



# **Genesee County Phase II Municipalities Annual Report**

***November 1, 2015 – October 31, 2016  
Reporting Period***

***Submitted to:***

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

***by the Genesee County Drain Commissioner***

***on behalf of Genesee County and contracted Communities***



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## Acronyms/Abbreviations

Acronyms/Abbreviations	Definition
BMP	Best Management Practice
CAER	University of Michigan – Flint, Center for Applied Environmental Research
EPA	Environmental Protection Agency
FRWC	Flint River Watershed Council
GCCD	Genesee County Conservation District
GCDC	Genesee County Drain Commissioner
GCRC	Genesee County Road Commission
GISD	Genesee Intermediate School District
GREEN	Global Rivers Environmental Education Network
IDEP	Illicit Discharge Elimination Plan
M&M	Monitoring and Mapping
MDEQ	Michigan Department of Environmental Quality
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
PEP	Public Education Plan
PPP	Public Participation Plan
PSD	Point Source Discharge
SEMCOG	Southeast Michigan Council of Governments
SESC	Soil Erosion and Sedimentation Control
SWAC	Storm Water Advisory Committee
SWM	Surface Water Management
SWPPI	Storm Water Pollution Prevention Initiative
WMP	Watershed Management Plan
WQI	Water Quality Index

# NPDES PERMIT REQUIREMENTS AND ADMINISTRATION

This annual report was prepared by Genesee County's engineering consultant, Tetra Tech, for the Michigan Department of Environmental Quality (MDEQ).

## PERMIT REQUIREMENTS

This annual report summarizes activities completed for the period from November 1, 2015, to October 31, 2016, by the Genesee County Drain Commissioner's Office and the contracted Phase II Municipalities to meet the requirements of their National Pollutant Discharge Elimination System (NPDES) permit, including:

- Jurisdictional Permit
- Public education and participation
- New construction standards
- Monitoring and mapping
- Illicit Discharge Elimination Program (IDEP)
- Storm Water Pollution Prevention Initiative (SWPPI)

## WATERSHED MANAGEMENT ADMINISTRATION

### *Storm Water System Service District*

To implement the permit requirements and perform watershed management planning, Genesee County established a Storm Water Management System for the entire County under the authority of Michigan Public Act 342 of 1939. Genesee County had designated the Genesee County Drain Commissioner's Office to be their authorized agent. Many of the communities in the County have executed a contract to use the County 342 Storm Water Management System as the lead agency to provide Phase II permitting services, including watershed management planning.

### *Watershed to a Jurisdictional permit*

With the new permit originally submitted to the MDEQ in April 2014, we are in the process of moving from a voluntary Watershed permit to a jurisdictional permit. To implement the permit requirements, Genesee County established a Storm Water Management System for the entire County under the authority of Michigan Public Act 342 of 1939. Genesee County had designated the Genesee County Drain Commissioner's Office to be their authorized agent. Many of the communities in the County have executed a contract to use the County 342 Storm Water Management System as the lead agency to provide Phase II permitting services.

### *Contract Communities*

In 2015 The Adhock Committee met, recommending the 3<sup>rd</sup> amendment to the contract. The Storm Water Advisory Group Passed a motion and those on Table 1-1 have signed a new 2015-2020 342 contract.

### **Note:**

- Of the Phase II communities, Grand Blanc Township is the only Phase II community that does **not** participate through this contract.
- In the 2013-2014 reporting cycle Mundy Township and Flushing Township were able to opt out of the NPDES Ph II permit, and have chosen to not to sign a new contract.
- The contract for Public Education services between City of Flint and Genesee County ended on September 1, 2014. City of Flint chose not to extend the contract. A letter by GCDC-SWM to the

MDEQ was sent 3/26/15 **notifying the State that Public Education efforts covered in this report are not being done on behalf of the City of Flint Effective Oct 1, 2014.**

- Although **\*Argentine Township** is not a Phase II community, they chose to sign the contract for services.

Table 1-1: Contract Communities

*Argentine Township	Fenton Township	City of Mount Morris
City of Burton	Flint Township	Mount Morris Township
City of Clio	City of Flushing	City of Swartz Creek
City of Davison	Genesee Township	Vienna Township
Davison Township	City of Grand Blanc	Genesee County
City of Fenton	City of Linden	

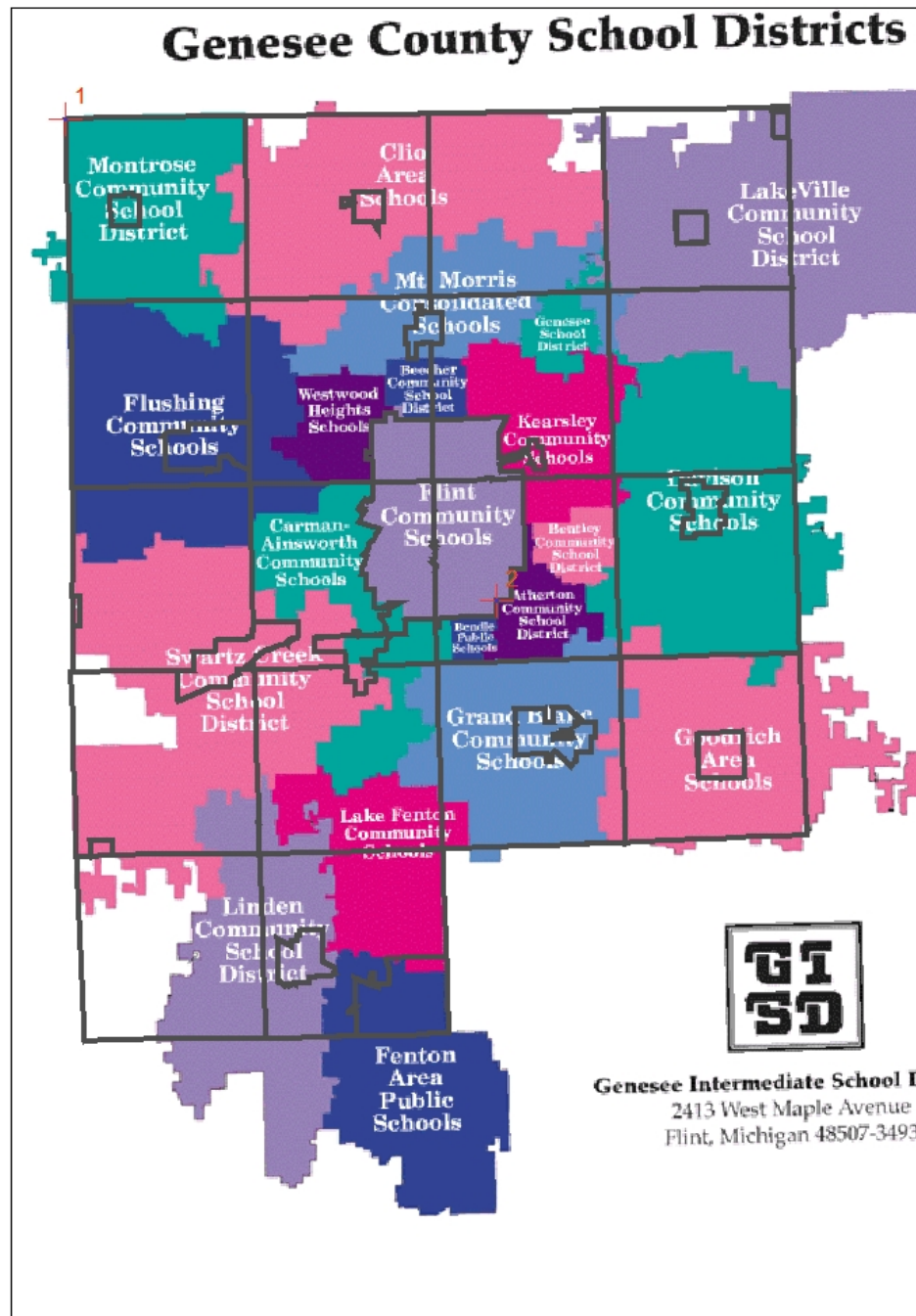
### ***Nested Drainage System Agreements***

The county has a nesting agreement with Bishop Airport. & the Schools below. The contracts between the Airport and County of Genesee and Schools and County of Genesee for nesting has been extended by agreement. During the next reporting cycle, amendment 2 of the contract with the airport and schools will be worked on. Below are schools that are currently being nested by Genesee County.

Table 1-2: Nested School Districts

<b>School District</b>	<b>Within an urbanized area</b>
Atherton	Y
Beecher	Y
Bendle	Y
Bentley	Y
Carman-Ainsworth	Y
Clio	Y
Davison	Y
Fenton	Y
City of Flint	Y
Flushing	Y
Genesee Intermediate School District (GISD)	Y
Genesee	Y
Grand Blanc	Y
Kearsley	Y
Lake Fenton	Y
Linden	Y
Mt. Morris	Y
Swartz Creek	Y
Westwood Heights	Y

The nested school districts have requested that the Genesee Intermediate School District (GISD) be their representative in this program. The GISD has been attending meetings and disseminating information to the individual school districts. They have facilitated meetings between the County and transportation and operations staff members, as well as superintendents, to discuss requirements, including staff training, to meet the requirements of the permit. The GISD participates in the county-wide education effort, including the development of grade-level appropriate watershed education curriculum. See chapter 2 for more details of GISD's involvement.



Note: Genesee County has only nested those portions of districts that are located within Genesee County and the Urbanized area.

#### ***Genesee County Storm Water Advisory Committee***

The Genesee County Storm Water Advisory Committee (SWAC) includes Genesee County and Communities with a signed 342 contract. Most, but not all, are Phase II communities with a Certificate of Coverage. In addition, many of the Genesee County communities without a signed 342 contract continue to participate in SWAC activities.

SWAC is guiding implementation of the entire Phase II Program and has three main sub-committees:

- Public Education (PE) and Participation Sub-Committee
- New Construction Standards and Practices (CSP) Sub-Committee
- Monitoring and Mapping (M&M) Sub-Committee

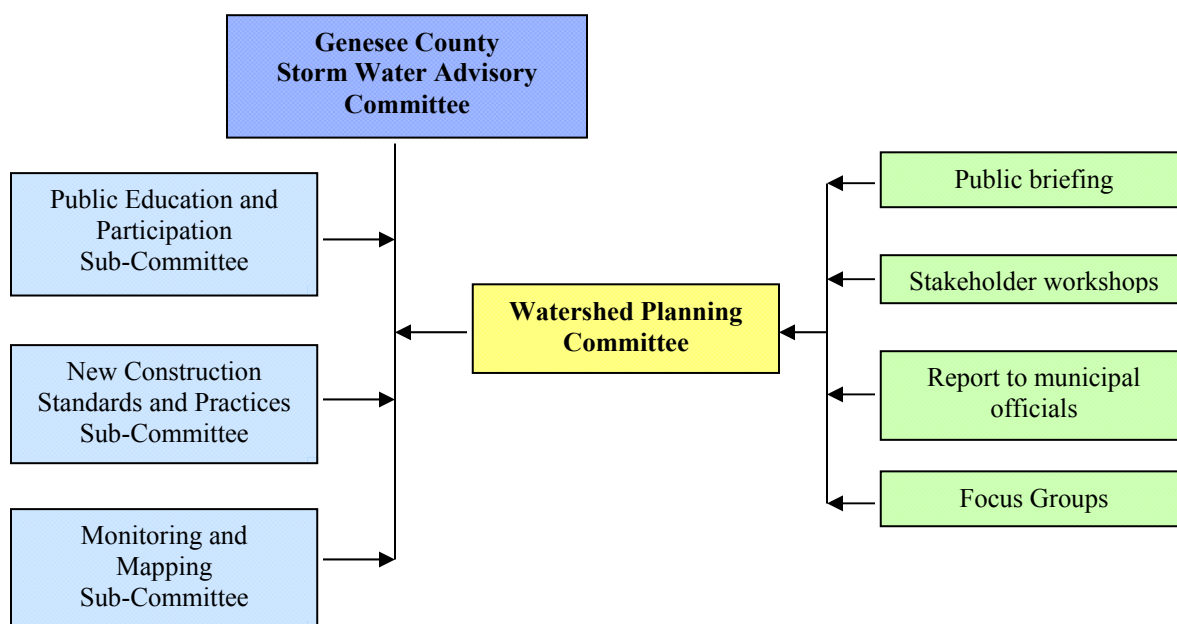
These sub-committees meet as needed along with stakeholders and/or individuals with specific specialized knowledge to implement the watershed plan, education plan and Illicit Discharge Elimination Plan (IDEP). A brief description of sub-committee duties is presented below Figure 1-2. With the new contract, in the next reporting cycle, each subcommittee will be a committee of the whole. This will streamline taking issues to be voted on from the subcommittee to the Storm Water Advisory Committee.

Figure 1-1 also shows the watershed planning decision-making process and sub-committee relationships. Previously under this permit Genesee County and Communities had a watershed permit. The 2015-2020 permits are all jurisdictional. Reporting will continue to be on a watershed base, but identification of communities represented will be given whenever possible.

SWAC meetings during this reporting period were held on:

- October 21, 2015
- November 18, 2015
- December 16, 2015
- January 27, 2016
- February 17, 2016
- March 16, 2016
- April 20, 2016
- May 18, 2016
- September 21, 2016
- October 19, 2016

Figure 1-1: Watershed Planning Decision Making Flowchart



***Public Education (PE) and Participation Sub-Committee***

The PE Sub-Committee guides the overall public education and participation process for the watershed management planning effort. PE activities are summarized in Section 2.

***New Construction Standards and Practices (CSP) Sub-Committee***

The CSP Sub-Committee oversees new construction standards and post-construction practices for Genesee County. This sub-committee is also updating ordinances to ensure compliance with Environmental Protection Agency (EPA) requirements. CSP activities are summarized in Section 3

***Monitoring and Mapping (M&M) Sub-Committee***

The M&M Sub-Committee oversees organization and implementation of watershed monitoring, field-sampling protocols, and mapping guidelines. In addition to several monitoring programs, they oversee the Illicit Discharge Elimination Plan (IDEP) Program. Local government leaders share their insights and views of the watershed throughout the project at workshops and meetings, as well as at other formal and informal exchanges. M&M activities are summarized in Section 4.



## PUBLIC EDUCATION AND PARTICIPATION SUB-COMMITTEE ACTIVITIES

The Public Education (PE) and Participation Sub-Committee held one meeting during this reporting period:

- December 1, 2015 Sub Committee workgroup held for NPDES Phase II SAW grant survey

Many of the Communities that used to be in the Phase II program and were able to opt out. With the 2014/15 permit it was decided that each subcommittee is now a committee of the whole made up of the contract members. (See Table 1-1) Non contract communities are invited, but are not voting members.

The purpose of the PE committee is to implement the Public Education Plan (PEP). This can be found in the Attachment 4 of new Permit Application. The PEP plan was revised to align with the new 2015 permit Application “Public Education Topics”. The actual implementation did not change. **The Public Education work is being done on behalf of the contract Communities (table 1-1)**

### PUBLIC EDUCATION PLAN

#### *Permit Requirements*

The planning and implementation of public education has been cross referenced to reflect the changes in the 2015-2020 permit application item #5 education topics listed below with the EPA-required elements:

- A. Promote public responsibility and stewardship in the applicant’s watershed(s).
- B. Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state.
- C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.
- D. Promote preferred cleaning materials and procedures for car, pavement, and power washing.
- E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.
- F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.
- G. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, and motor vehicle fluids.
- H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.
- I. Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.
- J. Promote methods for managing riparian lands to protect water quality.
- K. Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff.

#### *Partnerships*

The PE Sub-Committee has coordinated, developed, and implemented several elements of the PEP. Work during this permit cycle included:

- Program implementation through partnerships:
  - Education Booth at various events throughout the County, Public Engagement
  - Maintain the “Our Water” website
  - Presentations throughout the County

- Get the public on the water with canoe trips, education information provided
- Educate municipal staff through newsletters and involvement in educating the public
- School age watershed education
  - Through getting students on the water
  - Going into classes and educate on water subjects
- Use staff and volunteers to post signage
  - Storm drain stenciling and Storm drain markers
  - Creek Crossing signs over major waterways
- Researched events suitable for Phase II education community outreach
- Distributed Our water, Riparian, and septic system maintenance outreach materials
- Coordinated and maintained public education tools (watershed models, etc.)
- Researched “Our Water” campaign public relations and communications strategy

*Flint River Watershed Coalition:* On behalf of the of the Phase II permittees, the Flint River Watershed Coalition (FRWC) was contracted by the GCDC to provide several services, including:

- *Speaker Materials and Presentations:* PowerPoint presentations on storm water education for adult audiences such as municipal officials, rotary clubs, neighborhood associations, lake associations, etc.
- Hosting *canoe trips* on the Flint River described in the Activities Update.
- *Global Rivers Environmental Education Network (GREEN):* described in the Activities Update. *NOTE although this program is part of Monitoring and Mapping, there are education components to it.*
- *Macroinvertebrate Monitoring Program:* described in the Activities Update. *NOTE although this program is part of Monitoring and Mapping, there are education components to it.*
- The FRWC was involved in the *Storm Drain Stenciling* program described in the Activities Update.

*Genesee Conservation District:* On behalf of the of the Phase II permittees, the GCD was contracted by the GCDC to provide several services, including:

- The GCD was involved in the *Storm Drain Stenciling* program described in the Activities Update.
- Operate and staff the “Our Water” Information *Display booth* at the County Fair and other events described in the Activities Update.
- The GCD continues to *educate children* on storm water issues using the Enviroscope and craft projects that reinforce storm water messages as described in the Activities Update.
- *Facilitate and staff display booth at public events:* GCD schedules the display booth. Provide staff or training for volunteers.

