



## **PUBLIC EDUCATION PLAN**

### **REQUIRED ELEMENTS of the Public Education Plan (PEP):**

1. Education of the public regarding their responsibility and stewardship in their watershed.
2. Education of the public concerning management of riparian lands to protect water quality.
3. Education of the public concerning the ultimate discharge point and potential impacts from pollutants from the separate storm water drainage system serving their place of residence.
4. Education of the public on the availability, location, and requirements of the facilities for the disposal or drop off of household hazardous waste, chemicals, and motor vehicle fluids.
5. Education of the public on the availability, location, and requirements of facilities for the disposal of travel trailer and recreational boating sanitary wastes.
6. Education of the public on the availability, location, and requirements of facilities for the disposal of grass clippings and leaf litter from yards and lawn areas.
7. Education of the public regarding acceptable application and disposal of pesticides and fertilizers.
8. Education of the public concerning preferred cleaning materials and procedures for residential car washing.
9. Encourage public reporting of the presence of illicit discharges or improper disposal into separate storm water drainage systems.
10. Educate the public on the effects of soil erosion and sediment and encourage public reporting of soil erosion and sediment control problems.

### **VISION:**

Increase the general public's and business community's knowledge involving the required elements (1 - 10) of the Public Education Plan (PEP) to become stewards of the Saginaw Area Storm Water Authority's watersheds to improve storm water quality.

## INTRODUCTION:

Information will be communicated to the residents of and visitors to Saginaw County regarding the “Required Elements” (1 – 10) during the 5-year term of the general permit. At least one, or a combination, of the following public information mechanisms will be used to inform the public:

- community newsletters,
- websites,
- direct contact with riparian owners,
- presentations to groups,
- brochures and information sheets,
- audio and visual public / commercial media,
- And, possibly, watershed signage.

The Saginaw Area Storm Water Authority will address (1) above by holding meetings with existing public involvement programs in our community such as Saginaw Bay Watershed Initiative Network. The Saginaw Area Storm Water Authority will also review and assess activities such as storm drain stenciling / stickers, watershed or subdivision signage, river watch, river stewards, adopt-a-drain programs, and healthy lawn and garden clinics to determine if they are suitable Best Management Practices for the area. Additionally, efforts will be made to cooperate with other Authorities, such as the Mid Michigan Waste Authority or Northwest Utility Authority, that have similar or shared goals within Saginaw County.

Existing public education efforts and anticipated future efforts for each of the required elements are briefly described below. Each of the existing efforts will be reviewed by the end of 2006 for effectiveness and to determine the best method for improving public knowledge about these activities. After this review for effectiveness the PEP will be revisited to determine what changes will occur to increase the communication efficiency of the program. This will increase the use and visibility of these existing and proposed efforts put forth in this document. Future efforts to expand and improve the public education activities will be performed to the maximum extent practicable by the Phase II communities of Saginaw County.

A survey completed by the Center for Environmental Studies in 2003 will be utilized by the Authority to assist in targeting segments of the population. The information in the report issued by CES is useful and will be used to guide the SASWA decisions on public education. Additionally, the CES has developed public education workshops for the municipalities affected by the NPDES Phase II regulations. This information was not available until December of 2003. As the public education information is assessed for content and applicability to targeting population segments that may be hard to reach. The SASWA will re-evaluate this PEP and make necessary changes that will efficiently utilize resources and available funds. As adjustments are made to the PEP the regional MDEQ will be notified in writing of the changes.

It is the SASWA intent to comply with the Permit however in this litigious society we maintain the right to not perform activities with volunteers that our insurance carrier deems to have a moderate or high “risk” associated with the activity. Our insurance carrier has asked SASWA to provide 60 days notice regarding public participation events

that have risk potential. If our insurance carrier asks us to cease an activity or not carry it out we will comply with them and remove the activity from our PEP.

## **REQUIRED ELEMENT NO. 1: WATERSHED EDUCATION**

### **Education of the public about their responsibility and stewardship in their watershed.** (Watershed Permit MIG619000, Part 1.A.3.b.1)

**Present Effort:** The Saginaw Area Storm Water Authority (SASWA) is actively attempting to educate the public regarding watershed responsibility, stewardship, and recycling activities promoted by the region's solid waste authority. However, the efforts are limited in nature and are done on a one-to-one basis with the public as they generate requests for information. Whenever possible, the public is referred to agencies such as Saginaw County Public Health, Saginaw Bay Watershed Initiative Network, or Michigan State University's Cooperative Extension Program.

**Proposed Effort:** The SASWA will formulate a unified and coordinated plan for public education. Messages and brochure(s) will be developed or adapted to communicate to the general public about their responsibility in keeping the watershed and water resources clean. The message will define a watershed, advise the public on the area watersheds, how they impact watersheds and 10 things they can do help clean up the watershed. The SASWA will also look at and assess any education program developed by the State, professional organizations, or other interested parties that can effectively communicate a message that increases the general public's knowledge regarding stewardship of the watershed they reside in.

