# St. Clair County, Michigan



Public Education Plan Revised July, 2014

National Pollutant Discharge Elimination System Application for Discharge of Stormwater to Surface Waters from a Municipal Separate Storm Sewer System representing the following watershed partners:

> ST. CLAIR COUNTY ST. CLAIR COUNTY'S NESTED JURISDICTIONS: ALGONAC COMMUNITY SCHOOLS DISTRICT PORT HURON AREA SCHOOL DISTRICT EAST CHINA SCHOOL DISTRICT MARYSVILLE PUBLIC SCHOOLS DISTRICT ST. CLAIR COUNTY COMMUNITY COLLEGE SCC REGIONAL EDUCATIONAL SERVICE AGENCY CITY OF MARINE CITY CITY OF MARYSVILLE CITY OF ST. CLAIR CITY OF PORT HURON **CLYDE TOWNSHIP** EAST CHINA CHARTER TOWNSHIP FORT GRATIOT CHARTER TOWNSHIP **KIMBALL TOWNSHIP** PORT HURON CHARTER TOWNSHIP

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### I. INTRODUCTION

#### Purpose of the Public Education Plan

This collaborative Public Education Plan (PEP) was developed to fullfill the public education requirements of the State of Michigan's National Pollutant Discharge Elimination System (NPDES) Application for Discharge of Stormwater to Surface Waters from a Municpal Separate Storm Sewer System (MS4). This PEP provides an outline of the actions St. Clair County (SCC), its nested jurisdictions and the permittees within the Northeastern Watersheds will take to inform the residents, businesses and officials of St. Clair County about their role in protecting water quality and preventing stormwater pollution in their community. This PEP outlines the eleven public education topics that must be communicated, prioritizes them based on a procedure for assessing high-priority community-wide issues, and targets issues to reduce pollutants in stormwater runoff.

The goal for this PEP is to promote, publicize and facilitate a watershed education program that encourages the public to reduce stormwater pollution to the greatest extent possible. The "public" is defined as all persons who potentially could affect the quality of stormwater discharges, including, but not limited to, residents, public employees, businesses, industries, construction contractors and developers.

This PEP was created by SCC, its nested jurisdictions, and the permitees of the Northeastern Watersheds (NEW) Advisory Group who are subject to the aforementioned NPDES stormwater regulations. These permitees will be referred to in the remainder of this document as the "NEW Partners".

#### Objectives

The following objectives were developed to guide implementation of the Best Management Practicies (BMP) outlined in this PEP:

- Raise awareness and knowledge among the residents of SCC on how their daily activities impact the watershed.
- Educate the public regarding the importance of watersheds as a significant natural resource and community asset by fostering stewardship and enthusiasm for the resource.
- Improve understanding of the impacts of individual and group behaviors on water quality.
- Increase the number of individuals, schools and other organizations participating in water education and stewardship activites.

#### **II. COLLABORATION OF WATERSHED PARTNERS**

In developing this PEP, SCC continues its cooperative partnerships with its nested jurisdictions and the NEW Partners, who agree that approaching stormwater education on a watershed and countywide basis is both cost-effective and environmentally sound. The collaborative approach provides a consistent and effective mechanism for protecting water resources across the county in the most cost effective manner.

Because this plan is collaborative, SCC, its nested jurisdictions and the NEW Partners are all responsible for ensuring its implementation. Currently SCC implements and provides leadership on the majority of the public education activities listed in this plan while its nested jurisdictions and the NEW Partners are responsible for financially supporting these activities, promoting and

participating in them. The roles and financial arrangements between SCC, its nested jurisdictions and the NEW Partners are agreed upon annually at NEW Watershed Advisory Group meetings. Should the current roles or financial arrangements change, it is still the responsibility of this collaborative group to ensure that the activities outlined in this plan are implemented.

The following entities are committed to implementing this collaborative plan: St. Clair County (SCC)

> NEW Partners: Kimball Township East China Charter Township Clyde Township City of Port Huron City of St. Clair

Port Huron Charter Township Fort Gratiot Charter Township City of Marine City City of Marysville

SCC's Nested Jurisdictions:Marysville Public Schools DistrictPort Huron Area School DistrictEast China School DistrictSt. Clair County Community CollegeSt. Clair County Regional Educational Service AgencyAlgonac Community School District

### **III. Required Permit Elements**

This PEP outlines the program to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants in stormwater to the maximum extent practicable. The PEP describes current and proposed BMPs that will be implemented to meet the minimum control measure required in the permit.