### ***Activities Update***

*“Our Water” Campaign Webpage:* The development of an easy-to-use webpage with information about the seven storm water elements was identified as critical to the successful implementation of the “Our Water” Campaign. Since 2008, the Drain Commissioner’s Office hosts and updates the [www.ClearGeneseeWater.org](http://www.ClearGeneseeWater.org) webpage as needed throughout the reporting period. The “Our Water” webpage has been online since July 2006. In addition [www.gcdswm.com](http://www.gcdswm.com), the Drain Commissioner’s Office website also has content specifically for the NPDES Ph II permittees, including copies of this and past annual reports. Many Ph II permittees that have webpages provide a link to the [www.ClearGeneseeWater.org](http://www.ClearGeneseeWater.org) webpage.

*“Our Water” Newsletter:* Although this publication is available to the public, the purpose of the community updates is to keep the Communities updated with the changes to the permit program. There was only 1 newsletter produced this/last year. See attachment A. It was about the MI waters new online filing.

*Materials and Presentation for Riparian Land Owners:* An informational brochure was developed and served as a mail invite to a free workshop. All workshops were completed in the 2012-13 reporting period. A new workshop cycle has not begun during this reporting cycle. Copies of the brochure are made available to the interested communities to distribute. Also, brochures were made available for distribution at the booth events. The brochure contained information on basic stream bank stabilization techniques.

*Social Survey:* Genesee County performed a Social survey in 2005 to see the public's base line level of knowledge in regards to storm water and the behaviors that lead to pollutants getting into surface water. GCDC-SWM received a SAW grant to perform a new social survey and see where we can cross reference information from the original 2005 survey. Surveys were completed in this permit cycle, with the final results in 2016-2017.

*For-Mar on the Road:* GC Parks and Rec provides free science and nature based programs for k-8 education that meets MI science standards. 5<sup>th</sup> grade covers water and ecosystems. They have other programs throughout the County and year that touch on surface water and or stewardship. Attached

*Speaker Materials and Presentations:* An educational PowerPoint presentation was developed. The presentation contains appropriate branding for the "Our Water" Campaign. The presentation contains several modules that address various target audiences, including governmental and non-governmental entities. The modules of the presentation can easily be combined to customize a presentation for time or content within the required elements.

GCDC continued its contract with the FRWC to use this modular presentation to educate groups such as municipal officials, rotary clubs, neighborhood associations, and lake associations. The following presentations were made during this permit cycle:

Date	# Participants	Group	Venue	Participants
19-Jan-16	14	Business Networking Inc.	Walli's East	Business owners in Genesee County
21-Jan-16	17	Water Trail project introduction	MTA Flint	Leaders & administrators of Genesee County
26-Jan-16	12	Flint Funders Meeting	Hagerman Foundation	All of Genesee County
18-Feb-16	15	West Flint Business Association	Valley Family Restaurant	Flint, Flint Twp., Flushing
18-Mar-16	70	Bendle Students – University of MI	Northbank Center, U of M	Students from Bendle School
14-April-16	13	Sloan Museum Attendees	Sloan Museum	All of Genesee County
16-April-16	754	Earth Day – U of M Flint	U of M Campus	All of Genesee County - College students
6-May-16	22	St. Thomas More Academy	For-Mar	Burton
17-May-16	15	Downtown Flint Optimist Club	Flint Golf Club	All of Genesee County
11-June-16	85	Fish the Bricks	Riverfront Park	All of Genesee County
22-Aug-16	20	Press and friends paddle	Paddling event Vietnam Vet Park	All of Genesee County
25-Aug-16	12	Genesee Co. Parks & Rec Commission board meeting	Parks Office	All of Genesee County
22-Sept-16	15	Southern County landowners on the Flint River	Farmer's Market - Flint	Flushing, Flint, Richfield Twp., Flint Twp., Goodrich
22-Sept-16	30	Northern County landowners on the Flint River	Farmers Market – Montrose	Montrose, Flushing, Flushing Twp., Mt. Morris Twp.

24-Sept-16	125	For-Mar Overnight monitoring event for kids – BIOBLITZ	For-Mar	All of Genesee County
28-Sept-16	17	Sunrise Rotary Club	Baker College of Flint	All of Genesee County
30-Sept-16	Future	MI Environmental Council Annual Meeting	MSU School of Medicine – Flint	All of Genesee County
2016	1000+	Facebook Post	Facebook	FRWC followers – All of Genesee County

Note: In 2016 four other events were held: Michigan Water Trail Summit, Love our Lake-Thread Lake & Flint Park Lake, and Belle Isle however the audience was not to Phase II communities under this contract, therefore they are not included above.

*Brochures:* An educational brochure was developed to provide information about EPA’s seven mandated elements of storm water education. 5,000 brochures were printed in November 2006, and 10,000 reprints were made in 2009 and 2013. Over 2000 are handed out per year. The brochures are given away actively at events (see information booth heading below), and many have been passively picked up by the public at local community centers. Each municipality is also given brochures to distribute for public use and will report their activities under separate cover. See attachment A

*Newsletter Articles:* Sometimes permittees, partners, or other publications will print an article on a stormwater topic. Any water related articles during this reporting period are included in attachment A. Two articles were published in the Genesee Conservation District newsletter pertaining to the “Our Water” program. One in the winter/spring and one in the summer/fall. The newsletter was distributed to over 2,500 Genesee County residents.

*Time of Sale Septic Brochure:* Information to help educate septic system owners on proper maintenance and practices has been compiled into a brochure with the help of Genesee County Health Department. Copies have been given to the Genesee County Health Department, interested communities and the realtors association to distribute to interested realtors wishing to provide this information to new property owners. (Not all communities have residents with septic systems.) See attachment A

*Promotional Giveaways:* GCDC purchased 4000 promotional giveaways (premiums) in June of 2015 and 5000 additional promotional giveaways (premiums) in August of 2016. Premiums purchased included water bottles and tote bags; Premiums are given to the public at the information booth (see below). A person can win a premium if they answer a storm water-related question. This allows the booth staff/volunteers to engage the public in conversation, provide stormwater education and give them an educational brochure. Each premium given represents someone from the public that has received storm water education.

*Information Booth:* A display booth was developed in 2006. The booth includes a table and a free-standing banner outlining the seven simple steps to clean water. Educational activities were also developed to help engage people at public events.

The booth is staffed by volunteer municipal officials and staff of the GCDC or the Conservation District. Volunteers are trained to conduct the educational activities, which include giving premiums to each person who tries to answer a question on water quality. This approach serves several purposes:

- To educate the elected official
- To allow the communities themselves to teach the public about storm water issues



- To actively involve participants in the learning process

<b>During this reporting period, the booth was used at the events listed below.</b>			
4/2/16 & 4/3/16	Home & Garden show – Perani Arena	County Wide	272 educated
8/20/16	Back to the Bricks- Downtown Flint	County Wide	206 educated
8/22/16 – 8/28/16	Genesee County Fair – Genesee Twp.	County Wide	566 educated
8/25/16 – 8/27/16	Crim Health & Fitness Expo-Downtown Flint – Riverfront Banquet Center	County Wide	873 educated
9/13/16	National Night out- Flint Twp. Police Dept.	County Wide	124 educated
9/22/16	Davison Farmer’s Market	County Wide	52 educated
9/24/16	Flushing Harvest Festival	County Wide	377 educated
9/25/16	Grand Blanc Farmer’s Market	County Wide	92 educated
9/29/16	Davison Farmer’s Market	County Wide	48 educated

\*Demographic Data by community in Appendix A

Argentine Township, Mt. Morris Township and GCDC-SWM provided staff to assist with the County Fair

*Student Education:* GCDC-SWM contracted with the GCD to provide storm water education services to school-aged children on behalf of the Phase II permittees. During 2014-15 GCD reached thousands of students in the Phase II communities. In school presentations which include one or some of the following:

- Online Games (DiscoverWater.org)
- Hands on activities (build your own watershed)
- Games:
  - Water cycle relay race
  - Filter the Pollution
  - A-maze-ing water
  - Water trivia games (who wants to be a millionaire, a watershed game, the environmental council, conservation Style, and environmental jeopardy)
- Envirosapes



GCDC has four “Enviroscape” interactive models that demonstrate how pollutants can reach bodies of water. The Conservation District keeps one of the Enviroscape models for their own education program (see next section.) The other three models are available to be checked out for use by teachers/educators and available

for demonstrations at events. GCDC-SWM staff has met with the Genesee Intermediate School District (GISD) program coordinators to let them know what tools we have available for their teachers including the enviroscape.

Following is a list of the presentations made in 2015-2016:

Table 2-1: Breakdown of GCCD Water Quality Presentations in Fiscal Year 2015-16

Month	Event	School aged children reached:
1/21/16	Syring Elementary	25-30 per class * 3 classes
1/27/16	Randels Elementary	25-30 per class * 3 classes
2/4/16	Rankin Elementary	25-30 per class * 3 classes
2/4/16	Swartz Creek Middle School	25-30 per class * 3 classes
4/13/16 & 4/27/16	Dieck Elementary	20-30 per class * 3 classes
4/26/16	City School Elementary	20-30 per class * 1 class
5/3/16 & 5/17/16	Elms Road Elementary	20-30 per class * 3 classes
5/4-5/11- 5/18-5/25- 6/1-6/8/16	Moore Elementary	20-30 per class * 3 classes
5/19/- 5/23- 6/7/16	Madison Academy High School	20-30 per class * 1 class
5/31/16	State Road Elementary	20-30 per class * 3 classes
6/2/16 & 6/3/16	Central Elementary	20-30 per class * 12 classes
6/13 – 6/20 – 6/27/16	U of M Early Childhood Development Center (ECDC)	20-30 per class * 4 classes
7/11 – 7/18 – 7/25 – 8/1 – 8/8 – 8/15 – 8/29/16	U of M Early Childhood Development Center (ECDC)	15-25 per class * 4 classes
9/23/16	For-Mar Nature Preserve Bio Blitz	15-25 per class * 1 class

On 4/23/16 GCDC-SWM staff, Bill Poster did an enviroscape presentation for 20 boy scouts. 4 were from Grand Blanc and Davison, the rest were from other Counties throughout MI.

GCDC-SWM also contracted with the FRWC to support the Project Global Rivers Environmental Network (GREEN) Educational Program. (Program is also discussed in the M&M Sub-Committee -Section 7). In

January 2016 Tom Jones from GCRC\_SWM was recognized for all the work he has done for the project GREEN program.

Table 2-2: Breakdown of Project Green Schools in Fiscal Year 2015-16

	<b>School</b>	<b>Teacher</b>	<b>Students located within:</b>
<b>1</b>	Atherton High School	Matt Hyslop	City of Burton
<b>2</b>	Bendle High School	Todd Barden	City of Burton
<b>3</b>	Carman-Ainsworth Middle School	Melissa Warburton	Flint Twp, Mundy Twp
<b>4</b>	Carter Middle School	Ryan Niemi	City of Clio, Vienna Twp, Thetford Twp, Montrose Twp
<b>5</b>	Carter Middle School	Chip McCallum	City of Clio, Vienna Twp, Thetford Twp, Montrose Twp
<b>6</b>	Davison Middle School	Jody Kosiara	Richfield Twp, Davison Twp, City of Burton
<b>7</b>	Grand Blanc East Middle School	Deb Lacki	City of Grand Blanc, Grand Blanc Twp, Atlas Twp
<b>8</b>	Grand Blanc East Middle School	Patricia Nelson	City of Grand Blanc, Grand Blanc Twp, Atlas Twp
<b>9</b>	Grand Blanc East Middle School	Crystal Sobeck	City of Grand Blanc, Grand Blanc Twp, Atlas Twp
	<b>School</b>	<b>Teacher</b>	<b>Students located within:</b>
<b>10</b>	Grand Blanc High School	Suzanne Powers	City of Grand Blanc, Grand Blanc Twp, Mundy Twp.
<b>11</b>	Kearsley Armstrong	Lisa Katzenbeger	Genesee Twp.
<b>12</b>	LakeVille Middle School	Andrea Thelen	Forest Twp, Richfield Twp
<b>13</b>	LakeVille Middle School	Josh Henley	Forest Twp, Richfield Twp
<b>14</b>	Mt. Morris Junior High School	Kate Tallmadge	Mt. Morris Twp, City of Mt. Morris, Genesee Twp, Vienna Twp, Thetford Twp
<b>15</b>	Mt. Morris Junior High School	Zack Freeman	Mt. Morris Twp, City of Mt. Morris, Genesee Twp, Vienna Twp, Thetford Twp
<b>16</b>	Mt. Morris Junior High School	Kim McCormick	Mt. Morris Twp, City of Mt. Morris, Genesee Twp, Vienna Twp, Thetford Twp
<b>17</b>	Northwestern High School	Jarrett Trombley	City of Flint
<b>18</b>	Northwestern High School	Nadina Adversa	City of Flint
<b>19</b>	Powers Catholic High School	Julie Lawrence	County Wide
<b>20</b>	St. John Vianney Catholic School	Janice Matlon	County Wide
<b>21</b>	St. Thomas More Catholic School	Shelley Roberts	County Wide
<b>22</b>	Swartz Creek Middle School	Brandolyn Forbes	Clayton Twp, Gaines Twp, City of Swartz Cr, Flint Twp, Mundy Twp



23	The Valley School	Jeanne Wisenbaugh	County Wide
24	Westwood Heights - Hamady High School	Arletha Bryant	Mt. Morris Twp

NOTE: many teachers had multiple classes participating

*Catch Basin Stenciling Program:* The Our Water Program has a catch basin stenciling program. The stencils say “No Dumping - Drains to River”. Since 2006, volunteers and County staff are able to paint approximately 500+ stencils per year on Genesee County Roads, including City owned roads. A printed doorknob hanger is distributed to educate residents adjacent to the stenciling locations. See Attachment A

- As part of preventive maintenance, the Genesee County Drain Commissioner’s Surface Water Maintenance crew cleans and stencils hundreds of catch basins throughout the county each year.
- Starting in 2010 GCDC purchased Storm drain markers like the shown to the right to be installed on catch basin grate covers located within road ditches and rear yards where stenciling is not possible. Markers are installed by GCDC-SWM staff when they are working on storm drains throughout Genesee Co.
- Between Sept 2013 and Jan 2016, GCDC purchased and installed 1260 4” metal storm drain markers for a total of 1460. Between Jan & Sept of 2016 an additional 250 were installed for a total of 1710. Storm drain markers are anticipated to have a 30 year life expectancy allowing for long term passive education.
- Volunteer stenciling groups were organized by both FRWC and GCD. Also GCDC-SWM staff work from time to time with individual stenciling volunteer groups by providing technical support, supplies and catch basin locations for stenciling. Below is a list of volunteer groups that participated.



GCD: Held 8 Storm drain stenciling events:



<u>Date</u>	<u>Municipality</u>	<u>Volunteer Group</u>	<u>Location of stenciling</u>	<u>Door Hangers Distributed</u>	<u>Number of Drains Stenciled</u>
8/8/16	Flushing	Genesee Co. Residents	Chickasaw Trail, Shoshone Trail, Tahquamenon Trail, Overland Trail, Navajo Trail 7 Pine Bluff Dr.	68	18
8/11/16	Flushing	Genesee County Residents	Skyview Dr., Springview Dr., Pleasantview, Clearview, Chestnut St., Bonnie Sue Dr., Sunnyside, Fairfield Dr.	80	21
<u>Date</u>	<u>Municipality</u>	<u>Volunteer Group</u>	<u>Location of stenciling</u>	<u>Door Hangers</u>	<u>Number of Drains Stenciled</u>
9/6/16	Davison	Genesee County Residents	N. Wicklow Dr., Ashford Dr., Lochnayne Lane	60	12
9/6/16	Davison	Genesee County Residents	S. Wicklow Dr., Antrim Dr., Kildare Dr. & Kildare Ct.	50	18
9/13/16	Flushing	Genesee County Residents	Misty Morning Dr., Krystal Creek Ct., Shady Brook Ln, Fountain View Dr.	42	10
9/19/16	Flushing	Genesee County Residents	Jaclyn Ann Dr. & Jaime Lane	30	8
9/19/16	Flushing	Genesee County Residents	Eastman Dr. & Hickory Circle	38	13
9/20/16	Flushing	Genesee County Residents	Hut-West Dr., Rodney Ave & Daniel	57	16

FRWC: Held 16 Storm drain stenciling events:

<u>Date</u>	<u>Municipality</u>	<u>Volunteer Group</u>	<u>Volunteer Demographic</u>	<u>Adults</u>	<u>Child</u>	<u># homes</u>	<u># drains</u>	<u>Location of stenciling</u>
10/21/2015	Clio	<b>Clio MS NJHS</b>	City of Clio	3	5	70	10	State St. W Young St, W Johnson St., New St., Old St., Pine St.
10/28/2015	City of Flint	<b>Kettering Sorority</b>	Brownstown, MI; Milan, MI; Clinton Twp; Allen Park MI	12	0	200	18	Blair St., Cadillac St., Bagley St., Perry St., Dupont St. Gladwyn St.
6/12/2016	Swartz Creek	<b>Swartz Creek HS</b>	Swart Creek	2	7	132	46	Helmsley Dr, Chelmsford Dr. Daval Dr. Oakview Dr. Worchester Dr, Winshall Dr.
6/28/2016	Flushing Twp.	<b>Girl Scout Troop Montrose High School Honors Society</b>	Flushing Twp. Flushing Twp, Flushing & Montrose	4	6	85	11	Coutant St from N. McKinley to Circle Dr. Circle Dr & E. Park Ave. from N. McKinley Rd. to Circle Dr.
8/9/2016	City of Montrose	<b>Clio-Carter 8<sup>th</sup> Grade Students</b>	Montrose	4	8	225	89	City of Montrose Orchard St, Baldwin, Creager, Russett, Douglas, Alfred, Leroy, Ray St..
8/16/2016	City of Clio		City of Clio	2	9	123	33	Poplar St, Clarion St, Rodger Lodge, Buttler St and Cherry St.
8/19/2016	Swartz Creek	<b>Swartz Creek MS</b>	Swartz Creek	2	5	124	28	Woodstock Dr. Walden Dr. Joy Dr. Sue Lane, Star Ct., Elaine Dr., Park Place, Peri St. Woodside Trail
8/24/2016	Burton	<b>Bendle HS</b>	Burton	1	4	118	30	Fern, Buder, Scottwood, Parkwood, Columbia & Schumacher, Eldon Baker, Mohawk, Shawnee & Cherokee

8/31/2016	Flint	<b>Bill, Kare and Brock Burke</b>	Fenton Twp	2	1	128	12	Butternut Creek, Haven St, Corydon Dr. Wisner St., Harriet St., Walter St.
9/13/2016	Mt. Morris	<b>St. Thomas More Catholic School</b>	Mt. Morris	3	12	170	16	Harwood Rd., Barch Rd., Penwood Rd.
9/19/2016	Mt. Morris	<b>Homeschool Group</b>	Mt. Morris	6	8	220	32	David Berger & Eldon Rd. Mann Hall, Stocker, Knapp, Hughes, Middleton, Mann, Durand, Zimmerman & Farnum
10/8/2016	City of Flint	<b>Kettering Students</b>	Flint	8	0	160	16	
<b><u>Date</u></b>	<b><u>Municipality</u></b>	<b><u>Volunteer Group</u></b>	<b><u>Volunteer Demographic</u></b>	<b><u>Adults</u></b>	<b><u>Child</u></b>	<b><u># homes</u></b>	<b><u># drains</u></b>	<b><u>Location of stenciling</u></b>
10/8/2016	Flint	<b>Kettering Students</b>	Flint	8	0	210	21	Bradley, Hammond, Gainey, Gibson, Fielding, Knight, Reynolds Stocker,, Norwood, Brentwood, Crestwood, Sherwood, Pencombe Place, Sheffield
10/8/2016	Flint	<b>Kettering Students</b>	Flint	8	0	190	20	Allendale Place, Westcombe, Ferndale Place, Cloverdale Place
10/8/2016	Flint	<b>Kettering Sudents</b>	Flint	9	0	255	25	Edgemont, Mann, Hubbard, Barney, Blackington, St., S. Ballenger Hwy.
10/8/2016	Flint	<b>Kettering Students</b>	Flint	9	0	240	20	

GCDC: Stenciled those storm inlets that were cleaned (weather permitting) approx 200+. 1710+ Storm drain markers have been placed since this program began on catch basins and manhole lids.

