

**WAYNE COUNTY
ROUGE RIVER NATIONAL WET WEATHER DEMONSTRATION PROJECT
EPAC/SEMCOG REPORT**

December 2002

Watershed Management and Storm Water General Permit

The Director of the Watershed Management Division (WMD) represents Wayne County on the Rouge Project “Drafting Committee”; this committee has developed recommendations on how local communities will work together, with emphasis on developing local funding sources, to sustain the Rouge River restoration as the federal grant funding diminishes. There have been two retreats for Storm Water Permit holders in the Rouge Watershed to review the proposed working arrangement, agreement and timeline, prepared by the Drafting Committee. The agreement outlines voting and funding shares for the new working arrangement. A slide presentation and an Executive Summary of the proposed Rouge River Assembly agreement has been prepared for use by local communities and is posted on the Rouge Project website, www.rougeriver.com. The Drafting Committee is hosting a workshop for communities on December 6 to provide communities a final opportunity to discuss their remaining comments and questions with the Drafting Committee before the agreement is brought to their governing bodies for approval.

A key element for the proposed Rouge Watershed Management Assembly is the identification and procurement of crucial watershed management services in the Rouge watershed. Work has continued to refine the “5 Year Plans” for these services. These documents outline proposed services and funding sources for each service, and will be used to prepare each annual budget for the Rouge River Assembly. These documents are being shared with community representatives to gather their input on the crucial watershed services required to sustain water quality improvements in the Rouge Watershed and will be updated over time as necessary and as new information becomes available.

The WMD continues coordination of Wayne County’s compliance with our NPDES Storm Water General Permit. Various departments and divisions within Wayne County must complete a number of activities to reduce to the maximum extent practicable our discharge of pollutants to surface waters. In June, WMD prepared Wayne County's third annual report documenting our compliance with the storm water permit and submitted it to MDEQ; we have not yet received comments on this report.

Part of Wayne County’s compliance with our Storm Water General Permit involves working with local communities to implement activities outlined in the watershed management plans developed for watersheds within Wayne County. WMD continues to represent Wayne County at meetings of the seven Rouge Subwatershed Advisory Groups each month. WMD represents Wayne County at monthly meetings of the Lake St. Clair Subwatershed Advisory Group (includes the Grosse Pointes and Harper Woods within Wayne County), the Ecorse Creek Watershed Advisory Group (encompasses 10 Wayne County downriver communities), and the watersheds of the Frank & Poet Drain, Blakely Drain, and the Detroit River (downriver). These groups have been meeting monthly to discuss coordination of permit applications and options for funding mandated activities. In addition, efforts are underway to organize watershed groups in

other Wayne County watersheds, for the purpose of working together to comply with the MDEQ General Storm Water Permit and to pursue funding opportunities for completing activities required under the General Storm Water Permit.

The Michigan Drain Code provides a funding mechanism to assist the County and local communities comply with the new storm water permit requirements. The Directors of the Watershed Management Division and the Division of Public Works have been working with local communities and adjoining counties to further explore and define this opportunity. A guide to understanding Chapter 20 of the Drain Code entitled "Use of the Drain Code for Watershed and Drain Management, Maintenance, and Improvements" has been prepared and is being used to discuss these concepts with local communities.

Wayne County and Rouge Project staff meet with MDEQ every quarter to discuss coordination of Storm Water General Permit activities by numerous communities and agencies within southeast Michigan. The most recent meeting was November 13, and topics of discussion at the meeting included: re-issuance of the Watershed Based Stormwater Permit, update on the status of Storm Water Pollution Prevention Plans, revisions to the Subwatershed Management Plans (SWMPs), how to handle new parties joining the SWMPs, State of Michigan Nutrient Reduction Plan, and the recent MDEQ reorganization. The WMD Director represents Wayne County at these meetings.

