
Oakland County Phase II Stormwater Biennial Progress Report
Summary for Community Use
Prepared by the Oakland County Water Resources Commissioner's Office
October 1, 2017 – September 30, 2019

The Oakland County Water Resources Commissioner's Office (WRC) has prepared this summary to assist Oakland County communities in preparing their Phase II Stormwater Biennial Progress Report. The following items represent activities implemented by Oakland County during fiscal years 2018 and 2019 (FY 2018/2019) to protect and restore water resources throughout Oakland County. A complete copy of Oakland County's 2018-2019 Stormwater Biennial Progress Report will be available on the Oakland County Web site: www.oakgov.com/water, after November 1, 2019. For additional information on the programs listed below or other environmental programs offered by the WRC, please contact our Environmental Team at 248-858-0958 or envreq@oakgov.com.

Environmental Program Highlights

Electronics Recycling Event

Oakland Schools hosted an electronics recycling event at its Administrative Campus in Waterford on June 5, 2019. Fifty-four (54) cars attended and a total of seven (7) Gaylords and 3,435 pounds of e-waste was properly collected and disposed of. This was an opportunity for residents of Oakland County to have a safe way to dispose of unwanted electronics so they could be recycled and kept out of landfills.

Household Hazardous Waste Recycling

The Oakland County Waste Resource Management Division sponsored ten (10) household hazardous waste disposal days in FY 2018/2019:

- October 28, 2017 at Wildwood Amphitheatre in Orion Township,
- April 28, 2018 and April 13, 2019 at Oxford Middle School in Oxford Twp,
- June 23, 2018 and June 22, 2019 at Oakland University in Rochester,
- July 28, 2018 at North Sashabaw Elementary in Independence Twp,
- September 8, 2018 and July 20, 2019 at the Oakland County campus in Pontiac, and
- October 13, 2018 and September 7, 2019 at Oakland Community College – Highland Lakes Campus in Waterford Twp.

More than 1.4 million pounds of waste was collected during the past ten collection events. Over the past sixteen years, residents of more than 53,000 households have disposed of nearly 7 million pounds of hazardous materials which have been recycled or disposed of properly.

Information on household hazardous waste disposal in Oakland County is available online at: www.nohaz.com.

Michigan Green Schools Program

The Michigan Green Schools program assists all Michigan schools – public and private – in achieving environmental goals. These goals include protecting the air, land, water and animals of our state along with world outreach through good ecological practices and the teaching of educational stewardship. Students from pre-kindergarten through high school seniors are targeted. In FY 2018, 139 Oakland County schools have earned the Michigan Green School designation. Thirty-two (32) of the schools also received the special designation of Emerald Schools and 87 schools earned the Evergreen Schools status. An award ceremony was held on April 26, 2018 at Oakland Schools to honor the schools.

In FY 2019, 138 Oakland County schools earned the Michigan Green School designation. Thirty-two (32) of the schools also received the special designation of Emerald Schools and 80 schools earned the Evergreen Schools status. Twenty-one (21) of the 28 public school districts were represented in the program this year. An award ceremony was held at the Detroit Zoo on April 23, 2019 with close to 500 attendees to honor the schools.

Information on the program for Oakland County is available on Oakland Schools' [website](#).

Operation Medicine Cabinet Program

There are currently 36 drop-off sites throughout Oakland County where unused pharmaceuticals can be properly disposed of. Locations include Oakland County Sheriff's offices in:

Addison Twp, Brandon Twp, Commerce Twp, Highland Twp, Independence Twp, Lyon Twp, Oakland Twp, Orion Twp, Oxford Twp, Pontiac, Rochester Hills and Springfield Twp, as well as the Police Departments in Auburn Hills, Beverly Hills Village, Birmingham, Clawson, Farmington Hills, Holly, Keego Harbor, Madison Heights, Rochester, Royal Oak, Southfield, Troy, West Bloomfield and White Lake. Additional information can be found online [here](#).

New in FY 2017, a GIS-based online application is available for the public to see drop-off sites throughout the county and is available [here](#).

Stormwater Utility Legislation

In 2014, the WRC convened a workgroup of stakeholders to assemble language for a bill that will help clarify how communities can establish dedicated funding sources for managing their stormwater systems. A bill to enact new law known as the "Stormwater Utility Act" has been introduced in Lansing many times over the past several years without gaining enough momentum to be addressed by the full Legislature. With the need for this legislation continuing to rise, House Bill 4691, with identical language from prior bills, was introduced again in June 2019 by Representative Michal Webber and has bi-partisan co-sponsorship support. Work on this effort and related resources are available on the WRC's [website](#).

