

Public Education

The Genesee County Drain Commissioner's Office leads a consortium of communities (through the provisions of a 342 agreement) that collaboratively work to meet their National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer (MS4) Phase II permit requirements, including Public Education Plan (PEP) activities.

All actions that are proposed address one or more of the Education Topics (A through K) identified in the permit application. Table 2 outlines those actions being done.

- 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 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.

Program assessment involves reviewing the attainment of primarily the indirect measures of success. Measures of success will be reviewed for achievement and if the desired level of achievement is not attained, an investigation will be conducted to determine possible reasons. The PEP has developed and administered two (2) surveys to the public and a third is intended for the new permit cycle. Besides as a tool to direct the education committee, it may be used as a baseline assessment of where the public's knowledge is now. Future surveys may be used to measure change in knowledge and behavior. Other methods can provide measurable quantities like counting number of hits on the website or how many pounds of household hazardous waste have been dropped off. Assessing the attainment of the measures of success is an ongoing task that will be reported in each reporting cycle.

Under this new permit cycle, we are submitting a streamlined Table 2 with the following changes:

- Watershed Maps- activity removed. Although the maps are still available, this program does not reach very many people. Actions A through F are being met under other activities.
- Articles/Publications on PEP topics- activity removed. Although articles and publications may still be done by our partners and permittees, tracking this activity is difficult. Actions A through G are being met under other activities.
- Educational materials (Septic Systems Brochure) - activity removed. Although the brochures exist and may continue to be provided to 3rd parties to distribute, tracking has proven to be difficult. Actions C, G & H are being met under other activities.
- Canoe trips on the river- activity removed. Although, our partner Flint River Watershed Coalition (FRWC) and other 3rd party organizations will continue watershed stewardship efforts by getting residents on the water, the cost per activity is high, and participation has a lot of repeat canoers. Actions A, B & J are being met under other activities.
- Brochure for riparian landowners on landscape improvements to protect waterways- activity removed. Although the brochures exist and may continue to be available at events turnout for training was minimal. Actions A, B, I, & J are being met under other activities.
- IDEP and Good Housekeeping Training & Videos- activity removed. The prerecorded training videos are available to the permittees. Permittees may request scheduling a live training. Since IDEP and good housekeeping training are required in other sections of this permit, it is not necessary to be included in Table 2.
- Facebook: activity added. In 2021 it was discussed to have a social media presence.

Many of the public education actions are performed by other permittees or non-permittee partners. Each permittee is responsible to execute the permitted public education efforts regardless of who is doing the work. Work identified in the PEP is coordinated on a countywide basis. PEP activities have not been ranked by priority.

Table 2: Public Education Program Best Management Practices (BMPs)

Delivery Mechanism / Activity	Public Education Topics	Target Audience	Key Message	Delivery Mechanism	Year and frequency of Implementation	Responsible Party	Evaluation
1 Continue to maintain existing watershed signage along Roads and at river crossings	A B	Public, Residents, Visitors	Educate, promote, and connect public to their surrounding environment. 2 types of signs. -Name of watercourse -watershed sign with name of watershed and “protect our water”	Passing public in vehicles, bikes, or on foot will view signs.	Over 400 signs were placed throughout the County from 2008 to 2014. Signs may be added or moved based on future needs.	GCDC-SWM will determine what signs needs repair/ resetting and partner with the Road owner (Road Commission or City) to do maintenance indefinitely	Indicate in the progress reports that the signs are still there and note if any maintenance was done.
2 Promote the Benthic Monitoring Program	A B	Residents, School Children	Educate the public (volunteers) about macroinvertebrates and why they are an important indicator of water quality. Ways that individuals can affect the watershed through their activities. What is the actual condition of our waters?	FRWC website and or social media Program is also promoted to teachers and students in the below GREEN program	Macroinvertebrate collection and identification are done by volunteers each year spring and fall	GCDC-SWM, Flint River Watershed Coalition & Keepers of the Shiawassee to administer program	Indicate in the progress reports the -Number of volunteers and sites surveyed -Screen shots of FRWC social media and webpage.
3 Project Green Water Quality Monitoring Program (chemical testing)	A B (Depending on who does the Mentoring, the following topics can be covered C, D, E, F, G)	School Children, Teachers Groups	Ways that individuals can affect the watershed through their activities. What is the actual condition of our waters? How pollution occurs, what are indicators of pollution.	FRWC website and or social media, direct communication with teachers and students. Results located on www.flintriverGREEN.org	Each year FRWC contacts the school districts and offers this program and training to teachers. If accepted, they are trained and paired with volunteer mentors. They take classes out to watercourse or have samples taken and returned to class.	GCDC-SWM /FRWC to administer program	Indicate in the progress reports the -Number of participating schools/ sites surveyed -Screen shots of FRWC social media and webpage.

