**ANNUAL REPORT**

**FOR**

***Livingston County Drain Commissioner***



**Prepared in Compliance with**

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PHASE II STORM WATER REGULATIONS**

**GENERAL STORM WATER PERMIT**

**MIG619000**

**and**

**Certificate of Coverage**

**MIG610202**

**November 1, 2013**

**Storm Water Progress Report**

**Covering the period November 2011 through October 2013**

**Date: November 1, 2013**

**Michigan General Permit Number: MIG619000**

**Certificate of Coverage Number: MIG610202**

**Permittee: Livingston County Drain Commissioner**

**Mailing Address: 2300 E. Grand River**

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**Signatures of Authorized**

**Permittee Representatives**



**Brian Jonckheere**

**Drain Commissioner**



# Matt Bolang

# Environmental Specialist

**Storm Water Progress Report**

**Covering the period October 2011 through September 2013**

**Michigan General Permit Number MIG619000 | MIG040000**

Certificate of Coverage Number MIGXXXXXX

**Permittee: Permittee Name**

**Mailing Address: Address**

**Contact Person: Contact Name Telephone: XXX-XXX-XXXX**

**Title: Contact Title**

**Date: XXXXX XX, 2013**

**Signature of Authorized**

**Permittee Representative\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# Name of signer

# Title

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# Name of signer

# Title

# Introduction

This document fulfills Permittee’s NPDES Phase II storm water permit requirement for Storm Water Progress Report. This report includes information on progress made over the time period stated on the cover towards compliance with the six minimum measures and other commitments made in Permittee’s Storm Water Pollution Prevention Initiative (SWPPI). This document also reports on the assessment of water quality in the area affected by Permittee’s storm water discharge along with any changes made to Best Management Practices (BMPs) or Watershed Management Plans (WMP). The report follows reporting requirements specified in the permit and is organized by the six minimum measures, with additional reporting sections at the end.

**I. Compliance Assessment**

# A. Public Participation Plan (PPP)

A PPP was jointly developed for many permittees in the Huron Chain of Lakes (HCOL) Watershed and submitted to MDEQ in April 2010. A Watershed Management Plan (WMP) for the HCOL was most recently approved by MDEQ in 2007. Since that time, the permittees within the Huron Chain of Lakes Watershed have focused on implementing activities within the WMP and have additionally developed specific implementation plans to address water quality impairments. These activities are reported in other sections of this report.

Review and revision of the WMP

The WMP is currently not scheduled for revision. However, two TMDL Implementation Plans were revised during the reporting period: The Brighton Lake and Strawberry Lake Watershed Management Plans. Both were revised and submitted to DEQ in October 2011. Both plans are currently available to the public via the Huron River Watershed Council’s (HRWC) website at <http://www.hrwc.org/publications/watershed-management-plans/> and at the Livingston Watershed Advisory Group’s (WAG) webpage at <http://www.hrwc.org/livingston-wag/>. Those plans cover the majority of the HCOL watershed and address the major concerns. Should the WMP need revision in the future, public notice of the availability of the WMP will be made and a review process established.

Citizen Advisory Committee

Prior to the development of the WMP, the permittees within the HCOL joined with those from the Upper Shiawassee River to form the Livingston Watershed Advisory Group (WAG). Subsequently, members from non-permitted jurisdictions and Livingston County municipalities outside of the two watersheds have been invited to participate. This group is a forum, open to the public, for planning, discussion and reporting on watershed management practices, with a focus on stormwater treatment. During the reporting period, the WAG met on the following dates:

* January 18, 2012
* April 25, 2012
* December 5, 2012 (joint meeting with the Middle Huron Stormwater Advisory Group)

Meeting agendas are included in Appendix A. Lists of attendees to the meetings can be obtained by request from Ric Lawson the WAG facilitator ([rlawson@hrwc.org](mailto:rlawson@hrwc.org), 734-769-5123 ext.609)

# B. Public Education Plan (PEP)

The PEP section of our SWPPI was developed to promote, publicize, and facilitate watershed education in the Huron Chain of Lakes watershed. Following is a summary of the progress made on PEP implementation.

[HRWC and the Livingston County Drain Commissioner included activities for the period October 2011 through September 2013, but permittees should fill in progress on their own public education activities and efforts to distribute materials provided by others]

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

Brochures, tip cards, posters, and other materials developed by HRWC or the regional public outreach campaign, “Our water. Our future. Ours to Protect” were distributed by individual jurisdictions.

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.

During the reporting period the Southeast Michigan Partners for Clean Water met periodically to review existing materials and propose updates and revisions to the campaign messaging and delivery methods.

Livingston County

Educational handouts, including the SEMCOG and HRWC brochures, are available to the general public through our offices. Additional educational information is available through links on Livingston County’s Phase II website, [www.livgov.com/drain/Pages/phaseII.aspx](http://www.livgov.com/drain/Pages/phaseII.aspx). Handouts are also available during festivals and other community events throughout Livingston County when LCDC hosts a table or other organizations request information on water quality through our office.

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Add text.

Activity #2: Community Watershed Calendar

September 2011 through January 2012 – HRWC and participating communities produced, printed, and distributed 37,000 2012 Watershed Community Calendars presenting a two years of monthly informational pollution prevention tips targeted to homeowners in a single printed piece. The print calendar included two full pages per month for 2012 and an abbreviated three-page 2013 version, there was also an online option of downloadable 2013 replacement pages for residents wishing to re-use the two-page version. The tips and provided resources related to permit topic requirements such as illegal dumping, fertilizer and yard care, rain barrels, pet waste, car care, rain gardens and native plants, home toxics, storm drain awareness and general watershed education.



The 2012 Watershed Community Calendar also included a special call to action to take an online survey (see PEP Evaluation section below).