In 2001, the Detroit District US Army Corps of Engineers (COE) received funding through a Congressional appropriation to assist with the Rouge River restoration efforts. WMD is representing Wayne County in this effort. In November, revised work plans for the Rouge River Reconnaissance Study were received and are under review as follows: a watershed-wide flow management study, a watershed-wide dam study, a study of options for fish passage at the Fairlane Dam at Henry Ford Estate, and the creation of a Master Plan for the Johnson Creek watershed. DOE is working closely with the COE to ensure these projects are in harmony with the existing efforts of the Rouge Project and to provide information as needed for the success of these projects.

The Wayne County Storm Water Ordinance work group is revising and updating the Wayne County Storm Water Management Ordinance, Administrative Rules, and Standards Manual. It is anticipated that revised versions of these documents will be issued in the spring of 2003.

The concept of a Riparian Corridor Management Technical Advisory Committee (RPMTAC) has been presented to all Rouge Subwatershed Advisory Group (SWAGs), with the exception of the Main 1-2 SWAG. In November, staff contacted several specific individuals for participation on the RPMTAC. It is anticipated that staff will present the concept to the Main _ in January and hold the first RPMTAC meeting in February 2003. Staff also presented river friendly riparian corridor management information at the Protect Our Lakes and Streams Presentation held at the Highland Lakes Homeowners Association Clubhouse on November 20th. Twenty (20) people attended the presentation, which was sponsored by Northville Township, City of Northville, and the Highland Lakes Homeowners Association. The woody debris/habitat restoration project with the City of Wayne was completed. Efforts to develop a demonstration area behind the

Commerce Court Office along the Lower Rouge River continued. This site is being developed in cooperation with the Land Resources Management Division and will demonstrate composting techniques and use as well as riparian corridor management techniques including buffer zones, use of native plants and invasive species removal. Specific November activity included construction of the 3-bin composting demonstration structure. A proposed budget to address efforts in 2003 is being developed for approval by WMD and LRM directors.

Rouge Gateway Project

Excellent progress is being made with the restoration of an oxbow of the Rouge River at Henry Ford Museum & Greenfield Village. This project is funded by grants from the State of Michigan Clean Michigan Initiative (CMI) and the Rouge River National Wet Weather Demonstration Project. Construction of this phase was completed in August, and included excavation of the channel, wetlands plantings, and an initial hydraulic connection to the Rouge River. Fish surveys indicate that fish have are finding the oxbow on their own by migrating through the 300 ft of culvert from the Rouge. It is developing into an excellent nursery area and will only get better as the aquatic plant communities and associated aquatic invertebrates continue to develop. Currently, plans are underway to construct trails and other amenities in the oxbow; construction of these amenities should begin in the spring of 2003.

Wayne County and Henry Ford Museum & Greenfield Village have recently partnered with the COE to explore federal funding options for completion of Phase 3 of the Rouge Oxbow restoration project. Phase III of this project will replace the current pipe connection of the Rouge River to the oxbow with open channel cuts at both ends. This effort will allow unrestricted access to/from the oxbow by boats and wildlife. In October, Wayne County reviewed the COE's preliminary restoration plan for this effort. COE is revising the document, which is expected in December for final Wayne County review.

DOE continues work with the Detroit District US Army Corps of Engineers (COE) regarding potential restoration of the paved channel section of the Rouge. The preliminary restoration plan for modification of the concrete channel between Michigan Avenue and Interstate 94 was approved in August by COE district management. The COE will begin detailed analysis for this project in the next few months.

In 2000, the Detroit District US Army Corps of Engineers (COE) received funding through a grant from the NOAA to assist with the Rouge Gateway Master Plan. WMD is representing Wayne County in this effort. This summer, DOE and DPS worked with the COE to prioritize potential projects under this grant. A Draft Preliminary Restoration Plan for this project was prepared in late September 2002 and is under review.

