

PUBLIC EDUCATION PLAN

FOR

HARTLAND TOWNSHIP



PREPARED IN COMPLIANCE WITH
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

PHASE II STORM WATER REGULATIONS

GENERAL STORM WATER PERMIT
MIG619000

and

CERTIFICATE OF COVERAGE MIG610197

October 27, 2004

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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, commercial and industrial businesses, developers, visitors, and officials and employees of Hartland Township 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 fewer than 100,000 that have MS4s in “urbanized areas” as defined by the U.S. Bureau of the Census.

MDEQ Storm Water Discharge Permits

In Michigan the Michigan Department of Environmental Quality (MDEQ) is administering the federal Phase II permitting process. MDEQ has prepared two types of EPA-approved permits. A “jurisdictional permit” is closely structured to follow the EPA’s minimum measures for complying with Phase II regulations.

The second permit (permit no. MIG619000) has watershed-based requirements that are unique to Michigan and has been “strongly endorsed” by the EPA. These watershed-based permit requirements address the storm water pollution control issues covered in the EPA’s minimum measures, while maximizing flexibility and cost sharing opportunities. Hartland Township has applied for and obtained a Certificate of Coverage MIG610197 under the MDEQ’s watershed-based permit and will be working with other communities in the South Branch Shiawassee River Subwatershed to complete the permit requirements. The watershed-based permit requires Hartland Township to develop five different components:

1. *Public Education Plan (PEP)* to promote, publicize, and facilitate watershed education to encourage the public to reduce the discharge of pollutants in storm water;

2. *Illicit Discharge Elimination Program (IDEP)* to find, eliminate, and prohibit illicit discharges to Hartland Township's storm water drainage system;
3. *Watershed Management Plan (WMP)* to identify and address water quality and quantity issues within the South Branch Shiawassee Watershed. This WMP will be developed in cooperation with other communities and stakeholders within the Watershed;
4. *Public Participation Plan (PPP)* to solicit input and encourage participation from all watershed stakeholders in developing the Watershed Management Plan;
5. *Storm Water Pollution Prevention Initiative (SWPPI)* to detail the actions that Hartland Township will take to meet the goals of the WMP and to reduce discharge of pollutants to the maximum extent practicable.

Required PEP Categories

The primary goal of this PEP is to address all public education requirements of the MDEQ's watershed-based General Storm Water Discharge Permit. The six required PEP categories are:

1. **Personal Watershed Stewardship:** Education of the public about their responsibility and stewardship in their watershed.
2. **Ultimate Storm Water Discharge Locations and Potential Impacts:** Education of the public on the location of residential separate storm water collection system catch basins, the waters of the state where the system discharges; and potential impacts from pollutants from the separate storm water drainage system.
3. **Public Reporting of Illicit Discharges:** Encouragement of public reporting of the presence of illicit discharges or improper disposal of materials into the applicant's separate storm water drainage system.
4. **Personal Actions that can Impact the Watershed:** Education of the public on the need to minimize the amount of residential, or non-commercial, wastes washed into nearby catch basins (this should include the preferred cleaning materials and procedures for car, pavement, or power washing; the acceptable application and disposal of pesticides and fertilizers; and the effects caused by grass clippings, leaf litter, and animal wastes that get flushed into the waterway).
5. **Waste Disposal:** Education of the public on 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. **Riparian Land Management:** Education of the public concerning management of riparian lands to protect water quality.

Relation to Watershed Management Planning

In addition to meeting the six PEP categories listed above, the PEP will also be used as a tool to increase awareness, understanding, and support for the South Branch Shiawassee WMP and its recommendations. MDEQ has set a completion deadline of November 2005 for the South Branch Shiawassee Watershed Management Plan. This Plan will include an information and education (I&E) plan to increase public knowledge of the WMP and its recommendations by identifying and outlining target audiences and

outreach messages and methods. PEP activities will be updated and amended as necessary to compliment the objectives of the South Branch Shiawassee Watershed Management Plan.

