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*The table of contents is automatically generated and must be updated (look in the Microsoft Word References Tab, select "Update Table"). Headings are specifically formatted (Headings styles 1, 2, or 3) to auto-populate the table of contents.*

*Previous PEPs referenced the actual permit for the regulatory language. This PEP references the Stormwater Discharge Permit Application (shown in red). These citations are meant to remain.*

# **STORMWATER DISCHARGE PERMIT APPLICATION COLLABORATIVE PUBLIC EDUCATION PLAN**



## **For the Alliance of Downriver Watersheds MS4s**

**Effective upon NPDES Permit issuance for a period of five (5) years.**

Allen Park	Inkster	Taylor
Belleville	Lincoln Park	Van Buren Township
	Melvindale	Wayne County
Dearborn Heights	Riverview	Westland
Ecorse	Rockwood	Woodhaven
Flat Rock	Romulus	Woodhaven-Brownstown
Gibraltar	Southgate	School District
Grosse Ile Township	Sumpter Township	Wyandotte

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Exhibit A – Table of PEP Tasks by Topic and Activity

## I. INTRODUCTION

### Purpose of Public Education Plan

In accordance with the permit requirements for Federal Phase II Storm Water Regulations, this Public Education Plan (PEP) was prepared to instill within the residents, businesses, and officials of the communities in regulated watersheds a heightened level of awareness of the connection between individual actions and the health of their watershed and water resources. The objective of this plan is to promote, publicize, and facilitate watershed education for the purpose of encouraging the public to reduce the discharge of pollutants in storm water.

### Federal Phase II Storm Water Regulations

A 1987 amendment to the Federal Clean Water Act required the U.S. Environmental Protection Agency (EPA) to develop regulations setting forth National Pollutant Discharge Elimination System (NPDES) permit application requirements for storm water discharges from municipal separate storm sewer systems (MS4s). An MS4 is a drainage system that discharges to waters of the State and is owned or operated by a federal, state, county, city, village, township, district, association or other public body of government. Such drainage systems may include roads, catch basins, curbs, gutters, parking lots, ditches, conduits, pumping devices, or man-made channels.

Phase I of the NPDES regulations went into effect in 1990, which regulated discharges from communities with populations greater than 100,000. The rules for Phase II of the NPDES regulations were issued in 1999, requiring storm water discharge permits for communities with populations under 100,000 that have MS4s in “urbanized areas” as defined by the U.S. Bureau of the Census.

In Michigan the Michigan Department of Environmental Quality (MDEQ) is administering the federal Phase II permitting process.

This section can be updated to incorporate the current permitting program for Phase II as known.

### Required Public Education Plan Elements

The PEP program is designed 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 plan describes current and proposed best management practices (BMPs) to meet the minimum control measure requirements in a Public Education Plan (PEP).

This section can be updated to incorporate the current permitting program for Phase II.

The PEP may involve watershed or regional partners collaborating to combine or coordinate existing programs for public stewardship of water resources. Permittees shall indicate if they are or will be working collaboratively with watershed or regional partners on any or all activities in the PEP during the permit cycle, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

The PEP is designed to implement a sufficient amount of educational activities to ensure that the targeted audiences are reached with the appropriate messages to the maximum extent practicable. The permittee shall identify applicable topics from the topics listed below, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

Each applicable topic shall be prioritized based on a procedure for assessing high-priority community-wide issues and targeted issues to reduce pollutants in stormwater runoff, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

- A. Promote public responsibility and stewardship in the applicant(s) watershed.
- 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, yard wastes, 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.

For all applicable topics, the PEP shall identify:

1. Target audience.
2. Key message.
3. Delivery mechanism.
4. Year and frequency the BMP will be implemented.
5. Responsible party.

**A measurable goal with a measure of assessment shall be included for each BMP** and as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

The PEP shall provide the procedure for evaluating and determining the effectiveness of the overall PEP. The procedure shall include 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, (Stormwater Discharge Permit Application, Public Education Program (PEP) p. 3).

## II. COLLABORATION OF WATERSHED PARTNERS

The permittees identified below have elected to meet the PEP requirements by working with each other and other watershed and regional partners to develop, submit, and implement a PEP that includes both collaborative and individual BMPs:

Allen Park	Rockwood
Belleville	Romulus
Dearborn Heights	Southgate
Ecorse	Sumpter Township
Flat Rock	Taylor
Gibraltar	Van Buren Township
Grosse Ile Township	Wayne County
Inkster	Westland
Lincoln Park	Woodhaven
Melvindale	Woodhaven-Brownstown School District
Riverview	Wyandotte

These permittees are members of the Alliance of Downriver Watersheds (ADW). The ADW is a permanent watershed organization in Southeast Michigan, formed under Public Act 517 of the Public Laws of 2004. Its membership consists of 22 public agencies in the Ecorse Creek, Combined Downriver, and Lower Huron River Watersheds within Wayne and Monroe Counties.