Community Grant Program

The Wayne County Commission approved the department's recommendation for funding of the Round III projects on August 29, 2002, and kickoff meetings for these projects were initiated. For the Round IIA and the Round IIB subgrant projects, inter-agency agreements (IAAs) have been prepared and most of the projects selected are underway. Proposals for Rouge grant funding of Combined Sewer Overflow (CSO) and Sanitary Sewer Overflow (SSO) control

projects under the Round IV subgrant program were received on September 27, 2002. The Round IV proposals were reviewed in October and November 2002 and funding recommendations will be presented to the Wayne County Commission for approval in December 2002.

The community and agency subgrant projects closed-out in the period August – November are the following:

- Oakland County Caddell Drain Regional Detention Pond Retrofit (U2-04),
- City of Wixom Commercial Lawn Maintenance Workshop (IIA-25),
- Wayne County Park Nankin Mills Rouge Interactive Display (M3-05),
- Wayne County Park Nankin Mills Rouge Interactive Kiosk (M3-06),
- Wayne County Environmental Health Homeowners OSDS Public Education Material (OSS-05),
- Oakland County Caddell Drain Regional Detention Pond Retrofit (U2-04),
- State of Michigan Rouge RETAP Program Project,
- Oakland County GIS Utility Farmington Hills Storm Sewers & Septic Data Development (GIS-01),
- Wayne County Park Nankin Mills Rouge Interactive Display (M3-05),
- Wayne County Park Nankin Mills Rouge Interactive Kiosk (M3-06),
- Wayne County Environmental Health Homeowners OSDS Public Ed. Material (OSS-05), and
- Friends of the Rouge Continuation of Public Education Programs 2001-2002 (IIA-23).

Combined Sewer Overflow Control Project Status

Seventy-seven of the 83 Phase I CSO outfalls are now under control (retention/treatment basin) or have been eliminated (sewer separation). Ten CSO retention/treatment basins are currently in operation for the communities of River Rouge, Inkster, Redford, Acacia Park, Dearborn Heights, Bloomfield Village, Birmingham and Detroit's 7 Mile, Hubbell-Southfield and Puritan-Fenkell. The River Rouge Basin started operation in early August 2002. Livonia, Garden City, Plymouth Township, Bloomfield Hills, Wayne and Westland have completed their CSO separation projects.

The evaluation of the Phase 1 CSO controls has been underway since June 1997. The three Wayne County and the three Oakland County basin evaluation reports were submitted to MDEQ. In August 2000, MDEQ certified that the three Wayne County basins and three Oakland County basins were in compliance with the Phase II requirements for eliminating raw sewage discharges and protecting public health. Earlier this year, the three Oakland County basins were also certified as meeting the Phase III requirements for protecting water quality; a similar certification is expected for the Inkster, Dearborn Heights, Redford Township basins in Wayne County. Analysis of all other existing basins is ongoing. Preliminary studies for the CSO Phase II projects in Dearborn, Dearborn Heights, Detroit, Inkster and Redford are ongoing.

Based on priorities established within MDEQ, Rouge Project and Wayne County staff continue the process of evaluating whether the demonstration CSO basins comply with the Phase III goal

of meeting water quality standards. Draft technical memoranda were issued in August and November 2002 regarding water quality monitoring and modeling of dissolved oxygen impacts from Inkster CSO basin treated overflows. Considerable progress was also made on a final evaluation summary report for the Rouge Project Phase I CSO control program; this report should be issued in draft form by the end of the year.

Illicit Discharge Elimination Program (IDEP)

Staff continues to dye test businesses and industries in the Rouge River watershed for illicit connections to storm sewers. From August 1 through November 30, 2002, two hundred fifty-four (254) facilities were inspected for illicit connections, with forty-seven (47) violations found at twenty-two (22) different facilities. Program activities were conducted in the cities of Dearborn, Dearborn Heights, Livonia, Northville, Plymouth, Westland and in the Townships of Huron, Northville and Plymouth.