#### **Activity No. 1** *DEVELOP A MESSAGE, HANDOUT INFORMATION AND UTILIZE THE MWEA CD ON WATERSHED EDUCATION FOR THE AREA PUBLIC.*

Target Audience:	All residents, businesses, industry (if they participate), and visitors.
Messages:	All of the messages listed in this plan relating to watershed education, definitions and pollution prevention for watersheds, including statements or endorsements by public officials (e.g. Public Works Commissioner) encouraging resident action to prevent pollution of Saginaw County's water resources.
Description:	Development of brochures, web site messages, community newsletter articles targeting car washing activities, lawn care, proper disposal of household wastes, care of storm sewers and other topics that deal with good watershed hygiene. The definition of a watershed, the specific watershed's that can be affected in our region and what the public can do to protect the watersheds will be communicated.

Timetable:  
 Development: Summer 2003  
 Implementation: Spring 2004  
 Evaluation: Ongoing from Summer 2004 to Summer 2005  
 Responsibility: SASWA  
 Budget: \$16,820 for 5 years

Delivery mechanism: Mail, website (use of MWEA CD), community newsletters, brochure distribution at township offices and schools. A/V presentations to groups at their request

**MEASURABLE GOALS:**

- Keep a list of organizations or community groups that the brochures are distributed to during each year.
- Provide a number of these forms that are distributed or direct mailed each year to area residents.
- Number of newsletters distributed with the message.
- The brochure will contain a specific website address that will direct the public to a short survey (5 questions or points of inquiry) can be completed for use by the SASWA in development of annual reporting facts.
- If a second contact can be made with a group or population segment that has received these brochures, a short survey will be provided to the public to obtain information that is related to the above-mentioned topics.

**Activity No. 2** DESIGN AND MAINTAIN A WEBSITE FOR SASWA. THIS SITE HAS A PUBLIC EDUCATION PAGE WHERE THE MWEA WATERSHED EDUCATION CD WILL BE MADE AVAILABLE.

Target Audience: County residents, educational institutions, school districts, visitors and interested stakeholders that are computer users.

Messages: All activities that will affect the Saginaw Bay Watershed and its tributaries such as information regarding the watershed, planning phases, or any consistent statewide education message. All messages developed in this plan will be repeated on this website.

Description: SASWA will develop a website to be maintained by the consultant or other assigned personnel. The initial goal of this website will be primarily communication for posting agendas and minutes of SASWA meetings. The next phase (fall 2004) of development involves using the site for education and evaluation when a consistent and defined education / evaluation plan is developed either statewide or regionally.

Timetable:  
 Development: Summer 2003  
 Implementation: Fall 2003  
 Evaluation: Ongoing process from Spring 2004 through Fall 2008  
 Responsibility: SASWA

Budget: \$45,000 for 5 years

Delivery mechanism: Internet / computer

MEASURABLE GOALS:

- Tracking the number of “hits” and completed surveys that will be buried at specific locations within the website. These addresses will be provided to specific groups, participants or general public in brochures, news articles or municipal mailings.
- Development of statistics from the web site on a monthly basis.

**Activity No. 3** ARTICLES FOR COMMUNITY NEWSLETTERS, NEWSPAPERS, OR OTHER APPROPRIATE COMMUNITY MAILINGS.

Target Audience: All Saginaw County citizens.

Messages: Develop various articles that are in keeping with watershed hygiene, (e.g. definitions of watershed, pollution protection, how the public affects watersheds) for the Saginaw Bay Watershed. Examples were provided in Activity 1.

Description: A series of articles will be developed for use by the members of SASWA in mailings or in community newsletters. They will also be passed on to the local newspapers for publication on a more regional level.

Timetable:

Development: Summer 2003

Implementation: Fall 2003

Evaluation: Ongoing process from Spring 2004 through Summer 2008

Responsibility: SASWA

Budget: \$7,000.00 for 5 years

Delivery mechanism: Mailing of brochures, community newsletters, and newspapers.

MEASURABLE GOALS:

- 4 news articles printed per year in the Saginaw News or community newsletters.

**Activity No. 4** UTILIZATION OF THE MICHIGAN WATER ENVIRONMENT ASSOCIATIONS WATERSHED EDUCATION CD FOR EDUCATING THE PUBLIC IN VARIOUS SETTINGS AND MEDIA FORMATS.

Target Audience: All Saginaw County citizens, school districts, municipal boards and other elected officials, industry, business, contractors, developers.

Messages:	We are stewards of the Great Lakes Watershed. 10 things we can do to protect the watershed.
Description:	This is a CD developed by the MWEA's watershed education subcommittee to educate the general public about watersheds, defines a watershed and the impacts the public has on watersheds and 10 activities to protect the watershed. This CD is set up to play from a website, to be used as a power point resource in schools or as a cable TV education piece. It is approximately 13 minutes in length.
Timetable:	
Development:	Summer 2003 to Spring 2004 by MWEA
Implementation:	Spring 2004 on SASWA website
Evaluation:	Ongoing process from Spring 2004 through Summer 2008
Responsibility:	SASWA
Budget:	Free – there may be a cost for placing on the City of Saginaw's cable TV channel. We are researching this at this time.
Delivery mechanism:	Audio Visual media (cable TV and in schools) and SASWA web site.

