PUBLIC EDUCATION PLAN TEMPLATE

for Middle Huron Stormwater Advisory Group Members Participating in the Watershed Municipal Stormwater Permit June 11, 2010

TABLE OF CONTENTS

Section I – Introduction	3
Section II – Existing and Proposed Public Education Activities	5
Section III - Other Involved Organizations	13
Section IV – Evaluation	13
Section V – Progress Report	14

Exhibit A – Table of PEP Tasks by Topic

I. INTRODUCTION

Purpose of Public Education Plan

In accordance with the watershed-based 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 of the Middle Huron Stormwater Advisory Group (SAG) 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.

MDNRE Storm Water Discharge Permits

In Michigan the Michigan Department of Natural Resources and Environment (MDNRE) is administering the federal Phase II permitting process. MDNRE has prepared two types of EPA-approved permits. The "watershed-based" permit requirements address the storm water pollution control issues covered in the EPA's minimum measures, while offering flexibility and cost sharing opportunities. The "jurisdiction-based permit" is closely structured to follow the EPA's minimum measures for complying with Phase II regulations.

Several communities in the Middle Huron Watershed have applied for and obtained a Certificate of Coverage (COC) under MDNRE's watershed-based permit and will be working together to complete many of the permit requirements. The permit requires each community to develop a number of programs to comply with federal storm water regulations. One of these requirements is the Storm Water Pollution Prevention Initiative (SWPPI). Development and submittal of this PEP is part of the SWPPI.

Required Public Education Plan Elements

The permittees shall have a program to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants in storm water to the maximum extent practicable, Watershed Permit Part I.A.4.b.2 (page 10). The public education program may involve combining or coordinating existing programs for public stewardship of water resources. The permittees in

the Middle Huron have elected to meet the PEP requirements by working collaboratively with watershed or regional partners to develop, submit, and implement a watershed-wide or regional PEP. A collaborative PEP shall demonstrate that the audiences of all permittees will be targeted. The PEP is part of and shall be submitted with the Storm Water Pollution Prevention Initiative (SWPPI). Pollution prevention shall be encouraged, Watershed Permit Part I.A.4.b.2 (page 10). Appropriate BMPs for this minimum measure and measurable goals for each BMP shall be submitted to the Department in accordance with Part I.C.1.a.

"Public" shall be defined to include all persons who potentially could affect the quality of storm water discharges, including, but not limited to, residents, visitors to the area, public employees, businesses, industries, and construction contractors and developers.

The PEP is designed to implement a sufficient amount of educational activities to ensure that the targeted audiences are reached with the appropriate message(s) for the following topics (Watershed Permit Part I.A.4.b.2.a (page 11)):

- 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 into 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 instead of non-native vegetation
- 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.

For all applicable topics, the PEP shall identify: (Watershed Permit Part I.A.4.b.2.b (page 11))

- 1. Target audience(s).
- 2. Key message(s).
- 3. Delivery mechanism(s).
- 4. Timetable.
- 5. Responsible party (or parties).

The PEP shall describe a method for determining the effectiveness of the public education program. Watershed Permit Part I.A.4.b.2.c (page 11)

The primary goal of this PEP is to address all public education requirements of the MDNRE's Watershed Municipal Storm Water Discharge Permit. In the permit application the public education topics are identified above and shall be referred to by their corresponding number in each description of collaborative activities that addresses the topic as well as on the PEP table.

Middle Huron Stormwater Advisory Group Members Participating in the Watershed Municipal Stormwater Permit

The permitted entities, who comprise the SAG, that are participating in the PEP include the following:

- Washtenaw County Water Resources Commissioner
- Washtenaw County Road Commission
- City of Ann Arbor
- City of Ypsilanti
- Village of Dexter
- CharterTownship of Pittsfield*
- Charter Township of Ypsilanti
- Eastern Michigan University

It should be noted that, unlike the other participants, Pittsfield Township holds a jurisdictional permit. The Township is participating in this plan where appropriate, but it may also need to engage in additional activities to comply with jurisdictional permit requirements. Refer to the Pittsfield Township SWPPI for more details. Other entities may hold stormwater permits within the Washtenaw County portion of the Huron River Watershed, but they have not chosen to participate in this plan at this time.

II. EXISTING AND PROPOSED PUBLIC EDUCATION ACTIVITIES

To address each of the PEP requirements, the SAG will implement the following specific activities, which include a description, timeline, evaluation component, parties involved, and the required topic that the activity meets according to Watershed Permit Part I.A.4.b.2.a (page 11). Activities will be completed with the involvement of additional parties as noted in each activity description, or in cooperation with all watershed-based permit communities. Time lines for implementation of proposed activities extend from February 2010 (year 1) when implementation of the PEP begins to February 2015 (year 5) when the permit expires.

Activity #1: HRWC and/or Southeast Michigan Partners for Clean Water Informational Materials

Delivery Mechanism: Brochures, tip cards, posters, and other materials developed by HRWC or the regional

public outreach campaign, "Our water. Our future. Ours to Protect", will be utilized. The campaign materials will be distributed at municipal offices, events, and on web

sites or direct mailed.

Key Messages: These materials contain information that covers required Topics 1-8. The overall

campaign promotes key messages on proper use of fertilizer, car care, landscaping, storm drain awareness, household hazardous wastes, water conservation, pet care, and

riparian protection.

