# Report on Public Education Plan (PEP) Progress

The PEP section of our Stormwater Management Plan was developed to promote, publicize, and facilitate watershed education in the Middle Huron watershed. Following is a summary of the progress made on PEP implementation.

[HRWC, Washtenaw County Water Resources Commissioner and the Washtenaw County Road Commission included activities for the period **September 1, 2017 to August 30, 2019**, but permittees should fill in additional progress on their own public education activities and efforts to distribute materials provided by others. Areas after each activity are provided for this purpose and are highlighted in yellow. Comments to the right are provided as additional helpful instruction for collecting needed materials and producing the report. Please delete all comments and make sure the inserted images line up with the appropriate section prior to saving your final report and submitting it to MiWaters.]

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

Individual jurisdictions distributed brochures, tip cards, posters, and other materials developed by the Huron River Watershed Council (HRWC), Southeast Michigan Council of Governments (SEMCOG) and others agencies. The materials contain information that covers required Topics 1-8.

In informational web page and tip cards directed to the public on “what you can do with” household hazardous waste, stormdrains, landscaping, pet care, lawn care and car care are available from SEMCOG. The overall campaign promotes key messages on proper use of fertilizer, car care, landscaping, stormdrain awareness, household hazardous wastes, water conservation, pet care, and riparian protection. See <https://semcog.org/protect-our-waterways>.

In 2019 the Freshwater Forum at Cranbrook, Great Lakes Water Authority (GLWA) and SEMCOG developed a “One Water” regional water resource public outreach campaign. See <https://semcog.org/mionewater>. Goals included fostering stewardship, encouraging citizens to adopt best practices to protect water resources and infrastructure at the household level, and supporting long-term investments in water. The project produced and coordinated messaging and delivery of outreach materials for use by SEMCOG’s members and Partners for Clean Water, GLWA customers, and other interested groups. Educational messages were also rolled out at a regional level simultaneously through social media, websites, videos, radio, TV, outdoor advertising, and print-based methods. Primary campaign topics included water resources in the Great Lakes: drinking water, wastewater, stormwater, and natural resources that are connected to water resource priorities.

HRWC’s public outreach content which includes tips, resources and printable fact sheets and brochures on preventing water pollution is located at <https://www.hrwc.org/take-action/at-home/> on the following topics: lawn and garden, household and pet waste, water efficiency and conservation, driveways and walkways, and riverfront and lake shore properties. These and additional materials are also provided to permittees participating in the Middle Huron Partnership in an online project collaboration tool (Trello).

### **Pittsfield Charter Township**

Pittsfield Charter Township continues to strive for compliance with the Public Education portion of the approved Stormwater Management Plan. Minutes of the public meetings of the Stormwater Management Committee are available at the Township website, [http:/www.pittsfield-mi.gov,](http://www.pittsfield-mi.gov/) the *Legal Noti ces* section for interested residents or businesses.

SEMCOG "What You Can Do: brochures, Pittsfield Charter Township's promoting After the Storm Stormwater Management brochure, Native Landscaping brochure and Huron River Watershed Materials are distributed at the Township Administration Building. Please refer to the Stormwater Management Plan for additional information that addresses proposed public education implementation of best management practices via Township website.

**Activity #2: Community Watershed Calendar**



During the reporting period HRWC and participating communities produced, printed, and distributed 2018 Watershed Community Calendars presenting a full year of monthly informational pollution prevention tips targeted to homeowners in a single piece. A 2020 calendar is in production for distribution starting in October 2019. The tips and provided resources are 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, stormdrain awareness and general watershed education.

Participating communities distributed calendars in the fall to residents either by direct mail, at customer service counters and local venues or through other means. HRWC provided communities with the following actual quantities for the 2018 calendar and estimated (at the time of reporting, August 30, 2019) quantities for the 2020 calendar:

|  |  |  |
| --- | --- | --- |
| **Community** | **2018 Qty (actual)** | **2020 Qty (estimated)** |
| City of Brighton | 500 | 100 |
| Ann Arbor Charter Township | N/A | 844 |
| Ann Arbor Public Schools | 500 | 1300 |
| Barton Hills Village | 150 | 150 |
| City of Ann Arbor\* | 21,638 | 21,638 |
| City of Belleville | N/A | 119 |
| City of Chelsea | N/A | 973 |
| City of Dexter\* | 1800 | 2357 |
| City of Wixom | 200 | 200 |
| City of Ypsilanti | 500 | 500 |
| Eastern Michigan University | 1500 | 1000 |
| Green Oak Township\* | 767 | 750 |
| Hamburg Township | 200 | 200 |
| Huron River Watershed Council\* | 3,130 | 2808 |
| Livingston County Drain Commission | 700 | 700 |
| Livingston County Road Commission | 200 | 200 |
| Marion Township | 250 | 250 |
| Pittsfield Charter Township | 500 | 681 |
| Scio Township | N/A | 2237 |
| Superior Charter Township | N/A | 1000 |
| University of Michigan - EHS | 300 | 300 |
| Washtenaw County Road Commission | 300 | 1000 |
| Washtenaw County Water Resources Commissioner\* | 465 | 600 |
| Ypsilanti Charter Township | 2500 | 2174 |
| VA Ann Arbor Health Care System  | N/A | 119 |
| Village of Pinckney | 900 | 900 |
|   |   |   |
|  TOTAL | 37000 | 43000 |

\*Direct mailed all or part

Quantities in red, orders not yet confirmed for 2020, likely to change before report submission.