**MEASURABLE GOALS:**

- Number of showings on cable TV channel.
- Number of hits that download this site from SASWA website.
- Number of times this is used in school systems or general public settings and the accompanying survey for the CD will be filled out and turned in to presenter.
- Use of pre and post survey when presenting to the public in educational and controlled context.

**REQUIRED ELEMENT NO. 2: WATERSHED EDUCATION**

**Education of the public concerning management of riparian lands to protect water quality.**  
(Watershed Permit MIG619000, Part 1.A.3.b.6)

**Present Effort:** When complaints are received in Saginaw County concerning dumping of yard waste into rivers or drains, homeowners are notified via letter from the Saginaw County Public Works Commissioner's office of the proper disposal method.

**Proposed Effort:** There will be a systematic effort to identify private and business riparian landowners in the regulated area with literature specific to the watershed hygiene information and activities. Saginaw County GIS department (or appropriate GIS Authority) will complete the systematic effort by use of existing parcel information and linked database to list owners and addresses of parcels along the rivers and streams in the urbanized area.

A brochure and message for riparian landowners will be developed and distributed via mail. This brochure and message will discuss proper disposal of yard waste and other

watershed hygiene topics that should be practiced by riparian landowners and landowners along drain right of ways.

Information on septic systems and their maintenance will be supplied to riparian landowners in areas where sanitary sewer hook ups are not available. This can be done when the GIS layer for sanitary sewers has been developed for the SASWA base map, projected completion date end of 2006.

Other watershed hygiene topics to be presented to riparian owners include stream bank erosion, establishing vegetation buffer zones along waterways, management of landscaping and animal wastes, conservation easements, wetlands, the importance of riparian corridors, and construction activities along waterways.

These particular landowners will also be addressed in mailings to solicit their participation in the watershed management planning process.

All of these brochures or message items are adaptable for use by communities for inclusion in their existing community newsletters (e.g. Saginaw Charter and Thomas Townships). In addition, these articles will be available on the SASWA website.

Finally, working through the Saginaw County Public Works Commissioner's office, SASWA will include a public education component in new drainage improvement projects to inform residents of the potential negative impacts of some types of developments or practices on water quality. A brochure can be distributed to landowners on activities to improve water quality in the drainage district.

**Activity No. 5 DEVELOP A DATABASE OF ADDRESSES OF RIPARIAN LANDOWNERS IN THE SAGINAW URBANIZED AREA.**

Description: Development of a list of riparian landowners in the Saginaw Urbanized Area. This list can then be used in the future for targeted mailings by SASWA, or for use in public outreach programs during the watershed planning process to identify stakeholders wishing to participate in the planning process.

Timetable:

Development: Summer 2005

Implementation: Fall 2005

Evaluation: Ongoing process - Spring 2006 through Summer 2008

Responsibility: SASWA

Budget: \$8,400.00 for 5 years

Delivery mechanism: Mail, community newsletters, and web site.

**MEASURABLE GOAL:**

- Database of all parcels in SASWA watershed boundaries that are on the rivers or streams to be developed by Fall 2005.

**Activity No. 6 DEVELOP A SERIES OF MESSAGES ON WATERSHED HYGIENE**

Target Audience:	All residents and businesses along riparian corridor in the urbanized area. NOTE: Developers, contractors, engineering firms, real estate agencies, recreational users, lawncare / landscape companies are addressed. It should be noted that SASWA is addressing all residents of the county; this will cover these individuals at some point in time.
Messages:	All of the messages listed in this plan, including statements by public officials (e.g. Public Works Commissioner) encouraging resident and business action to prevent storm water pollution.
Description:	Development of brochures, community newsletters and web messages targeting car washing activities, lawn care, proper disposal of household wastes, care of storm sewers and other topics that address good watershed hygiene.
Timetable:	
Development:	Summer 2004
Implementation:	Spring 2005
Evaluation:	Ongoing from Summer 2005 to Summer 2008
Responsibility:	SASWA
Budget:	\$6,000.00 for 5 years
Delivery mechanism:	Distribution of brochures at public events and at public offices, Internet, news articles, community newsletters, SASWA website.

**MEASURABLE GOALS:**

- Keep a list of organizations or community groups that the brochures are distributed to during each year.
- Provide a number of these forms to be distributed or direct mailed each year to area residents.
- Within the brochure will be specific website address that will direct the public to a specific website where a short survey (5 questions or points of inquiry) can be completed for use by the SASWA in development of annual reporting facts.
- If a second contact can be made with a group or population segment that has received these brochures, a short survey will be provided to the public to obtain information that is related to the abovementioned topics.

### REQUIRED ELEMENT NO. 3:

#### **Education of the public concerning the ultimate discharge point and potential impacts from the separate storm water drainage system serving their place of residence.**

(Watershed Permit MIG619000, Part 1.A.3.b.2)

**Present Effort:** County agencies, such as the Public Works Commissioner, Road Commission and Public Health, provide information to residents regarding the adverse affects concerning polluted water. The information is verbal in nature and given upon request. The Saginaw County Public Works Commissioner's (SCPWC) office has educational efforts focused on a workshop for local building contractors. This workshop was directed toward increasing builders' and developers' knowledge and skills in soil erosion control and advised them of recent changes in the regulations and the county soil erosion and sediment control ordinance. Saginaw County and the SCPWC have set up a web site with permitting information pertaining to Soil Erosion and Sediment Control (SESC) issues. Also, to aid SASWA in its communication efforts with the public, email for SASWA is directed to the SCPWC office and is available on the SASWA website.