Community Profile

The Township covers approximately 36 square miles in eastern Livingston County. Originally established as an agricultural center, the Township was incorporated in 1836. Exhibit A is an aerial photograph of the Township with the jurisdictional limits shown in red.

The center of its business district is at M-59 and US-23. The Township has a total population of 10,940 as determined in the 2000 census. 12.42 square miles of the Township falls within the “urbanized area” and the storm water regulations apply to all the public separate storm sewer systems within the Township limits.

Some major employers in the Township are the Hartland Consolidated School District, Hartland Township Offices, LDM Technologies, Spiral Industries, Dynamic Technologies and the Shops at Waldenwoods.

Rolly Olney II has been appointed as Storm Water Program Manager by the Township and is responsible for implementation of the plan and compliance with the General Permit and COC. He can be contacted at (810) 632-7498 or by e-mail at Rolney@hartlandtwp.com.

EXISTING AND PROPOSED PUBLIC EDUCATION ACTIVITIES

This section details the existing educational activities in place within Hartland Township, as well as proposed educational activities designed to encourage the public to reduce the discharge of pollutants into storm water. These activities are organized according to the required six PEP categories.

Proposed activities are or will be completed with the involvement of additional parties as noted in each BMP activity description, or in cooperation with other Phase II communities. Time lines for implementation of proposed activities extend from February 2005 (year 1) when implementation of the PEP begins to November 2008 (year 4) when the permit expires.

1) EDUCATE THE PUBLIC ABOUT THEIR RESPONSIBILITY AND STEWARDSHIP IN THEIR WATERSHED

Overall Target audiences: residents, visitors, public employees, businesses, industries, construction contractors, and developers.

Key Messages:

- Definition of a watershed
- What watershed do you live in/affect
- Reasons for protecting the watershed
- How individuals affect their watershed and what they can do to protect water resources

Existing Activities

BMP #1.5: Web Site Information

Public informational meeting notices

BMP #1.6: Cable Access/Community Billboard

Notices of Public informational meeting

Proposed Activities

BMP #1.1: Southeast Michigan Partners for Clean Water Informational Materials

Description: Brochures, tip cards, posters, and other materials developed by the regional public outreach campaign, “Our water. Our future. Ours to Protect”, will be utilized. These materials contain information that covers all the key messages. The overall campaign promotes the Seven Simple Steps to Clean Water. Topics include: fertilizer, car care, landscaping, storm drain awareness, household hazardous wastes, water conservation, pet care, riparian protection. They have also developed a kid’s activity sheet. The campaign materials will be distributed at municipal offices, events, and on web sites. Hartland Township will also participate in bulk mailings of one of these materials to all single-family residential households.

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

Time Line: Materials will be created and disseminated throughout the permit cycle. Bulk mailings will occur in years 1 and 3 (years when calendar isn’t mailed).

Evaluation: Number of materials distributed. Coupons included with bulk mailings may be redeemed at local retailer (e.g. connect this to soil testing partners, offering 10% off purchases in their store if they bring in a soil sample); tracking increases at home toxics facility event(s) that correlate with the bulk mailing materials, and if possible, surveying participants to find out how they learned of the facility/event.

Responsible Parties: SEMCOG will develop materials; Hartland Township will ensure distribution of materials to appropriate target audiences; HRWC will coordinate printing and delivery of bulk mailing materials to participating communities.

BMP #1.2: Community Watershed Calendar

Description: Coordinated by HRWC, Hartland Township will participate in the bulk printing and distribution of a Community Watershed Calendar to all single-family residential households. 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 each of the six PEP categories, 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: Mailing will occur in year 2 of the permit cycle

Evaluation: Number of households receiving calendar; survey at end of calendar that can be mailed back to HRWC offering comments regarding use

Responsible Parties: HRWC will develop, print, and deliver calendars to communities. Hartland Township will ensure distribution/mailing of calendars.

BMP #1.3: Southeast Michigan Partners for Clean Water Mass Media Efforts

Description: A component of the “Our water. Our future. Ours to protect.” Campaign is working with the media (radio and television) to promote actions the public can take to protect water resources. The focus of the campaign is on the Seven Simple Steps to Clean Water. Hartland Township may augment this program by working directly with the local media.