Target Audience: Residents, visitors, public employees, businesses, industries, construction contractors

and developers.

Time Line: Materials will be created and disseminated throughout the permit cycle regularly Evaluation: For HRWC produced materials: HRWC will track number produced and method of

distribution and conduct follow up surveys, focus groups and/or web hit tracking. For

other materials, number distributed by permittees.

Responsible Parties: SEMCOG has materials available free with membership or for purchase, HRWC

develops the materials under contract. SAG members will ensure distribution of

materials to appropriate target audiences.

Required Topics met: 1-8

Activity #2: Community Watershed Calendar

Delivery Mechanism: Coordinated by HRWC, the Washtenaw Phase I/II will participate in the bulk printing

and distribution of a Community Watershed Calendar to all single-family residential households. In year 2 of the permit the calendar will serve as a vehicle to promote public participation in a broad survey to determine overall PEP effectiveness (see page

13, Section IV. Evaluation of Effectiveness).

Key Messages: Calendar will 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 will include key messages associated with 1-8 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; and illegal dumping in storm drains.

Target Audience: Residents.

Time Line: The calendars were published for calendar year 2010 and will be produced and

distributed again in years 2 and 4 of the permit.

Evaluation: Number of households receiving calendar; targeted mail, phone call survey or focus

group seeking feedback regarding the calendar's specific use; and in year 2 of the permit cycle, results of broad survey of overall PEP effectiveness (see page 13,

Section IV. Evaluation of Effectiveness).

Responsible Parties: SAG members, HRWC.

Required topics met: 1-8

Activity #3: Information in Community Newsletters and on Websites

Delivery Mechanism: The SAG members will regularly publish articles in their own newsletters and/or post

to their own web sites. Newsletters and/or websites will also be used to show

calendars of events and resources for public education and involvement. Potential web

site links include SEMCOG's "Our Water. Our Future. Ours to Protect" and Washtenaw County's web site. Information will be included on watersheds,

stewardship activities and events, and individual actions the public can take to protect

water resources. Articles and information is available from sources such as Washtenaw County, SEMCOG and HRWC. HRWC will produce articles and information under contract quarterly for SAG members. Permittees can also obtain information for publication from Washtenaw County and SMECOG ongoing.

Key Messages: Articles and information will focus on issues represented by all 9 topics.

Target Audience: Residents, visitors, public employees, businesses, industries, construction contractors

and developers.

Time Line: Starting in the first year, newsletter articles and information on web sites will be

published throughout the permit cycle.

Evaluation: For HRWC produced information, frequency and number or articles, tracking of web

hits to HRWC supporting pages and/or phone calls and e-mails to HRWC for related information. Hits on HRWC websites related to release or promotion. For other materials used by permittees, frequency of use in permittees newsletters, number of

newsletters distributed, hits on websites.

Responsible Parties: the SAG members will publish newsletter articles and information in various

distribution outlets; Washtenaw County, SEMCOG and HRWC will provide articles

and information.

Required topics met: 1-9

Page 6 June 11, 2010 Activity #4: Local Newspaper and Web Advertisements

Delivery Mechanism: Coordinated by HRWC, the SAG members will pay for local print news media and

online advertising.

Key Messages: Watershed awareness and protection, connection of storm drains to natural water

bodies, hazardous waste disposal, illegal dumping, lawn care, and car washing. Advertisements will use materials developed by Southeast Michigan Partners for

Clean Streams and HRWC.

Target Audience: Residents, visitors, businesses, industries, government employees, and developers Start in Year 1 and ongoing throughout the permit cycle, generally advertising is

placed depending on season, messaging and budget.

Evaluation: Frequency and number of advertisements run; number of inquiry calls and web hits

received as a result of advertisements.

Responsible Parties: SAG members, HRWC to coordinate ad development, placement and timing.

Required topics met: 1-7

Activity #5: Promote Water Resource Protection Workshops

Delivery Mechanism: The SAG members will assist in promotion of educational workshops and programs

for target audiences that will be organized through agencies such as the Washtenaw County Water Resources Commissioner, County Road Commission, MSU Extension,

SEMCOG, and the Michigan Water & Environment Association.

Key Messages: Programs may include the following: Watershed Management Short Course,

Home*A*Syst/ Lawn*A*Syst consultations and Master Composter 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.

Time Line: Throughout the permit cycle as workshop dates are established.

Evaluation: Compilation of all promotional efforts; number of attendees from the communities of

the SAG. When possible participants will be surveyed by organizer immediately

following workshops.

Responsible Parties: SAG members will promote workshop events as developed by outside agencies.

Required topics met: 9 in particular, but also 1-8

Activity #6: Promote and Support Volunteer Stream Monitoring

Delivery Mechanism: Coordinated by HRWC, the SAG members will support and assist in promoting the

Huron River Watershed Council's Adopt-A-Stream Program. Promotional efforts will include availability of Adopt-A-Stream literature and posting of volunteer event opportunities at Township/City Halls and announcement of volunteer event opportunities on permittee web sites and/or newsletters. HRWC will provide

information ongoing to permittees on Adopt-A-Stream volunteer opportunities prior to

events.