*Canoe Trips* on the Flint River. Due to weather there were an additional canoe trips scheduled and advertised this summer. Those that were held are shown below:



Date of Paddle	Name of Paddle	Portion of Watershed Covered	# of Participants	Participant Municipalities
28-May-16	Memorial Day Paddle	M-15 to Irish Road	39	Burton, Flint, Fenton, Lapeer, Grand Blanc, Gaines, Davison, Flushing, Columbiaville, Goodrich, Lake Orion
4-Jun-16	Hello Summer Paddle	Flushing Riverview Park to Flushing Township Nature Park	23	Flushing, Davison, Fenton, Howell, Waterford, Lapeer, Burton, Grand Blanc
11-June-16	Kayaking in the Parks	Mott Lake	6	Fenton, Grand Blanc, Clio
18-June-16	River Time Paddle	Dodge Road to Montrose Barber Memorial park	14	Grand Blanc, Flint, Midland, Montrose, Fenton, Swartz Creek, Otisville
23-June-16	Lovely Lapeer Evening Paddle	Rotary Park to Saginaw St. Landing	16	Lapeer **
26-Jun-16	Lazy Days of Summer	Irish Road to Mott Lake	17	Flint, Holly, Lake Orion, Metamora, Flushing, Fenton, Grand Blanc, Lapeer, Otisville, Clarkston, Davison, Mt. Morris
2-July-16	Up North Retreat Right Here at Home	Richfield Park to Mott Lake	29	Flint, Howell, Flushing, Waterford, Lake Orion, Metamora, Otisville
16-July-16	Summer Getaway	Holloway Dam to Irish Road	21	Lansing, Davison, Lapeer
27-July-16	Dog Days of Summer Evening Paddle	M-15 to Irish Road	15	Fenton, Flushing, Grand Blanc, Burton, Flint, Ortonville, Lapeer, Davison
4-Aug-16	Love Your Lakes – Flint Park Lake	Flint Park Lake	15	Flint, Residents of the Flint Park Lake neighborhood
6-Aug-16	Flotilla	Grand Traverse Ave to Mott Park Golf Course	205	Flint **
11-Aug-16	Love Your Lakes – Thread Lake	Thread Lake	14	Flint, Residents of the Thread Lake neighborhood
20-Aug-16	Float the Flint	M-15 to Irish Road	15	Fenton, Flint, Swartz Creek, Lake Orion, Grand Blanc
22-Aug-16	Friends, Funders & Press Paddle	Ends at Vietnam Veteran's Park	20	Flint and surrounding area
28-Aug-16	Fun Times Picnic on the Flint River	Montrose to Birch Run	17	Flint, Imlay City, Fenton, Flushing, Otisville, Clio
3-Sep-16	Pedal to Paddle	Bray Road to Vietnam Veteran's Park	8	FUTURE
17-Sep-16	Experience the Fall Colors	Holloway to Irish Rd.	16	FUTURE
22-Sep-16	Celebrate the Fall Equinox Paddle	Birch Run to Seymour Rd.	16	FUTURE
Total			<b>285</b>	

\*\* Denotes FRWC sponsored floats, outside the Contract area

*Macroinvertebrate Monitoring Program:* Since 1999, the FRWC has executed a bi-annual Benthic-Monitoring Program that has been performed to meet MDEQ requirements. This program has expanded from 18 sites to 32 since its inception. (18 of the 30 are within Genesee County) This program is possible due to volunteers who live in the watershed who give up two days twice a year to be trained to collect and log samples. The data is used to categorize sites as “poor”, “fair”, “good” or “excellent” and provide a good assessment of water quality. **Section 8** provides additional detail on Benthic-Monitoring Program and

summarizes findings for each watershed. Many of the Students that participate in GREEN and do chemical testing on the river also perform a Macroinvertebrate survey to show the students what kind of life lives in the Flint River and Shiawassee River.

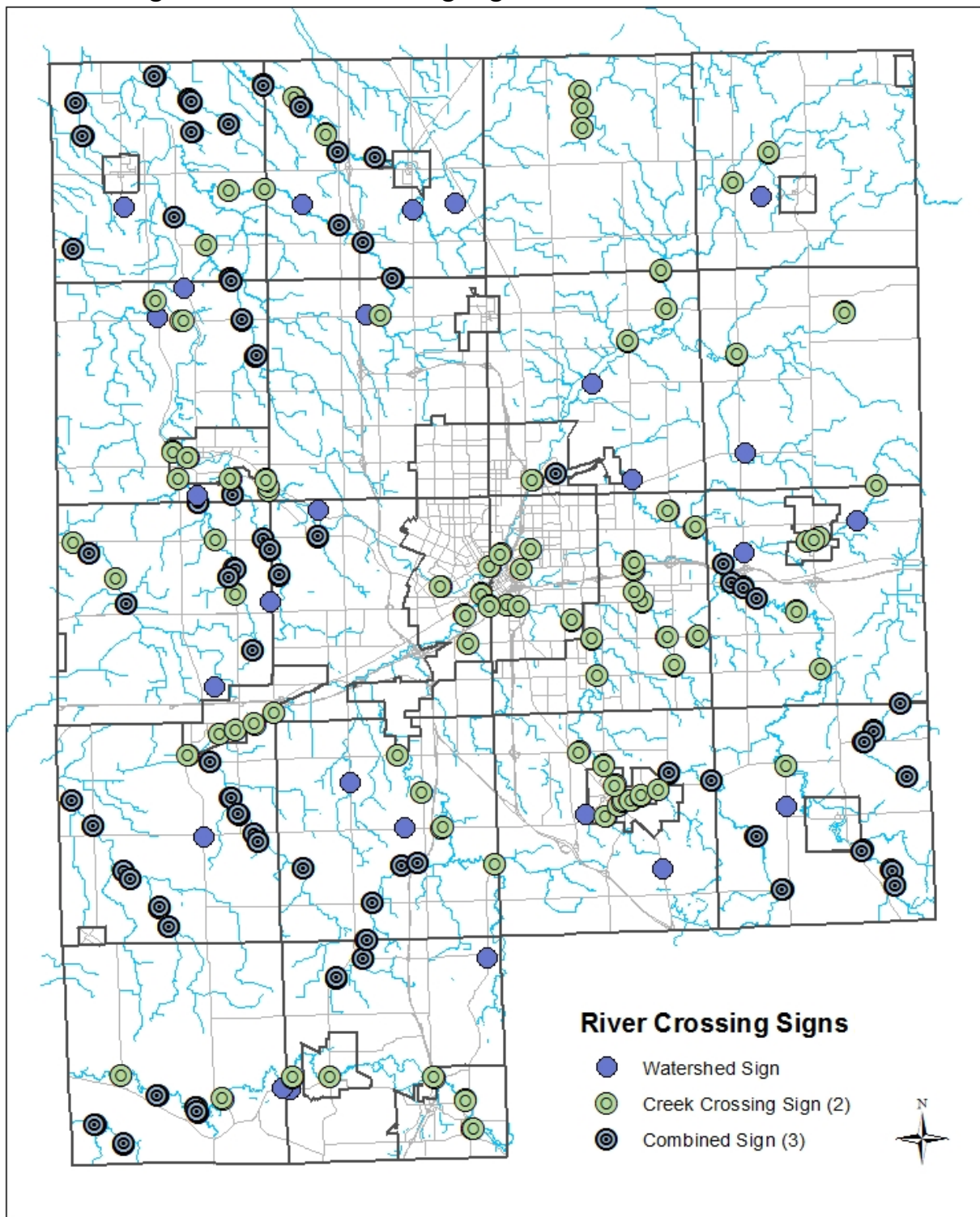
*Good Housekeeping Education:* Education efforts that related to Good Housekeeping of permittee properties: (Program is also discussed in the Good Housekeeping -Section 5).

- Nov 11, 2015: Susanne Hogan of the GCD-C-SWM spoke to the Genesee County Schools Maintenance Group meeting in regards to each nested permittee's SWPPP and good housekeeping practices that have to be maintained. Also let them know that good housekeeping training is now available online. See [http://www.gcdcswm.com/PhaseII/SWPPI\\_SWO/SWPPI\\_SWO.htm](http://www.gcdcswm.com/PhaseII/SWPPI_SWO/SWPPI_SWO.htm) for links.
- Other communities have requested/taken the training materials for this program to educate their staff:
  - City of Flushing

*Watershed Signs:* In cooperation with the Genesee County Road Commission (GCRC), the PE committee began installing 24" x 30" watershed signs throughout the Shiawassee and Flint River Watersheds in late 2006 & 2008. An additional 56 were placed in 2013-14 within the Cities. Stream/river crossing identification signs have also been placed to increase public awareness. No additional sign have been placed this reporting period.



Figure 2-1: River Crossing Signs Placed as of Oct 2014





*Public Education Plan Evaluation:* The evaluation plan will focus on monitoring outputs and outcomes of the education program. Currently, Tetra Tech and the GCDC staff are working to maintain records of outputs of the education program (number of people addressed at public events, number of presentations conducted, etc.) Tetra Tech, and the PE Sub-Committee are working on a robust evaluation plan to monitor outcomes (changes in behavior, changes in knowledge, etc.) in addition to outputs currently being monitored.

Areas of success:

- Educational materials are constantly expanding and available
- Stenciling program delivered and ongoing
- Brochures delivered
- Booth (for outside events) delivered
- Presentations are made to local groups on an on-going basis
- School age children are educated about storm water impacts on local waterways.
- Road Signs Installed and Maintained
- Storm drain Markers installed and ongoing
- Implementation of initial education efforts is done

Areas of need:

- Staffing constraints do not allow enough time dedicated solely to education efforts
- Develop additional education efforts

*Other Education Efforts:* There are many education efforts throughout Genesee County that promote the storm water message, but are not directly supported by this program. They may be supported indirectly by a local community including Genesee County or a nonprofit group. These efforts are listed below and included in Appendix A to show all efforts of water education within Genesee County and its Communities.

- The FRWC coordinates a river cleanup on the Flint River and its tributaries both within Genesee and Lapeer counties. The Cleanup was on April 30<sup>th</sup> 2016. Volunteers removed debris/ trash along 13 different locations in Genesee County and 3 locations in Lapeer County on the Flint River and its Tributaries. Staff from the County and local municipalities including the Drain Office, Parks and Rec, City of Flushing, City of Flint and others assisted with the cleanup by provided staff or garbage removal.



- Community walking path along river has free standing watershed signage, between Genesee County Parks and City of Flushing Park.
- Park provides education on proper disposal of pet waste at the City of Flushing Park walkway.
- There is an Annual River cleanup on the first week of June along the Shiawassee River, organized by a Fenton council members.
- Friends of the Shiawassee in another watershed group that is focusing on

the health of the Shiawassee River. Drain Office Staff has made arrangements for the FRWC to

expand the Benthic monitoring program to include 2 sites on the Shiawassee. GCDC staff was contacted by Friends of the Shiawassee to expand or work in tandem with that program. They produced a press release for a Benthic program that is adding 8 sites both upstream and downstream on the Shiawassee outside of Genesee County. They also have been adding adopt a river signs along the river. They also had at least 1 native planting training.

- Flint River Corridor Alliance is a community based organization of Government, non-profit and private sector stakeholders, focusing on the Flint River as it goes through the City of Flint. They are completing the securing of grant money to remove the Hamilton and Fabri dams located within and owned by City of Flint. They have partnered with Genesee County Parks and Rec to facilitate the dam removals. They also sponsor an annual Floatilla on the Flint River and other events promoting the Flint River.
- Genesee County Parks provides education on many subjects including storm water. (**H2 knOw!**). Genesee County, specifically the Parks and rec owns many acres along the Flint River providing defined access for the public. They also provide support for many water programs.
- Household Hazardous Waste: The Our Water program supports this program by promoting it but this program is developed and managed by Genesee County Planning Commission, General Motors, UAW Local 599, Goodwill Industries, 5R Processors and Keep Genesee County Beautiful & several communities participate and/or support this program both financially and with staff or letting program use their property. In the spring and fall there are HHW and electronic waste collections. City of Flint hosts a permanent site at their Water service center (centrally located within Genesee County). A second site moves to a new location around the County. This is either hosted at a school or municipal property. In the last couple of years this program has been expanded to include electronic waste.
  - **October 17, 2015: former Showcase Cinema, Flint Water Service Center**
  - **May 21, 2016: Grand Blanc High School, Flint Water Service Center**
  - **August 20, 2016: Lake Fenton HS, Flint Water Service Center**
  - **October 22, 2016: Trinity Assembly of God-Mt. Morris, Flint Water Service Center**

## **PUBLIC PARTICIPATION PLAN**

The PPP was implemented under previous years' annual reports. No PPP meetings were held within this reporting period. They are done on an as-needed basis and typically run concurrent with the updating of Watershed Management plans and if there is a significant event where public input is appropriate.

*Report to Municipal Officials:* Local appointed and elected officials are critical players in adopting the WMPs and allocating resources toward their implementation. Obtaining buy-in and providing education to this group helps to ensure the success of implementing the WMP. Local appointed and elected officials acknowledge their accountability to their constituents and embrace their role in shaping the future vision of the WMPs. As public officials, local government leaders value the advice, concerns, and issues that community residents see in terms of the watershed condition past, present and future.

Municipal officials are given newsletters as needed that provide updates on the status of storm water and watershed planning efforts. Each municipality is given 25-50 newsletters to be passed out to elected officials and planning boards. Municipalities are also given brochures and information packets to dispense to the public. Most recent newsletter was Sept 2015. See attachment A

## CONSTRUCTION STANDARDS AND PRACTICES SUB-COMMITTEE ACTIVITIES

The Construction Standards and Practices (CSP) Sub-Committee oversees new construction standards and post construction management practices for Genesee County, including storm water Best Management Practices (BMPs). This Sub-Committee also updates ordinances to ensure compliance with Environmental Protection Agency (EPA) requirements. In this reporting period, the CSP Sub-Committee did not hold any meetings. The new permit application was due 4/1/14. In the application the Ordinances (regulating mechanism) and standards are done and provided to permittees.

Many of the Communities that used to be in the Phase II program and were able to opt out. With the 2014/15 permit it was decided that each subcommittee is now a committee of the whole made up of the contract members. (See Table 1-1) Non contract communities are invited, but are not voting members.

**Work is being done on behalf of the contract Communities (table 1-1)**

### **STORM WATER ORDINANCE**

The CSP Sub-Committee had worked to establish a template Ordinance for Communities to adopt within Genesee County that would satisfy the new Permit Application. After reviewing State requirements and sample ordinances the CSP Sub-Committee reviewed and tailored the ordinance template. The Ordinances (regulating mechanism) and standards are done and provided to permittees. The local governments may elect to adopt stricter standards. During the training for the new permit application it was expressed by the State that Townships do not have to pass an actual ordinance. Townships may pass an alternative regulatory mechanism for those outfalls under their jurisdiction. Each community will have to adopt an ordinance/regulatory mechanism, whether they choose the Sub-Committee's or another version.

Currently, the only enforcement powers the County has are those given to them from the State (Public Acts that govern SESC, Septic, Road Commissions and the Drain Code). The County cannot pass an ordinance that would affect private property, but will enact policy to govern County-owned property. Individual communities have their own police power to enforce the ordinance. They also have the right to extend those powers to another entity to enforce the ordinance on their behalf.

Genesee County received a SAW grant to provide guidance to the communities to help facilitate the adoption of the ordinances. That work will be occurring in the next permit cycle.

The following sections of this report provide results for programs the BMP Sub-Committee oversees:

- Section 5 Good Housekeeping

It should be noted that the standards currently in place deal with water quantity. The new standards will also deal with water quality, and any new ordinances will expand the Community's authority as well as specify development requirements. The Storm Water Ordinance references a BMP Manual (see text below). By keeping the BMP Manual separate, and not including design guidance in the ordinance, changes can be made to the BMP Manual without revising the whole ordinance.

