

## **Enforcement Response Procedure**

**Bay Area Storm Water Authority  
April 1, 2018**

### **Section 1:**

#### **IDEP Illicit Spill/Dumping Violations:**

Three separate mechanisms will be used to address violations; The Michigan Drain Code, The Sanitary Code as enforced by the Bay County Health Department and Storm Water Quality Management and Discharge Control Regulations to be passed by Bay County Authority Member Municipalities. Within 90 days of DEQ approval the Townships approval process will begin. Any enforcement action will utilize the appropriate authorized vehicle depending on type and severity of violation

***The Michigan Drain Code*** provides authority to the Bay County Drain Commissioner to address illicit discharges in county drains. Public Act 40 of 1956 states:

*Sec. 423. (1) A person shall not continue to discharge or permit to be discharged into any county drain or inter-county drain of the state any sewage or waste matter capable of producing in the drain detrimental deposits, objectionable odor nuisance, injury to drainage conduits or structures, or capable of producing such pollution of the waters of the state receiving the flow from the drains as to injure livestock, destroy fish life, or be injurious to public health.*

*(10) Failure to comply with any of the provisions of this section subjects the offender to the penalties described in section 602.*

*Sec. 602. If any person shall willfully or maliciously remove any section or grade stake set along the line of any drain, or obstruct or injure any drain, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$100.00 and the costs of prosecution, or in default of the payment thereof, by imprisonment in the county jail not exceeding 90 days.*

***Sanitary Code of Bay County*** Michigan provides authority to the Bay County Health Department to take enforcement action on certain illicit discharges and water quality pollution. 61.000 - SANITARY CODE Res. No. 2004-057 Adopted: April 13, 2004

**SECTION I TITLE, AUTHORITY, JURISDICTION, PURPOSE, AND ADMINISTRATION**

61.102 Authority:

*1-2 These regulations are hereby adopted pursuant to the authority conferred upon local health departments by Part 24 of the Michigan Public Health Code, Act 368 of the Public Acts of 1978, as amended, including, but not limited to, Sections 2435(d) and 2441(1) of that Act*

61.103 Jurisdiction:

1-3

- a) The Health Department shall have jurisdiction throughout Bay County, including all municipalities located within the County, in the administration and enforcement of these regulations.*
- b) Nothing in this Code shall be construed to restrict or abrogate the authority of any municipality in Bay County to adopt more restrictive regulations or ordinances that do not conflict with or are not otherwise inconsistent with the requirements of this Code, as determined by the Health Officer. However, any conflicting or inconsistent local ordinance provisions are superseded by these regulations.*

61.106 Enforcement:

*1-6 All Premises governed by these regulations are subject to inspection by the Health Officer (or the Health Officer's Authorized Representative) who may collect samples for laboratory analysis, or take such other actions as deemed necessary or appropriate for the implementation and enforcement of these regulations.*

61.107 Right of entry and inspection:

1-7

- a) The Health Officer (or the Health Officer's Authorized Representative) after providing proper identification, may inspect any matter, thing, Premises, place, record, vehicle, incident, or event as provided for by Section 2446 of the Michigan Public Health Code.*
- b) The Health Officer (or the Health Officer's Authorized Representative) may apply for an inspection or investigation pursuant to Sections 2241 to 2247 of the Michigan Public Health Code to assure compliance with these regulations.*
- c) No person shall refuse to permit the Health Officer (or the Health Officer's Authorized Representative) to inspect any Premises at any reasonable time. It shall*

*be unlawful for any person to molest, willfully oppose, or verbally abuse the Health Officer (or the Health Officer's Authorized Representative) during the discharge of official duties including the enforcement of these regulations.*

61.109 Guidelines:

*1-9 The Health Officer shall establish administrative guidelines concerning the interpretation, implementation, and enforcement of this Code.*

**SECTION IV SEWAGE DISPOSAL ON ALL PREMISES**

61.402 Overflow and improper disposal of sewage:

*4-2 Under no condition may the overflow from a septic tank or the sewage from a Premises existing or hereafter constructed) be discharged or deposited upon the surface of the ground or into any lake, river, stream, county drain, ditch, storm sewer, or farm field tile.*

***Storm Water Quality Management and Discharge Control Regulations*** will be passed by municipalities in the urbanized area to protect waters of the state consistent with the Federal Clean Water Act. All violations and complaints are referred to the Bay County Drain Commissioner/BASWA Administrator. After investigation, notice of violation is provided to the person or persons in violation. If compliance is not achieved, the Storm Water Regulations provide for pursuing court injunctions, civil penalties of \$500 per day or the Administrator can issue municipal civil infraction or fines. These enforcement penalties are more clearly defined in Attachment 7, Bay Area Storm Water Authority Storm Water Regulations, Article V, pages 9-14.

**Section 2:**

**Construction Storm Water Enforcement:**

The Bay County Drain Commissioner (BCDC) is a Certified Enforcement Agent for Bay County. The County of Bay has adopted Part 91 of the Michigan Natural Resources and Environmental Protection Act by reference in Resolution 2007-177.

***Part 91***

***SOIL EROSION AND SEDIMENTATION CONTROLL***

***324.9107 Notice of violation.***

*Sec. 9107.*

*If a local unit of government has notice that a violation of this part has occurred within the boundaries of that local unit of government, including but not limited to a violation attributable to an earth change by an authorized public agency, the local unit of*

*government shall notify the appropriate county enforcing agency and municipal enforcing agency and the department of the violation.*

**324.9112 Earth change; permit required; effect of property transfer; violation; notice; hearing; answer; evidence; stipulation or consent order; final order of determination.**  
**Sec. 9112.**

- (1) *A person shall not maintain or undertake an earth change governed by this part, the rules promulgated under this part, or an applicable local ordinance, except in accordance with this part and the rules promulgated under this part or with the applicable local ordinance, and except as authorized by a permit issued by the appropriate county enforcing agency or municipal enforcing agency pursuant to part 13.*
- (2) *The owner of property that is subject to a permit under this part is responsible for compliance with the terms of the permit that apply to that property.*
- (3) *Except as provided in subsection (4), if property subject to a permit under this part is transferred, both of the following are transferred with the property:*
  - (a) *The permit, including the permit obligations and conditions.*
  - (b) *Responsibility for any violations of the permit that exist on the date the property is transferred.*
- (4) *If property is subject to a permit under this part and a parcel of the property, but not the entire property, is transferred, both of the following are transferred with the parcel:*
  - (a) *The permit obligations and conditions with respect to that parcel, but not the permit itself.*
  - (b) *Responsibility for any violations of the permit with respect to that parcel that exist on the date the parcel is transferred.*
- (5) *If property subject to a permit under this part is proposed to be transferred, the transferor shall notify the transferee of the permit in writing on a form developed by the department and provided by the county enforcing agency or municipal enforcing agency. The notice shall inform the transferee of the requirements of subsection (2) and, as applicable, subsection (3) or (4). The notice shall include a copy of the permit. The transferor and transferee shall sign the notice, and the transferor shall submit the signed notice to the county enforcing agency or municipal enforcing agency before the property is transferred.*
- (6) *A county enforcing agency or municipal enforcing agency may charge a fee for the transfer of a permit under subsection (3) or (4). The fee shall not exceed the administrative costs of transferring the permit. Fees collected under this subsection shall only be used for the enforcement and administration of this part by the enforcing agency.*
- (7) *If in the opinion of the department a person, including an authorized public agency, violates this part, the rules promulgated under this part, or an applicable local ordinance, or a county enforcing agency or municipal enforcing agency fails to enforce this part, the rules promulgated under this part, or an applicable local ordinance, the department may notify the alleged offender in writing of its determination. If the department places a county on probation under section*