Key Messages: Adopt volunteers assess habitat, water quality, and aquatic life in the Huron River and

its tributaries as part of an ongoing scientific study. The Program strives to educate watershed residents about their connection to the river and also the current conditions of the Huron River and its tributary streams. In addition, a central goal of the program is to inspire people to take actions that lead to better river protection at home and in

their communities.

Target Audience: Residents.

Time Line: Start promotions in first year; on-going throughout the permit cycle.

Page 7 June 11, 2010 Evaluation: Compilation of all promotional efforts; number of citizens participating in Adopt

events; resulting stewardship actions taken by participants. Survey participants on how

they heard about the events.

Responsible Parties: SAG members, HRWC. Requirements met: 1 in particular, but also 2-8

Activity #7: Catchbasin/Storm Drain Labeling (for communities with storm sewers)

Delivery Mechanism: (a) The Water Resources Commissioner's Office actively implements a catchbasin

marker program through the Community Partners for Clean Streams Program and the Homeowner's Handbook. Subdivision/condominium developments, businesses and institutional landowners must have final approval of the WRC as a Community

Partner for Clean Streams (where appropriate) to be eligible. The markers are installed

by Homeowner Associations/residents/businesses.

(b) As opportunities arise SAG members may also implement storm drain labeling with the use of school and community volunteers to assist in affixing labels to storm drains. Along streets where storm drains are affixed, communities will distribute flyers to residential units. Limited to locations with occupancy rates of over 80% (i.e. areas

not under recent construction).

The connection of storm drains to local waterways and the impacts of dumping Key Messages:

pollutants into these drains.

Residents, Visitors and Commercial Businesses Target Audience:

Time Line: Ongoing throughout permit cycle.

Evaluation: Number of drains labeled and flyers distributed, number of volunteers participating.

Washtenaw County Water Resources Commissioner, SAG members, school and Responsible Parties:

community volunteers, HRWC.

Required topics met: 1 and 2 in particular

Activity #8: Promote County-Wide Complaint Tracking and Response System

Delivery Mechanism: SAG members will work with Washtenaw County to publicize County-wide public

reporting and response system for illicit discharges or improper disposal of materials into local storm drain systems. Environmental Reporting Line is in place. Washtenaw County Environmental Health administers the Reporting Line. This program is logged and has an updated brochure ready for distribution. Promote use of Environmental

Reporting Line through partner newsletters, cable TV, web sites.

Public reporting of illicit discharges and/or improper disposal of materials into MS4s. Key Messages: Target Audience:

Residents, visitors, commercial and industrial businesses, local government officials

and employees.

Time Line: Ongoing promotional efforts.

Evaluation: Number of calls to Environmental Reporting Line; results of the tracking and response

Washtenaw County Health Department, Water Resources Commissioner, SAG Responsible Parties:

members.

Required topics met: 4

Activity #9: Promote Soil Testing

Delivery Mechanism: SAG members will work with MSU Extension and HRWC to encourage property

owners to have their soil tested in the spring to avoid unnecessary fertilizer applications. MSUE currently runs a soil testing program at approximately 10 participating retailers on Saturdays in April. Master gardeners are present to answer questions and provide guidance. Homeowners drop off samples for testing for a \$15 charge. Local newspaper advertisements, web announcements and a promotional flyer

encourage residents to have their soil tested.

Key Messages: Proper use and application of lawn fertilizers containing phosphorus.

Target Audience: Residents.

Time Line: Each spring throughout permit cycle.

Evaluation: Listing of point-of-sale locations where promoted; change in number of soil tests

performed.

Responsible Parties: SAG members, HRWC, MSU Extension.

Required topics met: 4ii

Activity #10: Riparian Land Management Brochures

Delivery Mechanism: Coordinated by HRWC, the SAG members will distribute a brochure promoting

riparian best management practices to riparian landowners via local realtors and nursery/garden retail businesses. Brochures will also be available at township offices and distributed by government officials and employees who work with riparian

landowners or direct mailed to landowners.

Key Messages: Brochures will emphasize BMPs such as landscaping with native plants, buffer zones,

and minimizing impervious surfaces to facilitate on-site water retention.

Target Audience: Riparian landowners, realtors, government officials and employees.

Time Line: Brochure available in year 3.

Evaluation: Number of brochures distributed, number of hits to supporting web page or phone

calls received by HRWC for additional information.

Responsible Parties: SAG members, HRWC.

Required topics met: 8

Activity #11: Stream and River Crossing Road Signs

Description: The Washtenaw County Road Commission will coordinate the design and placement

of stream and road crossing signs on primary roads in the county.

Target Audience: Visitors, residents.

Time Line: Begin within 2 years of COC issuance.

Evaluation: Number of signs.

Parties involved: WCRC and local community officials.

Requirements met: 1

Activity #12: Displays and Outreach at Local and Regional Fairs and Community Events

Delivery Mechanism: SAG members will promote and support stormwater education displays and outreach

at local fairs and community events such as Earth Day Festivals, Green Fairs, River Days and others. They will also help promote these events through their newsletters

and on websites.

Key Messages: Public awareness of watershed issues and improving personal actions affecting the

health of the watershed also including key messages associated with 1-8 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.

Time Line: Ongoing annually.

Evaluation: Number of materials distributed and contacts made, e-mail addresses collected for

HRWC or permittee newsletter distribution.