Target Audience: Residents, visitors
Time Line: Spring and fall throughout the permit cycle
Evaluation: Number of media promotion events
Responsible Parties: SEMCOG will implement the regional public outreach campaign, which includes a mass media component

BMP #1.4: Information in Hartland Township newsletter

Description: Hartland Township will regularly publish articles in Township’s newsletter that will focus on issues represented by all six PEP elements. Newsletter will also be used to show calendar of events and resources for public education and involvement. Articles will be provided by sources such as Livingston County, SEMCOG and HRWC.
Target Audience: Residents, visitors, public employees, businesses, industries, construction contractors and developers
Time Line: Starting in the 1st year, newsletter articles will be published (*quarterly, etc...*) throughout the permit cycle
Evaluation: Frequency of articles in newsletters and number of newsletter distributed
Responsible Parties: Hartland Township will provide newsletter articles in various distribution outlets; SEMCOG and HRWC will provide articles

BMP #1.5: Web Site Information

Description: Hartland Township will add information to it’s web site and/or link to other web site(s) with educational information addressing key messages for all PEP elements. Potential web site links include SEMCOG’s “Our Water. Our Future. Ours to Protect” web site and Livingston 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.
Target Audience: Residents, visitors, public employees, businesses, industries, construction contractors and developers
Time Line: Web site links and information will begin in 1st year and continue throughout the permit cycle
Evaluation: Number of web site hits to local community page
Responsible Parties: Hartland Township will provide content and/or links to other web sites. The Livingston County Drain Commissioner will improve its existing stormwater education web information.

BMP #1.6: Cable Access/Community Billboard

Description: Cable access broadcasting will address all key messages using existing videos, PSAs, and text materials provided by SEMCOG, HRWC, and other resources such as the Center for Environmental Study’s “Stormwater Savvy Campaign Tool Kit.”
Target Audience: Residents, visitors, public employees, businesses, industries, construction contractors and developers
Time Line: Airing of these materials will begin in the 1st year and continue throughout the permit cycle
Evaluation: Number of times information is aired
Responsible Parties: Hartland Township will ensure broadcasting of materials

BMP #1.7: Newspaper advertisements

Description: Coordinated by HRWC, Hartland Township will pay for local newspaper advertising on topics covering key messages in PEP elements 1-5 such as 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
Time Line: Start in Year 1 and ongoing throughout the permit cycle
Evaluation: Frequency and number of advertisements run; number of inquiry calls received as a result of advertisements
Responsible Parties: Hartland Township, HRWC

BMP #1.8: Water Quality Displays

Description: Hartland Township will use exhibits created by the Livingston County Drain Commissioner and/or SEMCOG for display at public events. These exhibits will promote watershed awareness through a map showing the Huron Chain of Lakes and/or S. Branch Shiawassee River subwatersheds, showing how storm drains connect to our river and streams, and provide tips on what individuals can do to protect their water resources. Displays will also offer literature pertaining to each of the six PEP elements and promote web sites (see BMP #1.5).

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

Time Line: Airing of these materials will begin in the 1st year and continue throughout the permit cycle. Displays will be set up at various times throughout the permit cycle.

Evaluation: Number of people visiting the display. Number of events.

Responsible Parties: Hartland Township will ensure that displays are used at relevant local events throughout the permit cycle. Displays provided by SEMCOG, Livingston County Drain Commissioner.

BMP #1.9: Promotion of Water Resource Protection Workshops

Description: Hartland Township will assist in promotion of educational workshops and programs for target audiences that will be organized through agencies such as the County Drain Commissioner, County Road Commission, MSU Extension, SEMCOG, and the Michigan Water & Environment Association. Programs may include the following: 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 Hartland Township; When possible surveying of participants immediately following workshops.

Responsible Parties: Hartland Township will promote workshop events as developed by outside agencies.