The ADW was formed in 2007 to build on its members' ongoing efforts to work together in managing the area's water resources. The ADW is relatively urban in nature consisting of 203.3 square miles and more than 450,000 people (2010 census). Major watercourses within the ADW that drain to the Detroit River and Lake Erie include Ecorse Creek, Sexton Kilfoil Drain, Frank and Poet Drain, Blakely Drain, Brownstown Creek, Huron River, Silver Creek and Woods Creek.

The consortium of agencies that make up the ADW meet on a regular basis and work together to cooperatively manage the rivers, lakes and streams within the watershed. Examples of ADW efforts include long-term water quality monitoring, stormwater permit compliance and reporting to the State of Michigan, submittal of grant applications for water quality improvements, and public education on items such as rain barrel use, phosphorus fertilizer, and proper pet waste management.

The consortium is governed by adopted bylaws that set forth its composition, duties and responsibilities. The member agencies assess themselves annually or bi-annually based on population and land areas within the watershed to establish an operating budget that they use to work toward water quality improvements.

Member agencies designate a person to represent them and vote at ADW meetings. Members can be a township, city, village, county, public school district, public college or university, or any other local or regional public agency that meets the following criteria:

- Has been issued a state permit for a water discharge into waterways within the three ADW watersheds
- Whose legal jurisdiction incorporates areas wholly or partially within the watershed boundaries
- Whose governing body by resolution, voluntarily adopts the ADW Bylaws

The ADW also includes Cooperating Partners, who are non-profit organizations, businesses, residents, etc., who provide their time, services, expertise and resources toward the common goal of protecting and restoring the watershed. Cooperating Partners are recognized as non-voting members.

### III. PROCEDURE FOR IDENTIFYING AND PRIORITIZING APPLICABLE PEP TOPICS

The public education topics A-K listed above in Section II were identified in the permit application. These topics are referred to by their corresponding letter in the Public Education BMPs below as well as on the PEP table.

#### Watershed-Wide Priority Topics

The procedure for identifying high-priority watershed-wide or targeted issues suited for collaborative public education efforts includes:

- A review of Watershed Management Plans for the Ecorse Creek, Combined Downriver and Lower Huron River watersheds including any established Total Maximum Daily Loads for waterbodies in each area.
- A review of data from on-going Wayne County, Huron River Watershed Council and ADW Stream Monitoring and Water Quality Monitoring Programs.
- A review of public opinion surveys on watershed issues and water quality concerns conducted by the Southeast Michigan Council of Governments (SEMCOG) in 2004 and the ADW in 2016.
- Topics identified by permittees at quarterly group meetings, in periodic subcommittee meetings and in permittee opinion surveys prior to and throughout the permit cycle.
- Discussion and input from the permitted entities regarding individual jurisdictional versus watershed-wide needs, potential public outreach opportunities, and existing and future programs.

Any additional procedural steps for identifying high-priority or targeted issues by individual permittees include:

Individual permittees will want to include any additional steps they may have taken to review and identify individual priority topics as part of the procedure here.

The ADW's high priority community-wide issues and targeted issues for collaborative efforts are:

- High yet stable levels of phosphorus in stormwater runoff from most monitored streams indicating broad sources;
- High and increasing *E. coli* counts in most monitored streams;
- High conductivity levels (indicating potential dissolved contaminants) in most monitored streams;
- Moderate to high flashy flows in monitored streams indicating the need for infiltration and storage across the watersheds;

- A need for greater protection of riparian areas to reduce erosion and slow and treat stormwater runoff; and
- Target audience research and public survey results indicating a need for continued education about stormwater pollution and specific residential responsibilities.

The high priority community-wide issues and targeted issues were used to **prioritize** topics A-K for **collaborative efforts**. Existing and Proposed Collaborative Public Education BMPs include in some way all topics, but the emphasis will be on Collaborative High Priority Topics. Individual permittees may have additional or other priorities for individual education efforts as shown below and may address these in Existing and Proposed Individual Public Education BMPs (Section V.):

Individual permittees may rank individual priority topics high/medium/low in the table below or prioritize topics specific to their MS4.

