PORTAGE COUNTY HEALTH DISTRICT

STORM WATER PROGRAM

2023 ILLICIT DISCHARGE DETECTION AND ELIMINATION ANNUAL REPORT

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Introduction

The Portage County Board of Commissioners (BOC) contracts with Portage County Combined General Health District (PCHD) to implement Portage County Storm Water District's Minimum Control Measure (MCM) #3 - Illicit Discharge Detection and Elimination (IDDE). The MCM #3 is one of the six minimum control measures that regulated communities in Ohio are required by the Ohio Environmental Protection Agency (OEPA) to develop, submit, and implement as part of a Storm Water Management Program (SWMP) consistent with the OEPA's National Pollutant Discharge Elimination System (NPDES) Phase II Small Municipal Separate Storm Sewer Systems (Small MS4) general permit requirements. PCHD employs storm water Best Management Practices (BMP) to reduce the adverse effects of contaminated stormwater discharges entering the waters of the state in accordance with OEPA regulations and to achieve and protect sustainable water quality.

PCHD is pleased to share the action plan, implementation activities, achievements of the Storm Water Program in this 2023 Illicit Discharge Detection and Elimination (IDDE) Annual Report based on Portage County's SWMP and the BMP submitted to OEPA. This report is a component of the Portage County Storm Water District's annual report submission to OEPA.

2023 Illicit Discharge Detection & Elimination (IDDE) Activities

Portage County Health District's 2023 Storm Water IDDE activities were based on, but not limited to, the scope of services outlined in the Portage County Storm Water Program contractual agreement between the PCHD and the BOC for storm water services. The goal of the PCHD IDDE activities is the elimination of any discharge to the storm drain system that is not composed entirely of storm water except for OEPA NPDES-permitted and firefighting activities.

2023 Portage County IDDE Achievements

In pursuance of illicit discharge detection and elimination (IDDE) objective in townships and villages in the Storm Water District, PCHD staff conscientiously built upon the existing storm water management plan towards achieving the long term goal of sustainable water quality improvement. The PCHD staff continued to enhance the healthy collaborative working relationships with Portage County Board of Commissioners (BOC), Portage County Engineer's Office (PCEO), Soil and Water Conservation District (SWCD), Portage County Water Resources Department (PCWR), Portage County Planning Commission (PCPC), Northeast Ohio Four County Regional Planning and Development Organization (NEFCO), townships, and villages to achieve our storm water goals. In particular, the Storm Water Program achieved the following in 2023:

- Completed 644 outfall verifications and dry weather screening inspections with approximately 92 in the MS4 and 452 in non-MS4 areas of the storm water district.

- Received $317,000.00 of 2022 H2Ohio and WPCLF funds and administered them successfully in 2023 by assisting 10 low-to-moderate income homeowners for the repair and/or replacement of household sewage treatment system (HSTS).
- Applied and approved for $150,000 of the 2024 WPCLF financial assistance to help low-to-moderate income homeowners for the repair/replacement of HSTSs.
- In the Oakwood Acres subdivision, Brimfield Township, 100% n=57 houses are successfully connected to public sanitary system to eliminate illicit discharging STSs.
- Eliminated 27 HSTS public health nuisances through repairs, replacements, or connections to public sanitary sewers
- Mapped all 2023 HSTS replacements, repairs, and sewer connections in the county.
- Updated the storm water system maps for townships, villages, and Storm Water annual report.

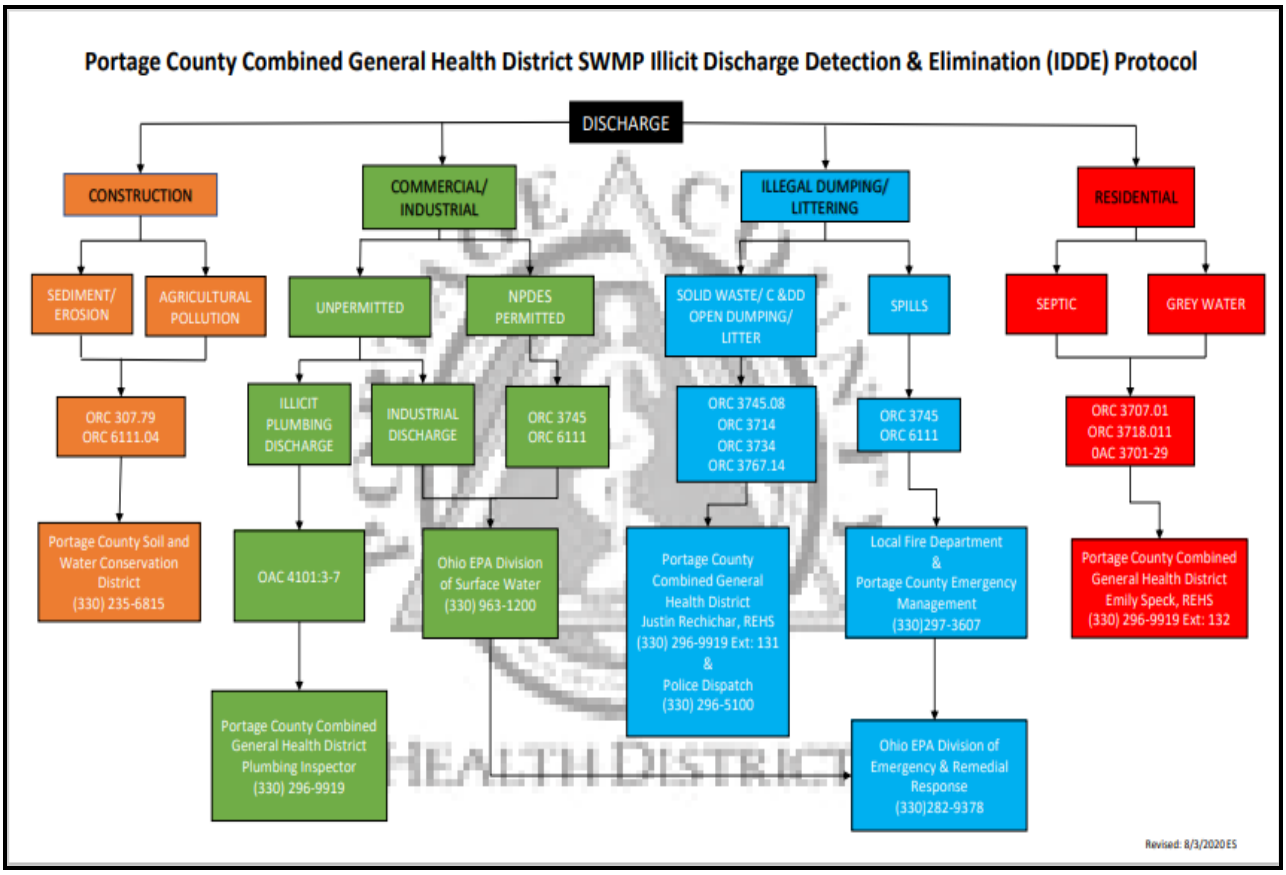
Expanded information on the above listed summary of PCHD's 2023 storm water achievements is detailed below.

Portage County IDDE Protocol

An illicit discharge is any direct or indirect discharge to an MS4 storm drain system that is not composed entirely of storm water except as exempted by the National Pollutant Discharging Elimination System (NPDES) permit. Illicit discharges into the storm drain system contribute reasonable amounts of pollutants to surface and ground water. Detection and elimination of illicit discharges from the storm drainage systems is a challenging task. A variety of transitory, intermittent, and long-lasting illicit discharges are produced by accident or careless practices. Examples of illicit discharge flows from homes, businesses, manufacturing, industry, and commercial establishments include sewage effluent, gray water (laundry), car wash residues, illegal dumping of oil and paint.

Portage County Storm Water Management Program (SWMP) provides PCHD with guidance to establish and implement an effective IDDE program consistent with OEPA's NPDES permit requirements aimed at preventing illicit discharges from entering the waters of the state. To facilitate the achievement of Portage County Stormwater District's IDDE goals, PCHD uses adequately trained staff and the storm water management plan including the creation and maintenance of illicit discharge database, HSTS nuisance complaint investigation, HSTS operation & maintenance, voluntary HSTS evaluation for replacement, point of sale HSTS evaluation inspection and dry weather outfall screening. The flow chart in Figure 1 below, is a visual representation of PCHD's SWMP IDDE protocol to deal with illicit discharges in Portage County Storm Water District's jurisdiction.

Figure 1: PCHD Storm Water Management Program (SWMP) IDDE Protocol Flow Chart



Suspected Illicit Discharge Database

PCHD suspected illicit discharge database is an organized collection of potential and confirmed illicit discharges data of wastewater as well as other wastes from non-stormwater sources stored in computer for easy access, management, and updating for IDDE activities. This suspected illicit discharge database focuses on, but not limited to, illicit discharges from failing HSTS.

The database is reviewed, updated, analyzed, and evaluated throughout the year and remains an important resource for HSTS information search, field inspection, and storm water illicit discharge violations enforcement.

The HSTS data in the suspected illicit discharge and detection elimination database is managed as a component of the Health District's operation and maintenance program by one of four processes:

- Class 1 Aeration Sewage Treatment System Inspections when homeowner fails to provide the required operation and maintenance service agreement
- Investigation upon receipt of a written nuisance compliance in accordance with Ohio Revised Code (ORC) 3718.011 and OAC 3701-29-23
- Identification during a voluntary Point-of-Sale real estate inspection; and

- Storm water outfall dry weather screening inspection.

HSTS identified through any of the processes above that needs further assessment are evaluated to determine whether the system is causing a public health nuisance in accordance with Ohio Revised Code 3718.011. When an HSTS is determined to be causing public health nuisance, PCHD works with homeowners and partner agencies to eliminate the nuisances and prevent wastewater pollutants from entering the waters of the states.

2023 Storm Water District Management IDDE Activities

The objective of the IDDE activities are to prevent illicit discharges from wastewaters and non-stormwater sources which cannot legally be discharged to Portage County MS4 drainage systems into the waters of the state. Measures implemented to achieve the storm water IDDE required by MCM #3 include training of PCHD storm water staff, participating in Storm Water District Program stakeholders' meeting, and storm water system mapping. Additionally, field activities such as verification of storm water outfalls, dry weather screening, HSTS operation and maintenance (O&M) inspections, and investigation of suspected HSTS illicit discharging nuisance complaints and voluntary replacement evaluations are employed.