13 communities distributed 34,000 calendars to residents either through direct mail\*, at customer service counters or through other channels.

|  |  |
| --- | --- |
| City of Brighton\* | 3200 |
| Livingston County Drain Commission | 500 |
| Livingston County Road Commission | 200 |
| Village of Pinckney | 900 |
| Brighton Township | 200 |
| City of Ann Arbor\* | 22,000 |
| Ann Arbor Public Schools | 500 |
| Village of Dexter | 500 |
| Washtenaw County Water Resources Commissioner | 300 |
| Pittsfield Township | 500 |
| City of Ypsilanti | 1500 |
| Charter Township of Ypsilanti | 2500 |
| Eastern Michigan University | 600 |
| Washtenaw County Road Commission | 100 |
| Barton Hills Village | 160 |
| Marion Township | 500 |
| Huron River Watershed Council | 2000 |

3000 calendars were also provided to over 80 entities (see below) for employees and public distribution, including distribution by HRWC at key organizational events and promotion of the calendar thorough HRWC’s direct mail printed newsletter (2,000 recipients), marketing emails (4000+ recipients), home page blog, and social media announcements on Facebook.

|  |  |  |
| --- | --- | --- |
| Ann Arbor Community Cntr |  | Mack Pool |
| Ann Arbor Hands-On Museum |  | Main Branch AADL |
| Arbor Farms |  | Michigan League |
| Argo Livery |  | Michigan Union |
| Arrowood Coop |  | Mr. Stadium |
| B-24's (NEW) Coffee Shop |  | Natural History Museum |
| Bank of Ann Arbor\* |  | Neutral Zone |
| Big City Small World Café |  | NEW Center |
| Bivouac |  | Nicola's Books |
| Bryant Community Center |  | Northwood Community Cntr |
| Buhr Park |  | Peace Neighborhood Center |
| Carrillon Chocolate |  | People's Food Coop |
| CC Little (Geology) Bldg |  | Pierpont Commons |
| Chemistry Bldg |  | REI |
| Cnty Frm Prk, Murry Rec |  | Reinhart Realtors\* |
| Concordia College |  | Shapiro Undergrad Library |
| Crazy Wisdom Bookstore |  | Smoothie King |
| Dawn Treader Book Shop |  | SNRE (Dana) Bldg |
| Downtown Home & Garden |  | Starbucks Coffee |
| Ecology Center |  | Sweetwaters Café |
| EH Kraus (Nat Sci) Bldg |  | Sweetwaters Café |
| Elevators, City Hall |  | The Corner Brewery |
| EMU Biology Dept. |  | The Ugly Mug Coffee Shop |
| EMU Geology Dept |  | Thomson Reuters\* |
| EMU Student Center |  | Tommy Thomson Florist |
| Espresso Royale |  | Toyota Technical Center\* |
| Farmer's Market |  | Turner Senior Resource Center |
| Food Co-op |  | U of M Career Center |
| Friends Meeting House |  | UM Art & Arch Bldg |
| Fuller Park |  | UM Botanical Gardens |
| Gallup Park |  | UM Program in Environment |
| Hatcher Grad Library |  | Undrgrad Resrch Op Prog. |
| Huron Hills Golf Course |  | Vets Park Pool and Rink |
| Islamic Center of AA |  | Wash Comm College |
| Jewish Community Center |  | Washtenaw Alano Club |
| Jolly Pumpkin |  | Wheeler Service Center |
| Kerrytown Shops\* |  | Whole Foods |
| KeyBank\* |  | Whole Foods |
| Legacy Land Conservancy |  | YMCA |
| Leslie Park Golf Course |  | Ypsilanti District Library |
| Livingston Land Conservancy |  | Ypsilanti District Library |
| Lobby, City Hall |  | Zen Buddhist Temple |
| MacFarland Tree Service |  | Zingerman’s Next Door |

Livingston County

Livingston County purchased 500, 2012 watershed calendars. Calendars were distributed through county offices and at community events.

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Add text.

Activity #3: Information in Community Newsletters and on Websites

Seasonal newsletter inserts of tips and information on nonpoint source pollution prevention topics are developed by HRWC annually and made available in pdf format for community use on <http://www.hrwc.org/our-work/programs/livingston-wag/> (under Public Education Materials).

These materials also include a series of 12 advertisements in various sizes and formats (jpeg, pdf) that correspond to the 2012 Watershed Community Calendar branding, monthly topics and messaging.

Additionally HRWC publishes announcements, articles, tips and promotions that focus on nonpoint source pollution prevention and water quality information using the following distribution channels:

* [www.hrwc.org](http://www.hrwc.org) (96,503 page views and 61,985 unique page views overall during reporting period – 63% new visits).
* [www.facebook.com/huronriver](http://www.facebook.com/huronriver) (657 followers on September 20, 2011 growing to 1,279 followers as of August 27, 2013).
* Monthly e-mail newsletter (4,159 average monthly contacts with an average open rate of 19%).
* Printed quarterly newsletter (direct mailed to over 2,000 HRWC members and distributed to the following watershed libraries: Huron High School, Ann Arbor District, South Lyon, Milford, Chelsea, Belleville, Flat Rock, Pinckney, Ypsilanti District, Brighton Public, Dexter District).

The featured landing page of the calendar and ads, [www.hrwc.org/h2oheroes](http://www.hrwc.org/h2oheroes) and homeowner tips pages in the “Take Action” section, www. hrwc.org/take-action had the following results over the reporting period:

* [www.hrwc.org/h2oheroes](http://www.hrwc.org/h2oheroes) (featured landing page of calendar and ads) 171 page views with 176 unique page views.
* [www.hrwc.org/take-action/capture-rain](http://www.hrwc.org/take-action/capture-rain) (content pages featuring rain gardens, rain barrels and native plants) – 2,838 page views with 2,180 unique page views.
* [www.hrwc.org/take-action/water-pollution](http://www.hrwc.org/take-action/water-pollution) (content pages featuring nonpoint source pollution prevention tips) – 1,712 page views with 1,281 unique page views.

