



THE ROUGE RIVER PROJECT
A WORLD CLASS EFFORT



BRINGING OUR RIVER BACK TO LIFE

City of Dearborn Combined Sewer Overflow Control Program

A publication of the Wayne County Rouge River National Wet Weather Demonstration Project

Information Date: March 2006

Objective

The City of Dearborn Combined Sewer Overflow (CSO) Control program seeks to control CSO discharges and to meet applicable requirements including water quality standards.

Program Overview

The City of Dearborn CSO control program is divided into 3 phases:

- West Dearborn-Phase A: Construction is underway and consists of innovative deep shaft storage and treatment facilities
- West Dearborn-Phase B: Planning and design is underway
- East Dearborn areas: Construction is underway

West Dearborn-Phase A

Phase A involves the installation of CSO control measures for Outfall Nos. 013 through 015. The City of Dearborn will use large shafts to capture and store overflows from the individual CSO locations. Construction started in late 2004, with the project being divided into the following four contracts:

- Contract No. 1 involves the construction of the disinfection facility that will service both capture shafts. The facility will consist of a chemical storage building together with a chemical feed line and mixing facilities.
 - ◆ Estimated Completion Date: April 2006
 - ◆ Estimated Project Cost: \$ 4 Million
- For Contract No. 2 (CSO 013), a 116-foot diameter shaft is being constructed near the northeast corner of the Greenfield Village

property. Existing Outfall No. 013 will be abandoned, along with the existing shafts located east of the existing Outfall No. 013, and a new influent sewer is being constructed from the Village Drive diversion chamber to the capture shaft location. A new screening facility and a new Outfall No. 013 are being constructed north of the capture shaft.

- ◆ Estimated Completion Date: May 2007
- ◆ Estimated Project Cost: \$ 29 Million



**Construction of Capture Shaft
at Greenfield Village**

- Contract No. 3 (CSO 014) includes construction of a 136-foot diameter shaft, a screening facility and building, construction of a diversion channel, and installation of dewatering pumps in the shaft to pump overflow through a force main connected to the Northwest Interceptor owned by the Detroit Water and Sewerage Department
 - ◆ Estimated Completion Date: May 2007
 - ◆ Estimated Project Cost: \$ 33 Million

- For Contract No. 4 (CSO 015), two existing shafts located at the Greenfield Pumping Station site are being modified. A new sewer is being constructed to connect the emergency overflow chamber to the existing shaft at the pumping station. A connection between the two existing shafts is also being constructed, along with a new sewer line along Rotunda and an emergency overflow chamber at the existing outfall.
 - ◆ Estimated Completion Date: May 2006
 - ◆ Estimated Project Cost: \$ 12 Million

West Dearborn-Phase B

The West Dearborn Phase B project involves the installation of CSO control measures for Outfall Nos. 001 through 012. In the original Basis of Design (BOD) and Supplemental Basis of Design (SBOD) reports for the West Dearborn CSO Control Program, a hybrid tunnel system (HTS) and flow through tunnel (FTT) system were identified for Phases A and B, respectively. An Addendum to the SBOD was then issued that detailed the use of capture shafts for Phase A, while maintaining a FTT for the Phase B portion.

A revised approach is currently being evaluated for the Phase B portion. The feasibility of use of the originally considered FTT is being compared to other alternatives (i.e. treatment shafts) that could be implemented for the control the noted outfalls. Components of the feasibility study include hydraulic, environmental, and geotechnical studies, alternative development, engineering cost estimates, property and permitting requirements, preparation of a Feasibility Study Report, and preparation of a BOD report.

Additionally, the Cities of Dearborn Heights and Inkster are evaluating combining the CSO control systems for selected outfalls in Dearborn Heights and Inkster with the control system for the West Dearborn CSO Control Program – Phase B.

East Dearborn Program

The East Dearborn CSO Control Project involves construction of control systems for CSOs at Outfall Nos. 016 and 017. The BOD for the East Dearborn CSO Control program was issued in

April 2003 with a follow-up Addendum issued in August 2004. Construction is underway for the East Dearborn CSO Control Project as follows:

- Contract No. 5 (CSO 016) includes construction of a 136-foot diameter shaft, a screening facility and building, construction of a diversion channel, and installation of dewatering pumps in the shaft to pump overflow through a force main connected to the DWSD Northwest Interceptor
 - ◆ Estimated Completion Date: March 2008
 - ◆ Estimated Project Cost: Not yet available
- Contract No. 6 (CSO 017) includes a treatment shaft that will be constructed on-line with the existing overflow box sewer located in a greenbelt area, and the construction of a small booster pump station to pump the CSO overflow from two outfalls during large storm events.
 - ◆ Estimated Completion Date: March 2008
 - ◆ Estimated Project Cost: Not yet available

Public Involvement

In 2004, the City of Dearborn educated its citizens about the upcoming CSO control project with media coverage, city council meetings, “frequently asked questions” on the city’s web site with an automated calculator so residents could see how much their taxes would increase, and a “CSO Edition” of the Mayor’s Forum. Dearborn citizens voted to raise their property taxes by 3.27 mills to pay for the \$314 million CSO control program. The ballot measure passed by almost 3 to 1.

To obtain further information on the Rouge Project, including documents, maps and general information, visit us at:

<http://www.rougeriver.com>

ACKNOWLEDGEMENT

The Rouge River National Wet Weather Demonstration Project is funded, in part, by the United States Environmental Protection Agency (EPA) Grant #XP995743-01 through -08 and #C264000-01.