



Oakland County, Michigan 2004 Annual Report

Certificate of Coverage MIG610042 General Storm Water Discharge Permit MIG61000

Submitted to:

**State of Michigan Department of Environmental Quality
Surface Water Quality Division**

Prepared by:

**Oakland County Drain Commissioner's Office
Environmental Unit**

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Table of Contents

| | |
|--------------------|---|
| Background | 6 |
| Annual Report..... | 6 |

Goal 1 – Remove Sources of Pollution that Threaten Public Health

A. Infrastructure Maintenance & Inspection

| | |
|--|---|
| OCDC – Create MS4 Database | 7 |
| OCDC – Storm Drain and Pond Maintenance & Inspections | 7 |
| OCDC – Sanitary Sewer Maintenance & Inspections..... | 7 |
| OCDC – Verify New Connections, Prevent Illicit Connections | 8 |
| OCDC - Infrastructure Mapping | 8 |
| OCDC - Spill Response | 8 |

B. OSDS Program

| | |
|---|---|
| OCHD – County OSDS Program | 8 |
| OCHD – County OSDS Installation/Enforcement | 9 |

C. Grant Facilitation Assistance

| | |
|---|----|
| OCDC – Walnut Lake Pump Station Project..... | 9 |
| OCDC – Edwards Drain Siphon Removal Project | 10 |
| WRMD – Oakland Brownfield Initiative | 10 |

D. Illicit Discharge and Elimination Program

| | |
|--|----|
| OCDC – IDEP OCDC Owned and/or Operated Facilities..... | 10 |
| RCOC – IDEP Facilities and Road Drainage System Outfalls | 13 |
| OCPR – IDEP Facilities | 13 |
| OCFM – IDEP Facilities | 13 |

E. Complaint Tracking

| | |
|--|----|
| OCDC – Update and Implement OC Complaint Hotline Program | 13 |
| OCDC – Publicize Hotline Program to Oakland County Staff..... | 14 |
| RCOC – Complaint Tracking..... | 14 |
| OCDC – Publicize Hotline Program to County Residents | 14 |

Goal 2 – Restore/Maintain Aesthetically Appealing Conditions

F. OC Waste Reduction Program

| | |
|--|----|
| WRMD – Solid Waste Plan | 15 |
| WRMD – Household Hazardous Waste Information | 15 |
| WRMD – America Recycles Days | 15 |
| OCDC – ISO 14000 Registration | 16 |
| OCFM – Waste Reduction Program | 16 |
| RCOC – Adopt-a-Road Cleanup Program..... | 16 |
| OCPR – Litter Pickup Program | 16 |

Goal 3 – Improve and maintain River Ecosystems for Fish and Wildlife

G. River/Stream Ecosystem Improvement

| | |
|--|----|
| OCDC – Volunteer Stream Work | 17 |
| OCDC – Publicize Habitat Related Events | 17 |
| OCPEDS – Riparian Lands Mapping..... | 17 |
| OCPEDS – MNFI Mapping & Community Distribution | 17 |
| OCPR – Pebble Creek BMPs | 18 |

Goal 4 – Minimize the Amount of Soil Erosion and Sedimentation

H. Soil Erosion Program

| | |
|--|----|
| OCDC – Soil Erosion Program | 18 |
| OCDC – Catch Basin Cleaning | 18 |
| OCFM – Soil Erosion Program | 19 |
| OCFM – Street Sweeping Program | 19 |
| RCOC – Curb & Gutter Sweeping Program..... | 19 |
| RCOC – Soil Erosion Program | 19 |
| RCOC – Catch Basin Vactoring | 19 |
| RCOC – Stream Crossing Grading..... | 20 |

(C.) Grant Facilitation Assistance

| | |
|--|----|
| OCDC – Edwards Streambank Stabilization for West Bloomfield Township..... | 20 |
| OCDC – FEMA Project Sites for Bloomfield Township..... | 20 |
| OCDC – Rouge Main 1-2 Inventory Studies – Streambank Erosion Inventory | 21 |

Goal 5 – Minimize Flow Variability and Associated Negative Impacts

(C.) Grant Facilitation Assistance

| | |
|--|----|
| OCDC – Franklin Branch Study Grant for Franklin Drainage District | 21 |
| OCDC – Rouge Main 1-2 Inventory Studies – Detention Pond Inventory | 22 |
| OCDC – USGS Stream Gauges | 22 |
| OCPR – Stormwater BMPs and Limited Imperviousness..... | 22 |

Goal 6 – Maximize Community Assets Related to the River

I. Improve Recreational Use

| | |
|---|----|
| OCPEDS – Countrywide Landscape Ecosystem vision Map & Greenways Planning Support..... | 23 |
| OCFM Pathway Program | 23 |
| OCPR Recreational Use | 23 |

J. Lake Improvement Activities

| | |
|---|----|
| OCDC Lake Improvement Board Assistance..... | 24 |
|---|----|

Goal 7 – Preserve and Enhance the Quality of the Great Lakes

K. Public Education (OC Residents)

| | |
|--|----|
| OCDC Schools Program | 24 |
| OCDC: U of M Dearborn Water Festival | 24 |
| OCDC: Cranbrook Water Festival..... | 25 |
| RCOC – Watershed Signage | 25 |
| OCPEDS – Presentations and Displays | 25 |
| OCPEDS – Special Topic Seminars | 25 |
| OCPEDS – Environmental Stewardship Website | 26 |
| OCDC – Presentations and Displays..... | 26 |
| OCDC Technical Support..... | 26 |
| OCHD – Presentations and Displays..... | 27 |
| OCHD – Riparian Newsletters | 27 |
| OCDC – Public Education Bulletin Boards | 28 |
| OCDC – Public Education Request Tracking | 28 |
| OCDC – Watermark Newsletter | 28 |
| OCDC - Watershed Model, the Enviroscape © | 28 |
| OCPR – Riparian Education Efforts | 28 |
| OCPR – Naturalist Programs | 28 |

L. Public Education (OC Employees)

| | |
|-----------------------------------|----|
| OCPR – Park Staff Education | 29 |
| OCHD – County Website | 29 |
| OCDC – County Website | 29 |

| | |
|---|----|
| M. <u>Regional Public Education Coordination</u> | |
| OCDC/OCPEDES – Regional Public Education Efforts..... | 29 |
| OCDC – Regional Survey | 30 |

Goal 8 – Integrate Stormwater Management in Planning and Land Use Approval Process

| | |
|--|----|
| N. <u>Staff Training in Stormwater Management</u> | |
| OCDC – Staff Education | 30 |
| RCOC – Staff Education | 30 |

| | |
|---|----|
| O. <u>Update OC Drainage Standards</u> | |
| OCDC – Update OC Drainage Standards | 31 |

| | |
|--|----|
| P. <u>Community Planning Support</u> | |
| OCPEDES – Oakland County BMP Locator Website | 31 |
| OCPR – Oakland County BMP Locator Database | 31 |
| OCDC – Oakland County BMP Locator Database | 31 |
| OCPEDES – Technical Support..... | 31 |
| OCPEDES – Mapped Information for Planning Support..... | 31 |
| OCPEDES – OC Community Planning Inventory | 32 |

Goal 9 – Establish Financial and Institutional Arrangements for the Fulfillment of the Management Plan

| | |
|---|----|
| Q. <u>Drainage District Development</u> | |
| OCDC – Support Drainage District Development..... | 32 |

| | |
|--|----|
| R. <u>Oakland County Stormwater Committee (OCSC)</u> | |
| OCDC – Facilitate and Organize OCSC | 33 |
| OCPEDES/OCHD/OCPR/RCOC/OCFM/OCIA – Participate as an Active Member of OCSC | 33 |

Goal 10 – Enforce Action Plans and Increase Accountability for Stormwater Management

| | |
|---|----|
| S. <u>Watershed/Subwatershed Participation</u> | |
| OCDC – Participate in Watershed/Subwatershed Groups | 34 |
| OCPEDES – Participate in Watershed/Subwatershed Groups..... | 34 |
| RCOC – Participate in Watershed/Subwatershed Groups | 34 |
| OCPR – Participate in Watershed/Subwatershed Groups | 34 |
| OCHD – Participate in Watershed/Subwatershed Groups | 35 |
| OCFM – Participate in Watershed/Subwatershed Groups | 35 |
| OCIA – Participate in Watershed/Subwatershed Groups | 35 |

| | |
|---|----|
| T. <u>Good Housekeeping</u> | |
| OCDC – OCDC Motorized Equipment Maintenance | 35 |
| OCDC – OCDC Motorized Equipment Washing | 35 |
| OCDC – Mowing Practices | 36 |
| OCFM – Vehicle and Motorized Equipment Maintenance..... | 36 |
| OCFM – Motorized Equipment Washing | 36 |
| OCFM – Mowing Practices | 36 |
| OCFM - Catch Basin Cleanout..... | 36 |
| RCOC – Facility Inspection | 37 |
| RCOC – SEMSIM | 37 |
| OCPR – Stewardship Action Group..... | 38 |

Background

In March of 2003, Oakland County transitioned from a Voluntary Storm Water Permit to a mandatory watershed-based storm water permit for the Rouge River Watershed, as the National Pollution Discharge Elimination System (NPDES) Phase II rules came into effect. At the same time, Oakland County applied for extension of the permit coverage to include all of the other watersheds within Oakland County.

