# Report on Public Education Plan (PEP) Progress

The PEP section 4 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.

The Huron River Watershed Council, Washtenaw County Water Resources Commissioner and the Washtenaw County Road Commission included information covering collaborative activities for the period **July 1, 2019 to June 30, 2021 (unless otherwise noted).**

[Instructions: Permittees should fill in additional progress on their own public education activities and efforts to distribute materials provided by others. Yellow highlighted areas after each activity are provided for this purpose. There is additional instruction for collecting needed materials and producing the report.

Please remove the highlighting and instructions 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 other 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, storm drains, 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, storm drain 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. The campaign was updated in 2020 and 2021.

SEMCOG’s 2019-20 and 2020-21 Southeast Michigan Partners for Clean Water Annual Reports are available here: <https://semcog.org/stormwater>.

HRWC’s public outreach content (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: landscaping (native plants, trees and rain gardens) lawn and garden (fertilizing, lawn care, fall leaf cleanup), 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).

In 2021 HRWC published an educational [Huron River Watershed Map Poster](https://www.hrwc.org/wp-content/uploads/HRWC-Watershed-Map-poster-2021.pdf), distributing it to residents in person and by mail. This print poster is a scale map that shows watershed boundaries, creeksheds (24), Trail Towns (5), lakes and ponds, the Natural River District, State Parks, Metroparks and local parks, dams on the main stem of the river, watershed high and low points and the start point for the Huron River Water Trial. It also includes pollution prevention messaging. During the reporting period, HRWC distributed 96 maps to the public.

[Permittees can add public education activities that related to Activity #1. Permittees should report here their use of materials. Include quantity and distribution method such as at municipal offices, events, or direct mailed. Include materials for the target audiences of residents, visitors, public employees, businesses, industries, construction contractors and developers]

**Activity #2: Community Watershed Calendar**

During the reporting period HRWC and participating communities produced, printed, and distributed a 2020 and a 2021 Huron River Watershed Community Calendar. Each presents a full year of monthly informational pollution prevention tips targeted to homeowners in a single printed piece. A 2022 calendar is in production for distribution starting in October 2021. 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, storm drain 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 quantities of calendars:

|  |  |  |
| --- | --- | --- |
| **Community** | **2020 Calendar Qty** | **2021 Calendar Qty** |
| Ann Arbor Charter Township | 850 | 300 |
| Ann Arbor Public Schools | 1300 | 1300 |
| Barton Hills Village | 150 | 150 |
| Brighton Township | 50 | 50 |
| City of Ann Arbor\* | 21677 | 22543 |
| City of Belleville | 125 | 120 |
| City of Brighton | 200 | 200 |
| City of Chelsea | 1000 | 975 |
| City of Dexter\* | 2357 | 2384 |
| City of Ypsilanti | 500 | 1000 |
| Eastern Michigan University | 1000 | 500 |
| Green Oak Township\* | 767 | 467 |
| Hamburg Township | 200 | 200 |
| Huron River Watershed Council | 1049 | 1685 |
| Huron Clinton Metroparks | 1000 | 1000 |
| Livingston County Drain Commissioner | 700 | 500 |
| Livingston County Road Commission | 100 | 50 |
| Pittsfield Charter Township | 700 | 700 |
| Putnam Township | 300 | 300 |
| Scio Township | 2300 | 1000 |
| Superior Charter Township | 1000 | 700 |
| University of Michigan | 300 | 200 |
| VA Ann Arbor Health Care System | 125 | 120 |
| Village of Pinckney | 450 | 450 |
| Washtenaw County Water Resources Commissioner | 600 | 600 |
| Washtenaw County Road Commission | 1000 | 200 |
| Ypsilanti Charter Township | 2200 | 1600 |
| **TOTAL** | **42000** | **39294** |

\*Direct mailed all or part

HRWC distributed calendars through direct mail, at key organizational events and in person, promoting it through HRWC’s marketing emails (7,236 recipients), home page (4,690 monthly average users), and social media announcements on Facebook, Twitter, and Instagram profiles.

