



**Robert A. Ficano**  
County Executive

To: Alliance of Rouge Communities

From: Kelly A. Cave, P.E. *Kelly A. Cave*  
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Wayne County Storm Water Coordinator

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Subject: Annual Report: January 1 – December 31, 2011  
Wayne County Certificate of Coverage (COC) MIG610040

Hello all. I am pleased to announce that Wayne County recently submitted our annual Storm Water Permit Compliance Report to the Michigan Dept of Environmental Quality (MDEQ) documenting the numerous activities conducted by County departments during 2011 to manage storm water from our operations and minimize the amount of storm water pollution that enters the County's rivers, lakes, and streams. Wayne County's annual storm water permit compliance reports are available online at

[http://www.waynecounty.com/doe\\_wqm\\_res\\_stormwm\\_permit.htm](http://www.waynecounty.com/doe_wqm_res_stormwm_permit.htm).

Some highlights of storm water management activities completed by the County during 2011:

- The combined efforts of the Department of Public Services (DPS) and the Environmental Health Division identified approximately 95 improper connections of sanitary sewers or failing septic systems connected to the County's rivers, lakes, and streams. Elimination of these sources means that approximately 6.5 million gallons of polluted storm water will no longer be discharged into Wayne County waterways this year and each year hereafter. Efforts to identify illicit discharges during 2011 included facility inspections (226), complaint investigations (255), septic system inspections (132), observations by County field staff, and other efforts.
- Twenty two sites where illegal dumping had occurred were cleaned up via Wayne County's CLEAN Program administered by the DPS-Land Resources Management Division. Approximately 1,301 cubic yards of waste and 4,192 tires were cleaned up as a result of these projects.
- DPS-Roads Division swept over 2,733 miles of roadway and properly disposed of over 16,600 cubic yards of street sweepings, catch basin cleanings and roadside trash. Approximately 137 groups picked up trash along 166 miles of roadway under the County's Adopt-a-Road program.
- DPS-Land Resources Division held 4 household hazardous waste day events and 4 computer/computer peripheral collection events. Over 5,474 residents participated in the events resulting in the proper disposal and/or recycling of over 1,325,688 pounds of material.

- Hundreds of Wayne County staff received training on topics related to preventing pollution from reaching our waterways. Topics ranged from soil erosion and sedimentation control practices to proper calibration of deicing equipment to soils training for onsite sewage disposal system installations.
- 120 new construction projects were reviewed to ensure compliance with the Wayne County Storm Water Ordinance. There were 620 construction approvals issued and inspection was provided for approved projects; 300 projects were completed in 2011 and 90 projects are still under construction. Soil erosion control permits were issued for 192 projects, and inspection was provided for approved projects. The Environmental Health Division inspected 543 swimming pools for proper plumbing and 132 septic systems to ensure that they were functioning properly.
- Compliance activities for Wayne County environmental ordinances included 44 notices issued for major violations of the Soil Erosion and Sedimentation Control Ordinance. For the County Sewer Use Ordinance, 2 municipal civil infraction were issued during 2011 while 24 industrial dischargers were recognized by the County's Industrial Pretreatment Program as members of the *Zero Violations Club* in 2011.
- Storm water management techniques and proper soil erosion and sedimentation control were used for Wayne County construction projects. For example, the Sheldon Center Road project included use of four Vortech<sup>TM</sup> swirl concentrators to remove pollution prior to discharge of road runoff to the Rouge River. Stream bank stabilization and natural channel design was included where possible in County Drain improvement petition projects, and woody debris management techniques are employed where possible in County Drain maintenance activities.
- Staff across various departments and division continue to blend pollution prevention activities into existing services to provide cost-effective benefits. For example, "no mow" or "grow zones" have been established at 29 sites in Parks properties. These grow zones infiltrate storm water into the ground and reduce storm water runoff and associated sediment and nutrient pollution loadings to the Rouge River. Significant cost savings have been realized from reducing the amount of land that is regularly mowed. During 2011, construction was initiated to install an additional 15 acres of grow zones at three sites within Wayne County Parks, designs were completed for seven grow zone sites within County road right of ways and 175 trees were planted along County roads in 4 locations. Additionally, over 4,150 tree seedlings were distributed to and an additional 150 trees planted at Michigan Green Schools in partnership with communities and schools.
- Pollution Prevention / Good Housekeeping techniques continue to be incorporated as appropriate into maintenance activities for County Drains, Parks and Roads, including associated maintenance yards. Thirteen DPS maintenance yards have been inspected and pollution prevention action plans have been developed and issued for ten of them. Seventy eight DPS staff attended the Municipal Good Housekeeping and Storm Water Operator training held in 2011.

- Numerous workshops, presentations and/or demonstration projects were conducted for County residents and businesses on a variety of pollution prevention and environmental stewardship topics. For example, WC Parks reached over 7,616 children and 3,678 adults via dozens of naturalist programming activities conducted by the Nankin Mills and Crosswinds Marsh naturalists.
- There were 141 schools recognized as Wayne County Green Schools for implementing a minimum of 10 specific energy-saving and environmentally friendly activities in 2011. This program has grown from 12 schools in the first year (2008). Wayne County's program is the second largest Green Schools Program in Michigan.
- Over 120,000 pieces of educational public information materials were distributed to residents and businesses throughout Wayne County's watersheds during 2011. Dozens of different materials were distributed, including 7 *Simple Steps to Clean Water* tip cards, *Disposal Tips for Home Medical Waste & Pharmaceuticals* brochure, *Your Septic System: A Reference Guide for Homeowners* brochure, *The Benefits of Trees* booklet, *Bennett Arboretum Trail Map and Interpretive Guide*, *Frog Facts* bookmark, and *Wayne County Grow Zone* signage. Additionally, watershed/storm water awareness displays were stationed at 18 events/locations across the County.
- In 2011, Wayne County continued to work together with other agencies to obtain grants under the Great Lakes Restoration Initiative to implement illicit discharge toxics reduction activities and establish additional grow zones, tree plantings and other green infrastructure projects along County Roads and properties. These grants offset the costs associated with implementing the required storm water management activities of Wayne County and our communities.

The many activities that Wayne County completes to prevent storm water pollution from reaching our waterways is having a measurable, positive impact on the environment and our quality of life in Wayne County. For example, caddis flies sensitive to water quality (the Northern case maker caddis (family Limnephilidae), long horned case makers (Family Leptoceridae) and Giant case maker caddis (family Phryganeidae), were found at several Lower Huron and Combined Downriver sites in 2011. Macroinvertebrate trend analysis indicates a significant improving trend in spring data (2004-2011) in the Lower Huron, Ecorse Creek and Combined Downriver watersheds.

Thank you for partnering with Wayne County to manage storm water in Wayne County in accordance with our municipal storm water discharge permits for the protection and restoration of area rivers, lakes and streams.. I look forward to working with you again this year on these activities and to submitting another positive report for 2012.