BMP #1.10: Promotion and Support of Volunteer Stream Monitoring

Description: Coordinated by HRWC, Hartland Township 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 Hall and announcement of volunteer event opportunities on Township's web site and/or newsletter. 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
Evaluation: Compilation of all promotional efforts; number of citizens participating in Adopt events; when possible resulting stewardship actions taken by participants
Responsible Parties: Hartland Township, HRWC

BMP #1.11: Signs noting watershed boundaries and/or tributaries

Description: Hartland Township will work with the Livingston County Road Commission to purchase and install signs that identify watershed boundaries and rivers/tributaries at major roadway/river crossing sites.
Target Audience: Visitors, Residents
Time Line: Install signs in 3rd year
Evaluation: Number of signs posted
Responsible Parties: Hartland Township, LCRC, LCDC

BMP #1.12: Watershed Management Short Course

Description: Hartland Township will assist in development, financial support, and/or promotion of a “Watershed Management Short Course” using resources and guidance provided by MSU Extension. The goal of the course will be to positively influence behaviors and equip citizens and local government officials with a range of knowledge, skills and resources to address non-point source pollution and local land use and water quality issues. A series of programs will provide lessons in basic watershed sciences, as well as specific topics pertaining to important local watershed issues.
Target Audience: Residents, commercial and industrial businesses, developers, and officials and employees
Time Line: Plan and conduct class in year 1
Evaluation: Number of participants; compiled results of survey presented at end of the course; tracking of class participants' involvement in implementing watershed management initiatives.
Responsible Parties: Hartland Township, MSU Extension, LCDC

2) PUBLIC EDUCATION ON THE LOCATION OF RESIDENTIAL SEPARATE STORM WATER COLLECTION SYSTEM CATCH BASINS, THE WATERS OF THE STATE WHERE THE SYSTEM DISCHARGES; AND POTENTIAL IMPACTS FROM POLLUTANTS FROM THE SEPARATE STORM WATER DRAINAGE SYSTEM.

Overall Target Audiences: residents

Key Messages:

- Connection of storm drainage systems to natural water bodies

- Storm water from storm sewer systems does not receive treatment prior to discharge; only storm water should enter the storm drainage system
- Impacts of storm water pollutants on water quality
- How to keep common pollutants out of the storm drainage system

Existing Activities

BMP #1.5: Web Site Information
Public informational meeting notices

BMP #1.6: Cable Access/Community Billboard
Notices of public informational meeting

Proposed Activities

BMP #2.1: Storm drain labeling and door hangers

Description: Hartland Township will use community volunteers to assist the LCDC and LCRC in affixing labels to storm drains with the message of “Dump no waste – drains to river.” Along streets where storm drains are affixed, distribute flyers to each residential unit explaining the connection of storm drains to local waterways and the impacts of dumping pollutants into these drains. Limited to locations with occupancy rates of over 80% (i.e. areas not under recent construction).

Target Audience: Residents, Visitors and commercial businesses

Time Line: Start in Year 1; ongoing

Evaluation: Number of volunteer hours; number of drains labeled and flyers distributed

Responsible Parties: Hartland Township, LCRC, LCDC, community volunteers, HRWC

BMP #1.1: Southeast Michigan Partners for Clean Water Informational Materials

BMP #1.2: Community Watershed Calendar

BMP #1.3: Southeast Michigan Partners for Clean Water Mass Media Efforts

BMP #1.4: Information in Hartland Township’s newsletter

BMP #1.5: Web Site Information

BMP #1.6: Cable Access/Community Billboard

BMP #1.7: Newspaper advertisements

BMP #1.8: Water Quality Displays

3) ENCOURAGEMENT OF PUBLIC REPORTING OF THE PRESENCE OF ILLICIT DISCHARGES OR IMPROPER DISPOSAL OF MATERIALS INTO THE APPLICANT’S SEPARATE STORM WATER DRAINAGE SYSTEM.

