



SASWA Progress Report for 2011

The Saginaw Area Storm Water Authority (SASWA) held six General Board Meetings and six Executive Board Meetings in 2011. It has been a busy year and many things have happened with the NPDES permit. First was the fact that the SASWA started the year off with the 2008 General Permit being revoked by the MDEQ and the 2003 permit was reinstated. The revisions that were 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 were in jeopardy by this move. However, we were fortunate the Regional MDEQ representative advised he was going to acknowledge the revised plans. These plans are available on the SASWA web site at: www.saswa.org

The MDEQ again held stakeholder meetings in Lansing of which, the SASWA had representation present during these new permit negotiations. The new permit is being drafted now and is expected to be released by February of 2012.

As usual, time is spent coordinating with the MDEQ on the permit and in researching the intricacies of the codified federal registry of the regulations associated with the Clean Water Act to determine what is actually required by the rules of the Clean Water Act or a requirement by the EPA as it relates to storm water and not just a recommendation by the MDEQ staff. The SASWA also assists its members when there have been staff changes or retirements to bring the new trustees "up to speed". This past year this service was provided for new trustees representing Saginaw Township Community Schools and the Saginaw Intermediate School District.

This year the SASWA had to coordinate with Saginaw County Mosquito Control to obtain permission from its membership for Mosquito Control to place an additive in catch basins to control mosquito larvae. The MDEQ advised the Mosquito Control that per requirements of the NPDES permit that SASWA members have, the members must provide permission to Mosquito Control before the additive can be placed in storm water structures. This coordination was completed in a very short time frame in a cooperative effort from the Mosquito Control, SASWA and the MDEQ, and the treatment was completed on over 26,000 structures in the Saginaw Valley.

Three members of the SASWA were audited by the MDEQ in 2011; they were; Saginaw Charter Township in March, Swan Valley Schools in July, and Saginaw County Road Commission in September of 2011. The audits for storm water permit compliance were long, lasting from 8 to 16 hours, 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 no violations were noted or documented. There were recommendations from the MDEQ to enhance the implementation of certain plans, most notably the Public Education Plan. One shining example of where the SASWA did well in its public education was in the radio spots that we sponsor in cooperation with the BASWA. The MDEQ feels that these radio spots are a worthwhile endeavor and hopes they continue in the future. The MDEQ felt the radio spots were informative and effectively communicate to the general public the importance of protecting our surface waters.

Based on one of the recommendations, Swan Valley School implemented storm water education during Parent / Teacher conferences at the Middle and Elementary Schools in their district. The SASWA

traveling table top displays were set up, brochures distributed, and a survey form was distributed and collected. From this survey form we were able to gather information to help with future education activities.

The audit also brought out the recommendation to continue with the planned education of the SASWA member's maintenance and public services staff. The SASWA had originally scheduled this training for the first quarter of 2011, however with the revocation of the 2008 permit; the members felt it best to wait until the MDEQ advised us on how to proceed. In the audits that were performed this came out as a necessary activity to complete in 2011. Based on this, a special training session was held for the Saginaw County Road Commission in which over 50 field staff were trained in spill prevention and recognition of illicit discharges and connections.

75 Municipal and educational institution staff members were trained in pollution prevention and good housekeeping procedures related to storm water runoff and illicit connections and spill reporting in November and December of 2011. 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 feedback from participants was positive and they felt the training was informative and useful for their job settings. This training helped municipal and educational institution staff understand their responsibilities related to the NPDES stormwater discharge permit held by SASWA members.

A children's educational workbook related to stormwater was developed this year for the membership. 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

Frankenmuth Elementary again invited the SASWA consultant to come and teach the third graders about the watershed and erosion control in the area. This class is well received by students and teachers and has been ongoing since 2004. The SASWA receives credit for public education for this endeavor as the education is done in Saginaw County. There is a quantifiable measurement related to this activity which meets MDEQ criteria, the students have to write a letter to the consultant explaining three key points they learned in the class. In the past the students have also completed posters on what they learned in the class sessions. If you have a class or group that you would like to learn about watersheds, the water cycle, water quality, watershed management or other topics related to surface water, contact Russ Beaubien through your SASWA representative. These education activities help the SASWA achieve its public education goals.

Over 500 brochures were distributed at various functions this past year to educate the general public on stormwater pollution. These included our display and materials at three Saginaw Chorale events. We hope to use the SASWA table top display more often at community events in 2012. If you are interested in hosting this display contact your SASWA representative and they will coordinate this education 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.

In August of 2011 the Third Annual Cass River Clean Up took place. The SASWA assists a group of volunteers by providing a small cash match for a grant to obtain funds to provide materials necessary for a river clean up. In the three years this has been going on over 9 miles of the river have been cleaned of debris and garbage. In 2011 approximately 15 cubic yards of trash, tires, scrap metal and other items were removed from the river from the Dixie Bridge to Lyle Park. Over 50 people participated as

volunteers, including the SASWA consultant and his family. Pictures of the clean up are at www.cassriver.org.

Another very successful clean-up effort that removed a substantial amount of sediment from our county and township paved roads and roadside storm sewers was reported by the Saginaw County Road Commission. In 2011 the workers from the Road Commission removed 590.5 cubic yards of sediment (1,012.4 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 1,012.4 Tons of sediment are estimated to contain 1,012 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 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 has helped eliminate the growth of over 5,060 tons of algae and nuisance aquatic plants in our region's water resources, ultimately the Saginaw Bay.** Great job!!

The SASWA had three spill reports filed for 2011. These were minor in nature, one a gasoline spill at a fueling station in Buena Vista which the Fire Department responded to and Young's Environmental completed a clean up at the site. Thomas Twp., had a report of a sewage smell at a site, however, upon investigation by Thomas Twp DPW superintendent and SASWA consultant it was determined that no problem existed at the site. A septic hauling business had an odor release, no spill or evidence of a spill was evident, and the owner was very cooperative regarding the incident. Buena Vista was the site of the third incident of a contaminant coming from an outlet into the Koehler Drain along Outer Drive. This was investigated by the MDEQ and the SASWA consultant was called in to assist. No evidence was found as to when this small spill (<2 gal. of hydraulic oil) occurred. MDEQ recommended some procedural changes for washing trucks and the use of BMPs in catch basins to eliminate future problems.

Outfall inspection was carried out this summer and fall by student co-ops trained for this task. During the summer 46 outfalls were inspected and no problems were discovered. During these inspections the summer co-op obtained GPS coordinates for mapping the storm systems for Thomas Township, Saginaw Charter Township, and Swan Valley Schools. In late fall the SASWA implemented a program using Saginaw Valley State University students with interests in surface water quality and chemistry to monitor outfalls and complete future outfall inspections. Three students were interviewed, trained and worked during November and December as weather and schedules permitted. Use of these students will be a significant cost savings to the SASWA to continue the monitoring portion of the illicit discharge elimination program. Additionally, the students obtain a chance to use their education in a practical application under field conditions. This opportunity helps the students gain valuable field experience, and provides them with examples of career paths to pursue. These students have inspected and completed reports on 51 outfalls in 2011. Total outfalls inspected for 2011 was 97. We are on track to complete outfall inspections by 2013.

The Summary Progress Report for the SASWA was completed for 2009/2010 and was submitted by the deadline provided by 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