N/A, community did not order/receive/participate

HRWC distributed calendars through direct mail, at key organizational events and in person, promoting it through HRWC’s printed newsletter (direct mailed to 2,000 recipients), marketing emails (7,000+ recipients), home page blog (9,000 monthly average unique page views), and social media announcements on Facebook and Twitter.

### **Pittsfield Charter Township**

From September 2015 through August 2017, over 500 Calendars were distributed by Pittsfield Charter Township. The calendars were available at the Administration and Parks & Recreation offices and distributed at events for the general public.

**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 and were made available for community use on [www.hrwc.org](http://www.hrwc.org) until January 2019 when they transitioned to an online project collaboration tool (Trello) with access provided to participating Middle Huron Partners.

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

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

* Website-www.hrwc.org (115,000+ sessions with 331,000+ page views overall during the reporting period with 85% new visitors)
* Facebook-HuronRiver (growth from 2,600+ to 3,300+ page likes during the reporting period). Instagram-HuronRiver (600+ followers). Twitter-@hrwc (775+ followers).
* Monthly e-mail newsletter (7,000 average monthly contacts with an average open rate of 22%).
* 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 homeowner pollution prevention tips web pages at [www.hrwc.org/take-action/at-home](http://www.hrwc.org/take-action/at-home) had the following results over the reporting period: 5,500+ total page views with 2,600+ total unique page views. The content on these pages is available for permittees to publish and distribute in their own communications channels. Page views during the reporting period included the following popular topics:

* [www.hrwc.org/take-action/at-home/household-pet-waste](http://www.hrwc.org/take-action/at-home/household-pet-waste), 12.56% of total page views.
* [www.hrwc.org/take-action/at-home/lawn-garden](http://www.hrwc.org/take-action/at-home/lawn-garden), 31.75% of total page views.
* [www.hrwc.org/take-action/at-home/riverfront-lakeshore-properties,](http://www.hrwc.org/take-action/at-home/riverfront-lakeshore-properties%2C) 9.85% of total page views
* [www.hrwc.org/take-action/at-home/tips-for-your-tap](http://www.hrwc.org/take-action/at-home/tips-for-your-tap), 8.81% of total page views.
* [www.hrwc.org/take-action/at-home/driveway-and-walkways](http://www.hrwc.org/take-action/at-home/dirveway-and-walkways), 6.58% of total page views going to that tips page.

### **Pittsfield Charter Township**

The *homepage* of the Township website, http:/www.pitts field -mi.gov. was updated regularly with the following seasonal in formation for residents and local businesses:

|  |  |
| --- | --- |
| **Public Education/ Seminar Announcement** | **Date** |
| Maintaining Your Detention Pond | July 6, 2015 - September 30. 2015 |
| Fats, Oil & Grease Brochure | October 3, 2015 - November 12, 2015 |
| Prevent Stormwater Pollution in Winter | November, 2015 - December 15, 2015 |
| Snow Storage and Disposal Techniques | January - March 29. 2016 |
| After the Storm - A Citizen's Guide to Understanding Stormwater Mana event |  April - June, 2016 |
| Please Pick Up Pet Waste In Your Yard | July - September 2016 |
| Where Are You Doing You Leaves This Fall? Leaves vrs Rake |  October 22, 2016 - October 31, 2016 |
| Main tainting Your Septic System | November - December 2016 |
| Help Prevent Stormwater Pollution This Winter |  January - March, 2017 |
| After the Storm - A citizen's Guide toUnderstanding!; Stormwater Management |  April - June, 2017 |
| Pittsfield Lawn Fertilizer Ordinance | July 5, 2017 - July 28, 2017 |
| Stormwater Management Seminar | August 21, 2017 - August 29, 2017 |
| Have a Green Lawn and Comply With the Law | August 30, 2017 - September 2017 |

**Activity #4: Local Newspaper and Web Advertisements**

HRWC provides communities with a 6 month week-by-week social media campaign of digital graphics, cut-and-paste ready text, hashtags, links and stormwater pollution prevention posts for Facebook, Twitter and Instagram as follows: May-Pet Waste, June-Lawn Care, July-Native Plants, August-Septic System, September-Home Toxics, October-Stormdrains.

Ads resemble and reinforce the Watershed Community Calendar messaging, using the hashtag #h2ohero and promoting the dedicated campaign web site, [www.hrwc.org/h2oheroes](http://www.hrwc.org/h2oheroes) which is directed to HRWC’s homeowner focused pollution prevention content and contains detailed information and additional resources.

12 months of h2o hero themed print ad materials are also available for community use.