Target Audiences: residents, visitors, public employees, businesses, industries, construction contractors, and developers

Key Messages:

- What is an illicit discharge?
- How to report and illicit discharge
- Impacts of illicit discharges and improper waste disposal on water quality
- How to identify failing on-site septic systems
- Penalties and consequences associated with illicit discharges and improper waste disposal

Existing Activities

BMP #1.5: Web Site Information

Public Informational meeting notices

BMP #1.6: Cable Access/Community Billboard

Notices of Public informational meeting

Proposed Activities

BMP #3.1: Implement and promote a county-wide complaint tracking and response system

Description: Hartland Township will work with Livingston County to develop an improved program for countywide public reporting and response system for illicit discharges or improper disposal of materials into local storm drain systems. Assist Livingston County in identifying problem dumping areas and installing “no dumping” signs near these areas and public access sites to lakes. Signs will contain information on potential impacts from illicit discharges and instructions for using a “hotline” for reporting illegal discharge/dumping activities. Promote use of “hotline” through Hartland Township’s newsletter, cable TV, web site

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

Time Line: Complete in year 2; on-going promotional efforts

Evaluation: Number of hotline calls; reduction in illicit discharges and improper waste disposal incidents; results of the tracking and response system

Responsible Parties: Livingston County Health Department, Drain Commissioner, Hartland Township

BMP #1.1: Southeast Michigan Partners for Clean Water Informational Materials

BMP #1.2: Community Watershed Calendar

BMP #1.3: Southeast Michigan Partners for Clean Water Mass Media Efforts

BMP #1.4: Information in Hartland Township’s newsletter

BMP #1.5: Web Site Information

BMP #1.6: Cable Access/Community Billboard

BMP #1.7: Newspaper advertisements

BMP #1.8: Water Quality Displays

BMP #1.9: Promotion of Water Resource Protection Workshops

BMP #1.12: Watershed Management Short Course

4) PUBLIC EDUCATION ON THE NEED TO MINIMIZE THE AMOUNT OF RESIDENTIAL, OR NON-COMMERCIAL, WASTES WASHED INTO NEARBY CATCH BASINS (INCLUDING PREFERRED CLEANING MATERIALS AND PROCEDURES FOR CAR, PAVEMENT, OR POWER WASHING; THE ACCEPTABLE APPLICATION AND DISPOSAL OF PESTICIDES AND FERTILIZERS; AND THE EFFECTS CAUSED BY GRASS CLIPPINGS, LEAF LITTER, AND ANIMAL WASTES THAT GET FLUSHED INTO THE WATERWAY).

Target Audiences: residents, public employees, businesses,

Key Messages:

- Environmental impacts and BMPs associated with:
 - Car, pavement, and/or power washing (preferred cleaning materials and practices – “phosphate free” is as important as “biodegradable”)
 - Pesticide and fertilizer use and disposal
 - Proper management of grass clippings, leaf litter, and animal wastes
 - Residential de-icer use
 - Native vegetation on residential properties as an alternative to turf grass
- Effects of residential wastes on our water bodies

Existing Activities

BMP #1.5: Web Site Information

Public Informational meeting notices

BMP #1.6: Cable Access/Community Billboard

Notices of Public informational meeting

Proposed Activities

BMP #4.1: Promote soil testing

Description: Hartland Township will work with MSU Extension and HRWC to encourage property owners to have their soil tested to avoid unnecessary fertilizer applications. Promotional flyers on how and why to have your soil tested will be made available to the public at fertilizer point-of-sale retail operations. Local newspaper advertisements will also encourage residents to have their soil tested. If possible, Hartland Township will coordinate with participating retailers to accept a coupon (e.g. 10% off store wide, up to \$50 purchase) provided in the direct mailing. Coupon will be subject to soil test participation (e.g. “bring in this coupon and your soil test, and receive...”)