Training

In 2023, PCHD storm water staff obtained training for its storm water activities and responsibilities. Internally, staff learned new ArcGIS Online mapping skills and used it for outfall dry weather screening field inspections during the year.

Emily Speck and Amos Sarfo attended the 15th Ohio Stormwater Annual Conference from May 10, 2023 – May 12, 2023. This conference was offered via virtual videoconference and in person. The conference offered useful presentations and discussions, which helped to deepen staff understanding of stormwater water management and nuances in the field.

Completed IDDE Performance Standards Activities

In 2023, PCHD used the storm water system GIS maps in conjunction with field inspections for IDDE activities in the MS4 and non-MS4 communities. The Portage County Storm Water District program covers MS4 Phase II regulated and non-MS4 unregulated communities. However, Aurora, Kent, Ravenna, and Streetsboro cities have their own storm water programs. Table 1 below summarizes the IDDE program performance standards achieved during the year, followed by a summary of storm sewer system mapping updates.

Table 1: 2023 IDDE Performance Standards Activities Summary

IDDE Performance Standards Activities	**MS4**	**Non-MS4**
Total number of outfalls (identified and stored in database before 2023)	204	1892
Number of outfalls dry weather screened	92	452
Number of outfalls with dry-weather flows identified	33	95
Number of outfalls where illicit discharges were Identified via dry-weather screening or other methods	5	3
Number of outfalls where illicit discharges were eliminated	0	0
Number of illicit discharges identified through other methods	17	27
Illicit discharges identified through other methods eliminated	10	17
Existing illicit discharges identified and yet to be eliminated	266	13
Details of the identified illicit discharges yet to be eliminated:		
○ Located in Chinn Allotment and Foxwood Estate in Ravenna Twp (MS4 areas)	259	
○ Located in Brimfield, Franklin, Rootstown, and Suffield Townships (MS4 areas).	5	
○ Located in Brimfield, Deerfield, Edinburg, Randolph, Rootstown, and Shalersville (non-MS4 areas)	2	3
○ An Estimate of volume (gpd = number of bedrooms*120) polluted wastewater to be eliminated	103,420	5,054
○ The source and the type (continuous/intermittent/one-time)	HSTS and continuous illicit discharge	HSTS and continuous illicit discharge
○ Types of pollutants believed to be present	Total suspended solids (TSS), biological oxygen demand (BOD5), phosphorus, nitrogen, and ammonia	TSS, BOD, phosphorus, nitrogen, ammonia
○ The receiving surface water of pollutants	Plum Creek, Fish Creek.	Plum, Fish, Breakneck, and West Brach
○ An estimated schedule for elimination of almost 250 illicit discharges in Chinn Allotment (stipulated by nuisance declaration issued by OEPA)	3 years	2 years
○ Foxwood Estate 9 illicit discharges expected to be eliminated within	3 years	
○ The remaining 7 are expected to be eliminated within	2 years	2 years

Storm Water System Map Updates

Using Geographic Information System (GIS) mapping software and hand-held Global Positioning System (GPS) receiver unit, Portage County Storm Water District has created comprehensive storm sewer system maps. These maps are used to support IDDE and other storm water best management practices in the storm water district.

In November 2023, PCHD sent letters to partners involved in the storm water program requesting them to inform PCHD of any changes in stormwater features and/or locations that might have occurred in their communities for map updates. Using the responses as well as PCHD staff field inspections, the storm water district comprehensive maps were updated to reflect necessary changes. The updated Portage County Storm Water District GIS maps are shown in Figures 2-7 below:

1. Storm Water District map depicting MS4 communities, watersheds, and waterbodies
2. Storm Water District map depicting the location of all outfalls and the name and location of all state surface waters, including watersheds that receive discharges from those outfalls
3. Storm Water District discharging household sewage treatment systems (HSTSs)
4. Storm Water District catch basins
5. Storm Water District drainpipe inlet and outlet
6. Storm Water District quality BMP facilities (private and public)

Figure 2: Portage County Storm Water District Watershed and Waterbody Map depicting a visual representation of spatial distribution of surface waters, including watersheds receiving discharges from storm water drainage system and MS4 areas of the district.

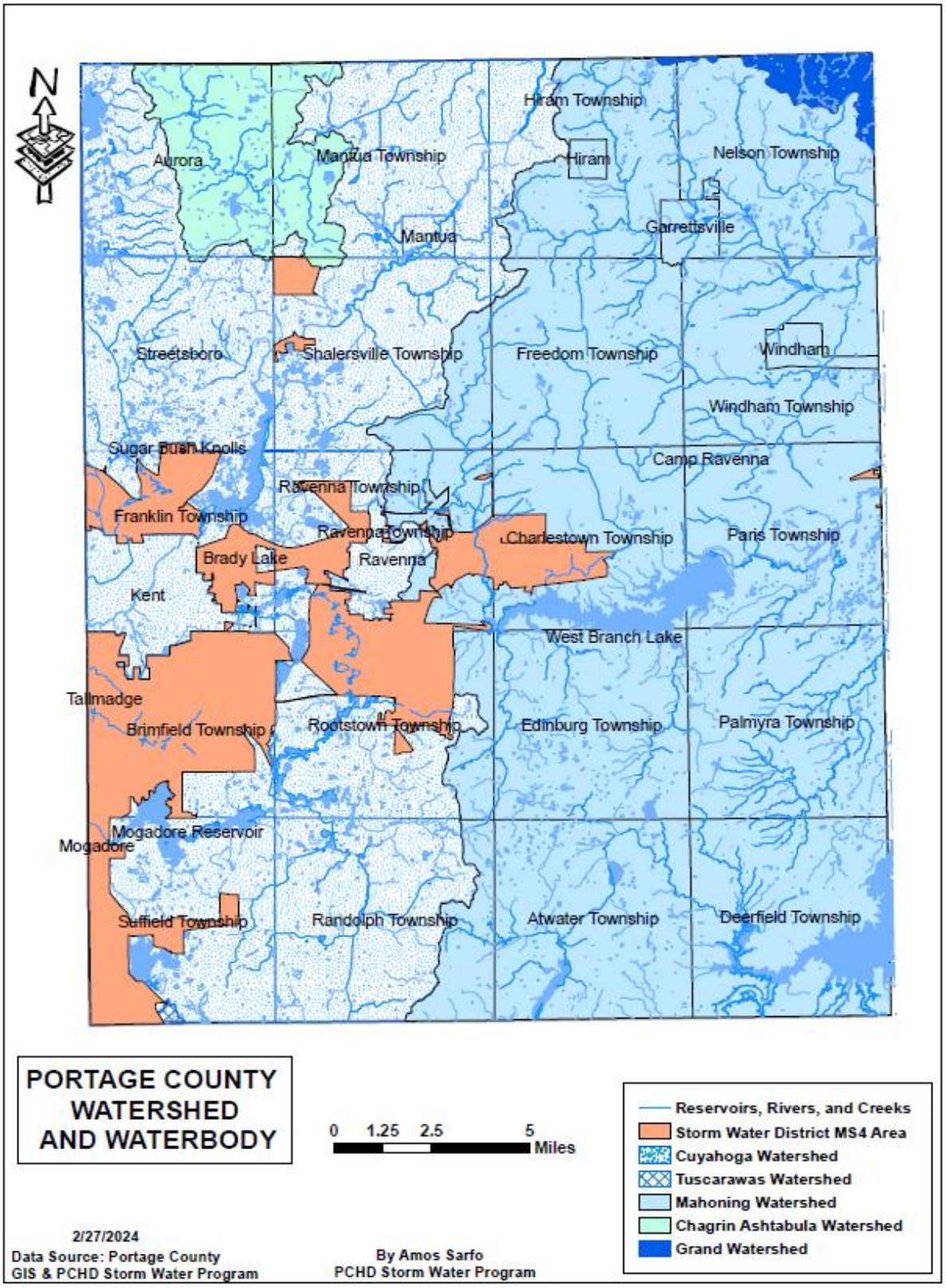


Figure 3: Portage County Storm Water District Screened Outfall Points Map depicting the visual representation of a spatial distribution of outfalls points, the name, and location of surface waters, including watersheds receiving discharges from those outfall points.