Parties involved: SAG members and HRWC.

Required topics met: 1-8

Page 9 June 11, 2010

Activity # 13: Community Partners for Clean Streams

Delivery Mechanism: Community Partners for Clean Streams is a voluntary, no cost to participants,

cooperative water quality protection program between the Washtenaw County Water Resources Commissioner's office and Washtenaw County businesses, institutions and multi-complex land owners. Partners assess how their daily site activities affect stormwater quality and commit to proactive ways to improve their activities by way of a Water Quality Action Plan. Partners are recognized for their stewardship in online and newspaper ads, at community events and through the Community Partners monthly online newsletter: "The eMonitor". SAG members will promote program in newsletters, make referrals to WCWRC regarding potential partners, and display

brochures, supplied by WCWRC, promoting program.

Key Messages: Commitment to protect water quality through on-site daily activities.

Target Audience: Washtenaw County businesses, institutions, multi-complex land owners.

Time Line: On-going.

Evaluation: Number of participants.

Parties Involved: WCWRC and SAG members.

Required topics met: 1-9

Activity #14: Pollution Prevention Inspections

Delivery Mechanism: The Pollution Prevention Program is responsible for inspecting facilities that store,

manufacture, or use hazardous, toxic, or polluting materials.

Key Messages: Inspectors ensure that facilities utilize and dispose of hazardous materials properly,

thereby preventing environmental contamination. This program operates in accordance

with the Washtenaw County Pollution Prevention Regulation.

Target Audience: Facilities that store, manufacture or use hazardous, toxic, or polluting materials.

Time-line: On-going.

Evaluation: Inspection reports and improvements made.

Parties involved: Washtenaw County Environmental Health and Water Resources Commissioner.

Required topics met: 9

Activity #15: Issues of the Environment Radio Show

Delivery Mechanism: Weekly radio shows; every Wednesday morning from 8:20-8:30am the Washtenaw

County Division of Public Works hosts a special guest speaker on the Issues of the

Environment Radio Show on WEMU (89.1 FM).

Key Messages: Varies by show topic, but generally addresses environmental stewardship and related

issues.

Target Audience: Washtenaw County residents and businesses.

Time Line: Ongoing weekly show, frequency of water quality related topics may be quarterly.

Evaluation: Number of water quality related program topics covered. Parties involved: Washtenaw County Environmental Health Division.

Required topics met: 1-9

Activity #16: Environmental Excellence Awards

Delivery Mechanism: The Environmental Excellence Awards Program recognizes businesses and non-profit

organizations in Washtenaw County that practice environmentally sound behavior in the areas of water quality protection, waste reduction and recycling, and pollution

prevention. This award is provided once year.

Key Messages: Water quality protection, waste reduction and recycling, and pollution prevention.

Target Audience: Businesses, institutions, multi-complex developments.

Page 10 June 11, 2010 Time Line: Annually.

Evaluation: Number of award recipients.

Parties involved: Washtenaw County Water Resources Commissioner, Environmental Health Division,

and Solid Waste Management.

Required topics met: 1-9

Activity #17: Fats, Oils, and Grease and Litter Reduction

Delivery Mechanism: Ninth Section of the Community Partners for Clean Streams Handbook and program

presentations. Coordinated with Washtenaw County Food Service Inspection Program.

Key Messages: Proper disposal of cooking fats, kitchen maintenance practices and recycling best

management practices.

Target Audience: Washtenaw County businesses.

Time Line: On-going.

Evaluation: Number of participants and number of actions corrected.

Parties involved: Washtenaw County Water Resources Commissioner, Environmental Health Division.

Required topics met: 9 N

Activity #18: River Safe Homes Program

Delivery Mechanism: Online and hard copy surveys determine how activities around the home protect water

quality. Improvement resources are included. Participants receive a RiverSafe Homes plaque for satisfactorily completing the survey and a quarterly "eReporter" online

newsletter.

Key Messages: Protecting water quality around the home is easy to do and produces significant

results.

Target Audience: Washtenaw County residents.

Evaluation: Number of participants.

Party Involved: Washtenaw County Water Resources Commissioner.

Required Topics met: 1-5, 7-8.

Activity #19: Other Public Education Activities Related Specifically to E. coli and phosphorus TMDLs

Delivery Mechanism: The SAG's TMDL plan and grant work plan indicate that the SAG will be developing

TMDL implementation activities ongoing. This PEP will also be revised and updated to include those specific activities. Currently the City of Ann Arbor, Charter Township of Pittsfield and Charter Township of Ypsilanti have enacted ordinances restricting the use of phosphorus lawn fertilizer. They each also have produced and distribute to retailers and service providers point of sale brochures about the ordinances targeting consumers ongoing. Additionally a general brochure encouraging consumers to use phosphorus free lawn fertilizer products has been produced by the City of Ann Arbor for distribution in Middle Huron areas without ordinances and is available from HRWC for permittee use. Key messages about pet waste are included in activities #1-

4 above but may also be developed as part of TMDL implementation.

Key Messages: Protect water quality by using phosphorus free lawn fertilizer and disposing of pet

waste properly.

Target Audience: Washtenaw County residents and consumers of lawn fertilizer products and services.

Evaluation: Reduction of E. coli and phosphorus.

