



SASWA PROGRESS REPORT FOR 2021

HISTORY OF THE SASWA

In 1987, Congress amended the Clean Water Act (CWA) to require implementation of a national program for addressing storm water discharges from municipalities, industry, and construction sites. The program was designed in two phases. **Phase I** required National Pollutant Discharge Elimination System (NPDES) permits for storm water discharge from sources including **medium** and **large Municipal Separate Storm Sewer Systems (MS4s)** serving populations of 100,000 or more and several categories of industrial activity, including construction activity that disturbs five or more acres of land. **Phase II** of the storm water program requires permits for storm water discharges from specific **small** municipal separate storm sewer systems (MS4s) serving Urbanized Area (UA) populations of 50,000 or more, and construction activity generally disturbing between one and five acres.

The term MS4 does not solely refer to municipally owned storm sewer systems, but rather has a much broader application that can include, in addition to local jurisdictions, State departments of transportation, universities, local sewer districts, hospitals, school districts, military bases, and prisons. In 2012 the State of Michigan began defining an MS4 as pipe systems, surface conveyance systems and roadside drainage. Open county or agricultural drains are considered “waters of the state”.

Based upon the 2000 Census Bureau information, the following municipalities in Saginaw County automatically were designated as an Urban Area, and therefore were required to secure a National Pollutant Discharge Elimination System permit by March 10, 2003.

Buena Vista Charter Township
Bridgeport Charter Township
Saginaw Charter Township
Spaulding Township
Carrollton Township
City of Zilwaukee
Thomas Township

Saginaw County Public Works Commissioner
City of Saginaw
Tittabawassee Township
Kochville Township
James Township
Saginaw County Road Commission

State agencies in Saginaw County, such as the Michigan Department of Transportation and Department of Corrections obtained permits through their parent organizations and have permits in place for their locations throughout the state. Birch Run Township, part of the Flint Urbanized Area, opted to not join the Saginaw Area Storm Water Authority (SASWA).

School districts located within the Urbanized Areas were also required to obtain an NPDES permit by March 10, 2003. The school districts that were located within the UA are as follows:

City of Saginaw Schools
Saginaw Township Schools
Carrollton Township Schools
Bridgeport-Spaulding Township Schools
Swan Valley Schools
Buena Vista Schools – **No longer a school district**
Freeland Schools
Saginaw Intermediate School District

Additionally, Saginaw Valley State University became a member of the SASWA based on the Urbanized Area encompassing the campus in Kochville Township.

The former Michigan Department of Environmental Quality (MDEQ), now Michigan Department of Environment, Great Lakes, and Energy (EGLE) had to develop criteria for school districts with campuses that were not entirely within the UA. Based on the definition developed, all school districts listed above were inspected and the following school districts were eliminated from having to obtain a permit based on the 2000 census: *(NOTE: this changed with the 2010 Census Bureau and may change when the 2020 census data is completed)*

- Freeland Schools – Only one building in the UA, until the 2010 census; they have now opted to be nested under Tittabawassee Township’s Permit.
- City of Saginaw Schools – All schools are within a combined sewer district and under a City permit.

Other changes which occurred based on either court rulings or census changes are as follows:

Based on a lawsuit filed and won by Comstock and Kalamazoo Townships, if a township’s municipal buildings are not within an Urbanized Area and no other municipal properties with a dendritic MS4 are in the Urbanized Area, then the township is exempt. This ruling allowed James, Spaulding, and Birch Run Townships to be removed from the permit list. With the release of the 2010 Census Bureau urbanized area, the same situation occurred for Kochville Township and a letter was provided to the then MDEQ to rescind their permit. This may change in the next census of 2020. The Urbanized Area data from the 2020 census is not available currently.

The purpose of the Saginaw Area Storm Water Authority (SASWA) is to provide guidance to participating members and provide a method to share in some of the associated costs. Each participating community is responsible for costs that do not benefit the Authority as a whole. The authority was formed under Public Act 230 of 1955 and was modeled after the Mid-Michigan Waste Authority and Northwest Utilities Authority.

For additional information about the SASWA and its programs, please use SASWA’s website at:

www.saswa.org

2021 PROGRESS REPORT

The Saginaw Area Storm Water Authority (SASWA) held four General Board Meetings and four Executive Board Meetings in 2021. The NPDES Individual MS4 Permit Application submittal from April 1, 2015 is still being reviewed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) for some members. The review of the SASWA permits has been completed by the EGLE and the SASWA has replied to the EGLE's comments; these permits will be up for Public Notice each permit for a period of 20 days for public comment via the MiWaters online database system (discussed below). After the public notice period is complete, the EGLE will then issue a permit to each member of the SASWA. The permit will be valid for five-plus years, dependent upon when it is issued. The members listed below has completed the public notice period and have had a permit issued. The issuance for all remaining applications will continue in 2022 as stated by an EGLE representative.

