

# PREFACE

## DOCUMENT HISTORY & BACKGROUND

In the mid-1980s the Indiana Local Technical Assistance Program (LTAP) predecessor, HERPICC, developed a model stormwater drainage ordinance, perhaps as a companion to then-HERPICC Stormwater Drainage Manual, that provided a regulatory language guidance to communities seeking to control increased runoff due to new development through a local ordinance. The noted model ordinance was used as a template by many communities in Indiana. However, over the years new laws for erosion control during construction as well as post-construction requirements necessitated a number of new ordinances to be adopted by communities. This, along with advances in methods and data, resulted in numerous, often inconsistent or segregated, ordinances and provisions associated with various stormwater quantity and quality requirements by various counties and communities.

In December 2021, the Indiana Department of Environmental Management (IDEM) formally replaced 327 IAC 15-5 (Rule 5) with a new Construction Stormwater General Permit (CSGP) and 327 IAC 15-13 (Rule 13) with a new MS4 General Permit (MS4 GP). Since these permits had not been updated since 2003, they incorporated several new or revised provisions that would impact how the stormwater construction and post-construction associated with new development or redevelopment would need to be reviewed and permitted, either by IDEM (through CSGP) or by MS4 entities (through MS4 GP).

It is important to note that local jurisdictional entities do not have the authority to directly implement or enforce IDEM's CSGP. Instead, the local ordinance serves this purpose, which is one of the reasons that at a minimum all of IDEM's CSGP requirements must be included in a local ordinance. This is also a requirement contained in the MS4 GP for regulated MS4 entities. When implementing and enforcing a local ordinance, the jurisdictional entity must use their local ordinance requirements and citations to them instead of IDEM's CSGP. For County MS4 entities, the IDEM MS4 GP also requires that construction and post-construction ordinances or other regulatory mechanism required by the CSGP is administered countywide, excluding incorporated cities and areas for which the County MS4 entity does not have jurisdiction.

To assist with promoting statewide consistency among these local ordinances, several regulated MS4 communities requested that an entity such as LTAP develop a model stormwater management ordinance for them to use. To fulfill this need, LTAP secured funding and retained the services of Christopher B. Burke Engineering, LLC (Burke) to assist with the development of a Model Stormwater Management Ordinance and an accompanying Stormwater Technical Standards Manual for use by Indiana counties and local communities.

The main impetus for LTAP to create this new model stormwater management ordinance was to help counties and local communities meet a major requirement of the new IDEM CSGP and MS4 GP associated with construction and post-construction. However, in order to appeal to various Indiana communities and their stormwater management needs regardless of them being designated as a regulated MS4 or not, such a model stormwater ordinance needed to be as comprehensive as possible and include aspects of stormwater management associated with new development and redevelopment that go beyond the IDEM-required provisions. Additionally, recently observed as well as the projected climate change impacts on flooding and erosion along Indiana streams and other water bodies necessitates adoption of higher, No-Adverse-Impact standards by Indiana communities in order to minimize their exposure to such impacts. As such, in addition to minimum IDEM requirements, the LTAP model stormwater management ordinance and its companion stormwater technical standards manual incorporate a comprehensive and No-Adverse-Impact set of provisions that various Indiana communities can wholly or partially adopt as they see appropriate.

These LTAP Model Stormwater Ordinance and Technical Standards are developed for use by both MS4 and non-MS4 communities. Although not necessarily required by IDEM, non-MS4 communities are also encouraged to adopt the stormwater quality-related provisions contained in these comprehensive model stormwater ordinance and technical standards. However, IDEM may still require an IDEM-sanctioned entity to perform the plan review and inspections as required by the IDEM CSGP.

Several existing resources, including the LTAP Stormwater Drainage Manual and existing No-Adverse-Impact stormwater ordinance and technical standards recently developed by Burke for a number of progressive MS4 and non-MS4 communities, were used for and incorporated into this Model Ordinance or its companion Model Stormwater Technical Standards manual. The provisions contained in these model ordinance and standards meet IDEM's December 2021 permit requirements and also include options for communities to select enhanced provisions to meet their local needs.

## **USE OF THIS DOCUMENT**

This up-to-date, consistent, comprehensive Model Stormwater Management Ordinance that works hand-in-hand with its companion Model Stormwater Technical Standards Manual is intended to help various counties and communities in Indiana manage stormwater impacts in a changing climate, which has exacerbated these impacts and created new concerns.

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This document is intentionally formatted with larger margins on the right side. These margins include helpful, instructional text to highlight areas where replacement text is needed, offer suggestions, or key considerations and discussion points.

To use the information contained in this document, there are two major routes for the user: 1) customize and adopt the comprehensive ordinance and standards in their entirety (the user can reduce the right margin of this document to hide side comments) or 2) just extract the language from one section of the ordinance or a chapter of the Technical Standards document (e.g., extract the new language regarding IDEM's new CSGP from Section 4 of the Model Ordinance and Chapter 7 of the Model Technical Standards) and use it in a stand-alone IDEM-required construction ordinance or the users comprehensive ordinance and standards (if they have an existing one).

It is important to note that while this model ordinance and standards meet the minimum IDEM requirements, they also contain additional, recommended requirements, practices, and standards that every community in the state should consider adopting. The intent of these documents is to set a prudent baseline standard for responsible stormwater management throughout the state of Indiana, regardless of whether or not such a standard is required by a federal or state agency.

Local communities should consider adopting the ordinance and technical standards as a complete package. Many communities have chosen to keep their ordinances streamlined with detailed or explanatory verbiage included in their technical standards. LTAP followed this same streamlined approach. The main reason for this is that usually the ordinance or any future revisions to it must be approved formally by a governing body. The technical standards typically can be updated more frequently and easily through the department or staff implementing the community's stormwater program.