**Proposed Effort:** The Authority will be emphasizing these concepts in newsletter articles, media interviews, public service announcements and through various other methods of communication. Some municipalities have quarterly or semiannual newsletters in which articles mentioned in this PEP may be placed.

The Saginaw Area Storm Water Authority will assist with other Soil Erosion and Sediment Control educational workshops developed by Saginaw County's Public Works Commissioner or other authorities on this subject, such as MDEQ or NRCS. The Authority will develop a workshop or informational seminar. This workshop will be directed at business owners through the Saginaw County Chamber of Commerce to educate and assist them in complying with Resource Conservation and Recovery Act (RCRA) requirements (especially proper containment and disposal of wastes). Provide information relating to protection of water resources in the Saginaw Area.

SASWA will recommend that any Storm Water Management Plans (also known as Post Construction Controls) developed for county, municipality and township utilization designate specific grates that have pre-cast labels stating "**Dump No Waste – Drains to Rivers**" (for example EJIW all K-castings of the 7040 series of catch basin curb inlets or similar castings). SASWA may also recommend that specified stickers be epoxied in place on any new catch basin or manhole covers during new construction or redevelopment projects in the SASWA watershed. SASWA is beginning the initial planning for Post Construction Controls and must still research how to implement a countywide ordinance for Post Construction Controls.

Written material and audiovisual has been developed to advise the public that storm drains discharge to area rivers, streams or drains. That the separate storm sewers do not receive treatment prior to discharge, of the impacts of storm water pollutants on the watershed. If possible signage may be developed in accordance with local ordinances and signage restrictions that will indicate the ultimate discharge point of residential storm sewer systems. For example, at the entry and exit to a subdivision a sign may be posted advising residents that the storm sewers in their residential streets discharges directly to the Saginaw or Tittabawassee Rivers.

NOTE : Activity 7 is dependent upon receipt of a grant.

**Activity No. 7** SPONSOR THREE INFORMATIONAL WORKSHOP OR SEMINARS FOR AREA CONTRACTORS, DEVELOPERS, BUILDERS, LANDSCAPERS, ENGINEERING FIRMS WITH ASSISTANCE FROM A GRANT THAT HAS BEEN APPLIED FOR.

Target Audience: Contractors, Developers, Builders, Landscapers, etc.

Messages: Communicate to the above-mentioned groups the goals of SASWA and its IDEP, PEP and WMP programs. Provide information on how they can help protect water resources from pollution by low impact development.

Description: Develop a PowerPoint presentation or use existing MWEA watershed education CD for use by consultants or board members to educate the groups mentioned above on NPDES Phase II community involvement and desired effects on the Saginaw Bay Watershed.

Timetable:

Development: Summer 2004

Implementation: Fall 2004

Evaluation: Winter 2004/2005 and ongoing until end of permit

Responsibility: SASWA

Budget: \$40,000.00 – Dependent on awarding of the Grant.

Delivery mechanism: Audio/visual and written materials supplied to participants

**MEASURABLE GOALS:**

- Number and variety of businesses attending the seminar.
- Number of seminars.
- Number of people attending seminars and the completion of before and after seminar surveys to monitor behavioral objectives.

NOTE: Activity 8 is dependent on volunteers coming forward to accept responsibility to carry out this activity. SASWA does not have the manpower or funds to carry out this activity and will not do so. Additionally, if the SASWA insurance carrier deems the storm drain stenciling a “high risk” activity we will not perform this task.

**Activity No. 8** STORM DRAIN MARKING OR OTHER SIMILAR SIGNAGE THAT INDICATES WHERE STORM DRAINS DISCHARGE.

Target Audience: All Saginaw County citizens and visitors.

Messages: Our daily lives affect water quality. Storm drains aren’t garbage cans. We can actively participate in improving our water quality and raising the awareness of our neighbors. The ultimate discharge point and no treatment aspects related to storm sewers.

Description: During any formal storm water review process for development or reconstruction of sites, the plans in municipalities and cities in SASWA’s watershed area,

the Authority will recommend that contractors install storm drain markers with the message “*Drains to River. Keep Our Water Clean. Keep Pollutants Out*” or have castings with a similar message.

If any volunteer groups come forward seeking projects in the watershed they may be assigned the task of marking all catch basins in a subdivision or platted development.

Also the volunteer will distribute literature to the residents about the storm sewers ultimate discharge point and how to care for storm drains and proper disposal of hazardous household wastes.

Timetable:	
Development:	Summer 2005
Implementation:	Fall 2006
Evaluation:	Ongoing from Fall 2006 until end of permit
Responsibility:	SASWA
Budget:	\$40,000 for 5 years
Delivery Mechanism:	Message to be delivered via web site, community newsletters, and in educational programs for schools.