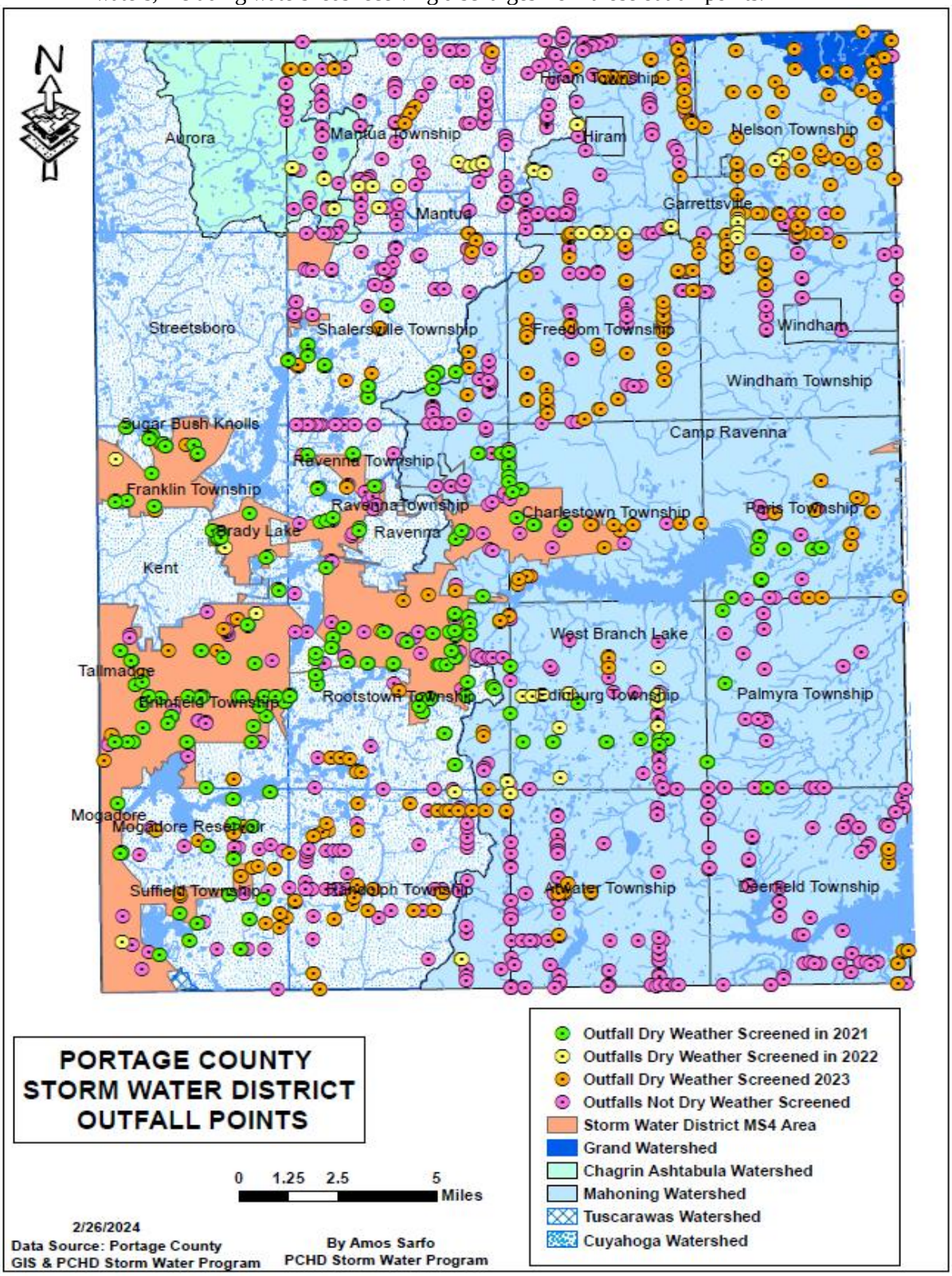


Figure 4: Portage County Storm Water District Discharging Household Sewage Treatment System (HSTS) Map depicting a visual representation of the spatial distribution of discharging HSTS, name, and location of surface waters, including watersheds receiving discharges from the discharging HSTSs.

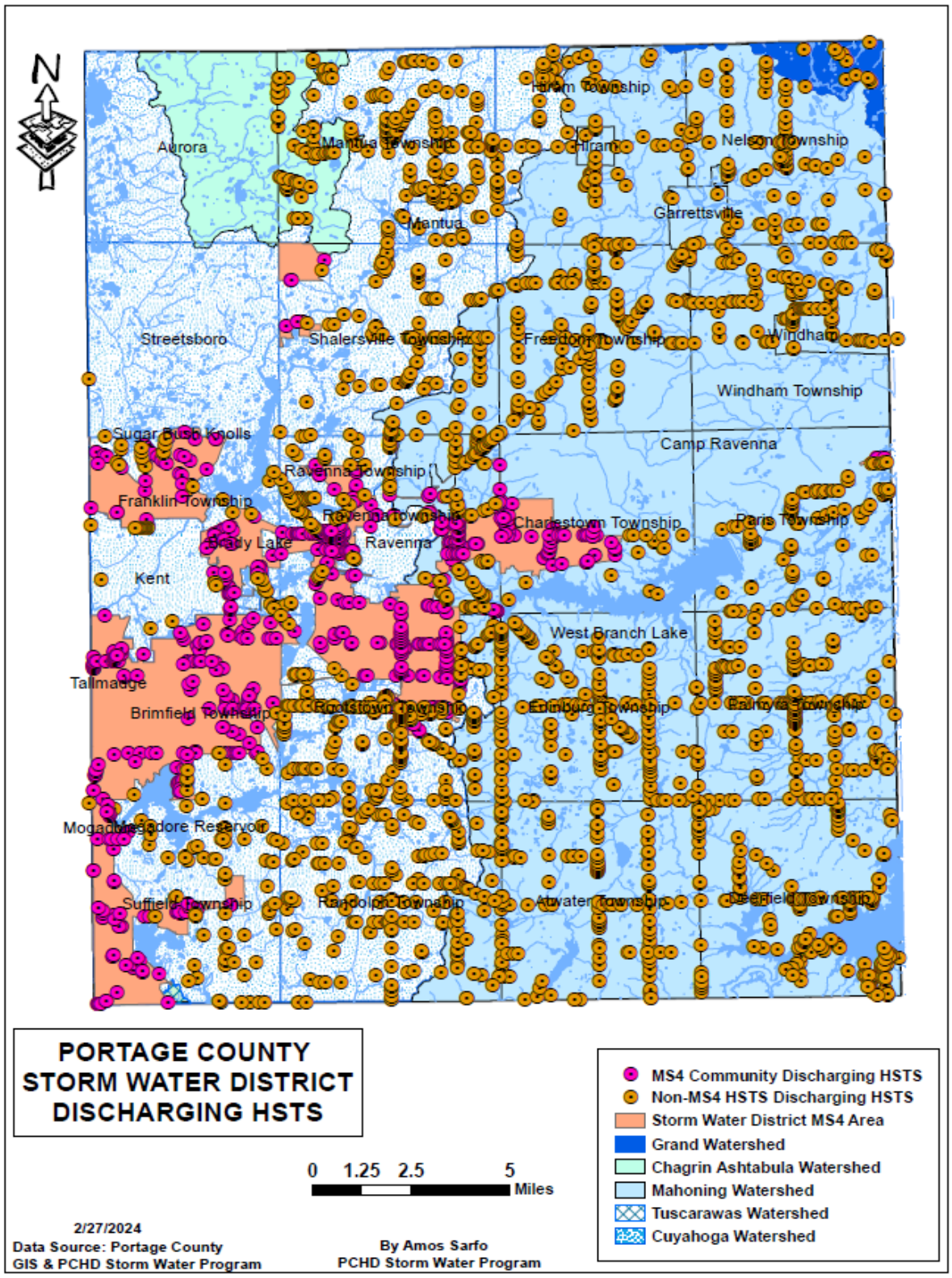


Figure 5: Portage County Storm Water District Catch Basins Map depicting a visual representation of the spatial distribution of catch basins, name, and location of surface waters, including watersheds receiving discharges from the drainage system catch basins.

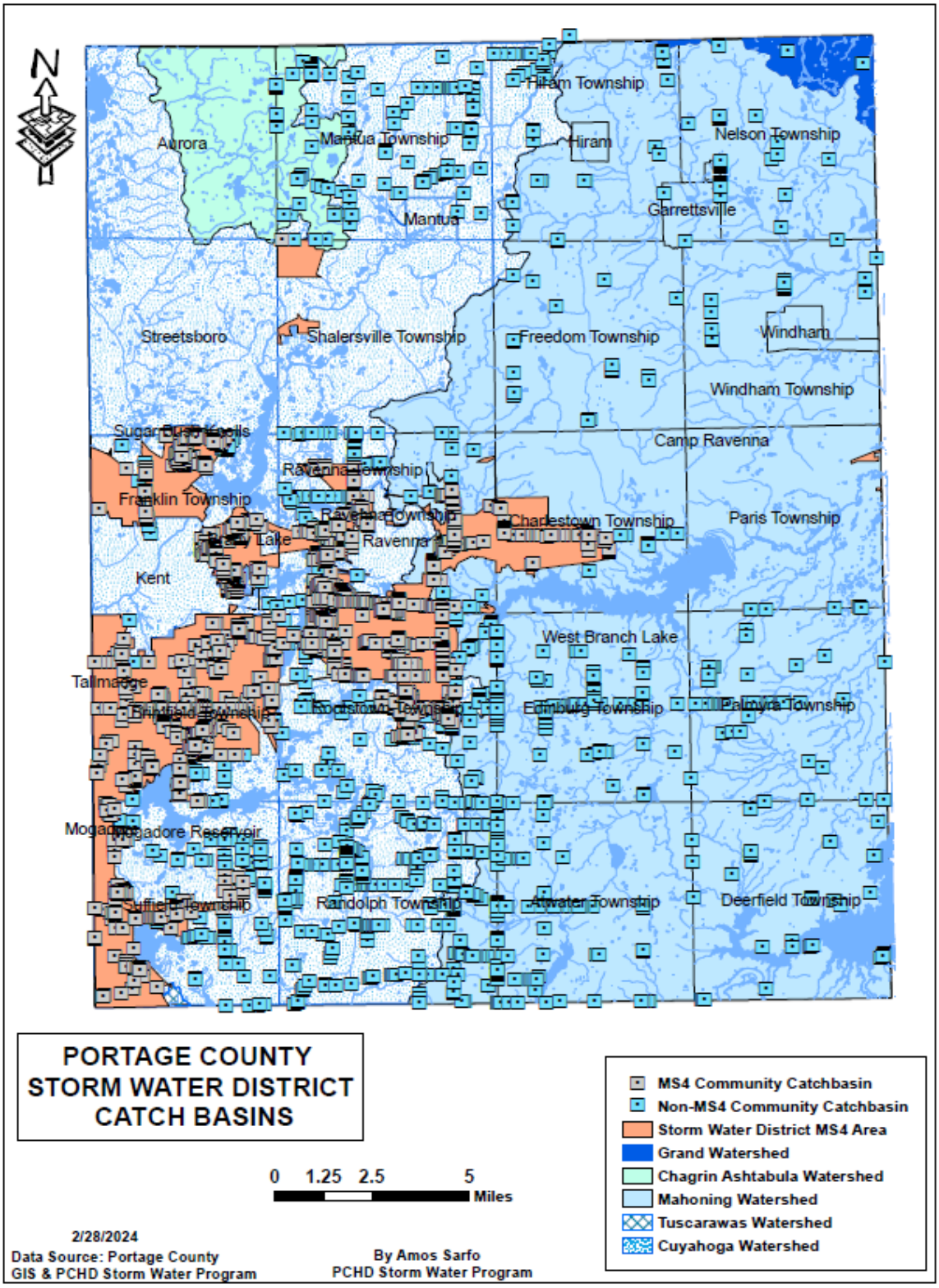


Figure 6: Portage County Storm Water District Pipe Inlet and Outlet Map depicting a visual representation of the spatial distribution of storm drain inlet and outlet pipes, name, and location of surface waters, including watersheds receiving discharges from the outlets.