The Oakland County Drain Commissioner's Office (OCDC), as the designated representative for Oakland County, is striving to meet all of the permit requirements and Watershed Management Plan (WMP) goals that are within Oakland County control, to protect and restore waterways and water bodies. The Oakland County Stormwater Committee (OCSC) was formed in November 2003 under the direction of the OCDC Environmental Unit staff, for the purpose of bringing Oakland County into Compliance with their Phase II Stormwater Permit.

The current departments and agencies comprising the OCSC include: Drain Commissioner's Office, Road Commission for Oakland County, Oakland County Parks & Recreation, Offices of the Oakland County Executive-Planning and Economic Development Divisions of the Community and Economic Development Department, Oakland County Health Division, Department of Facilities Management, and Waste Resource Management.

The OCSC has been working to define existing and needed programs necessary to bring Oakland County into compliance with the Phase II storm water regulations.

The current Oakland County watershed-based permit covers all of the regulated properties, roads, and drains throughout Oakland County. However, only the Rouge River Watershed has completed the watershed planning process of setting goals, identifying objectives, and reportable activities. The remaining watersheds in Oakland County are also covered under the permit, but are just beginning the planning process and do not have activities required in this annual report.

OCDC jurisdiction within the Rouge River Watershed consists of a piecemeal of open water courses, enclosed drains and other detention ponds and systems of Chapter 4 Drains, Chapter 20 Drains, and Chapter 18 drainage areas. These drains and drainage areas are the headwaters of the Rouge Main Branch, Rouge Upper Branch, and Rouge Middle Branches. OCFM has only one leased facility within the Rouge Watershed, the 52nd District Court. Parks and Recreation also has only one facility within the Rouge Watershed, Glen Oaks.

Annual Report

In order to assess our progress, Oakland County documents progress with respect to specific goals and/or actions, as well as any additional actions taken to reduce the discharge of pollutants in storm water. This annual report outlines all activities that Oakland County staff have performed between October 2003 and September 2004 that support the items outlined in the SWPPI document. For simplicity of review, this Annual Report follows the main topics and activities in the order listed in the SWPPI. The SWIPPI goals that are addressed by each activity are listed in parentheses at the end of each section.

Goal 1 - Remove Source of Pollution that Threaten Public Health

A. Infrastructure Maintenance & Inspection

OCDC – Create MS4 Database

Target: Work with OCDC, RCOC, OCFM, OCIA, and OCPR to create A GIS-based database for tracking IDEP on Oakland County owned and operated storm water conveyance systems.

Timeline: Database skeleton to be completed and ready for population by fall of 2004.

Progress:

OCDC Database Staff have been meeting regularly with the Environmental Unit and Operations and Maintenance to finalize the needed database structure that will encompass IDEP for county drains, county roads, county parks, and other county facilities. The Database Staff have completed the majority needs assessment and design phases of the database design. The database structure is expected to be finalized by the end of 2004.

Once the database structure is completed, the OCDC database staff will create front-end menus designed to work with hand-held field computers. A demonstration will be held for all appropriate field staff.

OCDC - Storm Drain and Pond Maintenance & Inspections

Target: Perform routine inspections of OCDC owned and operated storm drains and ponds for evidence of sedimentation, blockage, or improper function on a three-year schedule or as staff/resources are available. Record findings on field reports and generate repair sheets for any corrective actions required. Track inspections and repair sheets.

Timeline: Ongoing inspections on a three-year cycle.

Progress:

OCDC reports inspecting 1,934 structures, 33 drains, and performing 290 structure repairs during FY2004. Reports available through OCDC Operations and Maintenance.

OCDC – Sanitary Sewer Maintenance & Inspections

Target: Continue to perform routine inspections on OCDC owned or operated sanitary sewer systems to insure proper operation and prevent overflows and/or release of sewage to surface waters.

Timeline: Ongoing inspections on a five-year cycle.

Progress:

OCDC staff performed 2,930 inspections and 370 repairs to OCDC owned or operated sanitary sewer systems as of September 16, 2004. Reports available through OCDC Operations and Maintenance.

Goal 1 - Remove Source of Pollution that Threaten Public Health – Continued

A. Infrastructure Maintenance & Inspection - Continued

OCDC - Verify New Connections – Prevent Illicit connections

Target: For new construction and/or reconstruction projects of storm and sanitary systems managed by OCDC, proper connection will be verified by Inspection staff.

Timeline: Ongoing

Progress:

OCDC employs trained inspection personnel to inspect drain and sewer projects throughout Oakland County. The inspector is responsible for inspecting connections and other related items to insure that the work is constructed in accordance with the plans and specifications. The inspector is also present to insure that the integrity of the existing system is maintained and that proper compliance with state and local regulations are observed.

OCDC Infrastructure Mapping

Target: Continue progress on conversion of Drain Office Water/Sewer/Storm/Combined data to GIS format.

Timeline: Ongoing, scheduled for completion by the end of 2005.

Progress:

Water drawings have been fully converted as of 10-01-04. The data is currently undergoing a QA/QC process. Sanitary/Combined Sewer are under conversion, with completion expected in late spring 2005. Storm Sewer has not yet been contracted out for conversion. The anticipated start is Spring 2005 and completion in Fall 2005.

OCDC Spill Response

Target: Continue spill response procedures with Inland Waters for reported spills in OCDC owned and operated drains.

Timeline: Ongoing.

Progress:

OCDC contracts with Inland Waters to provide spill response and cleanup on spills from county operated drains. Cleanup of an oil spill from the Joslyn drain to the Clinton River in Pontiac was performed on 2/12/2004.

B. OSDS Program

OCHD – County OSDS Program

Target: Continue to implement the OC OSDS program in coordination with communities with the Rouge River Watershed.

Timeline: Ongoing

Progress:

The Oakland County Health Division has continued its ongoing OSDS program for the FY2004.

Goal 1 - Remove Source of Pollution that Threaten Public Health – Continued

B. OSDS Program - Continued

OCHD – County OSDS Installation/Enforcement

Target: Oakland County Health Department will continue to authorize issuance of permits for new OSDS and investigate and seek correction for reported failing systems.

Timeline: Ongoing

Progress:

The Oakland County Health Division has issued 1,109 on-site sewage disposal permits for the first three quarters of the 2003-2004 fiscal year as reported to the Michigan Department of Environmental Quality. This number is divided between 832 new systems and 277 repair/replacement permits. Data for the fourth quarter of this fiscal year have not been compiled.

The Oakland County Health Division has acted on 110 customer complaints in the first three quarters of the 2003-2004 fiscal year as reported to the Michigan Department of Environmental Quality. Data for the fourth quarter of the fiscal year have not been compiled.

C. Grant Facilitation Assistance

OCDC – Walnut Lake Pump Station Project

Target: Complete Construction on Walnut Lake Pump Station Project

Timeline: Target Completion Date – September, 2005.

Progress:

The scope of the Evergreen Farmington Sewage disposal System Segment III – Walnut No. 1 Pumping Station Improvements Project consisted of the planning, design and reconstruction of the Walnut Lake Pump Station No. 1. The Pumping Station serves portions of Bloomfield and West Bloomfield Township.

The project was planned, designed and will be constructed concurrently with a force main sewer from the Walnut No. 1 pumping station easterly at 14 Mile Road to the Evergreen interceptor and with modifications to regulators from the existing CSO basins. This will provide an interconnection from Farmington Interceptor to the Evergreen Interceptor to allow transfer up to 14 CFS of wet weather sanitary flow. The flow transfer would virtually eliminate Sanitary Sewer Overflows (SSO'S) at the Walnut No. 1 pumping station and at the Farmington Interceptor.

Design commenced for the Walnut Lake Project in August 2003 and both projects were bid concurrently in May 2004. Construction of both projects commenced in September 2004 and the new pump station and force main is expected to be running by September 2005.

Goal 1 - Remove Source of Pollution that Threaten Public Health – Continued

C. Grant Facilitation Assistance

OCDC - Edwards Drain Siphon Removal Project

Target: Complete Construction of Edwards Drain Siphon Removal Project.

Timeline: Target Completion Date -- 2004

Progress:

Construction of the Edwards Siphon Removal project was completed in December 2003. The Edwards Drain Siphon Removal project alleviated basement flooding, sanitary sewer overflows, and sanitary sewer surcharging in the vicinity of Maple Road and Orchard Lake Road caused from the four siphons removed in this project. The free flowing sanitary sewers will no longer cause a grease buildup in the siphons that directly contributed to the overflows, surcharging and basement flooding, which required costly monthly maintenance. Residents, businesses, and the Rouge Watershed will all benefit from this project.