Additionally, in 2018 HRWC produced “Testing the Waters of the Huron River,” a micro-documentary featuring HRWC’s volunteer Chemistry and Flow Monitoring Program. This short video highlights the Huron River Watershed Council (HRWC)'s extensive volunteer program to test and monitor the water chemistry and flow of the Huron River system and the waterways of the Downriver area. The data, which is collected throughout the year from dozens of sites, informs effective programs and policies to improve, protect and restore clean water. What makes the program successful is the significant efforts of volunteers, the important partnerships with government and educational organizations, and the team's innovative use of technology. <https://youtu.be/gdkKe-dKQag>. The video was distributed through a paid social media advertising campaign on Facebook that resulted in reaching 3,982 people resulting in 106 reactions, comments and shares. It has been viewed over 600 times during the reporting period.

**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:

* Chemistry and Flow Monitoring volunteer trainings, March and June 2018, 2019
* Changemaker Boot Camps volunteer trainings, January and February 2018, 2019
* Educator Trainings, March, 2018, 2019
* Volunteer Data Sharing, January 2018, March 2019
* Sectional River Clean-ups, Summer 2018, 2019
* River Round-Up, April and October, 2018, 2019
* Stonefly Search, January, 2018, 2019
* Malletts Creek, Millers Creek, and Fleming Creek Subwatershed Advisory Group meetings, monthly to quarterly, 2018, 2019
* HRWC Annual Meeting, April 2018, March 2019
* Suds on the River, September 2017, 2018
* Pittsfield Township Home Owners’ Workshop, September 2017
* Green Infrastructure Workshop, Putnam Twp, September 2017
* Green Infrastructure Workshop, Chelsea, Lima and Sylvan Township, May 2018
* Single Fly Fishing Tournament, July 2018
* Swift Run Rain Garden Planting Days and Stakeholder Meetings, August 2018
* Community Meetings on PFAS and the Huron River, September 2018, October 2018, December 2018, January 2019, July 2019, August 2019
* River Givers Community Celebration, March 2019
* Protecting Your Inland Lake: A Guide to Lake Stewardship Workshop, April 2019
* MSU Water School, May 2019
* How to Protect Land Workshop, June 2019
* Whole Farms for Clean Water Lunch & Learn, August 2019

Master Rain Gardeners are trained to design and build rain gardens, and to serve as neighborhood educators. Each year, the County hosts two certification classes, one online, and one in-person. [www.MasterRainGardener.org](http://www.masterraingardener.org/) The Washtenaw County Master Rain Gardener certification classes were offered:

Online Webinars (5-class series)

July 2018, July 2019

In-person Classes (5-class series)

January 2018, January 2019

Please see additional detail under Activity 20 – Residential Rain Garden Program.

**Activity #6: Promote and Support Volunteer Stream Monitoring**

Each year, 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 (“biomonitoring”) measures the aquatic invertebrate community.

In biomonitoring 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 which leads to inquiry about the causes of stream deterioration, the conditions of their local stream, and possible solutions. HRWC attempts to visit 40 locations per event (3x per year), which our volunteers have been able to keep up with. In 2016 and 2017 we collected 221 samples at 68 unique locations; In 2018 and 2019 (though April only), we have collected 169 samples at 64 unique locations.

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 interns measure the physical conditions of streams. They learn to “read a river” by studying the conditions that affect the ecological health of the sites. Interns are local college students that are aiming to become professionals in environmental and/or field work. These outings give them the basics to start those careers. In the summer of 2019 summer interns collected geomorphological data, which will support the redevelopment of the Middle Huron Master Plan, and they helped collect and process water samples for microplastics, a newly emerging contaminant in our watershed.

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 150 routinely participating in each event. HRWC has successfully drawn volunteers from throughout the watershed. Over 2014 and 2015 we have focused recruitment in the Trail Towns (Huron River Water Trail) (Milford, Dexter, Ann Arbor, Ypsilanti, and Flat Rock). While recruitment from these municipalities is slowly growing, the increased outreach, along with other Trail Town activities, have garnered numerous additional new partnerships and overall public awareness.

Additionally, HRWC operates a Chemistry and Flow 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 document named Section 8 – WQ Report.docx.

### **Pittsfield Charter Township**

Pittsfield Charter Township continually promotes **HRWC** Rain Barrel Sale and the Adopt-a­ Stream stonefly identification and count.

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

Adopt-A-Stormdrain Program. Stormdrain awareness is a priority for public education efforts of stormwater phase I and II regulated communities. Historically, many communities have labeled and marked stormdrains with language that explains that they go directly to the local surface waters. This effort was usually combined with the distribution of door hangers that provided more detailed information about stormwater, non-point source pollution and the proper disposal of motor oil, grass clippings, pet waste, and other pollutants. With many of the urban stormdrains now labeled/marked, the effort has shifted to maintenance by local street or public works staff.

In 2010 the Middle Huron Stormwater Advisory Group members began development of an Adopt-A-Stormdrain program for key areas of Washtenaw County. The program is designed to recruit public and private partners to take sustained action to keep stormdrains labeled, clear and clean by working with a committed group of individuals. These volunteers also report problems to the local governments and serve as the neighborhood advocates and educators.

