

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL
QUALITY**

**GENERAL STORM WATER PERMIT
MIG619000**

PUBLIC EDUCATION PLAN

FOR

**LIVINGSTON COUNTY DRAIN COMMISSIONER
Brian Jonckheere**

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SECTION 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 Livingston County 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 to the maximum extent practicable (MEP).

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.

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. The Livingston County Drain Commissioner (LCDC) has applied for and obtained a Certificate of Coverage (COC) under MDEQ’s watershed-based permit and will be working with other communities in the Huron Chain of Lakes and South Branch Shiawassee River Subwatersheds to complete the permit requirements. The watershed-based permit requires the LCDC to develop five different plans for implementation:

1. *Public Participation Plan (PPP)* to facilitate the involvement of watershed jurisdictions, agencies, organizations, and the general public in the development of the Huron Chain of Lakes and South Branch Shiawassee River Subwatershed Management Plans;
2. *Public Education Plan (PEP)* to promote, publicize, and facilitate watershed education to encourage the public to reduce the discharge of pollutants in storm water;

3. *Illicit Discharge Elimination Program (IDEP)* to find, eliminate, and prohibit illicit discharges to the LCDC's storm water drainage system;
4. *Watershed Management Plan (WMP)* to identify and address water quality and quantity issues within the Huron Chain of Lakes and South Branch Shiawassee River Watersheds. This WMP will be developed in cooperation with other communities and stakeholders within the watersheds;
5. *Storm Water Pollution Prevention Initiative (SWPPI)* to detail the actions that the LCDC will take to meet the goals of the WMP and to reduce the discharge of pollutants to the MEP.

Required PEP Elements

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 elements 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 systems.
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 systems.
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 storm water conveyances (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 August 2002, a watershed management plan for the Brighton Lake Subwatershed was completed under the guidance of the Huron River Watershed Council (HRWC) and approved by the MDEQ. This Brighton Lake WMP will serve as a foundation for the development of the Huron Chain of Lakes WMP, which will be geographically expanded and updated to meet Phase II minimum requirements. MDEQ has set a completion deadline of November 2005 for the Chain of Lakes Watershed Management Plan.

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 Huron Chain of Lakes WMP and its recommendations.

As with the Brighton Lake WMP, the Huron Chain of Lakes Plan will include an information and education (I&E) strategy 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 Huron Chain of Lake Watershed Management Plan.

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 River Watershed Management Plan. This Plan will include an information and education (I&E) strategy 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 River Watershed Management Plan.

County Profile

The communities that comprise Livingston County are the City of Brighton, Brighton Township, Cohoctah Township, Conway Township, Deerfield Township, the Village of Fowlerville, Genoa Township, Green Oak Township, Hamburg Township, Handy Township, Hartland Township, the City of Howell, Howell Township, Iosco Township, Marion Township, Oceola Township, Pinckney Village, Putnam Township, Tyrone Township and Unadilla Township. All of the communities contain “urbanized area” as defined by the USEPA except Cohoctah, Conway, Deerfield, Handy, Iosco and Unadilla Townships and the Village of Fowlerville.

The County of Livingston covers approximately 568.4 square miles, located in southeast Michigan and has a total population of 154,000 as determined in the 2000 census. The communities of Livingston County were originally established as an agricultural center. Today, the County is dramatically more diverse, (farm acreage diminishing by 39,261 acres from 1982-1997) ranging from urbanized areas in the southeast quadrant to farming communities in the northwest. Livingston County is one of the fastest growing in southeastern Michigan, ranking first in terms of 1990-1998 percent population change among Michigan counties. A significant amount of land is not only used in crop production, but sand and gravel extraction, as well.

Livingston County is an important destination for water related recreation in southern Michigan with 52 inland lakes consisting of 60 acres or more.

The Drain Commissioner

The Drain Commissioner maintains approximately 400 drains in Livingston County. The office of the Drain Commissioner, headed by Brian Jonckheere, provides a variety of services to the County’s communities, including: storm water drainage services, wastewater treatment operations, soil erosion and sedimentation control, department of public works, rain gauge networking, lake level evaluations, lake improvements, and environmental and watershed initiatives.

Approximately 80% of Livingston County residents utilize private household wells for their drinking water and about 70% of the County’s residents utilize private septic, on-site sewage disposal systems (OSDS), for disposal and treatment of their wastewater.

The School Districts of Livingston County

Livingston County partially or wholly contains 15 different public school districts, 9 non-public school districts and 2 public school academies, with the majority of the school-aged population enrolled in the Howell Public School District. Livingston County also houses 7 higher education learning centers.

The LCDC PEP identifies possible education objectives, assesses current education efforts, identifies additional education efforts needed to meet the objectives, establishes priorities and measures, establishes time frames for implementation, and identifies responsibilities for implementing various components of the plan.

