



SASWA PROGRESS REPORT FOR 2018

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 Michigan Department of Environmental Quality (MDEQ) 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)*

- 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 MDEQ to rescind their permit. This may change in the next census of 2020.

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

2018 PROGRESS REPORT

The Saginaw Area Storm Water Authority (SASWA) held four General Board Meetings and four Executive Board Meetings in 2018. The new NPDES Individual MS4 Permit Application submittal from April 1, 2015 is slowly being reviewed by the Michigan Department of Environmental Quality (MDEQ) as 2018 wains. The reviews of Saginaw Charter Township and the Saginaw County Public Works Commissioner's permit have been completed by the MDEQ and the SASWA has replied to the MDEQ's comments; these permits will soon be up for Public Notice by the MDEQ. The MDEQ will "Public Notice" each member's 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 MDEQ 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 reviews for the remaining applications will begin again in 2019, with the tentative issuance of permits for 2019, as stated by an MDEQ representative.

In 2015, the SASWA reported that a SAW Grant was applied for in 2013 to offset the preparation costs of the MS4 permit applications. The grant was tentatively scheduled to be issued in 2018. However, the SASWA had its grant awarded in late 2016. The SASWA has received a \$92,500 SAW Grant to assist with the application process; a total of \$83,250 has been awarded with a \$9,250 cash match (10%) by the SASWA (this match was accounted for in the budget for 2017). In 2017, two separate disbursement requests were submitted and received. The first disbursement was for \$9,070.87 and the second disbursement was for \$58,676.63; the remaining funds to receive, which will be submitted for in 2019, are \$15,502.50.

As stated in the "History of the SASWA", due to changes in both the definitions on a MS4 system and the Urbanized Area based on 2010 Census Data, Kochville Township was able to submit a letter in 2016 requesting to be removed from the MS4 Permit system. Final confirmation from the MDEQ occurred on January 4th of 2018 with an issuance of a letter. Based on this change in membership, the apportionment changed from 6.25% to 6.67% for members for the 2017 budget. With securing a portion of the SAW Grant funds in 2017, the budget for 2018 was substantially reduced from previous years. The SASWA passed a budget for 2018 which was lower than the 2017 budget year by \$20,000.00. Annual payments for the SASWA members changed from \$5,333.33 in 2017 to \$4,000.00 in 2018, respectively. Once the MS4 permit applications are completed, and with the remaining SAW Grant funds tentatively scheduled to be received in 2019, the SAWA anticipates their budget for the calendar year of 2020 may be reduced as the 2018 budget was reduced for members.

The SASWA still maintains a presence on the MDEQ's MS4 Implementation Team (MIT) which oversees the administration of the new Individual NPDES Stormwater permits. The SASWA is the only authority represented on the committee. The consultant also represents numerous other municipal and county clients around Michigan to the MDEQ. We are in an enviable position to have a direct voice to the MDEQ on this committee. It has not met for the past three years with the new permit application process taking up a substantial amount of the MDEQ's time.

The SASWA continues to utilize the MDEQ's online database management system for submitting permit applications, compliance reporting for permits, and a tracking system. As with any statewide large database, it is not without a "few" bugs. Fortunately, we have a consultant who has fought her way through the system and knows its intricacies well and keeps the MDEQ staff well informed of glitches and system errors which occur frequently. The new MS4 permit application has been available and currently, all NPDES progress reports are to be submitted for each member individually on-line. There will be a new progress reporting format for members to utilize beginning in 2018. We will be providing feedback to the MDEQ on this system on the MS4 Implementation Team and be trying to get our technical consultant on the MiWaters committee to help us bring up issues which communities and the general public may have

with the system. 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 MDEQ 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 are available on the SASWA website.

Annual MDEQ Audits of SASWA Members

In 2018 there was only one MDEQ Audit for the SASWA. The MDEQ performed an audit for Saginaw County (Saginaw County Public Works Commissioner); the audit consisted of a review of the 2018 progress report, the MS4 permit application, and an onsite field visit of a county owned drainage pump stations. It is not anticipated the MDEQ will perform any audits in 2019 as the focus is for review of applications and issuance of the NPDES MS4 permit.

Public Education

The members of the SASWA have been very active with the use of the SASWA table top display in township halls and at school districts in 2018. Again, if your community or school district is interested in hosting this display at events or at your location, contact your SASWA representative and they will coordinate this stormwater educational opportunity through the consultant. The SASWA will continue to distribute the children’s activity book during 2019. This activity book has educational items in it to help children understand stormwater, the environment and how to protect our water resources. This book has been updated and changed with assistance from environmental engineering students from Michigan Tech and Michigan State Universities.

SASWA Website

In 2015 and 2018, the consultant did an inventory of each page of the existing website to identify where updates must occur. The SASWA postponed work for the website in 2016 and 2017 for budgetary reasons. Issues with the existing website were identified in 2018 and it was determined it was more cost effective to have a new website created altogether. The SASWA anticipates having a new website created in the 2019 calendar year.

Community Newsletters

The Saginaw County Road Commission is still very pro-active in obtaining articles related to stormwater and placing them into their quarterly newsletter.

If you have a community newsletter and would like to assist the SASWA to meet its Public Education goals in 2019, please let your SASWA representative know and they will obtain articles for placement in community newsletters.