#### **PEP Priority Topics**

The public education topics A - K listed in the chart below are identified in the permit application. The procedure for identifying high-priority watershed-wide or targeted topics suited for collaborative public education efforts includes:

- A review of pertinent Watershed Management Plans including any established Total Maximum Daily Loads for waterbodies in each watershed;
- A review of the effectiveness of PEP activities implemented prior to this permit cycle;
- Topics identified by permitees at advisory group meetings prior to and throughout the permit cycle; and
- Discussion and input from permitees regarding potential public outreach opportunities, and existing and future programs.

Code	PEP Topic	<b>Priority Ranking</b>
Α	Promote public responsibility and stewardship in the watershed	High
В	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	High
С	Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4	High

D	Promote preferred cleaning materials and procedures for car, pavement, and power washing	Low
Е	Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers	Medium
F	Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4	High
G	Identify and promote the availability, location and requirements of facilities for collection of disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids	Medium
Н	Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure	Medium
Ι	Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development	Medium
J	Promote methods for managing riparian lands to protect water quality	High
K	Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to storm water runoff	Low

A measurable goal with a measure of evaluation is included for each PEP activity. As appropriate, a schedule for implementation (months and years), with interim milestones and the frequency of the BMP is also provided. In addition, for topics A - K the PEP identifies:

- 1. Target audience
- 2. Key message
- 3. Delivery mechanism
- 4. Year and frequency of BMP
- 5. Responsible party

#### **IV. OVERALL EVALUATION**

This PEP provides the procedure for evaluating and determining the effectiveness of the overall PEP. The procedure includes a method for assessing changes in public awareness and behavior resulting from the implementation of the PEP and the process for modifying the PEP to address ineffective implementation. This method for assessing changes in public awareness and behavior can be completed with surveys to monitor behavioral changes over time. These surveys will be done at public gatherings or through efforts of volunteers. These surveys need not be statistically valid for use in evaluation of the program.

A variety of mechanisms are described in the "Evaluation" of each of the PEP's individual activities. Evaluation of accumulated measures of the effectiveness of the PEP's individual activities can be categorized in terms of output (i.e., effort or activity) that measures short-term goals and milestones. Examples of output measurements include tracking web site hits or the number of literature pieces distributed to a target audience. When practicable, measurements of outcome (i.e. survey results that indicate actual behavior change) will be incorporated into BMP evaluations. Such measures are expected to include public comment and feedback and level of participation in programs and events. These mechanisms can be useful in determining whether the education effort is reaching the audience; however it is difficult to evaluate behavior change resulting from the education activity using these purely quantitative methods.

Through SCC's Stream Leaders water quality monitoring program, it is possible to evaluate longterm changes in water quality. The results are compiled in a scorecard which allows a simple mechanism for measuring improvements or declines in water quality across the various subwatersheds. Improvements in water quality cannot be attributed solely to a successful public education effort, but indicate the overall effectiveness of the storm water management efforts in the community, subwatershed, and county.

The final evaluation method to be used will be an ongoing process at the bi-monthly NEW Advisory Group meetings. As an agenda item the PEP activities will be evaluated for effectiveness at least once per year and group discussion will determine effectiveness. If it is determined by the group that a change is needed the PEP will be revised to reflect the change and the updated PEP will be presented to the group at the next bi-monthly meeting of the NEW Advisory Group.

#### V. PROGRESS REPORT

By the date indicated on SCC and the NEW Partner's permits, they will submit to the Michigan Department of Environmental Quality (MDEQ) a Progress Report on the implementation status of its permit and the progress of pollution prevention. This report will include documentation of PEP efforts, a summary of the evaluation of its effectiveness when appropriate (e.g. survey results, public comments received), and any proposed revisions or amendments.

#### **VI. PROPOSED PUBLIC EDUCATION BMPs**

The BMP activities to be implemented as part of this PEP are summarized below. Activities will be completed by the responsible parties noted in each activity description. Time lines for implementation of proposed activities extend from (year 1) when implementation of the PEP begins to (year 5) when the permit expires.