Collaborative Priority Level	Permittee Priority	Topic Letter	Topic Description
High		A	Public responsibility and stewardship in the watershed.
High		B	The connection of the MS4 to area waterbodies and the potential impacts of discharges.
High		C	Illicit discharges and public reporting of illicit discharges and improper disposal of materials.
Med		D	Promote preferred cleaning materials and procedures for car, pavement, and power washing.
High		E	Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.
High		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 or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
Low		H	Proper septic system care and maintenance, and how to recognize system failure.
Med		I	Benefits of green infrastructure and Low Impact Development.
Med		J	Promote methods for managing riparian lands to protect water quality.
Medium		K	Identify and educate commercial, industrial and institutional entities likely to contribute pollutants to stormwater runoff.

## IV. EXISTING AND PROPOSED COLLABORATIVE PUBLIC EDUCATION BMPs

To address each of the PEP requirements, the permittee will, individually or collaboratively, implement the following specific activities, which include a description, timeline, evaluation component, and the required topic that the activity meets. Activities will be completed with the involvement of responsible parties as noted in each activity description, and/or in cooperation with identified permitted communities.

DEQ reads this as stating that unless otherwise specified where “permittee” is included in the responsible party all permittees will implement the activity. Please note that some collaborative activities below also require individual permittees to do their part, which may include distributing print and digital materials, providing links on websites, promoting Wayne County’s household hazardous waste collections and environmental hotlines, promoting stream monitoring, installing and maintaining watershed signs, etc. It is expected that permittees will track and report these individual efforts toward collaborative ADW activities in their own annual report to DEQ. The ADW will report on group efforts only.

Time lines for implementation of proposed activities extend from permit issuance (year 1) when implementation of the PEP begins for a period of five (5) years.

### Activity #1: Produce and distribute a printed watershed community calendar and social media-driven photo contest

**Delivery Mechanism:** Coordinated by the ADW, permittees will participate in the bulk printing and distribution of a Watershed Community Calendar to residents. The calendar will include a social media-driven photo contest where residents will be encouraged to post and tag photos related to stormwater pollution-reducing behaviors on social media.

**Key Messages:** Calendars typically feature a different tip each month for increasing public awareness of watershed issues and improving personal actions affecting the health of their watershed. Topics/messages are likely to include key messages associated with A-J of the PEP topics that are suited for homeowners, such as general watershed stewardship; household hazardous waste disposal; proper lawn care; car washing; storm drain pollutants; pet waste; riparian land management; green infrastructure and LID; and illegal dumping in storm drains.

**Target Audience:** Residents.

**Year/Frequency:** Biannually (even calendar years).

**Goal:** During the permit cycle, the ADW will collaboratively produce a biannual print calendar in even calendar years that permittees will distribute to residents. To promote a calendar-related public photo contest during even calendar years, the ADW will also produce and permittees will distribute monthly social media posts/digital ads/content. The calendar and photo contest will be posted to the ADW website and permittees will provide links from their websites to the ADW website.

**Assessment:** Number of calendars distributed by the ADW and permittees;  
Number of posts/views on ADW social media sites and on the ADW website;  
Number of photo contest participants.

**Responsible Parties:** Permittees produce calendars and coordinate and run the photo contest collaboratively through the ADW. Permittees distribute calendars individually and help promote the photo contest within their communities.

**Topics Addressed:** A-J

### Activity #2: Organize and run focused-topic pollution prevention campaigns

**Delivery Mechanism:** The ADW will organize and run print or digital pollution prevention pledge campaigns that are focused on a single message or topic and that seek commitment from residents for positive action.

**Key Messages:** Campaigns will feature a different topic each year for increasing public awareness of watershed issues and improving personal actions affecting the health of their watershed. Topics/messages are likely to include key messages associated with A-J of the PEP topics that are suited for homeowners, such as general watershed stewardship; household hazardous waste disposal; proper lawn care; car washing; storm drain pollutants; pet waste; riparian land management; green infrastructure and LID; and illegal dumping in storm drains.

**Target Audience:** Residents.

**Year/Frequency:** Biannually (odd calendar years).

**Goal:** Biannually, the ADW will collaboratively host one print or digital single-topic pledge campaign. The ADW and permittees will distribute print and digital campaign materials that include a flyer, an ad graphic, and at least eight social media posts through local venues and customer service locations, newsletters and/or other publications, social media and websites.

**Assessment:** Number of print campaign materials distributed by the ADW and permittees; Number of posts/views on ADW social media sites and on the ADW website; Number of pledges collected.

**Responsible Parties:** ADW to coordinate and run the campaign as a collaborative effort. Permittees to help promote the campaign individually within their communities.

**Topics Addressed:** A-J

### Activity #3: Provide displays for community venues and outreach activities at events

**Delivery Mechanism:** The ADW will produce and make available a shared pop-up display and educational posters for use at community venues, regional fairs and events, and community meetings and events. The ADW will host the pop-up display at regional fairs/events with a water, green living or a sustainability focus. Individually, permittees will promote and support stormwater education by displaying posters or the pop-up display at their locations and other key public venues in their community such as municipal libraries, city/township halls, or schools or at community meetings, fairs and/or events.