HRWC developed the program format and structure, creating waivers, intake and reporting forms, instructions and tips, etc. See [www.hrwc.org/our-work/programs/adoptastormdrain/](http://www.hrwc.org/our-work/programs/adoptastormdrain/). Volunteers participated in the program by clearing debris from and applying new “Dump No Waste, Drains to River” markers to stormdrains and distributing informational door hangers to nearby neighborhood residences.

In 2018, we focused this program in Ypsilanti and Dexter, successfully deploying door hangers and stormdrain labels to nearly 100% of both communities through the use of summer intern assistance. We were also able to cover some areas of Ann Arbor that have had very low resident adoption, most notably the Huron Hills neighborhood.

In 2019 we were able to partner with the Ann Arbor Public Schools to get stormdrains labeled on all of the school properties.

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

The Washtenaw County Environmental Reporting Line (734-222-3800) is in operation during business hours (Monday-Friday, 8:30 to 5:00) and staffed by the Washtenaw County Environmental Health Division. Emergencies are directed to 9-1-1. In addition, online reporting of non-emergency issues is available 24/7 at <https://washtenaw.org/196/Report-an-Issue>.

Information promoting the Environmental Reporting Line is distributed at the Western Service Center and is available from the Water Resources Commissioner’s Office, upon request, for use at municipal offices, events, etc.

**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 soil testing program transitioned to a web-based mail in program run by MSU Extension 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.

HRWC promotes the “go phosphorus free” messaging to the public as part of healthy lawn and garden practices in the Watershed Community Calendar (Activity #2), Information in Community Newsletters and on Websites (Activity #3), and Local Newspaper and Web Advertisements (Activity #4).

During the reporting period a total of 1,747 pageviews were recorded on HRWC’s lawn and garden landing page [www.hrwc.org/take-action/at-home/lawn-garden](http://www.hrwc.org/take-action/at-home/lawn-garden), where fertilizer information and soil testing is promoted as a topic [www.hrwc.org/take-action/at-home/lawn-garden/#fertilize-phosphorus-free](http://www.hrwc.org/take-action/at-home/lawn-garden/#fertilize-phosphorus-free)

### **Pittsfield Charter Township**

Pittsfield Charter Township active l y promotes the use of soil testing through announcements on the homepage of its website, http:/www.piusfield-mi.go v, including Pittsfield's Lawn Fertilizer Ordinance (in effect for 8 years) and a State Law that prohibits applying fertilizer containing phosphorus that took effect January 1, 2012 .

Pittsfield Charter Township continues to utilize a Fertilizer Application Registration form to track the sales and application of fertilizer. Those selling and applying fertilizer must register annually with Pittsfield Charter Township.

**Activity #10: Riparian Land Management Brochures**

In 2014 HRWC produced a 12-page booklet, “Waterfront Wisdom, 7 tips for creating and maintaining a beautiful and healthy waterfront,” an updated adaptation of a booklet designed by Environmental Consulting & Technology and published by the Oakland County Water Resources Commissioner. A series of tips web pages have also been posted with information and resources for shoreline property owners on shoreline buffers, aquatic invasive species, preventing soil erosion, and benefits of keeping boats clean. See, <http://www.hrwc.org/take-action/waterfront-wise/>

These materials were developed and printed for the outreach requirements of the Portage Creek Implementation Project funded in part through the Michigan Nonpoint Source Program by the US Environmental Protection Agency under the Clean Water Act, assistance agreement C995474-12.

HRWC and participating communities printed an additional 2,400 booklets (not funded by the Michigan Nonpoint Source Program) for distribution to riparian landowners outside of the Portage Creek project area.

In December 2015 the Livingston Watershed Advisory Group also printed and direct mailed 2,390 booklets along with a short evaluative survey to owners of residential parcels on lakes in the Huron River Watershed greater than 10 acres.

During the reporting period 250 print booklets were distributed in person directly to watershed residents through outreach at several local and regional fairs and community events (see Activity #12) such as the Home, Garden & Lifestyle Show, Dexter Days, South Lyon Nature Fest and at regional water protection workshops (see Activity #5) such as Change Makers, January and February 2018, 2019; Protecting Your Inland Lake: A Guide to Lake Stewardship Workshop, April 2019; and MSU Water School, May 2019.

### **Pittsfield Charter Township**

The Township has developed a Natural Lawn Ordinance, No. 298 and a Natural Lawn Application for homeowners. At the biennial Stormwater Maintenance Education Seminar, we discuss the riparian lands with our Township residents. We have developed educational materials including a Natural Lawn brochure and Native Landscaping brochure and also provide the Washtenaw County's Maintaining Your Detention Ponds brochure.

**Activity #11: Stream and River Crossing Road Signs**

Through a partnership with the Washtenaw County Water Resources Commissioner’s Office, Washtenaw County Road Commission and local governments, 59 stream crossing signs were previously designed, produced and installed in highly traveled Phase II County road rights-of-way areas to promote watershed awareness to residents and visitors.