### **BMP MANUAL**

Currently, Genesee County Water & Waste is the County agent (City of Burton is the Municipal Agent in their community) on behalf of Part 91 of Public Act 451 and has construction BMPs for Soil Erosion and Sedimentation Control (SESC). Individual communities may or may not have ordinances that regulate



construction and post construction. The CSP Sub-Committee has developed a BMP Manual, which will represent minimum standards for post construction BMPs for water quantity and quality. These BMPs will not be limited to SESC.

Communities will be able to either adopt the CSP Sub-Committee's BMP Manual or create their own. Long-term BMP operation, maintenance, and schedule issues will be addressed in the enforcement portion of the manual.

Each community individually are addressing ordinances/resolutions for post construction and IDEP individually in their Permit Application(s) (due April 1, 2014). They may choose to use the ordinance template and BMP manual that were developed by the subcommittee or use other appropriate ordinances/resolutions. See Permit Application(s) for individual commitments.

## MONITORING AND MAPPING SUB-COMMITTEE ACTIVITIES

The Monitoring and Mapping (M&M) Sub-Committee did not meet during this reporting period:

Many of the Communities that used to be in the Phase II program and were able to opt out. With the 2014/15 permit it was decided that each subcommittee is now a committee of the whole made up of the contract members. (See Table 1-1) Non contract communities are invited, but are not voting members.

The M&M Sub-Committee oversees organization and implementation of watershed monitoring, field-sampling protocols, and mapping guidelines. As part of their responsibilities, the M&M Work Group oversees several water quality monitoring programs as well as the Illicit Discharge Elimination Plan (IDEP) Program. In addition, they oversee the Hot-spot Water Quality Monitoring Program, which goes beyond IDEP by focusing on known problem areas, such as Blue Bell Beach that is frequently closed due to high E-coli counts. **Work is being done on behalf of the contract Communities (table 1-1)**

The following sections of this report provide results for programs the M&M Sub-Committee oversees:

- Section 6 319 Nonpoint Source Grant Projects
- Section 7 Project GREEN (and its educational aspects discussed in Section 2)
- Section 8 Macroinvertebrate Study
- Section 9 IDEP Program
- Section 10 New Storm Water Point Source Discharges

## GOOD HOUSEKEEPING

Good Housekeeping is a required and essential part of an effective storm water pollution protection program. Periodic training in Stormwater Good Housekeeping practices is required for all applicable maintenance staff employed in nested municipalities or school districts. Affected personnel must be trained at least once over the course of the permit cycle.

A copy of the Power Point presentation and the BMP manual developed by this sub-committee are available on the GCDC-SWM website.

[http://www.gcdcswm.com/PhaseII/SWPPI\\_SWO/SWPPI\\_SWO.htm](http://www.gcdcswm.com/PhaseII/SWPPI_SWO/SWPPI_SWO.htm). Also contract participants or nested jurisdictions are able to **download** or borrow a disc with the video entitled “Storm Warning: Stormwater Pollution Prevention” by ExCal Visual LLP. The Power Point presentation and the BMP manual explain the importance of preventing contamination from storm water run-off and ways employees can be involved at their facility. Subject matter of written and video material meets the permit requirements for employee training.

### Maintenance Staff Training Topics

- Spill prevention
- Spill Control and Response
- Vehicle and Equipment Maintenance
- Vehicle and Equipment Washing
- Material Storage
- Waste Management
- Facility Maintenance
- Landscape and Grounds Maintenance
- Illicit Discharge Detection
- Contracts

From time to time, individualized training is offered to each nested agency/ Municipality under the contract. The training focused on establishing and strengthening the Good Housekeeping practices listed above. Training is not offered once or twice a permit cycle. No training was offered this reporting cycle, but it will be offered in 2016-17 reporting period.

The MDEQ SWPPP checklist used as a guideline for the audits is available upon request.

## GRANT PROJECTS

In 1987, Congress amended the Clean Water Act to establish the Section 319 Nonpoint Source Management Program because it recognized the need for greater federal leadership to help focus State and local nonpoint source efforts. Under Section 319, State, Territories, and Indian Tribes receive grant money which support a wide variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects.

There are three 319-grant projects within Genesee County. All are within the Middle Flint Watershed: the Swartz Creek Watershed Project, Gilkey Creek Watershed Project, and the Kearsley Creek Watershed Project. CAER and FRWC developed the Swartz Creek and Gilkey Creek WMPs and GCDC developed the Kearsley Creek WMP to control nonpoint sources of pollution. Projects may include implementing structural BMPs, non-structural BMPs, and information and education activities to eliminate nonpoint source pollution.

### **SWARTZ CREEK WATERSHED PROJECT**

The Swartz Creek Watershed Plan has been granted 319 status by the MDEQ.

No activity occurred during the reporting period.

### **KEARSLEY CREEK WATERSHED PROJECT**

The Kearsley Creek Watershed Plan has been granted 319 status by the MDEQ.

No activity occurred during the reporting period.

### **GILKEY CREEK**

The Gilkey Creek Watershed Plan has been granted 319 status by the MDEQ. It outlines designated and desired uses for the watershed, historic and present conditions, watershed goals, best management practices recommendations, and an education and evaluation plan.

GCDC-SWM received a SAW grant in this permit cycle. It included:

- Storm sewer asset management for the GCRC within the urbanized areas.
- Social survey
- Post construction education

The saw Grant is a 2-year grant and work will be complete by Oct 1, 2017.

## GENESEE GREEN

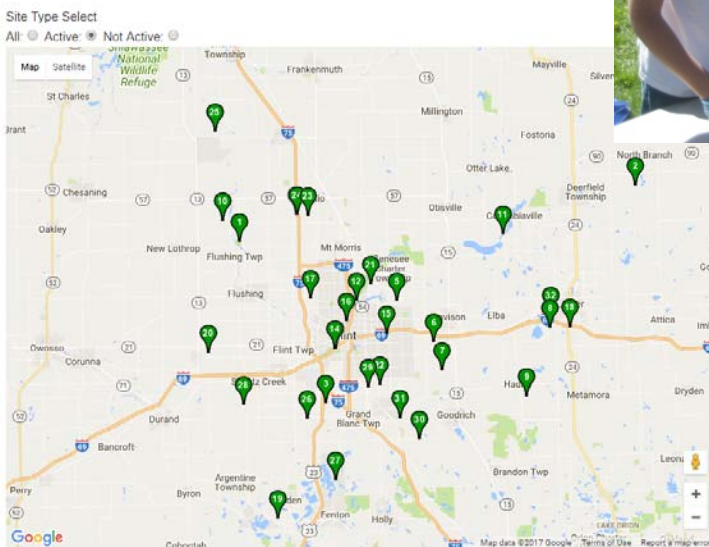
Project Green, now referred to as Genesee GREEN, has grown in Genesee County from approximately 100 students in 1990 to in excess of 1000 in 2016. The ideal is that all of the students visit specific sampling sites along the Flint River Watershed within the same week to conduct a Water Quality Index (WQI) analysis. The data gives a snapshot of that moment in time. As each year is added, comparisons can be made about the quality of the water running through the watershed environment over time. Comparisons can also be drawn between geographical sites.

The Global Rivers Environmental Education Network (GREEN) is a curriculum-based, mentored program that seeks to engage young people as active citizens to improve conditions in their watersheds. GREEN empowers young people to learn more about the watersheds they live in and use their findings to create lasting solutions to water quality problems. GREEN has been in existence for twenty years in Genesee County under the direction of the Genesee County Intermediate School District (GISD).

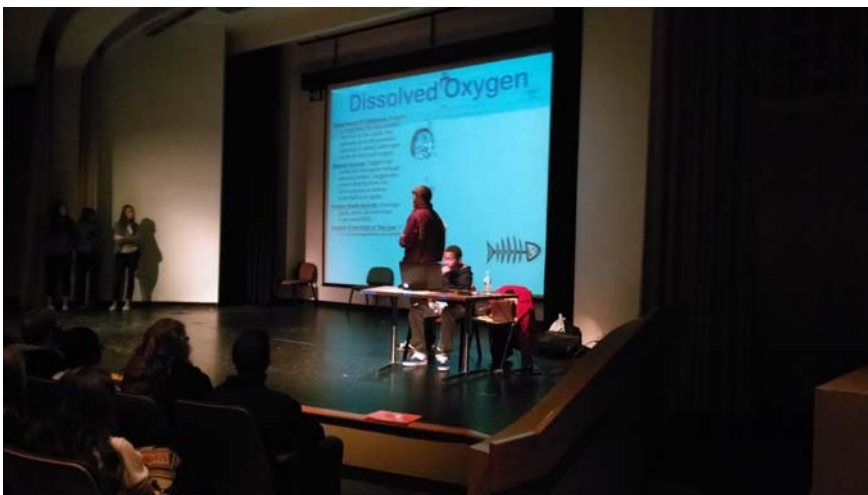
In 2003, the Flint River Watershed Coalition (FRWC) was approached by Earth Force Green and General Motors to be the coordinator of GREEN in the Flint River Watershed. FRWC was identified as the primary organization that could help improve program participation and effectiveness because of its focus on water quality monitoring and environmental education. The FRWC Board of Directors has endorsed this vision and is providing administrative control.

As part of the program, students from local schools learn about water quality and testing procedures by visiting various sites to take water samples and by analyzing the collected data. Many of the students get the opportunity to present their results, compare results to other sites, and get additional education at the Summit dated May 20, 2016. During the last reporting period, participation included:

40+	Participating Educators
1000+	Students
10	Mentors
13	Presenters at the summit



Schools are also encouraged to participate in a summit, where students are able to present their findings. The student summit was held at Kettering University and students from 16 schools presented collected data.



Each site visited is categorized as excellent, good, fair, poor, or very poor based on the National Sanitation Foundation (NSF) WQI analysis. To determine the WQI, nine tests are performed. Parameters tested include dissolved oxygen, fecal coliform, pH, biochemical oxygen demand (5-day), temperature, total phosphate, nitrates, turbidity, and total solids. After completing the nine tests, results are recorded and transferred to a weighting curve chart where a numerical value is obtained as shown in Table 7-1. For each test, the numerical value or Q-value between 0 and 10 is multiplied by a "weighting factor." For example, dissolved oxygen has a relatively high weighting factor (0.17) and therefore is more significant in determining water quality than the other tests. The nine resulting values are then added together to arrive at an overall WQI. If all nine water quality tests are not available, then the total of those samples available is multiplied by the inverse their total weighting factors.

Table 7-1: Water Quality Index Calculation Chart

Test Parameter	Q-Value	Weighting Factor	Total
1. Dissolved oxygen	$Q_{DO}$	0.17	$0.17 \times Q_{DO}$
2. Fecal coliform	$Q_{FC}$	0.16	$0.16 \times Q_{FC}$
3. pH	$Q_{pH}$	0.11	$0.11 \times Q_{pH}$
4. Biochemical oxygen demand	$Q_{BOD}$	0.11	$0.11 \times Q_{BOD}$
5. Temperature	$Q_T$	0.11	$0.11 \times Q_T$
6. Total phosphate	$Q_P$	0.10	$0.10 \times Q_P$
7. Nitrates	$Q_N$	0.10	$0.10 \times Q_N$
8. Turbidity	$Q_{Turb}$	0.08	$0.08 \times Q_{Turb}$
9. Total solids	$Q_{TS}$	0.07	$0.07 \times Q_{TS}$
Overall WQI			Sum ( $Q_x$ )

The WQI ranges are categorized as follows: 90-100 Excellent, 70- 89 Good, 50- 69 Average (Fair), 25- 49 Marginal (poor), 0- 24 Poor.

It should be noted that there was no discernible correlation between the Genesee GREEN Results and the Benthic Monitoring Results. Since the benthic monitoring results reflect the macroinvertebrates' long term exposure to their environment the results are assumed to be more reflective of the overall health of the water body compared to the one-time sampling associated with Genesee GREEN.

[Reference: Mitchell, Mark K. and William B. Sharp, 2000. *Field manual for Water Quality Monitoring: An environmental education program for schools*, (twelfth edition), Kendall/Hunt Publishing Company, Dubuque, Iowa]

Much effort was spent by Tom Jones from GCDC-SWM to update the Green Website <http://flintrivergreen.is-great.org/> to allow teachers to directly enter the data and make that data available to the public.

Table 7-2 and Figures 7-1 to 7-4 summarize Genesee Green results for the Lower, Middle, and Upper Flint River and Shiawassee River Watersheds. On the Genesee Green Website there was a gap between 2010-2015 sampling years. Our data shows that we recorded data from 2011-2013.

Table 7-2: Genesee Green Results

ID No	Location	Sampled Years	Water Quality Index (WQI)
<b><i>Lower Flint River Watershed</i></b>			
1L	Armstrong Creek at Dodge Road	2006-07, 2011-2012	Good
2L	Craven and Benson Drain off Mt Morris Road	2007	Fair
3L	Mill Street Bridge	1993, 1998-2004, 2006-2009	Good
4L	North corner of Flushing and Linden Roads	1991, 1994, 1998-2004, 2007, 2008, 2010	Good
5L	Pirnie Creek at Beecher Road	2006, 2008	Good
6L	Southeast corner of M-57 and Seymour Road	2001-2011	Good
7L	Clio Bike Path at Jennings Road	2007, 2009, 2011, 2012	Good
8L	Flushing Park at Pavilion #2	2001-02, 2005	Good
9L	Mott Park	1993, 1998-2000, 2010-2013, 2016	Fair
10L	Pine Run at Clio Park	2006, 2009, 2012-13	Good
11L	North of Flushing at Mt. Morris Bridge	1998	Good
12L	Seymour Rd. North of Farrand Rd.	2009	Good
13L	Flint River @ Barber Memorial Park	2015	Good
14L	Lake Drain @ Randy Wise	2015	Fair
	Misteguay Creek	2016	Good
<b><i>Middle Flint River Watershed</i></b>			
1M	Swartz Creek at Hill Road Bridge	2005-06, 2009-2010, 2012-13	Good
2M	Behind McDonalds at Dort and Stewart	2003	Fair
3M	Bridge between UM-Flint and Autoworld	1993-94, 1998, 2001	Fair
4M	Crampton Drain at Kearsley Armstrong	2006, 2008-2011	Good
5M	Downstream from For-Mar Nature Center	2005, 2010	Good
6M	Gilkey Creek behind Central High School	1991-92, 1994, 2001-2002, 2009	Poor
7M	Immediately west of the Farmer's Market	2004-06 2012-13	Good
8M	Pierson Drain at Atherton HS	2007, 2015	Good
9M	Swartz Creek at Happy Hollow	1993-94, 2002-2003, 2010-2012	Fair
10M	Swartz Creek at Swartz Creek M.S.	2005-06	Fair
11M	Swartz Creek at Van Slyke Road	2002, 2012	Good
12M	Swartz Creek Golf Course	2001-02	Good
13M	Thread Creek at McCandlish Road	2007-2008	Fair
14M	Thread Creek at Rust Park in Grand Blanc	2005-2006 2012	Good
15M	Timberwolf Turnout off Irish Road	2005	Fair
16M	Kearsley Creek at Goodrich Commons	2004	Good
17M	Kearsley Creek near Goodrich High School	2004-05	Good

ID No	Location	Sampled Years	Water Quality Index (WQI)
18M	Flint River West of Johnson AAA School	2006-2010	Good
19M	Thread Creek at Bristol Rd.	2008-2013	Fair
20M	Upstream of For-Mar Nature Center	2004, 2006-2009, 2011	Good
21M	Swartz Creek at Swartz Creek MS	2012	Good
22M	Black Creek- Abernathy Park	2013	Fair
23M	Swartz Creek @ Frost Gardens	2012-13, 2015	Good
24M	Davison Kearsley Creek	2015	Fair
25 M	Thread Creek @ Perry Road	2015-16	Good
<b>Upper Flint River Watershed</b>			
1U	Bear Swamp at Genesee Road	2007	Poor
2U	Oak Road North of Stanley	2001	Good
3U	Bluegill Boat Ramp on Mott Lake	2002, 2005	Good
4U	M-15 north of Stanley Road	1997-98, 2002	Good
5U	Holloway Reservoir at Mt. Morris Bridge	1997, 2001, 2003-05	Good
6U	Mott Farm between house and barn	1993-94, 1998, 2001, 2004	Good
7U	Richfield Park	2001, 2003-2010	Fair
8U	Flint River @ Steeping Stone	2015	Good
<b>Shiawassee River Watershed</b>			
1S	Platform south of Main Street Bridge in Fenton	1992, 1996, 1998-2004	Fair
2S	Linden Mill Pond (Shiawassee River)	2007, 2010, 2015	Good
3S	Fenton Mill Pond (Shiawassee River)	2009, 2012	Poor
4S	Linden Middle School Grounds	2012-13	Good
<b>Unknown Watershed</b>			
1UNK	Unlisted Location	2009-2012	Good

Table 7-3: Flint River Green Results for 2015

Location	School	Year	WQI
Davison Kearsley Creek	Davison Middle School	2015	61.82
Farmers Creek	Chatfield	2015	72.36
Flint River @ Barber Memorial Park	Montrose High School	2015	54.82
Flint River @ Steeping Stone Falls	Mt. Morris Middle School	2015	55.39
Lake Drain @ Randy Wise	Hamady High School	2015	49.44
Lapeer Hunters Creek	Lapeer High School	2015	71.08
Linden Mill Pond (Shiawassee River)	Linden Middle School	2015	69.65
Pierson Drain at Atherton HS	Atherton High School	2015	77.41
Silver Creek	Marshall Greene Middle School	2015	75.12
Swartz Creek @ Frost Gardens	Grand Blanc West Middle School	2015	62.64
Thread Creek at Perry Road	Grand Blanc East Middle School	2015	73.1