Several communities in Indiana already have adopted various, typically separate, ordinances to regulate various aspects of stormwater quantity and quality within their jurisdictions. Provided these existing community ordinances already contain the necessary enabling authority to the community to require information and compliance similar to that contained in this LTAP Model Stormwater Management Ordinance or can be updated to do so, these communities may choose to simply update their current ordinances and reference a customized version of the LTAP Model Stormwater Technical Standards Manual.

The main provisions and required data are contained in the LTAP Model Technical Standards Manual. So, if a community does streamline their ordinance(s), then similar to LTAP's approach the ordinance should refer to the technical standards to make it clear that compliance with both documents is mandatory. It is advisable for each community to consult with their legal counsel to ensure the technical standards will not be viewed simply as being merely unenforceable guidance.

LTAP is planning to periodically issue updates to this document as needed and as funding allows. Suggested corrections, revisions, needed additions, and/or improvements should be forwarded to LTAP so that it can be considered and incorporated into upcoming updates, as appropriate.

The following "Summary of Revisions" page contains a list of revisions/additions included in previous versions as well as this version of this document.

## SUMMARY OF REVISIONS

Version #	Date	List of Major Revisions
1.0	Aug 2021	Original version based on Burke NewGen O&TS Template
1.1	Feb 2022	<ul style="list-style-type: none"> <li>• Made revisions to preamble pages</li> <li>• Changed reference to IDEM regulations from “Draft CSGP” to “CSGP”</li> <li>• Converted the format of permit flow chart to a PowerPoint object</li> <li>• Corrected minor typos throughout</li> </ul>
1.2	Oct 2022	<ul style="list-style-type: none"> <li>• Added a “Summary of Revisions” page (this page)</li> <li>• Made minor revisions to the list of exempted discharges in Section 2</li> <li>• Made minor revisions to language regarding individual lots located within a larger permitted project in Section 4 (a)</li> <li>• Added a paragraph regarding project management log at the end of Section 4 (d)</li> <li>• Changed “Certified Professional” to “Trained Individual” in Chapter 6</li> <li>• Revised compliance and enforcement language in Section 7</li> <li>• Added a few definitions in Appendix A</li> </ul>
1.3	Nov 2025	<ul style="list-style-type: none"> <li>• Revised Section 1 (a) to clarify and emphasize that this ordinance covers both traditional runoff/drainage (stormwater quantity) and stormwater quality (including CSGP-related) requirements with various applicability thresholds</li> <li>• Revised Section 1 (b) to clarify that additional and exemptions that are specific to each subject are contained in each section associated with that subject (for example, while the 10,000 square feet is the threshold for the applicability of the overall ordinance, the threshold for detailed erosion and sediment control requirements is 1 acre)</li> <li>• Revised the list of exempted discharges and connections in Section 2 (c) to match the IDEM-specified list.</li> <li>• Added exemptions for detention requirements, in subsection (b)1 of Section 3, for one- or two-family dwellings and for limited and rare cases where the impacts on runoff peak, volume, and flow width are negligible.</li> <li>• Revised several paragraphs in Section 4 (a) in response to HEA 1037 passed in 2025, which made changes to IC 36-1-3-14, indicating that, while <u>recommended</u>, a detailed erosion control plan or SWPPP is <u>not required</u> for land disturbances less than one (1) acre that are not part of a larger common plan of development or sale. Also clarified the CSGP requirements with regards to maintaining on-site versus submitting of SWPPP for certain individual lots.</li> <li>• Revised Section 3 (d) to clarify that the self-monitoring program and project management logs are only required for projects that meet the applicability requirements of the CSGP</li> <li>• Revised the applicability threshold for post-construction stormwater quality BMPs in Section 5 (a) to match the CSGP threshold</li> <li>• Made minor edits to Section 5 (b) to clarify that the main purpose of Channel Protection Volume requirement is to minimize the impact of development on streambank erosion. However, this requirement is discussed in this Section of the ordinance because the BMPs used to</li> </ul>

		<p>address channel protection volume often help meet the required treatment of post-construction stormwater pollutants.</p> <ul style="list-style-type: none"> <li>• Revised Section 6 (b)1 to include clarifications regarding what will need to be included in the permit application and also to clarify that in addition to meeting the CSGP requirements, the applicant will need to obtain all required local permits before starting the construction.</li> <li>• Revised Section 6 (b) 2 to simplify the language regarding the SWPPP review time limits pursuant to IC 13-18-27.</li> <li>• Revised Section 6 (c) 4 in response to HEA 1037 passed in 2025, which made changes to IC 36-1-3-14, indicating that, while <u>recommended</u>, a detailed erosion control plan or SWPPP is <u>not required</u> for land disturbances less than one (1) acre that are not part of a larger common plan of development or sale.</li> <li>• Added required information items 6 and 7 to Section 6 (c)</li> <li>• Revised Section 6 (d) entirely to better clarify the main purpose of the individual lot plot plan permits and to reflect HEA 1037 required changes</li> <li>• Revised Section 6 (g) to exclude the erosion and sediment control measures part of the overall project from the required assurances needed by a local government for construction projects.</li> <li>• Revised the Permit Application Process chart (Figure 1 in Section 6) to more comprehensively list the required information from the applicant</li> <li>• Revised the list of offenses and their corresponding penalty fees in Section 7 (b) 3</li> <li>• Revised Section 7 (b) 4 to reflect the previously added IC 13-18-27-18 and recently added IC 36-1-3-14 (HEA 1037) required changes and time limits associated with issuing stop work orders</li> <li>• Deleted several unneeded definitions and made minor corrections to Appendix A</li> <li>• Made minor edits and corrections throughout the document</li> </ul>
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# Jurisdiction Entity Stormwater Management Ordinance

Version 1.3 (November 2025)

*Replace “Jurisdiction Entity”  
throughout the document to the name  
of the community*

