



Michigan's
Nonpoint Source
Program

Clean Michigan Initiative Nonpoint Source Grant

Tracking code: #2004-0130



Henry Ford Community College

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Kingfisher Bluff Innovative Storm Water Demonstration Project

February 2005 - March 2009

Kingfisher Bluff is located along the Rouge River's Main Branch at the western edge of the Henry Ford Community College campus in Dearborn, Michigan. The Rouge River meanders through this area and makes a sharp bend at the Kingfisher Bluff site. The river has caused significant stream bank erosion at the toe of the bluff, resulting in bank failures. The Kingfisher Bluff Project was designed to reduce pollutant loading, increase recreational opportunities, enhance and preserve habitat, and reduce water volumes and velocities. It was funded through grant money from the Clean Michigan Initiative and the Wayne County Rouge Program Office. The design included the stabilization of the existing bluff to include an observation overlook with interpretive signage, a connecting pathway to the Gateway Trail, and storm water best management practices (BMPs) such as porous pavement and a bioretention basin.



Grant Amount: \$ 510,389

Match Funds: \$ 367,100

Total Amount: \$ 877,489



Best Management Practices:

- 410 linear feet stream bank stabilized.



- 8,384 cubic feet treated by a bioretention basin.

- 1,587 square feet porous pavement installed.

Annual Load Reductions:

- Sediment: 685 tons per year
- Phosphorus: 122 pounds per year
- Nitrogen: 253 pounds per year



Grading of the bluff for stabilization

Informational Meetings:

- 2/1/06- Presented a project update to the Friends of the Rouge staff and board members.
- 2/23/06- Meeting with local interest groups to discuss concerns regarding habitat.
- 4/5/06 and 4/6/06- Meeting to introduce the design concepts to the public and answer questions.
- 6/13/06- Meeting with the MDEQ and concerned citizens to discuss and address the concerns about the project.

Partners involved:

- Rouge River National Wet Weather Demonstration Project
- Dearborn Rotary Club

March 2009



Bluff Before: Bank Erosion contributing heavy sedimentation to the river.



Bluff After: Bank stabilization with pullback slope, boulder toe, live stakes, and native vegetation cover.



Parking Lot Site After: Bioretention basin to capture the parking lot runoff.