Party Involved: SAG permittees. Required Topics met: 4(ii) and (iii). Activity #20: Residential Rain Garden Program

Delivery Mechanism: The Washtenaw County Water Resources Commissioner works with several families

each year to plan, design and install rain gardens on their properties as funding is available. The WCWRC's website provides extensive information to promote and

support "do-it-yourself" rain gardeners.

Key Messages: Protecting water quality and preventing stormwater runoff through the use of rain

gardens with native plants.

Target Audience: Washtenaw County residents.

Evaluation: Number of participants and number of rain gardens installed and maintained.

Party Involved: Washtenaw County Water Resources Commissioner

Required Topics met: 7

Activity #21: Washtenaw County Home Toxics Reduction Program

Delivery Mechanism: Provides the residents of Washtenaw County with a disposal option for flammable,

poisonous, toxic and corrosive materials by providing the Washtenaw County Home Toxics Collection Center in Scio Township, along with informational materials for the

public that promote the collection center and proper disposal of home toxics.

Key Messages: The program seeks to address the environmental (including water quality) and public

health effects resulting from improper handling and disposal of home toxics, 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.

Target Audience: Washtenaw County residents

Evaluation: Number of drop offs/quantity of disposal materials.

Party Involved: Washtenaw County Environmental Health Division and SAG members who promote

the Home Toxic Reduction Program

Required Topics met: 5

Activity #22: Proper Disposal of Prescription Drugs and Personal Care Products/Pharmacy Drug Take-Back

Program

Delivery mechanism: County website, brochure, video, outlining proper disposal of unused prescription

drugs and personal care products; network of local pharmacies (currently eight) participating in a drug-take-back program. County funded contractor to provide drug pick up from participating pharmacies, and proper disposal. Brochures are placed at

various local pharmacies, doctors' offices, government buildings. (web site :

http://www.ewashtenaw.org/government/departments/planning_environment/environ

mental_issues/medications_disposal/).

Key Messages: "Don't rush to flush," keep Rx Drugs and personal care products out of our water

systems, proper medication disposal.

Target Audience: Washtenaw County residents.

Evaluation: Quantity of pharmaceuticals brought into participating pharmacies.

Party Involved: Washtenaw County Environmental Health and WRC

Required Topics met: 1, 5

III. OTHER INVOLVED ORGANIZATIONS

In implementing this Public Education Plan, the SAG members will pursue cooperative partnerships plus information and resource sharing with several organizations, including:

Organization	Program	Contact if known
Washtenaw County Water Resources Commissioner	Partners for Clean Streams, Illicit Discharge & Dumping Response System, Educational Literature, River Safe Homes	Janis Bobrin
Washtenaw County Road Commission	Watershed Signs	Steve Puuri
Washtenaw County Health Department	Water Quality Monitoring Program	
Washtenaw County Planning and Environment	Household Hazardous Waste Collection Site, composting, waste disposal and recycling	
Huron River Watershed Council	Middle Huron Initiative, Adopt-A- Stream Program, Information and Education Campaign	Ric Lawson Pam Labadie
MSU Extension	Soil Testing, Watershed Management Short Course, Home*A*Syst Program, Lawn*A*Syst Program	
Southeast Michigan Council of Governments	Workshops, educational events, and public education materials	Amy Mangus
Michigan Department of Natural Resources and Environment	Water Resources Division, Surface Water Assessment Section	Bill Creal
Huron-Clinton Metropark Authority and	Environmental Education and Interpretive Programs	Dave Moilanen

IV. 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 through a carefully developed, coordinated survey conducted by the permitted entities.

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 sort-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 evaluations. Such measures are expected to include public comment and feedback, level of participation in programs and activities, and tools that measure behavior change, such as follow-up phone surveys on direct-mail literature, or redemption rates of bulk mailing and

soil testing coupons. When applicable, these measures will be coordinated with other communities and organizations.

The broad survey will be administered in year 2-3 of the permit cycle in conjunction with Activity #2, the watershed community calendar. The survey's target audience will be residents of the permitted entities and sample size will be based upon their combined household units, such that a large enough sample size will be obtained to generate statistically significant results between subpopulations and with previous surveys. The survey will measure public awareness of stormwater pollution and possible solutions, environmental attitudes, capacity, constraints, behaviors and, when appropriate, effectiveness of specific public education activities. The survey will primarily be conducted over the web with respondents recruited by mail and e-mail, through advertising, direct in-person contact and social media. Additional supplemental methods, such as direct mail and phone will be used to obtain a reasonable sample size or to fill in demographic gaps as needed. 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. Questions will be designed to reasonably compare with previous survey efforts.

V. PROGRESS REPORT

By the date indicated on the Certificate of Coverage, the SAG Members will submit to the MDNRE an Annual 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, and any proposed revisions or amendments. Reporting on PEP efforts will reflect data gathered on a calendar year basis.