*Change date as appropriate*

# Abbreviated Table of Contents

Section	Title	
1	GENERAL INFORMATION	
2	Prohibited Discharges and Connections	<i>Sections 2, 4, and 5 have been specifically developed to meet IDEM's requirements for entities that have MS4 designation. However, these provisions are prudent and recommended to be adopted by all entities regardless of federal or state mandates.</i>
3	Stormwater Quantity Management	
4	Stormwater Pollution Prevention for Construction Sites	
5	Post-Construction Stormwater Quality Management and Channel Protection	<i>Non-MS4 communities who do not wish to proactively regulate the water quality or prohibited non-stormwater flows in their communities can delete the sections highlighted in green.</i>
6	Permit Requirements and Procedures	
7	Compliance and Enforcement	
Appendices		
A	Abbreviations and Definitions	

## SECTION1

# General Information

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### (a) AUTHORITY AND TITLE

This Ordinance, which generally follows the Indiana LTAP Model Stormwater Technical Standards Manual, is adopted in accordance with statutory authority granted to **Jurisdiction Entity** under “Home Rule” to safeguard health, safety, and general welfare of the population living and/or working in the area under the jurisdiction of the **Jurisdiction Entity** and to minimize expenditure of public money for costly stormwater improvement projects resulting from potential unintended negative impacts of new development and redevelopment on both runoff/stormwater quantity and stormwater quality. In addition to traditional runoff control provisions, this ordinance also includes erosion and sediment control provisions. **required by Phase II of the National Pollutant Discharge Elimination System Stormwater program (40 CFR Parts 9, 122, 123, and 124; December 8, 1999) authorized by the 1987 amendments to the Clean Water Act, the Indiana Department of Environmental Management's (IDEM) Municipal Separate Storm Sewer System (MS4) General Permit (MS4 GP), and the Indiana Department of Environmental Management's Construction Stormwater General Permit (CSGP).**

The combining of all stormwater-related requirements into this single, comprehensive stormwater management ordinance is intended to help the engineering and development community more easily, efficiently, and holistically navigate through interrelated provisions associated with various stormwater quantity and quality requirements, which would have otherwise been in multiple, likely disjointed ordinances.

Based on this authority and these requirements, this Ordinance regulates:

- i. **Discharges of prohibited non-stormwater flows into the storm drain system.**
- ii. Stormwater drainage improvements related to development of lands located within the corporate boundaries of the **Jurisdiction Entity**.
- iii. Drainage control systems installed during new construction and grading of lots and other parcels of land.
- iv. **Stormwater, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity**
- v. **Stormwater discharges from construction support activities directly related to construction sites subject to this ordinance.**
- vi. **Erosion and sediment control systems installed during new construction and grading of lots and other parcels of land.**
- vii. The design, construction, and maintenance of stormwater drainage facilities and systems.
- viii. **The design, construction, and maintenance of stormwater quality facilities and systems.**
- ix. The design, construction, and maintenance of new dams
- x. The development downstream of existing dams
- xi. Development within floodplains, floodways, fluvial erosion hazard corridors, and bluff zones

This Ordinance shall be known and may be cited as the **Jurisdiction Entity** Stormwater Management Ordinance. Once adopted, this Ordinance will supersede any conflicting ordinances previously adopted by the **Jurisdiction Entity**.

*The content of this sub-section should be customized to most appropriately reflect specific situation of the community. The text highlighted in green should be deleted for non-MS4 communities.*

*Non-MS4 communities who do not wish to proactively regulate the water quality or prohibited non-stormwater flows in their communities will also need to delete the list of activities highlighted in green.*

Detailed technical requirements associated with this Ordinance are contained in the **Jurisdiction Entity** Stormwater Technical Standards Manual. Adherence to the requirements of the referenced standards manual shall also be required as set in this Ordinance.

## **(b) APPLICABILITY AND EXEMPTIONS**

This Ordinance shall regulate all development and redevelopment occurring within the **Jurisdiction Entity**. No building permit shall be issued and no land disturbance started for any construction in a development or redevelopment until the plans required by this Ordinance and the **Jurisdiction Entity** Stormwater Technical Standards Manual for such construction have been accepted in writing by the **Jurisdiction Entity**. With the exception of the requirements of Section 2 and Section 6(d) of this Ordinance, single-family dwelling houses and duplexes in accepted subdivisions, and land-disturbing activities affecting less than 10,000 square feet of area shall be exempt from the requirements of this Ordinance. Also exempt from this Ordinance shall be agricultural land-disturbing activities, including tillage, planting, cultivation, or harvesting operations for the production of agricultural or nursery and vegetative crops, pasture renovation and establishment, the construction of agricultural conservation practices, and the installation and maintenance of agricultural subsurface field tile. Additional, more specific applicability and exemptions (such as one acre threshold pertaining to erosion and sediment control requirements) are contained in the “Applicability and Exemptions” subsection of Sections 2 through 5 of this Ordinance.

In addition to the requirements of this Ordinance and its companion Stormwater Technical Standards Manual, compliance with all applicable ordinances of **Jurisdiction Entity** as well as with applicable Federal, State of Indiana, County, and other Local statues and regulations shall also be required. Unless otherwise stated, all other specifications referred to in this Ordinance shall be the most recent edition available. **Jurisdiction Entity** capital improvement projects shall be exempt from paying permit fees (except for any outsourced review fees, if applicable), but are expected to obtain a permit and meet all applicable technical requirements of this Ordinance and the **Jurisdiction Entity** Stormwater Technical Standards Manual. If the project site is located within a **Jurisdiction Entity County name** County Regulated Drain Watershed, the applicant will need to check with the **Jurisdiction Entity County name** County Surveyor’s Office to learn if additional Surveyor’s Office requirements specific to that regulated drain would apply to the site. In case there are conflicts between the requirements contained in this Ordinance and applicable requirements contained in other regulatory documents referenced above, the most restrictive shall prevail.