Livingston County

General information about Phase II and water quality educational information can be found on the LCDC’s Phase II website [www.livgov.com/drain/Pages/phaseII.aspx](http://www.livgov.com/drain/Pages/phaseII.aspx). Other water quality related content can be found through the Environmental Health Division’s website, [www.livgov.com/health/eh/Pages/default.aspx](http://www.livgov.com/health/eh/Pages/default.aspx). On occasion, our office contributes articles to community newsletters upon request.

In May 2013, the Livingston County website was drastically updated to remove redundant pages and increase the ability to find information from the various departments. To date, many of the websites are still in a state of change and have not been completed. Although we have the ability to use analytical tools to determine site “hits” and downloads, all of our web addressing has changed and we cannot track hits previous to May 2013. Additionally, we are still in the process of adding new information and fixing broken links. In future reports, LCDC will be able to provide better website analysis given our enhanced/simplified website.

[Permittee]

Add text.

Activity #4: Local Newspaper and Web Advertisements

HRWC developed a series of new NPS pollution prevention print ads (6 ads total with more on the way as seasonal photography is obtained). Featuring succinct tips, they combine the idea of everyday people doing extraordinary things without really going out of their way. The subjects in the ads know they're a hero, even if you can't really see their muscles and capes, which is why those features are drawn-in instead of worn in the photo itself. HRWC hopes that homeowners find these not-so-serious ads visually appealing and suggestive of how easy it is to protect the watershed in their own backyards. These ads are available to permittees at <http://www.hrwc.org/our-work/programs/livingston-wag/> (under Public Education Materials).

Also included is a series (30+) of colorful web ads in various sizes and formats with the “h20 heroes” theme and using the same colors, headlines, and tips as the print ads, but designed to maximize click-through rates with concise and intriguing copy that inspires readers to learn more.

Ads resemble and reinforce the 2012 Watershed Community Calendar messaging, promoting the dedicated campaign web site, [www.hrwc.org/h2oheroes](http://www.hrwc.org/h2oheroes) and containing detailed information and additional resources.

[Permittee]

Add text.

Activity #5: Promote Water Resource Protection Workshops

Across the entire reporting period, HRWC also organized and promoted the following community events/workshops incorporating water quality and nonpoint source pollution prevention informational materials:

* Water Quality Monitoring volunteer trainings, March 2012, 2013
* Educator Trainings, April, 2012
* Soil Erosion Seminar, May 15, 2012
* Volunteer Data Sharing, October 29, 2012
* Small Dam Owners Workshop, December, 13, 2012
* Sectional River Clean-ups, Summer 2012, 2013
* River Round-Up, April and October, 2012, 2013
* Stonefly Search, January, 2012, 2013
* Rain Barrel Distribution, May 18, 2013
* Riparian Landowner meetings (3), May-June, 2013
* Huron River Walks, May 29; June 22; July 9, 2013
* Green Infrastructure Workshops, June 5, 2012; February 28; May 16; June 5; July 2, 2013
* Huron River Paddle and Education Trips (9 total), Summer 2012, 2013

Livingston County

LCDC promotes relevant workshops as we become aware to email lists of potentially interested parties, including those directly involved with stormwater issues in Livingston County. Many of these workshops are sponsored or hosted by SEMCOG, HRWC, and neighboring MS4s (notably Oakland County Water Resources Commission). LCDC did not host any water resource protection workshops during this reporting period.

[Permittee]

Add text.

Activity #6: Promote and Support Volunteer Stream Monitoring

In 2011, 2012 and 2013 HRWC hosted several activities or monitoring events that inspire the protection of local fresh water resources. One event measures the physical conditions (described below) and the other event (“bio-monitoring”) measures the aquatic invertebrate community.

In bio-monitoring events, held in January (Stonefly Search), April (River Roundup) and September (River Roundup), volunteers spend the day as part of a small research team, examining the conditions of two streams. Streams are selected to be strikingly different in quality. Each team collects samples of creatures (macroinvertebrates). They notice immediately that one stream is teeming with life while the other appears nearly “dead”. This comparative difference is an effective way for residents to discover for themselves that some local streams have deteriorated while others remain healthy. The discovery usually leads to inquiry about the causes of stream deterioration, the conditions of their local stream, and possible solutions.

A follow-up report and annual presentation by HRWC responds to volunteer concerns by providing results of the monitoring events and an explanation of the primary causes of local stream deterioration, tools to address local stream issues and “tip cards” or information for homeowners and other residents on protecting water quality.

Annually in the summer volunteers measure the physical conditions of streams. They learn to “read a river” by studying the conditions that affect the ecological health of the sites. Participants form small teams to complete an evaluation of at least one site.

HRWC’s program serves the entire watershed, a 900-square mile area that drains into the Huron River and then into Lake Erie. The area includes approximately 525,000 residents and parts of seven counties in southeastern Michigan, primarily Livingston, Oakland, Washtenaw, and Wayne Counties. The pool of volunteers, who live in many of the in 67 watershed communities, is currently around 600, with up to 180 routinely participating in each event.

Additionally, HRWC operates a Water Quality Monitoring Program on behalf of partners in Washtenaw and Livingston Counties. This program, which utilizes volunteer sample collectors, is described in more detail in the Water Quality Data and Assessment section.

Livingston County

LCDC organizes and facilitates volunteer macro-invertebrate monitoring at 5 sites in Livingston County within the Shiawassee River watershed. These sampling events occur every spring and fall. Identification of the collections takes place after the events. Data is then entered online through MiCorps.net for use by MDEQ for this stretch of the watershed. Procedures for collection, identification, and data management align with those set forth by MiCorps for use in volunteer monitoring programs.

Due to a decrease in staff resources, and volunteers, the monitoring program has been on hiatus since our last collection event in May 2012. In January 2014, LCDC plans to hire a full time professional staff person that should have greater capacity to invigorate this program going forward, with collections hopeful in spring 2014, and potentially expand to the Red Cedar River watershed.