9105, a municipality is not approved under section 9106, or a state agency or agency of a local unit of government is not approved under section 9110, or if the department determines that a municipal enforcing agency or authorized public agency is not satisfactorily administering and enforcing this part and rules promulgated under this part, the department shall notify the county, municipality, state agency, or agency of a local unit of government in writing of its determination or action. The notice shall contain, in addition to a statement of the specific violation or failure that the department believes to exist, a proposed order, stipulation for agreement, or other action that the department considers appropriate to assure timely correction of the violation or failure. The notice shall set a date for a hearing not less than 4 or more than 8 weeks from the date of the notice of determination. Extensions of the date of the hearing may be granted by the department or on request. At the hearing, any interested party may appear, present witnesses, and submit evidence. A person who has been served with a notice of determination Rendered Thursday, April 5, 2018 Page 7 Michigan Compiled Laws Complete Through PA 56 and includes 58-90 of 2018 may file a written answer to the notice of determination before the date set for hearing or at the hearing may appear and present oral or written testimony and evidence on the charges and proposed requirements of the department to assure correction of the violation or failure. If a person served with the notice of determination agrees with the proposed requirements of the department and notifies the department of that agreement before the date set for the hearing, disposition of the case may be made with the approval of the department by stipulation or consent agreement without further hearing. The final order of determination following the hearing, or the stipulation or consent order as authorized by this section and approved by the department, is conclusive unless reviewed in accordance with the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328, in the circuit court of Ingham county, or of the county in which the violation occurred, upon petition filed within 15 days after the service upon the person of the final order of determination

**324.9117 Notice of determination.**

Sec. 9117.

If the county enforcing agency or municipal enforcing agency that is responsible for enforcing this part and the rules promulgated under this part determines that soil erosion or sedimentation of adjacent properties or the waters of the state has or will reasonably occur from land in violation of this part or the rules promulgated under this part or an applicable local ordinance, the county enforcing agency or municipal enforcing agency may seek to enforce a violation of this part by notifying the person who owns the land, by mail, with return receipt requested, of its determination. The notice shall contain a description of the violation and what must be done to remedy the violation and shall specify a time to comply with this part and the rules promulgated under this part or an applicable local ordinance

**324.9118 Compliance; time.**

Sec. 9118.

*Within 5 days after a notice of violation has been issued under section 9117, a person who owns land subject to this part and the rules promulgated under this part shall implement and maintain soil erosion and sedimentation control measures*

**324.9119 Entry upon land; construction, implementation, and maintenance of soil erosion and sedimentation control measures; cost.**

*Sec. 9119.*

*Except as otherwise provided in this section, not sooner than 5 days after notice of violation of this part has been mailed under section 9117, if the condition of the land, in the opinion of the county enforcing agency or municipal enforcing agency, may result in or contribute to soil erosion or sedimentation of adjacent properties or to the waters of the state, and if soil erosion and sedimentation control measures in conformance with this part and the rules promulgated under this part or an applicable local ordinance are not in place, the county enforcing agency or municipal enforcing agency, or a designee of either of these agencies, may enter upon the land and construct, implement, and maintain soil erosion and sedimentation control measures in conformance with this part and the rules promulgated under this part or an applicable local ordinance. However, the enforcing agency shall not expend more than \$10,000.00 for the cost of the work, materials, labor, and administration without prior written notice in the notice provided in section 9117 for the person who owns the land that the expenditure of more than \$10,000.00 may be made. If more than \$10,000.00 is to be expended under this*

**324.9121 Violations; penalties**

*Sec. 9121*

- (1) A person who violates this part is responsible for either of the following:
  - (a) If the action is brought by a county enforcing agency or a municipal enforcing agency of a local unit of government that has enacted an ordinance under this part that provides a penalty for violation, the person is responsible for a municipal civil infraction and may be ordered to pay a civil fine of not more than \$2,500.00.*
  - (b) If the action is brought by the state or a county enforcing agency of a county that has not enacted an ordinance under this part, the person is responsible for a state civil infraction and may be ordered to pay a civil fine of not more than \$2,500.00.**
- (2) A person who knowingly violates this part or knowingly makes a false statement in an application for a permit in a soil erosion and sedimentation control plan is responsible for the payment of a civil fine of not more than \$10,000 for each day of violation.*
- (3) A person who knowingly violates this part after receiving a notice of determination under section 9112 or 9117 is responsible for the payment of a civil fine of not less than \$2,500.00 or more than \$25,000.00 for each day of violation.*
- (4) Civil fines collected under subsections (2) and (3) shall be deposited as follows:
  - (a) If the state filed the action under this section, in the general fund of the state.*
  - (b) If a county enforcing agency or municipal enforcing agency filed the action under this section, with the county or municipality that filed the action.*
  - (c) If an action was filed jointly by the state and a county enforcing agency or municipal enforcing agency, the civil fines collected under this subsection shall be divided in proportion to each agency's involvement as mutually agreed upon by the agencies. All fines going to the department shall be deposited into the general fund of the state.**

- (5) *A default in the payment of a civil fine or costs ordered under this section or an installment of the fine or costs may be remedied by any means authorized un the revised judicature act of 1961, 1961 PA 236, MCL 600.101 to 600.9948.*
- (6) *In addition to a fine assessed under this section a person who violates this part is liable to the state for damages for the injury to, destruction of, or loss of natural resources resulting from the violation. The court may order a person who violates this part to restore the area or areas affected by the violation to their condition as existing immediately prior to the violation.*
- (7) *This section applies to an authorized public agency, in addition to other persons. This section does not apply to a county enforcing agency or a municipal enforcing agency with respect to its administration and enforcement of this part and rules promulgated under this part.*

### **Section 3:**

#### **Post Construction Standards:**

Jurisdiction remains with each municipality. There are two mechanisms to address post construction standards. First is the adoption of Storm water Management Plan and Design Standards. The second are Low Impact Design Ordinances.

Through Resolution, municipalities have adopted Storm Water Management Plan and Design Standards established by the Bay County Drain Commissioner. Building permits and subsequently occupancy permits are not issued unless a project plan meets the approved design standard and Occupancy permits are not issued until projects are built to design.