Any construction project which has had its final drainage plan accepted by the **Jurisdiction Entity** within a 2-year period prior to the effective date of this Ordinance shall be exempt from all requirements of this Ordinance that are in excess of the requirements of ordinances in effect at the time of acceptance. Such an exemption is not applicable to the requirements detailed in Section 2 of this Ordinance.

The **Jurisdiction Entity** has the authority to modify, grant exemptions, and/or waive any and all the requirements of this Ordinance and its associated technical standards document. A pre-submittal meeting with the **Jurisdiction Entity** may be requested by the applicant to discuss the applicability of various provisions of the Ordinance and its associated technical standards document with regards to unique

*The list of exempt categories and the threshold should be reviewed and adjusted per jurisdiction’s preferences.*

*Although agricultural activities are noted as exempt, the entity may want to add that it reserves the right to evaluate the impacts of creating new drainage ditches on the receiving stream. If receiving streams currently experiences flooding, additional stormwater management measures may be required.*

*The requirement that entity/MS4-owned facilities are also expected to meet applicable provisions in this ordinance and technical standards is also a mandated IDEM provision for MS4-owned projects as it pertains to construction pollution control and self-monitoring elements*

*The “grandfathered” provisions in this paragraph can be modified to match the jurisdiction’s preferences*

or unusual circumstances relating to a project. However, any initial determination of such applicability shall not be binding on future determinations of the **Jurisdiction Entity** that may be based on the review of more detailed information and plans.

### (c) FINDINGS

The **Jurisdiction Entity** finds that:

1. Water bodies, roadways, structures, and other property within the **Jurisdiction Entity** or its planning jurisdiction boundary are at times subjected to flooding;
2. Flooding is a danger to the lives and property of the public and is also a danger to the natural resources of the region;
3. Land development alters the hydrologic response of watersheds, resulting in increased stormwater runoff rates and volumes, increased flooding, increased stream channel erosion, and increased sediment transport and deposition;
4. Soil erosion resulting from land-disturbing activities causes a significant amount of sediment and other pollutants to be transported off-site and deposited in ditches, streams, wetlands, lakes, and reservoirs;
5. Increased stormwater runoff rates and volumes, and the sediments and pollutants associated with stormwater runoff from future development projects within the **Jurisdiction Entity** will, absent reasonable regulation and control, adversely affect the **Jurisdiction Entity's** water bodies and water resources;
6. Pollutant contributions from illicit discharges within the **Jurisdiction Entity** will, absent reasonable regulation, monitoring, and enforcement, adversely affect the **Jurisdiction Entity's** water bodies and water resources;
7. Stormwater runoff, soil erosion, non-point source pollution, and illicit sources of pollution can be controlled and minimized by the regulation of stormwater management;
8. Adopting the standards, criteria, and procedures contained and referenced in this Ordinance and implementing the same will address many of the deleterious effects of stormwater runoff and illicit discharges;
9. Adopting this Ordinance is necessary for the preservation of the public health, safety, and welfare, for the conservation of natural resources, and for compliance with State and Federal regulations.

*Non-MS4 communities who do not wish to proactively regulate the water quality or prohibited non-stormwater flows in their communities may need to delete non-water quantity related findings from the list highlighted in green.*

### (d) PURPOSE

The purpose of this Ordinance is to provide for the health, safety, and general welfare of the citizens of the **Jurisdiction Entity** through the regulation of stormwater and non-stormwater discharges to the storm drainage system and to protect, conserve and promote the coordinated development of land and water resources within the **Jurisdiction Entity**. This Ordinance establishes methods for managing the quantity and quality of stormwater entering into the storm drain system. The objectives of this Ordinance are:

- i. To reduce the hazard to public health and safety caused by excessive stormwater runoff.
- ii. To regulate the contribution of pollutants to the storm drain system and public waters from construction site runoff.
- iii. To regulate the contribution of pollutants to the storm drain system from runoff from new development and re-development.
- iv. To prohibit illicit discharges into the storm drain system.
- v. To establish legal authority to carry out all inspection, monitoring, and enforcement procedures necessary to ensure compliance with this Ordinance.

*Non-MS4 communities who do not wish to proactively regulate the water quality or prohibited non-stormwater flows in their communities may want to delete the texts highlighted in green.*

## (e) ABBREVIATIONS AND DEFINITIONS

For the purpose of this Ordinance, the abbreviations and definitions provided in Appendix A shall apply.

## (f) RESPONSIBILITY FOR ADMINISTRATION

The *Jurisdiction Entity Administering Board/Entity* shall administer, implement, and enforce the provisions of this Ordinance through the *Jurisdiction Entity Administering staff* (herein after simply referred to in this Ordinance as “the *Jurisdiction Entity*”). The *Jurisdiction Entity Administering Board/Entity* is authorized to adopt or update the Stormwater Technical Standards or other technical specifications, which shall be on file in *Jurisdiction Entity Administering Board/Entity* offices and/or posted online for public inspection. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the *Jurisdiction Entity* to qualified persons or entities acting in the beneficial interest of or in the employ of the *Jurisdiction Entity*.

## (g) INTERPRETATION

Words and phrases in this Ordinance shall be construed according to their common and accepted meanings, except that words and phrases defined in Appendix A, shall be construed according to the respective definitions given in that section. Technical words and technical phrases that are not defined in this Ordinance, but which have acquired particular meanings in law or in technical usage shall be construed according to such meanings.

## (h) SEVERABILITY

The provisions of this Ordinance are hereby declared severable, and if any court of competent jurisdiction should declare any part or provision of this Ordinance invalid or unenforceable, such invalidity or unenforceability shall not affect any other part or provision of this Ordinance.

## (i) DISCLAIMER OF LIABILITY

The degree of protection required by this Ordinance is considered reasonable for regulatory purposes and is based on historical records, engineering, and scientific methods of study. Larger storms may occur or stormwater runoff amounts may be increased by man-made or natural causes. This Ordinance does not imply that land uses permitted will be free from stormwater damage. This Ordinance shall not create liability on the part of the *Jurisdiction Entity* or any officer, representative, or employee thereof, for any damage that may result from reliance on this Ordinance or on any administrative decision lawfully made there under.