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					Students perform various chemical tests and draw conclusion to the results. A symposium is available where students may present their results.		- number of hits to link on cleargeneseewater.org website to this program
4 Display Booth for events	A B C D E F G H J	Public	Definition of a watershed - Ways those individuals can affect the watershed through their activities.	The display booth is used at several public festivals and events throughout the County and year.	The "Our Water" display booth is used at events throughout the year. The biggest is the weeklong County Fair. It is manned by partner staff and volunteers	GCDC-SWM \ Conservation District staff	Indicate in the progress reports the -Number of people spoken to. -Number of events attended
5 Website: http://cleargeneseewater.org/	A, B, C D, E, F G, H, I J, K	Public	The website has messages on most of the public education topics.	www.cleargeneseewater.org	Continuous presence on the website. Update as appropriate.	GCDC-SWM	Indicate in the progress reports the number of hits to links on cleargeneseewater.org website
6 Conservation District perform in class presentation to school districts	A, B, C, D (Depending on who does the training, the following topics can be covered E, F, G, I)	School Children, Teachers	What is a watershed - Importance of a riparian corridor, effects of human activities on waterways and wetlands.			SWM \ Conservation District	- Number of presentations
7 Catch basin stenciling /markers program and storm drain education	A B	Volunteer groups. Residents in subdivisions where drains are marked	- Storm drains discharge to Rivers and streams - Impacts of storm water pollutants in the watershed - Knowledge of separate storm water drainage system in your front ditch and that it flows to a river	-FRWC website and or social media, Conservation district promotes to volunteer groups. -Volunteer groups are trained to perform storm drain stenciling on	Groups are trained throughout the year, but stenciling happens spring to fall. Storm drain markers are applied throughout the	FRWC /Conservation District & GCDC-SWM maintenance dept.	Indicate in the progress reports the -Number of streets stenciled -Number of markers placed

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				pavement and put door hangers on adjacent houses. -GCDC-SWM attach more permanent markers outside of the road when doing maintenance.	year by GCDC-SWM staff		
8 Distribute brochures promoting the "seven simple steps"	A B C D E F G	Public and public employees	Actions everyone can take to improve water quality. Effects of residential waste on our waterbodies. Specifically, Car care, fertilizer, pet waste, water conservation, and household hazardous waste	Posted on www.cleargeneseewater.org , handed out at public events (booth), available in lobbies of municipal buildings.	The Brochure is distributed by Permittees and Partners at events and made available online & at municipal buildings. The brochure messages will be reevaluated and modified as needed before each reprinting	GCDC-SWM/ Permittees	-Number of brochures provided each year and
9 Promote and provide Speakers to groups about water related topics	B (Depending on who does the training, the following topics can be covered A, C, D, E, F, G, H, I, J)	Homeowner associations, non-profit groups, rotary clubs...	What is a watershed - Actions everyone can take to improve water quality, effects of residential waste on our waterbodies; and other specific messages (7 simple steps) The talk is broken into segments by topic so each talk can be customized	Promotion of the program is on www.cleargeneseewater.org FRWC promotes and provides staff/volunteers to come and speak to groups about water related topics	Continuous throughout the year	GCDC-SWM For website FRWC for staffing and promotion	Indicate in the progress reports the - Number of presentations given -Number of attendees.
10 Promote the Household Hazardous Waste Collection Day	G	Public, public employees, businesses	Identification of HHW (household hazardous waste), disposal locations and availability for pollution prevention	www.cleargeneseewater.org & http://gcmpc.org/recycle-day/	Continuous, update as necessary and as events are scheduled	GCDC-SWM, Genesee County Planning Dept	Indicated in progress report the number of hits on the www.cleargeneseewater.org link to HHW event(s).

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11 Website information about proper disposal of medications and personal care products	G	Public	Proper disposal of HHW, specifically medications and personal care products	www.cleargeneseewater.org	Continuous, material is made available on the website	GCDC-SWM	indicated in progress report website traffic to proper disposal of medication and personal care products page of www.cleargeneseewater.org
12 Education materials on proper disposal of waste for restaurants	K	Business owners, Health Dept staff	-Proper disposal of waste, not down the storm drain. -Storm drains discharge to Rivers and streams - Impacts of storm water pollutants in the watershed	www.cleargeneseewater.org Distributed by County Health Dept to restaurants during inspections *brochures development complete 2021	The health dept visits each restaurant twice per year. Within 6 months all restaurants will have been delivered brochure. Brochure will be provided on website	GCDC-SWM County health Dept.	Number of brochures provided each year will be indicated in progress report.
13 Promote Green Infrastructure and low impact development	I	Public	What is Green Infrastructure? Why should we develop with Green Infrastructure?, and provide resources	Provide on www.cleargeneseewater.org or a link to www.gcdcswm.com	Continuous, update as necessary	GCDC-SWM	Indicate in the progress reports the number of hits to links on cleargeneseewater.org website
14 Facebook-cleargeneseewater	A, B, C D, E, F G, H, I J, K	Public	Continue to add messages on most of the public education topics throughout the year.	ClearGeneseeWater on facebook	Continuous presence on the platform. Update as appropriate.	GCDC-SWM	Indicate in the progress reports the added content and followers

Education efforts by Permittee

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