“Be it resolved that \_\_\_\_\_ Township formally adopts the Storm Water Management Plan and Design Standards for Commercial, Industrial, Subdivision, condominium and Manufactured Home Development issued by the Bay County Drain Commissioner on June 16, 2003,

Be it further resolved all proposed non-residential, condominium and subdivision developments within the Township are required to submit storm water management plans to the Bay County Drain Commissioner for review and approval prior to approval by the Township Planning Commission”.

Municipalities have also passed Low Impact Design Ordinances to maximize the potential for best management practices to be utilized in the design of new buildings or infrastructure. The ordinances are known as *Alternative Design for Storm Water Discharge and Preservation of Natural Water Resources Ordinance*, they remove any barriers best management designs may have in complying with zoning ordinances. They require design review and approval as well as as-built inspection prior to occupancy.





Attachment 4  
**BAY AREA STORM WATER AUTHORITY**  
**PUBLIC PARTICIPATION PLAN (PPP)**

As required by the National Pollutant Discharge Elimination System (NPDES) Storm water Discharge of Storm water to Surface Waters from a Municipal Separate Storm Sewer System (MS4, the purpose of this Public Participation Plan (PPP) is to facilitate the involvement of watershed jurisdictions, agencies, organizations, and the general public in the development of the Storm Water Management Plans. Special effort should be made to involve those entities with the authority, ability, and desire to bring about necessary change by developing and implementing the Storm Watershed Management Plan.

**General Information**

This PPP has been developed exclusively for the Lower Saginaw River, Kawkawlin River and Saginaw Bay Shoreline Watersheds. The Bay County Drain Commissioner and the BASWA Members will be responsible for and work together to develop and administer the PPP. The intention is to encourage and implement the public's involvement in the planning process.

The following MS4 permittee(s) submit this PPP:

Bangor Charter Township  
Bay County Road Commission  
City of Bay City  
City of Essexville  
County of Bay  
Hampton Charter Township  
Kawkawlin Township

Monitor Charter Township

Nested Jurisdictions

Bangor Township Public Schools

Bay Arenac Intermediate School District

Bay City Public Schools

Essexville Hampton Public Schools

**Building the Team (Table)**

The following table identifies the various agencies/organizations/entities who we plan to involve in our watershed management planning process; the mechanisms we plan to use to bring the entities into the planning process; and identifies who will be responsible for implementing each mechanism.

<b>Potential Watershed Team</b>	<b>Participation Mechanism</b>	<b>Responsible Contact</b>
Bangor Township Public Schools	MS4 Permit Holder Nested Jurisdiction	BASWA Administrator
Bangor Township Board	MS4 Permit Holder	BASWA Partner
Bangor Township Planning and Zoning	Affiliate Invitation	BASWA Administrator
Bay Area Chamber of Commerce	Targeted Invitation	BASWA Administrator
Bay Area Community Foundation	Targeted Invitation	BASWA Administrator
Bay Area Convention and Visitors Bureau	Targeted Invitation	BASWA Administrator

Bay-Arenac ISD	MS4 Permit Holder Nested Jurisdiction	BASWA Administrator
Bay City Public Schools	MS4 Permit Holder Nested Jurisdiction	BASWA Administrator
Bay County Drain Commissioner	MS4 Permit Holder	BASWA Partner
Bay County Farm Bureau	Targeted Invitation	BASWA Administrator
Bay County Health Department	Affiliate Invitation	BASWA Administrator
Bay County Parks and Recreation-Pinconning Park	Affiliate Invitation	BASWA Administrator
Bay County Community Planning Department	MS4 Permit Holder	Watershed Partner
Bay County Road Commission	MS4 Permit Holder	BASWA Partner
Bay County Soil Erosion Program	Affiliate Invitation	BASWA Administrator
Bay Future, Inc	Targeted Invitation	BASWA Administrator
Bay Medical	Targeted Invitation	BASWA Administrator
Bay Sail	Targeted Invitation	BASWA Administrator
Boy Scouts - Huron Council	Targeted Invitation	BASWA Administrator
City of Bay City	MS4 Permit Holder	BASWA Partner

City of Bay City - Planning Commission	Affiliate Invitation	BASWA Administrator
City of Essexville	MS4 Permit Holder	BASWA Partner
City of Essexville - Planning Commission	Affiliate Invitation	BASWA Administrator
Consumers Energy	Targeted Invitation	BASWA Administrator
Delta College	Affiliate Invitation	BASWA Administrator
Ducks Unlimited- Bay County	Targeted Invitation	BASWA Administrator
East Central Michigan Planning and Development Regional Commission	Targeted Invitation	BASWA Administrator
Essexville-Hampton Public Schools	MS4 permit Holder Nested Jurisdiction	BASWA Administrator
Girl Scouts of Mitten Bay	Targeted Invitation	BASWA Administrator
Hampton Township Board	MS4 Permit Holder	BASWA Partner
Hampton Township Planning and Zoning	Affiliate Invitation	BASWA Administrator
Kawkawlin River Watershed Association	Targeted Invitation	BASWA Administrator
Kawkawlin Township Board	MS4 Permit Holder	BASWA Partner
Kawkawlin Township Planning and Zoning	Affiliate Invitation	BASWA Administrator

Linwood Sportsman Club	Targeted Invitation	BASWA Administrator
Bay County Realtors	Targeted Invitation	BASWA Administrator
MDNRE	Affiliate Invitation	BASWA Administrator
MDOT	Affiliate Invitation	BASWA Administrator
Michigan State University Extension Bay County	Targeted Invitation	BASWA Administrator
Monitor Sugar	Targeted Invitation	BASWA Administrator
Monitor Township Board	MS4 Permit Holder	BASWA Partner
Monitor Township Planning and Zoning	Affiliate Invitation	BASWA Administrator
Natural Resource Conservation Service/Conservation District	Targeted Invitation	BASWA Administrator
Partnership for Saginaw Bay Watershed	Targeted Invitation	BASWA Administrator
Saginaw Bay Greenways	Targeted Invitation	BASWA Administrator
Saginaw Bay Walleye Club	Targeted Invitation	BASWA Administrator
Saginaw Valley State University	Targeted Invitation	BASWA Administrator
Saginaw Watershed Initiative Network (WIN)	Targeted Invitation	BASWA Administrator
Save our Shores Organization	Targeted Invitation	BASWA Administrator

Trout Unlimited	Targeted Invitation	BASWA Administrator
General Public	PSA; Website; Press Release	BASWA Administrator

Stake holders will initially receive an invitation; either targeted or affiliated. PSA's and press releases will invite the public and serve as a reminder to invitees. The website will encourage public participation with a link to email comments or concerns to the BASWA administrator.

- Affiliate Invitations are given to entities affiliated with Authority Members or entities under MS4 permit.
- Targeted Invitations are extended to stakeholders that have no legal obligation under the program.