Wildlife Habitats of Oakland (WHO) Certification

Wildlife Habitats of Oakland (WHO) is a collaborative effort among leading conservation groups, county government and nonprofit agencies in Oakland County. WHO is working in conjunction with the National Wildlife Federation to accomplish the following goals:

- Create a network of wildlife-friendly habitats in residential yards, businesses, parks, trails and other publicly owned lands
- Raise awareness about the importance of pollinators and other indicator species
- Recognize the significant role that native plants have in fostering a healthy environment

- Certify all of Oakland County as a National Wildlife Federation Community Wildlife Habitat

More information is available on the WHO [website](#).

WRC Storm Drain and Sanitary Sewer Projects Under Development, Under Construction and Recently Completed

The WRC has a complete listing of current, future and recently completed storm drain and sanitary sewer projects that are implemented to protect our natural resources from water pollution and are available on WRC's [website](#).

Public Education Program Highlights

Art-Fish-Fun Festival

The WRC, in partnership with The Art Experience in Pontiac, Pure Oakland Water, the City of Pontiac and the Clinton River Watershed Council, hosted the fifth and sixth annual Art-Fish-Fun Festival in Beaudette Park in Pontiac on June 9, 2018 and June 8, 2019, respectively. The event is aimed to educate and engage the public in environmental education in a fun-filled way. In addition to environmental exhibitors, the event features fishing with Water Resources Commissioner, Jim Nash, and a barbeque lunch. In FY 2018, there were more than 500 visitors and 37 exhibitors. In FY 2019, there were more than 700 visitors and 36 exhibitors. Prior to the beginning of the festival, volunteers also come out to participate in a trash cleanup along the water's edge. In FY 2018, 19 volunteers collected 20 bags of trash, and in FY 2019, 22 volunteers collected 22 bags of trash.

Clinton River Water Festival

The WRC was part of the planning committee to present the 12th and 13th annual Clinton River Water Festivals at Oakland University in Rochester on May 18, 2018 and May 17, 2019. The Water Festival reached nearly 2,000 fifth grade students and nearly 345 teachers and chaperones in the Clinton River watershed.

Contractor Training Related to Stormwater Management Activities

In FY 2013, the WRC added stormwater pollution prevention language to the "Notes" section on its soil erosion and sedimentation control details sheet (available online [here](#)) as part of the WRC's Soil Erosion and Sedimentation Control Program to address the contractor training requirements of the Phase II Stormwater permit. The stormwater pollution prevention language states:

"While performing work involving grounds maintenance and/or the construction/maintenance of any infrastructure, including roads, water mains, sanitary sewers, storm drains and stormwater best management practices (BMPs), contractors shall minimize pollution from stormwater runoff that can affect water quality related to work activities. Pollutants that could impair water quality may include fuel, grease and oil, nutrients, bacteria and pathogens, litter and debris, and soil erosion and sedimentation. Applicable BMPs shall be implemented by the contractor to the maximum extent practicable to protect water quality and wildlife habitat."

For those communities that utilize WRC to administer its SESC program (which includes 21 cities, 18 townships and nine villages in Oakland County – see map of community coverage [here](#)), you would be covered by WRC's SESC program for these requirements.

Kids' Clean Water Calendar Contest

The WRC received nearly 1,300 entries from fourth and fifth grade students throughout Oakland County for the 2018 and 2019 Calendar Contests. Winning entries were included in 11,000 calendars that were distributed to homeowners, municipalities, businesses and schools throughout Oakland County.

Oakland County *Dirt Doctors* Program

The Dirt Doctors program is designed to teach children how individual actions affect our waterways. It explains the connections between vegetation, soil erosion and water quality in a fun-filled, interactive way. During FY 2018/2019, the WRC Dirt Doctors educated more than 4,000 students through 615 presentations at 26 events located in Ann Arbor, Bloomfield Hills, Dearborn, Detroit, Keego Harbor, Lake Orion, Macomb, Madison Heights, Monroe, Novi, Oxford, Pontiac, Rochester Hills, Southfield, West Bloomfield and Westland.

Oakland County Environmental/Natural Resource-Related Web Sites

The WRC continues to enhance and maintain its website: www.oakgov.com/water with county residents in mind. A separate e-mail address is used for handling environmental questions, requests for services and materials at: envreq@oakgov.com. The WRC also maintains a website on riparian education information at www.oakgov.com/riparian. The County's 24-Hour Pollution Hotline is available [here](#).