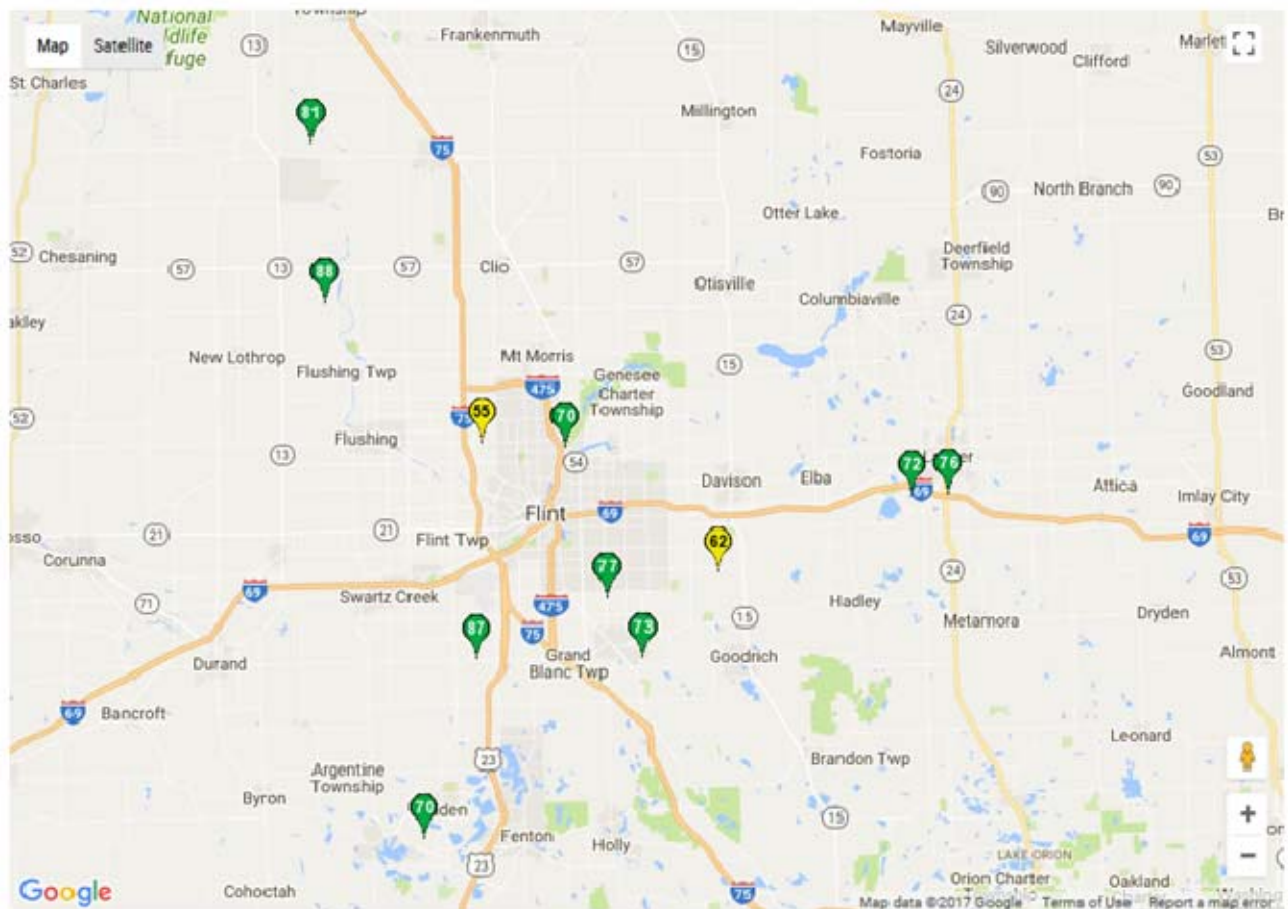


Figure 7-1: Flint River Green Location Map for 2015

Table 7-4: Flint River Green Results for 2016

Location	School	Year	WQI
Farmers Creek	Chatfield	2016	72.5
Misteguay Creek	Valley School	2016	71.9
Mott Golf Course Bridge at hole #6	St. John Vianney	2016	66.1
Thread Creek at Perry Road	Grand Blanc East Middle School	2016	76.5

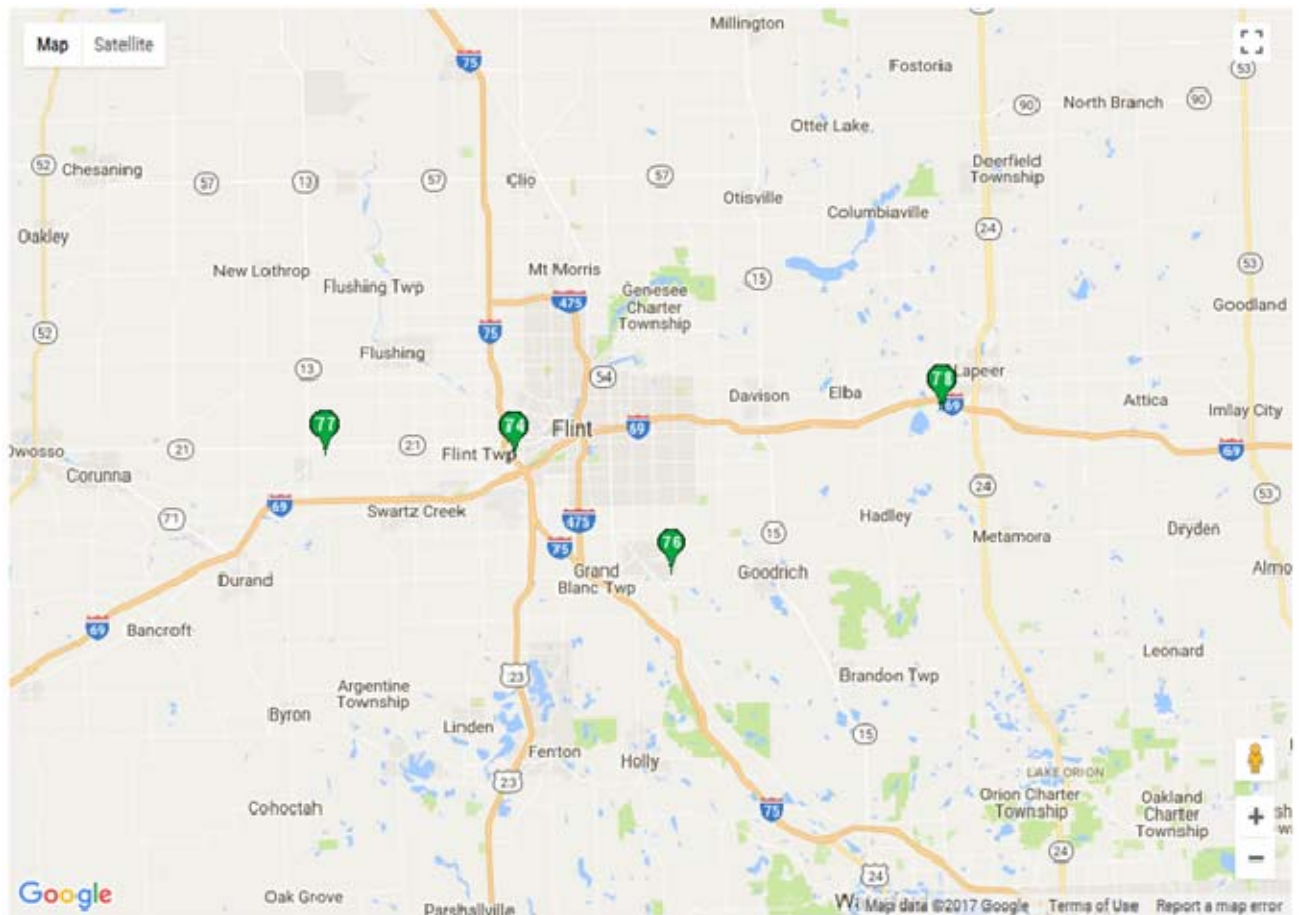


Figure 7-2: Flint River Green Location Map for 2016

## MACROINVERTEBRATE STUDY

Since 1999, the Flint River Watershed Coalition (FRWC) has executed a bi-annual Benthic Monitoring Program that has been performed to meet MDEQ requirements. This program has expanded from 18 to 30 sites since its inception.

This program is successful because volunteers who live in the watershed contribute two days, twice a year for training, sample collection and species identification. The scores for each site visit are averaged over the sample years and categorized as either Excellent (>48), Good (34 – 48), Fair (19 – 33.9), and Poor (<19). These scores not only give an indication of macroinvertebrate community health but also provide a good Water Quality Index value. Table 8-1 and Figures 8-1, 8-2, 8-3, and 8-4 summarize macroinvertebrate sampling results for the Lower, Middle, and Upper Flint River Watersheds and the Shiawassee River Watershed. Sites categorized as “poor” are identified in Table 8-1 with red font.

One of the study sites received a Water Quality Index rating of “Excellent” while four sites showed a decline in water quality (red font). Macroinvertebrate study was last updated in April & May for 2015 which was included in the 2015 Annual Report.

**Table 8-1: Macroinvertebrate Study Results**

ID_No	Location	Sampled Years	Water Quality Index (WQI)	Water Quality Fall 2015/Spring 2016
<b><i>Lower Flint River Watershed</i></b>				
A-L	Pine Run Headwaters	1999-2000, 2003-2016	Fair	No Change
B-L	Misteguay Creek Headwaters	1999-2000, 2004-2016	Fair	Good/Fair
C-L	Flint River, Flushing	1999-2016	Excellent	Good/Excellent
D-L	Brent Run	1999-2003, 2005-2016	Good	No Change
E-L	Brent Run Headwaters	1999-2000, 2004-2016	Fair	Poor/Fair
<b><i>Middle Flint River Watershed</i></b>				
A-M	Swartz Creek	1999-2016	Excellent	Good/Excellent
B-M	Thread Creek	1999-2016	Fair	Poor/Fair
C-M	Thread Creek Headwaters	1999-2016	Fair	Good/Fair
D-M	Kearsley Creek	1999, 2001-2016	Excellent	Good/Excellent
E-M	Kearsley Creek Headwaters	1999-2003, 2005, 2007-2016	Good	No Change
F-M	Gilkey Creek	1999-2013	Poor	Discontinued
G-M	Gilkey Creek Headwaters	2002-2016	Fair	No Change
I-M	Gilkey Creek Restoration (Kearsley Park)	2009-2016	Good	Fair/Good
J-M	Swartz Creek Headwaters	2007-2016	Excellent	Good/Excellent
<b><i>Upper Flint River Watershed</i></b>				
A-U	Butternut Creek Headwaters	2000-2016	Good	No Change
B-U	Flint River, Richfield	2000-2003	Replaced	Replaced with Clark Drain Site
C-U	Clark Drain, Richfield Park	2009-2016	Good	No Change

D-U	Butternut Creek	1999-2016	Good	No Change
<b><i>Shiawassee River Watershed</i></b>				
A-S	Argentine	2008-2016	Fair	No Change
B-S	Linden	2008-2016	Fair	No Change

It should be noted that there was no discernible correlation between the Project GREEN Results (Section 7) and the Benthic Monitoring results. Since the Benthic Monitoring results reflect the macroinvertebrates' long-term exposure to their environment, the results are assumed to be more reflective of the overall health of the water body compared to the one-time sampling associated with Project GREEN (which is more focused on inspiring youth).