**Communication During the SWMP Development Process**

Communication during the Watershed Planning Process will be maintained with the stakeholders and public by a variety of mechanisms. The SWMP process will begin 60 days after issuance of the permit.

- 1.) Individually identified Email distribution lists will be maintained and utilized to the greatest extent practical for meeting notices, communication updates and public events.
- 2.) A BASWA web-site will be updated annually or as necessary and maintained to include opportunities to review and inspect SWMP and provide links to each affiliate member site available. Email addresses and phone numbers will be provided to allow the public to comment on the SWMP.
- 3.) Press releases will be developed to announce milestones, including opportunities

for inspection and public comment of the SWMP.

4.) Public Meetings to inspect and review the SWMP will be held periodically, notice consistent with item 9, below.

5.) The BASWA Administrator will attend meetings of local boards, councils, associations, and other interested groups.

6.) Articles will be developed for other existing newsletters or circulars.

7.) Attend and promote appropriate workshops, seminars, and open-houses.

8.) Conduct surveys as needed.

9.) Publish public notices and public meeting announcements in a manner consistent with public notice requirements for municipalities to invite public involvement and periodic review of the SWMP which is available on BASWA website.

#### **Time Line for the Planning Process**

<b>Activity</b>	<b>Schedule</b>
Broadcast Solicit Participation for SWMP Development	Completed 2005
Public Meeting to Review SWMP	Completed 2006
Ongoing BASWA Meeting	All Quarters of Permit Period
Seek Grant Funding Sources	Ongoing

Investigate Other Potential Funding/Grant sources	Ongoing
Broadcast Solicit Participation to review SWMP	Within 2 years of permit approval
Public meeting to Review Updated Watershed Management Plans	Within 3 years of permit approval

**Coming to Agreement**

At decision making milestones, advance meeting notices will include a description of the decisions to be made regarding the Storm Water Pollution Prevention Initiative, Watershed Management Plan Updates or other meeting purpose actions as well as a brief summary of (decision) impacts in order to encourage the broadest level of participation. Group consensus will be the goal and strived for at decision making points. If conflicts exist on critical issues after allowing time for debate, a majority vote by full voting members of the Bay Area Storm Water Authority will make the decision. Minutes of meetings will be kept to include a record of differing view points

**Adaptive Management**

Public participation and involvement by stakeholders will be evaluated at each meeting through sign-in sheets. Participation will be encouraged in PSA's, press releases and emails. If fewer than 10 stakeholders and members of the public participate, it will be determined that public participation is not adequate and additional communications to stake holders will be made through a blast email encouraging participation and identifying additional potential stakeholders. Stakeholders must include municipalities, agricultural, residential and conservation individuals. An updated targeted invitation letter as described in Part 2 Building the Team - will be sent out to encourage participation to participants who have missed two meetings.



ATTACHMENT 5  
**BAY AREA STORM WATER AUTHORITY  
PUBLIC EDUCATION PLAN (PEP)**

**APRIL 15, 2018  
(OR AS APPROVED BY MDEQ)**

This Public Education Plan (PEP) is submitted to the Michigan Department of Environmental Quality to fulfill those requirements of the National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge of Stormwater to Surface Waters from a Municipal Separate Storm Sewer System (MS4). This PEP is designed exclusively for use by the Bay County Urbanized Area Storm Water Authority (Authority) and its use is limited to the members of the Authority. The Authority is comprised of the following member municipalities:

Bangor Charter Township

Bay County Road Commission

City of Bay City

City of Essexville

County of Bay

Nested Jurisdictions:

Bay Arenac ISD

Bay City Schools

Bangor Township Schools

Essexville-Hampton Public Schools

Hampton Charter Township

Kawkawlin Township

Monitor Charter Township

In accordance with the NPDES Municipal Separate Storm Sewer System (MS4), this PEP will be implemented collectively by members of BASWA to comply with the public education requirement of each municipalities permit:

*To promote, publicize, and facilitate watershed education for the purpose of encouraging the public to reduce the discharge of pollutants in storm water to the maximum extent practicable.*

In carrying out the following public education efforts, each Member will take action and respond in a manner consistent with the scope of its current legal authority. If the legal authority necessary to carry out one of the required public education elements within its jurisdiction is vested in whole or in part in another municipal authority, the Member will notify and take appropriate steps to encourage the other municipal authority to satisfy that element. Municipal authorities include but are not limited to the Drain Commissioner and the Road Commission.

### OBJECTIVES FOR PUBLIC EDUCATION

1. Build awareness and stewardship of the two Bay County Watersheds and tributaries, the urban storm water system, as well as the daily impact of activities on this resource among municipality residents.
2. Improve the public’s understanding of the Saginaw and Kawkawlin Rivers and the Saginaw Bay, to improve their status as natural resources, recreational resources, and valuable community assets (i.e. foster stewardship and enthusiasm for the rivers and Bay).
3. Build awareness and foster stewardship of the local watershed management actions, NPDES Permit requirements and the municipal partners through dissemination of informational materials and coordination of activities.

### PRIORITIZING TOPICS IN THE PEP

The procedure for identifying high-priority community-wide or targeted topics to reduce pollutants in storm water runoff suited for collaborative public education efforts includes the following:

- A review of pertinent Watershed Management Plans including any established Total Maximum Daily Loads for waterbodies in each watershed
- A review of the effectiveness of PEP activities implemented prior to this permit cycle
- Topics identified by permittees at meetings prior to and throughout the permit cycle
- Discussion and input from permittees regarding potential public outreach opportunities, and existing and future programs.

Required Element	Public Education Topic	Priority Ranking	Community wide/targeted issue
A	Promote public responsibility and stewardship in their watershed	High	Community-wide Issue
B	Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state	High	Community-wide Issue
C	Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into MS4	High	Community-wide Issue
D	Promote preferred cleaning materials and procedures for car, pavement & power washing	Medium	Community-wide Issue

E	Inform and educate the public on proper application and disposal of pesticides, herbicides and fertilizers	High	Community-wide Issue
F	Promote proper disposal practices for grass clippings, leaf litter and animal wastes that may enter into the MS4	Medium	Community-wide Issue
G	Educate the public on the availability, location and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes and marine/motor vehicle fluids	Medium	Community-wide Issue
H	Inform and educate the public on proper septic system care and maintenance and how to recognize system failure	Low	Targeted/OSSDs properties
I	Educate the public on and promote the benefits of green infrastructure and low impact development	Low	Community-wide issue
J	Identify and educate commercial, industrial and institutional entities likely to contribute pollutants to storm water runoff	Medium	Targeted/Industry-business

***Activity #1: Develop/Update/Maintain BASWA Web Site***

Target Audience                      Community-wide

Key Message:                         A-J included on rotating basis

Delivery Mechanism:                A web site currently exists for the County; the Storm Water Authority Website will continue to piggyback on the site and utilize a number of existing resources. The website address will be included on all published newsletters and be an available link on each member website within 60 days of PEP approval. Annual maintenance of web site with appropriate seasonal messages.