In FY2018, Oakland County Information Technology developed a Seven Simple Steps to Clean Water Story Map and that is available [here](#); a link to the Story Map is on WRC's "Seven Simple Steps to Clean Water" website [here](#). The page also promotes the 24-Hour Pollution Hotline and viewers can explore land use changes from 1940 vs. 2017 imagery within Oakland County.

The Oakland County Planning and Economic Development department continues to host and update the Oakland County Environmental Stewardship [website](#).

The Oakland County Parks and Recreation Commission also hosts a comprehensive [website](#) which features a calendar of events, stewardship opportunities, links to countywide parks and trails and other natural resource-related information for Oakland County.

MSU-Extension has a host of natural resource education resources available on its website [here](#).

Oakland County *Enviroscape™ Watershed Model* Program

The WRC *Enviroscape™* Watershed Model program teaches students about watersheds and how individual actions affect our waterways, as well as how pollution moves throughout a watershed. Students are taught how to prevent pollution through everyday actions. During FY 2018/2019, more than 2,000 students in 162 different presentations at 17 different events located in Birmingham, Bloomfield Hills, Dearborn, Ferndale, Macomb, Pontiac, Rochester Hills, Troy, West Bloomfield and White Lake Twp were reached.

Oakland Lakefront Lifestyles Magazine Advertisements

Public education messages were placed in the April to September issues of *Oakland Lakefront Lifestyles* magazine. The messages included pet care, fertilizers, household hazardous waste disposal, earth-friendly landscaping, septic system maintenance and storm drain awareness. *Oakland Lakefront*

Lifestyles is published monthly and reaches approximately 15,400 homeowners on any of 223 lakes within the west and central areas of Oakland County annually.

Onsite Sewage Disposal (Septic System) Maintenance Education

The WRC published an ad on proper septic system maintenance in the *Oakland Lakefront Lifestyles* magazine in its August 2018 and 2019 issues which reach 15,400 riparian homeowners annually.

Proper septic system operation and maintenance education is also provided in the [Waterfront Wisdom booklet](#).

Additionally, the Oakland County Health Department offers a septic system installer education class that instructs on the Oakland County Sanitary Code and policies related to onsite wastewater treatment systems. The class is open to contractors wishing to complete installations in Oakland County as well as private homeowners wishing to install their own septic system. There were 66 attendees in FY 2018 and 11 classes with 61 attendees in FY2019.

MSU-Extension has a website on Septic System Education available [here](#).

Regional Stormwater Summit

The 5th annual Regional Stormwater Summit was held on October 20, 2017, with approximately 250 people in attendance at Lawrence Technological University. The event is held in partnership with LTU, Pure Oakland Water and the WRC. The 6th annual Summit was held on October 5, 2018 at LTU with approximately 220 attendees. The Summit's purpose is to bring together regional stakeholders to learn more about and share ideas on the latest and greatest information related to stormwater management. All of the presentations and taped video of the event are available on the Pure Oakland Water website [here](#).

Riparian Education

In June 2008, the WRC completed the development of riparian education materials entitled, "[Waterfront Wisdom-Healthy Habits for Clean Water](#)." The materials consist of a comprehensive booklet, as well as individual pamphlets on each of the seven "Healthy Habits for Clean Water." These materials can be viewed and downloaded at: www.oakgov.com/riparian. As of September 30, 2019, more than 16,700 booklets have been distributed throughout southeast Michigan. There are still copies available free of charge upon request. The booklet has also been specifically adapted to the [Clinton River](#) and [Rouge River](#) watersheds and is available digitally.

Rouge River Water Festival

The WRC partnered with the Cranbrook Institute of Science to present the Water Festival for the Oakland County portion of the Rouge River Watershed. The 16th and 17th annual Cranbrook Water Festival provided an educational and enjoyable learning experience that supports the objectives of school science programs for fourth and fifth grade students. The Water Festivals reached more than 2,400 participants from 19 elementary schools in 12 different Oakland County Rouge Communities (Beverly Hills, Bingham Farms, Birmingham, Bloomfield Hills, Bloomfield Twp, Commerce, Farmington Hills, Franklin, Oak Park, Southfield, Troy and Walled Lake).

Illicit Discharge Elimination Program (IDEP) Summary

Oakland County 24-Hour Pollution Hotline

The WRC continues to staff the 24-hour Pollution Hotline (248-858-0931) where residents, municipalities and others can call to report surface water pollution in Oakland County.