University Student Sponsorship

In 2016, the SASWA teamed up with a Saginaw Valley State University (SVSU) student who was doing a study of *E. coli* in stormwater discharges from county drains discharging into the Saginaw River. The student was completing her undergraduate degree in Analytical Chemistry. Her research was presented at a national conference in California in early April of 2016. She also presented her findings to the SASWA General Board. Her research provided useful data for the SASWA on the health of our regional drains and provides the SASWA with an opportunity to obtain additional focused research for the future. The SASWA donated \$250.00 for the student to cover her travel expenses to present her research in California. The Bay

Area Storm Water Authority (BASWA) also provided \$250.00 to the student. There was some research started in 2017, but the SASWA will not get results as the student did not complete the assigned tasks.

The SASWA will be coordinating with SVSU again in 2019 to obtain more focused stormwater research information. This information is being developed in collaboration with the Saginaw Bay Environmental Studies Institute at SVSU. We feel that a collaboration with our regional University (and member of SASWA) will help in the future. This also provides a real-life application of the student's chosen field of study and opportunity to see what careers are available in the Great Lakes Bay Region. The former student who presented the original study now works for Spicer Group as their water quality analyst.

Pollution Prevention and Good Housekeeping efforts

In 2017, the SASWA hosted the following training sessions 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):

- January 24th (Morning and Afternoon sessions)
- January 25th (Morning and Afternoon sessions)
- February 20th (Morning session)
- March 9th (Morning and Afternoon sessions)

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. Training will be held again in 2019 for any new staff for public works, grounds maintenance, building maintenance, and custodial staff who may come into contact with stormwater during the course of their work activities.

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, City of Saginaw and others. In 2018 the workers from the Road Commission removed 308 cubic yards (519 tons) of sediment with their street sweeping program. They also cleaned over 330 catch basins, removing another 4 tons of sediment. The City of Saginaw continues its programs of cleaning materials from the restrictor plates in the street catchbasins, street sweeping program and catch basin cleaning programs. Typically, these amounts are substantial. This sediment removed 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 have an effect on our water resources. For example, the 523 tons of sediment from street sweeping and catch basin cleaning are estimated to contain 445 pounds of Phosphorus. Phosphorus is a limiting nutrient in freshwater, so if it becomes available in freshwater, aquatic plants and algae grow at a very rapid rate. One (1) pound of phosphorus can yield up to 10,000 pounds of algae and aquatic vegetation. This 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 Road Commission of Saginaw County has helped eliminate the growth of over 2,223 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. This also helps reduce the probability of having harmful algal blooms in Saginaw Bay.

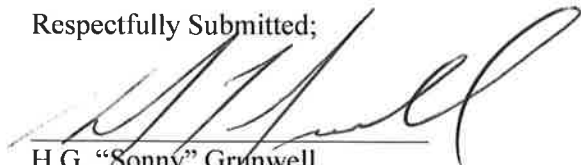
The SASWA had a team from Spicer Group inspect catch basins on township, school district, and county properties in the Urbanized Area of Saginaw. All structural storm water controls scheduled for inspection in 2018 were completed. The inspection team consisted of an environmental engineering intern from Michigan Tech and an environmental chemistry water quality intern from Saginaw Valley State University.

The SASWA had seven reports for spills or illicit discharges reported for 2018. The first incident occurred in Bridgeport at the TA Travel Center on March 15th and was reported to the Michigan Department of Environmental Quality Pollution Emergency Alerting System (PEAS) reporting hotline. The spill consisted of approximately 30 gallons of diesel fuel. The spill was contained in the catch basin sump, there was no discharge made to the detention basin, MS4, or waters of the state. The second illegal dumping occurred on April 22nd in Saginaw Charter Township; this consisted of dog feces being disposed of into a storm sewer. The third incident occurred in Saginaw Charter Township on May 17th; approximately two gallons of an unknown type of floor stripper agent was dumped in the parking lot in front of Jet's Pizza by a catch basin. The site was cleaned up with oil dry and the material was disposed of into the dumpster. The spill was mostly contained to the sump of the catch basin.

The fourth incident was discovered on June 13th while Spicer Group staff were completing structural storm water control inspections in Saginaw Charter Township at the Soccer Complex; line painting equipment was being cleaned by a catch basin. Saginaw Charter Township was following up with the reoccurring incident. The fifth incident was discovered on July 6th at the Carrollton School District (Carrollton Middle School and Elementary School) when Spicer Group staff were completing structural storm water control inspections. It was discovered that custodians were dumping plastic garbage and milk into the catch basins; Carrollton Township staff educated the custodians. Carrollton School District contacted City Sewer and had them clean out the basins.

The sixth incident occurred on September 13th at a residential home in Saginaw Charter Township. A truck was leaking oil near a catch basin; the truck was moved, and nothing was found within the catch basin. The seventh incident occurred in the City of Saginaw on October 24th and was reported to the Michigan Department of Environmental Quality Pollution Emergency Alerting System (PEAS) reporting hotline. A 330-gallon plastic tote being loaded onto a trailer was punctured and released approximately 175 gallons of a non-reg ultrion 8187 material into the storm drain; Northern A1 was the cleanup contractor.

Respectfully Submitted;



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Chair - SASWA