Middle Huron Stormwater Advisory Group

								Timetab	le / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity #	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
	stewardship employees, industries, construction construction extractors and	Watershed		Brochures, tip cards, and other materials	distributed to homeowners throughout watershed	Same as key message		Use existing Southeast Michigan Partners for Clean Streams or WRC informational materials or tip card materials developed by HRWC or WRC in years 1, 3 and 5	produce, print and distribute in years 1, 3 and 5	HRWC to coordinate and produce under contract, communities to distribute	cost of staff hours, graphic design, photography, printing and mailing or delivery	number of materials distributed increase in hits to HRWC websites, post mailing survey and/or evaluative focus group, overall evaluative survey
			get 50% of people in	2. watershed community calendar	distributed to homeowners throughout watershed	Same as key	Measure of number of people recognizing the watershed they live in	develop information, photos, graphics for calendar in spring/summer years 2(2011) and 4 (2013)	produce, print and distribute calendar in years 2 (2011) and 4 (2013)	HRWC to coordinate production and printing under contract, communities to distribute	cost of staff hours, graphic design, photography, printing and mailing or delivery	number of calendars distributed, increase in hits to HRWC's website based on the information in the calendar, follow up survey, overall evaluative survey
watershed		the public will/can affect - Purpose for protecting the watershed - Ways that individuals can affect the watershed	an affect a watershed to understand what a watershed is viduals atershed	3. Seasonal articles in community newsletters and information and links on community websites		message	Measure of number of people that understand the definition of a watershed and how they can effect the watershed	develop and produce seasonal articles quarterly and/or as needed	distribute to communities for use in newsletters and post to websites on going	HRWC, WCWRC to develop materials for articles and websites, communities to distribute	cost of staff hours, printing and mailing	number of newsletters distributed, hits to community website where materials posted, overall evaluative survey
				4. advertisements in local newspaper and on local media websites	residents, owners and employees of local businesses and industries		Measure number of people implementing recommended steps to prevent pollution	HRWC to produce new or update existing ads as needed or use of existing SEMCOG ads	Advertising placed seasonally (depending on key message) throughout permit time frame	HRWC to coordinate production and placement of advertising	cost of staff hours, graphic design, and advertising rates	number and timing of ads places and hits to HRWC's website based on the information presented, overall evaluative survey
				6. Promote and support volunteer stream monitoring as a means to protect the watershed	residents	-	increase in number of volunteers participating in program	HRWC has existing monitoring program and materials	Communities to promote monitoring events/opportunities on-going	HRWC to run stream monitoring program and provide events and materials, communities to promote	materials development, printing, staff time to run monitoring program	number of volunteers participating in monitoring events on a repeat basis and their commitment to program

Middle Huron Stormwater Advisory Group

								Timetab	le / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity #	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
	residents,	- Definition of Watershed		7. Catch basin marker program through Community Partners for Clean Streams and Homeowners Handbook and as opportunities arise for individual SAG members to install labels with the help of school and community volunteers	Residents, visitors, commercial businesses	Connection of storm drains to local waterways and impacts of dumping	Number of catch basins and stormdrains labeled	WRC already has existing catch basin marker program, SAG members will develop as opportunity arises	WRC currently implements, SAG members will implement as able throughout permit cycle	WRC, individual SAG members	cost of staff hours to coordinate and materials	Number of residents, businesses that install marks/labels, number of volunteers participating, number of stormdrains labeled, number of flyers distributed
Personal watershed stewardship	visitors, businesses, public employees, industries, construction contractors and	- Education on the specific watershed(s) the public will/can affect - Purpose for protecting the watershed - Ways that individuals can affect the watershed	get 50% of people in a watershed to understand what a watershed is	11. Stream and river crossing road signs	Residents, visitors traveling by car or on foot	or creek or river specific information	Measure of number of people recognizing the watershed they live in or the water body near them	WCRC already has a program in place for sign production and placement	As appropriate locations are identified throughout the permit cycle	WCRC	cost of staff hours to coordinate, materials, installation	Number of signs installed and locations
	developers	through their activities		12. Displays and outreach at local community events and fairs staffed by SAG members and HRWC and community volunteers	Residents	Promote watershed awareness and simple steps at home for protecting	people recognizing watershed and taking	SAG members and HRWC to use existing materials produced by HRWC, SEMCOG, WRC	SAG members and HRWC identify and commit to opportunities to exhibit as they arise	SAG members and HRWC	cost of staff hours, materials	Number of events, number of materials distributed at events, number of community volunteers staffing at events, number of contacts made and/or email addresses collected
				15. Issues of Environment Radio Show	Washtenaw County residents and visitors	awareness and simple steps at	Measure of number of people recognizing watershed and taking steps to protect	Radio show is already an ongoing weekly program of Washtenaw County Environmental Health Division	Water quality issues are addressed at least quarterly	WCEHD	cost of staff hours, overhead and equipment	Number of water quality related program topics covered

Middle Huron Stormwater Advisory Group

								Timetab	le / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity#	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
1. Personal watershed stewardship	residents, visitors, businesses, public employees, industries, construction contractors and	- Definition of Watershed - Education on the specific watershed(s) the public will/can affect - Purpose for protecting the watershed - Ways that individuals can affect the watershed	get 50% of people in a watershed to understand what a watershed is	16. Environmental Excellence Awards Program which recognizes businesses and non-profits in Washtenaw County that practice environmentally sound behavior in areas of water quality protection among others	institutions, multi- complex	Water quality protection, waste reduction and recycling and pollution prevention	increase in number of applicants/participant s and award recipients	Existing program run by WRC	Continuing throughout permit cycle		starr costs and	Number of award recipients
	developers	through their activities		18. River Safe Homes Program - online and hard copy surveys of homeowners determining and informing of home activities that protect water quality	Washtenaw County residents	Protecting water quality around the home is easy to do and produces significant results	Increase in participants	Existing program run by WRC	Continuing throughout permit cycle	WRC, other SAG members to promote	staff and materials costs	Number or participants or residents who are deemed to have RiverSafe homes