Oakland County created this Pollution Hotline to address Phase II Stormwater Permit requirements and because individuals and municipalities wanting to report surface water pollution often were unclear about how to do so. This Hotline provides a clearinghouse for surface water pollution complaints resulting in consistent 24-hour response, or referral. Complaints are logged in a database and referred to the appropriate agency for action.

Oakland County received 30 complaints from 13 communities in FY 2018 and 49 complaints from 24 communities in FY 2019. Investigation of these complaints resulted in the identification of 45 illicit discharge sources and elimination of 44 of those sources. An illicit discharge is pollution draining to surface water or the dumping of polluting material that can impact surface water.

A summary of complaint investigations is provided in the tables below.

Summary of FY 2018 WRC Pollution Hotline Complaint Investigations

Community	Number of			Source of Discharge
	Complaints	Illicit Discharges	Illicit Discharges Corrected	
Bloomfield Twp	2	1	0	Sewage - Residential (1)
Commerce Twp	1	1	1	Oil - Illegal Dumping
Farmington Hills	4	2	2	Sewage - SSOs
Holly Township	2	0	0	Flooding / Tree removal
Madison Heights	1	1	1	Oil - Spill - Unknown Source
Oak Park	1	0	0	Flooding - Commercial Property
Oakland Twp	1	1	1	Sewage - SSO
Orion Twp	3	1	1	Odor - Landfill; Sediment - Construction Site
Pontiac	9	9	9	Grease - Illegal Dumping at restaurant; Trash - Illegal dumping; Sewage - SSO's - 5 events; Sewage - Illegal Dumping at Commercial Facility; Sewage - Broken House lead
Southfield	1	1	1	Sewage - SSO
Sylvan Lake	1	1	1	Spill - Diesel Fuel to Sylvan Lake
Troy	2	2	2	Sediment - Construction Site; Grease - Restaurant Dumping
Waterford	2	1	1	Sewage - SSO
Totals: 13 Communities	30	21	20	

(1) Ongoing investigation to locate source of sanitary discharge in residential subdivision to enclosed local road drainage system by WRC and Bloomfield Twp

Summary of FY 2019 WRC Pollution Hotline Complaint Investigations

Community	Number of			Source of Discharge
	Complaints	Illicit Discharges	Illicit Discharges Corrected	
Auburn Hills	3	1	1	Sewage -SSO (1); Plastic Plant Fire
Bloomfield Twp	2	1	1	Lime Waste - Accident /Spill (2); Algae
Commerce Twp	4	1	1	Yard Waste - Drain Cleanout
Farmington	1	1	1	Sediment - Construction Site
Farmington Hills	3	2	2	Concrete Washout - Construction Site; Paint Washout - Illegal Dumping to Commercial Property Catch Basin
Franklin Village	1	0	0	Stormwater Discharge/Flooding Complaint
Highland Twp	2	2	2	Kerosene - Gas Station Illegal Dumping; Construction Debris - Illegal Dumping
Holly Village	2	0	0	Landscaping Yard Waste Disposal (3); Property Development
Independence Twp	1	1	1	Hydraulic Fluid - Lake Weed Harvester Spill
Madison Heights	2	2	2	Cement Washout - Sidewalk/Parking Lot Replacement (4); Diesel Fuel - Spill (Unknown)
Milford	1	1	1	Hydraulic Fluid - Spill from Garbage Truck Accident
New Hudson	1	0	0	Sheen from Leaf Decay
Orchard Lake	1	1	1	Sediment - Construction Site
Oxford Twp	2	1	1	SSO - Mobile Home Park
Pontiac	3	2	2	Gasoline - Illegal Dumping to Residential Storm Catch Basin; Spill from Tanker Overfill at Gas Station
Rose Twp	1	1	1	Diesel Fuel - Vehicle Accident
South Lyon	1	0	0	Drain Cleanout
Southfield	1	0	0	Commercial Parking Lot Dumping Complaint
Springfield Twp	1	0	0	Residential - Storm Discharge/Flooding
Sylvan Lake	2	1	1	Waste Oil - Illegal Dumping to Stormwater Lift Station (5)
Troy	3	0	0	Underground Storage Tank at Residence (6)
West Bloomfield Twp	6	2	2	Oil/Fuel - Snowmelt Parking Lot & Road Runoff (7); Fuel - Vehicle Leak
Waterford Twp	4	3	3	Asphalt - Waste from Paving Company; Catch Basin Cleanout Wastewater - from Vactor; Gasoline - Vehicle Accident
White Lake Twp	1	1	1	Sediment - Construction Site
Totals: 24 Communities	49	24	24	

(1) Plastics plant fire in Auburn Hills. Multi-agency response. Fire fighting runoff contained to on site detention and cleaned up.