A picture containing text, tree

Description automatically generatedA bird that is standing in the grass

Description automatically generated

[2020 Watershed Community Calendar](https://www.hrwc.org/2020-watershed-community-calendar/) [2021 Watershed Community Calendar](https://www.hrwc.org/2021-watershed-community-calendar/)

**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.

There are four tip sheets, that HRWC posts to its website and distributes by email or at in-person events:

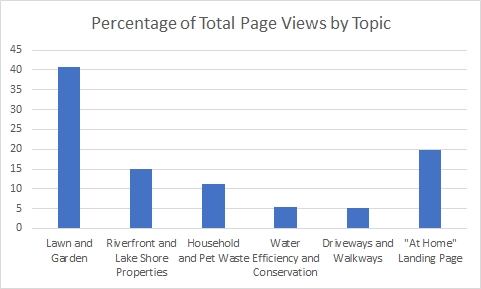
* Pet Waste, <https://www.hrwc.org/wp-content/uploads/HRWC-Pet-Waste-Tip-Sheet.pdf>
* Septic Systems, <https://www.hrwc.org/wp-content/uploads/HRWC-Septic-System-Tip-Sheet.pdf>
* Native Plants and Rain Gardens, <https://www.hrwc.org/wp-content/uploads/HRWC-Native-Plants-Tip-Sheet.pdf>
* Lawn Care, <https://www.hrwc.org/wp-content/uploads/HRWC-Lawn-Care-Tip-Sheets.pdf>

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 (143,485 sessions with 385,200 page views overall during the reporting period with 86.8% new visitors).
* Facebook-@HuronRiver (3,614 page likes); Instagram-@HuronRiver (1,231 followers); Twitter-@hrwc (997 followers) as of the end of the reporting period, July 1, 2019 through June 30, 2021.
* Monthly e-mail newsletter (7,236 average monthly contacts with an average open rate of 21.4%).
* Printed quarterly newsletter the [Huron River Report](https://www.hrwc.org/about/newsletters/) (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: 4,493 total page views with 2,537 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), 11.28% of total page views.
* [www.hrwc.org/take-action/at-home/lawn-garden](http://www.hrwc.org/take-action/at-home/lawn-garden), 40.73% 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,) 14.93% 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), 5.48% 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), 5.23% of total page views.



[Permittees can add public education activities that related to Activity #3. Permittees should report out their use of HRWC inserts, pdfs or tips or their use of similar information in community newsletters or websites. Include quantity and distribution method such as at municipal offices, events, or direct-mailed. Include materials for the target audiences of residents, visitors, public employees, businesses, industries, construction contractors and developers.]

**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-Storm Drains.12 months of “H2O Hero” themed print ad materials are also available for community use.

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.

May-June 2021 HRWC, the Washtenaw County Water Resources Commissioner’s Office and the City of Ann Arbor worked with the Southeast Michigan Council of Governments (SEMCOG) to produce an educational video series featuring community leaders promoting watershed and pollution prevention awareness. See also Activity #1. Six [One Water educational videos](https://www.youtube.com/playlist?list=PLFCFywdeWzv2YKQCXx7V0b4f6oKyhGDF5) were created and published in July to HRWC’s YouTube channel on the following topics: stormwater benefits of trees, proper disposal of pet waste; proper disposal of wipes, FOGs and prescriptions; storm drain connection to waterbodies; benefits of native plants and rain gardens; benefits of river cleanups. A social media campaign planned for July-August 2021 (after the reporting period) delivered the videos and messaging to watershed audiences. 3,810 people saw the campaign on Facebook and Instagram (reach), resulting in 260 engagements (likes, reactions, comments, shares, clicks).

May-August 2021 HRWC produced an educational short [video series “Field Day Friday”](https://youtube.com/playlist?list=PLFCFywdeWzv2EG25fDfrM2nMjrHOcB5De) featuring staff members answering frequently asked questions about the watershed. Videos posted to Facebook and InstagramTV weekly on Fridays. 16 videos were created on a variety of topics including wildlife, stream monitoring, PFAS, recreation, swimming, native plants and rain gardens and more. 3,701 people saw the campaign on Facebook (reach), resulting in 344 engagements (likes, reactions, comments, shares, clicks).