Members with Issued Permits

- Saginaw Charter Township
- City of Saginaw
- Bridgeport Charter Township
- Thomas Township
- Saginaw Intermediate School District
- Saginaw County Public Works Commissioner
- Saginaw Valley State University
- Swan Valley Public Schools
- Tittabawassee Township
- Bridgeport Spaulding Public Schools
- City of Zilwaukee
- Carrollton Township
- Buena Vista Township

The SASWA continues to utilize the EGLE's online database management system for submitting permit applications, compliance reporting for permits, and a tracking system. There will be a new progress reporting format for members to utilize beginning in 2022. It should be noted that the MiWaters system is a public system; the general public will be able to view documents that are submitted to the EGLE in which are deemed a "public" document. Most of the items produced by the SASWA for implementation of its best management practices will be able to be viewed by the public. These same public documents will be available on the SASWA website upon their final approval.

EGLE Audits of SASWA Members

In 2021 there were two EGLE audits performed for the SASWA, the City of Zilwaukee and Saginaw Charter Township. Both members were audited on all six of the six minimum measures: Public Participation Plan (PPP), Public Education Plan (PEP), Illicit Discharge Elimination Program (IDEP), Construction Stormwater Runoff Control Program (CSWRCP), Post Construction Controls (PCC) and Pollution Prevention and Good Housekeeping Program (PP & GH). After the audit, EGLE requested additional information and issued a violation notice for both members, which the City of Zilwaukee and Saginaw Charter Township promptly responded to. Audits for SASWA members will continue into 2022 as the focus shifts away from the permit application submissions.

Public Education

The COVID-19 pandemic has continued to impact stormwater education opportunities. The members of the SASWA were unable to use the public display board in 2021. With the absence of outreach events, SASWA has emphasized their online resources and educational content for the public. Content available from the SASWA website includes information on how to protect the watershed with such as tips on, Lawn Care, Pet Waste, and Car Washing. Additional information and activities are available for Homeowners', Commercial Property Owners', and Children. The SASWA has also started a quarterly blog, which members are encouraged to share on their social media pages. Articles and videos posted are season specific and any members with suggestions for blog post content or themes are encouraged to share them.

SASWA Website

The SASWA launched a new website, www.saswa.org, during the 2019 calendar year and has been continuing to improve the content and accessibility throughout 2021. Public notice documents, educational materials, and stormwater management plans are all available on the website. Training for SASWA members is also available. If you have any suggestions for how to improve the SASWA website, please reach out to your SASWA representative or contact us directly through the SASWA website.

Community Newsletters/ Social Media Postings

In addition to the SASWA blog posts, if you have a community newsletter or social media page and would like to assist the SASWA to meet its Public Education goals in 2022, please let your SASWA representative know and they will obtain articles for placement in community newsletters or on community social media pages. This will also help communities with their future stormwater audits.

Pollution Prevention and Good Housekeeping Efforts

In 2019, the SASWA hosted two training sessions, morning, and afternoon, on March 28th for public works, grounds maintenance, building maintenance and custodial staff who may come into contact with stormwater during the course of their work activities (i.e., anything outside). The training sessions were completed in a manner so staff could be rotated and not be away from work the entire day. The following topics were covered during the training sessions with the same material covered at each session: NPDES Phase II overview including the six minimum measures, IDEP and Dry Weather Screening Training, Spill Prevention and Clean-up, Construction Site Best Management Practices (BMPs), and Pollution Prevention and Good Housekeeping. In addition, pre-and post-tests were given at each training session and the results were compiled as a unit of measurement for comparison purposes. These educational sessions are **required** as part of the NPDES MS4 permit, and staff has attended these sessions in the past.

Due to the pandemic and the limits on public gatherings, the SASWA website was updated to include staff training videos to comply with this permit requirement. Upcoming training dates for public works, grounds maintenance, building maintenance, and custodial staff who may encounter stormwater during their work activities will be determined once all SASWA member permits have been issued. Members suggested that video recordings of the presentations given at the large group trainings be made available on the SASWA website for access at any time as coordinating staff attendance to the large trainings is exceedingly difficult. The presentation and online training outline are in development and should be available for use in 2022.