The words “approve” and “accept”, and their common derivations as used in this Ordinance in relation to plans, reports, calculations, and permits shall mean that *Jurisdiction Entity* has reviewed the material produced and submitted by the applicant or his/her agents for general compliance with this Ordinance and the *Jurisdiction Entity* Stormwater Technical Standards Manual, and that such compliance would qualify the applicant to receive a stormwater management approval or permit. Such an “approval” or “acceptance” is based on the assumption that the project engineer has followed all appropriate engineering methods in the design. Any stormwater quantity (drainage) or water quality problems associated with the project caused by poor construction by the contractor/owner and/or poor engineering design or judgment, either on-site or off-site, are the responsibility of the developer and their project engineer.

*Non-MS4 communities who do not wish to proactively regulate the water quality or prohibited non-stormwater flows in their communities may want to delete the text highlighted in green.*

Consideration, design, construction, and maintenance of safety measures for proposed or existing stormwater facilities shall be the responsibility of the developer, applicant, and/or the property owner. *Jurisdiction Entity* and its officials and representatives shall not be responsible for maintenance nor liability for any accidents or damages.

## SECTION 2

# Prohibited Discharges and Connections

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### (a) APPLICABILITY AND EXEMPTIONS

This section shall apply to all discharges, including illegal dumping, entering the storm drain system under the control of the **Jurisdiction Entity**, regardless of whether the discharge originates from developed or undeveloped lands, and regardless of whether the discharge is generated from an active construction site or a stabilized site. These discharges include flows from direct connections to the storm drain system, illegal dumping, and contaminated runoff.

*Non-MS4 communities who do not wish to proactively regulate the water quality or prohibited non-stormwater flows in their communities can delete this section in its entirety.*

Stormwater runoff from agricultural, timber harvesting, and mining activities is exempted from the requirements of this section unless determined to contain pollutants not associated with such activities or in excess of standard practices. Farm residences are **not** included in this exemption.

Any non-stormwater discharge permitted under an NPDES permit, waiver (unless the waiver is solely based on point source considerations, still allowing non-point source discharge of a pollutant), or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for the subject discharge to the storm drain system, is also exempted from this section.

### (b) PROHIBITED DISCHARGES AND CONNECTIONS

No person shall discharge to a MS4 conveyance, watercourse, or waterbody, directly or indirectly, any substance other than stormwater or an exempted discharge. Any person discharging stormwater shall effectively minimize pollutants from also being discharged with the stormwater, through the use of Best Management Practices (BMP's).

Concrete washout material shall be properly contained within an appropriate practice and any waste material properly disposed of.

The **Jurisdiction Entity** is authorized to require dischargers to implement pollution prevention measures, utilizing BMP's necessary to prevent or reduce the discharge of pollutants into the **Jurisdiction Entity**'s stormwater drainage system.

### (c) EXEMPTED DISCHARGES AND CONNECTIONS

Notwithstanding other requirements in this Ordinance, stormwater comingled with other discharges either regulated by other NPDES permits or determined by the **Jurisdiction Entity** to not be a significant source of pollutants, including the following, are exempt from the requirements of this Section:

- i. Water line and hydrant flushing for maintenance

- ii. Irrigation water
- iii. Footing, foundation, and crawl space drains (uncontaminated)
- iv. Excess storm sewer cleaning water not collected by a vacuum truck (uncontaminated)
- v. Fire suppression activities
- vi. Uncontaminated pumped groundwater
- vii. Springs
- viii. Residential car washing
- ix. Non-commercial car washing by community organizations
- x. External building washdown, without detergents
- xi. Dechlorinated/debrominated residential swimming pool discharges
- xii. Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20))
- xiii. Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used
- xiv. Uncontaminated condensate from air conditioning units, coolers, and other compressors, and from outside storage of refrigerated gases or liquids

#### **(d) STORAGE OF HAZARDOUS OR TOXIC MATERIAL**

Storage or stockpiling of hazardous or toxic material within any watercourse, or in its associated floodway or floodplain, is strictly prohibited. Storage or stockpiling of hazardous or toxic material, including sewage treatment plant stockpiles, on active construction sites shall include adequate protection and/or containment so as to prevent any such materials from entering any temporary or permanent stormwater conveyance or watercourse.

#### **(e) PRIVATE PROPERTY MAINTENANCE DUTIES**

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse located within their property boundaries, free of trash, debris, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

#### **(f) SPILL REPORTING**

Any discharger who accidentally discharges into a waterbody any substance other than stormwater or an exempted discharge shall immediately inform the **Jurisdiction Entity** concerning the discharge. A written report concerning the discharge shall be filed with the **Jurisdiction Entity** and IDEM, by the dischargers, within five (5) days. The written report shall specify:

- i. The composition of the discharge and the cause thereof;
- ii. The date, time, and estimated volume of the discharge;
- iii. All measures taken to clean up the accidental discharge, and all measures proposed to be taken to prevent any recurrence;

- iv. The name and telephone number of the person making the report, and the name and telephone number of a person who may be contacted for additional information on the matter.

A properly reported accidental discharge shall be an affirmative defense to a civil infraction proceeding brought under this Ordinance against a discharger for such discharge. It shall not, however, be a defense to a legal action brought to obtain an injunction, to obtain recovery of costs or to obtain other relief because of or arising out of the discharge. A discharge shall be considered properly reported only if the discharger complies with all the requirements of this section. This requirement does not relieve discharger from notifying other entities as required by state or federal regulations.