[Permittees can add public education activities that related to Activity #4. Permittees should report out their use of digital materials and print ads on social media and in print news media publications.]

**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:

* River Cleanups (Dexter, Milford, Willow and Oakwoods Metroparks) August 2019
* Whole Farms for Clean Water Lunch & Learn, August, September, October 2019
* Suds on the River, September 2019, 2020
* River Cleanup (Ypsilanti) September 2019
* Ypsi Fall River Day, September 2019
* River Cleanup (Island Lake State Recreation Area) September 2019
* Leader and Collector Trainings for Stream Monitoring, September 2019, April 2020
* River Roundup, October 2019, April 2020, October 2020, April 2021
* Insect ID Day, October 2019, May 2020
* City of Ann Arbor Public Works Open House, October 2019
* How to Protect Land Workshop (Chelsea, Lima Twp, Sylvan Twp), January 2020
* Winter Stonefly Search, January 2020 and 2021
* Confronting the PFAS Crisis, Workshop, February 2020
* Huron River Water Trail Partners, Stewardship & Safety, February 2020
* River Givers Community Gathering, March 2020 and 2021
* Whole Farms for Clean Water Webinar Information Session, March 2020
* Chemistry and Flow Monitoring Virtual Training Washtenaw County, March 2020
* Chemistry and Flow Monitoring Virtual Training Wayne County, March 2020
* 50 for 50 Earth Day Challenge, April 2020
* European Frog Bit Educational Meeting, December 2020
* “Revitalization and Stewardship Along the Huron River Water Trail” video webinar, March, 2021
* “Insects Tell A Story, What we learn from Stonefly Search and River Roundup,” video webinar, March 2021
* “Climate Change and the Huron, What we stand to lose and how we win,” video webinar, March 2021
* “What is a Healthy River?,” video webinar, March 2021
* Change Makers Cohorts for New Leaders (3 virtual workshops) March 2021
* Meet the Huron Educational Paddle Trip (Bandemer Park, Ann Arbor and Oakwoods Metropark, New Boston) June 2021
* Michigan Water School Webinars, October and November 2020
* Educator Trainings, September 2019
* Malletts Creek, Millers Creek, and Fleming Creek Subwatershed Advisory Group meetings, monthly to quarterly, 2019-2021
* Master Rain Gardener Course & Certification, 2019-2021 (see below)

Each year Washtenaw County with support from the City of Ann Arbor, hosts Master Rain Gardener certification classes in-person and/or online. Master Rain Gardeners are trained to design and build rain gardens, and to serve as neighborhood educators. See [www.MasterRainGardener.org](http://www.MasterRainGardener.org).

The Master Rain Gardener certification classes were offered:

* January 2019, in-person
* July/August 2019, online
* 2020 – Current, Free online classes offered throughout the year due to Covid

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 October (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 the reporting period July 1, 2019 through June 30, 2021, we collected 124 samples at 56 unique locations. Which was accomplished by 450 volunteer outings, for a total of roughly 1800 hours of service.

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 sheets or information for homeowners and other residents on protecting water quality.

In March 2021 HRWC produced and distributed a video webinar [“Insects Tell A Story, What we learn from Stonefly Search and River Round Up.”](https://youtu.be/PgBs638tQh0)

HRWC also published the following blogs during the reporting period, sharing Stonefly and River Roundup results:

* <https://www.hrwc.org/stoneflies-in-the-snow/>, April 7, 2020
* <https://www.hrwc.org/2021-stonefly-search-results/>, March 25, 2021
* <https://www.hrwc.org/a-successful-river-roundup/>, April 26, 2021

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 summers of 2019, 2020, and 2021 interns collected geomorphological data, which will support the redevelopment of the Upper Middle Huron Master Plan, and they helped collect and process water samples for E. coli, a priority pollutant in the Upper Middle Huron River 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.

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.