During this reporting period the Washtenaw County Road Commission installed 6 “Protect Our Streams & Rivers” signs and 38 stream/drain name signs.

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

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

* Fly Fishing Film Tour (February 2018, 2019)
* Home, Garden & Lifestyle Show, Washtenaw County (March 2018, 2019)
* River Givers Celebration (March 2018)
* Earth Days: Ann Arbor, Washtenaw Community College and Brighton (April 2018, 2019)
* Ann Arbor Mayor’s Green Fair (June 2018, 2019)
* Huron River Day (May 2018, 2019)
* Dexter Daze (August 2018, 2019)
* University of Michigan EarthFest (September 2017, 2018)
* Ypsilanti Fall River Day (September 2017, 2018)
* Suds on the River (September 2017, 2018)
* Ann Arbor Water Treatment Plant Open House (May 2018, 2019)
* Ann Arbor Wastewater Treatment Plant Open House (October 2018)
* African American Festival (July 2019)
* Washtenaw Conservation District Native Plant Sale (June 2019)

At the 2018 and 2019 Ann Arbor Earth Day Festivals in April, HRWC hosted a stream monitoring demonstration and watershed education booth for children and families. Volunteers collected benthic macroinvertebrates and guided festival attendees through table-top observation and identification. In 2018 300+ children and parents participated during the 4-hour festival with help from six students with Skyline High School’s Environmental Club who were trained offsite by a volunteer leader from HRWC’s streamside education program. In 2018 HRWC distributed 250 donated red maple and sugar maple seedlings for planting. HRWC also distributed watershed education, tree planting and benefits, volunteer stewardship and stormwater pollution prevention materials.

In 2018 and 2019 in March HRWC partnered with the Washtenaw County Water Resources Commissioner’s Office, to host a booth at the Washtenaw Home, Garden & Lifestyle Show. Both years, the booth featured native plants and rain garden displays and information, Waterfront Wisdom and riparian information were highlighted. Experts in sustainable landscaping and rain gardens (Susan Bryan and Catie Wytychek, WCWRC, 2018, 2019) were on hand to promote and advise homeowners on best practices. Susan gave a homeowner presentation on tackling stormwater runoff using rain gardens (2018, 2019). Leading up to Home, Garden & Lifestyle in 2019, WCWRC and HRWC appeared as guests to present “Rain Gardens 101” on the Lucy Ann Lance “Around the Home” show, 1290 WLBY in February.

In 2018 and 2019 at Ann Arbor’s Huron River Day in July HRWC hosted a stream-monitoring demonstration and watershed education booth for children and families. Participants from HRWC’s volunteer stream monitoring program were on hand to show and tell macro-invertebrate indicator species, demonstrate monitoring equipment and recruit volunteers for HRWC’s volunteer programs. Participating communities from the Middle Huron also sponsored a stream simulation table educational exhibit from the University of Michigan’s Museum of Natural History. The activity provided children hands-on opportunities to explore how water flows, erosion, effects of flooding, the consequences of human activities on water quality, and much more.

### **Pittsfield Charter Township**

The Public Safety Community Coordinator meets periodically with property owner Associations to discuss local resources. The Community Coordinator provides "Ours to Protect" brochures at all meetings he presents at.

**Activity # 13: Community Partners for Clean Streams**



The Community Partners for Clean Streams (CPCS) program is a voluntary, cooperative effort between the Washtenaw County Water Resources Commissioner’s Office and Washtenaw County businesses, institutional landowners and multi-family residential complexes. The goal of the program is to help identify practical, cost-effective ways to protect Washtenaw County waterways through pollution prevention. CPCS is a cost-free initiative that provides information, technical advice and recognition to participants. There are currently over 130 partners in the program. For additional information visit: [www.washtenaw.org/](http://www.washtenaw.org/)e2p2.

### **Pittsfield Charter Township**

Pittsfield Charter Township is a member of the Community Partners for Clean Streams program and also completed voluntary Pollution Prevention Inspection inspections al all facilities.

In April 2017, the Township's Board of Trustees adopted Ordinance No. 325, Pavement Sealant Ordinance, to prohibit the use and sale of pavement sealant products containing 0.1% Polycyclic Aromatic Hydrocarbons **(PAHS)** by weight, including coal tar-based sealer in Pittsfield Charter Township in order to protect, restore, and preserve the quality of its waters and protect the health of its residents. We will utilize a Pavement Sealant Registration form to track the sales and application of sealants. Those selling and applying sealants must register annually with Pittsfield Charter Township.

**Activity #14: Pollution Prevention Inspections**

Washtenaw County Pollution Prevention (P2) Inspections review chemical storage/handling practices, look for illicit connections, ensure compliance with relevant federal, state and local laws and provide a report and technical assistance where remediation is necessary. During the reporting period, 521 inspections were conducted by the Washtenaw County Environmental Health Division. See <https://www.washtenaw.org/1573/Pollution-Prevention>.

