



## SASWA PROGRESS REPORT FOR 2017

### 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 (2) 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 (5) 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 (1) and five (5) 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 are 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](http://www.saswa.org)**

## **2017 PROGRESS REPORT**

The Saginaw Area Storm Water Authority (SASWA) held four (4) General Board Meetings and four (4) Executive Board Meetings in 2017. 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 2017 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 twenty (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 (5)-plus years, dependent upon when it is issued. The reviews for the remaining applications will begin again in 2018, with the tentative issuance of permits for 2018, 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 will be awarded with a \$9,250 cash match (10%) by the SASWA (this match was accounted for in the budget for 2017). In 2017, two (2) 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 2018, 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 4<sup>th</sup> of 2018. 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 has passed a new budget for 2018 which is 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.

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 two (2) years with the new permit application process taking up a lot 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**

Again in 2017, there were no MDEQ Audits of SASWA Members and there probably will not be any audits in 2018. The MDEQ is using the MS4 Permit Application review process as a form of auditing members of the SASWA, as stated in 2015's summary of activities.

## **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 2017. 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 plan on handing out children activity books to area children during 2018. 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 Web Site**

The SASWA will be updating its website in 2018; in 2015, the consultant did an inventory of each page of the web site to identify where updates must occur. This work will occur in either late spring or summer of 2018. The SASWA postponed this work on 2016 and 2017 for budgetary reasons.

## **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 2018, 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, 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 get any results until 2018. The SASWA be coordinating with SVSU again in 2018 to obtain more 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 24<sup>th</sup> (Morning and Afternoon sessions)
- January 25<sup>th</sup> (Morning and Afternoon sessions)
- February 20<sup>th</sup> (Morning session)
- March 9<sup>th</sup> (Morning and Afternoon sessions)

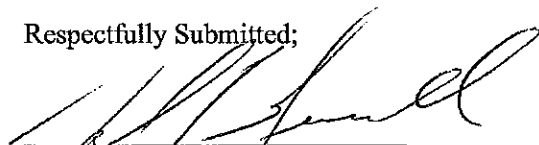
The training sessions were completed in a manner so staff could be rotated and not be away from work the entire day. The following topics were covered during the training sessions with the same material covered at each session: NPDES Phase II overview including the six (6) minimum measures, IDEP and Dry Weather Screening Training, Spill Prevention & 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.

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 2017 the workers from the Road Commission removed 418 cubic yards (705 tons) of sediment with their street sweeping program, a 7.8% increase over 2016 totals. They also cleaned over 754 catch basins, removing another 243 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 947 tons of sediment from street sweeping and catch basin cleaning are estimated to contain 806 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 4,030 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 four (4) reports for spills or illicit discharges reported for 2017. The first illegal dumping occurred on February 27<sup>th</sup> in Bridgeport Charter Township; this consisted of household waste items (i.e. paint cans, thinners, oil cans) being dumped into a ditch. The second incident occurred in Thomas Township on March 13<sup>th</sup>; this illicit discharge of various alcohol beverages took place at 7570 Gratiot and was estimated at over 2,400 gallons of alcohol. The third incident was an illicit discharge of fertilizer into the storm system in Saginaw Township on Fashion Square Boulevard at Custom Lawncare on April 26<sup>th</sup>. The third incident provided the SASWA an opportunity to provide training to Custom Lawncare employees. The SASWA consultant traveled to their Flint office and conducted a training on stormwater systems, the importance of cleaning up spills, buffer zones and lawn applications to thirty-eight (38) Custom Lawncare staff members. The owner of Custom Lawncare requested for the SASWA consultant to perform this training annually. The final incident occurred on September 25<sup>th</sup> at the southwest quadrant of the

intersection of S. Reimers and Hess Roads; the incident consisted of a blackwater, smelly discharge in the roadside ditch. The initial call was immediately acted upon by the Saginaw County Road Commission (SCRC) staff whom contacted the Saginaw County Public Works Commissioner and Spicer Group. It was determined that it was a SCRC Drain and it could be handled before it got to a County Drain. A vactor truck came in and removed the liquid; the operator thought it was rotting farm produce and not sewerage. Follow-up site investigation indicated that no odor remained on the site and the water was clear.

Respectfully Submitted;



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H.G. "Sonny" Grunwell  
Chair - SASWA