[Permittee]

Add text.

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

Livingston County

Livingston County has, in the past, worked with local Boy Scout troops to target subdivisions with storm drains/catch basins and provide adhesive markers for the drains that convey messages about the connectedness to surface water. These projects have targeted structures and systems owned and/or operated by LCDC.

LCDC is in the process of targeting this program to our local lake associations that have stormwater infrastructure. Lake of the Pines in Brighton has recently received 50 markers and will be installing this month (October 2013).

Example Drain Markers:



[Permittee]

Add text.

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

Livingston County

Livingston County tracks complaints and responses activities through a software program used by LCDC and LCDPH (Tidemark). Depending on the type of complaint, the appropriate agency leads the response. 911/Central Dispatch is the emergency agency for the county and environmental emergencies are transferred to the appropriate department. Depending on the severity of the complaint, MDEQ may also be involved with responses.

County websites and various literature distributed promote office numbers of both LCDC and LCDPH in the event of an environmental complaint, along with the PEAS number for pollution emergencies.

[Permittee]

Add text.

Activity #9: Promote Soil Testing

Beginning January 1, 2012, phosphorus fertilizer applications are restricted on residential and commercial lawns in Michigan, including athletic fields and golf courses statewide. This includes applications by both homeowners and commercial applicators.

The general rule in the Michigan Fertilizer Law is no phosphorus fertilizer may be applied on residential or commercial lawns, unless it meets an exemption. The sale of phosphorus fertilizers in the marketplace is not impacted. Phosphorus applications for agriculture, gardens, trees, and shrubs are exempted. In September 2011 HRWC participated in a phosphorus fertilizer workgroup coordinated by the Michigan Department of Agriculture & Rural Development. MDARD produced a homeowner brochure and additional phosphorus information (available at [www.michigan.gov/mda-fertilizer](http://www.michigan.gov/mda-fertilizer) and [www.BePhosphorusSmart.msu.edu](http://www.BePhosphorusSmart.msu.edu)).

In 2012, the Michigan State University Extension “Don’t Guess, Soil Test” program transitioned to a web-based mail in program run by MSUE where consumers were directed to purchase ($25) a soil test kit, mail-in their samples and get results by email which they then plug into a website tool for interpretation. The “ Don’t Guess, Soil Test” program was formerly offered annually in the spring and was held at local retailers in the month of April in Washtenaw, Oakland and Livingston Counties.

HRWC promoted the “go phosphorus free” messaging to the public in April 2012 and 2013 through the Watershed Community Calendar (Activity #2), Information in Community Newsletters and on Websites (Activity #3), and Local Newspaper and Web Advertisements (Activity #4).

[Permittee]

Add text.

Activity #10: Riparian Land Management Brochures

HRWC has available for community use a Riparian Living brochure for the Livingston County Drain Commissioner in 2007 that was cooperatively reproduced again in 2007 by the City of Ann Arbor, the City of Ypsilanti, the Village of Barton Hills and The Village of South Rockwood. It includes tips on composting, pet waste, toxics disposal, septic system maintenance, fertilizer, boat maintenance, vegetative setbacks, and general resources for Monroe and Washtenaw Counties. HRWC regularly distributes this brochure at public outreach events (see activity #12).

An updated brochure is scheduled to be produced and distributed in 2013 under the Public Education Plan for Middle Huron Stormwater Advisory Group Members and Livingston Watershed Advisory Group members participating in the Watershed Municipal Stormwater Permit. HRWC with the help of the Washtenaw County Water Resources Commissioner has identified a brochure for use going forward, *Waterfront Wisdom, Healthy Habits for Clean Water*, designed by Environmental Consulting & Technology and published by the Oakland County Drain Commissioner. This publication will be adapted for the Huron River watershed and an electronic version will be made publicly available in November 2013.

Livingston County

The Riparian Land Management Brochure is a staple handout at all Livingston County events. We also distribute during various community events during the course of the year and always have it available through our county offices.

[Permittee]

Add text.

Activity #11: Stream and River Crossing Road Signs

Livingston County

Most of the road-stream crossing signage in Livingston County was installed by the Livingston County Road Commission throughout the county prior to the time period covered in this report (pre-2009). A few additional signs were installed in 2009. Please refer to the Livingston County Road Commission’s annual report for more detail.

[Permittee]

Add text.

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

HRWC coordinated and staffed displays and table activities at the following community events during the reporting period:

* Home Grown Festival, Ann Arbor (September 2011, 2012)
* Home, Garden & Lifestyle Show Washtenaw County (March 2012, 2013)
* Chelsea Expo (March 2013)
* Earth Day, Schoolcraft College, Washtenaw Community College, Ann Arbor and Milford (April 2012, 2013)
* Ann Arbor Mayor’s Green Fair (June 2012, 2013)
* Mission Zero Fest (June 2012)
* Pinckney Art in the Park (June 2012)
* Huron River Day (July 2012, 2013)
* Dexter Daze (August 2013)
* Ypsilanti Heritage Festival (August 2012, 2013)
* University of Michigan Party for the Planet (September 2012, 2013)
* Flat Rock Riverfest (September 2011, 2012, 2013)

In June 2012 HRWC exhibited at the three day festival Pinckney Art in the Park, distributing information on homeowner nonpoint source pollution prevention topics, Huron River recreation and water quality stewardship. HRWC staff and volunteers featured a “Where Do You Live in the Watershed” mapping activity and talked with over 150 individuals, handing out over 60 maps of the watershed and signing up 30 individuals to receive HRWC’s quarterly newsletter by email.