WRMD - Oakland Brownfield Initiative

Target: Continue facilitating the Oakland Brownfield Initiative which serves to protect the county's natural resources, particularly critical water and waterways, while restoring and increasing built environments and urban vitality.

Timeline: Ongoing

Progress:

In 2004 Oakland County completed the United States Environmental Protection Agency (USEPA) Brownfield Assessment Grant, this \$250,000 grant was awarded to Oakland County in 2001 to help assess Brownfield's within the County. In addition Oakland County was awarded a \$550,000 Supplemental Brownfield Cleanup Revolving Loan Fund (BCRLF) from the USEPA in order to provide low interest loans to private developers who spend money cleaning up Brownfield sites. In the future you can expect Oakland County to become even more proactive in dealing with the Brownfield issue.

D. IDEP Program

OCDC – IDEP OCDC Owned and/or Operated Facilities

Target: Implement OCDC portion of OC IDEP Program to conduct outfall inventories in dry weather conditions on all Chapter 20 Drains and Clinton River Watershed Drains. Pursue funding opportunities to continue outfall inventories in Huron, Shiawassee, and Flint watersheds.

Timeline: IDEP Plan for the entire county is scheduled for completion on November 1, 2004 with implementation upon approval by MDEQ.

Progress:

TASK 1: OCDC OWNED OR OPERATED DRAINAGE SYSTEMS

All ODDC storm drains within the Oakland County portion of Rouge River Watershed were mapped and inventoried and outfalls have been screened for dry weather discharges under a grant received by the Rouge Program Office from 1999 through 2002. No new outfall inventories were performed in the Rouge Watershed during 2003/2004.

Goal 1 - Remove Source of Pollution that Threaten Public Health – Continued

D. IDEP Program - Continued

OCDC – IDEP OCDC Owned and/or Operated Facilities - Continued

ODDC continued to map and dry weather screen outfall locations of County drains in the Clinton River, Flint River, Shiawassee River and Huron River Watersheds. A total of 188 additional County drain outfall locations were added during 2003 /2004 season. Dry Weather screening of the outfalls led to three IDEP investigations. Two were in the Clinton River Watershed on the Galloway and Ladd Drains both of which led to Landfill discharges which were referred to the MDEQ Water Division and Remedial Response Division for enforcement. The third was in the Huron River Watershed on the Yerkes Drain from an NPDES permitted facility, which was referred to MDEQ for enforcement.

OCDC continued to perform SWAT (Strom Water Action Team) investigations of complaints received from citizens via the 24-hour Environmental Hotline, communities, other Oakland County Departments and Divisions and regulatory agencies. A total of 32 complaints were investigated during the 2003/2004 period. Eight complaints were received from the environmental hotline but only two of these resulted in SWAT investigations. Four investigations resulted from referrals from communities, 4 investigations resulted from referrals from OCDC units. 16 investigations resulted from direct phone calls by citizens to the ODCD Environmental Unit IDEP coordinator. Three investigations resulted from referrals by the MDEQ and three investigations resulted from referrals by consultants performing streambank and retention pond surveys under the Rouge Main 1-2 Grant projects.

Of the 32 complaint investigations, 26 resulted in identification of illicit discharge of which 22 resulted in the identification and elimination of a discharge source. Of these, four were septic system related and referred to OCHD and local communities for enforcement. Three were sewer-related discharges referred to OCDC O&M and local DPW for correction. Two were soil erosion issues which were referred to OCDC SESC Unit and local Communities, three were retention pond related issues were referred to MDEQ and local communities. Three were illicit connections from buildings, which corrected by the facility owners, two were related to leaking transformers which were referred to MDEQ and DTE for enforcement. Three were related to leaking dumpsters that were referred to OHCD, and Local communities for enforcement and two were related to waste storage and handling practices. This includes an elementary school disposing of floor cleaning wastes in a parking lot catch basin and storage of oil wastes and metal shavings at an industrial facility. The elementary school has discontinued this practice and the industrial facility was required to apply for an Industrial Stormwater NPDES Permit and develop a Storm Water Pollution Prevention Plan by the MDEQ

ODCD Staff performed a survey of the Greenaway Drain in the Village of Wolverine Lake, Walled Lake and Commerce Twp. in August 2004. This was in response to concern of bacterial contamination of Wolverine Lake by the Village of Wolverine Lake. 28 inlets to the Greenaway drain were identified and screened during dry weather for indication of illicit discharges. No illicit discharges were reported.

Goal 1 - Remove Source of Pollution that Threaten Public Health – Continued

D. IDEP Program - Continued

OCDC – IDEP OCDC Owned and/or Operated Facilities – Continued

TASK 2: OCDC FACILITIES

The OCDC Environmental Unit conducted surveys of the OCDC Administration Building/ Operations and Maintenance Facility and the Pump Maintenance Facility in 2004. The purpose of the was to identify storm drainage systems and storm drainage patterns on the facility property and to identify potential storm water contamination issues, including materials and waste storage, handling and disposal practices that could contribute pollutants to the storm water collection systems.

The OCDC Environmental Unit also conducted surveys of the Commerce Township Wastewater Treatment Facility and the Walled Lake / Novi Wastewater Treatment Facility. The purpose of these surveys was to map the outfall locations and storm water collection systems at these facilities and to monitor the outfalls for unauthorized storm water discharges as required under their General Industrial Site NPDES Permits. Certified Storm Water Operators for the Environmental Unit also helped facility management perform site evaluations and inspections of facilities and properties, review materials and waste storage, storage handling and disposal procedures, and develop Storm Water Pollution Prevention Plans as require under their General Storm Water NPDES Permits.

The OCDC Environmental Unit also assisted the OCIA with their General Industrial Site NPDES Permits at the Oakland County Southwest Airport and Oakland County International Airport

TASK 3: CMI GRANT FOR CLINTON RIVER IDEP ON OAKLAND COUNTY DRAINS

OCDC was awarded a grant in 2004 to perform outfall surveys and IDEP investigation on Oakland County drains within the Clinton River Watershed. The grant project is a two-year endeavor beginning September 15, 2004.

TASK 4: LAKE ST CLAIR REGIONAL MONITORING PROJECT

ODCD Environmental Unit is participating with Macomb County, St Clair County, Wayne County, USGS, and others in establishing a regional monitoring system for watersheds within the Lake St. Clair basin under a project funded through the state legislature and administered through the MDEQ. 23 monitoring stations have been set up in five watersheds that discharge to Lake St. Clair. Water quality data will be collected at these sites by continuous monitoring and grab sampling, during dry weather and wet weather events for a period of two years beginning in September of 2004. Four stations are established on the Clinton River in Oakland County. Water quality data from these stations will be used to help prioritize IDEP activities in the Clinton River Watershed and evaluate the effectiveness of the illicit discharge elimination activities under the CMI Grant program.

Goal 1 - Remove Source of Pollution that Threaten Public Health – Continued

D. IDEP Program - Continued

RCOC – IDEP Facilities and Road Drainage System Outfalls

Target: Implement RCOC portion of OC IDEP Program in the Rouge River Watershed. Complete the dry-weather detailed inventory of storm drain out-falls for county roads under RCOC jurisdiction, documenting evidence of sedimentation, blockage, or improper function. Record and report problem areas for corrective action. Train appropriate staff as required

Timeline: Ongoing

Progress:

The road storm drainage out-falls subject to our jurisdiction have been inventoried in the Rouge watershed. In 2003, the inventory moved beyond the Rouge. During FY 2004, the RCOC completed inventories in Highland and Milford Townships. Waterford, Auburn Hills and Rochester Hills are partially inventoried and scheduled for completion by the end of 2004.

OCPR – IDEP Facilities

Target: Conduct detailed outfall inventories in dry weather conditions to identify potential illicit discharges on Parks & Recreation facilities in the Rouge River Watershed. Develop a program to inspect each outfall within a five year period.

Timeline: Ongoing

Progress:

OCPR has been conducting a review of park staff allocations and training prior to implementing the IDEP of park facilities in 2005.

OCFM – IDEP Facilities

Target: Conduct detailed outfall inventories in dry weather conditions to identify potential illicit discharges on County facilities managed by Facilities Management in the Rouge River Watershed. Develop a program to inspect each outfall within a five year period.

Timeline: Ongoing

Progress:

Facilities Management has only one facility (52nd District Court-Novis) within the Rouge Watershed. Oakland County is not the owner of the actual property, the 52nd District Court rents the space. Facilities Maintenance will be contracting with the Drain Commissioner's Office to conduct inspections of all IDEP Facilities starting in FY2005.

E. Complaint Tracking

OCDC – Update and Implement OC Complaint Hotline Program

Target: Update hotline program including coordination with communities to correct contact lists, establish costs, educate operators, and update brochure. Implement updated program.

