

Clinton River Watershed Anchor Bay Lake St. Clair Direct Drainage

Collaborative Public Education Plan

**Approved:
March 21st, 2023**

**Submitted by the Clinton River Watershed Council on behalf of
Macomb County, Oakland County
and the MS4 permit holders that participate in the
Clinton River Watershed Council's Stormwater Education Program**

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I. INTRODUCTION

This watershed wide Public Education Plan (PEP) was developed to inform the public within the Clinton River Watershed about their role in protecting water quality and preventing stormwater pollution. This plan was created by the municipalities and other partners in the Clinton River Watershed with the input of stakeholders and professionals in the environmental education field. This plan outlines the public education goals and messages that must be communicated under the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II regulations. The PEP also describes the existing and future efforts the communities and other partners will undertake to achieve these education goals, and how these efforts will be evaluated.

II. PARTNERS & STAKEHOLDERS

This watershed wide PEP is submitted on behalf of Macomb County, Oakland County and the MS4 permit holders that participate in the Stormwater Education Program facilitated by the Clinton River Watershed Council (CRWC). Municipal staff, county agencies, and CRWC participated in the development of the PEP. The CRWC Stormwater Education program was developed to assist communities that must comply with the NPDES Phase I or Phase II stormwater discharge regulations. Activities facilitated by CRWC, Macomb and Oakland Counties, and the MSU Extension Office will be reported on behalf of the following permit holders and their nested MS4's.

Avondale School District	City of Grosse Pointe Shores	City of Utica
Charter Township of Chesterfield	City of Fraser	City of Warren
Charter Township of Clinton	City of Harper Woods	Independence Township
Charter Township of Harrison	City of Hazel Park	Macomb Intermediate School District
Charter Township Orion	City of Madison Heights	Macomb Township
Charter Township of Oxford	City of Mount Clemens	Macomb County
Charter Township of Shelby	City of New Baltimore	Oakland County
Charter Township of Washington	City of Orchard Lake Village	Oakland University
City of Center Line	City of Pontiac	Oxford Area Community Schools
City of Keego Harbor	City of Rochester	Rochester Community Schools
City of Eastpointe	City of Rochester Hills	Village of Lake Orion
City of Fraser	City of Roseville	Village of New Haven
City of Grosse Pointe	City of St. Clair Shores	Village of Oxford
City of Grosse Pointe Farms	City of Sterling Heights	Village of Romeo
City of Grosse Pointe Park	City of Sylvan Lake	
	City of the Village of Clarkston	
	City of Troy	

Clinton River watershed communities, subwatershed groups, and partners agreed that approaching stormwater education on a watershed, cross-jurisdictional basis is both cost-effective and environmentally sound. The watershed approach allows the partners to share information and resources to address stormwater concerns at their source. Similarly, developing and implementing a public education program on a watershed basis provides a consistent and effective mechanism for protecting water resources across the region, while leveraging financial resources in each community.

During preparation of this PEP, various municipal staff, environmental organizations, county agencies, and the MSU Extension offices were contacted.

The following information was compiled to identify and organize existing stormwater education materials and programs:

- Existing materials or programs used to educate the public about watersheds and water quality protection (e.g. brochures, videos, displays, school programs, etc.).
- Existing audiences to target for watershed education (e.g. homeowners associations, lake associations, churches, civic groups, business associations, etc.).
- Existing communication methods that could be used to disseminate watershed education (e.g. cable access channel, email, website, newsletter, water bills, etc.).

III. CLINTON RIVER WATERSHED COUNCIL'S STORMWATER EDUCATION PROGRAM

The CRWC is a nonprofit organization dedicated to protecting, enhancing, and celebrating the Clinton River, its watershed, and Lake St. Clair. For over 50 years, the CRWC has worked collaboratively with local governments, businesses, individuals, and other community groups to address water quality and land use issues in the watershed. Stormwater runoff is the leading source of pollution in the Clinton River today, thus CRWC's efforts are focused primarily on decreasing the amount of stormwater and stormwater pollution reaching our streams, rivers, and lakes. CRWC works to achieve its mission by providing education and stewardship programs to the more than 1.5 million people, 63 communities, and 4 counties in the Clinton River watershed.

Upon the request of a number of communities, CRWC developed the Stormwater Education Program to assist its members in meeting their Phase I or Phase II public education requirements. The components of the Stormwater Education Program are outlined in this PEP, along with materials and programs offered by the counties, CRWC, and MSU extension. These materials and programs will be supported and promoted by the MS4 permittees named in this PEP. In subscribing to the Stormwater Education Program, each participating entity has entered into contract with the watershed council. CRWC has agreed to provide the programs outlined in this plan.

As outlined in this PEP, CRWC's program includes the following major components:

- Education of the public and recruitment of volunteers in each subwatershed through a variety of outreach methods (presentations, workshops, websites, cable TV, print media, etc.).
- Regular volunteer training sessions and establishment of water quality monitoring sites throughout each subwatershed.
- Quarterly stormwater management forums for municipal staff, City Council members, planners, engineers, consultants, MDEQ MS4 permit staff, and other watershed stakeholders to share information and discuss topics related to stormwater management, planning, and infrastructure development.
- Coordination of other on-going education and stewardship efforts, including River Day, Weekly Clean, Clinton Clean-Up, paddling events, water festivals, Adopt-A-Stream citizen science program, the Stream Leaders student river monitoring program, and the RiverSafe LakeSafe program.