At the three day Ypsilanti Heritage Festival, which draws 80-90,000 attendees each year, HRWC participates in a joint outreach effort, the *“Green Tent”* funded and organized by Eastern Michigan University, the City of Ypsilanti and Ypsilanti Township. Several local environmental organizations participate annually including the Washtenaw County Water Resources Commissioner, and the Environmental Health Department and MDEQ. HRWC hosts a stream-monitoring demonstration and an art activity for children and families. In 2012 and 2013 HRWC raffled a kayak which helped to draw in over 400 festival goers to the Green Tent displays which featured NPS pollution prevention and stewardship messaging.

At the 2013 Ann Arbor Earth Day Festival in April, HRWC hosted a unique tabling activity for children, helping them build “native plant terrariums” and teaching why native Michigan plants are good for protecting water quality. Over 300 terrariums were made during the 4 hour festival.

Also in 2013 HRWC partnered with the Washtenaw County Water Resources Commissioner, the Washtenaw County Road Commission, the City of Ann Arbor, the Village of Barton Hills and Great Lakes Rain Barrel to promote and host a public rain barrel sale on May 18. Efforts resulted in the sale of 322 rain barrels to local residents at a discounted rate of roughly 20% off retail pricing (negotiated by WCWRC). Outreach included a rain barrel display and the distribution of 2,000 postcards by HRWC and the WCWRC at the Home Garden & Lifestyle Show, the Chelsea Expo and Earth Day Festivals at Schoolcraft College, Washtenaw Community College, Ann Arbor and Milford. The City of Ann Arbor promoted the festival through a display and postcard distribution at its customer service center, its water bill insert *Water Matters,* and in various community emails. Ann Arbor Public Schools published sale information in a district-wide email to staff and families. Print advertisements were run in Michigan Gardener April, the Ann Arbor Observer April and May, and the Spring 2013 Community Observer (for a total circulation of 170,000). As a result HRWC’s rain barrel sale web page experienced 3,956 page views (3,266 unique page views) Februrary1 through June 1 which include the months preceding and shortly following the sale.

HRWC and WCWRC also partnered with the Village of Dexter and Great Lakes Rain Barrel to promote and hold rain barrel sales at the Village’s Saturday Farmers Markets July 13, and August 3 and 17, 2013. Announcements were posted to HRWC’s Facebook Page (approx 1200 followers) and Chris Merucci, president of Great Lakes Rain Barrel was interviewed on the Lucy Ann Lance Show on WLBY 1290 AM, airing on its live weekly radio broadcast and included in the internet replay of the show on [www.lucyannlance.com](http://www.lucyannlance.com).

Livingston County

LCDC presented an informational display with handout information at the following events during this reporting period:

* Livingston Family Fun Day, Soil Conservation District Nature Center, Iosco Twsp: June 23, 2012 and June 22, 2013
* HHW Events: three events (Spring, Summer, Fall) each year for 2012 and 2013

LCDC’s informational display is available for use by other municipalities in Livingston County. Along with the display, LCDC also provides water quality and storm water informational brochures to CVTs within the county.

[Permittee]

Add text.

Activity # 13: Livingston County Household Hazardous Waste Reduction Program

Livingston County

LCDC facilitates HHW collection events three times per year. Amount of waste collected in pounds is indicated in the table below.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Household Hazardous Waste Collections** | | | | |  | |  | |  |
| LCDC hosts three collections per year | | | | |  | |  | |  |
|  | **2012** | **2013** |  |  | |  | |
| Spring | 10,439 | 15,310 |  |  | |  | |
| Summer | 11,800 | 15,072 |  |  | |  | |
| Fall | 16,458 | 20,000(est) |  |  | |  | |
| **Total** | **38,697** | **50,382(est)** |  |  | | | |

LCDC also distributes collection receptacles throughout the county for used batteries. Amount of batteries collected, in pounds, is indicated in the table below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Battery Collection Program** | | | | |  |
| (20 collection sites in the County) | | | | | |
|  | | |  |  |  |
| Year | | | Pounds collected | |  |
| 2012 | | | 34,880 |  |  |
| 2013 | | | 32,000(est) |  |  |
|  |  |

[Permittee]

Add text.

Activity #14: Proper Disposal of Prescription Drugs and Personal Care Products

Livingston County

The Livingston County Sherriff’s Office coordinates the collection and incineration of unwanted pharmaceuticals in Livingston County. There are 7 permanent collection locations across the county located at local police stations. Additionally, several mobile collections were organized at county pharmacies and high schools through the Livingston County Community Alliance, <http://livingstoncountycommunityalliance.org>. From November 1, 2011 through September 30, 2013, 1063.5 pounds of pharmaceuticals were collected and incinerated.

In March 2012, Livingston County applied for a grant through the MDEQ Pollution Prevention Program. The proposal was titled, “Livingston County Drug Take-Back Program” and was a collaborative application with LCCA, Livingston County Solid Waste, Livingston County Environmental Health Division, and Livingston County Sheriff’s Department. The goal of the grant proposal was to effectively increase awareness and increase opportunities for the citizens to properly dispose of unwanted pharmaceuticals. Unfortunately, our proposal was not funded. We will continue to support the work of LCCA and hopefully in the future seek additional funding to bolster their existing program.

[Permittee]

Add text.

Activity #15: Electronic Waste Reduction

Livingston County

LCDC sponsors electronics recycling events that are free to the public. The table below indicates the amount of electronics received for each event.

|  |  |
| --- | --- |
| **Collection Date** | **Pounds** |
| May 2012 | 85,478 |
| October 2012 | 94,849 |
| May 2013 | 55,347 |
| September 2013 | 59,891 |

[Permittee]

Add text.

Activity #16: Drainage System Maps for Communities and Schools

In 2010 and 2011, with grant funding provided by MDEQ through the Livingston County Drain Commissioner, HRWC worked with communities and schools within the Huron Chain of Lakes Watershed to compile storm system mapping information into a consolidated map. HRWC contacted or met with each community to determine the format and content of each storm system map or database. A universal Geographic Information System (GIS) database structure was developed and map information was converted to allow inclusion in the GIS. The final storm system database was reviewed by contributing partners and provided to MDEQ as part of a grant deliverable. It is important to note that this was a map consolidation effort and not data content development effort. The mapping information is only as good as the data provided by contributing partners. Also, not every community in the watershed possessed map information on their storm system.