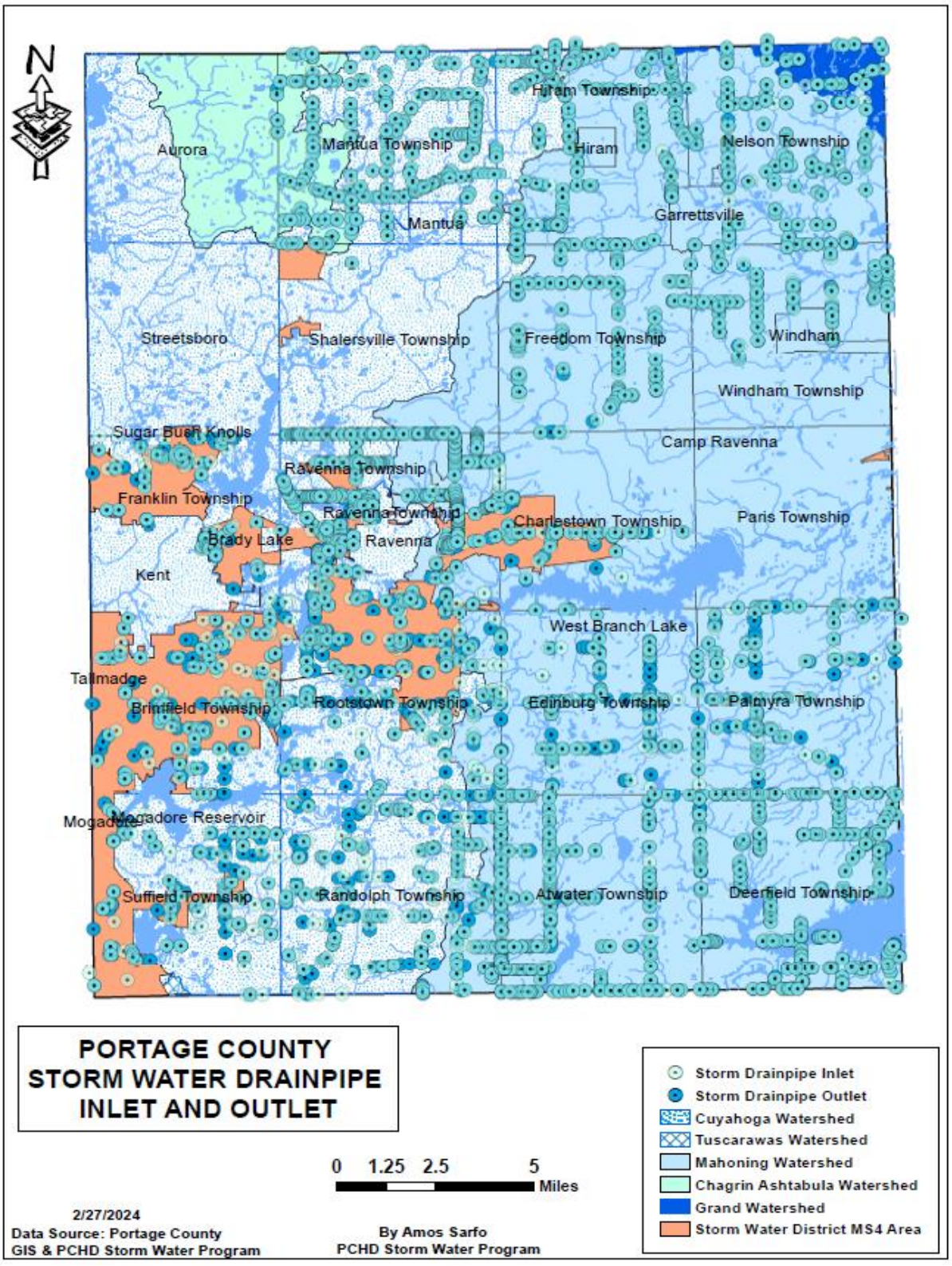
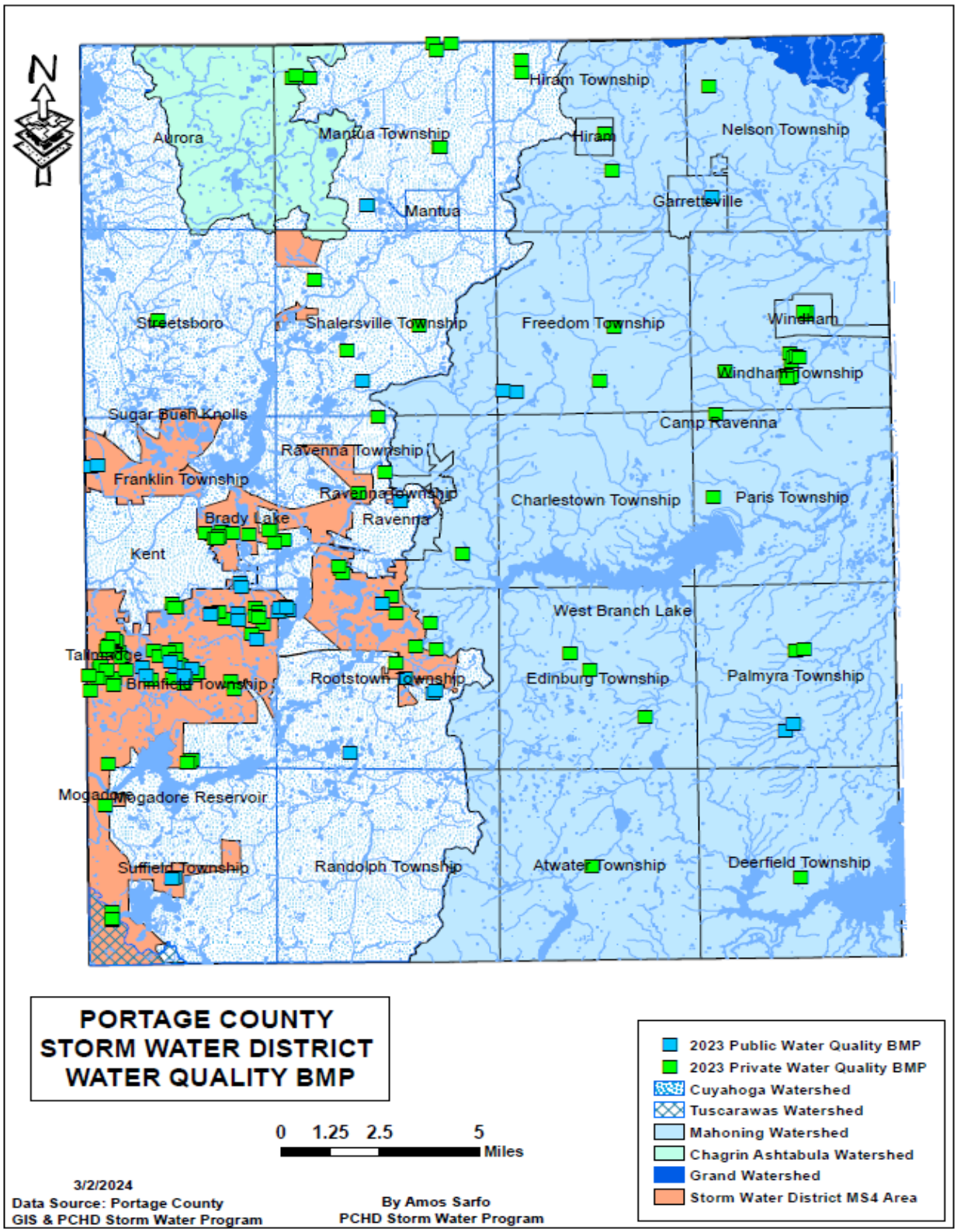


Figure 7: Portage County Storm Water District Water Quality BMP Map depicting spatial locations flood control facilities (retention and detention ponds) consisting of public and private post-construction water quality BMPs and locations of state surface waters including watersheds.



Total Maximum Daily Load (TMDL)

The total Maximum Daily Load (TMDL) program created under United States Environmental Protection Agency (USEPA) Clean Water Act (CWA) Section 303(d) of the Clean Water Act focuses on identifying and restoring polluted rivers, streams, lakes, and other surface water bodies in the US. A TMDL is a technical calculation of the maximum amount of a pollutant a waterbody can receive and still meet water quality standards. It is primarily developed to determine whether surface waterbody connected to the waters of the US is impaired (nonattainment of water quality standards) or unimpaired (attainment of water quality standards) in accordance with the CWA. Once impaired waters are identified, the state must act to improve their quality. The identification and elimination of illicit discharges are linked with TMDL.

The Ohio Environmental Protection Agency (OEPA) currently requires holders of MS4 Phase II storm water permits to address TMDL as part of the six minimum control measures. The OEPA TMDL seeks to address the sum of all point source loads ("waste load allocation") and loads associated with nonpoint sources ("load allocation"). A list of watersheds, waterbodies and their status regarding attainment and non-attainment is compiled by OEPA. This list (in accordance with section 303(d) is made available to the public and submitted to the US Environmental Protection Agency (U.S. EPA) in even-numbered years.

The overarching goal of Ohio's TMDL process is full attainment of biological and chemical Water Quality Standards (WQS) and, subsequently, removal of watersheds and water bodies from the list of waterbody segments impaired by a pollutant and needing TMDL. OEPA's efforts are boosted by Ohio Governor Mike DeWine's recent H2O water quality initiative aimed at minimizing the introduction of nutrients and other runoff into Ohio waterways to achieve sustainable water quality. In response to the OEPA TMDL goals and the governor's initiative. PCHD uses illicit discharge detection and elimination (IDDE) best management practices (BMP) to address TMDL issues resulting from HSTS illicit discharge of total suspended solids (TSS), biological oxygen demand (BOD5), phosphorus, nitrogen, and ammonia.

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Portage county has five watersheds namely, Chagrin, Cuyahoga, Grand, Mahoning, and Tuscarawas. The MS4 areas of the Storm Water District, however, are occupied by the Cuyahoga and Tuscarawas only. The Chagrin, Grand, and Mahoning watersheds also drain over the rest of the county as shown in the maps in Figures 2-8. A brief review of the list of County's main watersheds and sub-watersheds' TMDL attainment status is compiled from Ohio EPA's Watershed Action Plan as reported below. This list characterizes water bodies as achieving attainment, partial attainment, or nonattainment status. Additionally, it identifies reasons or concerns for the TMDL status. Table 2 below summarizes the findings from the review.