Target Audience: residents

Time Line: Start in 1st year; repeat each spring throughout permit cycle

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

Responsible Parties: Hartland Township, HRWC, MSU Extension

BMP #1.1: Southeast Michigan Partners for Clean Water Informational Materials

BMP #1.2: Community Watershed Calendar

BMP #1.3: Southeast Michigan Partners for Clean Water Mass Media Efforts

BMP #1.4: Information in Hartland Township's newsletter

BMP #1.5: Web Site Information

BMP #1.6: Cable Access/Community Billboard

BMP #1.7: Newspaper advertisements

BMP #1.8: Water Quality Displays

BMP #1.9: Promotion of Water Resource Protection Workshops

BMP #1.12: Watershed Management Short Course

BMP #2.1 Storm Drain Labeling and Door Hangers

5) PUBLIC EDUCATION ON 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.

Target Audiences: residents, visitors, public employees, businesses, industries, institutions, construction contractors and developers

Key Messages:

- Identification of household hazardous wastes and available alternatives
- Disposal locations, requirements, and availability for:
 - Household hazardous wastes & other chemicals
 - Motor vehicle fluids
 - Travel trailer sanitary wastes
 - Recreational boating sanitary wastes
 - Yard wastes

Existing Activities

BMP #1.5: Web Site Information

Public Informational meeting notices, Watershed information and copy of COC & Permit

BMP #1.6: Cable Access/Community Billboard

Notices of Public informational meeting

Currently, the LCDC Solid Waste Program has a wide variety of informational materials and services they provide on this topic:

- Gives detailed information located within their website on how to properly dispose of oil-based and latex paints, as well as "how to" tips on oil recycling.
- Sponsor the Mercury Thermometer Exchange, a program intended to educate residents on the dangers of mercury versus digital thermometers, in an attempt to reduce the amount of mercury being discarded with residential trash.

- Several communities within Livingston County publish a quarterly/annual newsletter, which often supplies topics like disposal of effluent from regenerating softeners, household wastewater treatment and environmental-friendly lawn care practices to name a few.
- HHW drop-off dates offered to County residents throughout the months of April – August. A link to this information is available on the LCDC website.
- Publication of “Waste Reduction Guide” to help residents and local businesses dispose of a variety of items, ranging from batteries to printer cartridges to tires. This guide is a very useful tool in reducing overall waste to nearby landfills.
- A number of classroom presentations are made, informing students on illegal dumping and groundwater/surface water contamination.
- The LCDC helped in providing a video to Hamburg Township that includes information on what to take to waste collection points.
- Cable Television Channel 18 offers advertisements on community collection days.

Proposed Activities

BMP #1.1: Southeast Michigan Partners for Clean Water Informational Materials

BMP #1.2: Community Watershed Calendar

BMP #1.3: Southeast Michigan Partners for Clean Water Mass Media Efforts

BMP #1.4: Information in Hartland Township’s newsletter

BMP #1.5: Web Site Information

BMP #1.6: Cable Access/Community Billboard

BMP #1.7: Newspaper Advertisements

BMP #1.8: Water Quality Displays

BMP #1.9: Promotion of Water Resource Protection Workshops

6) PUBLIC EDUCATION CONCERNING MANAGEMENT OF RIPARIAN LANDS TO PROTECT WATER QUALITY.

Target Audiences: riparian land owners, realtors, developers, engineering firms, recreational users, lawn care companies, and landscapers

Key Messages:

- Importance of riparian corridors
- BMPs for riparian lands
 - Protection through use of conservation easements
 - Lawn maintenance for water quality (including no-mow and no-chemical application zones)
 - Landscaping for water quality
 - Shoreline stabilization techniques
 - Proper septic system maintenance
 - Proper management of grass clippings, leaf litter, animal waste, and other wastes

Existing Activities

BMP #1.5: Web Site Information

Public Informational meeting notices

BMP #1.6: Cable Access/Community Billboard

Notices of Public informational meeting

Proposed Activities

BMP #6.1: Riparian Land Management brochures

Description: Coordinated by HRWC, Hartland Township 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. 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 3rd year