There were eighteen (18) water quality related complaint received during the period August – November:

- A Harper Woods resident called concerning a neighbor who was allegedly dumping chemicals on their lawn. The caller was referred to the Harper Woods Ordinance Officer for follow up and investigation.
- A referral was received from the Wayne County Environmental Health Division concerning residential flooding in the City of Taylor. Staff offered technical assistance to Environmental Health in this complaint investigation, and work continues with the City of Taylor to resolve the flooding issue.
- A Plymouth resident called to report leaking oil drums and dumping of used oil into the storm drain at a commercial property. Staff investigated the incident and found no evidence of illegal dumping or leaking drums. The complaint is now closed.
- A Canton Township business called to report paint being dumped into the Elliot Drain. Staff investigated the complaint along with the Michigan Department of Environmental Quality (MDEQ) and the Canton Township Fire Department. The source of the paint was from a nearby industrial building. The issue was turned over to Canton Township for follow up and enforcement.
- A Van Buren Township employee called to report the leaking of hydraulic fluid into a residential storm drain. The issue was referred to the Division of Public Works for follow up and investigation.
- A referral was received from the MDEQ concerning a fertilizer odor coming from a storm drain in Redford Township. The issue was referred to Redford Township and the Division of Public Works for follow up and investigation.
- A Redford Township resident called to report gasoline and oil leaking from automobiles being stored in a car wash parking lot into the storm drain. Staff investigated the complaint and found no evidence of vehicle fluids leaking or automobiles being stored. The complaint is now closed.
- A Northville Township resident called to report a suspicious discharge of water bubbling up from underground in a residential subdivision. The complaint is still under investigation.

- A Canton Township resident called for assistance with an area of ponding water that had killed sod in their backyard. Staff investigated the issue and gave several options to the resident to help with property drainage and possible utilization of the resource as a rain garden. The complaint is now closed.
- The President of a homeowners association in Canton Township called with concerns about dozens of dead ducks in a subdivision detention pond. Results from tests performed by the Michigan Department of Agriculture indicated that the ducks died from Avian Botulism. The caller was informed that this is a common occurrence in ponds with low water levels. The homeowners association is working with Canton Township to engineer repairs to their stormwater collection system which will allow for higher water levels in the future.
- A River Rouge resident called with concerns over the possible dumping of sewage into Ecorse Creek by a pumping truck in Lincoln Park. Staff investigated the incident and determined that the truck was contracted by Lincoln Park for a sewer cleaning project and that the sewage was being pumped across the Creek into another sanitary manhole. The complaint is now closed.
- A Taylor resident called alleging that a commercial neighbor was pumping raw sewage from their facility into a storm drain. Staff investigated the incident and found that the facility was cleaning out their trench drains and disposing of the waste in the sanitary sewer. This complaint is now closed.
- An anonymous citizen complaint was received concerning the discharge of raw sewage into the Detroit River at Dingell Park in Ecorse. Staff investigated the incident and discovered no evidence of sewage discharge at the time of inspection. The issue was referred to the City of Ecorse for further investigation and follow up.
- A referral was received from the Michigan Department of Environmental Quality suspicious odors from a storm sewer in Dearborn. The complaint is currently under investigation.
- A referral was received from the USCG National Response Center concerning illegal dumping of liquid waste at a commercial facility in Melvindale. The issue was referred to MDEQ for follow-up and investigation.
- A notification was received from MDEQ concerning a paint spill into a stream from an automotive assembly plant in Wayne. Staff investigated the incident and observed the clean up operation. Approximately eighty thousand (80,000) gallons was pumped from the stream. The incident is under further investigation by MDEQ.
- In November, a referral from the City of Livonia was received concerning reports of black, oil-like water seen in various locations of the Bell Creek. Staff investigated the incident and determined that the source of the discoloration was from naturally occurring tannins and lignins present in decomposing leaves. The complaint investigation is now closed.
- A referral was received from the City of Wayne concerning a possible sewage discharge into the lower Rouge River. Staff investigated the incident and determined that the source of the discharge was from a broken sewer interceptor. A referral was made immediately to the DOE – Public Works Division and repairs were made. The investigation is now closed.