This brief review of the MS4 area watersheds indicates that the Breakneck, Potter, Plum, Fish, and Tinkers Creeks, which are tributaries of the Cuyahoga River have achieved partial attainment status. The Wahoo Ditch, a tributary of the Cuyahoga River is classified as nonattainment. The Tuscarawas River headwaters of Tuscarawas River are also assigned partial attainment. The review also shows that in the non-MS4 area of the county is occupied by the Chagrin, Grand, and Mahoning watersheds, the West Branch, and the Eagle Creek, which are tributaries of the Mahoning River are assigned partial attainment status. Deer Creek, which is also a tributary of Mahoning was found to be nonattainment. Only 2 out of 10 sites tested on the Deer Creek sites were in full attainment. OEPA suspects the nonattainment is primarily due to illicit discharges and failing HSTS. The Upper Aurora

Branch of the Chagrin Falls River in the Chagrin Ashtabula watershed was determined to be nonattainment. Notwithstanding the high E. coli from livestock runoff, the Grand River of the Grand watershed is designated as attainment.

Table 2: OEPA's Action Plan detailing the Portage County Watershed and Waterbody TMDL Status (Year Last Reported 2022)

Portage County Watershed, Sub-watersheds/Waterbodies			
Main Watershed	**Sub Watershed**	**Attainment Status**	**Reasons/Concerns**
Cuyahoga River	Breakneck	Partial Attainment	Nonattainment from Wahoo Ditch and downstream
	Potter Creek	Partial Attainment	Siltation and channelization. HABs from Congress Lake
	Plum Creek	Attainment	Non-point pollution and fracking
	Fish Creek	Partial Attainment	Partial attainment due to degraded fish population downstream
	Main Stem	Attainment	Kent Dam Removal
	Tinkers Creek-Headwaters	Partial Attainment	Poor aquatic habitat. ST RT 14 Drainage Ditch Restoration, ST RT 303 Culvert Restoration Project
Mahoning River	West Branch	Partial Attainment	Nonattainment downstream due to the influence of the dam and the Mahoning River
	Deer Creek	Nonattainment	Illicit discharges and failing HSTS
	Eagle Creek	Partial Attainment	Nonattainment for aquatic life
Chagrin River	Upper Aurora Branch	Nonattainment	Habitat alterations
Grand River	Grand River	Attainment	Sedimentation problems/erosion. High *E. coli* from livestock runoff
Tuscarawas River	Tuscarawas River Headwaters	Partial Attainment	Pathogens from sewage illicit discharges. Habitat alterations

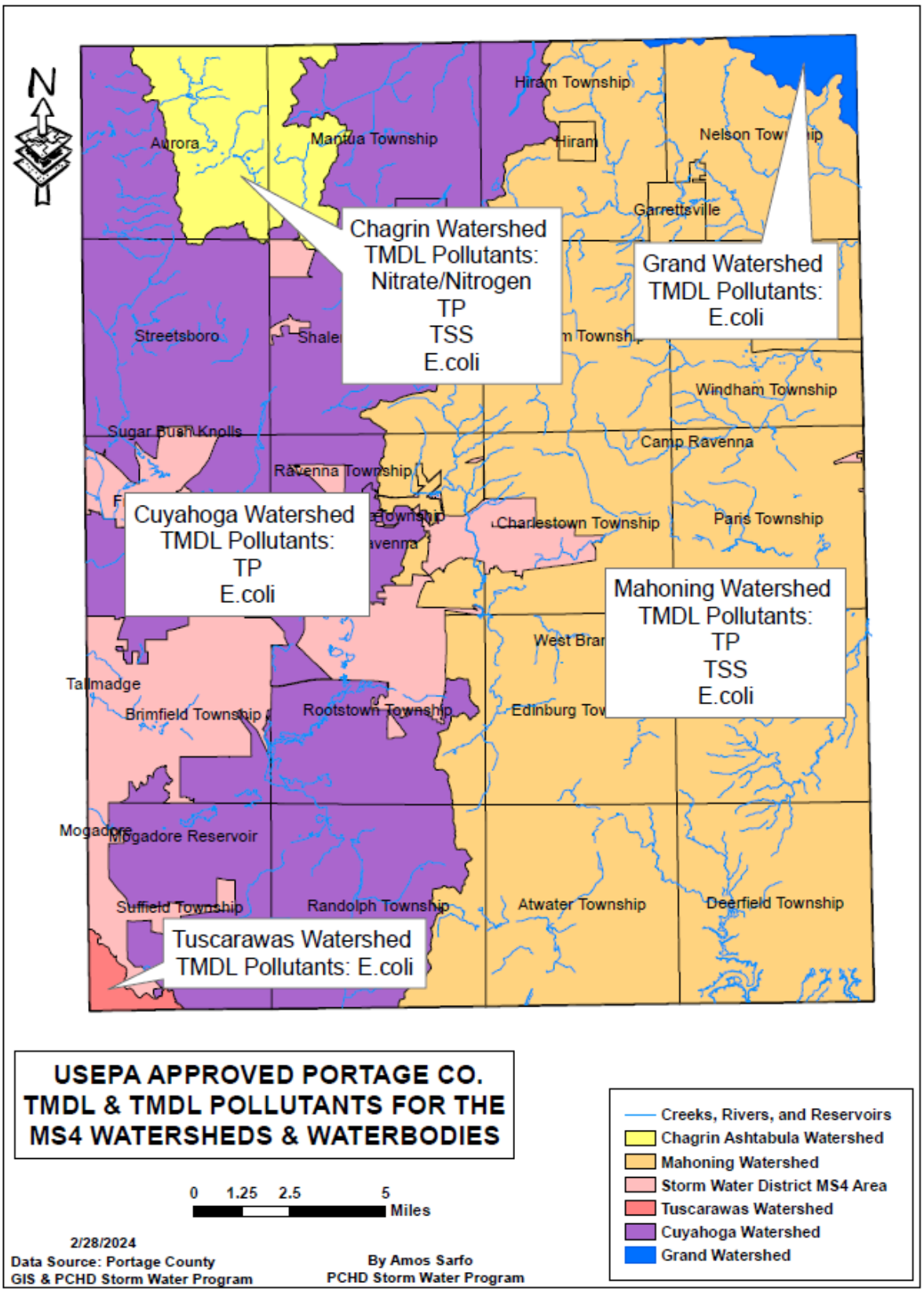
Besides the watersheds and sub-watersheds' TMDL attainment status compiled in OEPA's Watershed Action Plan discussed above, the Appendix A of the OEPA's NPDES Permit No: OHQ000004 issued on April 1, 2022, identifies regulated MS4s that are located within a USEPA approved TMDL and the MDL pollutants(s) for the MS4 area watersheds as shown in Table 3 and Figure 8 below. Although it

was not yet available at the time this report was published, the most recent TMDL attainment status data is anticipated to be released in 2024.

Table 3: Portage County MS4s USEPA approved TMDL and TMDL Pollutants for the MS4. This table is an extract from Appendix A of the 2022 OEPA NPDES Permit No: OHQ000004

Portage	Aurora City	Chagrin River	TP, Nitrate/Nitrogen, TSS, E. coli
		Cuyahoga River (lower)	TP, E. coli
		Cuyahoga River (middle and upper)	TP
Portage	Brady Lake Village	Cuyahoga River (middle and upper)	TP
Portage	Brimfield Township	Cuyahoga River (middle and upper)	TP
Portage	Franklin Township	Cuyahoga River (lower)	TP, E. coli
		Cuyahoga River (middle and upper)	TP
Portage	Kent City	Cuyahoga River (middle and upper)	TP
Portage	Kent State University at Kent	Cuyahoga River (lower)	TP, E. coli
Portage	Portage County	Cuyahoga River (lower)	TP, E. coli
		Cuyahoga River (middle and upper)	TP
		Mahoning River (upper)	E. coli, TP
		Tuscarawas River	E. coli
		Chagrin River	TP, Nitrate/Nitrogen, TSS, E. coli
Portage	Ravenna City	Cuyahoga River (middle and upper)	TP
		Mahoning River (upper)	E. coli, TP
Portage	Ravenna Township	Cuyahoga River (middle and upper)	TP
		Mahoning River (upper)	E. coli, TP
Portage	Rootstown Township	Cuyahoga River (middle and upper)	TP
		Mahoning River (upper)	TP
Portage	Streetsboro City	Chagrin River	TP, Nitrate/Nitrogen, TSS, E. coli
		Cuyahoga River (lower)	TP, E. coli
		Cuyahoga River (middle and upper)	TP
Portage	Sugar Bush Knolls Village	Cuyahoga River (middle and upper)	TP

Figure 8: Portage County MS4s USEPA Approved TMDL and TMDL Pollutants for the MS4 depicting Watersheds and Waterbodies



IDDE: Nutrients Elimination to Achieve TMDL

In 2023, 136 HSTS illicit discharges were replaced, repaird, or connected to public sanitary sewer in the the Portage County Storm Water District. Some of these illicit discharges were previously identified through IDDE, nuisance complaints, voluntary replacement, and POS HSTS inspections, but were corrected during the year. The HSTS improvements resulted in the elimination of pollutants from entering into the storm water system and the waters of the state.