**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 neighborhood advocates and educators.

HRWC developed the program format and structure, creating waivers, intake and reporting forms, instructions and tips, etc. See https://www.hrwc.org/volunteer/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 2019 we were able to partner with the Ann Arbor Public Schools to get stormdrains labeled on all of the school properties. Autumn of 2019, as with many years, had stormdrain awareness around much of the University of Michigan off campus student housing. This education to new/temporary residents has been a priority for this project each September. We are looking to duplicate this priority around the Eastern Michigan University campus in coming years.

During the reporting period, 17 HRWC experienced volunteers submitted the program’s online form, (first time volunteers submit a general form designating their interest in a variety of opportunities) indicating their specific intent to adopt a stormdrain. Also there were 2,004 page views of the program landing page with 1,179 people visiting the page. In January 2021 HRWC published a video promoting the program.

**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.

The Environmental Reporting Line is promoted on the website and hard copy information is also periodically distributed at the Western Service Center and upon request.

**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 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. 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 soil testing and the “go phosphorus free” message 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). See the lawn and garden tip sheet distributed digitally and in print that promotes both soil testing and the use of phosphorus-free fertilizer: <https://www.hrwc.org/wp-content/uploads/HRWC-Lawn-Care-Tip-Sheets.pdf>

During the reporting period a total of 1,815 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)

**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 water protection events and workshops, local and regional fairs, and other community events (see Activity #5 and #12).

In addition, the Livingston Watershed Advisory Group, planned and conducted outreach for a March 2020 lakes focused-workshop “Vision 2020—Your Like Health and You. Speakers included Erick Elgin, Limnologist at Michigan State University Extension and Craig Kivi a graduate of the MSUE/Michigan Lakes and Streams Association Lake Leaders Institute and long-time resident of the Chain of Lakes. The event was canceled due to State Orders and Directives from the Michigan Occupational Safety and Health Administration (MIOSHA), the Governor’s Office, and the Michigan Department of Health and Human Services (MDHHS); and health and safety concerns regarding the Coronavirus.

[Permittees can add public education activities that related to Activity #10. Permittees should indicate if they are currently distributing or have distributed a riparian brochure or promoted riparian educational information or events during the reporting period. This could include distributing print or digital materials on websites or through social media.

**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 coordinates and staffs watershed information displays and outreach activities at the following regional events many of which are held annually. State Orders and Directives from the Michigan Occupational Safety and Health Administration (MIOSHA), the Governor’s Office, and the Michigan Department of Health and Human Services (MDHHS); and health and safety concerns related to Coronavirus resulted in many public outreach events being canceled or not scheduled during the reporting period (July 1, 2019 through June 30, 2021). All 2019 events were held in person as planned. Changes to events in 2020 and 2021 are reflected.

* Fly Fishing Film Tour (February 2020 – in person, 2021 – not held)
* Quiet Adventure Symposium (March 2020 – in person, 2021 – virtual)
* Home, Garden & Lifestyle Show, Washtenaw County (March 2020 – canceled, 2021 – canceled)
* Lakes Workshop for Homeowners on the Chain of Lakes (March 2020 – canceled)
* River Givers Celebration (March 2020 – in person, 2021 – virtual)
* Earth Days: Ann Arbor, Washtenaw Community College and Brighton (April 2020 – canceled, 2021 – virtual for Ann Arbor only)
* Chelsea Spring Expo (April 2020 – canceled, 2021 – canceled)
* Ann Arbor Water Treatment Plant Open House (May 2020 – canceled, 2021 – not held)
* Huron River Day (May 2020 – canceled, 2021 – virtual)
* Ann Arbor Mayor’s Green Fair (June 2020 – not held, 2021– planned for October)
* Washtenaw Conservation District Native Plant Sale (August 2020 – in person, June 2021 – in person)
* Four Seasons South Lyon Garden & Nature Festival (July 2019 – in person)
* Taste of Flat Rock (July 2019 – in person)
* African American Festival (July 2019 – in person)
* Dexter Daze (August 2019 – in person, 2020 – canceled, 2021 – did not participate due to limited capacity)
* University of Michigan EarthFest (September 2019 – in person, 2020 – virtual)
* Ypsilanti Fall River Day (September 2019 – in person, 2020 – canceled)
* Suds on the River (September 2019 – in person, 2020 – virtual tour)
* Ann Arbor Wastewater Treatment Plant Open House (October 2019 – in person)
* Ann Arbor Public Works Open House (October 2019 – in person)