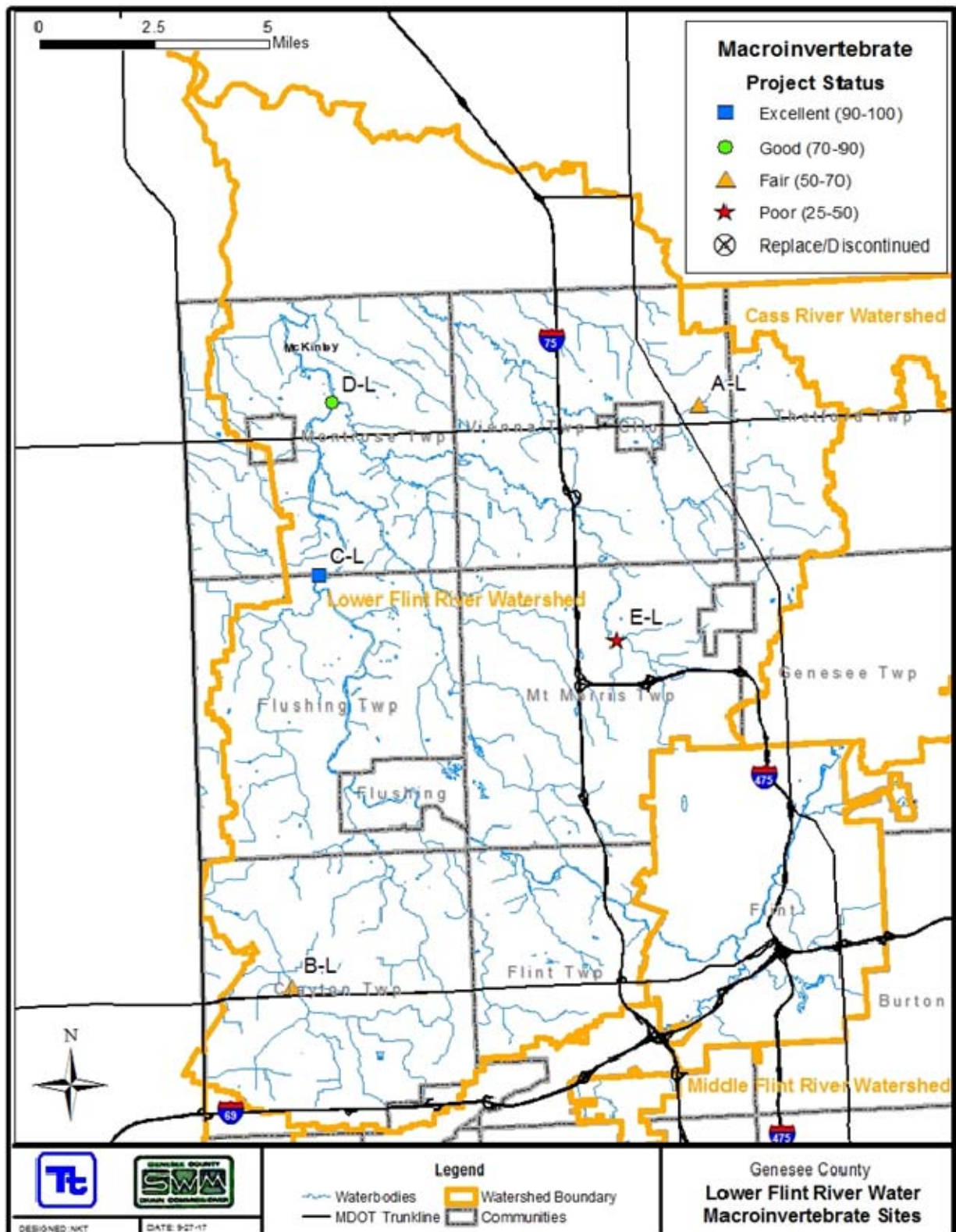


Figure 8-1: Macroinvertebrate Study Results for the Lower Flint River Watershed



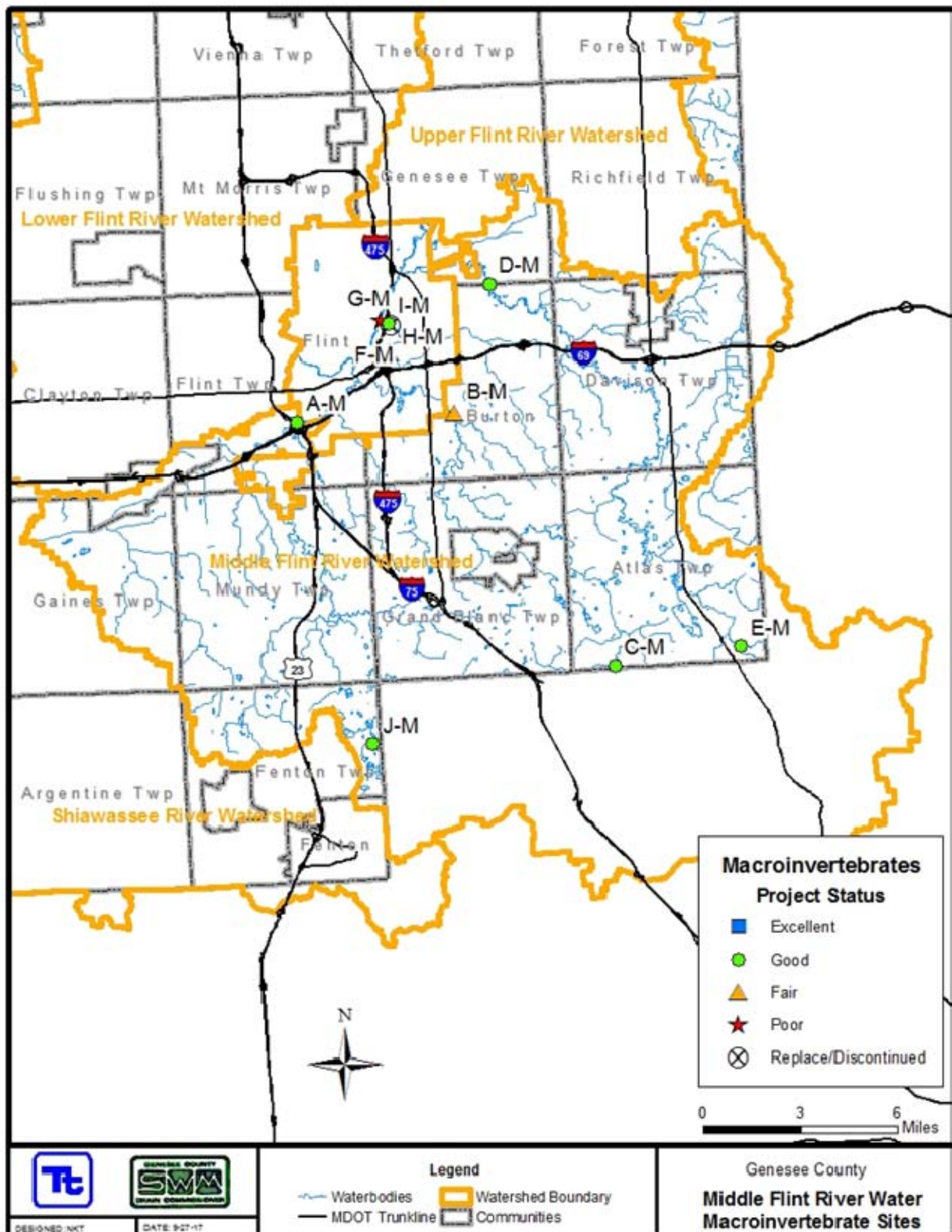


Figure 8-2: Macroinvertebrate Study Results for the Middle Flint River Watershed

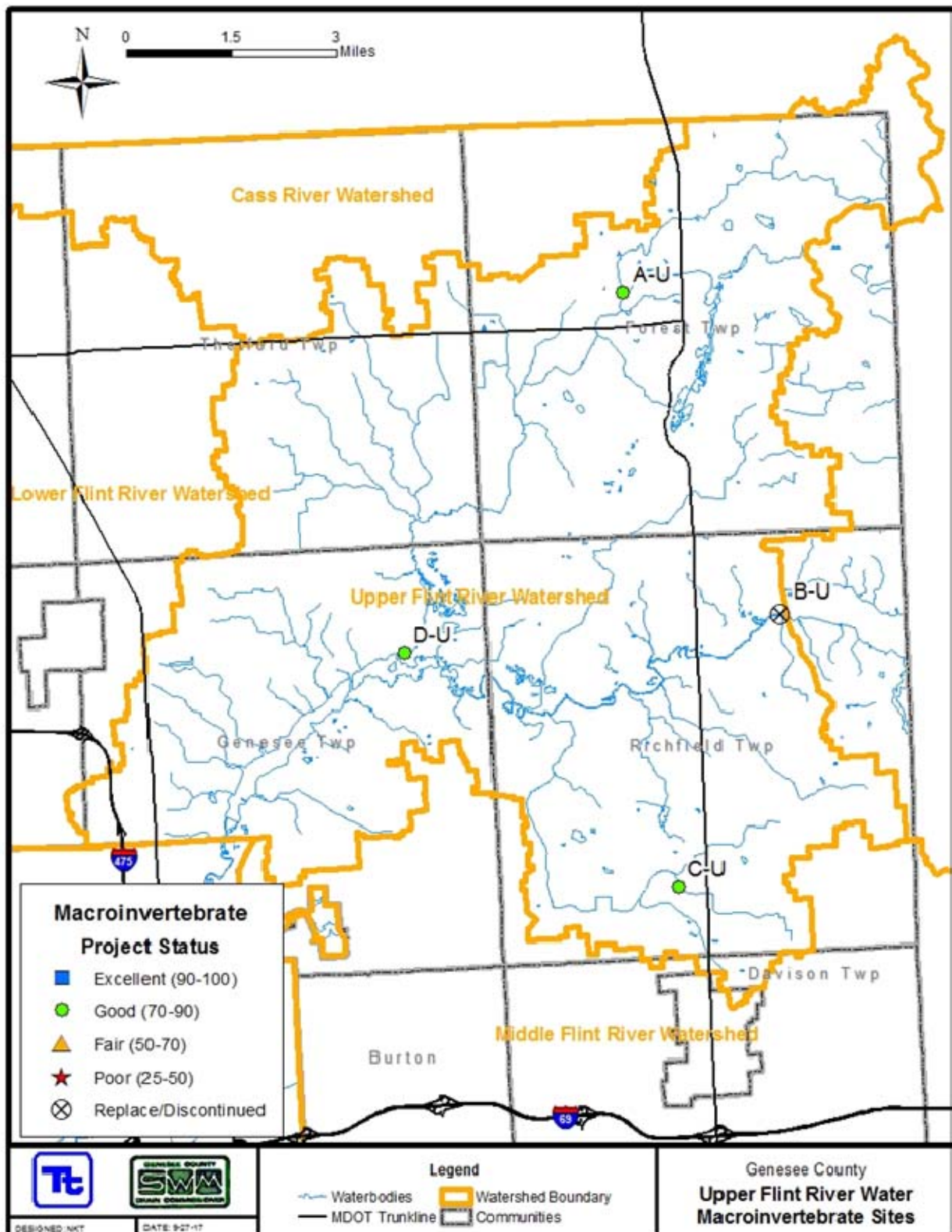


Figure 8-3: Macroinvertebrate Study Results for the Upper Flint River Watershed



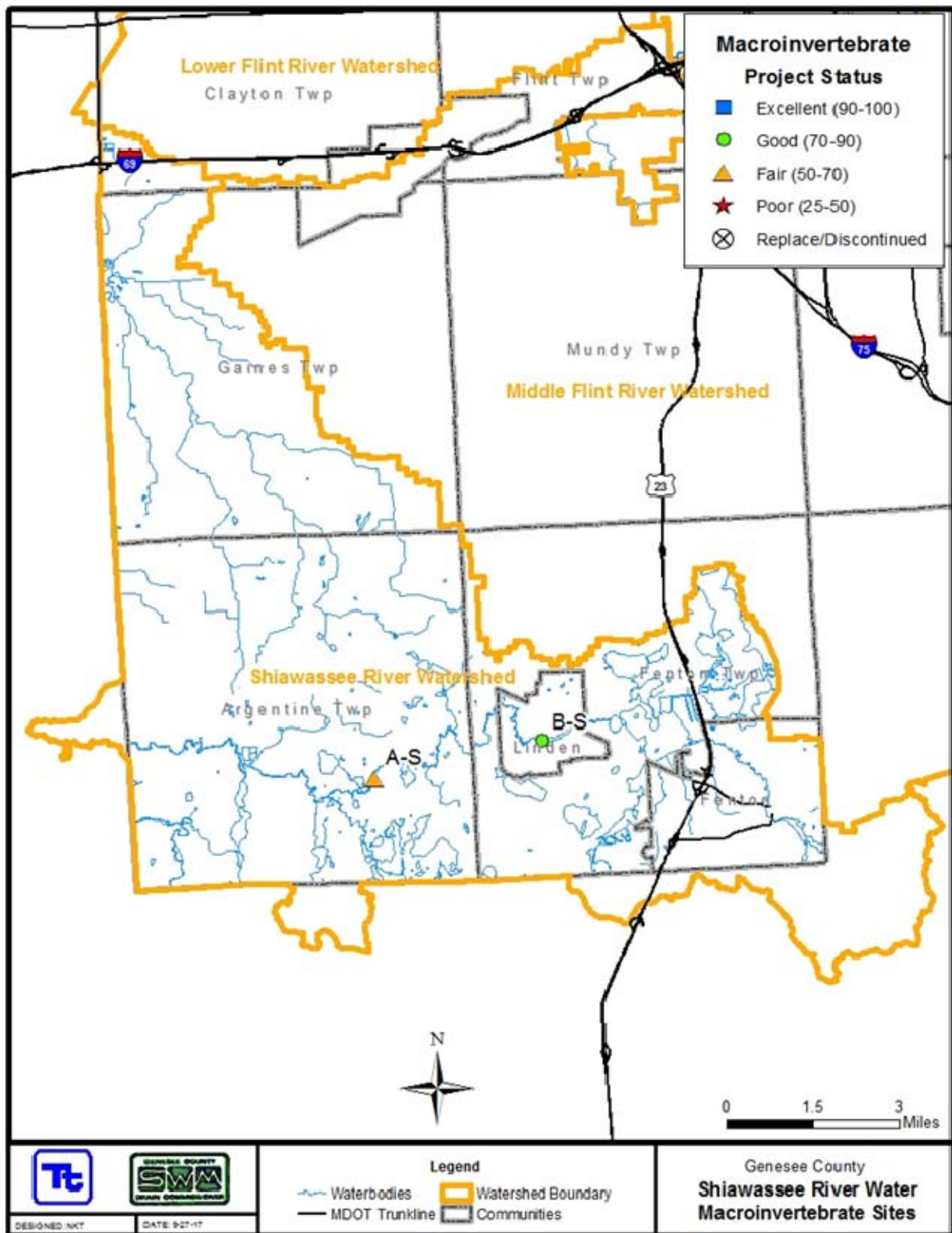


Figure 8-4: Macroinvertebrate Study Results for the Shiawassee River Watershed



## Illicit Discharge Elimination Plan (IDEP)

The purpose of the Illicit Discharge Elimination Plan (IDEP) is to establish a program to eliminate illicit discharges and connections, including the discharge of sanitary wastewater, to Genesee County's separate storm water drainage system. The County is required to conduct dry weather screening of all municipal separate storm sewer system (MS4) outfalls, also referred to as point source discharges (PSDs), to comply with their National Pollutant Discharge Elimination System (NPDES) permit.

This Section summarizes the IDEP activities including the illicit connections identified within each watershed and a list of PSDs identified during 2013-2014 IDEP field investigations. Also included are Phase II Permit application maps and tables showing PSDs for each municipality investigated.

This Section summarizes the IDEP activities including the illicit connections identified during the 2015-2016 IDEP field investigations. Also included is a map showing the outfalls investigated (Figure 9-5).

Figure 9-6 shows the illicit discharge notification system process. During field investigations, crews investigate MS4 outfalls and private drains within the County drainage system. Each outfall is mapped and investigated at least once every five years. If dry weather flow is present at an outfall, the flow is sampled, analyzed, and tracked upstream to its source. When the pollution source is isolated, Genesee County works with the responsible party to eliminate the discharge.

In 2015-2016, a total of 311 outfalls were investigated (Table 9-2). Eight illicit discharges were found during this investigation period (Table 9-3).

**Table 9-2: 2015-2016 Outfalls Investigated**

<b>Outfall ID</b>	<b>Owner</b>	<b>Receiving Waterbody</b>	<b>Priority</b>	<b>Date Investigated</b>
5633001	GCDC 0979	Silver Lake	Medium	10/27/2015
5633003	GCDC 0980	Silver Lake	Medium	10/27/2015
5633004	GCDC 0980	Silver Lake	Medium	10/27/2015
5633251	GCDC 1121	Silver Lake	Medium	10/27/2015
5633252	GCDC 1444	Silver Lake	Medium	10/27/2015
5633005	GCRC	Silver Lake	Medium	10/27/2015
5633006	GCRC	Silver Lake	Medium	10/27/2015
5633501	GCRC	Silver Lake	Low	10/27/2015
5633505	GCRC	Silver Lake	Medium	10/27/2015
5626503	C of Fenton	Adams Drain 0124	High	11/5/2015
5634259	C of Fenton	Egyptian Drain 0867	High	11/5/2015
5635003	C of Fenton	Adams Drain 0124	High	11/5/2015
5634252	GCDC 0867	Egyptian 0867	High	11/5/2015
5634274	GCDC 0867	Egyptian Drain	High	11/5/2015
5634267	GCRC	Egyptian Drain	High	11/5/2015
5634271	GCRC	Egyptian Drain	High	11/5/2015
5634272	GCRC	Egyptian Drain	High	11/5/2015

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
7701265	C of Burton	Cochran	Low	12/8/2015
7701764	C of Burton	Cochran Drain 0174	Low	12/8/2015
7701775	C of Burton	Kearsley Creek	Low	12/8/2015
7701776	C of Burton	Kearsley Creek	Low	12/8/2015
7701777	C of Burton	Cochran Drain 0174	Medium	12/8/2015
7701778	C of Burton	Cochran Drain 0174	Medium	12/8/2015
7701779	C of Burton	Brier Creek Drain 0130	Low	12/8/2015
7712254	C of Burton	Kearsley Creek	High	12/8/2015
7712255	GCDC 0264	Kearsley Creek	Medium	12/8/2015
8831759	GCDC 0003	Brier Creek	High	12/9/2015
8831251	GCRC	Powers-cullen Drain 0014	*High	12/9/2015
8831252	GCRC	Powers-cullen Drain 0014	*High	12/9/2015
8831501	GCRC	Brier Drain 0130	Medium	12/9/2015
8831502	GCRC	Brier Drain 0130	Medium	12/9/2015
8831758	GCRC	Brier Drain 0130	High	12/9/2015
8832007	GCRC	Powers-cullen Drain 0014	*High	12/9/2015
8832008	GCRC	Powers-cullen Drain 0014	*High	12/9/2015
8523751	C of Flushing	Bowman, Firman Br 0195	High	2/11/2016
8525010	C of Flushing	Boman Drain 1431	High	2/11/2016
8523509	GC School	Road Ditch to Flint River	High	2/11/2016
8525504	GCDC 0062	Boman Drain 0062	High	2/11/2016
8525258	GCDC 1431	Boman Drain GCDC 0062 via pond	High	2/11/2016
8527758	C of Flushing	Flint River	High	2/17/2016
8527765	C of Flushing	Flint River	High	2/17/2016
8527784	C of Flushing	Flint River	High	2/17/2016
8527861	C of Flushing	Flint River	High	2/17/2016
8527862	C of Flushing	Flint River	High	2/17/2016
8527868	C of Flushing	Flint River	High	2/17/2016
8527703	GCRC	Cole Cr Drain 0764	High	2/17/2016
8527769	C of Flushing	Flint River	High	2/18/2016
8534001	C of Flushing	Cole Creek 0764	High	2/18/2016
8534007	C of Flushing	Cole Creek 0764	Medium	2/18/2016

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
8534009	C of Flushing	Cole Creek 0764	Medium	2/18/2016
8534010	C of Flushing	Cole Creek 0764	Medium	2/18/2016
8631501	GCDC 0005	Flint River	High	2/18/2016
8534012	GCDC 1503	Cole Creek 0764	Low	2/18/2016
6502001	C of Swartz Cr	Swartz Creek, West Branch 0122	High	4/18/2016
6502260	C of Swartz Cr	Swartz Creek, West Branch 0122	High	4/18/2016
6502265	C of Swartz Cr	Swartz Creek, West Branch	Low	4/18/2016
6502266	C of Swartz Cr	Swartz Creek, West Branch	Low	4/18/2016
6502278	C of Swartz Cr	Swartz Creek, West Branch	Low	4/18/2016
6503761	C of Swartz Cr	Swartz Creek, West Branch	Medium	4/18/2016
6502301	GC School	Swartz Creek, West Branch	Medium	4/18/2016
6502302	GC School	Swartz Creek, West Branch	Medium	4/18/2016
6502304	GC School	Swartz Creek, West Branch	Medium	4/18/2016
6502452	GC School	Swartz Creek, West Branch	Medium	4/18/2016
6502256	GCDC 0371	West Br Swartz Creek	High	4/18/2016
6502454	GCDC 0371	West Br Swartz Creek	High	4/18/2016
6502015	C of Swartz Cr	Swartz Creek, West Branch	Low	4/19/2016
6502257	C of Swartz Cr	Swartz Creek, West Branch 0122	High	4/19/2016
6502263	C of Swartz Cr	Swartz Creek, West Branch 0122	High	4/19/2016
6502275	C of Swartz Cr	Swartz Creek, West Branch	Low	4/19/2016
6502276	C of Swartz Cr	Swartz Creek, West Branch	Low	4/19/2016
6502277	C of Swartz Cr	Swartz Creek, West Branch	Low	4/19/2016
6502255	GCDC 0371	West Br Swartz Creek	High	4/19/2016
6501007	GCDC 1079	West Br Swartz Creek	High	4/19/2016
6502003	GCDC 1273	West Br Swartz Creek	High	4/19/2016
6502261	C of Swartz Cr	Swartz Creek, West Branch 0122	High	5/9/2016
6502354	C of Swartz Cr	Swartz Creek, West Branch 0122	High	5/9/2016
6502356	C of Swartz Cr	Swartz Creek, West Branch 0122	High	5/9/2016
6502309	GC School	Swartz Creek, West Branch	Medium	5/9/2016
6502355	GCDC 0355	West Br Swartz Creek	High	5/9/2016
6502293	GCDC 1459	West Br Swartz Creek	High	5/9/2016
6501102	C of Swartz Cr	Swartz Creek, West Branch 0122	Medium	5/19/2016

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
6501103	C of Swartz Cr	Swartz Creek, West Branch 0122	Medium	5/19/2016
6501104	C of Swartz Cr	Swartz Creek, West Branch 0122	High	5/19/2016
6501108	C of Swartz Cr	Swartz Creek, West Branch 0122	High	5/19/2016
6501301	C of Swartz Cr	Swartz Creek, West Branch 0122	High	5/19/2016
6501302	C of Swartz Cr	Swartz Creek, West Branch 0122	Medium	5/19/2016
6502004	C of Swartz Cr	Swartz Creek, West Branch 0122	Medium	5/19/2016
6502510	C of Swartz Cr	Swartz Creek, West Branch 0122	Medium	5/19/2016
6501105	GCDC 1271	West Br Swartz Creek	High	5/19/2016
5625509	C of Fenton	Shiawassee River	High	5/23/2016
5636001	C of Fenton	Shiawassee River	High	5/23/2016
5636006	C of Fenton	Shiawassee River	High	5/23/2016
5636017	C of Fenton	Shiawassee River	High	5/23/2016
5636018	C of Fenton	Shiawassee River	High	5/23/2016
5636023	C of Fenton	Shiawassee River	High	5/23/2016
5636033	C of Fenton	Shiawassee River	High	5/23/2016
5636036	C of Fenton	Shiawassee River	High	5/23/2016
5636039	C of Fenton	Shiawassee River	High	5/23/2016
5625506	C of Fenton	Shiawassee River	Medium	5/24/2016
5625507	C of Fenton	Shiawassee River	Medium	5/24/2016
5625513	C of Fenton	Shiawassee River	High	5/24/2016
5626251	C of Fenton	Shiawassee River	Medium	5/24/2016
5626255	C of Fenton	Shiawassee River	High	5/24/2016
5626256	C of Fenton	Shiawassee River	Medium	5/24/2016
5626265	C of Fenton	Shiawassee River	Medium	5/24/2016
5626267	C of Fenton	Shiawassee River	High	5/24/2016
5626268	C of Fenton	Shiawassee River	High	5/24/2016
7809251	C of Davison	Black Creek 0704	High	5/25/2016
7809291	C of Davison	Harvey Drain 0631	High	5/25/2016
7809292	C of Davison	Harvey Drain 0631	High	5/25/2016
7809295	C of Davison	Black Creek 0020	High	5/25/2016
7809301	C of Davison	Black Creek 0704	High	5/25/2016
7809302	C of Davison	Black Creek 0704	High	5/25/2016