**Key Messages:** Public awareness of watershed issues and improving personal actions affecting the health of the watershed also including key messages associated with A-K of the PEP topics, such as general watershed stewardship; household hazardous waste disposal; proper lawn care; car washing; storm drain pollutants; pet waste; riparian land management; benefits of native plants; and illegal dumping in storm drains.

**Target Audience:** Residents, visitors, community leaders.

**Year/Frequency:** 2-3 events annually for the ADW collaboratively. Permittee placement of ADW educational posters or pop-up display in at least 1 permittee location or public venue or meeting or event in the permittee's community per year.

**Goal:** The ADW will produce/provide a pop-up display for ADW and permittee use and a set of educational posters for each permittee during the permit cycle. The ADW will collaboratively host the pop-up display at two regional events annually. Permittees will display posters or host the pop-up display in at least one location or at one community event annually.

**Assessment:** Name, date and location of event where the ADW hosted the pop-up display; Permittees will also report the location, date and name of meeting/event (if applicable) where they placed posters or hosted the pop-up display in their permittee locations, public venues, meetings/events.

**Responsible Parties:** ADW and permittees.

**Topics Addressed:** A-J

#### **Activity #4: Support green schools program with incentives to qualifying ADW schools**

**Delivery Mechanism:** The ADW supports the Michigan Green Schools Program by providing incentives and recognition to participating schools in the ADW area who strive to earn and maintain Green School status. Past incentives have included trees for planting at school locations and educational materials featuring their stormwater benefits. More recently the ADW provided professionally run, curriculum-based in-school watershed workshops and educational signage for five schools earning the Green School designation. The ADW will continue to offer these incentives and educational opportunities to Green Schools annually throughout the permit cycle.

**Key Message:** Watershed awareness and stewardship.

**Target Audience:** Wayne county elementary, middle and high school students and teachers

**Year/Frequency:** Annually.

**Goal:** The ADW will engage at least three Green Schools in the ADW area each year during the permit cycle in incentives and educational opportunities.

**Assessment:** ADW will report a list of schools with number of students participating in tree plantings, watershed workshops or other ADW incentives and educational opportunities;  
List of schools displaying ADW-provided educational signage or distributing ADW materials;  
Number of schools including water-related activities in their Green Schools applications.

**Responsible Parties:** Wayne County (Green Schools program coordinator) and ADW

**Topics Addressed:** A, B, I

#### **Activity #5: Support and promote volunteer stream and water quality monitoring**

**Delivery Mechanism:** Permittees will support and assist in promoting the volunteer stream and water quality monitoring programs coordinated by the Huron River Watershed Council (HRWC) and others to their residents. The ADW will produce publicity materials including flyers and press releases, seek earned media placement and run digital or print advertising in watershed media outlets. The ADW will also seek help

from regional cooperating partners to distribute these materials. Permittees will help promote these programs by distributing materials individually within their communities, providing literature and posting volunteer event opportunities at customer service locations, on web sites, on social media outlets and in newsletters. The ADW will collect and provide information ongoing to permittees on volunteer opportunities prior to events.

<b>Key Messages:</b>	Volunteer monitoring for water quality is conducted spring through fall at stream sites in the ADW waterbodies. Additionally, watershed volunteers and students assess habitat, water quality, and aquatic life via benthic macroinvertebrate monitoring. These programs strive to educate participating watershed residents about their connection to the river and the current conditions. A central goal of the programs is to inspire people to take actions that lead to better river protection at home and in their communities.
<b>Target Audience:</b>	Residents, teachers, students.
<b>Year/Frequency:</b>	Stream monitoring occurs annually at unique events in winter, spring, fall. Water quality monitoring is ongoing spring through fall, with a training in the spring.
<b>Goal:</b>	The ADW and permittees will promote three one-day volunteer macro-invertebrate monitoring events in the Huron River watershed and a seasonal volunteer chemistry and flow monitoring program in the Huron River and ADW area that are coordinated by the Huron River Watershed Council.
<b>Assessment:</b>	Compilation of all promotional efforts by the ADW; Number of people participating in events as recorded by HRWC; Resulting stewardship actions taken as reported by participants through event surveys conducted by HRWC; Permittees will also report individual efforts to distribute promotional event materials.
<b>Responsible Parties:</b>	Permittees, ADW, HRWC.
<b>Topics Addressed:</b>	A in particular, but also B-J