Evaluation: Number of brochures distributed

Responsible Parties: Hartland Township, HRWC

BMP #1.1: Southeast Michigan Partners for Clean Water Informational Materials

BMP #1.2: Community Watershed Calendar

BMP #1.3: Southeast Michigan Partners for Clean Water Mass Media Efforts

BMP #1.4: Information in Hartland Township's newsletter

BMP #1.5: Web Site Information

BMP #1.6: Cable Access/Community Billboard

BMP #1.7: Water Quality Displays

BMP #1.8: Promotion of Water Resource Protection Workshops

BMP #1.12: Watershed Management Short Course

BMP #4.1: Promote soil testing

III. OTHER INVOLVED ORGANIZATIONS

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

Organization	Program	Contact
Livingston County Drain Commissioner	"Adopt Your Watershed" Program, Workshops, Illicit Discharge & Dumping Response System, Educational Literature	Brian Jonckheere
Livingston County Road Commission	Watershed signs	Steve Wasyk
Livingston County Health Department	Waste Water Management Program, Water Quality Monitoring Program	Ted Westmeier
Livingston Solid Waste Management	Household Hazardous Waste Collection Site, composting, waste disposal and recycling	Brian Jonckheere
Huron River Watershed Council	Upper Huron Initiative, Information and Education Campaign	Chris Riggs Jennifer Wolf
MSU Extension – Livingston County	Watershed Management Short Course, Home*A*Syst Program, Lawn*A*Syst Program	Mike Gaden
Southeast Michigan Council of Governments	Ours to Protect campaign materials, Headwaters Video, display	Amy Mangus
Friends of the Shiawassee River	Water Quality Monitoring, Advice and Service Planning and Education	Tom Cook
Michigan Department of Environmental Quality	Nonpoint Source Monitoring and Aquatic Nuisance Control	Richard Powers
Huron-Clinton Metropark Authority and Michigan State Parks	Environmental Education and Interpretive Programs	Dave Moinanen
Michigan Water Environment Association	Water Source Book	Curt Christeson

IV. EVALUATION AND PROGRESS REPORT

By the date indicated on the Certificate of Coverage, Hartland Township will submit to the MDEQ 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, summary of the evaluation of its effectiveness, and any proposed revisions or amendments.

Hartland Township will evaluate its Public Education Plan in terms of its effectiveness in achieving the objectives set forth in its permit. Evaluation of BMP 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) have been incorporated into BMP evaluations. Such measures are expected to include public comment and feedback, level of participation in programs and activities, and tools to measure behavior change, such as the mail-in survey from the Community Calendar, follow-up phone survey on direct-mail literature, and redemption rates of bulk mailing and soil testing coupons. When applicable, these measures will be coordinated with other communities and organizations involved in the watershed planning process for the Huron Chain of Lakes and South Branch Shiawassee Subwatershed.

In addition to evaluating individual activities, Hartland Township's overall public outreach program will be evaluated. The Southeast Michigan Partners for Clean Water performed a regional water resource survey of the residents of Southeast Michigan. Additionally, the Livingston County Drain Commission paid to have this survey statistically significant for the Huron Chain of Lakes and S. Branch Shiawassee subwatershed. This survey information will provide a baseline to gauge the overall effectiveness of our community's program as we move forward. We will be able to judge the effectiveness of our programs through follow up activities that include surveys, web site and phone tracking, along with one-on-one discussions with our various target audiences.