Livingston County

LCDC maintains an accurate GIS database of all owned and operated storm sewer systems in Livingston County. Database is regularly maintained and updated by a designated staff person in LCDC.

**PEP Evaluation**

In 2011-2012 the Washtenaw County Stormwater Advisory Group and the Livingston Watershed Advisory Group implemented a broad public education survey to measure public awareness of stormwater pollution and possible solutions, environmental attitudes, behaviors, and constraints of residents of the Huron River watershed who have been generally exposed to nonpoint source pollution prevention and watershed education messaging through the materials and regular outreach channels of the Huron River Watershed Council and participating communities. Please see the attached report (in Appendix B) or go to [www.hrwc.org/survey/](http://www.hrwc.org/survey/) for the final report and all supporting documentation.

# C. Illicit Discharge Elimination Plan (IDEP)

The IDEP section of our SWPPI was developed to prohibit and effectively eliminate illicit discharges (including the discharge of sanitary wastewater) to Livingston County Drain Commissioner storm sewer systems. Following is a summary of progress made toward IDEP implementation.

Activity #1: Prohibit Illicit Discharges Through Regulation

LCDC has, in past reporting, demonstrated compliance with this activity. No further updates at this time.

Activity #2: Program to Find and Eliminate Illicit Connections and Discharges

* Storm Sewer System Map: LCDC has continued to update our storm sewer system map through our GIS system. All discharge points, receiving waters, facilities, controls, etc. have been mapped through GIS.
* Dry Weather Screening: LCDC continues to inspect and report on any illicit discharges within our system. An inspection schedule has been developed (and included in previous reporting). All outfalls are inspected on a 5-year cycle (approximately 20% outfalls per year). No illicit discharges have been reported for the timeframe contained in this progress report. The table below is total outfall inspections per year within the regulated area in the county.

|  |  |
| --- | --- |
| 2012 Totals = | 93 |
| 2013 Totals = | 97 |

A detailed list of all inspections can be obtained by contacting LCDC.

* Regulatory Mechanism: LCDC has established regulatory authority (and mechanism) for addressing illicit discharges. This has been documented in previous reports.

Activity #3: Environmental or Complaint Response

* Maintain an environmental reporting framework: LCDC maintains an internal database that is used for permitting and tracking complaints and associated activities related to each. Coordination with other departments can also be facilitated through this framework since permitting authorities in Livingston County share the same database system. A more detailed report of county activities related to complaint tracking can be obtained upon request.

Activity #4: Staff Training

* Provide IDEP training to all staff: LCDC has provided IDEP training to all staff within the established timeframe as indicated in the permit. On March 17, 2011, 10 LCDC employees attended the training seminar titled: *Municipal Operations: How small changes can make big improvements in water quality.* This was a training coordinated between SEMCOG, WCWRC and LCDC, that was hosted at the Washtenaw Intermediate School District in Ann Arbor. Below is a list of those that attended.

|  |  |  |
| --- | --- | --- |
| **Employee** | **Title** |  |
| Matt Bolang | Environmental Specialist | |
| Todd Cox | Soil Erosion/IDEP | |
| Darrin Burns | Field Supervisor | |
| Steve Hasbrouck | Sanitary Supervisor | |
| Mark Hathaway | Soil Erosion/IDEP | |
| Rich Luttman | Drain Worker | |
| Rusty Matthews | Drain Worker | |
| Ken Recker | Chief Dept. Drain Commissioner | |
| Rod Soos | Soil Erosion/IDEP | |
| Bill Trotter | Drain Worker | |

Additionally during this training session, 3 LCDC staff received training related to obtaining a Certified Industrial Stormwater Operator credential. All 3 passed the exam and are now certified (Matt Bolang, Darrin Burns, and Steve Hasbrouck).

Activity #5: Overall Effectiveness of IDEP

* Tracking database: As stated in previous sections, LCDC uses an internal database to track all activities within the department. Dry weather screenings and general drain maintenance activities are a couple of those activities.
* Eliminate all obvious illicit dumping and connections found: LCDC did not find any illicit connections during this report period.
* Generate map to identify the locations(s) of the discharge(s) into both the MS4 and receiving waters: LCDC has the ability to map any point location with our GIS database. Should we encounter any illicit connection or discharge, this point and other pertinent features will be included.

**D. Post-Construction Storm Water Control for New Developments and Redevelopment Projects**

The Livingston County Drain Commissioner’s Office has a process to implement and enforce a program to address post-construction storm water runoff from all new and redevelopment projects that disturb 1 acre or more. Progress to implement this program is included below.

Activity #1: Regulate Post Construction Controls at New Development Sites and Re-development Sites

* Adopt Water Quality and Channel Protection standards of permit, as agreed to in Permit Application, that are enforceable: No further activity to report, this activity was accomplished in the past and is engrained in our operations.
* Adopt O&M requirements for new PC controls: No further activity to report, this activity was accomplished in the past and is engrained in our operations.
* Develop and implement policy for site plan review and approval to meet new standards: No further activity to report, this activity was accomplished in the past and is engrained in our operations.
* Develop and implement enforcement procedures if PC controls are not constructed as required or O&M is not conducted as required: No further activity to report, this activity was accomplished in the past and is engrained in our operations.