**MEASURABLE GOALS:**

- The number of catch basins stenciled per year.
- The numbers of subdivisions that have had catch basins labeled or signage placed by volunteer groups or other means.

**REQUIRED ELEMENT NO. 4: WASTE MANAGEMENT**

**Education of the public on the availability, location, and requirements of facilities for the disposal or drop-off of household hazardous wastes, chemicals and motor vehicle fluids.**

(Watershed Permit MIG619000, Part 1.A.3.b.5)

***Present Effort:*** None.

***Proposed Effort:*** Mid Michigan Waste Authority (MMWA) has developed brochures and flyers for Saginaw County that provide information to the public on how to recycle or safely dispose of used motor oils and others automotive fluids, household and lead acid batteries, plastic bags and numerous other items. Citizens’ call and make an appointment to drop off their waste or are given a location to drop off the materials.

The SASWA will support the existing efforts of the Mid Michigan Waste Authority and Saginaw County Public Health Department. SASWA will coordinate with the Mid Michigan Waste Authority and the Public Health Department to advise and educate the public on proper disposal techniques and help in providing information to the public on the time and place of hazardous waste disposal activities. A calendar and PSA’s will be developed in cooperation with the MMWA to convey information on waste disposal and watershed hygiene as budget permits. A cooperative effort to evaluate and identify potential information gaps will be done annually to

assure planning continuity and for better promotion of the water quality benefits for properly handling and disposing of these materials. SASWA will also work with the Mid Michigan Waste Authority to coordinate or expand and improve their educational efforts in this aspect.

**Activity No. 9 DEVELOP OR PROCURE A CALENDAR FOR DISTRIBUTION BY SASWA.**

Target Audience: All Saginaw County residents and visitors.

Messages: We all live in a watershed. Every home is waterfront property. Our daily actions affect water quality. Other applicable messages related to good watershed hygiene and proper disposal of hazardous wastes and waste materials.

Description: A calendar that can be distributed to the residents with tips on good watershed hygiene and proper disposal procedures for solid and liquid wastes to keep them out of the watershed. To be done in cooperation with MMWA and Saginaw County Mosquito Abatement source reduction program. Dates for collection of hazardous waste materials can be placed on this calendar for public reference. These calendar events will also be placed on SASWA's website community calendar.

Timetable:

Development: Summer 2005 (funding dependent)

Implementation: Winter 2005 / 2006

Evaluation: Ongoing from Fall 2006 through permit period

Responsibility: SASWA

Budget: \$25,000 for 5 years (may be cost shared with MMWA and the Saginaw County Health Department)

Delivery Mechanism: Handout of calendar at Earth Day activities or other community sponsored events. Web site utilization for advertising hazardous household material pick up dates and locations.

**MEASURABLE GOALS:**

- Amount of waste materials collected annually at these waste collection coordinated events.
- Any increase in the number of collection sites or events in a calendar year.

**REQUIRED ELEMENT NO. 5: WASTE MANAGEMENT**

**Education of the public on the availability, location, and requirements of the facilities for the disposal of travel trailer and recreational boating sanitary wastes.**

(Watershed Permit MIG619000, Part 1.A.3.b.5)

**Present Effort:** None.

**Proposed Effort:** A brochure will be developed to educate the public on proper disposal techniques for sanitary wastes from recreational vehicles. The brochure will contain information on proper and improper disposal and the locations of disposal facilities in the Greater Saginaw

Area. Brochures will be placed at area businesses that sell recreational vehicles and large boats to provide buyers with information on proper disposal of sanitary wastes and locations in the county for disposal. Provide local boating and recreational vehicle user groups such as Saginaw Bay Power Squadron, Saginaw County Sheriff's Boating Program, Good Sam Club, et cetera, with information on proper disposal and site locations within the County. Distribution of information at regional boat and recreational vehicle shows.

**Activity No. 10 DEVELOP BROCHURE ON PROPER DISPOSAL OF SANITARY WASTE WATER FROM RECREATIONAL VEHICLES**

Target Audience:	Owners of recreational vehicles such as boats, trailers and motor coaches. Attendees at RV and boat shows in Tri County area.
Messages:	Encourage owners of these types of vehicles / boats to prevent pollution and protect water quality by proper disposal of sanitary wastes.
Description:	A brochure targeting illicit disposal of sanitary wastes, how and where to dispose of sanitary wastes.
Timetable:	
Development:	Winter 2004 / 2005
Implementation:	Spring 2005 during RV/boat shows in Tri - County
Evaluation:	Fall 2006 and ongoing through end of permit
Responsibility:	SASWA
Budget:	\$1,500.00 for 5 years
Delivery Mechanism:	Brochure for handout at public events or dealerships. The message will be placed on the SASWA web site.

**MEASURABLE GOALS:**

- Development of a brochure on this topic by the timetable listed above.
- Development of a list of disposal sites that accept sanitary wastes from recreational vehicles and boats.
- Distribution of brochures to area businesses dealing with recreational vehicles and distribution of brochures at area boat and RV shows, minimally one per year.