**Activity #15: Green Media**

In collaboration with local partners (City of Ann Arbor, Eastern Michigan University), Washtenaw County uses the website www.washtenaw.org to bring environmental education to the public in a variety of forms. Information is distributed via newspaper articles, award-winning informational videos, television shows, and weekly radio programs. The Green *Media* website was developed to serve as a single resource for the County’s educational outreach efforts. <https://www.washtenaw.org/375/Green-Media>.

*“Issues of the Environment” Radio Show (WEMU – 89.1 FM)*

The *Issues in the Environment* is a weekly radio program hosted by David Fair on WEMU, sponsored by the Washtenaw County Public Works Division and the Water Resources Commissioner’s Office. 114 shows aired during the reporting period. Examples of the water quality related topics include: *Water Is Not Only Source Of PFAS*, *Expanding Lake Protections In The Huron River Watershed, Climate Change To Cause More Flooding In The Great Lakes Region, Mitigating Phosphorus Levels In Area Lakes And In The Huron River, Past And Future Impacts Of The Great Lakes Restoration Initiative, The Huron River, PFAS Contamination, And You, Ann Arbor Moves Forward In Addressing PFAS Chemicals In Drinking Water, Michigan Shoreline Stewards Program Protects Inland Lakes*, and many others*.* A complete listing of program topics can be found online at <https://www.washtenaw.org/340/Issues-of-the-Environment---Radio> including past interviews.

*The Green Room* is a collaboration between the City of Ann Arbor's [Community Television Network (CTN)](https://a2ctn.viebit.com/), the Washtenaw County Public Works Division and the Water Resources Commissioner’s Office. 23 television shows aired during the reporting period. Airing of each new episode begins on Channel 19, and continues to air throughout the month, typically 4-6 times per week. The show is also available for streaming online from the CTN webpages and/or YouTube. The show is produced by Barbara Lucas and Tim Nagae. Highlights of topics covered included: *Climate change, PFAS, Water Quality Plan for SE Michigan, Benefits of Trees, Proper Septic System maintenance and Smart Water*. Through her work with the County, Barbara also co-produces a monthly *Green Room* [radio show](https://www.washtenaw.org/363/Radio-Show) with [WEMU 89.1FM](http://wemu.org/programs/green-room)'s David Fair. 21 radio shows aired during the reporting period. A variety of topics were covered during the reporting period, including: *Pipelines* (5-part Series), *Urban Living Density, Climate Change, and PFAS .* A complete listing of episodes and the topics covered can be found online. See:

The Green Room TV: <https://www.washtenaw.org/365/TV-Show---The-Green-Room>.

The Green Room Radio: <https://www.washtenaw.org/363/18831/Radio-Show>

Additionally, a variety of environmental video projects have been produced by the Washtenaw County Environmental Health Division. Videos such as *Water Quality: It’s in our Hands, Septic Systems and Water Quality,* and *Safe Disposal of Medications* are posted on the Washtenaw County website and can be viewed anytime: <https://www.washtenaw.org/2373/Video-Resources>.

**Activity #16: Environmental Excellence Awards**

The Environmental Excellence Awards were held in March 2018 & March 2019. Winners were selected to receive an award in the following categories: Water Quality Protection, Waste Reduction & Recycling, and Pollution Prevention. The Overall Environmental Excellence winner excels and participates in the Washtenaw County Community Partners for Clean Streams, WasteKnot and Pollution Prevention (if applicable) programs. Award winners in all three categories plus the overall winner, are provided in Table 1 below. Advertisement(s), press releases and website postings are used to recognize awards winners. See <https://www.washtenaw.org/415/Awards>.

*Table 1: Environmental Excellence Winners for 2018-2019*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Overall Winner* | *Water Quality Protection* | *Waste Reduction & Recycling* | *Pollution Prevention* |
| 2018 | **Laura Rubin – HRWC (Leadership Excellence)** | **USGS Great Lakes Science Center** | **Food Gatherers** | **Pollard Banknote Limited** |
| 2019 | **Ann Arbor YMCA** | **Thurston Nature Center** | **Western Washtenaw Recycling Authority** | **O & W, Inc.** |

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

The Community Partners for Clean Streams program highlights proper disposal of fats, oils and grease (FOG) in the Series 9 document. Food service educational materials are available to educate restaurants about FOG disposal and clean-up procedures. These packages include CPCS Series 9, a FOG brochure, and a FOG hauler listing. Customers are primarily directed to the electronic information rather than providing physical documents. Additionally, there have been 408 pageviews to the FOG Information on the County website:

[https://www.washtenaw.org/838/Fats-Oils-Grease &](https://www.washtenaw.org/838/Fats-Oils-Grease%20%26) <https://washtenaw.org/1567/Fats-Oils-Grease-FOG>) during the reporting period.

### **Pittsfield Charter Township**

Pittsfield Charter Township has prepared website materials that provide information about best management practices to local businesses and residents. Annually, Pittsfield Charter Township provides secure document shredding service free of charge to local residents. The most recent event was September 24, 2016 where Pittsfield shredded 6,980 pounds A total of 15,329 pounds were shredded and recycled in 2016. In-house, Pittsfield Township shredded 4,600 pounds during the January - August, 2017 period.