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

The Community Partners for Clean Streams (CPCS) program is a voluntary, cooperative partnership between local businesses and organizations and the Washtenaw County Water Resources Commissioner’s Office. The goal of the program is to help identify practical, cost-effective ways to protect our waterways through pollution prevention at businesses/organizations in the County. Partners receive free information, technical advice, and recognition. There are currently over 150 partners in the program. For additional information visit: https://www.washtenaw.org/409/Community-Partners-for-Clean-Streams.

**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. The Washtenaw County Environmental Health Division conducts these inspections. From July 2017 through December 2019, WCEH performed 663 inspections with an additional 136 completed in 2020. See program details at: https://www.washtenaw.org/1573/Pollution-Prevention.

**Activity #15: Green Media**

Washtenaw County’s Green Media website was developed to serve as a single resource for the County’s public environmental education programs in a variety of formats - in collaboration with the City of Ann Arbor’s Community Television Network (CTN), and Eastern Michigan University’s WEMU 89.1 Radio Station. Washtenaw County uses the website https://www.washtenaw.org/375/Green-Media to highlight local environmental issues impacting our community. Information is distributed via articles, brochures, videos, television shows, and ~weekly radio programs.

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

Issues of the Environment is a weekly radio program on 89.1 WEMU hosted by David Fair and sponsored by the Washtenaw County Public Works Division and the Water Resources Commissioner’s Office. In 2020, the show celebrated its 25th year on the air. 123 shows aired from January 2019 through June 2021. Examples of the many water quality related topics include:

* Past And Future Impacts Of The Great Lakes Restoration Initiative
* Using Rainwater To Build Sustainable Water Systems
* Mitigating Phosphorus Levels In Area Lakes And In The Huron River
* The 2019 Algae Bloom In Lake Erie Is Massive
* The Ongoing Efforts To Monitor And Remediate The Gelman 1,4 Dioxane Plume
* Huron River Watershed Council Update On PFAS Legislation And Litigation
* Moving Process Forward To Remove Peninsular Paper Dam From Huron River
* Women’s History Month (series): Women Protecting our Waterways – Huron River Watershed Council, Michelle Deatrick, Mary Beth Doyle, Donna Lasinski, and Janis Bobrin

A complete listing of program topics can be found online at <https://www.washtenaw.org/340/Issues-of-the-Environment> including past interviews.

The Green Room television show is a collaboration between the City of Ann Arbor's Community Television Network (CTN), the Washtenaw County Public Works Division and the Water Resources Commissioner’s Office. Nineteen (19) television shows aired between July 2019 and June 2021. 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:

* Trees Protect Our Natural Resources
* Climate Change Impacts to Michigan
* Microplastics In Our Waters
* Environmental Activism in Michigan
* PFAS.

The monthly The Green Room radio show was also co-produced by Barbara Lucas with WEMU 89.1FM's David Fair. The final year of The Green Room in 2019 included a 5-part series on PFAS which won the 2019 Michigan Association of Broadcasters Award -1st Place - Public Radio Series. 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 Radio: <https://www.washtenaw.org/363/Radio-Show>

**Activity #16: Environmental Excellence Awards**

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

The Environmental Excellence Awards recognize businesses and organizations taking additional actions to protect the environment. Award categories include: Water Quality Protection, Waste Reduction & Recycling, and Pollution Prevention. The award event was held in March 2019. Although winners were selected for 2020, the event was cancelled due to the Covid pandemic. 2020 winners will be recognized at the next scheduled awards event. Advertisements, articles, press releases, and website postings are also used to recognize award winners.

Environmental Excellence Award Winners for 2019-2020 are provided below. Visit the website for additional information at: https://www.washtenaw.org/415/Awards.