**REQUIRED ELEMENT NO. 6: WASTE MANAGEMENT**

**Education of the public on the availability, location, and requirements of facilities for the disposal of grass clippings and leaf litter from yards and lawn areas.**

(Watershed Permit MIG619000, Part 1.A.3.b.5)

**Present Effort:** None.

**Proposed Effort:** During the term of the permit, the general public in the urbanized areas, Saginaw County, will be advised and educated on proper disposal techniques of grass and leaf litter. SASWA will work cooperatively with any active programs such as the City of Saginaw's

composting program or to investigate opportunities for better promotion of the water quality benefits through proper handling and disposal of these materials.

The SASWA will use its website and other communication channels to provide information to the public on how to compost their own grass clippings and leaves.

**Activity No. 11 DEVELOP A BROCHURE OR ARTICLE ON WATERSHED HYGIENE AS IT RELATES TO THIS TOPIC**

Target Audience: All residents, businesses, and visitors.

Messages: Statements by a public official(s) (e.g. Public Works Commissioner) encouraging resident action to prevent pollution of storm water by composting or proper disposal techniques of yard wastes, or active involvement in composting programs.

Description: Development of a brochure and message targeting lawn care and proper disposal of gardening, landscaping, and lawn wastes and care of storm sewers by not dumping these wastes near storm sewer inlets or in open storm drains. This topic will be addressed in the future on the SASWA website as information for the public.

Timetable:

Development: Winter 2003/04

Implementation: Spring 2004

Evaluation: Summer 2004 and ongoing until end of permit

Responsibility: SASWA

Budget: \$16,820 for 5 years

Delivery Mechanism: Handout brochure, PSA's, web site, community newsletters.

**MEASURABLE GOAL:**

- Documented increase in collection of lawn clippings and leaves by composting programs, if measurable. Examples would be tonnage or number of truckloads annually.
- Number of "buried" surveys completed on web site that deal with this topic.
- Number of public service announcements per year.

**REQUIRED ELEMENT NO 7: STORM WATER BMPs & WASTE MANAGEMENT**

**Education of the public regarding acceptable application and disposal of pesticides, herbicides and fertilizers.**

(Watershed Permit MIG619000, Part 1.A.3.b.4)

*Present Effort:* None

*Proposed Effort:* Michigan State Cooperative Extension agency has a public education program that provides citizens of Saginaw County with information on pesticides and fertilizers and their use through the Master Gardener Program. The Saginaw County Health Department has an annual "2002 Clean Sweep" Collection Schedule which is a

Saginaw Bay Watershed Pollution Prevention / Chemical Collection Program for disposal of unwanted pesticides, herbicides and garden products.

Over the term of the Permit, and as watershed planning develops, the SASWA will work with the Michigan State Cooperative Extension Program or similar agencies to identify and implement opportunities, mechanisms, and information for educating the public and staff on these disposal issues. SASWA, in cooperation with other agencies, such as Public Health Department and the Saginaw County Road Commission, will ask the local MSU Extension for fact sheets on fertilizer and pesticide application. The SASWA will publicize the proper use and/or disposal of these materials. Further efforts will be made to provide efficient and effective use of the Saginaw County Department of Public Health and its Clean Sweep Collection Schedule. These efforts will be focused on communicating times, dates, and places for the general public to dispose of pesticides and herbicides.

**Activity No. 12 DEVELOP A BROCHURE AND A MESSAGE ON WATERSHED HYGIENE AS IT RELATES TO THIS TOPIC.**

Target Audience:	All residents, businesses, and visitors.
Messages:	Encourage resident action to prevent pollution of storm water from fertilizer or pesticide applications. How to properly use and dispose of these items to prevent introduction into the storm drainage systems.
Description:	Development of a brochure or articles targeting lawn / garden / landscaping care and proper use of fertilizers and pesticides. This topic will also be addressed on the SASWA website as information for the public. The local MSU Cooperative Extension office will be approached for information for public distribution and inclusion in their training programs for Master Gardener and Lawn care.
Timetable:	
Development:	Winter 2004/05
Implementation:	Spring 2005
Evaluation:	Summer 2005 and ongoing until end of permit.
Responsibility:	SASWA
Budget:	\$16,820 for 5 years
Delivery Mechanism:	Handout brochures, web site, community newsletters, newspaper articles, A/V media.

**MEASURABLE GOALS:**

- Amount (quantities) of pesticides, herbicides, and fertilizers collected in “Clean Sweep” programs sponsored by the Saginaw County Public Health Department.
- Brochures will direct the public to buried surveys in the SASWA website for completion, the number of completed surveys on this site will be tracked. Follow up information may be requested from participants.

- Number of hits on the specific web site page where articles are that are related to this topic.
- Number of people attending related seminars on this topic sponsored or cosponsored by SASWA.

**REQUIRED ELEMENT NO. 8: STORM WATER BMPs**

**Education of the public concerning preferred cleaning materials and procedures for residential car washing.**

(Watershed Permit MIG619000, Part 1.A.3.b.4)

*Present Effort:* None.