SECTION II - EXISTING AND PROPOSED PUBLIC EDUCATION ACTIVITIES

This section details the existing educational activities in place by the LCDC, 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 Best Management Practice (BMP) activity description, or in cooperation with other Phase II communities. Timelines 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

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 <i>Seven Simple Steps to Clean Water</i> . Topics include: fertilizer, car care, landscaping, storm drain awareness, household hazardous wastes, water conservation, pet care and riparian protection. They have also developed a kid's activity sheet. The campaign materials will be distributed at municipal offices, local events, and posted on the LCDC website.
Target Audience:	Residents, visitors, public employees, businesses, industries, construction contractors and developers.
Time Line:	Materials will be created and disseminated throughout the permit cycle.
Evaluation:	Number of materials distributed. Coupons included with the informational materials 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 informational materials, and if possible, surveying participants to find out how they learned of the facility/event.
Responsible Parties:	SEMCOG will develop materials; the LCDC will ensure distribution of materials to appropriate target audiences; HRWC will coordinate printing and distribution of bulk mailings.

BMP #1.2: Community Watershed Calendar

Description: Coordinated by HRWC, the LCDC will participate in the bulk printing and distribution of a Community Watershed Calendar to be placed in municipal offices and handed out at local events. The 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 elements, 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: Printing will occur throughout the permit cycle, and distribution on-going as supplies last.

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

Responsible Parties: The LCDC, HRWC

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*. The LCDC 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 Lake Association Newsletter(s)

Description: The LCDC will publish articles in lake association newsletters that will focus on issues represented by all six PEP elements. Newsletter(s) 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 Year 1, newsletter articles will be published bi-annually throughout the permit cycle

Evaluation: Frequency of articles in newsletters and number of newsletters distributed

Responsible Parties: The LCDC will provide newsletter articles in various distribution outlets; SEMCOG and HRWC will provide articles.

BMP #1.5: Website Information

Description: The LCDC will add information to its website and/or link to other website(s) with educational information addressing key messages for all PEP elements. Potential links to be included: SEMCOG’s “Our Water. Our Future. Ours to Protect.” education campaign, MSU-Extension Livingston County, and HRWC, just to

name a few. Information will be provided 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: Website links and information will begin in Year 1 and continue throughout the permit cycle

Evaluation: Number of hits to website

Responsible Parties: The LCDC

BMP #1.6: Cable Access/Community Billboard

Description: Cable access broadcasting will address all key messages using existing videos, public service announcements (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 Year 1 and continue throughout the permit cycle

Evaluation: Number of times information is aired

Responsible Parties: The LCDC will ensure broadcasting of materials

BMP #1.7: Newspaper Advertisements

Description: Coordinated by HRWC, the LCDC 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 Water and HRWC.

Target Audience: Residents, visitors, businesses, industries, government employees, and developers

Time Line: Start in Year 1 and on-going throughout the permit cycle

Evaluation: Frequency and number of advertisements run; number of inquiry calls received as a result of advertisements.

Responsible Parties: The LCDC, HRWC

BMP #1.8: Water Quality Displays

Description: The LCDC will use exhibits created by themselves and/or SEMCOG for display at public events. These exhibits will promote watershed awareness through a map showing the Huron Chain of Lakes and South Branch Shiawassee River subwatersheds, showing how storm drains connect to our rivers 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 websites (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 Year 1 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 attended.

Responsible Parties: The LCDC will ensure that displays are used at relevant local events throughout the permit cycle. Displays provided by SEMCOG and LCDC.

BMP #1.9: Promotion of Water Resource Protection Workshops

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

Responsible Parties: The LCDC will promote workshop events as developed by contributing agencies.

BMP #1.10: Promotion and Support of Volunteer Stream/Lake Monitoring

Description: Coordinated by HRWC, the LCDC 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 the LCDC's website and/or newsletter. Adopt volunteers assess habitat, water quality, and aquatic life in the Huron River and its tributaries as part of an on-going 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.

Other possibilities for volunteer monitoring in area lakes would be through the MDEQ-sponsored Cooperative Lakes Management Program (CLMP).

Target Audience: Residents

Time Line: Start promotions in Year 1; 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: The LCDC, HRWC

BMP #1.11: Utilization of Watershed Signage

Description: The LCDC will work with the Livingston County Road Commission (LCRC) 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 by Year 3

Evaluation: Number of signs posted and location

Responsible Parties: The LCDC, LCRC, and participating Cities, Villages and Townships (CVT's)

BMP #1.12: Watershed Management Short Course

Description: The LCDC 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: 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 SYSTEMS.