The Fats, Oils and Grease Seminar, scheduled for November 12, 2015 was cancelled due to a lack of response. A total of 432 invitations were mailed out.

**Activity #18: River Safe Homes Program**

The River Safe Homes Program began in 2007 and continues to offer Washtenaw County residents (<https://www.washtenaw.org/riversafe>), user-friendly water quality protection information online that is geared to homeowners. Participants take an online survey to assess how the pollution prevention activities they already do and pledge to do can protect and improve water quality around their homes. The topics covered in the survey include:

* Lawn Care
* Car Care
* Proper Pet Waste Disposal
* Household Hazardous Waste Disposal



Upon satisfactory completion of the survey, participants receive a “RiverSafe Home” logo (window cling) that may be displayed at their home. The purpose of the logo is to inform visitors about the water quality protection activities and commitment made by the homeowners who live there. A hard copy RiverSafe Home booklet and survey are also available for residents who do not have internet access.

During the reporting period, over 280 RiverSafe Home surveys were completed. The City of Ann Arbor continues to partner with the WCWRC’s Office to promote RiverSafe Homes within the City by offering a Residential Stormwater Credit program. See <http://bit.ly/rshresidentcredit> for details.

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

HRWC regularly publishes articles in its quarterly newsletter the Huron River Report (circulation 2,200) that feature issues related to E. coli and phosphorus TMDLs. Articles related to these topics during the reporting period included the following:

* Green Infrastructure Takes Root! HRWC completes construction of new projects to improve creeksheds (Summer 2019)
* Lake Monitoring Expands in the ‘Shed, Volunteers capture data on 24 lakes in 2018 (Summer 2019)
* Ford and Belleville TMDL Update, MDEQ to redevelop lakes pollution policy (Spring 2019)
* Taking the Pulse of the River, A partnership develops a remote watershed sensor network (Fall 2018)
* Safe Swimming in the Huron River, Stay healthy by deciding when and where to jump in (Summer 2018)
* Digging into Lakes, HRWC investigates harmful algal blooms in Brighton and Ore lakes (Spring 2018)
* Breathing Life Back into Norton Creek, Partners work to restore an impaired tributary (Spring 2018)
* New Rain Gardens in Swift Run! Green infrastructure to improve neighborhood creek and the Huron (Summer 2017)

Related blog posts at <https://www.hrwc.org/blog/> include:

* <https://www.hrwc.org/late-harmful-algae-blooms-hit-shed/>, October 10, 2018
* <https://www.hrwc.org/chemistry-flow-monitoring-program-wraps-up-2018-season/>, October 19, 2018
* <https://www.hrwc.org/what-does-it-take-to-test-the-waters-of-the-huron-river/>, October 22, 2019
* <https://www.hrwc.org/get-your-feet-wet-with-the-chemistry-and-flow-monitoring-program/>, March 7, 2019
* <https://www.hrwc.org/hrwc-launches-whole-farms-for-clean-water/>, August 19, 2019

### **Pittsfield Charter Township**

Pittsfield Charter Township actively promotes the use of soil testing through announcements on the homepage of its website, [http:/www.pittsfield-mi.gov,](http://www.pittsfield-mi.gov/) including Pittsfield's Lawn Fertilizer Ordinance (in effect for 8 years) and a new State Law that prohibits applying fertilizer containing phosphorus that took effect January 1, 2012.

Pittsfield Charter Township continues to utilize a Fertilizer Application Registration form to track the sales and application of fertilizer. Those selling and applying fertilizer must register annually with Pittsfield Charter Township.

In April 2017, Pittsfield Charter Township adopted Ordinance No. 325, Pavement Sealant Ordinance, to prohibit the use and sale of pavement sealant products containing 0.1% Polycyclic Aromatic Hydrocarbons (PAHS) by weight, including coal tar-based sealer in Pittsfield Charter Township in order to protect, restore, and preserve the quality of its waters and protect the health of its residents. We will utilize a Pavement Sealant Registration form to track the sales and application of sealants. Those selling and applying sealants must register annually with Pittsfield Charter Township.

**Activity #20: Residential Rain Garden Program**

Since 2005 rain gardens have been designed and installed at residential, church, and institutional properties through the Residential Rain Garden Program. The project was initiated as a Clean Water Act 319 grant but has since been funded by both the County and the City of Ann Arbor and periodically by a grant from the Michigan Department of Environment, Great Lakes & Energy (formerly MDEQ).