**Environmental Excellence Winners for 2019-2020**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Overall Winner** | **Water Quality Protection** | **Waste Reduction & Recycling** | **Pollution Prevention** |
| **2019** | **Ann Arbor YMCA** | **Thurston Nature Center** | **Western Washtenaw Recycling Authority** | **O & W, Inc.** |
| **2020** | **Shannan Gibb-Randall** | **Arbor Brewing Company** | **Fjällräven** | **Convenience Auto Service** |

**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 CPCS Handbook. Food service educational materials are available to educate restaurants about FOG disposal and clean-up procedures. These packages typically include the CPCS Handbook, a FOG brochure, and a FOG hauler listing. Customers are primarily directed to the electronic information rather than providing physical documents.

The County websites with FOG information include:

|  |  |  |
| --- | --- | --- |
| **Division / Webpage** | **~2019 Page Views** | **2020 Page Views** |
| WCWRC - <https://www.washtenaw.org/838/Fats-Oils-Grease> | 165 | 508 |
| WCEH - <https://washtenaw.org/1567/Fats-Oils-Grease-FOG> | 269  (5/11/18-12/31/19;  new website) | 519 |
| Annual Totals | 434 | 1,027 |

**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.

Over 430 RiverSafe Home surveys were completed from 2019 through June 2021. The City of Ann Arbor continues to partner with the WCWRC’s Office to promote RiverSafe Homes by offering a Residential Stormwater Credit program for residents within the City. See https://bit.ly/A2creditsSW 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 2,000) 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)
* Revised Phosphorus Policy Approved (Spring 2020)
* Crossing Watershed Boundaries, HRWC collaborates with Southeast Michigan river groups (Spring 2021)
* Protecting the Middle Huron, Top ten recommendations set to achieve healthy water (Spring 2021)
* Keeping Stormwater Running Clean, HRWC supports collaborative stormwater management (Summer 2021)

The Huron River Report can be found here: <https://www.hrwc.org/about/newsletters/>. Articles are generally posted to HRWC’s blog and shared via HRWC’s social media channels—Facebook, Twitter and LinkedIn and emailed to HRWC’s list of 7,000+ subscribers.

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

* <https://www.hrwc.org/lights-camera-analyze/>, October 20, 2020
* <https://www.hrwc.org/trees-and-forests-fight-climate-change-and-water-pollution/>, April 7, 2020
* <https://www.hrwc.org/working-with-impact-downriver-chemistry-and-flow-monitoring/>, February 20, 2020
* <https://www.hrwc.org/chemistry-and-flow-2019-season/>, November 4, 2019
* <https://www.hrwc.org/hrwc-launches-whole-farms-for-clean-water/>, August 19, 2019

Blogs posts are also generally shared via HRWC’s social media channels—Facebook, Twitter and LinkedIn and emailed to HRWC’s list of 7,000+ subscribers.

[Permittees should indicate their individual efforts regarding the phosphorus TMDL for Activity #19 here.]

**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).

Rain gardens are shallow gardens filled with beautiful native plants that collect rainwater and runoff and let it soak into the ground naturally. This helps to clean the water, protect waterways, and reduce flooding. Rain gardens also create healthy habitats for wildlife, birds, and pollinators. These benefits are taught in detail to adults and children throughout the County.

The Washtenaw County Master Rain Gardener certification classes were offered:

* January 2019, in-person
* July/August 2019, online
* 2020, online

The Master Rain Garden Course was offered free online 2020-present while people were quarantining during the pandemic. Many people looking to get outdoors in 2020 turned to gardening. The response to the MRG online course was overwhelming with 502 people becoming certified master rain gardeners and 95 new rain gardens being constructed in the County. Certified master rain gardeners also went on to install raingardens in Ontario, Cleveland, and Kalamazoo.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2019** | **2020** | **2021 (Jan-June)** | **Total** |
| Rain Gardens Installed | 82 | 94 | 17 | 193 |
| Master Rain Gardeners Trained | 160 | 502 | 140 | 802 |
| Washtenaw County is also partnering with the City of Ann Arbor to maintain public rain gardens. Workdays are hosted and volunteers are recruited to maintain public rain gardens. See volunteer hours below. | | | | |
|  | **2019** | **2020** | **2021 (Jan-June)** | **Total** |
| Volunteer Hours in Public Rain Gardens | 925 | 915 | 352 | 2,192 |