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
7809758	C of Davison	Black Creek 0704	High	5/25/2016
7810020	C of Davison	Black Creek 0704	High	5/25/2016
7810027	C of Davison	Black Creek 0704	High	5/25/2016
7810028	C of Davison	Black Creek 0704	High	5/25/2016
7810045	C of Davison	Black Creek 0704	High	5/25/2016
7810046	C of Davison	Black Creek 0704	High	5/25/2016
7809511	C of Davison	Long Lake	Medium	5/31/2016
7809520	C of Davison	Black Creek 0704	Medium	5/31/2016
7809524	C of Davison	Black Creek 0704	Medium	5/31/2016
7810502	C of Davison	Black Creek 0704	Low	5/31/2016
7810503	C of Davison	Black Creek 0704	Low	5/31/2016
7810504	C of Davison	Black Creek 0704	Low	5/31/2016
7810505	C of Davison	Black Creek 0704	Low	5/31/2016
7810506	C of Davison	Black Creek 0704	Low	5/31/2016
7809304	Gc School	Harvey Drain 0631	Low	5/31/2016
7806251	GCDC 0003	Brier Creek 0130	High	5/31/2016
7805254	GCDC 1251	Brier Creek Drain 0130	Medium	5/31/2016
7807836	GCDC 1337	Black Creek 0704	High	5/31/2016
7807837	GCDC 1337	Black Creek	High	5/31/2016
7806004	GCDC 1510	Brier Drain 0130	Medium	5/31/2016
7807517	GCRC	Kearsley Creek	Medium	5/31/2016
7808758	GCRC	Black Creek 0704	Medium	5/31/2016
7809501	GCRC	Black Creek 0704	Medium	5/31/2016
7809503	GCRC	Long Lake 0614	Medium	5/31/2016
6710508	C of GrandB	Thread Creek	Medium	6/13/2016
6710512	C of GrandB	Thread Creek	Medium	6/13/2016
6710513	C of GrandB	Thread Creek	Medium	6/13/2016
6710514	C of GrandB	Thread Creek	Medium	6/13/2016
6715003	C of GrandB	Thread Creek	Medium	6/13/2016
6715004	C of GrandB	Thread Creek	Medium	6/13/2016
6716251	C of GrandB	Mancour Drain 1061	Low	6/13/2016
6716252	C of GrandB	Mancour Drain 1061	Low	6/13/2016

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
6716253	C of GrandB	Mancour Drain 1061	Low	6/13/2016
6716255	C of GrandB	Mancour Drain 1061	High	6/13/2016
6716256	C of GrandB	Mancour Drain 1061	High	6/13/2016
6716257	C of GrandB	Mancour Drain 1061	High	6/13/2016
6716258	C of GrandB	Mancour Drain 1061	Low	6/13/2016
6716751	C of GrandB	Layman Drain 0385	Medium	6/13/2016
6716760	C of GrandB	Layman Drain 0385	Medium	6/13/2016
6716763	C of GrandB	Layman, Crosby Branch of 0122	Medium	6/13/2016
6716764	C of GrandB	Layman, Crosby Branch of 0122	Medium	6/13/2016
6714009	C of GrandB	Bush Drain 0007	Medium	6/20/2016
6714501	C of GrandB	Thread Creek	Medium	6/20/2016
6714753	C of GrandB	Bush Drain	Medium	6/20/2016
6714754	C of GrandB	Bush Drain 0007	Medium	6/20/2016
6714755	C of GrandB	Bush Drain 0007	Medium	6/20/2016
6714756	C of GrandB	Bush Drain 0007	Medium	6/20/2016
6714757	C of GrandB	Bush Drain 0007	Medium	6/20/2016
6715252	C of GrandB	Thread Creek	Medium	6/20/2016
6715262	C of GrandB	Thread Creek	Medium	6/20/2016
6715504	C of GrandB	Layman Drain 0385	Medium	6/20/2016
6715505	C of GrandB	Layman Drain 0385	High	6/20/2016
6723004	C of GrandB	Perry Drain 1132	Medium	6/20/2016
6715257	C of GrandB	Thread Creek	Low	6/21/2016
6715263	C of GrandB	Thread Creek	Low	6/21/2016
6715506	C of GrandB	Layman Drain 0385	High	6/21/2016
6715511	C of GrandB	Layman, Crosby Branch of 0710	Medium	6/21/2016
6715512	C of GrandB	Layman, Crosby Branch of 0710	Medium	6/21/2016
6715513	C of GrandB	Layman, Crosby Branch of 0710	High	6/21/2016
6715514	C of GrandB	Layman, Crosby Branch of 0710	High	6/21/2016
6715515	C of GrandB	Layman Drain 0385	High	6/21/2016
6715516	C of GrandB	Layman Drain 0385	High	6/21/2016
6709751	C of GrandB	Thread Creek	High	6/22/2016
6710504	C of GrandB	Thread Creek	Medium	6/22/2016



Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
6710506	C of GrandB	Thread Creek	Medium	6/22/2016
6710520	C of GrandB	Thread Creek	Medium	6/22/2016
6715010	C of GrandB	Mancour Drain 1061	High	6/22/2016
6715510	C of GrandB	Layman, Crosby Branch of 0710	Medium	6/22/2016
6716761	C of GrandB	Layman Drain 0385	High	6/22/2016
6716762	C of GrandB	Layman Drain 0385	Medium	6/22/2016
6710521	C of GrandB	Thread Creek	Medium	6/23/2016
6714010	C of GrandB	Thread Creek	High	6/23/2016
6714253	C of GrandB	Bush Drain 0007	Medium	6/23/2016
6714256	C of GrandB	Bush Drain 0007	Medium	6/23/2016
6715005	C of GrandB	Thread Creek	Medium	6/23/2016
6715264	C of GrandB	Thread Creek	Low	6/23/2016
6715265	C of GrandB	Thread Creek	Low	6/23/2016
8706507	C of Mt Morris	Benjamin Run Tributary	Medium	7/5/2016
8601754	C of Mt. Morris	Benjamin Run Tributary	Low	7/5/2016
8601755	C of Mt. Morris	Benjamin Run Tributary	Low	7/5/2016
8601758	C of Mt. Morris	Benjamin Run Tributary	Low	7/5/2016
8601760	C of Mt. Morris	Benjamin Run Tributary	Low	7/5/2016
8601761	C of Mt. Morris	Benjamin Run Tributary	Low	7/5/2016
8601767	C of Mt. Morris	Benjamin Run Tributary	Low	7/5/2016
8601769	C of Mt. Morris	Benjamin Run Tributary	Low	7/5/2016
8612254	C of Mt. Morris	Craven & Benson, Branch #1	Low	7/5/2016
8612255	C of Mt. Morris	Craven & Benson, Branch #1	Low	7/5/2016
8612257	C of Mt. Morris	Craven & Benson, Branch #1	Low	7/5/2016
8612259	C of Mt. Morris	Craven & Benson, Branch #1	Low	7/5/2016
8706503	C of Mt. Morris	Benjamin Run Tributary	Medium	7/5/2016
8706506	C of Mt. Morris	Benjamin Run Tributary	High	7/5/2016
7809001	Davison Twp	Stockman Drain 0659	High	7/6/2016
7603001	Flint Twp	Hartshorn & Ext	None	7/6/2016
7610251	Flint Twp	Flint River Tributary	Medium	7/6/2016
7617501	Flint Twp	Chapman Drain 0009	Medium	7/6/2016
7622001	Flint Twp	Burroughs Drain 0008	Low	7/6/2016

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
7629762	Flint Twp	Swartz Creek, West Br 0122	Low	7/6/2016
7629763	Flint Twp	Swartz Creek, West Br 0122	Low	7/6/2016
9614762	Vienna Township	Pine Run & Tryon Drain	High	7/6/2016
9622004	Vienna Township	Haven & Dexter Street Outlet	Low	7/6/2016
7804762	C of Davison	Black Creek 0020	Low	7/7/2016
7804764	C of Davison	Black Creek 0020	Low	7/7/2016
7804766	C of Davison	Black Creek 0020	Low	7/7/2016
7804767	C of Davison	Black Creek 0020	Low	7/7/2016
7804768	C of Davison	Black Creek 0020	Low	7/7/2016
7804769	C of Davison	Black Creek 0020	Low	7/7/2016
7804770	C of Davison	Black Creek 0020	Low	7/7/2016
7808001	Davison Twp	Black Creek 0704	High	7/7/2016
7815001	Davison Twp	Long Lake Drain	Medium	7/7/2016
8711003	Genesee Twp	Green Arbor Drain	*None	7/7/2016
8711504	Genesee Twp	Green Arbor Drain	*None	7/7/2016
8735504	Genesee Twp	Kearsley Creek	Medium	7/7/2016
5620501	C of Linden	Shiawassee River	High	7/18/2016
5620502	C of Linden	Shiawassee river	High	7/18/2016
5620503	C of Linden	Shiawassee River	High	7/18/2016
5620504	C of Linden	Shiawassee River	High	7/18/2016
5620514	C of Linden	Shiawassee River	High	7/18/2016
5620516	C of Linden	Shiawassee River	High	7/18/2016
5620517	C of Linden	Shiawassee River	High	7/18/2016
5611251	Fenton Twp	Lake Fenton	Low	7/18/2016
5611252	Fenton Twp	Lake Fenton	Medium	7/18/2016
5611253	Fenton Twp	Lake Fenton	Medium	7/18/2016
5611254	Fenton Twp	Lake Fenton	Medium	7/18/2016
5611255	Fenton Twp	Lake Fenton	Medium	7/18/2016
5611256	GCDC 0505	Lake Fenton	High	7/18/2016
5620255	GCRC	Shiawassee River	Medium	7/18/2016
5620256	GCRC	Shiawassee River	Medium	7/18/2016
5621001	GCRC	Shiawassee River	Medium	7/18/2016

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
5621004	GCRC	Shiawassee River	Medium	7/18/2016
7724254	C of Burton	Phillips 0080	Medium	7/20/2016
7724255	C of Burton	Phillips 0080	Medium	7/20/2016
7724502	C of Burton	Gilkey Creek 0017	Low	7/20/2016
7724755	C of Burton	Phillips 0080	High	7/20/2016
7724756	C of Burton	Phillips, East Br of 0319	High	7/20/2016
7724757	C of Burton	Phillips, East Branch 0319	High	7/20/2016
7724761	C of Burton	Phillips, East Branch 0319	High	7/20/2016
7724762	C of Burton	Phillips, East Branch 0319	High	7/20/2016
7724763	C of Burton	Phillips, East Branch 0319	High	7/20/2016
7725251	C of Burton	Phillips 0080	High	7/20/2016
7725252	C of Burton	Phillips 0080	High	7/20/2016
7725258	C of Burton	Phillips Drain 0080	High	7/20/2016
7725259	C of Burton	Phillips Drain 0080	High	7/20/2016
7725262	C of Burton	Phillips 0080	Medium	7/20/2016
7725263	C of Burton	Phillips 0080	Medium	7/20/2016
7726251	C of Burton	Gilkey Cr 0017	High	7/20/2016
7726252	C of Burton	Gilkey Cr 0017	Medium	7/20/2016
7726254	C of Burton	Gilkey Creek 0017	Low	7/20/2016
7726255	C of Burton	Gilkey Creek 0017	Low	7/20/2016
7825251	GCDC 0080	Phillips 0080	High	7/20/2016
7724760	GCDC 0096	Phillips, East Branch 0319	High	7/20/2016
7725257	GCDC 0155	Phillips Drain 0080	High	7/20/2016
7819344	GCDC 0342	Phillips, East Branch 0319	High	7/20/2016
7714006	C of Burton	Richards Drain 0042	Medium	7/21/2016
7714007	C of Burton	Richards Drain 0042	Medium	7/21/2016
7714008	C of Burton	Richards Drain 0042	Medium	7/21/2016
7714009	C of Burton	Richards Drain 0042	Medium	7/21/2016
7714502	C of Burton	Gilkey Creek 0017	High	7/21/2016
7714503	C of Burton	Gilkey Ck17	High	7/21/2016
7714512	C of Burton	Gilkey Creek 0017	High	7/21/2016
7715265	C of Burton	Gilkey Creek 0017	High	7/21/2016

Outfall ID	Owner	Receiving Waterbody	Priority	Date Investigated
7715763	C of Burton	Gilkey Creek 0017	High	7/21/2016
7715764	C of Burton	Gilkey Creek 0017	High	7/21/2016
7723012	C of Burton	Gilkey Cr 0017	High	7/21/2016
7723253	C of Burton	Gilkey, Coats Br 0261	High	7/21/2016
7723255	C of Burton	Gilkey, Coats Br 0261	High	7/21/2016
7723256	C of Burton	Gilkey, Coats Br 0261	High	7/21/2016
7723261	C of Burton	Gilkey, Coats Br 0261	Medium	7/21/2016
7723262	C of Burton	Gilkey, Coats Br 0178	Medium	7/21/2016
7723263	C of Burton	Gilkey, Coats Br 0178	Medium	7/21/2016
7723264	C of Burton	Gilkey, Coats Br 0178	Medium	7/21/2016
7723265	GCDC 0178	Gilkey, coats Ext 0178	High	7/21/2016
7723254	GCDC 0261	Gilkey, Coats Br 0261	High	7/21/2016
7723258	GCDC 0488	Gilkey, coats Ext 0178	Medium	7/21/2016
7701524	C of Burton	Kearsley Creek	High	7/28/2016
7701525	C of Burton	Kearsley Creek	Medium	7/28/2016
7701531	C of Burton	Kearsley Creek	Medium	7/28/2016
7702764	C of Burton	Kearsley Creek	Medium	7/28/2016
7712253	C of Burton	Kearsley Creek	High	7/28/2016
7714519	C of Burton	Gilkey Creek 0017	High	7/28/2016
7715258	C of Burton	Gilkey Creek 0017	Medium	7/28/2016
7715263	C of Burton	Gilkey Creek 0017	Medium	7/28/2016
7715752	C of Burton	Gilkey Creek 0017	Medium	7/28/2016
7715756	C of Burton	Gilkey Creek 0017	Medium	7/28/2016
7715759	C of Burton	Gilkey Creek 0017	Medium	7/28/2016
7715760	C of Burton	Gilkey Creek 0017	Medium	7/28/2016
7723001	C of Burton	Gilkey Cr 0017	High	7/28/2016
7723003	C of Burton	Gilkey Cr 0017	High	7/28/2016
7723501	C of Burton	Robinson & Curtis 0344	Low	7/28/2016
7723502	C of Burton	Robinson & Curtis 0344	Low	7/28/2016
7723504	C of Burton	Robinson & Curtis 0344	Low	7/28/2016
7723505	C of Burton	Robinson & Curtis 0344	Low	7/28/2016
7715757	GCDC 0046	Gilkey Creek 0017	High	7/28/2016

<b>Outfall ID</b>	<b>Owner</b>	<b>Receiving Waterbody</b>	<b>Priority</b>	<b>Date Investigated</b>
7701527	GCDC 0120	Kearsley Creek	Medium	7/28/2016
7715261	GCDC 0177	Gilkey Creek 0017	High	7/28/2016
7702767	GCDC 0325	Kearsley Creek	High	7/28/2016
7715761	GCDC 0357	Gilkey Creek 0017	High	7/28/2016
7714518	GCDC 0425	Gilkey Creek 0017	High	7/28/2016