#### **Activity #1: Distribute Educational Materials**

Delivery Mechanism:	Utilize print and digital materials developed by SCC, by the Southeast Michigan Council of Governments (SEMCOG), and/or other organizations. Materials will be distributed at municipal offices, events, public locations, and on websites.
Key Messages:	A - K
Target Audience:	Residents, visitors, students, public employees, businesses, industries, construction contractors and developers
Year & Frequency:	Materials will be disseminated throughout the year for the duration of the permit cycle.
Goal:	50 pieces of materials distributed per year per permitee
Evaluation:	Number of materials distributed; location materials were distributed
<b>Responsible Party:</b>	SCC, NEW Partners, Nested Jurisdictions

#### Activity #2: Provide Content in Newsletters, Websites, Social Media

Delivery Mechanism: Information will be developed and distributed to watershed stakeholders to keep them informed about ongoing watershed issues, individual actions to protect water resources, and stewardship opportunities. Information on similar topics will also be included in permitee's

K	newsletters and/or other types of notices mailed and/or emailed to watershed residents. Information will also be posted on a collaborative storm water website and/or via social media tools.
Key Messages:	A - K
Target Audience:	Residents, visitors, public employees, schools, businesses, industries, construction contractors and developers
Year & Frequency:	Developed and distributed throughout the year and for the duration of the permit cycle
Goal:	1 article in newsletter/ year; 1,000 hits/year on the collaborative storm water website
Evaluation:	Frequency and number of articles, number of newsletters distributed, content of newsletters, number of website hits, type of social media tools used; content of messages
Responsible Party:	SCC, NEW Partners, Nested Jurisdictions

# Activity #3: Conduct Outreach at Local Fairs and Community Events

Delivery Mechanism:	Participate in and/or promote county-wide environmental education events such as Earth Fair, River Day, Stream Leaders, Adopt-A-Road and/or Adopt-A-Stream, or other similar water-themed fairs and festivals
Key Messages:	A - K
Target Audience:	Residents, visitors, students, public employees, businesses
Year & Frequency:	Ongoing annually and for the duration of the permit cycle
Goal:	Participate in and/or promote 2 events per year
Evaluation:	Number of participants, number of activities, amount and type of media
	coverage received, surveys if applicable
<b>Responsible Party:</b>	SCC, NEW Partners, Nested Jurisdictions

# Activity #4: Display Water Quality Exhibits

Delivery Mechanism: Provide water-quality and/or watershed themed exhibits and/or table-top displays at public events and/or public facilities

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# **Activity #5: Promote SCC water quality hotline**

Delivery Mechanism: Promote SCC's 24-hour anonymous water quality hotline for reporting	
	illicit discharges and pollution problems
Key Messages:	С
Target Audience:	Residents, public employees, businesses, industries
Year & Frequency:	Ongoing throughout permit cycle
Goal:	Regular maintenance and update of a pollution hotline and record of the
	complaints per year

Evaluation:Number of calls to hotline; nature of complaints; follow-up actionsResponsible Party:SCC, NEW Partners, Nested Jurisdictions

# Activity #6: Conduct Mass Media Outreach

Delivery Mechanism:	Provide press releases and media materials related to watershed activities to local radio, TV, and newspapers. This may include PSA's developed by SEMCOG; videotapes of presentations and workshops described above; other text derived from existing digital materials and articles
Key messages:	A - K
Target Audience:	Residents, visitors, public employees, businesses, and industry
Year & Frequency:	Regularly throughout the permit cycle, depending on season, messaging and budget
Goal:	3 published and/or broadcast messages per year
Evaluation: Responsible Party:	Number of times information is aired, period of time, content of material SCC, NEW Partners, Nested Jurisdictions

# **Activity #7: Water Quality Presentations**

Delivery Mechanism:	Conduct presentations that teach about current watershed issues, water
	pollution sources and solutions to these impacts. Provide free
	presentations to civic groups, organizations, schools and service clubs.
Key messages:	A - K
Target Audience:	Residents, students, schools, public employees, businesses, industries
Year & Frequency:	Ongoing throughout permit cycle
Goal:	16 presentations per year
Evaluation:	Number of participants; number of presentations; content of program;
	participant surveys
<b>Responsible Party:</b>	SCC, NEW Partners, Nested Jurisdictions