Overall Target Audiences: Residents

Key Messages:

- Connection of storm water 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 water drainage system
- Impacts of storm water pollutants on water quality
- How to keep common pollutants out of the storm drainage system

Proposed Activities

BMP #2.1: Storm Drain Labeling and Door Hangers (*only for communities with storm sewers*)

Description: The LCDC will use community volunteers to assist 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; on-going

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

Responsible Parties: The LCDC, LCRC, HRWC, participating CVT’s, and community volunteers

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 Newsletters

BMP #1.5: Website Information

BMP #1.6: Cable Access/Community Billboard

BMP #1.7: Newspaper Advertisements

BMP #1.8: Water Quality Displays

BMP #1.12: Watershed Management Short Course

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 an illicit discharge
- Impacts of illicit discharges and improper waste disposal on water quality
- How to identify failing on-site septic disposal systems (OSDS)
- Penalties and consequences associated with illicit discharges and improper waste disposal

Existing Activities

Currently, the Livingston County Department of Public Health (LCDPH) provides a number of informational materials to County residents on the topic of OSDS. The LCDC will utilize many of these existing resources for dissemination such as the following:

- The LCDPH provides an on-site sewage disposal systems presentation provided to local groups twice a year.
- The official website of the LCDPH provides an array of helpful information, including a quarterly newsletter, calendar of events (such as “Know Your Septic Well”, a free training workshop for homeowners held in February) and a variety of other topics related to on-site waste water disposal.

Proposed Activities

BMP #3.1: Implement and Promote a County-wide Complaint Tracking and Response System

Description: The LCDC will work with the LCDPH to develop an improved program for County-wide 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 various newsletters, cable TV, and website.

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: LCDPH, LCDC

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 Newsletters

BMP #1.5: Website 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

- 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, and 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

Proposed Activities

BMP #4.1: Promote Soil Testing

Description: The LCDC 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 their 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, the LCDC will support the program for communities to 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 Year 1; 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: The LCDC, 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 Newsletters

BMP #1.5: Website 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 #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 (HHW) & other chemicals
 - Motor vehicle fluids
 - Travel trailer sanitary wastes
 - Recreational boating sanitary wastes
 - Yard wastes

Existing Activities

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 Newsletters

BMP #1.5: Website 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 #4.1: Promote soil testing

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

Recently, the LCDC developed a newsletter that was sent out to Thompson Lake residents with information on how to improve water quality in their watershed. The newsletter is intended to go out bi-annually.

Proposed Activities

BMP #6.1: Riparian Land Management Brochures

Description: Coordinated by HRWC, the LCDC will distribute a brochure promoting riparian BMPs 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/infiltration.

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

Time Line: Brochure available in Year 3

Evaluation: Number of brochures distributed

Responsible Parties: The LCDC, 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 Newsletters

BMP #1.5: Website Information

BMP #1.6: Cable Access/Community Billboard

BMP #1.7: Water Quality Displays

BMP #1.8: Promotion of Water Resource Protection Workshops

BMP #4.1: Promote Soil Testing

SECTION III – OTHER INVOLVED ORGANIZATIONS

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

Organization	Program	Contact
Livingston County Drain Commissioner	“Adopt Your Watershed” Program, CLMP, Workshops, Illicit Discharge & Dumping Response System, Educational Literature	Brian Jonckheere
Livingston County Road Commission	Watershed Signage	Steve Wasyk
Livingston County Department of Public Health	Waste Water Management Program, Water Quality Monitoring Program	Ted Westmeier
Livingston County Solid Waste Management	Household Hazardous Waste Collection Sites, 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 (Shiawassee only)	Water Quality Monitoring, Advice and Service Planning and Education	Tom Cook
Michigan Department of Environmental Quality	Nonpoint Source Monitoring and Aquatic Nuisance Control, CLMP	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

SECTION IV – EVALUATION AND PROGRESS REPORT

By the date indicated on our Certificate of Coverage, the LCDC 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.

The LCDC will evaluate its PEP 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 website 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 River Subwatersheds.

In addition to evaluating individual activities, the LCDC'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. The LCDC provided the funding to have this survey analyzed relevant to the statistical significance for the Huron Chain of Lakes and South Branch Shiawassee River subwatersheds. This survey information will provide a baseline to gauge the overall effectiveness of our community's programs as we move forward. We will be able to judge the effectiveness of our programs through follow-up activities that include surveys, website and phone tracking, along with one-on-one discussions with our various target audiences.

Staff Contact: Brian Jonckheere
Title: Livingston County Drain Commissioner
Telephone: 517.546.0040

V. SUMMARY OF PROPOSED 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; on-going	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	Distribution on-going	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; on-going (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; on-going	SEMCOG, HRWC	Frequency of articles published and number of newsletters distributed
#1.5 Website information	1, 2, 3, 4, 5, 6	Begin in Year 1; on-going		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; on-going		Number of times information is aired
#1.7 Newspaper Advertisements	1, 2, 3, 4, 5	Begin in Year 1; on-going	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; on-going	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 on-going 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 Programs	1, 2, 3, 4, 5, 6	Begin in Year 1; on-going	HRWC	Number of volunteers; resulting stewardship actions taken by participants
#1.11 Watershed Signage	1	Install signs by Year 3	LCRC, other CVT's	Number of signs posted
#1.12 Watershed Management Short Course	1, 2, 4, 6	Begin in Year 1	MSU-Extension	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	Begin in Year 1; on-going as development expands	HRWC, Community Volunteers, LCRC, other CVT's	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	LCDPH	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; on-going (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