Goal:                                      Annual maintenance and updating of website; record visits to site through a counter per year: 500 hits per year

Year/Frequency:                      Established 2005. Annual updates or as need.

Responsible Party:                    BASWA

Evaluation:                              An internal counter will be incorporated into web site within 90 days of PEP approval. A summary of growth will be included in the report to MDEQ.

***Activity #2: Develop Articles/Inserts for Newsletters***

Target Audience: Authority member community residents, waterfront property owners, business groups, schools, community organizations and other newsletter outlets that are distributed to our community.

Key Message: A-J

Delivery Mechanism: Newsletters will be distributed through direct mail (inserts to tax/utility bills) to local residents and they will also be available at each member municipality office. Member municipalities send out newsletters to their residents and businesses on a variable basis and they will be used to promote watershed education. The newsletters will include articles and information on watershed principles and practices as well as other storm water education information and BMP's.

Goal: Publish one newsletters and two news articles per year

Year/Frequency: Implemented in 2004, ongoing annually and variably according to Township mailing frequencies

Responsible party: BASWA

Evaluation: A survey will be conducted in the last year of the permit cycle It will utilize mail or phone and be designed to measure penetration and retention of Authority messages. Survey results will be compared to a baseline survey completed by BASWA in 2007.

***Activity #3: Distribution of Brochures/Tip Cards***

Target Audience: Residents of Authority Member Communities, visitors to community information distribution points including; municipalities, attractions, marinas, schools, commercial centers of the Bay Area.

Key Message: A-J

Delivery Mechanism: Available at member municipality building locations.

Goal: 50 pieces of material distributed per year per Authority member

Year/Frequency: Began 2005 and is ongoing.

Responsible Party: BASWA

Evaluation: A survey will be conducted in the last year of the permit cycle. It will utilize mail or phone and be designed to measure penetration and retention of Authority messages. Survey results will be compared to a baseline survey completed by BASWA in 2007.

***Activity #4: Develop Public Service Announcements***

Target Audience: Residents of the Authority Member Communities, the general public and visitors to the area.

Key Message: A, B, E, D,F,G

Delivery Mechanism: Media release

Goal: 2 published and/or broadcast per year

Year/Frequency: Annually

Responsible Party: BASWA

Evaluation: A survey will be conducted in the last year of the permit cycle. It will utilize mail or phone and be designed to measure penetration and retention of Authority messages. Survey results will be compared to a baseline survey completed by BASWA in 2007.

***Activity #5: Specific Industry/ Outreach***

Target Audience: Industrial, riparian and lawn care organizations

Key Message: A, B, D, E, F, J

Delivery Mechanism: Targeted Mailing

Goal: Two mailings during permit cycle.

Year/Frequency: Implemented 2008. Ongoing twice per permit cycle

Responsible Party: BASWA

Evaluation: A survey will be conducted in the last year of the permit cycle

It will utilize mail or phone and be designed to measure penetration and retention of Authority messages. Survey results will be compared to a baseline survey completed by BASWA in 2007.

***Activity #6: Youth Watershed Education***

Target Audience: Schools, civic groups, youth programs (grades 1 – 3 primarily)

Key Message: A, B (C through I being ancillary)

Delivery Mechanism: School visits

Goal: Visit ten classrooms during permit cycle: minimum 2 annually

Year & Frequency: Ongoing throughout permit cycle

Responsible Party: BASWA

Evaluation: Work with educators to develop an evaluation quiz to determine retention. A survey will be conducted in the last year of the permit cycle. It will utilize mail or phone and be designed to measure penetration and retention of Authority messages. Survey results will be compared to a baseline survey completed by BASWA in 2007.

***Activity #7: Promote BASWA Illicit Discharge Reporting System***

Target Audience: Residents, public employees, businesses, industries.

Key Message: C

Delivery Mechanism: Included in printed mailing, Member websites

Goal: Regular maintenance and update of website/phone line hotline and record of the complaints per year. Contact information will be included on all printed materials

Year & Frequency: Ongoing throughout the permit cycle

Responsible Party: BASWA and member municipalities

Evaluation: Number of calls to hotline; nature of complaints; follow-up actions; number of illicit discharges/pollution issues cleaned-up/outcome of

issues. A survey will be conducted in the last year of the permit cycle. It will utilize mail or phone and be designed to measure penetration and retention of Authority messages. Survey results will be compared to a baseline survey completed by BASWA in 2007.

## **INTEGRATED COORDINATION EFFORTS**

It is important to note that throughout the term of the permit, combinations of these disseminating mechanisms will be utilized emphasizing relevant seasonal information and promoting other links to include information presented in community newsletters, cable TV programs and advertisements, brochures/flyers in public facilities, public facility displays, and direct communications. The coordinated effort by the member municipalities will serve as an integrated promotion of public education for reduction of pollutants in storm water as well as target special groups. The effort will inform and educate residents and visitors about how their activities impact water quality in Bay County watersheds, how to reduce pollutants, and how the storm water system works.

Upon adequate notice being provided, The Authority will promote and support public involvement programs and other public events which have a shared goal such as annual river clean ups and/or volunteer monitoring programs, Bay Sail, Partnership for Saginaw Bay, community water quality initiatives, Master Gardener Program, and Saginaw Bay WIN grant funded initiatives, such as the Saginaw Bay Greenways Program. The Authority will use its web site, public service announcements, public access television and publications to promote these activities.

## **RELATIONSHIP TO WATERSHED MANAGEMENT PLANNING**

With experience gained as watershed management progresses, appropriate modifications will be made to the PEP. During the watershed management planning process, goals for the watershed will be developed and these will be integrated into the PEP. The need to evaluate the success or impact of the PEP will be further reviewed.

## **METHOD FOR DETERMINING ACTIVITY EFFECTIVENESS**

During the first Certificate of Coverage cycle, it became evident that the process of educated citizens on storm water quality improvement would take decades. Recognizing this, measures are difficult and success limited. Each activity undertaken has value but a realistic measure will only show minute gains.

The Bay County Urbanized Area is required through the permit to “describe a method for determining the effectiveness of the various public education activities.” The PEP activities will consistently convey messages which encourage the public to reduce the discharge of pollutants in storm water. The variety of identified activities and tools described within the PEP will be monitored on an annual basis in order to evaluate their effectiveness. As our standard, we will use the level of public participation and involvement in the various activities and the numerical demand for public information. Specifically we will track the public informational brochure distribution rates, keeping track of the numbers of brochures distributed by request; the number of newsletter articles published and any follow up inquiries; the number of related public meetings and events and the number of persons attending or participating; an internal counter will measure web-site hits. Each publication will have contact numbers for additional information and those contacts will be tracked.

