC, Kurt Kuban, saw the opportunity to have a permitted woody debris management project utilizing the cut trees. Opening discussions with City Engineer Ramzi J. El-Ghraib eventually led to city support for the project. With the assistance of Wayne County Department of Environment, the City agreed to apply for the necessary MDEQ Permit. The project design was to install the trees into the Lower Rouge River as instream habitat structure. The structure would protect the streambank from excessive erosion, collect sediment and offer protection for fish and macroinvertebrates. The permit was issued September 27th, 2002. Arrangements were made with the Fire Station Construction Supervisor, Dieb Mougrabi of CPDA Construction, to have a tracked backhoe move and place the tree sections (two 30+ foot/26 inch diameter forked tree trunks with two 6 x 6 foot root balls.) The tree sections were skillfully placed into the river on November 26th, 2002. It took one person, two hours to install the posts and cable the tree sections to the bank. In Early 2003, there were signs of sediment deposition. Joe Rathbun, MDEQ Biologist, placed erosion pins at the site to get measurements and track changes at the site. No significant changes occurred until May 2004, when flood waters poured four feet over the structure and lifted the 35 tree section on to the bank until the waters receded. It is important to note that the structures installed stayed cabled and in place.



Trees removed for construction are a resource, woody debris for instream structure.



Logs are affixed to the bank by cables and stakes. This activity requires a MDEQ permit for installation.

Methods Used

WDM 201 - Habitat Structure Method
Riparian Buffer Grow Zone

Cost

\$50.00 MDEQ Permit Fee
\$70.00 Tools and Materials
Donation of Contractor and Backhoe



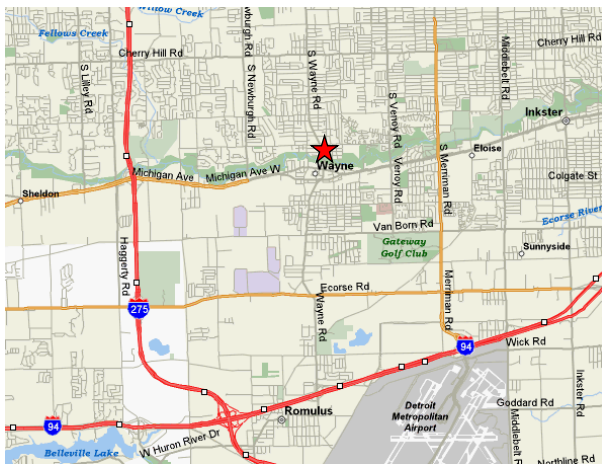
Materials Used

4 - 3ft Heavy duty "D" channel galvanized steel posts.
(Ends of posts were sharpened to cut roots)
100 ft 1/8 inch aircraft wire cable.
10 - 1/8 inch "U" Clamps.
Sledge Hammer. Cable Cutter. Socket Wrench.



Permits

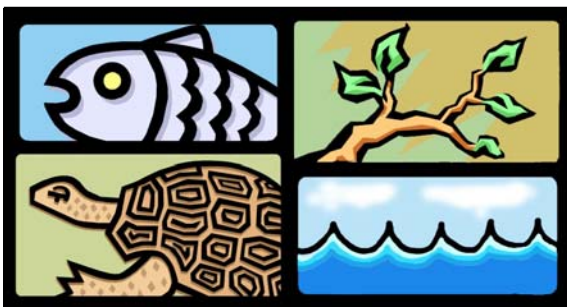
MDEQ Inland Lakes and Streams Permit
Wayne County Soil Erosion Permit



Partners

City of Wayne
CDPA Construction

Friends of the Rouge
Wayne County



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Text and photos provided by William Craig. For more information on this project, please contact Friends of the Rouge at (313) 792-9621, U of M—Dearborn, 4901 Evergreen Road—220 ASC, Dearborn, Michigan 48128