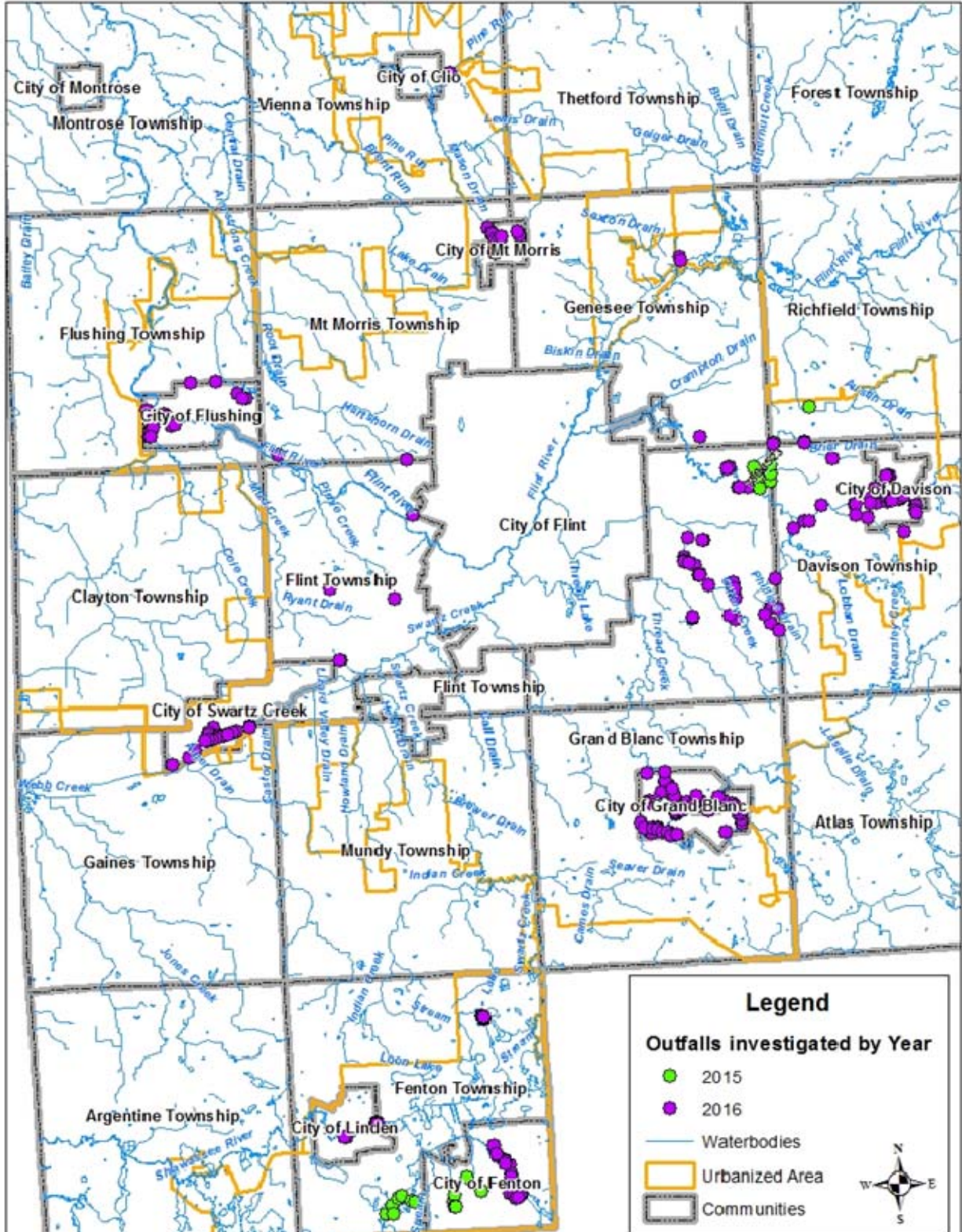


Figure 9-5: Outfall Investigation Locations by Year



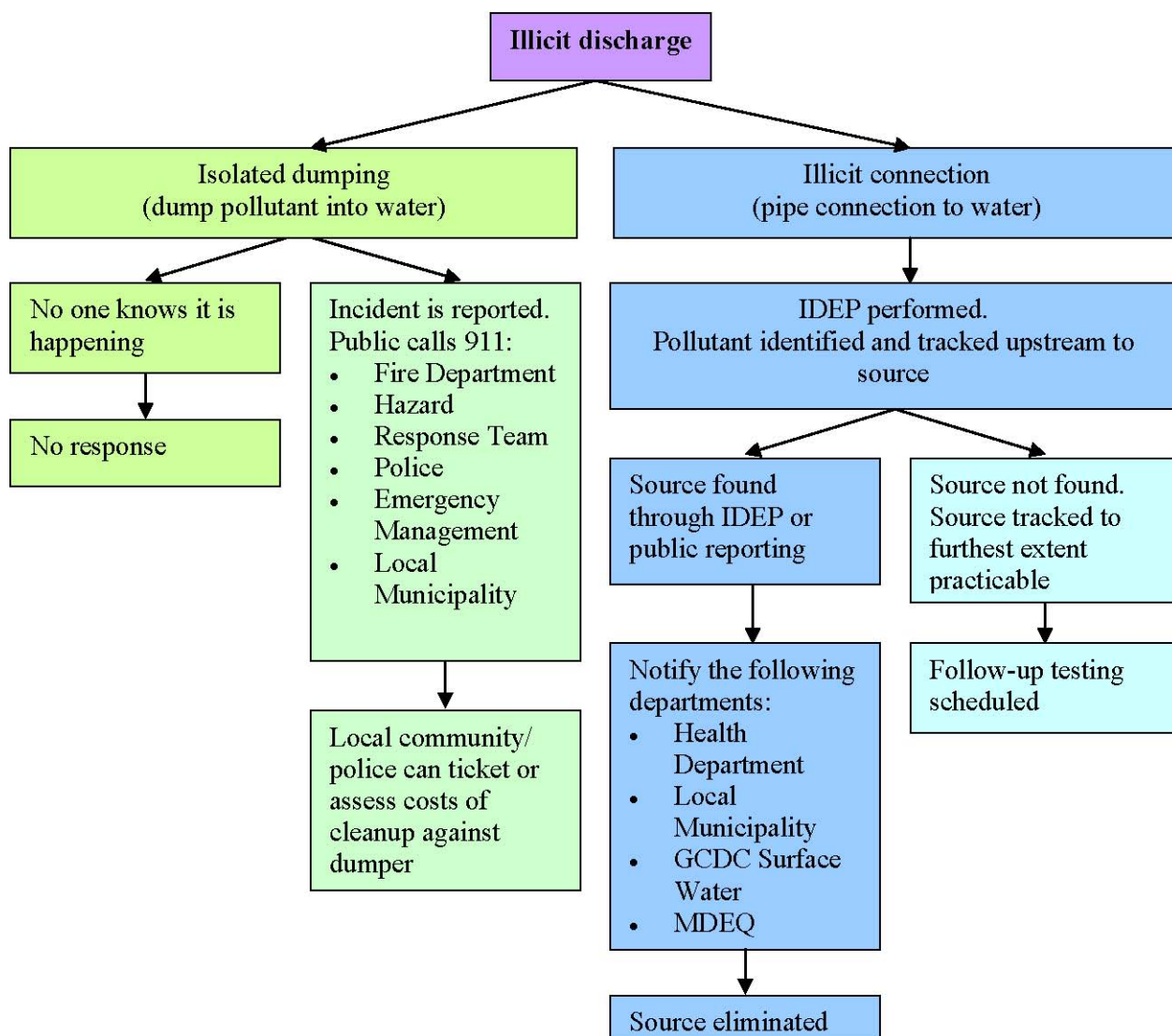


Figure 9-6: Illicit Discharge Notification System Process

When Tetra tech finds an illicit discharge resulting from dry weather testing, it is forwarded to GCDC-SWM for followup. Below is a list of potential illicit discharges found that required followup.

Table 9-3: Illicit Dicharges October 1, 2015 to September 29, 2016

Sample Location	Background and Inspection
Outfall 5634274 Egyptian Drain, Owen Rd. and South Alloy Drive	On 11-16-2015, Tetra Tech field crews sampled dry-weather flow from GCDC Outfall 5634274. Lab Testing confirmed E. coli and surfactant levels above the threshold for investigative action
Outfall 6502001 Swartz Creek	On 4-29-2016, Tetra Tech field crews sampled dry-weather flow from GCDC Outfall 6502001. Lab Testing confirmed E. coli levels above the threshold for investigative action.
Outfall 6502257 Swartz Creek	On 4-29-2016, Tetra Tech field crews sampled dry-weather flow from GCDC Outfall 6502257. Lab testing confirmed E. coli levels above the threshold for investigative action.
Outfall 6715516 Grand Blanc	On 6-30-2016, Tetra Tech field crews sampled dry-weather flow from GCDC Outfall 6715516. Lab testing confirmed E. coli levels above the threshold for investigative action.
Outfall 6716252 Grand Blanc	On 7-5-2016, Tetra Tech field crews sampled dry-weather flow from Grand Blanc Outfall 6716252. Lab testing confirmed E. coli levels above the threshold for investigative action.
Outfall 7810046 Davison	On 7-5-2017, Tetra Tech field crews sampled dry-weather flow from Davison Outfall 7810046. Lab testing confirmed E. coli levels above the threshold for investigative action.
Outfall 7810504 Davison	On 7-5-2017, Tetra Tech field crews sampled dry-weather flow from Davison Outfall 7810504. Lab testing confirmed E. coli levels above the threshold for investigative action.
Outfall 8706506 Mount Morris	On 7-13-2016, Tetra Tech field crews sampled dry-weather flow from Mount Morris Outfall 8706506. Lab testing confirmed E. coli levels above the threshold for investigative action.

## NEW STORM WATER POINT SOURCE DISCHARGES (PSD)

In the 2008 annual report, PSD points were identified on the permit application map by municipality. These maps have been updated in the 2010 report to reflect the change in management of the MS4 areas in the second permit cycle. In the past, PSD's were tracked by watershed. In 2009, municipal ownership (city, township, etc.) of PSD's was assigned by GCDC. PSDs are updated on an annual basis. Municipalities that were designated by GCDC as containing MS4 outfalls include:

- City of Burton
- City of Clio
- City of Davison
- City of Fenton
- City of Flushing
- City of Grand Blanc
- City of Linden
- City of Mt. Morris
- Davison Township
- Fenton Township
- Flint Township
- Flushing Charter Township
- Genesee Charter Township
- Mt. Morris Charter Township
- Mundy Charter Township
- Vienna Township
- Genesee County
  - Agencies
  - Nested Jurisdictions

A complete copy of outfalls in a GIS Layer has been provided periodically to the MDEQ at their request. The Permit Application- Table 1 (submitted April 2014) was a list of all the outfalls identified. This list was revised as part of the permit review process. Any outfalls up to January 2015 were included and provided to the communities to submit to the MDEQ. Appendix B contains a complete current list of outfalls (Aug 30, 2016).

Due the large number of outfalls for Genesee county and City of Burton, ongoing efforts to map outfalls is being done. Genesee County received an Asset management grant that will assist the County's ability to map the Road Commission storm water infrastructure. This will allow us to locate and map outfalls more efficiently. City of Burton had hired an engineering firm to compile storm plans within their community. This list will be used to identify outfalls within the City.

Follow up from Incident Reports from Tetra tech  
Or illicit discharges reported from public

Sample Location	Background & Follow-up Inspection	Results & Comments
ID #6502257 5075 Brady Street City of Swartz Creek	On 4/29/16, Tetra Tech sampled Outfall #650257. Sampling results from 36" RCP emptying into Swartz Creek shows a high concentration of E.coli and Surfactant. GCDC-SWM conducted a site inspection and found that 5075 Brady Street washer discharge line and kitchen wastewater line connected to storm sewer. Owner is working to re-route to sanitary sewer	On-going
ID #8706506 City of Mt. Morris	On 7/13/16, Tetra Tech sampled outfall #8706506. City of Mt. Morris storm sewer (24" RCP) connected to GCDC-SWM system at intersection of Walter and Coy street. Tetra Tech sampling results shows a high concentration of E.coli from 24" RCP. City of Mt. Morris has been notified. Currently, City is doing its follow-up investigation to identify the source.	On-going
ID #7810046 City of Davison	On 7/5/16, Tetra Tech sampled outfall #7810046. City of Davison 18" PVC pipe located on south wall of the culvert crossing Black creek at Main street. Tetra Tech sampling results show elevated levels of E. coli and ammonia from the 18" PVC pipe. City of Davison has been notified. Currently, City is doing its follow-up investigation to identify the source	On-going
ID #6715516 12063 S. Saginaw St City of Grand Blanc	On 6/30/16, Tetra Tech conducted dry weather flow inspection of outfall 6715516. Inspection shows a 4" plastic pipe discharging into a "beehive" type catch basin. Tetra Tech sampling results shows high concentration of E. Coli. GCDC-SWM conducted follow-up inspections and identified the source of this illicit connection. GCDC-SWM and Sunset Plaza Apartment working to eliminate the source of this illicit connection.	On-going
2171 E. Parkwood Drive City Of Burton	On 5/16/16, Homeowner called and complained about his floor drain is connected to our storm sewer and that causing flooding in his basement. This is considered an illicit connection. We have contacted the homeowner several times to schedule a dye test to confirm connectivity.	On-going
ID #6716252 340 Reid Rd Grand Blanc Township Sec-16	7/5/16: During dry weather flow investigation, Tetra Tech observed flow from a 36" pipe flowing southwest. Tetra Tech conducted sampling and sampling results shows high level of E. Coli	On-going
ID #7810504 425 E. Clark Street City of Davison Sec-10	7/5/16: Tetra Tech identified dry weather flow from a 15" RCP at City of Davison storm water outfall. City of Davison is working to identify and eliminate the source.	On-going
ID #7810046 Main St. Crossing Black Creek City of Davison	7/5/16: Tetra Tech identified dry weather flow from a 18" plastic pipe into Black Creek intersecting Main St. City of Davison is working to identify and eliminate the source	On-going

Sec-10		
ID #6502001 5094 Fairchild St City of Swartz Creek	On 4/29/16, Tetra Tech sampled Outfall #6502001. Sampling results from 18" RCP emptying into Swartz Creek shows a high concentration of E.coli. GCDC-SWM conducted a site inspection and found that 5094 Fairchild Street washer discharge line connected to storm sewer. Owner re-routed washer line to sanitary sewer. On 8/4/16, we have confirmed that illicit connection is eliminated.	File Closed
929 E. Main Street City of Flushing	On 6/7/16, City of Flushing called GCDC-SWM about yard waste dumping onto the bank of Flint River across 929 E. Main St. GCDC-SWM conducted a follow-up inspection and met some property owners. And also observed evidence of yard waste dumping. On 7/15/16, GCDC-SWM wrote letter to adjacent property owners indicating dumping yard waste onto the bank of Flint river is not acceptable.	Closed
2505 Warner Road Flushing Township	On 11/4/15, GCDC-SWM conducted a dye test at this property. Dye test confirmed that sanitary lead is connected to county storm sewer and confirmed an illicit connection. On 11/4/15, GCDC-SWM wrote a letter to eliminate the illicit connection. On 4/9/16, we have conducted a follow-up inspection and confirmed that sanitary lead re-routed to sanitary sewer.	Closed
3328 Kleinpell Street City of Burton	On 3/7/16, MDEQ received complaint about oil running down from the property. On 3/8/16, GCDC-SWM conducted a site inspection and observed a trace of oil sheen flowing south of the property west side of the street. This may resulted from the operation of semi-trucks facility. GCDC-SWM emailed inspection report to MDEQ. 3/14/17 Owner contacted City Burton. He had cleaned up area. Burton DPW and Code enforcement had visited site and found area to be cleaned and no evidence of oil.	Closed
Willowbrook Apt 215 W. South Street City of Davison	On 6/1/16, received complaint about willowbrook Apt power washing swimming pool and then discharging to Black Creek. City of Davison stopped direct discharge to Black Creek but allowed to discharge into their lawn.	Closed
215 E. Flint Street City of Davison	On 5/27/16, City of Davison complained about red gel coming of weep drain hole from the bottom of 6-foot retaining wall. On 6/10/16, GCDC-SWM inspected the site and observed only one hole at northwest corner shows sign of dry red gel. We inspected storm sewer manhole/catch basin at parking lot of adjacent shopping mall did not observe any sign of red gel	Closed
1141 S. State Road Davison Township	On 3/4/16, GCDC-WWS reported a gasoline spill at this property to GCDC-SWM. GCDC-WWS staff inspected the site on the same day and found no signs of spill on-site. According to GCDC-WWS report, HAZMAT came and sweep the area. GCDC-SWM also conducted a site inspection and observed no sign oil or oil sheen in county storm sewer.	Closed
318 Railway St City of Clio	On 5/3/16, GCDC-SWM received a letter from the City of Clio regarding dumping of debris on the bank of Pine Run	Closed

City of Grand Blanc	showed at the end of storm water outlet pipe back of his house. We have conducted a site inspection. It was florescent green color and has no odor. City of Grand Blanc Office inspected the site and confirmed that it was a dye.	
2291 Lake Ridge Drive Grand Blanc Township	On 6/24/16, homeowner complained about cleaning residual concrete from a concrete truck into driveway and then flows to a roadside catch basin in front of her house. GCDC-SWM conducted an inspection and stopped contractor from dumping concrete residual water into driveway Spoke to Contractor. They are responsible for providing acceptable discharge point for cleaning concrete.	Closed
Downstream of Mill Pond 02-22-100-035 Village of Goodrich	On 8/4/16, Brian Zuber from MDEQ emailed a complaint concerning a potential oil/sewage discharge into Kearsley Creek just downstream of Mill pond. On 8/5/16, GCDC-SWM conducted a site inspection. I walked around upstream of that location and could not locate any source of this leachate. At that time, I did not observe any active sign of leaching was going on. Kearsley Creek is MDEQ control watercourse and village of Goodrich is not a NPDES Phase II community. GCDC has no jurisdiction over this location.	Closed
Behind "Sagano's" Restaurant, Linco Plaza Flint Twp, Sec-2	On 5/3/16, GCDC-WWS staff observed oil grease on a storm sewer catch basin just behind this Restaurant. On 5/27/16, GCDC-SWM conducted a site inspection and found sign of kitchen grease/used oil spilled over pavement. GCDC-SWM staff talked to Restaurant manager and asked to make sure that used oil/grease do not spill over container.	Closed
6533 W. Pierson Rd Mt Morris Twp	300 Gallons of Gasoline into storm drain was reported by the Flint Journal. This was due to a car colliding with a gas pump on Aug 7, 2016. Complications with the store tuning off the pumps resulted in the volume of 300 to 500 gallons of gasoline spilling into the parking lot. First responders placed barriers to contain and absorb gasoline. Environmental cleanup crew vacuumed drains. GCDC-SWM was not notified of this spill until it appeared in the paper. Follow up was performed. No evidence left of gasoline remained.	Closed
5045 Stanley	GCP&R site, neighbor called on them. Says oil they cleaned up last year is still present. Tetra tech did follow-up investigation to test for oil/ VOC. GCDC Staff and Park Staff present. No evidence onsite of oil.	Closed
Car Wash Business Flushing Road	On 7-5-16, GCDC-SWM received a complaint from Flint Twp about discharging soapy water in the driveway. GCDC-SWM conducted a site inspection on 7-5-16 and did not observe any sign oil stain. GCDC-SWM staff talked with the business owner about the complaint and explained that dumping oil in storm sewer is considered an illicit connection.	File Closed
1535 Lambden Rd Flint Twp, Sec-16	On 9-1-15, GCDC-SWM wrote a letter to the contractor and a copy to GCDC-WWS to stop such illicit activity in the future.	File Closed