Middle Huron Stormwater Advisory Group

								Timetab	le / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity#	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
2. Ultimate storm water discharge location and potential impacts	residents, schools, owners and employees of local businesses and industries, boy/girl scouts, volunteers groups	Storm drains discharge to water bodies. Storm water discharged from separate storm sewer systems does not receive treatment prior to discharge. Impacts of storm water pollutants in the watershed. Knowledge of separate storm water drainage system in a neighborhood and the water body to which the storm water is discharged	get 50% of the people in the watershed to understand where their storm water goes and what the impacts are	Activities 1, 2, 3, 4, 7, 12, 15 and 18 identified above								
		- Illicit Discharge - what it is and what to look for - Promotion of illicit		Activities 1, 2, 3, 12, 15 and 18 identified above								
3. Public reporting of illicit discharges	Residents, visitors to the area, public employees, businesses, industries, construction contractors and developers	discharge reporting system and how to report an illicit discharge - Water quality impacts associated with illicit discharges and improper waste disposal - Identification of failing on-site sewage disposal systems - physical symptoms to watch for - Consequences and penalties associated with illicit discharges and improper waste disposal	Eliminate all illicit discharges to storm drains and waterways	8. Promote County-wide complaint tracking and response system.	Residents, visitors, commercial and industrial businesses, local govt officials, and employees	Protect water quality by reporting illicit discharges and improper disposal of materials into catch basins, storm drains, etc.	Increase in reporting	Washtenaw County Environmental Health has and administers Environmental Reporting Line with brochure ready for distribution	Continuing throughout permit cycle	WCEHD to administer and promote complaint and tracking response system, SAG members to promote when possible	staff, equipment, materials	Number of phone calls to reporting line, reduction in incidents, results of tracking and response system

Middle Huron Stormwater Advisory Group

								Timetabl	e / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity #	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
		Car, pavement, and/or power washing (preferred cleaning	Increase in number of residents implementing tips to protect the watershed	Activities 1, 2, 3, 4, 8, 12, 15, 16, 18 identified above								
4. Personal actions that can impact the watershed	Residents, businesses, public employees, groups that do car wash fundraising	materials and practices – "phosphate free" is as important as "biodegradable"). Pesticide use, fertilizer use, and their disposal. Proper management of grass clippings, leaf litter, and animal wastes. Residential de- icer use . Native	Increase the number of residents participating in soil testing program to determine proper fertilization	9. Promote MSU Extension soil testing program offered at retailers on Saturdays in April	residents, homeowners	Get your soil tested to determine proper level of nutrients required, master gardeners on hand to provide info and answer questions	increase in number of soil samples submitted	Program developed by MSU Extension	Hold on Saturdays in April at group of participating Washtenaw County retailers	to promote	Cost to run ads, staff time for posting web information and newsletter articles	Number of test kits used, reduction in sales of phosphorus lawn fertilizers as voluntarily reported by local retailers or fertilizer manufacturer/distribu tors
		vegetation on residential properties as an alternative to turf grass. Effects of residential wastes on our water bodies.	Increase the amount of phos-free lawn fertilizer over product with phos sold in the watershed, and increase the number of pet owners who dispose of pet waste in the trash	19. The SAG's TMDL plan indicate that the SAG will develop TMDL specific implementation activities ongoing	consumers of lawn fertilizer products and pet owners	Choose phosphorus free lawn fertilizer, fertilize less, other safe practices. Pick up pet waste to improve water quality	Increase in number of retailers carrying more phos-free product than not	SAG members to develop TMDL implementation plan which includes public ed. Several SAG members have existing ordinances and ed plans in place on phos lawn fertilizer	Continuing throughout permit cycle	SAG members		Increase in phos free lawn fertilizer sales as voluntarily reported by local retailers or fertilizer manufacturer/distribu tors. Number of flyers distributed, ads run, etc. on pet waste, reduction of E. coli and phosphorus in water
		- Identification of household hazardous wastes and available alternatives - Disposal locations,	Increase the number	Activities 1, 2, 3, 4, 12, 15, 16, 18 identified above								

