



SASWA Progress Report for 2012



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 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 populations of 50,000 or more, and construction activity generally disturbing between 1 and 5 acres.

The term MS4 does not solely refer to municipally owned storm sewer systems but 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. An MS4 also is not always just a system of underground pipes. It can include roads with drainage systems, gutters, swales, open drains and ditches.

Based upon the 2000 Census information and other regulations of this act as implemented in Michigan, the following 16 municipalities, county agencies, and educational institutions in Saginaw County were required to secure and maintain a National Pollutant Discharge Elimination System permit by March 10, 2003.

Buena Vista Charter Township & Schools
Bridgeport Charter Township
Bridgeport Spaulding Schools
Carrollton Township & Schools
City of Zilwaukee
Kochville Township
Saginaw Valley State University
Tittabawassee Township

Saginaw County Public Works Department
City of Saginaw
Saginaw Charter Township
Saginaw Township Community Schools
Saginaw County Road Commission
Thomas Township
Swan Valley School District
Saginaw Intermediate School District

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.

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 go to our website at:

www.saswa.org

2012 Progress Report

The Saginaw Area Storm Water Authority (SASWA) held six General Board Meetings and six Executive Board Meetings in 2012. The NPDES Permit has finally been released by the MDEQ. The SASWA is still working under the original 2003 permit, but the local MDEQ regional office is accepting the portions of the 2008 permit that the SASWA has implemented. This was done to keep plans and reports that the SASWA has completed under the 2008 permit in effect and to keep our forward momentum in place. Specifically, the revisions completed to the Public Education Plan, Public Participation Plan, Illicit Discharge Elimination Plan, Storm Water Pollution Prevention Plan and development of the Storm Water Pollution Prevention Plans for specific members have been acknowledged and approved. These plans are available on the SASWA web site at: www.saswa.org

The MDEQ held stakeholder two meetings in Lansing, June 13, 2012 and July 23, 2012 of which, the SASWA had representation present as parts of the new permit were explained. The new permit is finally complete and being implemented starting in 2013. The implementation of the permit application phase is different than in past years. Instead of all 300+ permittees applying all at once, permittees will be applying based on the watershed their municipality or county is located in. The watersheds in Michigan have been divided into 5 groups and the permits are for 5 year intervals. So theoretically, only 60 permits will be applied for each watershed year. This will help the MDEQ staff in administering the program with their limited resources.

We have already negotiated with the MDEQ district office and have decided that we will do all of the SASWA permits in one year, 2016. This means we will need to begin preparing for this permit application over the next two years in order to spread the cost of the application out over a period of time. The SASWA consultant will be working with clients in other watershed areas as they prepare their permit applications obtaining experience in this new process before it has to be done here for the SASWA. This should result in a streamlining of the application process and potentially save funds.

Annual MDEQ Audits of SASWA Members

Two members of the SASWA were audited by the MDEQ in 2012; they were; City of Saginaw on April 4th and 5th, 2012; and Saginaw Intermediate School District on April 11, 2012. The audits for storm water permit compliance were from 8 to 16 hours in duration, during which the MDEQ reviewed practices by each of the members that related to storm water. Each of these audits resulted in a letter from the regional MDEQ office that had to be answered by a specified date. For the most part the letters were positive in nature and one violation was noted. There were recommendations from the MDEQ to enhance the implementation of certain plans, most notably the Public Education Plan related to quantification of the education of the public. The SASWA has been gathering survey data to develop this quantification of the effectiveness of the public education plan. This has been provided to the MDEQ already.

The audit also brought out the recommendation to continue with the education of the SASWA member's maintenance and public services staff. The SASWA has completed another training session with the Saginaw County Road Commission in which over 50 field staff was trained in storm water pollution prevention and good housekeeping practices. The City of Saginaw had 51 staff members trained in pollution prevention and good housekeeping procedures related to storm water runoff and illicit connections and spill reporting in April of 2012. The participants in the 4.5 hour training session took a pre-test and post-test to measure the effectiveness of the training and the overall scores improved by an average of 20% after the training was completed. The Saginaw ISD had another training session to add to past training to upgrade them for their work environment. Again, feedback from all participants was positive and they felt the training was useful for their job settings. This training helps municipal and

educational institution staffs understand their responsibilities related to the NPDES stormwater discharge permit held by SASWA members.

The SASWA members that will be audited over the next 3 years are:

Buena Vista Charter Township and Schools
Bridgeport Spaulding Schools
Saginaw County Public Works
Saginaw Valley State University
Tittabawassee Township
Saginaw Township Community Schools

Bridgeport Charter Township
Carrollton Township and Schools
Kochville Township
Thomas Township
Zilwaukee, City of

The SASWA and its consultant will be working with members to help them get into compliance before the audits occur. Understand that one of these audits takes municipal and educational staff a considerable amount of time to prepare for, take part in and then respond to the review letter. The consultant will be present during the audit; will work with staff to prepare for the audit and will prepare the audit response letter for your staff.