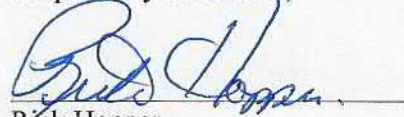
Another very successful clean-up effort which removed a substantial amount of sediment from city, county and township paved roads and roadside storm sewers was reported by the Saginaw County Road Commission (SCRC) and others. In 2021 the workers from the SCRC removed 393 cubic yards (663 tons) of sediment with their street sweeping program. They also cleaned 806 catch basins, removing another 224 tons of sediment. The Road Commission began their Catch Basin Inspection Program in 2020 as part of the NPDES MS4 permit application. This program has helped to proactively determine areas of concern and to address any catch basin maintenance issues before they get out of hand. The SCRC will continue this program throughout this permit cycle. The City of Saginaw continues its programs of cleaning materials from the restrictor plates in the street catch basins, street sweeping program, and catch basin cleaning programs. The SASWA had a team from Spicer Group inspect catch basins on township, school district, and county properties in the Urbanized Area of Saginaw. All structural storm water controls scheduled for inspection in 2019 were completed, including those on Saginaw Valley State University's campus. The approved catch basin inspection program with the new NPDES permits for all SASWA members, began in 2021. All member's, apart from the SCRC, high priority catch basins were inspected, 434 total, and cleaning maps were developed. In 2022, all medium priority catch basins are scheduled to be inspected.

The sediment removed from street sweeping and catch basin cleaning usually has pollutants attached to it such as heavy metals like lead, chromium, zinc, aluminum, petroleum products, and nutrients such as phosphorus and nitrogen. These materials impact our water resources. For example, the 888 tons of sediment from street sweeping and catch basin cleaning are estimated to contain 754 pounds of phosphorus. Phosphorus is a limiting nutrient in freshwater, so if it becomes available in freshwater, aquatic plants and algae grow at a rapid rate. One pound of phosphorus can yield up to 10,000 pounds of algae /aquatic vegetation. The algae and aquatic vegetation, when it dies off, is the source of organic muck in lakes and rivers; most of this goes out to Saginaw Bay. **The street sweeping program of the Saginaw County Road Commission has helped eliminate the growth of over 3,772 tons of algae and nuisance aquatic plants in our region's water resources, ultimately the Saginaw Bay.** These efforts are helping us preserve our water resources and helps reduce the probability of having harmful algal blooms in Saginaw Bay.

IDEP dry weather screening was also done during 2021. For ease of tracking and to ensure all points are inspected during a permit cycle, the SASWA outfalls and points of discharge were divided into 5 sections (one to be completed each year of the permit cycle). In 2021, the first year of inspections were completed with 130 outfalls and points of discharge inspected. The remaining outfalls will be screened in the coming years according to the proposed schedule. Of the outfalls screened, 25 needed a follow up visit and of those 25, eleven needed to have water quality sampling completed. One of the outfalls was determined to have an illicit connection due to high levels of human E. coli and the necessary information was provided to the Saginaw County Health Department and EGLE for follow up investigation.

The SASWA had four reports of spills or illicit discharges in 2021 and one illicit discharge discovered during dry weather screening, mentioned above. The first incident was the release of Class B firefighting foam used at a structure fire in Thomas Township. Proper firefighting techniques were used, and the foam was pre-diluted prior to entering the storm system. EGLE was notified of the incident and no residual was present after the event. The second incident involved a vacant lot in the City of Saginaw. EGLE contacted Spicer Group about a thick oil-based substance they noticed during field work near the end of July. The City of Saginaw was contacted, and Spicer staff went to the site to meet the EGLE staff and determined that none of the substance had reached the catch basin. EGLE staff met with the property owner and has been in discussion on clean up. Also in July, SCPWC received a call from a landowner that a hired painting crew and said an employee dumped paint into one of the catch basins. Spicer staff went and investigated the spill and spoke with the painting crew that was on site. The company was contacted and requested to find a cleanup service; Spicer staff provided some contacts. None of the emergency clean up companies were able to clean up paint. This was within the combined sewer district and was a small amount, so it was determined that no additional cleanup was necessary given the effort to attempt to clean by the company and the time taken to attempt to track down a company to complete the cleanup. The fourth potential illicit discharge was observed during catch basin inspections at a Saginaw Intermediate School District (Saginaw ISD) property. A clear hardened glaze was noted on several catch basins in the parking lot along with additional hardened material from parking lot resurfacing. Staff from Saginaw ISD was contacted they inspected the basins as well and confirmed that the material was from the resurfacing and when the work was completed catch basin inserts were installed to prevent discharge into the catch basins. The nature of the material found; no immediate action was taken because of the low potential to discharge.

Respectfully Submitted,



Rick Hopper
Chair - SASWA