Timeline: Target completion date for update is September 2005

Progress:

A rough draft has been developed of the brochure, a meeting has been held with Oakland County Facilities Management & Operations to review current program, and a survey has been sent to the Oakland County communities to determine how each community would utilize the program at a local level, as well as providing us updated contact information.

An outreach program will be developed and implemented after the revision of the Hotline Program is complete.

Goal 1 - Remove Source of Pollution that Threaten Public Health – Continued

E. Complaint Tracking - Continued

OCDC – Publicize Hotline Program to Oakland County Staff

Target: Publicize/Promote hotline program by distributing hotline promotional materials to staff.

Timeline: Program to be publicized once per year after update is complete.

Progress:

Hotline Program information was provided to staff at two OCSC meetings, as well as providing additional materials for each agency to take back to their physical location. Additionally, two public education bulletin boards have addressed the hotline program and provided materials to staff and the OCDC website (www.oakgov.com/drain) also contains information regarding the program.

An outreach program will be developed and implemented after the revision of the Hotline Program is complete (Goal #1 D target completion date September 2005).

RCOC – Complaint Tracking

Target: The Department of Citizen Services will continue documenting phone complaints regarding storm drainage and forwarding them to the appropriate RCOC department for action. OCDC will be notified of complaint and steps taken.

Timeline: Ongoing

Progress:

Three illicit connections were discovered:

- *Pine Thistle/Sunningdale in Bloomfield Township*
- *13 Mile/Franklin Branch in Bingham Farms, and*
- *a Plugged catch basin on Greenfield Road in Southfield*

The Pine thistle location is a suspected laundry connection. OCDC and Bloomfield Township have been working together to resolve this. The plugged catch basin on Greenfield is a recent discovery and RCOC maintenance and environmental concerns are working on finding the cause.

OCDC – Publicize Hotline Program to County Residents

Target: Publicize/Promote hotline program by distributing hotline promotional materials to SWAGS, posting on website, and bringing to appropriate public events where OCDC has a display. Pursue options for distributing information with Water & Sewer bills.

Timeline: Program to be publicized once per year after update is complete.

Progress:

Hotline program information was provided to all watershed and subwatershed members at meetings attended by OCDC staff, as well as providing additional materials for each organization to take back to their physical location. The 24-hour complaint hotline is also posted on the OCDC website at www.oakgov.com/drain and magnets supporting the program were provided at a minimum of 16 events.

(N:\EC\Env\UnitInfo\Tracking&Status\requesttracking.xls). An outreach program will be developed and implemented after the revision of the Hotline Program is complete (Goal #1 D target completion date September 2005).

Goal 2 - Restore/Maintain Aesthetically Appealing Conditions

F. OC Waste Reduction Program

WRMD – Solid Waste Plan

Target: Continue to implement OC Solid Waste Plan

Timeline: Ongoing

Progress:

The 1999 Oakland County Solid Waste Management received approval from the Michigan Department of Environmental Quality on June 24, 2003. As noted in the MDEQ Director's approval letter, minor clarifications have been made to the locally approved Plan submittal. These clarifications are noted and found on pages III-53 and III-54. Fresh copies of the Solid Waste Management Plan were printed with the clarifications made and mailed to each of the local municipal offices of Oakland County.

WRMD – Household Hazardous Waste Information

Target: Continue to publicize information on the NO HAZ, RRRASOC and SOCRRA programs to citizens and employees of Oakland County. NO HAZ, RRRASOC, and SOCRRA provide safe disposal of household hazardous waste to Oakland County municipalities to the maximum extent practicable (as budget allows).

Timeline: Ongoing

Progress:

Oakland County's Waste Resource Management Division maintains a webpage on the main Oakland County website directing residents to the municipally sponsored household hazardous waste disposal information for their community. There are three individual consortium or authority based programs operating in Oakland County - NO HAZ, RRRASOC and SOCRRA - serving the majority of Oakland County residents with environmentally sound hhw disposal options. Many communities who are not a part of this group maintain their own HHW programs. Information is passed along to residents via webpage data listed at <http://www.oakgov.com/waste/nohaz/> or verbally when residents telephone the office with specific questions about proper disposal. Total disposal amounts are not yet available for the previous year's events to determine the amount of HHW removed from the waste stream.

WRMD – America Recycles Days

Target: Continue to publicize America Recycles Day to Oakland County Employees. America Recycles Day (ARD) is a national event that takes place annually on November 15. This day and the events surrounding it, serve to raise public awareness and promote the social, environmental, and economic benefits of buying recycled and recycling.

Timeline: Ongoing

Progress:

America Recycles Day 2003 was celebrated in the weeks leading up to November 15 throughout Oakland County. Posters, bookmarks and contest entry forms were displayed in each of the 40+ libraries throughout the County and in the Executive Office Building. A cellular phone collection was also held at the Executive Office Building and all County employees were invited to donate their used cell phone for recycling. Pamela Tremble, Oakland County employee, sits on the state-wide organizing committee for America Recycles Day through the Michigan Recycling Coalition. Serving as Co-Chair of the ARD Team Michigan, she helped to organize the Statewide Cell Phone Recycling Event for ARD 2003. Plans for ARD 2004 are already underway.

Goal 2 - Restore/Maintain Aesthetically Appealing Conditions - Continued

F. OC Waste Reduction Program - Continued

OCDC – ISO 14000 Registration

Target: Complete ISO 14000 certification.

Timeline: Completion by fall 2004.

Progress:

The Oakland County Drain Commissioner's Office began implementing an environmental management system based on the tenants of ISO 14001:1996 in July, 2003. To date, we have identified our environmental aspects and set the criteria to determine significant environmental aspects. Goals aimed at improved environmental performance with action plans to achieve those goals have been implemented. Registration to the ISO 14001 standard is expected in the first quarter of 2005.

OCFM – Waste Reduction Program

Target: Continue Paper Recycling Program

Timeline: Ongoing

Progress:

Facilities Maintenance conducts Paper Recycling at the 52nd District Court – Novi in cooperation with the Court. During 2004, 9,095 pounds of general office paper were recycled by the Court at this location.

RCOC – Adopt-A-Road Cleanup Program

Target: Continue management of the Adopt-A-Road cleanup program.

Timeline: Ongoing

Progress:

The Adopt-a-Road program picked up approximately 300 cubic yards of trash during FY 2004.

Extras

OCPR - Litter Pickup Program

Although OCPR does not have a formal SWPPI item under OC Waste Reduction Program, OCPR staff and volunteers work very hard to maintain aesthetically appealing parklands including the appropriate deposition, storage and transportation of solid waste. Grounds maintenance staff members, volunteers and members of the Weekend Alternative program for Misdemeanants (WAM) and Trusty Crews (a community service program through the department of corrections) pick up litter on a regular basis. The OCPR Project Supervisor for construction also monitors all development projects on parkland to insure the compliance of independent contractors with Park waste management standards.

Goal 3 - Improve and Maintain River Ecosystems for Fish and Wildlife

G. River/Stream Ecosystem Improvement

OCDC – Volunteer Stream Work

Target: Publicize clean-up activities to OCDC staff and the general public through website and in-house bulletin boards.

Timeline: Ongoing

Progress:

Calendars containing detailed information regarding volunteer stream work have been posted on the OCDC web site at www.oakgov.com/drain, as well as postings on the OCDC public education bulletin boards as upcoming environmental activities. OCDC has listed at least 8 volunteer stream work events this year. For detailed information, contact Darla DiClemente in the Environmental Unit.

OCDC – Publicize Habitat Related Events

Target: Publicize habitat related events via the Oakland County Website and bulletin boards for employees and building visitors.

Timeline: Ongoing

Progress:

Calendars containing detailed information regarding habitat-related events have been posted on the OCDC web site at www.oakgov.com/drain, as well as postings on the OCDC public education bulletin boards as upcoming environmental activities. OCDC has listed a minimum of 12 habitat related events. For detailed information, contact Darla DiClemente in the Environmental Unit.

OCPEDS – Riparian Lands Mapping

Target: Prepare maps and descriptions of riparian landscapes in Oakland County as staff time allows.

Timeline: Ongoing

Progress:

OCPEDS completed riparian mapping for the entire Rouge Green corridor area (85,900 acres).

OCPEDS – MNFI Mapping & Community Distribution

Target: Maintain and update MNFI Oakland county Potential Natural Areas coverage and distribute to communities and environmental groups, as staff time allows

Timeline: Ongoing

Progress:

47 requests filled for reports, maps, and GIS files.

Goal 3 - Improve and Maintain River Ecosystems for Fish and Wildlife - Continued

G. River/Stream Ecosystem Improvement- Continued

Extras

OCPR – Pebble Creek BMPs

Although OCPR does not have a formal SWPPI item under River/Stream Ecosystem Improvement due to their lack of information on the health of Pebble Creek which cuts through Glen Oaks County Park. Glen Oaks Grounds Maintenance staff has been working to improve the health of the creek as part of their Best Management Practices on the Golf Course. They have maintained and expanded vegetative buffers and planted shade trees along the stream to enhance riparian habitat and provide thermal protection for the stream.