(2) Algae in creek and subdivision retention pond. Community is working with HOA on nutrient reduction.

(3) Property is under development. Community and EGLE are permitting/monitoring site development.

(4) Unknown discharge of diesel fuel to the Henry Graham and Red Run Drain. Site cleaned up by WRC /Macomb DPW. Enclosed drain investigation did not identify a source.

(5) Illegal dumping of waste oil to the Beechmont Drain stormwater lift station. Site cleaned up by WRC. Investigation by WRC and Sylvan Lake did not locate a source.

(6) Unknown underground storage tank reported by resident; City of Troy and EGLE are coordinating remediation and monitoring with resident. No impact to the local storm is evident.

(7) WRC & West Bloomfield Fire Dept. investigated. Fuel/Oil is believed to be from upstream road & parking lot snowmelt runoff. Upstream investigations did not locate a direct source.

Outfall/Discharge Point Surveys and Illicit Discharge Investigations

WRC continues to conduct stormwater outfall/discharge point surveys and follow-up investigations to locate and eliminate pollution from our waterways. An outfall/discharge point survey consists of GPS point location and illicit discharge screening, which includes visual inspection and sampling.

In FY 2018, surveys were conducted at 105 outfall/discharge points located along 25 County Drains in 5 communities within the Rouge and Clinton River watersheds. Below is a summary of the WRC County Drain inspections by community in the Rouge and Clinton River watersheds for FY 2018, and it is indicated whether or not a suspected discharge was found and if the illicit discharge was corrected.

FY 2018 Summary of WRC County Drain Dry Weather Screenings and IDEP Investigations

WRC Drain Name	MS4 Outfalls / DPs	Community	Watershed	Suspected Discharges	IDEP Investigations	Discharges Discovered	Discharges Corrected	Source
Austin (1)	4	Southfield	Rouge	Yes	No	No	NA	NA
Campbell No. 2 (2)	4	Hazel Park	Clinton	Yes	No	No	NA	NA
Claude H Stevens 1 (1)	1	Bloomfield Twp	Rouge	Yes	No	No	NA	NA
Claude H Stevens 3 (1), (3)	4	Bloomfield Twp	Rouge	Yes	Yes	Pending	Pending	Unidentified
Claude H Stevens 4 (1)	4	Bloomfield Twp	Rouge	Yes	Yes	Pending	Pending	Unidentified
Claude H Stevens 5 (1)	1	Bloomfield Twp	Rouge	Yes	No	No	NA	NA
Claude H Stevens 10 (1)	1	Bloomfield Twp	Rouge	Yes	No	No	NA	NA
Dequindre Road (2), (3)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
Devonshire (1)	8	Bloomfield Twp	Rouge	Yes	No	No	NA	NA
Dunleavy (2)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
8 Mile Road (1), (3)	2	Southfield	Rouge	Yes	Yes	Pending	Pending	Unidentified
Fracassi (1), (3)	10	Southfield	Rouge	Yes	Yes	Pending	Pending	Unidentified
GWK North (2), (3)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
GWK South (2), (3)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
Hamlin (1)	1	Bloomfield Twp	Rouge	Yes	No	No	NA	NA
Henry Graham (2), (3)	8	Madison Heights	Clinton	Yes	No	No	NA	NA
Herring (2)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
Kaczmar (2)	3	Hazel Park	Clinton	Yes	No	No	NA	NA
Kutchey (2)	8	Hazel Park	Clinton	Yes	Yes	No	NA	NA
McCoy (2)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
Red Run Federal (2), (3)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
Sharkey (2)	6	Madison Heights	Clinton	Yes	Yes	No	NA	NA
US-16 (1), (3), (4)	4	Farmington	Rouge	No	No	NA	NA	NA
Walker Relief (2), (3)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
Wilson (2), (3)	4	Madison Heights	Clinton	Yes	No	No	NA	NA
FY 2018 (25)	Outfalls / DPs Screened	Communities	Watersheds	Suspect Drains	Drains Investigated	Illicit Discharges Discovered	Illicit Discharges Corrected	
Total	105	5	2	25	6	0	0	

(1) Indicates follow-up sampling and investigations conducted under a Rouge ARC grant (see IDEP Investigation section for details)

(2) Drains being sampled and investigated as part of a Red Run & Bear Creek Collaborative TMDL Monitoring Plan with Madison Heights and Hazel Park continuing in FY 2018 / 2019

(3) Microbial Source Tracking (MST) sampling was also conducted on these drains

(4) Illicit discharges eliminated in 2017. Follow-up sampling conducted to confirm corrections

In summary, during FY 2018, 21 illicit discharges were discovered by WRC during complaint investigations, outfall/discharge point surveys and follow-up investigations. Of these, a total of 20 illicit discharges were corrected with the identified sources being eliminated.