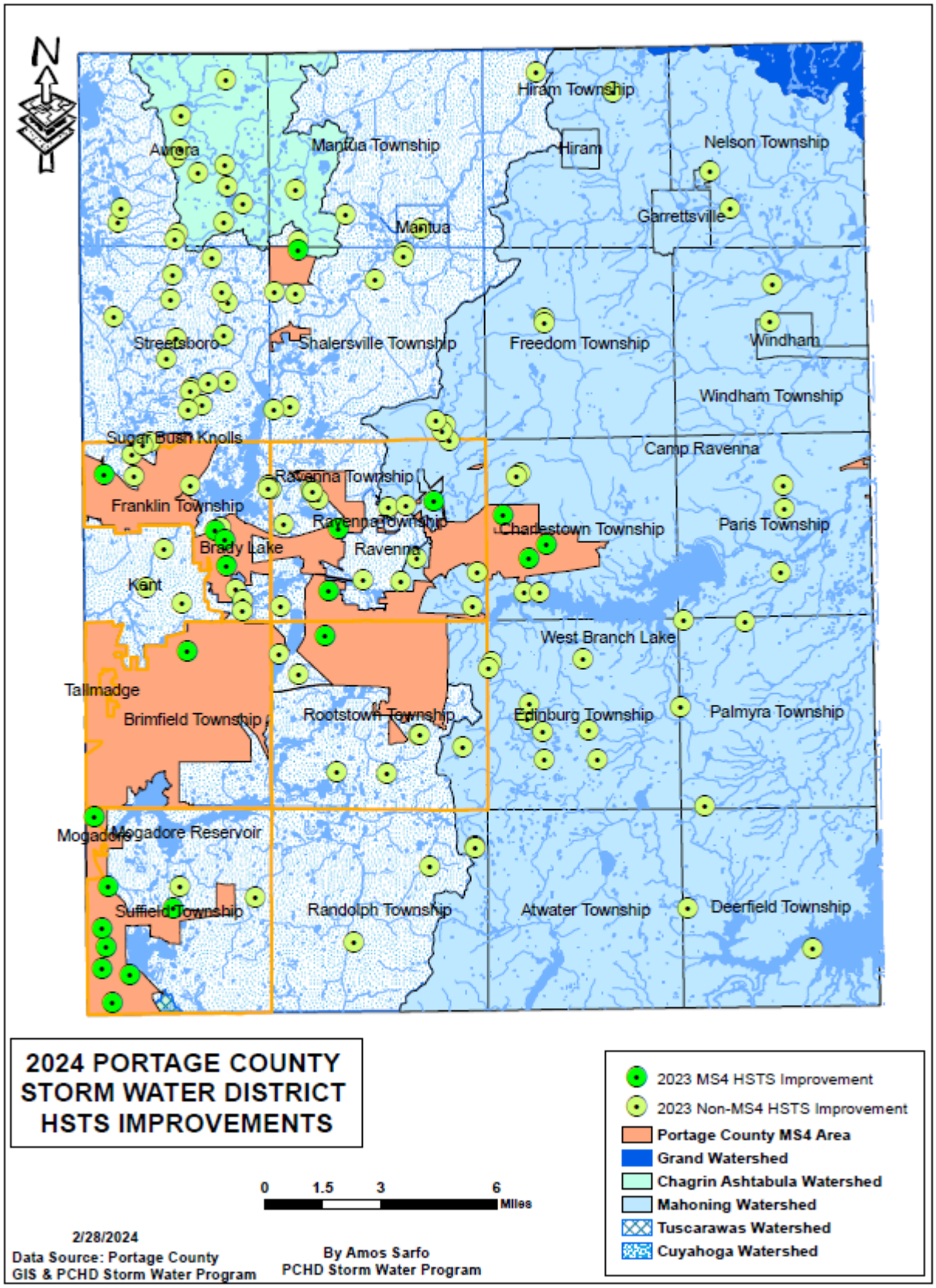
To estimate the amount of pollutants removed, PCHD used the county auditor's website to identify the homes involved with combined bedrooms of 429. Based on water usage of 120 gallons a day per bedroom in accordance with the Ohio Aadministrative Code (OAC) Chapter 3701-29 Sewage treatment (STS) Rules, it is estimated that 136 HSTSs will adequately treat 51,480 (429 *120) gallons of wastewater per day. Using Excel spreadsheeet module for a gross estimate of sediment and nutrient load reductions, it is projected that the elimination will lead to the removal of nutrients from the Storm Water District. Table 4 below summarizes the total suspended (TSS) solids, biological oxygen demand (BOD), phosphorous, nitrogen, and ammonia prevented from entering the waters of the state per year in the MS4 and non-MS4 watersheds.

Table 4: IDDE and Estimated Nutrients Pollution Removed

Total Estimated Gallons of Wastewater Adequately Treated per Day and Total Pounds of Nutrients Eliminated per Year in MS4 and Non-MS4 Communities Based on 2023 HSTS Improvement			
Homes and HSTS Data in 2023	**MS4**	**Non-MS4**	**Total**
Number of Homes (HSTS)	21	115	136
Total Number of Bedrooms	68	361	429
Total Gallons of Wastewater Generated Per Day	8160	43,320	51,480
Total Number of Nutrients in pounds (lbs) Eliminated Per Year			
TSS	1,787.0	9,487.1	11,274.1
BOD	3,487.7	18,499.8	21,984.5
Phosphorous	372.3	1,976.5	2,348.8
Nitrogen	982.9	5,217.9	6,200.8
Ammonia	744.6	3,953.0	4,697.6

As Table 4 illustrates, elimination of HSTS illicit discharges demonstrates a significant amount of nutrients removed from storm water systems. This is a positive step to reduce pollution of surface water and waterways to achieve sustainable water quality for human consumption, aquatic life and recreational activities. Figure 9 below shows a map of illicit discharges eliminated from Portage County Storm Water District watersheds.

Figure 9: Portage County Storm Water District HSTS Improvement Map depicting a visual representation of the spatial distribution of illicit discharging HSTS Replacement, repair, and sewer connection in the Storm Water District eliminated in 2023.



Facility Planning and Prioritization

Priority Area Facility Planning Activities

In 2023, the PCHD Storm Water Program continued to collaborate with the Portage County Water Resources (PCWR), Northeast Ohio Four County Regional Planning and Development Organization (NEFCO), and other partner agencies to:

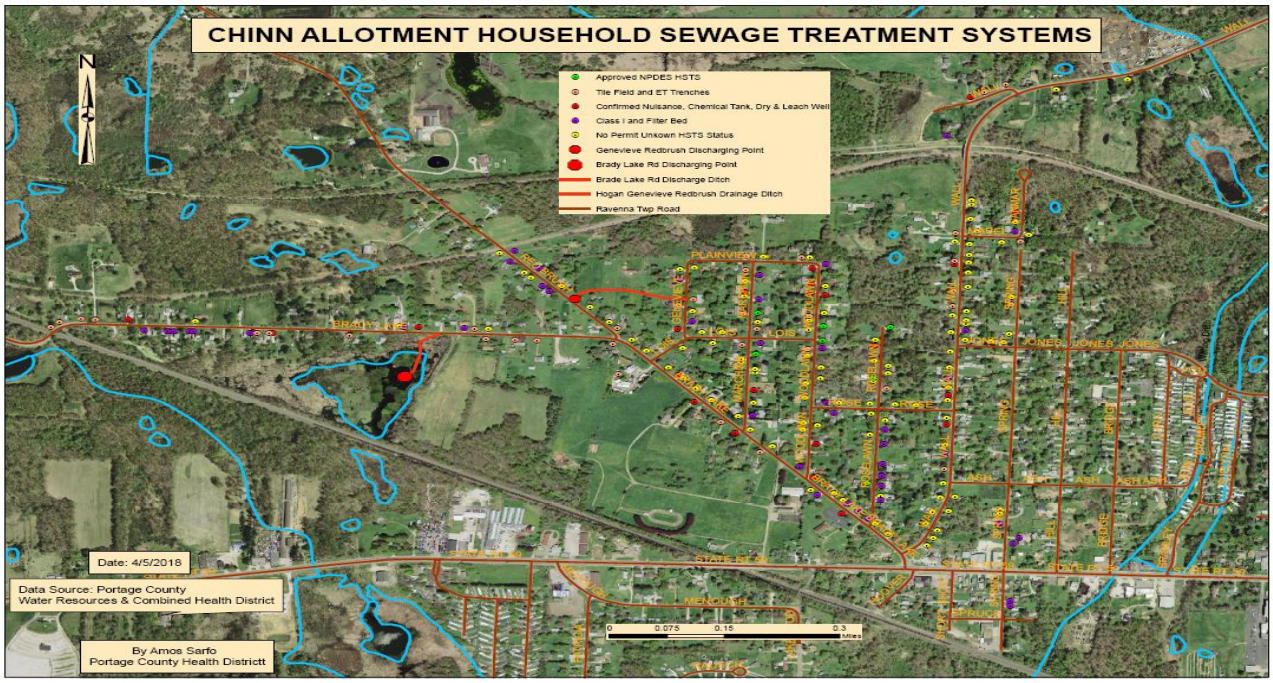
- Identify potential areas within the Storm Water District that may have high concentrations of failing HSTSs due to age and small lot sizes;
- Prioritize current sanitary sewer projects in the county;
- Identify and prioritize funding and economic impacts for STS repairs and/or replacement or sanitary sewer projects; and
- Revise, update, and confirm Portage County locations with available and accessible public sanitary sewers.

These proactive area-wide planning activities focus attention on public investments in wastewater treatment facilities and elimination of point source water pollution aimed at achieving preventable surface water contamination and sustainable water quality. The storm water partner agencies continue to collaborate and address issues concerning areas of highly concentrated illicit discharging household sewage treatment systems identified previously as described below:

- Chinn Allotment, Ravenna Township

As noted in previous annual reports, PCHD identified roughly 250 homes with failing HSTS in the area, declared them a public health nuisance, and OEPA issued a citation that the failing septic systems must be connected to public sanitary sewers. PCWR, the agency managing the project, has awarded the design plan to an engineering firm. Figure 10 shows an HSTS map of the location.

Figure 10: Chinn Allotment Household Sewage Treatment Systems Map



- Oakwood Acres, Brimfield Township

  Through IDDE inspection, PCHD identified 57 homes in this community failing HSTS discharging into the storm water system. As result of PCHD's nuisance violation enforcement action and collaborative work with PCWR, the homeowners agreed to connect to public sanitary sewer. In 2023, the last two residences in Oakwood Acres were connected to the public sanitary sewer system under PCWR's oversight, marking 100 percent successful completion of the project.

- Foxwood Estate, Ravenna Township

  In Ravenna Township, we are working with OEPA on the elimination of a public health nuisance conditions emanating from Bryn Mawr Street and Seabury Drive caused by 9 homes with HSTS illicit discharges to connect to sanitary sewer. Funding for the sewer project has been secured for the City of Ravenna to facilitate the sanitary connection.