Goal 4 - Minimize the Amount of Soil Erosion and Sedimentation

H. Soil Erosion Program

OCDC – Soil Erosion Program

Target: Continue to operate Soil Erosion Program, including Staff Training as needed.

Timeline: Ongoing

Measuring Progress: Report statistics for the Phase II Annual Report.

Progress:

The OCDC Soil Erosion Unit has implemented a new fee structure including a permit class system to identify the severity of earth disruption and assign appropriate inspection priorities.

The soil erosion database has been updated to retrieve daily inspections, as well as providing information utilized in monthly quality assurance monitoring.

We have also added three inspectors, one full-time clerical position and one part-time clerical position to address growing soil erosion demands. All inspectors are DEQ certified and as part of our continual education process. They are required to attend a minimum of one seminar per year. Currently, we are developing a training plan for clerical staff to receive soil erosion training as well.

OCDC – Catch Basin Cleaning

Target: Continue to clean catch-basins as part of drain maintenance on a three-year cycle.

Timeline: Ongoing, three-year cycle.

Progress:

OCDC cleaned five catchbasins, as requested, during FY2004.

Goal 4 - Minimize the Amount of Soil Erosion and Sedimentation - Continued

H. Soil Erosion Program - Continued

OCFM – Soil Erosion Program

Target: Continue to include soil erosion requirements in project specifications and to direct contractors to OCDC for soil erosion requirements and permits.

Timeline: As Required

Progress:

The 52nd District Court – Novi is a leased facility and Facilities Management is not responsible for Soil Erosion at the site.

OCFM – Street Sweeping Program

Target: Continue to conduct street sweeping programs on properties managed by OCFM.

Timeline: Ongoing

Progress:

The 52nd District Court – Novi is a leased facility and Facilities Management is not responsible for Soil Erosion at the site.

RCOC – Curb & Gutter Sweeping Program

Target: Continue to conduct Curb & Gutter Sweeping programs on properties managed by OCFM.

Timeline: Ongoing

Progress:

RCOC reported during FY2004 that the following curb miles have been swept to keep our waterways clean:

- *State Roads: 432 curb miles are swept four times per year,*
- *Primary Roads: 438 curb miles are swept four times per year, and*
- *Local Roads: 438 curb miles are swept once per year.*

RCOC – Soil Erosion Program

Target: Continue to serve as an Authorized Public Agency for soil erosion and sedimentation. This includes implementation and enforcement of our SESC Operating Guidelines and conducting internal SESC inspections and project reviews.

Timeline: Ongoing

Progress:

The Environmental Concerns Department at RCOC has conducted internal SESC inspections for a second year.

RCOC – Catch Basin Vactoring

Target: Continue the regular cleaning of storm sewer catch basins with Vactors.

Timeline: Ongoing

Progress:

The RCOC reports that during FY 2004, approximately 4,600 structures will be cleaned. This includes work performed by RCOC forces and contracted services. Contact Val Gomulka for more information.

Goal 4 - Minimize the Amount of Soil Erosion and Sedimentation – Continued

RCOC – Stream Crossing Grading

Target: Continue to use the video “Keep an Eye on It” to train in-house staff on proper grading practices at stream crossings.

Timeline: Provide each county and MDEQ Soil Erosion Staff with an initial copy, and as requested.

Progress: Three copies of the video “Keep An Eye on It” were mailed out as requested by various parties.

(C.) Grant Facilitation Assistance

OCDC – Edwards Streambank Stabilization for West Bloomfield Township

Target: Act as project manager and grant administrator for duration of project.

Timeline: Scheduled for completion of construction by the end of 2004

Progress:

Construction of the Edwards Streambank Stabilization Project commenced on August 1, 2004 and is approximately 40 percent complete and on schedule to be completed by November 30, 2004. This project consists of 1,100 feet of innovative streambank stabilization measures including a vegetated buffer zone and planted geocells near the low flow channel. Additionally, both live staking and plug plantings are incorporated into this project for a more natural alternative to traditional streambank stabilization methods. This project is partially funded through an EPA grant received by OCDC.

OCDC – Taub Drain Streambank Stabilization for West Bloomfield Township

Target: Act as project manager and grant administrator for duration of project.

Timeline: Scheduled for completion of construction by end of 2004

Progress:

Taub Drain Streambank Stabilization Project is currently in the final design stage. Preliminary plans have been submitted and reviewed by both West Bloomfield Township and OCDC. The plans have been submitted to MDEQ for review and will be scheduled for the West Bloomfield Township Wetland Review Board and Woodland Review Board during the fall of 2004. Applied Science, Inc. submitted an application for Rouge Program Office Round VI funding for the Taub Drain Streambank Stabilization project in April of 2004. The project was not funded.

OCDC – FEMA Project Sites for Bloomfield Township

Target: Act as project manager and grant administrator for duration of project.

Timeline: Projects are in study phase for 2004 with design and construction following in 2005 and 2006.

Progress:

FEMA Project Sites for Bloomfield Township are in the preliminary design stage. Preliminary sketches have been prepared by Applied Science, Inc. in order to finalize concepts, create cost estimates, and begin property/easement acquisition. Once preliminary plans have been approved by Bloomfield Township and OCDC, final contract documents can be prepared. Target completion is end of 2005.

Goal 4 - Minimize the Amount of Soil Erosion and Sedimentation – Continued

(C.) Grant Facilitation Assistance- Continued

OCDC – Rouge Main 1-2 Inventory Studies- Streambank Erosion Inventory

Target: Act as project manager and grant administrator for duration of project. Pursue additional grant funding for project extension if requested by communities.

Timeline: Scheduled for completion by the end of 2004

Progress:

As of September 2004 the Streambank Erosion Inventory Project is 90% complete for the 10 participating communities (Village of Beverly Hills, Village of Bingham Farms, Birmingham, Bloomfield Hills, Bloomfield Township, Farmington Hills, Rochester Hills, Southfield, Troy, West Bloomfield Township). In total, the streambank inventory covered 89.2 miles where the streambank condition was logged and photo-documented at more than 2000 sites. The sites were scored and ranked for prioritization of future improvement projects. Each Community received a separate report summarizing the status of their community's streambank findings. Tasks remaining include choosing which of the severely ranked sites will be further studied with conceptual designs and cost estimates prepared. This project is on schedule for completion by November 30, 2004.

Goal 5 - Minimize Flow Variability and Associated Negative Impacts

(C.) Grant Facilitation Assistance

OCDC Franklin Branch Study Grant for Franklin Drainage District

Target: Act as project manager and grant administrator for duration of project.

Timeline: Project schedule for completion by Dec 2004

Progress:

Data collection will continue throughout the modeling efforts. Final subarea delineations have been made within the watershed. The hydrologic model has been finished and awaiting calibration. The hydraulic model has been populated with the survey information of the non-FEMA studied reaches of the waterway. Sufficient USGS gage and rain gage information has been collected to begin model calibration. Several memorandum have been completed that will be used in the final report.

Milestones for September 2004 include: filling in the necessary data gaps required to continue with the modeling efforts, calibrate the hydrologic and hydraulic model,

Goal 5 - Minimize Flow Variability and Associated Negative Impacts - Continued

(C.) Grant Facilitation Assistance - Continued

OCDC - Rouge Main 1-2 Inventory Studies- Detention Pond Inventory

Target: Act as project manager and grant administrator for duration of project. Pursue additional grant funding for project extension if requested by communities.

Timeline: Scheduled for completion at the end of 2004.

Progress:

As of August 6, 2004, the Detention Pond Inventory Project was approximately 85% complete for the seven participating Rouge Main 1-2 Subwatershed communities (Village of Beverly Hills, Village of Bingham Farms, Bloomfield Twp., Rochester Hills, Southfield, Troy, West Bloomfield Twp.). A total of 569 detention ponds have been identified to date. Once the ponds are located, a review of each plan and file is conducted to fill in the database fields with available information. A field inspection of each pond is then conducted to verify as-builts drawings and locate problem areas for possible water quality improvement.

Each pond is ranked for prioritization of future capital and O&M improvement projects. Tasks remaining include selecting which of the many severely ranked sites will be further studied with conceptual designs and cost estimates prepared. This project is currently on schedule for completion by November 30, 2004.

OCDC – USGS Stream Gauges

Target: Continue to financially support seven USGS stream gauges in Oakland County for flow information. Four of the seven stream gauges are located within the Rouge River Watershed.

Timeline: Ongoing, as budget allows.

Progress:

Funding has been continued for the existing seven stations and one additional station has been added for the Franklin branch of the Rouge River.