The following pollutants were removed through the County's IDEP in FY 2018:

October 1, 2017 – Sept. 30, 2018

Pollutant	Source	Rouge		Clinton		Huron		Total
		No.	Estimated amt.	No.	Estimated amt.	No.	Estimated amt.	
Sewage	SSOs	3	4,120,000 gal	5	5,055 gal	1	50 gal	4,194,410 gal
	Broken Sanitary			1	54,750 gal			
	Illegal Dumping			2	14,605 gal			
Fuels, Oil & Grease	Spills/ Accidents			2	100 gal	1	50 gal	200 gal
	Illegal Dumping			2	50 gal			
Sediments	Construction Site			2	873,281 lbs			873,281 lbs
Trash / Debris	Illegal Dumping			1	20 yds			20 Yds

No illicit discharges were discovered in the Flint or Shiawassee River Watersheds in FY 2018.

During FY 2019, WRC performed 5,039 inspections on structures located along 101 County Drains in 23 communities in four watersheds (the Clinton, Huron, Rouge and Shiawassee). A total of 10 drains were identified with suspect discharges. All ten drains were investigated and one (1) illicit discharge was discovered.

Below is a summary of the WRC County Drain inspections by community and watershed for FY 2019, and it is indicated whether a suspected discharge was found and if the illicit discharge was corrected.