A survey will be developed in-house based on previous base-line surveys conducted in previous permits. It will be conducted at the beginning and end of the permit cycle to determine the effectiveness of the messages and delivery mechanisms. It will be done using phone or mail and be available on the website. Depending on responses, the Public Education Plan or specific messages and delivery methods will be adjusted.

#### **DATE FOR ANNUAL PROGRESS REPORT**

By the date indicated on the permits issued to the BASWA members, a Progress Report on the implementation status of their permit and the progress of pollution prevention for the members will be submitted to the MDEQ. This report will include documentation of the PEP efforts, a summary of the evaluation of its effectiveness when appropriate, and any proposed revisions or amendments. The report will incorporate the measurable goals listed and may incorporate any additional quantitative or qualitative goals that the Authority feels are necessary for public education evaluation. Each community / county agency / educational institution will have a section of the progress report specific to their annual activities.

#### **ANNUAL BUDGET**

BASWA adopts annual budgets. A line item and apportionment is prepared and provided to the Authority members for approval. The budget is then adopted at the Annual Meeting in December of every year. This process has been in place since the formation of the Authority under PA 233 of 1955 in 2003. All annual budgets and apportionments are available on the BASWA website.



## **ILLCIT DISCHARGE ELIMINATION PROGRAM**

### ***BAY AREA STORM WATER AUTHORITY***

The Illicit Discharge Elimination Program (IDEP) is being performed as a part of a watershed strategy within the Bay Area Storm Water Authority (BASWA) communities. Many of the activities and program efforts required by this permit have been and are currently being performed throughout the Urbanized Area by various public and private entities. The Saginaw Bay area was recognized almost 30 years ago as having water quality impairments, and in fact is listed by the International Joint Commission as an "Area of Concern". Directly as a result of this listing and directly in response to the local citizenry support and concern for this valuable local resource, hundreds of millions of dollars have been spent to characterize the problems and specific problem areas, identify contaminant sources, and implement many source reduction and pollution prevention activities by both public agencies and community interest organizations.

As a result of these efforts and expenditures, water quality improvements have been measured. The past 25 years have shown the success of these efforts as: 1) specific contaminants have been reduced, 2) source reduction has occurred and 3) data showing strong and measurable recovery. Clearly, pollution remediation and prevention activities to protect and improve the quality of water resources are not a new undertaking in this Bay County area. It is the intent of the Bay Area Storm Water Authority Committee communities to build on this successful existing effort, and increase activities and efforts where needed to comply with the Michigan Department of Environmental Quality's (MDEQ) Permit.

Although each municipal BASWA member will obtain their own permit, this IDEP will serve as a document for all members with the exception of the City of Bay City, which will have their own. The rest of the urbanized area will be cooperatively utilize this plan.

#### **PERMIT REQUIREMENTS AND DEFINITIONS**

As required by the National Pollutant Discharge Elimination System (NPDES) Storm water Discharge of Storm water to Surface Waters from a Municipal Separate Storm Sewer System (MS4), the Authority will work to eliminate illicit storm water discharges from Separate Storm Water Drainage Systems within its watershed plan, the following definitions apply to the IDEP:

"Illicit connection" means a physical connection to the separate storm water drainage system that 1) primarily conveys illicit discharges into the system and/or 2) is not authorized or permitted by the local authority (where a local authority requires such authorization or permit).

"Illicit discharge" means any discharge (or seepage) to the separate storm water drainage system that is not composed entirely of storm water, except for discharges specified in Parts I.A.1.c. and d. of the permit. Examples of illicit discharges include dumping of motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, animal wastes, or unauthorized discharges of sewage, industrial wastes, restaurant wastes, or any other non-storm water waste into a separate storm water drainage

system.

"Point source discharge" (PSD) means an outfall from a drainage system to waters of the state, or a point where a storm water drainage system discharges into a system operated by another public body.

"Significant illicit discharge" means a discharge that shows evidence of impairing water quality in the receiving water.

## **FINDING, PRIORITIZING AND ELIMINATING ILLICIT DISCHARGES AND CONNECTIONS**

This program will be done using an investigative methodology to effectively identify and eliminate illicit discharges. Multiple steps may be ongoing simultaneously as the program is implemented. The investigative methodology includes first verifying the known PSD locations and locating unmapped PSDs; then field screening of each PSD will be conducted and a follow-up investigation will occur where needed to locate the source of an illicit discharge or connection; finally corrective action to remove illicit connections will occur and confirmation will be provided that the illicit connection has been removed. Jurisdictions will verify or develop necessary enforcement ordinances to allow the authority to take necessary legal action.

Maps and tables identifying the known PSDs and their ownership within the municipal limits have been developed and will be utilized as a starting point for the field verification and screening program.

## **PROGRAM:**

### **Training**

Training of staff employed by Authority members will occur every three years. New employees will be trained within one year of hire or election. The staff includes Drain Commissioner, Road Commission, and municipal department of Public Works staff. In addition, cross-training with the Bay County Health Department, Bay County Mosquito Control and other identified municipal employees will be conducted to increase on-going monitoring of open drains.

Training for all staff will include; techniques for identifying illicit discharges & connections, recognizing illicit discharges, understanding municipal storm water infrastructure, common types of illicit discharges, field observation, reporting requirements and spill reporting. Field screening and source investigation, more complete infrastructure analysis, field planning and preparation and enforcement procedures training will be done with personnel directly involved with the program. Training will also include definitions and photograph examples of illicit discharges. It will include recognition of natural occurring phenomena and their sources as well as utilization of GPS equipment and other necessary mapping and surveying skills to aid in the location of illicit discharges. Training will extend to both those directly involved in screening and as many additional personnel as possible. Training will include a test or quiz to ensure competence. BASWA will maintain a list of trained personnel.

## Field Verification, Identification and Screening of PSDs

Beginning in January 2020, the field re-screening and verification will begin for known PSDs and be completed during the permit cycle. The field screening and verification will be done by trained Drain Commissioner, Road Commission, city and township staff. Those locations and any unmapped PSDs found during field investigations will be recorded and screened. The focus of the field screening is to observe for the presence or absence of flow, deposits/stains on structures or banks, vegetation condition, structural condition, bacterial sheens, algae and slime, water clarity, color, odor and floatable materials. 100% of the urbanized area will be re-screened during the permit cycle. Past efforts have demonstrated that a higher proportion of illicit discharges exist in older urbanized areas. The Kawkawlin River and older urbanized areas will continue to receive the initial screening as a primary concern. Field crews will record a coordinate of each PSD using a handheld Global Positioning System (GPS) device or other suitable surveying technique. PSDs found during the investigations will be added to the appropriate maps; this information, as well as any corrections or modifications to the map or table, will be reported to the MDEQ as required.