## **(g) INSPECTIONS AND MONITORING**

### **1. Storm Drainage System**

The **Jurisdiction Entity** has the authority to periodically inspect the portion of the storm drainage system under the **Jurisdiction Entity's** control, in an effort to detect and eliminate illicit connections and discharges into the system. This inspection will include a screening of discharges from outfalls connected to the system in order to determine if prohibited flows are being conveyed into the storm drainage system. It could also include spot testing of waters contained in the storm drainage system itself to detect the introduction of pollutants into the system by means other than a defined outfall, such as dumping or contaminated sheet runoff.

### **2. Potential Polluters**

If, as a result of the storm drainage system inspection, a discharger is suspected of an illicit discharge, the **Jurisdiction Entity** may inspect and/or obtain stormwater samples from stormwater runoff facilities of the subject discharger, to determine compliance with the requirements of this Ordinance. Upon request, the discharger shall allow the **Jurisdiction Entity's** properly identified representative to enter upon the premises of the discharger at all hours necessary for the purposes of such inspection or sampling. The **Jurisdiction Entity** or its properly identified representative may place on the discharger's property the equipment or devices used for such sampling or inspection. Identified illicit connections or discharges shall be subject to enforcement action as described in Section 7 of this Ordinance.

### **3. New Development and Re-Development**

Following the final completion of construction and the receipt of as-built drawings by the **Jurisdiction Entity**, the **Jurisdiction Entity** has the authority to inspect new development and re-development sites to verify that all on-site stormwater conveyances and connections to the storm drainage system are in compliance with this section. As-built documentation shall be provided to the **Jurisdiction Entity** for review related to all storm sewer system and stormwater detention basin elements on the development site.

## SECTION 3

# Stormwater Quantity Management

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### (a) APPLICABILITY AND EXEMPTIONS

The storage and controlled release of excess stormwater runoff shall be required for all new business, institutional developments, commercial and industrial developments, residential subdivisions, planned development, rural estate subdivisions, and any redevelopment or other new construction located within the **Jurisdiction Entity**. The **Jurisdiction Entity**, after thorough investigation and evaluation, may waive the requirement of controlled runoff for minor subdivisions. Additional potential exemptions regarding the detention requirements are provided under Sub-section (b).

### (b) POLICY ON STORMWATER QUANTITY MANAGEMENT

It is recognized that most streams and drainage channels serving the **Jurisdiction Entity** do not have sufficient capacity to receive and convey stormwater runoff resulting from continued urbanization. Accordingly, the storage and controlled release of excess stormwater runoff (except for situations provided in subsection 1 of this Section) as well as compensation for loss of floodplain storage shall be required for all developments and redevelopments (as defined in Appendix A) located within the **Jurisdiction Entity**. Release rate requirements, downstream restriction considerations, acceptable outlet, adjoining property impact considerations, policy on dams and levees, policy on Fluvial Erosion Hazard corridors, and compensatory floodplain storage rates are detailed in the **Jurisdiction Entity** Stormwater Technical Standards.

Due to unknowns regarding the future development patterns and the associated proposed stormwater quantity management systems within a watershed, it is the policy of the **Jurisdiction Entity** to discourage direct release of runoff from a new development or redevelopment without providing detention. However, in rare circumstances, where a comprehensive watershed-wide hydrologic study or watershed plan of a major stream (not a “beat the peak” analysis) adopted by the **Jurisdiction Entity** substantiates the benefits of (or allows for) direct release for a proposed development located adjacent to a major stream, the detention requirements set in this Ordinance may be waived. Other special circumstances when such a waiver may be considered by **Jurisdiction Entity** include situations where the design of a regional pond has already considered direct release in certain areas in the watershed.

#### 1. Exemptions for Detention Requirements

Detention will not be required for the following:

- i. Land alterations where the primary basis on which a stormwater drainage permit is required is the construction, enlargement, or location (on a permanent foundation) of a one-family dwelling, two-family dwelling, or accessory structure appurtenant to either a one- or two-family dwelling.

- ii. Approved fill areas or one-time additions to existing commercial buildings (including multi-family residential structures) that do not increase the amount of impervious area on-site by more than a total of 0.5 acres, provided the existing runoff patterns and flow capacity of the property will not be altered by the filling operations. Note that the use of this exemption requires a prior preliminary consultation with the **Jurisdiction Entity**.
- iii. Notwithstanding the downstream restriction provisions of Chapter 6 of the **Jurisdiction Entity** Stormwater Technical Standards Manual, those site developments where the stormwater management system has been designed such that:
  - a. after combining flows from both the off-site and on-site drainage areas, there will be no increase in the total peak discharge from the developed site during the 2-, 10-, or 100-year storm events (assuming the pre-developed landuse used in the analysis is based on conditions that existed, from historic aerial photographs, at least 50% of the time over the last 30 years); and
  - b. the volume of runoff for each project site outlet has not been increased for the entire range of storm events, up to the 100-year storm event; and
  - c. the flow width is greater than or equal to that flow width which existed prior to the development (for the entire range of storm events, up to the 100-year storm event) and the velocity at the property boundary line for each sub-basin is less than or equal to that velocity which existed prior to the development (for the entire range of storm events, up to the 100-year storm event); and
  - d. the drainage report for the proposed development includes a section that clearly indicates the upper limit of imperviousness to which the development can build and still meet the detention exemption.

## **(c) CALCULATIONS AND DESIGN STANDARDS AND SPECIFICATIONS**

The calculation methods as well as the type, sizing, and placement of all stormwater facilities shall meet the design criteria, standards, and specifications outlined in the **Jurisdiction Entity** Stormwater Technical Standards Manual. The methods and procedures in the Stormwater Technical Standards Manual are consistent with the policy stated above.

## **(d) DRAINAGE EASEMENT REQUIREMENTS**

All stormwater systems, including detention or retention basins, conveyance systems, structures and appurtenances, located outside of the public right-of-way

shall be placed within a drainage easement. There shall be no trees or shrubs planted, nor any structures or fences erected in any drainage easement, unless otherwise accepted by **Jurisdiction Entity** in writing. Additional easement requirements along stormwater conveyance systems are contained in the **Jurisdiction Entity** Stormwater Technical Standards Manual. All drainage improvements performed relative to the conveyance of stormwater runoff and the perpetual maintenance thereof, within the latter easements, shall be the responsibility of the owner or homeowner association.