V. SUMMARY OF PEP TASKS

BMP ACTIVITY	REQUIREMENTS FULFILLED	TIMELINE (Year 1 in 2005 to Year 4 in 2008)	OTHER RESPONSIBLE PARTIES	EVALUATION
#1.1 Partners for Clean Water information materials	1, 2, 3, 4, 5, 6	Begin in year 1; ongoing (bulk mailings in years 1 and 3)	SEMCOG, HRWC	Quantity of materials distributed, coupon redemptions, increases at home toxics facility and survey of participants
#1.2 Community Watershed Calendar	1, 2, 3, 4, 5, 6	Mail calendars in year 2 and 4	HRWC	Mail-in survey included with calendar
#1.3 Partners for Clean Waters mass media efforts	1, 2, 3, 4, 5, 6	Begin in year 1; ongoing (Distribute 2 tip cards annually)	SEMCOG	Number of media promotion events
#1.4 Information in newsletter	1, 2, 3, 4, 5, 6	Begin in year 1; ongoing	SEMCOG, HRWC	Frequency of articles published and number of newsletters distributed
#1.5 Web site information	1, 2, 3, 4, 5, 6	Begin in year 1; ongoing	Livingston County Drain Commission	Number of hits to (community name)'s web page
#1.6 Cable Access/Community Billboard	1, 2, 3, 4, 5, 6	Begin in year 1; ongoing		Number of times information is aired
#1.7 Newspaper Advertisements	1, 2, 3, 4, 5	Begin in year 1; ongoing	HRWC	Frequency and number of ads run; number of inquiry calls received as a result of ads
#1.8 Water Quality Displays	1, 2, 3, 4, 5, 6	Begin in year 1; ongoing	Livingston County Drain Commissioner; SEMCOG	Number of events/days when display is used/ number of people visiting displays
#1.9: Promotion of Water Resource Protection Workshops	1, 3, 4, 5, 6	Begin in year 1 and ongoing as workshop dates are established		Compilation of promotional efforts; number of attendees from (<i>community</i>); survey of participants after workshops
#1.10 Volunteer Monitoring Program	1, 2, 3, 4, 5, 6	Begin in year 1; ongoing	HRWC	Number of volunteers; resulting stewardship actions taken by participants
#1.11 Signs noting watershed boundaries and/or river/stream crossings	1	Install signs in year 3	Livingston County Road Commission	Number of signs posted
#1.12 Watershed Management Short Course	1, 2, 4, 6	Begin in year 1	MSU Extension ,Livingston County Drain Commissioner	Number of participants; results of class survey; tracking of class participants' involvement in implementing watershed management initiatives
#2.1 Storm drain labeling and door hangers (where applicable)	2, 4	Ongoing as development expands	HRWC, LCDC, LCRC	Number of volunteer hours; number of storm drains labeled and number of flyers distributed
#3.1 Illicit discharge complaint tracking and response system	3	Complete in year 2; on-going promotion	Livingston County Drain Commissioner, Health Department	results of tracking and response system (number of reported incidents), reduction in dumping; number of signs posted
#4.1 Promote soil testing	4, 6	Begin in year 1; ongoing (repeat each spring)	HRWC, MSU Extension	Coupon redemption rates; compilation of point-of-sale locations where promoted; change in number of soil tests performed
#6.1 Riparian land management brochures	6	Brochure available in year 3	HRWC	Number of brochures distributed

VI. Related Activities Coordinated by Livingston County

The following BMP activity descriptions are included as part of Livingston County's PEP. These activities are being coordinated by the County, but may include cooperation from local communities, including Hartland Township. These activities will complement the proposed activities of Hartland Township's PEP and directly enhance education efforts directed toward the general public within Hartland Township.

BMP: "Adopt Your Watershed" Program

Description: Explore co-sponsoring with other communities or groups an "Adopt Your Watershed" Program, originally developed by USEPA

Time Line: Begin program within 3 years of COC issuance

Evaluation: Volunteering events held; responses at end of events survey; change in public attitude

Responsible Parties: LCDC

BMP: Create maps of the drainage system within each community

Description: Provide maps to communities and schools of drainage system in their area with the help of existing GPS/GIS information and future efforts.

Time Line: Complete within 4 years of COC issuance

Evaluation: Display maps and related information on pamphlets to residents, including that information is also available via Internet

Responsible Parties: LCDC and local community officials

BMP: Household hazardous waste informational displays

Description: Design information displays for area banks, post offices and public libraries, providing information on travel trailer, vehicle maintenance and other household hazardous waste disposal

Time Line: Begin within 2 years of COC issuance

Evaluation: Display maps and related information on pamphlets to residents, including that information is also available via Internet

Responsible Parties: LCDC and local community officials

Exhibit A
Aerial Photograph

Exhibit B
Zoning Map

Exhibit C
SEMCOG
Letter of Commitment

Exhibit D
HRWC
Letter of Commitment