The LCDC standards, policies and procedures related to the above activity can be found on our website: [www.livgov.com/drain/Pages/procedures.aspx](http://www.livgov.com/drain/Pages/procedures.aspx)

Activity #2: Post Construction Controls at Municipally Owned Facilities

* All property owned by the MS4 permittee that has new development or substantial redevelopment will adhere to the PCC standards: LCDC uses the same criteria under Activity #1 above when working on LCDC owned or operated properties.
* All permittee owned sites with a new PCC-BMP will have an O&M plan for the BMP: LCDC uses the same criteria under Activity #1 above when working on LCDC owned or operated properties. LCDC maintains a manual of standard O&M practices for various types of PCC-BMP that may be installed on owned properties. Activities related to O&M are documented in our internal tracking database. Copies of O&M plans for LCDC activities can be obtained upon request. A summary of activities related to O&M can be found below:

|  |  |
| --- | --- |
| Year | O&M Activities |
| 2012 | 139 |
| 2013 | 135 |

The O&M Activities include all items in the following categories as listed in our database: bank erosion, blowhole(s), catch basin full/vac, catch basin repair, catch basin plugged, cleanout, ditch cleanout, drain cleanout, flooding, hazardous waste, misc, remove brush, remove debris, remove tree, sinkhole, slickwicks, soil erosion complaint, structure repair, tile replace, tile plugged, tile repair, washout, water ponding.

**E. Construction Storm Water Runoff Control**

To control wet weather discharges from construction activities, the Livingston County Drain Commissioner’s Office has developed procedures to minimize soil erosion and control runoff from construction sites. Progress toward implementation of construction storm water runoff controls is below.

Activity #1: Provide notice to the SESC agency and MDEQ when pollutants are discharged from construction activity:

LCDC is the County Enforcing Agency for SESC in Livingston County. LCDC is also an Authorized Public Agency. Notices are reported to MDEQ district staff as they occur and in quarterly reports. Activity numbers for these events can be obtained through our office.

* Inspection Construction Sites: LCDC inspects all aspects of SESC in Livingston County. Please reference the tables below for activity numbers in this program:

|  |  |  |  |
| --- | --- | --- | --- |
| **2012** |  |  |  |
|  | Permits | Waivers | Totals |
| Utility | 4 | 2 | 6 |
| Commercial | 47 | 11 | 58 |
| Residential | 429 | 245 | 674 |
| TOTALS: | 480 | 258 | **738** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **2013** |  |  |  |
|  | Permits | Waivers | Totals |
| Utility | 27 | 7 | 34 |
| Commercial | 45 | 12 | 57 |
| Residential | 734 | 305 | 1039 |
| TOTALS: | 806 | 324 | **1130** |
|  |  |  |  |

Enforcement activities:

2012

Commercial Follow-up Inspections: 50

Residential Re-inspections: 147

Municipal Civil Infraction Violation Tickets: 1

Municipal Civil Infraction Citations: 0

Bond Company Settlements: 0

Bond Collections: 0

2013

Commercial Follow-up Inspections: 33

Residential Re-inspections: 157

Municipal Civil Infraction Violation Tickets: 0

Municipal Civil Infraction Citations: 0

Bond Company Settlements: 0

Bond Collections: 0

Activity #2: Complaint Process

* Procedure for tracking and following complaints: As noted in other sections of this report, LCDC uses an internal database to track complaints and follow up corrective action.

Activity #3: Review and approval of preliminary site plans

* Develop and implement policy for site plan review and approval to meet Part 91 standards and local standards: LCDC is the County Enforcing Agency for SESC in Livingston County. LCDC is also an Authorized Public Agency. Our policies and regulations related to SESC and be found on our website: [www.livgov.com/drain/Pages/procedures.aspx](http://www.livgov.com/drain/Pages/procedures.aspx)
* Develop and implement enforcement procedures if SESC controls are not constructed and maintained as required: Procedures are in place. Visit the above website for more detail.

**F. Pollution Prevention and Good Housekeeping**

A set of training and maintenance activities is required for MS4 municipal operations, under the permit, to control pollution from municipal operations. The Livingston County Drain Commissioner’s Office has fulfilled these requirements by implementing the following activities.

Activity #1: Employee/Contractor Training

* Develop detailed list of training topics for employees and contractors: LCDC facilitates employee training through opportunities offered from other organizations off site. Although a detailed list has not been created, seasoned staff are encouraged to attend trainings. Key staff routinely attend appropriate trainings.
* Conferences (trainings) attended by Matt Bolang:
  + 12/13/12 – Dam Management – Ann Arbor, MI (sponsored by HRWC)
  + 12/10/12 – MS4 Conference, New Permit Application Training – Auburn Hills, MI (sponsored by MDEQ)
  + 12/6/12 – MWEA Watershed Conference – Eagle Eye, Bath, MI
* Develop various training sessions and materials for employees and/or facilitate attendance of third party training off-site: LCDC solicits off site training opportunities through advertisements offered on various email list-serves and technical publications.
* Provide training (or training materials) to contractors prior to conducting work for permitee: Standard contract language educates the contractor through various BMPs included as part of each particular contract. Additional credentials may be required depending on the scope of the project.

Activity #2: Structural Storm Water Control Effectiveness

* Develop a list of municipal properties and structural controls that are owned or operated by the permitee: This activity was accomplished during the submittal of our SWPPI report. These properties and structures are mapped in our GIS system.
* Develop a schedule for inspections, and O&M for all structural controls: Currently, scheduled maintenance and inspections are tracked by our internal database (Tidemark) along with our GIS system. A new, more integrated, database software package will be installed within the next year (Citiworks). This software will allow for integration between GIS and work orders. All data will be able to be accessed and manipulated through one program.
* New Facilities and SW Controls: As new facilities and/or stormwater controls are constructed or added to LCDC’s control, they are inventoried and mapped in our GIS system.