#### **Activity #6: Stream and river crossing road signs**

<b>Description:</b>	Through an ADW program, permittees have previously installed 80 stream crossing and watershed signs along roads where creeks or streams cross as well as at locations near watershed boundaries. Permittees will maintain these existing signs and the ADW will review and promote the placement of additional signs in areas where a need for signage has been identified and not met, coordinating or facilitating sign production for members.
<b>Target Audience:</b>	Visitors, residents.
<b>Year/Frequency:</b>	Ongoing.
<b>Goal:</b>	The ADW has recently completed a baseline survey and map inventory of existing stream crossing and watershed signs documenting location, type and condition. Based on survey results the ADW will advise permittees regarding maintenance and replacement needs and will recommend additional sign locations to increase visibility and public recognition. The ADW will facilitate the production of replacement signs and at least 5 new signs during the permit cycle. Permittees will install and maintain signage.
<b>Assessment:</b>	Survey results, map inventory and recommendations;

Number of new and replacement signs produced by the ADW;  
Permittees will report installation and maintenance activities.

**Responsible Parties:** ADW and local community officials, permittees.  
**Topics Addressed:** A

#### **Activity #7: Participate in regional partnership activities**

**Delivery Mechanism:** The ADW and permittees will seek to participate and collaborate with regional partners such as SEMCOG, the Alliance of Rouge Communities, Great Lakes Commission, Friends of the Detroit River, Detroit International Wildlife Refuge and others in activities that further public education on watershed awareness and stormwater issues. The ADW will attend regional partner meetings and report potential opportunities to ADW members.

**Key Messages:** Collaborative efforts are effective at reaching a greater number of target audiences with persuasive messaging that works.

**Target Audience:** Stakeholders of partner organizations.

**Year/Frequency:** 3-4 meetings annually.

**Goal:** The ADW collaboratively will identify opportunities to build upon and improve collaborative public education efforts by seeking out and attending at least three meetings annually with regional groups working on watershed awareness and stormwater issues.

**Assessment:** ADW provided list of meetings with date, location, meeting topic and participating groups and any resulting opportunities identified and reported to permittees.

**Responsible Parties:** ADW and individual permittees.  
**Topics Addressed:** A-K

#### **Activity #8: Promote county-wide complaint tracking and response system**

**Delivery Mechanism:** Permittees will educate the public on illicit discharges and work with Wayne County to publicize county-wide public reporting and response system for illicit discharges or improper disposal of materials into local storm drain systems. A 24- Hour Environmental Hotline is in place and administered by the Wayne County Department of Public Services. The County promotes the use of the 24-Hour Environmental Hotline on County web sites. Permittee efforts will include providing public information and promoting the Hotline at their customer service locations, on web sites and social media outlets and in newsletters.

**Key Messages:** Prevention and reporting of illicit discharges and/or improper disposal of materials into MS4s.

**Target Audience:** Residents, visitors, commercial and industrial businesses, local government officials and employees.

**Year/Frequency:** Ongoing promotional efforts.

**Goal:** The ADW and permittees will annually distribute materials with the hotline number referenced and will promote the hotline on the ADW and permittee websites and social media outlets or newsletters.

**Assessment:** Number of materials distributed annually with hotline number referenced reported by ADW for collaborative efforts and reported by permittees for permittee efforts.

**Responsible Parties:** -Number of views on ADW website and social media reported by ADW  
ADW, Wayne County, permittees.  
**Topics Addressed:** B, C, K

#### **Activity #9: Promote water resource protection workshops**

**Delivery Mechanism:** The permittees will promote regional educational workshops and programs for residential, business and municipal target audiences that are organized through agencies such as Wayne County, MSU Extension, SEMCOG, the Michigan Water & Environment Association, the Natural Shorelines Partnership, the Friends of the Detroit River, the Alliance of Rouge Communities, Friends of the Rouge and others. Permittee efforts will include providing public information and promoting workshops at their customer service locations, on web sites and social media outlets and in newsletters.

**Key Messages:** Programs may include the following: Watershed Management Short Course, Master Rain Gardener and Master Composter program, the Michigan Water Stewards program, watershed-friendly golf course management workshop, illicit discharge and connections elimination workshop, road salt BMP/de-icing alternatives workshop, land use/storm water planning workshops, and riparian land management workshops.

**Target Audience:** Residents, government officials and employees, construction contractors, and developers.

**Year/Frequency:** Throughout the permit cycle as workshop dates are established and need for promotional assistance are identified by others.

**Goal:** The ADW and permittees will annually distribute information and promotional materials for at least one regional educational workshop/program through customer service locations websites, social media outlets and newsletters.

**Assessment:** Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts;  
Number of views on ADW website and social media reported by ADW.