WRC Drain Name	Stormwater Structure DWS Inspections	Community	Watershed	Suspected Discharges	IDEP Investigations	Discharges Discovered	Discharges Corrected	Source
Augusta (3)	0	Pontiac	Clinton	No	No	0	0	
Austin (1)	31	Southfield	Rouge	No	No	0	0	
Autumn Ridge Estates (1)	55	West Bloomfield Twp	Rouge	No	No	0	0	
Bald Eagle Lake (1), (2)	8	Brandon Twp	Clinton	No	No	0	0	
Bare (1), (2)	14	Holly Twp	Shiawassee	No	No	0	0	
Barnard (1)	24	Pontiac	Clinton	No	No	0	0	
Bartlett (1), (2)	18	Pontiac	Clinton	No	No	0	0	
Birchwood Park (1)	191	West Bloomfield Twp	Huron	No	No	0	0	
Birdsland (1)	23	Waterford Twp	Clinton	No	No	0	0	
Blackwood (1), (2)	37	Lyon Twp	Huron	No	No	0	0	
Brandon-Oxford (1), (2)	37	Brandon Twp	Clinton	No	No	0	0	
Brewer (1)	52	Pontiac	Clinton	No	No	0	0	
Brooklyn Relief (1)	10	Pontiac	Clinton	No	No	0	0	
Campbell No. 2 (1), (4)	57	Hazel Park	Clinton	No	No	0	0	
Carrollton (1)	76	Oakland Twp	Clinton	No	No	0	0	
Claude H. Stevens (1), (3), (4), (5)	138	Bloomfield Twp	Rouge	Yes	Yes	1	Pending	Misconnected Septic System
Chester (1), (2)	220	Rochester Hills	Rouge	No	No	0	0	
Clarenceville (3)	0	Farmington Hills	Rouge	No	No	0	0	
Clark (1), (3)	33	Addison Twp / Leonard Village	Clinton	No	No	0	0	
Country Creek (1)	258	Oakland Twp	Clinton	No	No	0	0	
Coy (1)	36	Farmington Hills	Clinton	No	No	0	0	
Douglas (1)	26	Troy	Clinton	No	No	0	0	
Doyon (1), (2)	60	West Bloomfield Twp	Huron	No	No	0	0	
Dunleavy (1), (4)	251	Madison Heights	Clinton	No	No	0	0	
Duns Scotus (1), (2)	11	Southfield	Rouge	No	No	0	0	
Edwards Relief (1), (3)	0	Southfield	Rouge	No	No	0	0	
Eight Mile (3), (4)	11	Southfield	Rouge	Yes	Yes	0	0	
Elliot (1)	31	Troy	Clinton	No	No	0	0	
Evergreen Road (1)	23	Southfield	Rouge	No	No	0	0	
Fracassi (1), (3), (4), (5)	246	Southfield	Rouge	Yes	Yes	0	0	
Francis (1), (2)	23	Novi	Rouge	No	No	0	0	
GWK North (4)	2	Madison Heights	Clinton	Yes	Yes	0	0	
GWK South (4)	4	Madison Heights	Clinton	Yes	Yes	0	0	
Galloway Lake Farms (3)	0	Pontiac	Clinton	No	No	0	0	
Green Lake Crossing (1)	56	West Bloomfield Twp	Rouge	No	No	0	0	
Greenpointe Condo (1)	55	West Bloomfield Twp	Rouge	No	No	0	0	
Greenway (3)	0	Commerce Twp / Wolverine Village	Huron	No	No	0	0	
Henry Graham (1), (3), (4)	0	Troy / Madison Heights	Clinton	Yes	Yes	0	0	
Hobart (1)	39	Auburn Hills	Clinton	No	No	0	0	
Honeywell (1), (2)	1	Rochester Hills	Clinton	No	No	0	0	
Houghten (1), (2)	29	Troy	Clinton	No	No	0	0	
Jewel (1)	2	Pontiac	Clinton	No	No	0	0	
Karas (1), (2)	107	Rochester Hills	Clinton	No	No	0	0	
Kemp (1), (2)	36	West Bloomfield Twp	Rouge	No	No	0	0	
Kingsridge (1)	1	Oakland Twp	Clinton	No	No	0	0	
Knorwood Pines West (1), (2)	118	Oakland Twp	Clinton	No	No	0	0	
Kaczmar (4)	1	Madison Heights	Clinton	No	No	0	0	
Karzon (1)	4	Bloomfield Twp	Rouge	No	No	0	0	
Kutcheon (1), (4)	55	Hazel Park / Warren	Clinton	Yes	Yes	0	0	
Leonard (1), (2)	15	Addison Twp / Leonard Village	Clinton	No	No	0	0	
Lyon No. 1 (1), (2)	18	Lyon Twp	Huron	No	No	0	0	
Mainland (1), (2)	15	Pontiac / Waterford	Clinton	No	No	0	0	
Maple Creek (1)	257	West Bloomfield Twp	Rouge	No	No	0	0	
Martha Washington (3)	0	Southfield	Rouge	No	No	0	0	
Maynard (1), (2)	15	Commerce Twp	Huron	No	No	0	0	
McCoy (4)	1	Madison Heights / Warren	Clinton	No	No	0	0	
McClure (1), (2)	12	Oakland Twp	Clinton	No	No	0	0	
Mchor (1)	6	Waterford Twp	Clinton	No	No	0	0	
Mission Springs (1)	86	West Bloomfield Twp	Huron	No	No	0	0	
Nichols Relief (1), (2)	271	Bloomfield Twp	Rouge	No	No	0	0	
Oak Knob (1)	14	Bloomfield Hills	Rouge	No	No	0	0	
Oakland Farm (1)	193	Oakland Twp	Clinton	No	No	0	0	
Otter (1), (2)	34	Waterford Twp	Clinton	No	No	0	0	
Oxford Avenue (1)	46	Farmington Hills	Rouge	No	No	0	0	
Patterson - Holly (1), (2)	130	Holly Village	Shiawassee	No	No	0	0	
Pearl Street (1), (3)	1	Farmington Hills	Rouge	No	No	0	0	
Pleasant Lake North (1)	21	West Bloomfield Twp	Huron	No	No	0	0	
Pontiac Creek Ext (1)	5	Pontiac / Waterford	Clinton	No	No	0	0	
Prince (3)	0	Oxford Twp	Clinton	No	No	0	0	
Reid & Branch (1), (2)	17	Orion Twp	Clinton	No	No	0	0	
Richton Relief (1)	34	Pontiac	Clinton	No	No	0	0	
Sharkey Relief (4)	6	Madison Heights	Clinton	Yes	Yes	0	0	
Sherman (1), (2)	40	Southfield	Rouge	No	No	0	0	
Shore North (1)	37	West Bloomfield Twp	Rouge	No	No	0	0	
Simsbury Plaza (1)	21	West Bloomfield Twp	Rouge	No	No	0	0	
Sinking Bridge (1), (2)	21	Pontiac	Clinton	No	No	0	0	
Six Points (1)	18	Lyon Twp	Huron	No	No	0	0	
South Lyon No. 1 (1), (2)	36	Lyon Twp / S. Lyon	Huron	No	No	0	0	
Spencer (1), (2)	44	Troy	Clinton	No	No	0	0	
Sprague (1), (2)	38	Troy	Rouge	No	No	0	0	
Stonebridge (1)	109	West Bloomfield Twp	Rouge	No	No	0	0	
Sturgis (1), (2)	7	Troy	Clinton	No	No	0	0	
Swan (1)	14	Troy	Clinton	No	No	0	0	
Taylor-Ladd (1), (2)	16	Commerce Twp	Huron	No	No	0	0	
Tilden (1)	42	Sylvan Lake	Clinton	No	No	0	0	
Underhill (1), (2)	31	Lyon Twp	Huron	No	No	0	0	
US-16 (3)	0	Farmington Hills	Rouge	No	No	0	0	
Varner Relief (1)	69	Rochester Hills	Clinton	No	No	0	0	
Walnut Woods Apt (1)	25	West Bloomfield Twp	Rouge	No	No	0	0	
West Bloomfield Ridge (1)	33	West Bloomfield Twp	Huron	No	No	0	0	
West End (1)	13	Pontiac / Waterford	Clinton	No	No	0	0	
Westbrooke Condos (1)	33	West Bloomfield Twp	Rouge	No	No	0	0	
Westwind Lake (1)	196	West Bloomfield Twp	Rouge	No	No	0	0	
Whispering Wds (1)	36	West Bloomfield Twp	Huron	No	No	0	0	
Willow Woods (1)	50	West Bloomfield Twp	Huron	No	No	0	0	
Wilmont Relief (1), (2)	44	Waterford Twp	Clinton	No	No	0	0	
Walker Relief (4)	6	Madison Heights	Clinton	Yes	Yes	0	0	
Wilson (4)	2	Madison Heights	Clinton	Yes	Yes	0	0	
Woodcliff on the Lake (1)	68	West Bloomfield Twp	Rouge	No	No	0	0	
Woodland Ridge (1)	133	West Bloomfield Twp	Huron	No	No	0	0	
Woodlands (1)	150	West Bloomfield Twp	Huron	No	No	0	0	
Drains	DWS Inspections	Communities	Watersheds	Suspect Drains	Drains Investigated	Illicit Discharges Discovered	Illicit Discharges Corrected	
Totals: 101	5,039	23	4	10	10	1	0	