Any outlet to, crossing, and/or encroachment of a County Regulated Drainage Easement requires application and acceptance from the County Drainage Board in accordance with the Indiana Drainage Code.”

#### **(e) PLACEMENT OF UTILITIES**

No utility company may disturb existing storm drainage facilities without the consent of the **Jurisdiction Entity** staff, whose decision may be appealed to the **Jurisdiction Entity's body with authority to grant appeals** of the **Jurisdiction Entity**. All existing drainage facilities shall have senior rights and damage to said facilities shall result in penalties as prescribed in Section 7 of this ordinance.

#### **(f) STRUCTURES NEAR COUNTY REGULATED DRAINS**

For regulated drains not located in platted subdivisions, unless otherwise accepted by the **Jurisdiction Entity County name** County Drainage Board, no permanent structure (including fences) shall be erected within seventy-five feet measured at right angles from a) the existing top of bank of a regulated open drain, as determined by the **Jurisdiction Entity County name** County Drainage Board; or b) the center line of a piped Regulated Drain. The Indiana Drainage Code may be consulted for further details.

#### **(g) INSPECTION, MAINTENANCE, RECORD KEEPING, AND REPORTING**

After the approval of the Stormwater Management Permit by the **Jurisdiction Entity** and the commencement of construction activities, the **Jurisdiction Entity** has the authority to conduct inspections of the work being done to ensure full compliance with the provisions of this section, the Stormwater Technical Standards Manual, Design and Construction Standards, and the terms and conditions of the approved permit.

The **Jurisdiction Entity** also has the authority to perform long-term, post-construction inspection of all public or privately owned stormwater quantity facilities. The inspection will cover physical conditions, available storage capacity, and the operational condition of key facility elements. Stormwater quantity facilities shall be maintained in good condition, in accordance with the designed and approved performance specifications for the facilities, in addition to any prescribed Operation & Maintenance procedures, and shall not be subsequently altered, revised or replaced except as approved by the **Jurisdiction Entity**. If deficiencies are found during the inspection, the owner of the facility will be notified by the

**Jurisdiction Entity** and will be required to take all necessary measures to correct such deficiencies. If the owner fails to correct the deficiencies within the allowed time period, as specified in the notification letter, the **Jurisdiction Entity** will undertake the work and collect from the owner using lien rights if necessary.

Assignment of responsibility for maintaining facilities serving more than one lot or holding shall be documented by appropriate covenants to property deeds, unless responsibility is formally accepted by a public body, and determined before the final stormwater permit is approved.

Stormwater conveyance facilities may be donated to the **Jurisdiction Entity** or other unit of government designated by the **Jurisdiction Entity**, for ownership and permanent maintenance providing the **Jurisdiction Entity** or other governmental unit is willing to accept responsibility.

*The text highlighted in green is optional and intended for those communities that accept the ownership and responsibility of all or a part of permitted stormwater conveyance facilities into their system. Delete if that is not desired by the community.*

## SECTION 4

# Stormwater Pollution Prevention for Construction Sites

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### (a) APPLICABILITY AND EXEMPTIONS

As part of its Stormwater Management Permit/approval, the **Jurisdiction Entity** will require a Stormwater Pollution Prevention Plan (SWPPP), which includes erosion and sediment control measures and materials handling procedures, to be submitted as part of a project's construction plans and specifications. Any project located within the corporate boundaries of the **Jurisdiction Entity** that includes clearing, grading, excavation or other land disturbing activities resulting in the disturbance of one (1) acre or more of total land area is subject to the requirements of this section. This includes both new development and re-development. This section also applies to disturbances of land of any size that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) acre or more of total land area. Section 4 (c) provides guidelines for calculating land disturbance. Projects meeting the coverage requirements of IDEM's CSGP shall also be in compliance with the requirements contained in that permit.

While pursuant to the provisions of IC 36-1-3-14, a detailed erosion control plan or SWPPP is not required for land disturbances less than one (1) acre that are not part of a larger common plan of development or sale, appropriate erosion and sediment control measures that are consistent with the **Jurisdiction Entity** Stormwater Technical Standards Manual are recommended to be designed, shown on the plans, and implemented for these smaller sites as well to minimize the potential for enforcement actions authorized under IC 36-1-3-14 (d).

The requirements under this chapter do not apply to the following activities:

- i. Agricultural land-disturbing activities, including tillage, planting, cultivation, or harvesting operations for the production of agricultural or nursery and vegetative crops, pasture renovation and establishment, the construction of agricultural conservation practices, and the installation and maintenance of agricultural subsurface field tile.
- ii. Silvicultural activities associated with nonpoint discharges (40 CFR 122.27).
- iii. Stormwater discharges associated with oil and gas exploration, production, processing or treatment operations, or transmission facilities (40 CFR 122.26).
- iv. Ditch maintenance for activities performed on a regulated drain by the county drainage board, or a ditch where the drainage board has relinquished jurisdiction to a municipality or a sanitary district in accordance with IC 36-9-27.

The requirements under this section do not apply to the following activities, provided other applicable state permits contain provisions requiring immediate implementation of soil erosion and sediment control measures:

- i. Landfills that have been issued a certification of closure under 329 IAC 10.
- ii. Coal mining activities permitted under IC 14-34.