During the field verification stage, each PSD will be screened for signs of illicit discharges or connections. Where illicit discharges or connections are suspected, a systematic investigation upstream of the PSD will be conducted to trace the discharge to the source. The PSDs will be observed in the field during dry weather conditions, typically assumed to be 72 hours with less than 0.10 inches of rainfall. Favorable seasonal conditions such as winter freeze up or summer drought will be utilized as much as practicable. When field screening PSDs in open channels, a longer dry weather duration preceding the observation may be needed. Specific dry weather duration requirements may be site specific and will be determined during the field investigation. The sites will also be further checked for intermittent flows, if suspected, due to field observations. Fieldwork may be limited to certain times of the year to promote identification; for example, when the water table in the waterways is relatively low (late summer, fall and winter), winter thaws and spring will be avoided. Each field check will be recorded and fully documented with descriptions of date, time, and observation notes confirming any discharge or odors or recording that none exist.

If dry-weather flow is present, it will be visually observed by checking water clarity and color, the presence of foam, oil sheen, trash or other materials. It will also be checked for odor, bacterial sheen, slime, excessive vegetative growth and staining of the banks. The location will be reported to the Drain Office staff within 24 hours, who will take sample of the dry-weather flow within 48 hours, weather permitting, and have it tested for representative tracer parameters including:

- X     pH
- X     temperature
- X     *E. coli*
- X     detergents

- X fluoride
- X hardness
- X ammonia
- X total organic carbon

At that time, the BASWA Administrator designee will also do a preliminary investigation to determine the source of the flow.

The presence of dry-weather flow does not automatically indicate an illicit discharge or a connection, but it does require that laboratory testing be performed to analyze the discharge for indicator parameters (ammonia, fluoride, and detergents). The water may simply be groundwater seepage and seasonal flow or it may be an illicit connection. The water sample will be grabbed by the BASWA Administrator designee and submitted to a contract lab for a detailed analysis. Field tests will include visual observations, PH and water temperature. Test results and observations will be used to identify areas that require follow-up investigations.

If the sample is determined to exceed parameters and the source was not identified in the initial screening, a source investigation shall be conducted within three business days of receiving laboratory results. This will be accomplished by tracing the pollutant stream until the source is isolated. This may include multiple water samplings, and/or dye testing by drain office or health department personnel. In general, dye testing will be used as the final step to confirm positive identification of an illicit connection. Televising the sewer by a commercial sewer cleaner or the Bay County Road Commission may be used to further isolate the pollutant source or may be used if dye testing does not reveal the source of the problem. This approach is intended to locate illicit discharges and connections in the most cost-effective and efficient manner possible. It will focus the use of dye testing in those situations necessary to confirm illicit connections. The BASWA Administrator may engage a qualified contractor to assist in the identification if they cannot identify the source.

In the event multiple locations with exceeded parameters are identified, priority of addressing them will be based on estimated total load of pollutant as determined by value of flow volume and level of tracers. The illicit discharge with the highest estimated pollutant load will be addressed first.

If a complaint is received for an illicit discharge or illegal dumping/spill a field investigation will occur on the same business day, or within 24 hours. If a flow is identified, testing and identification will take place as with any other discharge.

MDEQ will be notified immediately via District Office or 24-Hour Pollution Emergency Alerting System (800) 292-4706 to report any release of polluting material from the MS4 to the surface waters or ground waters of the state if they are in excess of the threshold of reporting quantities in the Part 5 Rules.

#### **Removal Actions and Confirmation of Removal**

All illicit connections or illegal dumpings/spillings that are located through the screening process or reported regardless of their location whether inside or outside of the priority area are responded to by the entity with jurisdiction. If multiple illicit discharges are discovered, they will be prioritized based on the severity and potential harm they may cause. Factors that would influence the prioritization include analyzing results from ambient water quality, dry weather observation, chemical and bacterial analysis, as well as video, smoke or dye testing results. That analysis coupled with a review of the receiving water for beneficial uses, impairment of the water body, existing water quality data and endangered flora and fauna will determine the priority of removal actions. A field investigation will be performed within 24 hours and if necessary a water sample will be obtained. Upon completion of the investigation, a letter will be prepared by the local jurisdiction to notify the property owner of the violation and the required corrective action that needs to occur. A follow site investigation will occur within 24 hours of corrective action by the landowner.

Corrective Actions will follow enforcement standards outlined in the BASWA Enforcement Response Procedure utilizing the most appropriate statute or ordinance identified. This includes timelines for discharge removal as specified in the selected enforcement method.

#### **Review of the Legal Authority**

Upon approval of the MDEQ to ensure requirements of the Permit are fulfilled, BASWA members will enact a Bay Area Storm Water Authority Storm Water Regulations. The adoption of the regulation through ordinance provides the necessary authority to address illicit discharge connections.

#### **DETERMINING THE EFFECTIVENESS OF THE IDEP ACTIVITIES**

As required by the permit, a report will be generated and include the following information which will become the baseline for measurable improvements:

- \* Number of PSDs verified, located and screened.
- \* Number of illicit discharges found and percentages of those remedied.
- \* The number of complaints in the tracking systems received and the percentage that leads to the discovery of illicit connections.
- \* Status of the implementation of various aspects of the IDEP
- \* Timeliness of elimination of located illicit connections.
- \* A listing of significant discharges by location, pollutants of concern involved, estimates of volume and load discharge.
- \* Improvements in ambient water quality.
- \* Number of participants in training program
- \* Quiz before and after staff training

#### **MAPPING**

As part of the ongoing program, maps in the urbanized area are reviewed and a map of identified outfalls has been created. It is the basis of field screening and verification. When crews walk the drains during the screening process they will confirm the outfall locations as well as locate and map additional outfalls along the drains. In addition, the utility map will incorporate any results from televising storm sewers. Mapping of located, verified and screened PSDs will be continually updated utilizing GPS information. Updated maps will be submitted annually to the MDEQ with the annual report. The maps will include designation of located and remedied illicit discharges. Maps that have been submitted can be referenced in the NPDES Certificate of Coverage.

Attachment 8

*Storm Water Management  
Plan and Design Standards  
for  
Commercial, Industrial, Subdivision,  
Condominium, and Manufactured Home  
Site Development*

*Standards Comply with NPDES*

Issued by  
**Joseph Rivet**  
Bay County Drain Commissioner

The Design Standards contained herein will apply to all Commercial, Industrial, Subdivision, Condominium, and Manufactured Home Site Development within Bay County.