- Benita Road, Paris Township

  All but two of 8 suspected illicit discharges from HSTSs found have been eliminated.
  - PCHD took more water samples from the stormwater drains after the HSTS replacements and detected drastic reduction in water contamination in the area.
  - This seems to suggest a correlation between the failing HSTS and the storm drain contamination in the vicinity
  - The remaining two failing HSTS are expected to be eliminated in 2024

- Parkman Road Vicinity, Windham Township

  PCHD identified suspected HSTS illicit discharge in the roadside ditch in this vicinity during IDDE inspection. PCHD is working with stakeholders to fully identify the problem, find a holistic, and best approach to eliminate the suspected illicit discharges.

Stakeholders' Meetings

As members of the Portage County Storm Water Task Force and Steering Committee, the PCHD Health Commissioner, Director of Environmental Health, and Storm Water Program Supervisor attend quarterly meetings to discuss pertinent issues with the Storm Water District's stakeholders. PCHD presents summaries of storm water activities including inspections, dry weather screening, dye testing, office/field consultations, GIS and data search, notices of violation issued for replacement/repairs, court appearances, and field/office research.

Financial Assistance for Illicit Discharges Elimination

Financial Assistance for HSTS Improvement

PCHD is mindful of the substantial cost involved in HSTS repairs, replacements or connections to public sanitary sewer and the financial burdens to eliminate illicit discharge. Therefore, the Storm Water Program seeks new funding sources to broaden the base of the financial assistance to help homeowners and continues to collaborate with the Portage County Board of Commissioners (BOD), Regional Planning Commission (RPC), Engineers Office (PCEO), Soil and Water Conservation

District (SWCD), Water resources Department (PCWR), and Neighborhood Development Services (NDS) to manage and implement current financial assistance programs such as:

1. Water Pollution Control Loan Fund (WPCLF) HSTS Improvement Program
2. Portage County Treasurer Home Improvement Program
3. RPC HSTS Repair or Replacement Program
4. NDS Home Rehabilitation Program
5. USDA Home Repair Program

Available financial support to qualified applicants is disbursed on first-come, first-served basis.

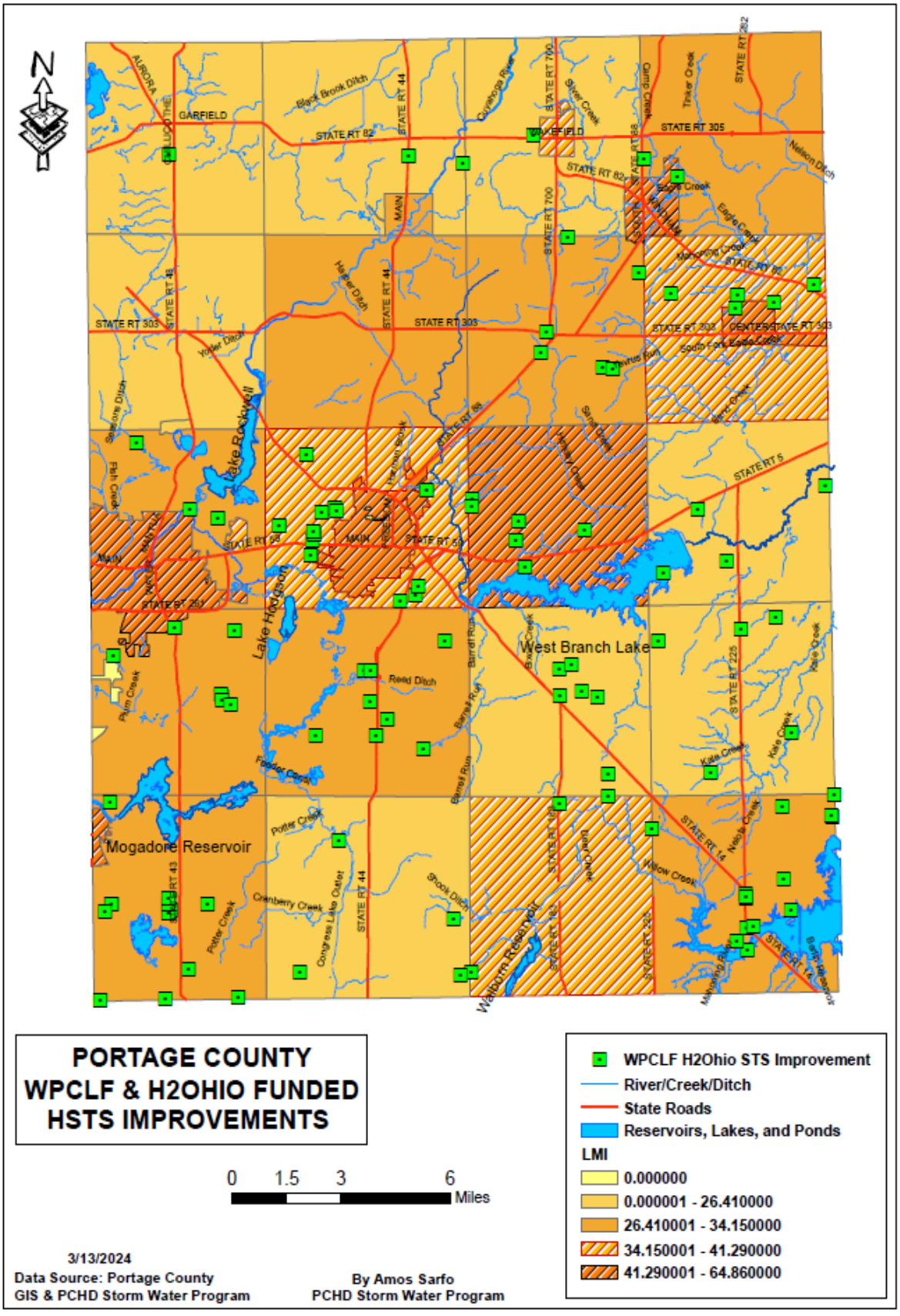
Water Pollution Control Loan Fund (WPCLF) and H2Ohio Program

In 2023, PCHD applied and received Ohio Environmental Protection Agency (OEPA) Water Pollution Control Loan Fund (WPCLF) and H2Ohio grant for HSTS improvement in the county. Both the WPCLF and H2Ohio are principal forgiveness funds to assist low to moderate income qualifying homeowners who meet the guidelines for HSTS improvement financial support on a first come first serve basis. PCHD Storm Water Program has applied for, received over $1.717 million, and disbursed $1.5 million of HSTS improvement total funding from 2016 to 2023. The distribution of OEPA WPCLF and H2Ohio funding awarded to PCHD between 2016 and 2023 are:

- Received $300,000 of 2016 WPCLF funds
- Received $300,000 of 2017 WPCLF funds
- Received $200,000 of 2018 WPCLF funds
- Received $150,000 of 2019 WPCLF funds
- Received $150,000 of 2020 WPCLF funds
- Received $150,000 of 2021 WPCLF funds
- Received $150,000 of 2022 WPCLF funds
- Received $167,000 of 2022 H2Ohio funds
- Received $150,000 of 2023 WPCLF funds

Over the years, the OEPA WPCLF Program has offered financial assistance to 120 low to moderate income homeowners, including eight homeowners who received assistance in 2022. Figure 11 below shows a map of WPCLF and H2Ohio funded HSTS improvements in Portage County between 2016 and 2023. Four of these are HSTS replacements financed by Governor Mike DeWine's H2Ohio Initiative, which was launched in 2019 with the goal of systematically and comprehensively resolving Ohio's major water challenges that have been accumulating for decades. Furthermore, OEPA has awarded an additional $150,000 to PCHD for the 2024 funding year to be disbursed within 18 months.

Figure 11: Portage County WPCLF & H2Ohio Funded HSTS Replacements **Map**



Storm Water Education and Community Outreach Activities

Community Outreach

In 2023, PCHD Storm Water Program in collaboration with SWCD and support from the Engineer's office offered education and outreach programs to storm water stakeholders and the public to facilitate their understanding of storm water management issues, gain public support and increase compliance with the OEPA NPDES Phase II Small MS4 general permit requirements. The educational and community outreach promotion was aimed at helping Portage County communities to eliminate or prevent point and non-point sources of water pollutants from entering the waters of the state through storm water drains. Detailed below are examples of the storm water education and community outreach efforts in 2023:

PCHD Stormwater Education, 2023

Kim Plough,
Health Educator
Annual Work Report

Community Initiatives Promoting Stormwater Management Awareness

Portage County Health District
999 East Main Street
Ravenna, Ohio 44266

PORTAGE COUNTY HEALTH DISTRICT

Themes	Messages	Themes	Audience
Pesticides and Fertilizers: • GOAL: Raise awareness about the impact of chemicals and fertilizers on water quality to minimize their effects, for example, by reducing winter salt usage and providing guidance on using fewer pesticides.	• No Chemicals Down The Drain • Don't Overuse Chemicals • Be Winter Smart, Use Less Salt • More Trees, Less Grass • Only Flush The 3 P's • Clean Water Starts With You • Think at the Sink • Don't Rush To Flush	Billboards   	1.Billboards were placed in various locations throughout Portage County totaling 49 weeks. Average weekly impression: 347,120

Themes	Messages	Themes	Audience
Pollution Prevention: • GOAL: Educate individuals about the sources and types of pollutants that can enter stormwater runoff. • Explain how to prevent pollution by correctly disposing of waste and maintaining vehicles. • Encourage reducing the use of harmful chemicals. • Emphasize the importance of taking care of homes and being mindful of what is disposed of in drains, including garage storm drains.	• No Chemicals Down The Drain • Don't Overuse Chemicals • Be Winter Smart, Use Less Salt • More Trees, Less Grass • Only Flush The 3 P's • Clean Water Starts With You • Think at the Sink • Don't Rush To Flush	Fair/Wheel Questions/Prizes     	2. During the Randolph Fair, visitors engaged with stormwater awareness questions from our prize wheel and received educational messages along with giveaways, reaching an average of 1,000 impressions for the week. The prizes included fish, wipes (emphasizing "Clean water starts with you"), a water drop stress ball (also promoting clean water initiatives), a bag clip, and a trash bag (encouraging against littering in cars), all showcased in images.