Extras

OCPR – Stormwater BMPs and Limited Imperviousness

Although OCPR does not have a formal SWPPI item under Goal 5, it is worth mentioning, however, that OCPR is trying to minimize the negative impacts of flow variability by efforts to restrict parkland development and to implement Best Management Practices into the design of new facilities. OCPR has established a policy of 70% undeveloped to 30% developed in order to minimize the amount of impervious surfaces and preserve natural areas. OCPR Design and Development department has incorporated bio-swales, stone rip-rap water control structures and vegetative buffers into new construction projects to mitigate the flow of stormwater. Only vegetative buffers have been utilized at Glen Oaks at this point because of the age of the park and the lack of recent site modifications.

Goal 6 - Maximize Community Assets Related to the River

I. Improve Recreational Use

OCPEDS – Countywide Landscape Ecosystem Vision Map & Greenways Planning Support

Target: Assist the Oakland County Natural Area Advisory Group in developing a county-wide landscape ecosystem vision map outlining opportunities, planning process, tools and techniques and funding sources, as staff time allows.

Timeline: Ongoing

Progress:

Three Natural Area Advisory Group meetings have been held in 2004. In addition, planning has been started for an ecosystem vision map.

OCFM – Pathway Program

Target: As funding permits, implement the pathway program on the Service Center.

Timeline: To be completed when funding permits

Progress:

Pathway is currently in place across the entire length of the 52nd District Court – Novi property connecting the property with adjacent properties including a natural wetland area.

OCPR –Recreational Use

Target: OCPR will continue its efforts to provide access to lake, riparian and wetland habitats through universally accessible trails, piers and boardwalks.

Timeline: Ongoing

Progress:

Glen Oaks Ground Maintenance and Conference Center staff members continue to utilize the Pebble Creek riparian area as a back-drop for park recreational activities. Universal access around the riparian area is provided by golf carts on a series of paved cart paths. Views of the area are maintained by selective trimming. Educational materials on exotic species removal have been distributed to park staff and will commence in fall 2004.

OCPR is mandated by the 2002 Recreational Master Plan Strategic Objectives provide access to natural areas that have been created to preserve valuable natural resources. OCPR continues to add to our system of trails, boardwalks and nature center facilities to provide such access. In 2003, OCPR completed a boardwalk to take Independence Oaks park visitors into wetland habitat in the Headwaters of the Clinton River. In 2004, OCPR submitted a Michigan natural Resources Trust Fund grant application for construction of a boardwalk at Independence Oaks that would span the Clinton River headwaters and three associated wetland habitats.

Goal 6 - Maximize Community Assets Related to the River - Continued

J. Lake Improvement Activities

OCDC – Lake Improvement Board Assistance

Target: Continue to serve (as required by statute) on Lake Improvement Boards acting as a liaison between the Lake Improvement Board and the Drain Commissioner's Office for technical expertise and public education opportunities and materials. Post Lake Improvement Board Manual, developed by OCDC, on OCDC website.

Timeline: Ongoing

Progress: *The OCDC Lake Improvement Board manual and the meeting schedule are posted on the OCDC website at www.oakgov.com/drain. For detailed information, contact Darla DiClemente in the Environmental Unit.*

Extras

OCPR – Lake Improvement BMPs

Although OCPR does not have a formal SWPPI item under Lake Improvement Activities, it is important to note that OCPR has implemented Best Management Practices (BMPs) such as the reduction of fertilizers and pesticides near the lakes on or adjacent to park property. OCPR will continue to explore the use of other BMPs such as vegetative buffers, interpretive signage, and integrated pest management.

OCPR also supports the efforts of community lake improvement boards by hosting the composting of aquatic weeds at Orion Oaks County Park.

Goal 7 - Preserve and Enhance the Quality of the Great Lakes

K. Public Education (OC Residents)

OCDC – Schools Program

Target: Support children's education programs throughout the Rouge River Watershed.

Timeline: Ongoing

Progress:

OCDC has provided two employees to one Career Day Program and our watershed model, the Enviroscope®, was utilized in three schoolroom presentations. This information is captured in excel format at N:\EC\Env\UnitInfo\Tracking&Status\requesttracking.xls.

OCDC: U of M Dearborn Water Festival

Target: Participate as a sponsor in the U of M Dearborn Water Festival by providing staff and expertise for presentations and/or displays as funding and staff time permits.

Timeline: One Water Festival Annually

Progress:

OCDC provided three employees to participate in the U of M Dearborn Water Festival. OCDC employees were presenters of an Illicit Discharge Elimination Program and a stormwater display. This information is captured at N:\EC\Env\UnitInfo\Tracking&Status\requesttracking.xls.

Goal 7 - Preserve and Enhance the Quality of the Great Lakes - Continued

K. Public Education (OC Residents) - Continued

OCDC: Rouge River Water Festival at Cranbrook Institute of Science

Target: Participate as a sponsor in the Cranbrook Water Festival by providing staff and expertise for presentations and/or displays as funding and staff time permits.

Timeline: One Water Festival Annually

Progress:

The Rouge River Water Festival is an interactive learning event for fifth grade students located in the Rouge River Watershed. This years Water Festival (September 16, 17, 23 and 24, 2004) saw approximately 3,000 students.

OCDC provided seven employees to participate in the Rouge River Water Festival. OCDC employees were presenters, exhibitors, and guides for the students. Detailed information is captured in excel format at N:\EC\Env\UnitInfo\Tracking&Status\requesttracking.xls.

RCOC – Watershed Signage

Target: Support coordination of signage of waterways for major road/stream crossings on County owned roads. Develop maps and estimates of probably sign locations to aid CVTs

Timeline: Estimates completed by September 2004.

Progress:

The estimated number of road/stream crossings for possible watershed signage was calculated and forwarded onto OCDC to aid the CVTs. RCOC continues to support drain stenciling and watershed signage.

OCPEDS – Presentations and Displays

Target: Provide displays and presentations for one water-quality related event within the Rouge Watershed.

Timeline: Within one year.

Progress:

Presentation created for Rouge River Water Festival at Cranbrook on 9/24/04.

OCPEDS – Special Topic Seminars

Target: conduct one Special Topic Seminars on an Environmental Stewardship Topics.

Timeline: Within one year.

Progress:

OCPEDS organized and held a Planner's Gathering Luncheon on 6/4/04. The seminar included a speaker on Leadership in Environmental Energy and Design (LEED) and sustainable stormwater. LEED consists of standards for environmental design in planning, site selection, and construction. LEED is a program of the Unites States green Building Council. Web site: <http://www.usgbc.org/>

Goal 7 - Preserve and Enhance the Quality of the Great Lakes - Continued

K. Public Education (OC Residents) - Continued

OCPEDS – Environmental Stewardship Website

Target: Build and maintain existing OC Environmental Stewardship Website to provide current and accurate information for OC employees and citizens.

Timeline: Ongoing

Progress:

OCPEDS continues to host the OC Environmental Stewardship website at http://www.oakgov.com/peds/program_service/ess.html

OCDC – Presentations and Displays

Target: Provide displays and presentations for water-quality related events, as requested and as staffing permits.

Timeline: Ongoing

Progress:

OCDC EU has provided at least seven displays and two presentations based on unit tracking information regarding the display boards and staff services for presentations are posted on our website. Detailed information is at: N:\EC\Env\UnitInfo\Tracking&Status\requesttracking.xls.

OCDC – Technical Support

Target: Provide technical support, equipment, information, and referrals to water-quality-related interest groups, committees, and councils, upon request and as staffing permits.

Timeline: Ongoing

Progress:

All members of the OCDC Environmental Unit routinely provide technical assistance to any citizen, municipality, or coworker requesting guidance or information. It is the policy of the drain office to never leave a request unanswered. All requests for information or assistance to the Environmental Unit are tracked in-house via a shared electronic file. Technical assistance during the 1994 fiscal year have included presence at municipal meetings to explain Phase II, coordination of meetings for subwatershed groups, participation in regional Phase II efforts, supply of electronic guidance documents, public education supplies, in addition to contact information and referrals and answers to technical questions.

Goal 7 - Preserve and Enhance the Quality of the Great Lakes - Continued

K. Public Education (OC Residents) - Continued

OCHD – Presentations and Displays

Target: Provide displays and presentations for water-quality related events, as requested.

Timeline: Ongoing

Progress:

The Oakland County Health Division provides on-site sewage disposal informational presentations on an “as requested” basis. For FY2004 fiscal year, OCHD has provided three (3) trainings in conjunction with the Michigan State University Cooperative extension’s Water Quality Program. Approximately 135 people were educated on groundwater pollution, on-site sewage disposal maintenance and basic water well function. These training were held in various locations listed below:

- *Franklin: Approximately 20 attendees*
- *Troy: Approximately 80 attendees*
- *Independence: Approximately 35 attendees*

The Michigan State University Cooperative Extension organizes and administers these outreach programs. Records of the trainings are held in their offices.