(1) DWS Stormwater Structure Inspections conducted during FY 2019
(2) Open Channel Drain Inspections conducted during FY 2019
(3) Enclosed Drain Closed Circuit Tevised (CCTV) Inspections conducted during FY 2019
(4) E. coli Wet and Dry Weather & DNA sampling conducted as part of ongoing IDEP Investigations during FY 2019
(5) Residential Dye Testing conducted as part of ongoing IDEP Investigations in FY 2019

In summary, during FY 2019, 25 illicit discharges were discovered by WRC during complaint investigations, stormwater structure inspections and follow-up investigations. Of these, a total of 24 illicit discharges were corrected with the identified sources being eliminated.

The following pollutants were removed through the County’s IDEP in FY 2019:

October 1, 2018 – Sept. 30, 2019

Pollutant	Source	Rouge		Clinton		Huron		Shiawessee		Total
		No.	Estimated amt.	No.	Estimated amt.	No.	Estimated amt.	No.	Estimated Amt.	
Sewage	Misconnected Failed Septic	1	146,000 gal							247,905 gal
	SSOs	3	7,330 gal	2	51,550 gal	1	50 gal			
	Illicit Discharge			1	2,500 gal					
	Spills/Accidents			1	35,000 gal					
	Broken Sanitary			1	5,475 gal					
Fuels, Oil & Grease	Illegal Dumping			1	20 gal					2,740 gal
	Parking Lot / Road Runoff	1	10 gal							
	Spills/Accidents			5	2,660 gal			1	50 gal	
Sediments	Construction Site			1	Not Estimated	1	Not Estimated			Not Estimated
Asphalt	Illegal Dumping			1	50 lbs					50 lbs
Hydraulic Fluid	Spills/Accidents			1	20 gal	1	20 gal			40 gal
Paint Washout	Commercial	1	20 gal							20 gal
Concrete Washout	Construction Site	1	Not Estimated	2	5 gal					5 gal
Lime Waste	Spills/Accidents	1	2,000 lbs							2,000 lbs
Yard Waste	Residential					1	Not Estimated			Not Estimated
Algae/Nutrients	Residential Runoff	1	Not Estimated							Not Estimated

No illicit discharges were discovered in the Flint River watershed in FY 2019.