Middle Huron Stormwater Advisory Group

								Timetab	le / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity#	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
5. Waste management assistance	Residents, visitors to the area, public employees, businesses, industries, institutions, construction contractors and developers	requirements, and availability for household hazardous wastes & other chemicals. - Motor vehicle fluids - Travel trailer sanitary wastes - Recreational boating sanitary wastes (recommended for inclusion in PEP) - Yard wastes - Disposal of prescription drugs and personal care	or testacting dropping of household hazardous waste during household hazardous waste collection events by 25% and increase quantity of pharmaceuticals turned into pharmacies participating in drug take-back program	22. Proper disposal of prescription drugs and personal care products/pharm acy take back program	Residents of Washtenaw County who use and dispose of personal care products and prescription drugs	Don't flush drugs and personal care products. Take drugs to participating pharmacies for proper disposal.	Increase in quantity of parmaceuticals turned into pharmacies participating in take back program		Continuing throughout permit cycle	WCEHD and WRC, SAG members and HRWC to promote		Increase in drop offs of prescription drugs at participating pharmacies
		products		21. Washtenaw County Home Toxics Reduction Program	Home toxics collection center and informational/promotio nal materials	home toxics, inform of environmental and health effects from improper handling, storage and disposal and encourage proper techniques	Increase in use of household hazardous waste collection facilities	Program ongoing and administered by Washtenaw County Environmental Health Division	Continuing throughout permit cycle	WCEHD, SAG members and HRWC to promote	staff, facility, equipment, materials, disposal, etc.	Increase in use of home toxics collection center by residents, number of brochures distributed, ads run, etc.
6. Septic System Maintenance	Septic system owners, riparian land owners, septage haulers, realtors, home inspectors, new homeowners	- Proper Septic system care and maintenance - How to recognize system failure - Impact failing systems have on water quality - Where to go for assistance	Educate all septic system owners on proper care and maintenance and how to recognize failing systems	Activities 1, 2, 3, 4, 12, and 15 identified above								
		Using native plants, specifically for a vegetative riparian	Increase the use of native plants by residents in home gardens	Activities 1, 2, 3, 4, 12, 15, 16, and 18 identified above								
7. Benefits of native vegetation		- wildlife habitat	Realize an increase in the use of native plants and the installation of rain gardens by residents	20. Residential rain garden program run by Water Resources Commissioner that helps homeowners plan, design and install rain gardens	Homeowners in Washtenaw County	to protect the environment by	Number of homeowners participating in program	Program already up and running	Ongoing throughout permit cycle as funding available	WRC	Staff, materials, design professional	Number of rain gardens installed and number of applicants to program who install a rain garden independently

Middle Huron Stormwater Advisory Group

								Timetab	le / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity #	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
			Inform residential	Activities 3, 15, 16 and 18 as identified above								
8. Management of	Riparian land owners, developers, contractors, engineering firms, recreational	- Importance of riparian corridors - BMPs for riparian lands - Protection through use of conservation easements - Lawn maintenance for water quality	riparian landowners how to better manage the land to protect water quality	10. Distribute brochure to residents offering tips on best practices	riparian home owners, members of lake associations	Same as key message	Number of brochures distributed and measurement of hits to website disseminating information	Develop content or update existing direct mail brochure by Jan 2011	Provide to communities to distribute or direct mail spring 2011	HRWC to develop or obtain brochure and coordinate printing and mailing	cost of staff hours, printing and mailing	number of brochures distributed, hits to community and HRWC website where materials are posted
riparian lands	users, lawn care companies, landscapers, lake & stream associations, golf courses, sportsmen	 Landscaping for water quality Shoreline stabilization techniques 	Inform riparian Iandowners related businesses how to better manage the land to protect water quality	5. Promote presentations and workshops to targeted audiences	Lake and stream associations, lawn care companies, and landscapers	How to properly manage and dispose of grass, leaf and animal wastes, proper fertilizer use, use of buffers or native vegetation, etc.	Number of riparian land owners and related businesses who attend workshops	Develop presentation by March 2011	Deliver all presentations by Dec 2012	MSU Extension and/or HRWC and/or SEMCOG or other entities	cost of developing presentation, staff hours and printing of surveys forms	Number of workshop participants or post workshop evaluation survey of participants
				Activities 3, 5, 15, and 16 identified above								
9. Entity specific	operations	Chemicals (I.e. salt for deicing) need to be stored under cover and handled in a manner that reduces the exposure of the chemicals to storm	Reduce the amount of spillage during chemical handling	13. Community Partners for Clean Streams Program wherein partner businesses, institutions and multi-complex land owners assess daily site activities for improvement and implement a Water Quality Action Plan	businesses, institutions and multi- complex land owners	Commitment to protect water quality in onsite daily activities	Increase in number of participants in program	Program currently administered by WRC	Ongoing throughout permit cycle	WRC		Number of participants

Middle Huron Stormwater Advisory Group

								Timetab	le / Timeline			
Public Education Topics	Target Audience(s)	Key Message	Standard of Effectiveness (recommended)	Delivery Mechanism/Act ivity#	Mechanism Specific Audience (recommended)	Mechanism Specific Message(s) (recommended)	Milestone(s) (recommended)	Development	Implementation	Responsible Party	Cost (recommended)	Evaluation
pollutants	industrial operations and institutions	water runoff. • Grease, food wastes and litter form food preparation establishments(restaurants, school cafeterias.		14. Pollution prevention inspections program	hazardous, toxic or	Inspectors ensure proper use and disposal of hazardous materials	Increase in improvements made as a result of inspection	Program currently administered by WRC and WCEHD	Ongoing throughout permit cycle		staff and materials costs	Number of inspections and improvements made as a result
		etc)	Proper disposal of cooking fats, kitchen maintenance practices and recycling best management practices	17. Fats, Oils, Grease and Litter Reduction is specifically addressed by the Community Partners for Clean Streams program in conjunction with the Washtenaw County Food Service Inspection Program	Washtenaw county businesses and entities engaged in food service	practices and	Number of actions needed correction decreases	Program currently administered by WRC and WCEHD	Ongoing throughout permit cycle		staff and materials	Number of inspections and improvements made as a result