- Engage and collaborate with municipalities to promote and facilitate CRWC's WaterTowns™ place making initiative focused on connecting communities to their waterways through education, green stormwater infrastructure, history, art, and ecology.
- Development and distribution of supporting print and web-based materials.

IV. GOALS & OBJECTIVES

The goal of this PEP is to promote, publicize, and facilitate watershed education for the purpose of encouraging the public to reduce the discharge of pollutants in stormwater to the maximum extent practicable. Pollution prevention shall be encouraged.

“Public” is defined to include all persons who potentially could affect the authorized stormwater discharges, including, but not limited to, residents, visitors to the area, public employees, businesses, industries, construction contractors, and developers.

This PEP is designed to ensure that the targeted audiences (“public”) are reached with the appropriate messages for the following nine topics as required in the 2003 NPDES Phase II stormwater permit:

1. Responsibility and stewardship in their watershed.
2. The connection of MS4 catch basins, storm drains, and ditches to area waterways, and the potential impacts these could have on the surface waters of the state.
3. Public reporting of illicit discharges or improper disposal of materials in MS4s.
4. The effects and need to minimize the amount of residential or noncommercial wastes discharged into MS4s, including:
 - i. Preferred cleaning materials and procedures for car, pavement, and power washing.
 - ii. Acceptable application and disposal of pesticides, herbicides, and fertilizers.
 - iii. Proper disposal practices for grass clippings, leaf litter, and animal wastes that get flushed into MS4s and the surface waters of the state.
5. The availability, location, and requirements of facilities for disposal or drop-off of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
6. For property owners with septic systems, the proper septic system care and maintenance, and how to recognize system failure.
7. The benefits of using native vegetation as well as other landscape practices that enhance water quality such as rain gardens and rain barrels.
8. For permittees with riparian land owners, methods for managing riparian lands to protect water quality.
9. Additional pollutants unique to commercial, industrial, and institutional entities as the need is identified.

10. Green stormwater infrastructure development and benefits.

All PEP participating permittees were required to apply for a new MS4 permit in their respective permit cycle years. The following key messages will be covered within the Clinton River Watershed and Lake St. Clair Direct Drainage Collaborative Public Education Plan. This Collaborative PEP was developed and will be implemented to continue meeting the PEP requirements of the 2003 MS4 permit as well as the new MS4 permit going forward.

- 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 stormwater 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.

V. REQUIRED ELEMENTS –EDUCATION ACTIVITIES

Appendix A details the activities and methods that the **Clinton River Watershed Council, Macomb County, Oakland County, and MSU extension will perform on behalf of the participating communities.** The matrix breaks out the activities according to the elements and key messages that they address and describes the target audiences, delivery mechanisms, timeline, responsible parties, and evaluation methods for each activity. An overall evaluation plan is also included in Section VI.

VI. EVALUATION PLAN

A variety of mechanisms will be employed. Some will quantify the usage of materials (e.g. number of materials distributed, website hits) and participation in events (e.g. number of attendees at a presentation or workshop, number of participants at an event). 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.

The CRWC will use an online survey tool to measure post contact behavioral changes. For example; email addresses will be collected from all CRWC facilitated event attendees, 60-90 days following the event an email with a link to the online survey will be sent asking the participant some questions about their general knowledge and behavior changes. While the surveys are not scientifically significant the results of the survey can help mold the Public Education Efforts throughout the Clinton.

Through CRWC's Adopt-A-Stream monitoring program, it is possible to evaluate long-term changes in water quality. The results are compiled in an annual data summary, which allows a simple mechanism for measuring improvements or declines in water quality across the various subwatersheds. This data is managed in a document that records water quality monitoring results for up to the past five years. Improvements in water quality cannot be attributed solely to a successful public education effort, but indicate the overall effectiveness of the stormwater management efforts in the community, subwatershed, and watershed-wide.

VII. REPORTING

The Clinton River Watershed Council will provide a Biennial Progress Report on this Public Education Plan to the Michigan Department of Environmental Quality. This Biennial Report of the watershed wide collaborative PEP is submitted by the CRWC on behalf of Macomb County, Oakland County and the MS4 permit holders that participate in the Stormwater Education Program facilitated by CRWC. Activities facilitated by CRWC, Macomb and Oakland Counties, and the MSU Extension Office will be reported on behalf of the permit holders and their nested MS4s.

VIII. APPENDIX A: ACTIVITIES DETAIL TABLE 1

IX. APPENDIX B: COMMUNITY SPECIFIC ACTIONS TRACKING SPREADSHEET

X. APPENDIX C: LETTERS OF COMMITMENT FOR SERVICES AND PROGRAMS

1. Macomb County Public Works Office
2. Oakland County Water Resources Commissioner's Office
3. MSU Extension