**Responsible Parties:** Permittees will promote workshop events as developed by outside agencies.  
**Topics Addressed:** K in particular, but also A-J

#### **Activity #10: Promote county household hazardous waste reduction program**

**Delivery Mechanism:** Permittees will work with Wayne County to publicize residential disposal options for flammable, poisonous, toxic and corrosive materials through community collection events, and informational materials for the public that promote the collection events and proper disposal of household hazardous waste and recycling. Permittee efforts will include providing public information and promoting collection events and information at their customer service locations, on web sites and social media outlets and in newsletters.

**Key Messages:** The program seeks to address the environmental (including water quality) and public health effects resulting from improper handling and disposal of household hazardous waste, and is committed to reducing the use of home toxics and keeping citizens informed about the choices and responsibilities associated with purchasing, handling and disposing of toxic substances.

<b>Target Audience:</b>	Wayne County residents.
<b>Year/Frequency:</b>	Annually. HHW collections are typically held by the Wayne County Department of Public Services 4 times each year in different communities.
<b>Goal:</b>	The ADW and permittees will annually distribute information and promotional materials for all HHW collections scheduled by Wayne County through customer service locations websites, social media outlets and newsletters.
<b>Assessment:</b>	Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts; Number of views on ADW website and social media reported by ADW.
<b>Responsible Parties:</b>	Resource Recovery Guide is produced by Wayne County. Events and informational materials are promoted by Wayne County and permittees.
<b>Topics Addressed:</b>	G

## V. EXISTING AND PROPOSED INDIVIDUAL PUBLIC EDUCATION BMPs

Reported above and as follows:

Individual permittees should fill in details of their individual activities here.

### Activity #X: Description

**Delivery Mechanism:**

**Key Messages:**

**Target Audience:**

**Year and Frequency:**

**Goal:**

**Assessment:**

**Responsible Parties:**

**Topics Addressed:**

## VI. OTHER INVOLVED ORGANIZATIONS

In implementing this Public Education Plan, the permittees will pursue cooperative partnerships plus information and resource sharing with several organizations, including but not limited to:

Organization	Program	Contact If Known
Alliance of Downriver Watersheds	Chairperson Facilitation Team Leader	Jim Gorris, City of Gibraltar Vicki Putala, OHM
Huron-Clinton Metropark Authority, Pointe Mouillée State Game Area (Michigan Department of Natural Resources), Detroit River International Wildlife Refuge, Friends of the Detroit River, Detroit Riverkeeper	Environmental Education and Interpretive Programs	Jennifer Hollenbeck, HCMA; Zach Cooley, Pointe Mouillée State Game Area; Susan White, DRIWR; Robert Burns, Detroit Riverkeeper
Huron River Watershed Council	Water Quality Monitoring Program, Facilitation of Collaborative Permittee Activities, Information and Education Campaign	Ric Lawson Andrea Paine Pam Labadie
Wayne County Department of Public Services, Water Quality Management Division	Workshops, Illicit Discharge & Dumping Response System, water quality monitoring; watershed signs and informational displays; Green Schools program	Noel Mullett Mike Flowers Nancy Gregor
Wayne County Department of Public Services, Land Resource Management Division	Household Hazardous Waste Collection Sites, composting, waste disposal and recycling	John Demerjian
MSU Extension – Wayne County	Horticulture & Natural Resources, Watershed Management, and other programs	Gary Williams, Extension Educator, Natural Resources-Outdoor Education; Mary Bohling, Extension Educator, Sea Grant; Kristine Hahn, Extension Educator, Consumer Horticulture
Michigan Department of Environmental Quality	Water Resources Division, Field Operations Section, MS4 Staff	Lishba Varughese Erica Stevenson
Michigan Water Environment Association	The Michigan Water Network (MWN) information conduit and repository for important news, data, facts, etc. pertaining to the water-related issues of Michigan and the Great Lakes	Allison Wood, Executive Director
Southeast Michigan Council of Governments	Workshops, educational events, and public education materials, SEMCOG Partners for Clean Water	Katherine Grantham

## **VII. EVALUATION OF EFFECTIVENESS**

Evaluation of the overall effectiveness of the PEP will consist of a combination of both the accumulated measures of the effectiveness of the PEP's individual activities and a measure of the effectiveness of the sum of all the activities.

Evaluation of accumulated measures of the effectiveness of the PEP's individual activities success 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., results that indicate actual behavior change) will be incorporated into BMP activity evaluations. Such measures are expected to include public comment and feedback, level of participation in programs and activities, and tools that measure behavior change. When applicable, these measures will be reasonably coordinated with other communities and organizations and will be designed to supplement or provide comparison to the ADW's 2016 Resident Survey on Water Quality. Results will serve to provide a basis for evaluating PEP activities going forward and will provide an opportunity to benchmark social indicators for subsequent permit cycles.