Themes	Messages	Themes	Audience
Pesticides & Fertilizers and Pollution Prevention	• No Chemicals Down The Drain • Don't Overuse Chemicals • Be Winter Smart, Use Less Salt • More Trees, Less Grass • Only Flush The 3 P's • Clean Water Starts With You • Think at the Sink • Don't Rush To Flush	Stormwater Awareness Week Video Clip:   Full Video, double click to interact: Restroom sign: 	3. The Septic Clean workshop, held in partnership with PSWCD, attracted approximately 30 participants to an in-person event. During the workshop, attendees learned about the benefits of using eco-friendly cleaners and the significance of avoiding chemical cleaning products. 4. An infographic/ sign was created for every restroom at the PCHD main office to address the problem of wipes being flushed down the toilets.

Billboards


don't
overuse
chemicals
PORTAGE COUNTY
HEALTH DISTRICT
Paid for by The Portage County Health District Stormwater Program
portagehealth.net


Don't
overuse
chemicals
Paid for by The Portage County Health District Stormwater Program Learn more at: portagehealth.net


PORTAGE COUNTY
HEALTH DISTRICT
BE WINTER SMART
USE LESS SALT
Did you know just
1 coffee mug of salt
covers 250 sq ft?
portagehealth.net/stormwater

Handouts

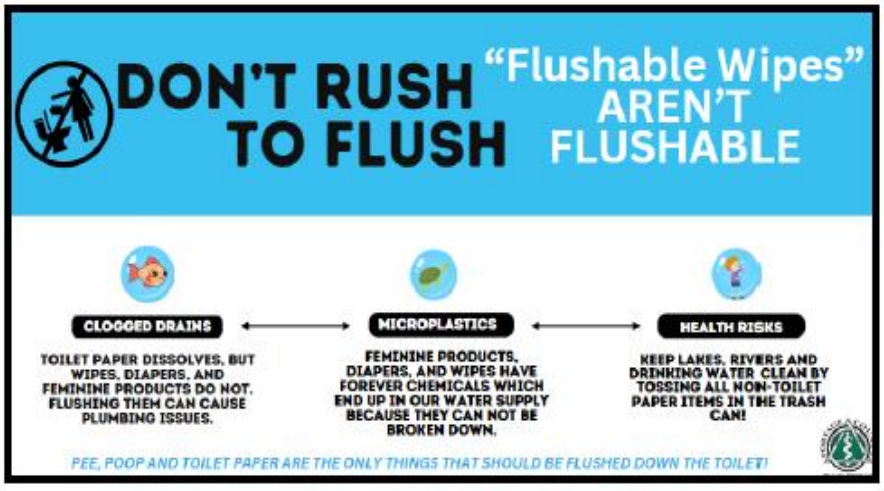
Don't Flush Wipes

Clean Water Starts With You

Don't Overuse Chemicals

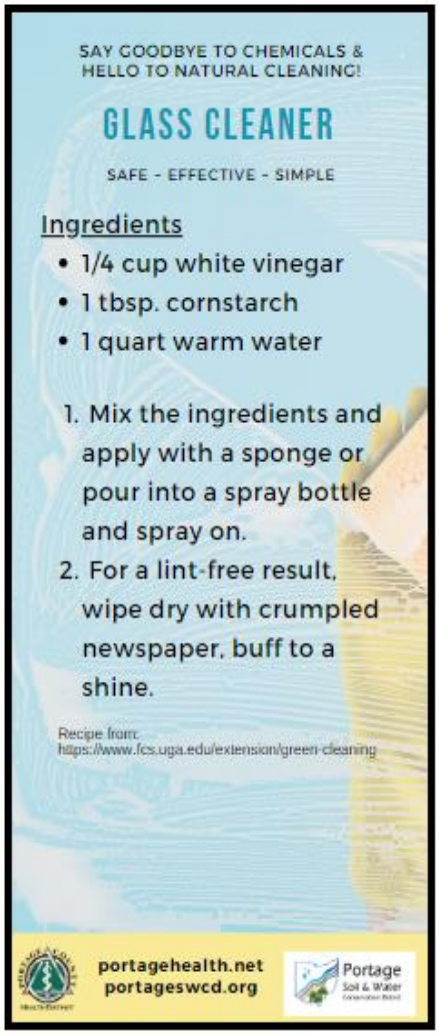
Stormwater Videos

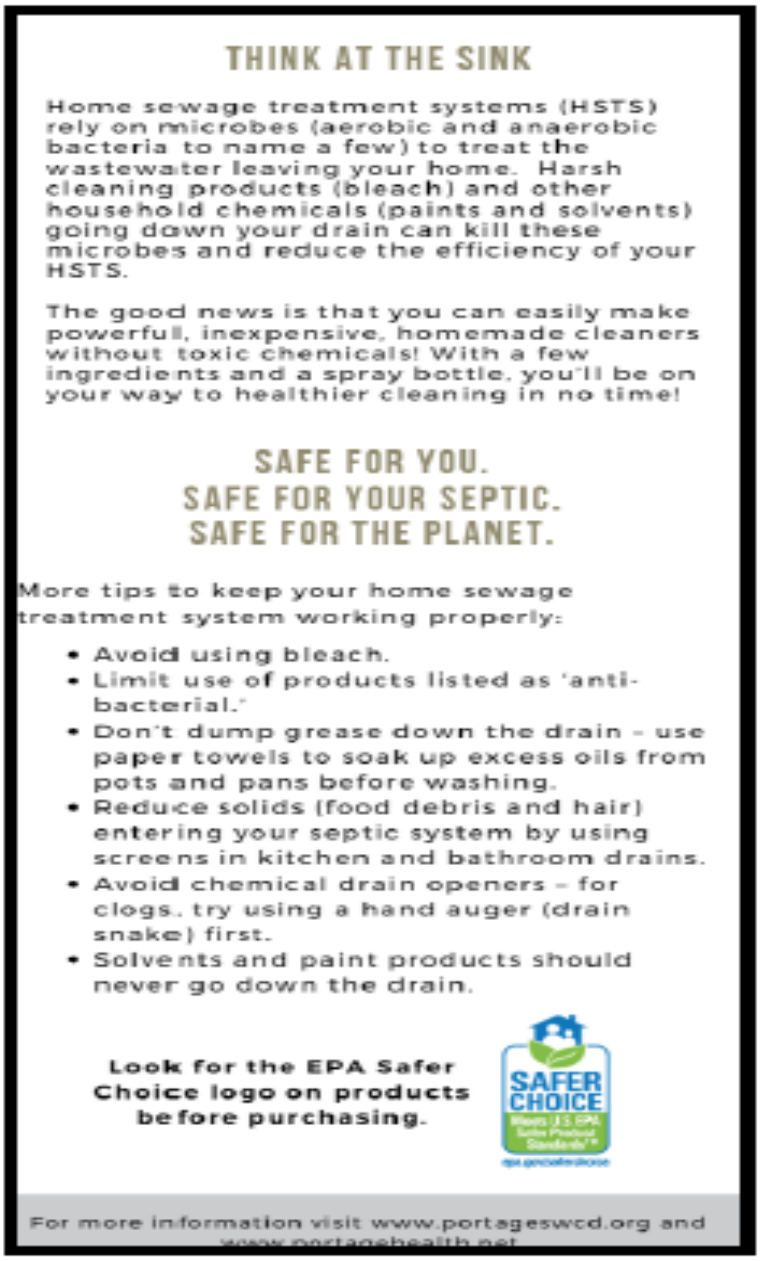
Signage



Rack Cards


SAY GOODBYE TO CHEMICALS & HELLO TO NATURAL CLEANING!
TOILET BOWL CLEANER
SAFE - EFFECTIVE - SIMPLE
Ingredients
• 1 cup borax
• 1/2 cup white vinegar
1. Flush to wet the sides of the bowl. Sprinkle the borax around the toilet bowl, then spray with vinegar. Leave for several hours or overnight before scrubbing with a toilet brush.
Recipe from:
https://www.fcs.uga.edu/extension/green-cleaning
Portage Soil & Water
PORTAGE COUNTY
HEALTH DISTRICT


SAY GOODBYE TO CHEMICALS & HELLO TO NATURAL CLEANING!
GLASS CLEANER
SAFE - EFFECTIVE - SIMPLE
Ingredients
• 1/4 cup white vinegar
• 1 tbsp. cornstarch
• 1 quart warm water
1. Mix the ingredients and apply with a sponge or pour into a spray bottle and spray on.
2. For a lint-free result, wipe dry with crumpled newspaper, buff to a shine.
Recipe from:
https://www.fcs.uga.edu/extension/green-cleaning
portagehealth.net
portageswcd.org
Portage Soil & Water



THINK AT THE SINK

Home sewage treatment systems (HSTS) rely on microbes (aerobic and anaerobic bacteria to name a few) to treat the wastewater leaving your home. Harsh cleaning products (bleach) and other household chemicals (paints and solvents) going down your drain can kill these microbes and reduce the efficiency of your HSTS.

The good news is that you can easily make powerful, inexpensive, homemade cleaners without toxic chemicals! With a few ingredients and a spray bottle, you'll be on your way to healthier cleaning in no time!

SAFE FOR YOU.
SAFE FOR YOUR SEPTIC.
SAFE FOR THE PLANET.

More tips to keep your home sewage treatment system working properly:

- Avoid using bleach.
- Limit use of products listed as 'anti-bacterial.'
- Don't dump grease down the drain – use paper towels to soak up excess oils from pots and pans before washing.
- Reduce solids (food debris and hair) entering your septic system by using screens in kitchen and bathroom drains.
- Avoid chemical drain openers – for clogs, try using a hand auger (drain snake) first.
- Solvents and paint products should never go down the drain.

Look for the EPA Safer Choice logo on products before purchasing.

SAFER CHOICE

For more information visit www.portageswcd.org and www.portagehealth.net

Conclusion

In 2023, PCHD Storm water Program successfully implemented the Municipal Small Storm Water System (MS4) program IDDE in the Storm Water District of Portage County. By collaborating with our county partners, 136 illicit discharges were eliminated and thus a substantial reduction of pollutants from the watersheds in Portage County.

Storm Water Program is prime example of PCHD's efforts to identify, detect, and eliminate illicit discharges while preventing surface and groundwater pollution pursuant to our water watersheds. PCHD's efforts are magnified with the collaboration and assistance of the Portage County Engineer's office, Soil and Water Conservation District, and our Township partners.