Washtenaw County is also partnering with the City of Ann Arbor to maintain public rain gardens. Work days are hosted and volunteers are recruited to maintain public rain gardens. See volunteer hours below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2017 | 2018 | 2019 (through June) | Total  |
| Rain Gardens Installed | 78 | 59 | 0 | 137 |
| Master Rain Gardeners Trained | 159 | 99 | 42 | 300 |
| Volunteer Hours in Public Rain Gardens | 1,142 | 1,320 | 306 | 2,768 |

**Activity #21: Washtenaw County Home Toxics Reduction Program**

*County Household Hazardous Waste Collection Events*

The Washtenaw County Home Toxics Reduction Program has a permanent facility at 705 N. Zeeb Road that accepts household hazardous waste from the citizens of Washtenaw County. Examples of the household hazardous waste (HHW) materials that are accepted include: paints, aerosols, cleaners, motor oil, cooking oils (vegetable, canola, olive, etc.), pesticides, herbicides, fertilizers, paint thinner, solvents, varnishes, wood preservatives, mercury, fluorescent light bulbs, and home repair products. A complete listing of the acceptable and non-acceptable items can be found on our website at <https://washtenaw.org/287/Home-Toxics-Paint-Oil-Pesticides-more>.

Collection facility hours of operation take place the first 3 Saturdays of the month from 9:00 am until noon beginning in April and ending in November. Collection during the winter months (December-March) is available by appointment. Appointments are also scheduled year-round for those citizens unable to use the facility during regularly scheduled collection days. The Home Toxics Reduction Program household hazardous waste statistics for the reporting period were:

*Table 3: Household Hazardous Waste (HHW) Collection Event Data*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2017** | **2018** | **2019 (Jan-Jun)** | **Totals** |
| Number of Participants | 4,220 | 4,762 | 1,939 | **10,921 participants** |
| Household Hazardous Waste (pounds) | 203,409 | 504,942 | 168,240 | **876,591 pounds HHW** |

In addition to the Saturday collection events, Clean-up Days to collect Household Hazardous Waste (HHW) were held in cooperation with the Washtenaw County Solid Waste Division, and local municipalities and universities. Eight (8) collection days were held in 2017-2018 at the following locations: EMU/Ypsilanti (2), Chelsea (2), Northfield Township (2), and Saline (2).

*Table 2: Clean-Up Day Collection Event Data*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2017** | **2018** | **Totals** |
| Number of Vehicles served | 2,290 | 2,666 | **4,956 vehicles** |
| Pounds of Waste Collected | 406,575 | 630,081 | **1,036,656 pounds**  |

Additional information on HHW collected is available in the Washtenaw County Solid Waste Program Annual Reports.

2017: <http://bit.ly/solidwastereport2017>

2018: <http://bit.ly/solidwastereport2018>

*Waste Knot Program*

The Waste Knot Program works to develop relationships within the Washtenaw County business community to increase waste reduction and recycling activities. The program provides community-wide recognition and organization-based technical assistance along with value-added education to organizations that exhibit leadership in waste reduction and recycling or to organizations that desire to become leaders in waste reduction and recycling. Currently there are over 320 businesses participating in the program.

For more information, please visit the Waste Knot Program website at <https://www.washtenaw.org/e2p2>.

### **Pittsfield Charter Township**

*Pittsfield Township Cleanup Voucher Program*

In 2013 Pittsfield Charter Township exchanged the annual Clean-up Day for a clean- up voucher program in order for recycling to be more convenient for residents. Each household in Pittsfield Charter Township is eligible to receive one clean- up voucher per year, good for dropping off recyclables at Recycle Ann Arbor, free of charge. Listed below are the current statistics of what have been recycled through the voucher program from January - December 2016 and January ­ August 2017.

Clean-up Voucher Data from January -December 2016 & January-August 2017

|  |  |  |
| --- | --- | --- |
|  | 2016 | Jan-Au g 2017 |
| Number of Vouchers Used | 294 | 178 |
| Tires | 38 | 27 |
| Mixed Electronics | 22 | 8 |
| Monitors | 33 | 7 |
| Sm, Med, Large Electronics | 181 | 86 |
| TV Inches | 2481 | 1231 |
| Fluorescent, CFL Bulbs | 163 | 45 |
| Propane Tanks | 7 | 4 |
| Freon | 16 | 10 |
| Sofas | 21 | 12 |
| Motor Oil (gal) | 44 | 19 |
| Other Fluids (gal) | 9 | 7 |
| Mattresses | 44 | 19 |
| General Waste (cubic ya rd) | 272 | 167 |
| Yard Waste | 37 | 11 |

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

The Medicine Take-Back Program currently consists of twelve (12) participating pharmacies and eight (8) Big Red Barrel locations at Police & Sheriff locations that serve as collection points for the general public to take unused, expired or unwanted medicines for safe disposal.

|  |  |
| --- | --- |
| **Medicine Take-Back (medication + sharps)** | **Pounds** |
| 2017  | **3,973** |
| 2018 | **4,063** |
| **Total pounds** | **8,036** |

The County’s website [www.dontflushdrugs.com](http://www.dontflushdrugs.com/) includes disposal locations and information on:

* Pharmaceutical Take-Back Program
* Mail-In Programs
* Big Red Barrel Program
* Locations Around Michigan
* Medication and Personal Care Product Disposal Guidelines (including our 4-min. video on proper disposal)

### **Pittsfield Charter Township**

Pittsfield Charter Township cooperatively provides available information from the Washtenaw County Water Resources Commissioner's office about the proper disposal of personal care and prescription drugs.