## **VIII. PERIODIC PROGRESS REPORT**

Permittees will provide documentation of PEP efforts, a summary of the evaluation of its effectiveness when appropriate, and any proposed revisions or amendments to the PEP program in the periodic stormwater reports to the MDEQ. Reporting on PEP efforts will reflect data gathered on a calendar year basis.

**STORMWATER DISCHARGE PERMIT APPLICATION  
COLLABORATIVE PUBLIC EDUCATION PLAN TABLE  
For the Alliance of Downriver Watersheds MS4s**

Public Education Topic	BMP Activity #	BMP Activity Description	Partner Collaboration	Target Audience	Key Message	Delivery Mechanism	Year	Frequency	Responsible Party	Goal	Assessment
A-J	1	Watershed community calendar and social media photo contest	Yes	Residents	A-J	Distributed print calendar and photo contest on social media	Even calendar years	Biannually	ADW/Permittees	During the permit cycle, the ADW will collaboratively produce a biannual print calendar in even calendar years that permittees will distribute to residents. To promote a calendar-related public photo contest during even calendar years, the ADW will also produce and permittees will distribute monthly social media posts/digital ads/content. The calendar and photo contest will be posted to the ADW website and permittees will provide links from their websites to the ADW website.	Number of calendars distributed by the ADW and permittees; Number of posts/views on ADW social media sites and on the ADW website; Number of photo contest participants.
A-J	2	Focused topic pollution prevention pledge campaigns	Yes	Residents	A-J	Digital pollution prevention pledge campaign seeking resident commitment toward a positive action	Odd calendar years	Biannually	ADW/Permittees	Biannually, the ADW will collaboratively host one print or digital single-topic pledge campaign. The ADW and permittees will distribute print and digital campaign materials that include a flyer, an ad graphic, and at least eight social media posts through local venues and customer service locations, newsletters and/or other publications, social media and websites.	Number of print campaign materials distributed by the ADW and permittees; Number of posts/views on ADW social media sites and on the ADW website; Number of pledges collected.
A-J	3	Displays at community venues and outreach activities at events	Yes	Residents, visitors, community leaders	A-J	Pop-up display and educational posters at regional fairs and events and community venues, meetings or events	1-5	2-3 regional fairs and events annually; Ongoing at community venues	ADW/Permittees	The ADW will produce/provide a pop-up display for ADW and permittee use and a set of educational posters for each permittee during the permit cycle. The ADW will collaboratively host the pop-up display at two regional events annually. Permittees will display posters or host the pop-up display in at least one location or at one community event annually.	Name, date and location of event where the ADW hosted the pop-up display; Permittees will also report the location, date and name of meeting/event (if applicable) where they placed posters or hosted the pop-up display in their permittee locations, public venues, meetings/events.
A, B, I	4	Support county green schools program	Yes	Students, teachers	A, B, I	Incentives, educational opportunities and activities (water-related) for green schools and watershed educational signage	1-5	Annually	Wayne County/ADW	The ADW will engage at least three Green Schools in the ADW area each year during the permit cycle in incentives and educational opportunities.	ADW will report a list of schools with number of students participating in tree plantings, watershed workshops or other ADW incentives and educational opportunities; List of schools displaying ADW-provided educational signage or distributing ADW materials; Number of schools including water-related activities in their Green Schools applications.
A primary, B-K secondary	5	Support/promote volunteer stream and water quality monitoring	Yes	Residents, students, teachers	A, B-K	Permittees promote HRWC volunteer water quality monitoring; and volunteer and student benthic macroinvertebrate monitoring	1-5	Annually spring-fall; annually at unique events winter, spring, fall	HRWC/ADW/Permittees	The ADW and permittees will promote three one-day volunteer macro-invertebrate monitoring events in the Huron River watershed and a seasonal volunteer chemistry and flow monitoring program in the Huron River and ADW area that are coordinated by the Huron River Watershed Council.	Compilation of all promotional efforts by the ADW; Number of people participating in events as recorded by HRWC; Resulting stewardship actions taken as reported by participants through event surveys conducted by HRWC; Permittees will also report individual efforts to distribute promotional event materials.