OCHD – Riparian Newsletters

Target: Mail Riparian newsletters with beach contact letters at the beginning of the beach monitoring season.

Timeline: Summer 2004

Progress:

The Oakland County Health Division has continued it’s monitoring activity of inland lakes during the 2004 bathing beach season. This is not a mandated program. A total of 105 beaches on 63 different lakes were sampled for e-Coli. The sampling program encompassed nine weeks and began the week of June 7, 2004. A total of 945 sampling events were conducted between June 7 and August 9, 2004 consisting 2,837 individual samples.

Fourteen of the 2004 beaches were located in the Rouge River Watershed:

- *4 beaches on Walled Lake (Walled Lake)*
- *5 beaches on Walnut Lake (West Bloomfield)*
- *2 beaches on Gilbert Lake (Bloomfield)*
- *3 beaches on Upper Long Lake (Bloomfield)*

Of the total 45 beach closures during the 2004 season, two of the closures occurred in the Rouge River Watershed on Gilbert Lake in Bloomfield due to elevated e-Coli levels.

At the beginning of each bathing beach season, notifications are sent to the individual cities, villages or townships (CVT) in which the beach is located as notification that sampling will occur. These same letters are also mailed to the contact person of record for the individual bathing beaches. 28 CVTs were included in the 2004 season. One hundred and ten (110) Waterside Living- a newsletter for Riparian landowners in the Rouge River Watershed newsletters were distributed with these letters the week of June 7, 2004.

Goal 7 - Preserve and Enhance the Quality of the Great Lakes - Continued

K. Public Education (OC Residents) - Continued

Extras

OCDC – Public Education Bulletin Boards

The OCDC Environmental Unit creates and maintains public education bulletin boards, in the main lobby, focusing on pollution prevention and water quality. As part of the bulletin boards, 85 upcoming environmental activities were posted.

The public education boards are designed to education Oakland County residents and employees, in addition to supporting a regional public education outreach campaign facilitated by Southeast Michigan Council of Governments (SEMCOG). For detailed information, contact Darla DiClemente in the Environmental Unit. Topics displayed on the public education bulletin boards are tracked, all environmental activities that have been posted are captured, and the SEMCOG Regional Public Education Outreach Calendar is available.

OCDC – Public Education Request Tracking

The OCDC Environmental Unit created an excel spreadsheet to capture public education requests, this year more than 100 requests were processed. For detailed information, contact Darla DiClemente in the Environmental Unit.

OCDC – Watermark Newsletter

The OCDC Environmental Unit had 13 environmental articles published in the last four issues of the OCDC Watermark newsletter. The Watermark is a quarterly newsletter. The topics, article copy and actual newsletters are available upon request.

OCDC – Watershed Model, the Enviroscope®

The OCDC Environmental Unit has a watershed model, the Enviroscope®, available for use. The watershed model has been utilized five times addressing Oakland County residents at various events in addition to being used for school programs. For detailed information, contact Darla DiClemente in the Environmental Unit.

OCPR – Riparian Education Efforts

Although OCPR does not have a formal SWPPI item under Public Education for the Glen Oaks facility, interpretive signs for the vegetative buffers, natural areas and Pebble Creek have been budgeted for FY 2005.

OCPR – Naturalist Programs

OCPR has continued to provide naturalist programs through the nature centers at Independence and Lyon Oaks. Naturalists at Independence Oaks were able to utilize the recently created headwaters boardwalk to host interpretive programs that focused on wetlands ecology. OCPR is exploring the use of local artistic talent to create a photographic mural of the Clinton River Watershed for the Lewis Wint Nature Center.

Goal 7 - Preserve and Enhance the Quality of the Great Lakes - Continued

M. Regional Public Education Coordination - Continued

OCDC - Regional Survey

Target: Participate in regional survey on watershed-related topics to establish baseline and focus for public education campaign.

Timeline: Ongoing

Progress:

OCDC provided \$10,000 to the regional survey effort so that the major subwatersheds within Oakland County could be survey-delineated. Results from the survey will include summaries for the following subwatershed areas: Paint/Stony Creek, Upper Clinton, Clinton Min, Kent Lake, Red Run, Rouge Main, Rouge Upper, and Rouge Middle.

OCDC Environmental Unit staff attended meetings of the survey subcommittee and provided input on survey topics, priorities, and wording of questions. Results of the survey should be available in early October 2004.

Goal 8 - Integrate Stormwater Management in Planning and Land Use Approval Process

N. Staff Training in Stormwater Management

OCDC –Staff Education

Target: Create and implement an education plan to educate engineering and field staff on new stormwater BMPs and techniques.

Timeline: A draft education plan is targeted for completion by the end of 2004.

Progress:

An education plan for OCDC staff will be developed as a component of the Oakland County Public Education Plan due November 1, 2004. To date, the plan is in outline format, with needs and opportunities for each type/group of staff members. As the plan becomes more detailed and formalized, specific training opportunities will be set up and appropriate staff notified to attend. OCDC ISO requires staff to complete training evaluation forms following applicable training.

RCOC –Staff Education

Target: Provide training to appropriate RCOC staff on water quality/stormwater management.

Timeline: Prepare a draft education plan for RCOC employees by December 2004.

Progress:

RCOC is working on a draft education plan for all RCOC employees. It is scheduled for completion in 2005. Environmental Concerns staff at RCOC has worked with OCDC on some IDEP complaints what have been very educational and will be useful in training staff about illicit discharge detection and reporting.

Goal 8 - Integrate Stormwater Management in Planning and Land Use Approval Process - Continued

P. Community Planning Support - Continued

OCPEDS – OC Community Planning Inventory

Target: Continue to populate Oakland County Planning Inventory with data for 61 municipalities, as staff time allows. Publicize database to appropriate audiences via web site, as staff time allows.

Timeline: Ongoing

Progress:

The survey was distributed to eleven test communities. To date, OCPEDS has received responses from nine of those communities. OCPEDS will be distributing this survey to additional communities and compiling the data into a report and database on the OCPEDS website.

Goal 9 - Establish Financial and Institutional Arrangements for the Fulfillment of the Management Plan

Q. Drainage District Development

OCDC – Support Drainage District Development

Target: Develop a strategy to implement a comprehensive drainage district funding mechanism for the subwatershed groups.

Timeline: Ongoing

Progress:

The Oakland County Drain Commissioner's Office continues to advocate the Comprehensive Chapter 20 Drainage District as a means to finance Subwatershed Group capital and O&M projects. The Franklin Subwatershed District, a Chapter 20 Drainage District, has worked successfully on a number of stormwater projects this year and continues to be a good example to be shared with others considering the Chapter 20 Drainage District as a watershed funding option. This year we had a number of meetings with the City of Walled Lake, Commerce Township and the Village of Wolverine Lake in regards to possibly using the Chapter 20 as a Subwatershed funding mechanism.

Goal 9 - Establish Financial and Institutional Arrangements for the Fulfillment of the Management Plan – Continued

R. Oakland County Stormwater Committee (OCSC)

OCDC – Facilitate and Organize OCSC

Target: Organize, coordinate, and facilitate the OCSC to bring Oakland County into compliance with their Phase II permit.

Timeline: Ongoing

Progress:

The Oakland County Stormwater Committee (OCSC) was formed in November 2003 under the direction of the OCDC Environmental Unit Staff, for the purpose of bringing Oakland County into compliance with their Phase II Stormwater Permit.

The OCSC is comprised of representatives from appropriate Oakland County agencies and departments including: the Drain Commissioner's Office, the Road Commission for Oakland County, Oakland County Parks & Recreation, the Offices of the Oakland County Executive: the Department of Facilities Management, the Waste Resource Management and Planning and Economic Development Divisions of the Community and Economic Development Department, Central Services: the Department of Aviation and Transportation, Information Technology, and the Oakland County Health Department.

The OCSC has been working to define the existing and needed programs necessary to bring Oakland County into compliance with the Phase II storm water regulations.

The OCSC will continue to provide input and oversight into the development and implementation of the Illicit Discharge Elimination Plan (due Nov. 1, 2004), Public Education Plan (due Nov. 1, 2004), and revisions to the Storm Water Pollution Prevention Initiative, and other documents and reports as required by the Phase II Permit.

The OCSC will seek representation from other Oakland County agencies and departments as needed for Phase II compliance.

OCPEDS/OCHD/OCPR/RCOC/OCFM/OCIA - Participate as an Active Member of OCS

Target: Participate as an active member of OCS, providing expertise and assistance to bring OC into Phase II compliance.

Timeline: Ongoing

Progress:

All above entities have participated with the Oakland County Stormwater Committee and have reviewed information as provided by the other subwatershed advisory groups.

Goal 10 - Enforce Action Plans and Increase Accountability for Stormwater Management

S. Watershed/Subwatershed Participation

OCDC – Participate in Watershed/Subwatershed Groups

Target: Participate as a facilitator or member in all active Watershed/Subwatershed Groups. Coordinate with other OC agencies via the OCSC to represent other agencies as needed.