In preparation for this audit, municipalities need to have certain plans, ordinances, or regulatory procedures in place. One such item is a Post Construction Control Procedure, also known as a Storm Water Management Plan. Communities that have these in place now are:

Saginaw Charter Township
Carrollton Township
Tittabawassee Township (pending)

Thomas Township
Kochville Township
City of Saginaw

If your municipality does not have this document in place please contact the SASWA consultant soon. The SASWA developed a generic plan that can be adopted for your municipality. Educational institutions and the County do not need this document.

Public Education

A children's educational workbook related to stormwater was revised this year for the membership. We no longer call it a WORK BOOK, as someone pointed out, kids don't like WORK. We now call it an ACTIVITY BOOK, as kids like activities, not WORK. We received input to change the presentation format to use less colored ink from printing to keep the costs of this Activity Book down for members who wish to print their own copies to hand out. This activity book has puzzles, word games and web site addresses with activities related to surface water and is designed to raise awareness of stormwater pollution. The activities in the booklet are available on the SASWA web site at:

http://www.saswa.org/public_education.php

Over 300 brochures were distributed at various functions this past year to educate the general public on stormwater pollution. The Swan Valley Schools came through again this year and displayed storm water education during Parent / Teacher conferences at the Middle and Elementary Schools in their district. The SASWA traveling table top display was set up, brochures and materials distributed.

We hope to use the SASWA table top display more at community events in 2013. If you are interested in hosting this display at events or in your township offices, contact your SASWA representative and they will coordinate this stormwater educational opportunity with the consultant. The SASWA is always

looking for an opportunity to educate the public on protecting our water resources in our region and education is the simplest way to stop pollution from entering our rivers and the Saginaw Bay.

Education Survey Results

The Saginaw Intermediate School District assisted the SASWA a lot this year by helping obtain results of the effectiveness of our public education. What we discovered was that 57% of those surveyed believe stormwater runoff is treated at a wastewater treatment plant before discharge into our rivers. 54% do not know that the storm sewers go directly to our rivers. When participants were asked if they lived in a watershed over 60% said "No". The fact is everyone in the world lives in a watershed. We will be targeting our education on this topic in the near future. The good findings were that 74% used recycling, 96% knew that it was improper to dispose of leaves and grass clippings in rivers, streams and drains. 80% used a collection site to dispose of prescription medication. They realized that flushing medication down a toilet causes problems in our Great Lakes.

New Education Brochures

Based on the survey results two new brochures have been developed for the SASWA members. One is for Watershed Education of the general public. These have been distributed to SASWA members to handout.

The second brochure is the first in a targeted education program. This brochure will be sent to out countywide to lawn care businesses to help remind their staff not to blow grass clippings into the street gutters or towards catch basin inlets. These will be mailed in spring, 2013.

In 2013 the SASWA will develop two more brochures, one for restaurants and one for fueling stations and automotive repair shops to help prevent oils, grease and hydrocarbons from entering into our storm drainage systems.

Pollution Prevention and Good Housekeeping efforts

Another very successful clean-up effort that 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 2012 the workers from the Road Commission removed 844 cubic yards of sediment and the City of Saginaw removed 2,130 cubic yards of sediment and their restrictor / catchbasin inlet cleaning program accounted for an additional 800 cubic yards of debris (5,019 Tons of sediment) from our road surfaces and from sediment collected in storm drains in the roads. This sediment removed usually has pollutants attached to it such as heavy metals like lead, chromium, zinc, aluminum and nutrients such as phosphorus and nitrogen and petroleum compounds. These materials have an effect on our water resources. For example, the 5,019 Tons of sediment are estimated to contain 4,266 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 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 and City of Saginaw has helped eliminate the growth of over 21,330 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.

The SASWA had no spills reported for 2012. We did have a report of homeowners putting leaves in a roadside ditch in Thomas Township. This was handled by an article in the Township Newsletter advising

residents of the harmful nature of this type of disposal method for leaves and grass clippings in storm drainage systems.

Limited outfall inspection was carried out this spring and summer by co-ops trained for this task. During the summer 16 outfalls were inspected and no problems were discovered. We also took this time to update storm sewer maps for SASWA members and obtained GPS coordinates for mapping the storm systems for Bridgeport Township and schools, Buena Vista Charter Township and schools, Saginaw ISD campuses, and Saginaw Township Community Schools. We have also obtained information on Carrollton Township. This information will be used on the applications for the new NPDES permits in 2016. We will continue to work on this information for all members over the next two years.

The Annual Progress Report for the SASWA was completed for 2011/2012 and was submitted to the MDEQ. Your representative to the SASWA can get a copy of the report from the SASWA website. The report is available at:

http://www.saswa.org/restricted/member_resources.php

Click on the link on this page in the upper left corner that says: "Reports". The MDEQ provided the SASWA with a letter this year advising that the next progress report will not be due until 2014.

Respectfully Submitted:



Herbert G. "Sonny" Grunwell
Chair - SASWA