Activity #3: Waste Management from O&M

* Identify sources of waste and storage: LCDC operates a septage receiving station. The function of the station is to receive human waste products pumped from septic tanks. Livingston County abolished the land application of these wastes upon construction of this facility (5/29/07). Total gallons received can be viewed in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Septage Receiving Station Gallons Received** | | | |
|  | **2011** | **2012** | **2013** |
| January |  | 545,053 | 762,679 |
| February |  | 401,984 | 518,878 |
| March |  | 1,082,486 | 662,479 |
| April |  | 1,429,683 | 1,821,196 |
| May |  | 1,614,493 | 2,269,064 |
| June |  | 1,739,269 | 2,208,665 |
| July |  | 1,530,791 | 2,013,023 |
| August |  | 1,696,224 | 1,691,210 |
| September |  | 1,494,372 | 1,858,100 |
| October |  | 2,086,951 |  |
| November | 1,426,258 | 1,740,524 |  |
| December | 800,038 | 979,250 |  |
| **Total** | **2,226,296** | **16,341,080** | **13,805,294** |

LCDC also operates several wastewater treatment systems in Livingston County. Below is a summary table of activities for those systems during the time period covered in this report (2009-2011). A more detailed inspection report can be obtained upon request.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **2012/2013 Community Septic Systems Work Orders** | | | | |
| **Sanitary System** | **Township** | **Preventive maintenance** | **Repair** | **Emergency** | **Miss Digg Staking** |
| Deer Creek | Brighton | 18 | 2 | 10 | 10 |
| Eagle Ravine | Brighton | 16 |  | 0 | 0 |
| Greenock Hills | Green Oak | 41 | 4 | 10 | 1 |
| Highland Hills | Oceola | 16 |  | 5 | 0 |
| Long Lake Pines | Hartland | 20 |  | 11 | 10 |
| Oaks at Beach Lake | Brighton | 23 |  | 6 | 1 |
| Orchard Estates | Brighton | 28 |  | 9 | 0 |
| Portage Bay | Putnam | 18 | 1 | 7 | 7 |
| Sandy Creek | Green Oak | 34 | 6 | 7 | 2 |
| Tyrone Lake | Hartland & Tyrone | 231 | 25 | 127 | 25 |
|  |  |  |  |  |  |
| Totals |  | 445 | 38 | 192 | 56 |

* Develop procedures for proper handling and disposal of waste: Various wastes that are generated during normal O&M operations are disposed of properly and according to all applicable rules and regulations.

Activity #4: Management of Vegetated Properties owned or operated by Permitee

* Develop policy regarding soil testing and fertilizer use: LCDC uses a single landscape contractor to maintain all owned/operated properties. The standard contract language prohibits the use of fertilizers and other chemicals. A copy of the contract language can be obtained upon request.
* Use existing training materials for employees and contractors regarding storage, handling, and use of pesticides, herbicides, and fertilizers: The training provided in March 2011 (see PEP#5: Municipal Operations) specifically addressed good housekeeping on municipal properties. Additional printed and web-based resources are available to LCDC employees.
* Develop a program to minimize SW impacts from vegetated properties: LCDC uses a single landscape contractor to maintain all owned/operated properties. The standard contract language prohibits the use of fertilizers and other chemicals. A copy of the contract language can be obtained upon request.
* Certified operator: The following LCDC employees are certified industrial stormwater operators: Matt Bolang #11359, Darrin Burns #11343, and Steve Hasbrouck #11367. All expire July 1, 2016.

Activity #5: Fleet Maintenance and Storage Yard/Facilities: LCDC did not develop a SWPPP for the one property it operates that meets the definition of a fleet maintenance or storage yard facility, North Street Garage. Building is currently owned by the Livingston County Road Commission; however, LCDC does house some equipment on site and some raw material.

Activity #6: Parking Lots, Roadways, Bridges owned by permitee

* Implement BMPs to reduce pollutant discharges: LCDC does not own parking lots, roadways, or bridges, however, LCDC does clean out catch basins as appropriate in parking areas.
* Proper salt storage and management: LCDC does not store salt.
* Reduce TSS runoff from paved surfaces to the maximum extent practicable: LCDC will investigate ways to reduce any possible offload of TSS from parking areas.

**II. Water Quality Data, Assessment and Stressor Update**

Permittees within the Huron Chain of Lakes Watershed agreed to work with the HRWC to develop and conduct a water quality monitoring program to collect data and assess the water quality within the river and tributaries. There are two stormwater related TMDLs in the HCOL watershed. While the permit does not specifically require reporting on TMDLs, Permittee and watershed partners have funded monitoring to determine progress toward meeting each TMDL. This monitoring program is also used determine status and trends of water quality within the HCOL watershed affected by storm water discharges. HRWC submitted a plan for this monitoring as an appendix to SWPPIs submitted by permittees within the watershed. That plan was titled “Huron Chain of Lakes Stormwater Plan for Addressing Total

Maximum Daily Loads (TMDLs).”

Subsequently, HRWC had conducted water quality monitoring each year between April and September, beginning in 2008, with significant expansion of sites and effort in August 2010. Monitoring continued at sites throughout the watershed from April through September in 2011 and 2012. No monitoring was conducted in 2013. They will report the results of this monitoring following the inclusion of results through September. Their initial report was released in November 2011 and the 2012 results were discussed in a subsequent report. Both are linked to the WAG website at [www.hrwc.org/livingston-wag/](http://www.hrwc.org/livingston-wag/).

Much of this data analysis was also included in the evaluation of two water quality threats within the watershed. Based on this analysis and discussion with the WAG, implementation plans were developed and submitted to MDEQ for each of the following two TMDLs:

* Brighton Lake – impaired for excessive phosphorus
* Strawberry Lake – threatened by excessive phosphorus

Those plans were finalized and distributed in October 2011. The plans are posted on the WAG website at [www.hrwc.org/livingston-wag/](http://www.hrwc.org/livingston-wag/).

No additional watershed stressors beyond those listed above and others originally listed in the WMP have been identified.

[Permittees can add monitoring activities they have engaged outside of the program developed by HRWC.]

**III. Upcoming Activities and Changes**

[The permittee should make sure to address the following in this section or within previous sections:

* Upcoming activities – provide a summary of activities for the upcoming year.
* BMP or Goal Changes – describe if there are any changes
* Notice of changes in reliance on permitted drainage system operators
* Storm water drainage system changes