*Proposed Effort:* Over the term of the Permit, and as watershed planning occurs, the SASWA will identify existing information and opportunities for educating the public and businesses regarding this issue. Recommendations from the watershed management plan for the affected area, including appropriate illustrations, will be included in future newsletters or fliers. This information and/or handouts for commercial car washes will be made available. Additionally, SASWA will direct citizens to proper agencies to deal with these matters. Information will be presented to the local school districts through SASWA to increase their knowledge in the use of proper detergents to use for car washes and utilization of BMPs to protect storm sewer inlets from detergents, silts and sediments during fundraising events.

**Activity No. 13 DEVELOP A BROCHURE AND MESSAGE ON WATERSHED FRIENDLY CAR WASHING.**

Target Audience:	All residents and school districts in the urbanized area and county.
Messages:	Proper methods to use for washing cars, such as on lawn areas, how to keep sediment and soaps from entering storm drains, utilization of phosphate-free soaps.
Description:	Development of a brochure and message targeting the car washing activities, protection of storm sewers, best management practices, and use of phosphate-free soaps for good watershed hygiene.
Timetable:	
Development:	Spring 2004
Implementation:	Summer 2004
Evaluation:	Fall 2004 and ongoing through permit period
Responsibility:	SASWA
Budget:	\$1,500.00 for 5 years
Delivery Mechanism:	Handout brochures, web site, community newsletters, newspaper articles, A/V media.

MEASURABLE GOAL:

- The number of school fundraising groups that SASWA provides information on car washing in the SASWA watershed area.

**REQUIRED ELEMENT NO. 9: ILLICIT DISCHARGES & CONNECTIONS**

**Encourage the public to report illicit discharges or improper disposal into storm sewers.**

(Watershed Permit MIG619000, Part 1.A.3.b.3)

*Present Effort:* SASWA is developing options for modifying the existing citizen complaint system to encourage reporting of and response to complaints of illicit discharges or improper disposal into storm water drainage systems. The Michigan Pollution Emergency Alerting System (PEAS) is a 24 hour hotline managed by the Michigan Department of Environmental Quality for over 25 years. This system is used to report environmental pollution emergencies such as tanker accidents, pipeline spills/breaks and release of hazardous substances, oil, salt, or other polluting materials. This system provides first responding agencies with technical advice on how to minimize environmental damage. The PEAS hotline toll free number is (800) 2924706.

EMERGENCY RESPONSE to hazardous material problems is 911.

*Proposed Effort:* The general public of Saginaw County will be made aware of the Saginaw Area Storm Water Authority's IDEP program. SASWA will work to identify ways to coordinate these efforts in the county. SASWA has developed a strategy for informing the public about the impact of illicit discharges on the environment and to encourage reporting of illicit discharges or improper disposal into storm water drainage systems.

This has started with the development of a county wide storm water ordinance related to storm water quality and discharge control, providing enforcement capabilities for illicit discharges, spills, and dumping into storm drains within the county. The ordinance has the following sections:

- Title, purpose, definitions, and general provisions
- Discharge prohibitions
- Regulations and requirements
- Inspection and Monitoring
- Enforcement

related to the consequences and penalties associated with illicit discharges and improper disposal of waste materials in the storm drains. Also, a list of best management practices is available in the ordinance under the Regulations and requirements to prevent, control and reduce storm water pollutants. The training of department of public services personnel for all members of SASWA and county emergency response personnel on procedures that have been developed for reporting illicit discharges and connections.

**Activity No. 14** DEVELOPMENT OF PROCEDURES FOR ILLICIT DISCHARGES AND CONNECTION REPORTING

Target Audience:	All residents, businesses, and visitors.
Messages:	All of the messages listed in this plan, including statements by County Public Works Commissioner encouraging resident action to prevent pollution. Definition of illicit discharges and connections to storm drains and how to report them. Hazards associated with illicit discharges and improper waste disposal. Identification of failing on site sewage disposal systems. Consequences associated with illicit discharges or improper disposal of wastes.
Description:	Brochures and messages targeting illicit discharges, what they are and how to report them.
Timetable:	
Development:	September 2003 to September 2004
Implementation:	Fall 2004
Evaluation:	Fall 2004 and ongoing to end of permit
Responsibility:	SASWA
Budget:	\$5,400.00 for 5 years
Delivery Mechanism:	Handout brochures, community newsletters, PSAs, SASWA and community web sites. NOTE: the saswa.org Home page has a quick connect to this information and reporting procedure.

**MEASURABLE GOALS:**

- Number of viable complaints received by the reporting program by the phone system.
- Number of viable complaints received by the Website reporting system.
- Amount of responses to and outcomes from the reporting program.
- Any reportable volumes of materials or pollutants that are removed from the storm drainage systems.
- Number of failing septic systems reported to Public Health Department.

**Activity No. 15** DEVELOPMENT OF COUNTY WIDE TRAINING FOR MUNICIPALITY AND RESPONSE PERSONNEL TO DEAL WITH ILLICIT DISCHARGES AND CONNECTION REPORTING.

Target Audience:	Municipal, village, city, township public works /services personnel and managers, haz mat team responders, fire chiefs / training officers, and emergency dispatchers.
Messages:	Definition of illicit discharges and connections to storm drains and how to report them. The proper procedure to handle spills, illicit discharges, dumping and connections. Also, hazards associated with the illicit discharges, spills and dumping, failing on site sewage disposal systems and how they are handled.