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

***Total Materials Processed By Washtenaw County Solid Waste Division Programs***

Includes Home Toxics, Clean Up Days, Medications & Sharps, School Recycling, & Zero Waste Events

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2019** | **2020** | **2021** | **Totals** |
| **Total Materials Processed in Pounds** | **1,380,000** | **960,000** | **458,000** | **~2.8 Million Pounds Processed** |

*County Household Hazardous Waste Collection Events*

The Washtenaw County Home Toxics Center (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. Weekday home toxics drop offs are available by appointment, year-round, for those citizens unable to use the facility during regularly scheduled collection days.

In 2020, the global pandemic impacted not only our day-to-day lives but also our services to residents. With more time at home, people cleaned out their home and garages and brought us more home toxics than ever before. Our Zero Waste Events and some Clean-Up Days were cancelled. In response, we moved online with virtual school recycling programs, created online scheduling for Home Toxics Center appointments, and launched an interactive medication disposal map.

*Pounds of Materials Processed from the Home Toxics Center*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2019** | **2020** | **2021 (Jan-Jun)** | **Totals** |
| Residents Served | 5,000 | 4,975 | 973 | **10,948 Residents Served** |
| Household Hazardous Waste (pounds) | 367,000 | 425,000 | 223,379 | **1,015,379 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. Thirteen (13) collection days were held in 2019- 2021 (through June) and were located in Manchester Township, Northfield Township/Whitmore Lake, Chelsea, Ypsilanti Township, Augusta Township and Saline.

*Clean-Up Day Collection Event Data*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2019** | **2020** | **2021 (Jan-Jun)** | **Totals** |
| Number of Events | 5 | 4 | 4 | **13 Events** |
| Pounds of Waste Collected | 506,381 | 261,569 | 234,272 | **1,002,222 Pounds** |

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

2019: <https://bit.ly/solidwastereport2019>

2020: <https://bit.ly/solidwastereport2020>

*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 300 businesses participating in the program.

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

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

The Medication Take-Back Program currently consists of nineteen (19) participating pharmacies and nine (9) 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.

|  |  |
| --- | --- |
| **Medication Take-Back (medication + sharps)** | **Pounds** |
| 2019 | **1,390** |
| 2020 | **1,180** |
| 2021 (Jan-Jun) | **466** |
| **Total pounds** | **1,646** |

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

* Medication Disposal Network Map
* Pharmacy Take-Back Program
* Big Red Barrel Program
* Sharps Disposal Directory
* EGLE’s Drug Disposal Minute (video)
* Other Disposal Locations – State Police, Lenawee County, Livingston County, Oakland County and the Michigan Pharmacists Association

**Individual Public Education BMPs**

[Permittees need to check your individual SWPPI for activities you committed to and include reporting on those here. Examples may include brochures distributed, items posted to your website, your own environmental festivals, e-waste pick up days, bulk item pick up days, cable channel announcements, advertising the household hazardous waste days, storm drain grates installed with no dumping signs, etc.

**Evaluation of Effectiveness Summary**

Evaluation of the overall effectiveness of the PEP consists of a combination of both the accumulated measures of the effectiveness of the PEP’s individual activities (shown above) and a measure of the effectiveness of the sum of all the activities through a carefully developed coordinated survey that was conducted by HRWC for the permittees in 2012. “Small Actions Upstream, A study of public attitudes toward freshwater resources and pollution prevention in the Huron River watershed,” results are reported here: <https://www.hrwc.org/wp-content/uploads/PEP-Survey-Report-FINAL.pdf>

During the current reporting period, the accumulated measures of individual activities (shown above), provide the basis for measuring the PEP’s effectiveness.