Customer surveys are provided to all non-anonymous complainants in an effort to monitor our service to the public and improve our operations. Since September 2000, the WMD has investigated thirty-five (35) non-anonymous, water quality related complaints. Of these

complaints, fourteen (14) surveys were completed and returned, with thirteen (13) respondents being pleased with the investigative efforts.

Staff conducted a tannin/lignin analysis on water samples collected from several locations in the Rouge watershed. This work is being done as part of ongoing research project to compare tannin/lignin levels in rivers across the country with those in southeast Michigan.

WMD's nationally renowned IDEP training program continues to offer training to a wide variety of water quality professionals. We were recently awarded a grant from MDEQ to provide training presentations throughout the State during 2003; work continues to finalize the contract for this grant.

Work continues this month on the Ecorse Creek IDEP Project. WMD was awarded a Clean Michigan Initiative grant to conduct IDEP activities in the Ecorse Creek watershed. Agreements have been reached with each of the participating communities (Dearborn Heights, Lincoln Park, Romulus, Southgate, Taylor and Westland) to begin implementation of program activities. Sampling of the creek "before" IDEP work commences is underway; two (2) sampling events were completed with Wayne State University this month.

Advanced investigations have begun in an area upstream of Newburgh Lake to determine potential sources of high bacteria that have been detected from recent sampling events. Initial sampling was done to begin collecting water quality data. Cooperation with the Middle 1 SWAG and local communities is being sought to develop a report on this issue.

The City of Dearborn Heights has contracted with WMD to provide IDEP services to assist the City with their storm water permit requirements. The program has WMD staff conducting dye testing and public outreach to businesses in the northwest portion of the City. As of November 30, one hundred and thirty-one (131) inspections have been completed. The City plans to utilize its new Illicit Connection Ordinance to enforce any violations discovered by WMD staff. Staff continues to meet with the Dearborn Heights Public Works and Building Departments this month to coordinate efforts. Initial dye testing inspections are now completed and follow-up investigations will continue through the end of the year.

Public Involvement and Education

WMD staff arranges for the stationing of the *Rouge River: Our Recreational Resource* displays and the *Our Actions Affect the River* display in communities throughout the Rouge Watershed. . In August 2002, the *Lower Rouge* display was stationed in the Dearborn Heights City Hall. In September 2002, the *Lower Rouge* display was replaced by the *Middle Rouge* display in the Dearborn Heights City Hall. The *Lower, Main, Middle* and *Upper Rouge* displays were set up at Rouge 2002 on September 20th, along with the *Our Actions* display. The *Our Actions* display was also set up at the Detroit Water Festival (September 19th) and at the Lawn Care Workshop (September 21st) held in Canton. In October, the *Middle Rouge* display remained in the Dearborn Heights City Hall and handout materials were replenished. The *Lower, Main, Middle*

and *Upper Rouge* displays are in-house awaiting new locations. The *Our Actions* display was also set up at the *Riverkeeper* visit on Belle Isle (October 27th), the Westland Library (October 3rd), Wyandotte Boat Club – *Riverkeeper* Celebration (October 27th) and Van Buren Township (October 17th). In November 2002, the *Middle Rouge* display was removed from the Dearborn Heights City Hall. The *Lower, Main, Middle* and *Upper Rouge* displays are in-house awaiting new locations. The *Our Actions* display was set up at the City of Plymouth Library.

In support to Friends of the Rouge (FOTR) voluntary monitoring program, staff distributed announcement flyers for and participated in the Fall Bug Hunt, held October 12th. In addition, we began work on the Frog & Toad 2002 Data Results maps. These maps will be mailed out by FOTR to the volunteers and others in January announcing the inviting participation in the 2003 program.

The River Friendly Partners Program has currently recognized 26 River Friendly Partners. Staff introduces the program to the all businesses inspected as part of the dye-test program. Follow-up contacts continued. To date most of these businesses have requested and been sent additional information but there have been no follow-up technical assistance visits scheduled. Efforts (as reported above) continued on the Commerce Court Demonstration Site consistent with the Commerce Court Office's River Friendly Partners Program Action Plan.