Timeline: Ongoing

Progress:

OCDC provides four employees to participate in the active watershed and subwatershed groups. Participation in the groups can be evidenced by meeting minutes.

OCDC continues to act as chair of the Main 1-2 Subwatershed group and we also coordinate several grants for this group. OCDC also serves as the facilitator for the Clinton Main Subwatershed groups.

OCPEDS – Participate in Watershed/Subwatershed Groups

Target: Participate as an active member in all active Watershed/Subwatershed Groups when applicable to address issues related to OCPEDS. Review subwatershed plan goals as they are developed to determine applicability to OCPEDS.

Timeline: Ongoing

Progress:

OC Participation in watershed/subwatershed can be evidenced by meeting minutes. Typically, OCDC attends all meetings, while RCOC, OCPR, and OCPEDS attend only select groups (where they have facilities), or where they have been requested to attend by the group's members.

RCOC – Participate in Watershed/Subwatershed Groups

Target: Participate as an active member in all active Watershed/Subwatershed Groups when applicable to address issues related to roads under RCOC jurisdiction. Review subwatershed plan goals as they are developed to determine applicability to RCOC jurisdiction.

Timeline: Ongoing

Progress:

RCOC is participating in the Clinton Main subwatershed group in coordination with OCDC, OCFM, OCPEDS, and OCPR staff. They will attend specific Subwatershed Group meetings if requested by the group.

OCPR – Participate in Watershed/Subwatershed Groups

Target: Participate as an active member in all active Watershed/Subwatershed Groups where OCPR has facilities, including attendance at selected meetings, reviewing and contributing to the drafting of relevant documents, donation of facilities and staff time to hosting meetings and programs, and the coordination of public participation and public education efforts.

Timeline: Ongoing

Progress:

OCPR is participating in the Clinton Main subwatershed group in coordination with OCDC, RCOC, OCPEDS, and OCFM staff. OCPR is keeping track of other relevant Subwatershed groups via e-mail meeting minutes, etc. They will attend specific Subwatershed Group meetings if requested by the group.

Goal 10 - Enforce Action Plans and Increase Accountability for Stormwater Management - Continued

S. Watershed/Subwatershed Participation - Continued

OCHD – Participate in Watershed/Subwatershed Groups

Target: Participate as an active member in all active Watershed/Subwatershed Groups when applicable to address issues related to OCHD. Review subwatershed plan goals as they are developed to determine applicability to OCHD.

Timeline: Ongoing

Progress:

OCHD is represented by OCDC staff at most Watershed/Subwatershed Groups. They have attended Rouge Main 1-2 SWAG meetings, as requested by the Watershed/Subwatershed group, and will do so for other groups.

OCFM – Participate in Watershed/Subwatershed Groups

Target: Review documents and meeting updates produced by the subwatershed groups where Facilities Management property is located. Participate in subwatershed group activities as it relates to managed properties.

Timeline: Ongoing

Progress:

OCFM is participating in the Clinton Main subwatershed group in coordination with OCDC, RCOC, OCPEDS, and OCPR staff.

OCIA – Participate in Watershed/Subwatershed Groups

Target: Participate as an active member in all active Watershed/Subwatershed Groups where OCIA has facilities.

Timeline: Ongoing

Progress:

OCIA is represented by OCDC staff at Watershed/Subwatershed Groups. They will attend specific meetings if requested by the Watershed/Subwatershed group

T. Good Housekeeping

OCDC – OCDC Motorized Equipment Maintenance

Target: Implement a vehicle maintenance program to minimize pollution from vehicle fluids.

Timeline: Ongoing

Progress:

OCDC contracts with an outside vendor to provide maintenance to service vehicles.

OCDC – OCDC Motorized Equipment Washing

Target: Implement a vehicle washing policy to minimize pollution from vehicle washing

Timeline: Ongoing

Progress:

OCDC contracts with an outside vendor or Central Services to wash service vehicles.

Goal 10 - Enforce Action Plans and Increase Accountability for Stormwater Management - Continued

T. Good Housekeeping - Continued

OCDC – Mowing Practices

Target: Follow mowing practices that save energy and maximize infiltration potential.

Timeline: Ongoing

Progress:

All mower blades for OCDC owned and operated mowers have been set at a height of three inches. These mowers are used for maintenance areas along drains, as well as service areas where OCDC pump stations and other equipment are located.

OCFM – Vehicle and Motorized Equipment Maintenance

Target: As funding permits, OCFM will implement a maintenance program to minimize pollution from vehicle fluids.

Timeline: Ongoing

Progress:

The 52nd District Court – Novi is a leased facility and motorized equipment is not kept on site.

OCFM – Motorized Equipment Washing

Target: As funding permits, and when practical, OCFM will use only Oakland County approved facilities for vehicle washing. When vehicles are washed on-site at the shop, approved means and methods will be followed.

Timeline: Ongoing

Progress:

The 52nd District Court – Novi is a leased facility and no motorized equipment is washed on site.

OCFM – Mowing Practices

Target: Follow mowing practices that save energy and maximize infiltration potential.

Timeline: Ongoing

Progress:

The 52nd District Court – Novi is a leased facility and Facilities Management is not responsible for this work.

OCFM – Catch Basin Cleanout

Target: Follow a program of regular catch basin inspection and cleanout.

Timeline: Ongoing

Progress:

The 52nd District Court – Novi is a leased facility and Facilities Management is not responsible for this work.

Goal 10 - Enforce Action Plans and Increase Accountability for Stormwater Management - Continued

T. Good Housekeeping - Continued

RCOC – Facility Inspection

Target: Inspect the Southfield maintenance garage which is in the Rouge watershed to ensure proper protection of stormwater and good housekeeping practices are followed. These include outfall inspection; updating Pollution Incident Prevention Plans; Salt storage is in compliance with Part 5 of 1994 PA 451; vehicle maintenance; vehicle washing; waste disposal in compliance with state/fed regulations; recycling of oil, antifreeze, batteries, scrap metal, tires, and woodchips.

Timeline: Ongoing maintenance and update PIPP by December 2004

Progress:

RCOC is currently updating the Pollution Incident Prevention Plan, which will be completed in 2005. RCOC will continue with ongoing maintenance of garages and recycling programs. The Southfield Garages will be inspected by fall of 2005 to insure proper protection of stormwater.

RCOC – SEMSIM

Target: Continue to use SEMSIM to help reduce the overall amount of salt that's used to remove ice from roads.

Timeline: Ongoing

Progress:

The RCOC now has a total of 72 trucks equipped with SEMSIM.

The first-of-its-kind Southeastern Michigan Snow and Ice Management (SEMSIM) project joins the Road Commission for Oakland County (RCOC), Wayne County Department of Public Services, the City of Detroit and the Road Commission of Macomb County in a partnership that will benefit motorists in all four jurisdictions. The Suburban Mobility Authority for Regional Transportation (SMART) is also a partner, meaning that regional mass transit will also benefit from the project. SEMSIM represents the first time that four governmental road agencies have joined forces to implement such a project.

SEMSIM is introducing cutting-edge technologies that will result in safer roads across the region and more efficient use of resources for the partner agencies. The SEMSIM technologies include:

- *Satellite-based global positioning system (GPS) vehicle tracking devices*
- *Air and pavement temperature sensors*
- *Plows sensors*
- *Computerized salt spreaders*
- *In-vehicle dashboard computer displays*
- *A 900 MHz radio system*
- *Customized computer software.*

Goal 10 - Enforce Action Plans and Increase Accountability for Stormwater Management - Continued

U. Good Housekeeping – Continued

RCOC – SEMSIM - Continued

The radio system is provided by SMART and serves as the communications “backbone” for SEMSIM. The GPS system allows the partners to track vehicles in real time, so they can see exactly where they are and what they are doing at any time. This allows the agencies to better manage their truck fleets. Each SEMSIM truck is equipped with a number of sensors that record air and pavement temperature and whether the front and ‘underbelly’ plows are up or down. This data is fed continuously to management computers via the SMART radio system. Additionally, the computerized salt spreaders continuously tell the management computers the amount of salt being spread. SEMSIM will allow all four agencies to more efficiently plow and salt their roads. This means improved service for the motorists traveling in Southeast Michigan and reduced costs for the road agencies. SMART will benefit by receiving real-time information about what roads have been salted and plowed, which will help it better manage its fleet during difficult driving conditions.

Extras

OCPR – Stewardship Action Group

OCPR has created a Stewardship Action Group for the dissemination of information and the implementation of land and water stewardship within the park system. This stewardship would include the implementation of BMPs as directed by the OCPR office of Design and Development.

Now that the mechanism for implementation has been established, budget allowances for parkland stewardship have been incorporated into the 2005 Grounds Maintenance Budgets for each of the 11 county parks.

Stewardship actions anticipated in the fiscal year 2005 will begin in fall 2004.