**STORMWATER DISCHARGE PERMIT APPLICATION  
COLLABORATIVE PUBLIC EDUCATION PLAN TABLE  
For the Alliance of Downriver Watersheds MS4s**

Public Education Topic	BMP Activity #	BMP Activity Description	Partner Collaboration	Target Audience	Key Message	Delivery Mechanism	Year	Frequency	Responsible Party	Goal	Assessment
A, B, C	6	Stream and river crossing road signs	Yes (to install and/or maintain)	Residents, visitors	A	Roadside Signage	1-5	On-going	ADW/local community officials/Permittees	The ADW has recently completed a baseline survey and map inventory of existing stream crossing and watershed signs documenting location, type and condition. Based on survey results the ADW will advise permittees regarding maintenance and replacement needs and will recommend additional sign locations to increase visibility and public recognition. The ADW will facilitate the production of replacement signs and at least 5 new signs during the permit cycle. Permittees will install and maintain signage.	Survey results, map inventory and recommendations; Number of new and replacement signs produced by the ADW; Permittees will report installation and maintenance activities.
J, K	7	Participate in regional partnership activities	Yes	Stakeholders of partner organizations; residents	A-K	Participate with regional partners in activities that that further public education of watershed and stormwater issues	1-5	On-going; identify and attend 3-4 partner meetings annually	ADW/Permittees	The ADW collaboratively will identify opportunities to build upon and improve collaborative public education efforts by seeking out and attending at least three meetings annually with regional groups working on watershed awareness and stormwater issues.	ADW provided list of meetings with date, location, meeting topic and participating groups and any resulting opportunities identified and reported to permittees.
A-K	8	Promote county-wide complaint tracking and response systems	Yes (to promote)	Residents; visitors; commercial and industrial businesses; local govt officials and employees	B, C, K	Permittees will publicize and promote regional reporting lines with print and digital promotional information	1-5	On-going	Wayne County/ADW/Permittees	The ADW and permittees will annually distribute materials with the hotline number referenced and will promote the hotline on the ADW and permittee websites and social media outlets or newsletters.	Number of materials distributed annually with hotline number referenced reported by ADW for collaborative efforts and reported by permittees for permittee efforts.
B, C	9	Promote water resource protection workshops	Yes (to promote)	Residents, local govt officials and employees; construction contractors and developers	A-J	Permittees will publicize and promote regional educational workshops at customer service locations, on websites, social media outlets and/or newsletters	1-5	On-going as workshops are organized	ADW/Permittees	The ADW and permittees will annually distribute information and promotional materials for at least one regional educational workshop/program through customer service locations websites, social media outlets and newsletters.	Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts; Number of views on ADW website and social media reported by ADW.
A, G	10	Promote county household hazardous waste reduction program	Yes (to promote)	Residents	G	Permittees will publicize and promote county collection events and proper disposal of household hazardous waste and recycling with print and digital promotional information	1-5	Annually	Wayne County/ADW/Permittees	The ADW and permittees will annually distribute information and promotional materials for all HHW collections scheduled by Wayne County through customer service locations websites, social media outlets and newsletters.	Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts; Number of views on ADW website and social media reported by ADW.

**Permittees in the Alliance of Downriver Watersheds:**

Allen Park

Belleville

Dearborn Heights

Ecorse

Flat Rock

Gibraltar

Grosse Ile Township

Inkster

Lincoln Park

Melvindale

Riverview

Rockwood

Romulus

Southgate

Sumpter Township

Taylor

Van Buren Township

Wayne County

Westland

Woodhaven

Woodhaven-Brownstown School District

Wyandotte

STORMWATER DISCHARGE PERMIT APPLICATION  
 COLLABORATIVE PUBLIC EDUCATION PLAN TABLE

Public Education Topic	Key Message
A. Promote public responsibility and stewardship in the applicant(s) watershed.	Watershed definition, location, purpose for protecting, ways to affect, also including recreational and economic benefits of local water resources.
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.	Recognition of and how to locate. Lack of treatment and flow impacts to water quality and water body to which MS4 is connected.
C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.	What it is, promotion of reporting system and how to use, water quality impacts, identification of on-site sewage disposal and symptoms of failure, consequences to water quality.
D. Promote preferred cleaning materials and procedures for car, pavement, and power washing.	Preferred cleaning materials and procedures.
E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.	Proper application and disposal.
F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.	Proper disposal.
G. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.	Identification of household hazardous wastes and proper disposal.
H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.	Proper care and maintenance, recognition of failure, water quality impacts.
I. Educate the public on and promote the benefits of green infrastructure and Low Impact Development.	Benefits of green infrastructure and low impact development and implementing landscaping for water quality in residential applications.
J. Promote methods for managing riparian lands to protect water quality.	Benefits of riparian buffers of native plants, shrubs and trees for preventing erosion and runoff into waterbodies.
K. Identify and educate commercial, industrial and institutional entities likely to contribute pollutants to stormwater runoff.	Storage of chemicals to prevent exposure to stormwater runoff, proper disposal of grease and waste from food preparation, best practices for kitchen maintenance and recycling to prevent improper disposal.