# TABLE OF CONTENTS

	<u>PAGE</u>
<b>I INTRODUCTION</b> .....	
A. Objective of the Storm Water Management Plan.....	3-4
B. Administration of the Storm Water Management Plan .....	4
<b>II. ADMINISTRATION</b> .....	5-19
A. Definitions.....	5-8
B. NPDES Stormwater Management Criteria.....	9-14
1. Overview of Permit Requirements.....	9-10
2. Water Quality.....	10-11
3. Channel Protection.....	11-14
4. Long Term Operation & Management.....	14
C. Review Procedure.....	14-17
1. Preliminary Layout.....	14-16
2. Formal Review .....	16-17
D. Design Submittal Approval .....	16-17
E. Changes to Design Submittal after Approval .....	17
F. Inspection Requirements .....	17-18
G. Insurance Requirements .....	18
H. Fee Schedule .....	18
I. Penalties/Enforcement .....	18
J. Appeals Process.....	19
<b>III. STORM DRAINAGE SYSTEMS JURISDICTIONS</b> .....	20
<b>IV. DESIGN CALCULATIONS</b> .....	21-27
A. Allowable Discharge Rate.....	21
B. Discharge Metering Line Requirements.....	22
C. Storm Water Detention Requirements.....	23
D. Storm Water Conveyance Requirements (10 year).....	24
E. Storm Water Conveyance Requirements (25 year) .....	24
F. Storm Water Conveyance Requirements (100 year).....	25
G. Time of Concentration .....	25
H. Runoff Coefficient.....	26-27
<b>V. DESIGN STANDARDS</b> .....	28-38
A. Requirements.....	28-37
1. General .....	28-30
2. Open Drains.....	30
3. Right-of-Way Requirement .....	31
4. Storm Sewer Piping Requirements for Established Bay County Drains .....	231-33
5. Culverts.....	33
6. Detention Requirements .....	33-35
7. Maintenance Requirements for Detention Facilities .....	35
8. Rear Lot Drainage Requirements .....	27-35-37
B. Variances from Requirements .....	37
C. Final Cleanup, Seeding, Sodding & Mulching.....	37
D. Grading.....	38
E. Contingencies .....	38



VI.	<b>FINAL PLAT REQUIREMENTS</b> .....	38-40
	A. How Final Plat is Approved .....	38
	B. What is Required Before Approval of Final Plat .....	38-39
	C. When Drainage Improvements are Made Before Submission of Final Plat.....	39
	D. When Drainage Improvements are Made After Submission of Final Plat.....	40
VII.	<b>STAKING REQUIREMENTS FOR ESTABLISHED COUNTY DRAINS</b> .....	40-41
	A. County Drain Enclosures .....	40
	B. Open Drains.....	41
	C. General .....	41

**Appendix A:**

- Storm Water Management Checklist
- Complete Storm Water Design Submittal Summary
- Application to Connect and Discharge Clean Storm Water to an Established County Drain
- Application for Permission to Tile an Established County Drain
- Application for Permit to Cross or Parallel an Established County Drain
- Application for a Special Temporary Culvert Permit

**Appendix B:**

- Required Deed Restrictions for Lots Affected by Drain Right-of-Way
- Operation and Maintenance plan for the Storm Water Drainage Systems

**Appendix C:**

- Details

## *I. INTRODUCTION*

### **A. The Objective of the Storm Water Management Plan**

Act 288 of the Public Acts of 1967 is known as the Land Division Act (formerly the Subdivision Control Act of 1967). The Drain Commissioner of Bay County, through legislative enactment, has acquired jurisdiction over established county drains and may under the terms of this Act acquire jurisdiction of drainage systems within subdivided lands and drains external to the proposed development after January 1, 1968. In accordance with the provisions of the Act, the Drain Commissioner has the right to require that County Drains, both within and outside the plat, be approved to the standards established by the Drain Commissioner. The Act also makes it possible for the Proprietor to record a plat before the required improvements are made, provided a satisfactory bond is deposited with the Drain Commissioner to insure performances. All plats to be recorded with the Register of Deeds must be in conformity with this Act.

This Storm Water Management Plan will establish the framework through which storm water detention measures and the design of storm water collection systems will be implemented. This Plan will also ensure that the present storm water collection systems are able to manage the increased amounts of storm water resulting from development and redevelopment. The Plan requires storm water management design practices that will help to minimize the impacts of proposed development or redevelopment projects on the existing drainage systems.

The Plan explains the proactive approach to managing storm water and will detail the process that must be followed to gain approval for new developments or redevelopment projects.

In addition, the Plan will help to insure that adequate drainage systems are being constructed for future developments within Bay County. Finally, this Plan is intended to aid developers in the design of their storm water runoff collection and detention systems.

The Storm Water Management Plan includes:

1. A summary of the administrative procedures including meeting requirements, review procedures, inspection requirements, fee schedule, issuance of permits, enforcement, and penalties.
2. A description of design calculations, standards, and guidelines.

3. Application for permit to connect and discharge clean storm water to an established county drain.
4. Application for permit to tile an established county drain.
5. Application for permit to cross or parallel an established county drain.
6. Application for a special temporary culvert permit.
7. Complete storm water design submittal summary.
8. Storm water management checklist.

***Compliance with this Storm Water Management Plan does not preclude the applicant from obtaining any or all other State, Federal, or Local Permits and approvals which may be required.***

## **B. Administration of the Storm Water Management Plan**

The Storm Water Management Plan will be implemented and operated by the Bay County Drain Commissioner and/or his/her designee. The Drain Commissioner will be responsible for the review of new development and redevelopment plans and for the installation and maintenance of measures within Bay County to accomplish the plan. The Drain Commissioner will work in conjunction with the necessary regulatory agencies, as well as architectural and engineering consultants, landowners, and developers within Bay County.

## II. ADMINISTRATION

### A. Definitions

For the purpose of this storm water management plan, the following definitions are adopted:

**Allowable Discharge:** The restricted discharge from a site after development or redevelopment as calculated in accordance with the Storm Water Management Plan.

**Base Flood Elevation:** The elevation delineating the flood level having a one-percent probability of being equaled or exceeded in any given year (also known as the 100-year flood elevation), as determined from Flood Insurance Rate Maps (FIRMs) or the best available information.

**Clean Storm Water:** Storm water effluent free of concentrations of any chemical, mineral or organic matter above ambient natural conditions that is commonly considered pollution by EPA, MDEQ or other similarly qualified organization.

**Commissioner:** The Drain Commissioner of the County of Bay, State of Michigan.

**Conduit:** Any channel, pipe, sewer or culvert used for the conveyance or movement of water whether open or closed.

**Control Elevation:** Contour lines and points of predetermined elevation used to denote a detention storm area on a plat or site drawing.

**Complete Design Submittal:** Includes a completed application for permit to connect and discharge clean storm water to an established county drain (Appendix A), three sets of sealed plans, three sets of hydraulic calculations, a completed drainage checklist (Appendix A) and a completed storm water design submittal summary (Appendix A). The plans and calculations shall comply with the requirements of this Storm Water Management Plan.

**Design Discharge Rate:** Unit allowable discharge rate per acre of land proposed for development or redevelopment.

**Detention Facility:** A facility constructed or modified to restrict the flow of storm water to a prescribed maximum rate and to concurrently detain the excess waters that accumulate behind the outlet.

**Detention Storage:** The temporary detaining or storage of storm water in a storage basin, on rooftops, in streets, parking lots, school yards, parks, open space, or other areas under predetermined and controlled conditions, with the rate of drainage therefrom regulated by appropriately installed devices. These detention storage areas shall not be considered regulated wetlands.