Consequences and penalties associated with these activities.

Description: A two-hour training program to help staff understand their role in the IDEP programs and how the countywide Storm Water Quality ordinance is to be enforced. Also included in the training. This program will have annual refresher training and spill critiques as events occur.

Timetable:

Development: September 2003 to January 2004

Implementation: Spring/Summer 2004

Evaluation: Fall 2004 and ongoing to end of permit

Responsibility: SASWA

Budget: \$5,000.00 for 5 years

Delivery Mechanism: Power point presentations by consultant.

**MEASURABLE GOALS:**

- Number of staff and personnel trained in a year.
- Number of staff and personnel attending refresher programs annually.
- Number of critiques held annually.
- Number of reports generated on spills or illicit connection / discharges situations in the county.
- Any reportable volumes of materials or pollutants that are removed from the storm drainage systems.

**REQUIRED ELEMENT NO. 10: ISSUE RELATED TO ILLICIT DISCHARGES**

**Encourage the public to report soil erosion or sediment control problems.**

*Present Effort:* None.

*Proposed Effort:* The general public of Saginaw County will be made aware of Saginaw County Public Works Commissioner's program for soil erosion and sediment control and its relationship to the Saginaw Area Storm Water Authority's IDEP program. The Authority will work to identify ways to communicate these efforts. SASWA will be developing a strategy for informing the public about the impact of soil erosion and sediment control on the environment and to encourage reporting of problems related to soil erosion and sediment control. A power point presentation developed for school districts related to this topic has been developed. A county wide ordinance (Ordinance Number 114) for enforcement is in place at this time for these issues.

**Activity No. 16** DEVELOPMENT OF A MESSAGE AND EDUCATION PROGRAM TO INFORM THE PUBLIC ON ISSUES RELATED TO SOIL EROSION AND SEDIMENT CONTROL AND REPORTING SOIL EROSION AND SEDIMENT CONTROL PROBLEMS IN SAGINAW COUNTY.

Target Audience:	All residents, school district students, businesses, and visitors.
Messages:	How soil erosion and sediment control is everyone's responsibility as stewards of the watershed. How sedimentation effects water quality. How to prevent soil erosion and sedimentation.
Description:	A brochure with photos targeting soil erosion and sediment control. What soil erosion and sediment control problems consist of and look like and how to report these types of problems. Power point presentation related to this topic.
Timetable:	
Development:	September 2003 through September 2004
Implementation:	Fall 2004
Evaluation:	Fall 2004 and ongoing from that time
Responsibility:	SASWA
Budget:	\$3,300.00 for 5 years \$2,000.00 for educations sessions over 2 years
Delivery mechanism:	Written media, community newsletters, web site, Power point media, and classroom presentation.

#### MEASURABLE GOALS:

- Number of viable complaints received by the reporting program by the phone system.
- Number of viable complaints received by the Website reporting system.
- Amount of responses to and outcomes from the reporting program.
- Number of civil infractions issued per year.
- Number of people attending training or power point presentations.
- If in educational setting of school children a letter will be written back to the presenter, or the use of pre-post surveys.

#### **PUBLIC EDUCATION PLAN MEASURABLE GOALS SUMMARY:**

The measurable goals section of this document does not utilize education or behavioral objectives to a great extent. The reason is the state has not put forth much effort in providing guidance in how this can be effectively accomplished. The SASWA will use measurable goals in educational settings as the opportunities present themselves and we will report results as they are obtained. We wish to maintain flexibility in this area until such time as good examples for measurable goals are available. Until that time SASWA will utilize the measurable goals in this document, as they are listed and applicable. This document will be revisited for effectiveness annually during the reporting process. At that time the activities will be assessed for future measurable goals that are behavioral or educationally based, when identified they will be implemented for the next year's related activity.

▪ **Measurement (to be revisited for effectiveness in 2005)**

The measurable goals have been listed after each of the 10 elements of this Public Education Plan for the SASWA. The following are additional measurements that may be utilized when the plan is assessed annually for effectiveness:

Number of people attending informational programs regarding establishment of a complaint procedure for the County.

Number of informational articles printed in township newsletters related to this topic / procedure over a specified time period.

Number of valid complaints received in a specified time period.

Number of participants attending lawn care seminars on appropriate uses of fertilizers and pesticides.

Polls or surveys after articles have been mailed or communicated by an appropriate communication channel to see if public attitude regarding a topic has changed. Dependent on availability of suitable materials for a survey.

Increase in recycling efforts documented by the Mid Michigan Waste Authority after an educational effort.

Increase in amounts of hazardous household chemicals dropped off after an education program or advertised drop off date, and compare it to previous records for similar events, if they exist.

**Annual Report:**

The annual report will consist of restatement of each of the ten required elements and the progress made on each over the past year by the Authority. The report will incorporate the measurable goals listed above and may incorporate any additional goals that the Authority feels is necessary for public education. Each community / agency / school / university will have a section of the report specific to their annual activities.

The date for issuance of the Annual Progress Report will be due one year after the Certificate of Coverage is received by the Saginaw Phase II communities. This date will be communicated by the Authority to its membership.