For children-oriented outreach, staff participated in Spark Day 2002, an environmental education day at Madison Elementary School in the Wayne/Westland School District. A modified version of the Dirt Doctors "Lesson Plans in Soil Erosion and Sedimentation Control" presentation was given to over the 60 students who attended three 50 minute sessions.

For Wayne County's Nutrient Reduction Campaign, all 2002 *River Friendly Lawn Care Workshops* have been completed. Staff are summarizing the results of 2002 and planning the 2003 workshop schedule. The 2002 *Slow Release Fertilizer Sticker Program* concluded in November. Staff are summarizing the results of 2002 and planning the 2003 work effort. Advertisement of the Nutrient Reduction Campaign also continued in November, with billboards up at 5 locations within the watershed (Ecorse Road east of Wayne, Romulus; 7 Mile Road, west of Evergreen, Detroit; Warren Road, east of Outer Drive, Detroit; northwest corner of Auburn & Opdyke, Pontiac; Ford Road, west of Newburgh, Westland). These billboards promote the use of slow release fertilizers as well as the WCDOE hotline. Staff is in the process of summarizing the results of the 2002 advertising effort and planning the 2003 work effort.

In the area of general public information distribution, there were approximately 1,270 pieces of public information materials that were given out during the period August - November 2002 from requests that came over the website, fax, phone, or letter. Staff continued to deliver flyers for distribution at/by: retailers participating in the *Slow Release Fertilizer Program* and at a variety of local community public offices and facilities. Flyers distributed included *River Friendly Lawn Care Workshops*, *Slow Release Sticker Program*, and the *Healthy Lawn Care Tips*. In a coordinated effort with the Wayne County Roads, our first order for watershed signage Department has been completed for 20 signs ordered by three communities.

The www.rougeriver.com website continues to be improved and additional material is being added. We experience approximately 170,000 hits to the site each month. E-mails continue to come in with requests for materials, questions about the project, and concerned citizens thanking the project for their work.

Updates are in process for the Images of the Rouge CD. The Images CD contains various pictures of the Rouge River Project for use by those doing public outreach. This second edition of this tool will contain not only updated pictures, but a wider variety of topics.

WMD GIS, Data Management, and Computer Systems Management

The Watershed Management Division (WMD) provides GIS and data services to a wide variety of individuals and organizations as part of the Rouge River Wet Weather Demonstration Project. These services consist of map production, data development, data analysis, and spatial analysis that are required as part of the on-going activities of the Rouge Project. During the month of November, a number of GIS maps, data requests, and data development tasks were performed including:

- Data cleanup and metadata development continued in preparation for the Rouge GIS CD.
- Coordination and application design continued for posting interactive mapping on www.rougeriver.com.
- Development of the map series for the 2001 Baseline Data Survey continued.
- An analysis of Wayne County watersheds area by community was revised and finalized.
- A map of the Middle 3 and Lower 2 subwatersheds was finalized, plotted, and distributed for a Wayne-Westland teacher's workshop.
- Work continues developing new maps and map templates in ArcMap, the map composition module of ArcGIS.
- Miscellaneous requests for GIS data were filled.

During the month of November, the Rouge data team continued to work on a number of database and application development tasks as well as system maintenance activities. The following is a summary of completed tasks.

- Production of the 2001 baseline data summary report continues; data analysis graphics and statistics were created.
- QA/QC review of the 2002 sampling data continues. Data loading issues were identified, reviewed and data loader application maintenance performed to accommodate data formatting issues.
- Production and distribution of volume 8 of the RPO Data CD continues; user surveys and CD requests are being reviewed and processed.

Administration, Policy and Outreach

The WMD division director is actively working with the Michigan Congressional delegation to obtain additional funding for the Rouge River National Wet Weather Demonstration Project; \$12.5 million is requested for FY03.