*unless the entity is designated as a MS4, the review and enforcement of these requirements would not fall on the entity. However, the recommended practice for all jurisdictions, whether designated as MS4 or not, is to adopt provisions stated in this model ordinance to safeguard degradation of the quality of community's water resources.*

*Non-MS4 communities who do not wish to proactively regulate the water quality or prohibited non-stormwater flows in their communities can delete the contents of this section and simply refer the applicants to IDEM. As an agency IDEM will work those entities that have been designated to review plans and/or conduct inspections that have accepted the responsibility of reviewing plans as part of the IDEM requirements.*

- iii. Municipal solid waste landfills that are accepting waste pursuant to a permit issued by the Indiana Department of Environmental Management under 329 IAC 10 that contains equivalent stormwater requirements, including the expansion of landfill boundaries and construction of new cells either within or outside the original solid waste permit boundary.

For an individual lot where land disturbance is expected to be one (1) acre or more and individual lots expected to be less than one (1) acre that are located in a commercial or industrial larger common plan of development or sale, the individual lot owner shall complete their own notice of intent letter, apply for a stormwater permit from the **Jurisdiction Entity**, and ensure that a sufficient construction and stormwater pollution prevention plan is completed and submitted in accordance with Section 6 of this Ordinance, regardless of whether the individual lot is part of a larger permitted project site.

An Individual Lot Plot Plan Permit application is required by the **Jurisdiction Entity** for development of any size that meets the applicability requirements of this ordinance (as stated in Section 1(b)) prior to receiving a building permit. For an individual residential lot where land disturbance is one (1) acre or more, a stormwater pollution prevention plan (SWPPP) that is specific to the lot is required to be submitted as part of the Individual Lot Plot Plan Permit. For individual residential lots with land disturbance less than one acre and part of a larger common plan of development, a SWPPP is required to be maintained on-site but submittal to the municipality is not required. For sites with land disturbance less than one acre and not part of a larger common plan of development, inclusion of SWPPP information in the permit application is recommended but not required. Details of the permitting process are contained in Section 6(d) and additional requirements for individual lots may be found in the **Jurisdiction Entity Stormwater Technical Standards Manual**.

*if the entity does not wish to keep the language and requirements associated with entity-required separate Individual lot permit in Section 6 (d) and in technical standards, then delete the highlighted segment and instead insert "develop a SWPPP for the individual lot and complete a Construction Stormwater Residential Development Registration form (State Form 53049) and maintain it onsite." .*

An individual lot located within a larger permitted project site, is considered part of the larger permitted project site, and the individual lot operator shall comply with the terms and conditions of the stormwater permit approved for the larger project site. The stormwater permit application for the larger project site shall include detailed erosion and sediment control measures for individual lots.

It will be the responsibility of the project site owner to complete a stormwater permit application and ensure that a sufficient construction plan is completed and submitted to the **Jurisdiction Entity** in accordance with Section 6 of this Ordinance. It will be the responsibility of the project site owner to ensure compliance with this Ordinance during the construction activity and implementation of the construction plan, and to notify the **Jurisdiction Entity** upon completion of the project and stabilization of the site, requesting a termination inspection to be performed by the **Jurisdiction Entity**. However, all persons engaging in construction and land disturbing activities on a permitted project site meeting the applicability requirements shall comply with the requirements of this section and this Ordinance.

## **(b) POLICY ON STORMWATER POLLUTION PREVENTION**

Effective stormwater pollution prevention on construction sites is dependent on a combination of preventing movement of soil from its original position (erosion

control), intercepting displaced soil prior to entering a waterbody (sediment control), and proper on-site materials handling.

For land disturbance of one (1) acre or more, the developer shall submit to the *Jurisdiction Entity*, a SWPPP with detailed erosion and sediment control plans as well as a narrative describing materials handling and storage, and construction sequencing. The SWPPP and the project management log must be retained for at least three (3) years from the date the project permit is terminated.

The required IDEM general and implementation requirements that apply to all land-disturbing activities are contained in the *Jurisdiction Entity* Stormwater Technical Standards Manual.

### **(c) CALCULATIONS AND DESIGN STANDARDS AND SPECIFICATIONS**

In calculating the total area of land disturbance, for the purposes of determining applicability of this section to a project, the following guidelines should be used:

- i. Off-site construction activities that provide services (for example, road extensions, sewer, water, offsite stockpiles, borrow areas, and other utilities) to a land disturbing project site, must be considered as a part of the total land disturbance calculation for the project site, when the activity is under the control of the project site owner.
- ii. To determine if multi-lot project sites are regulated by this section, the area of land disturbance shall be calculated by adding the total area of land disturbance for improvements, such as, roads, utilities, or common areas, and the expected total disturbance on each individual lot, as determined by the following:
  1. For a single-family residential project site where the lots are one-half (0.5) acre or more, one-half (0.5) acre of land disturbance must be used as the expected lot disturbance.
  2. For a single-family residential project site where the lots are less than one half (0.5) acre in size, the total lot must be calculated as being disturbed.
  3. To calculate lot disturbance on all other types of project sites, such as industrial and commercial projects project sites, a minimum of one (1) acre of land disturbance must be used as the expected lot disturbance, unless the lots are less than one (1) acre in size, in which case the total lot must be calculated as being disturbed.

The calculation methods as well as the type, sizing, and placement of all stormwater pollution prevention measures for construction sites shall meet the design criteria, standards, and specifications outlined in the Indiana Stormwater Quality Manual, the *Jurisdiction Entity* Stormwater Technical Standards Manual, and the product guidance/specifications of the manufacturer. The methods and procedures included in these two references are in keeping with the above stated policy and meet the requirements of the IDEM's CSGP. A Copy of the Indiana Stormwater Quality Manual may be obtained online through IDEM.

The design requirements that would apply to all land-disturbing activities and shall be considered in the selection, design, and implementation of all stormwater quality and management measures contained in the SWPPP are contained in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

#### **(d) INSPECTION, MAINTENANCE, RECORD KEEPING, AND REPORTING**

Following approval of the Stormwater Management Permit or Individual Lot Plot Plan Permit by the **Jurisdiction Entity** and commencement of construction activities, the **Jurisdiction Entity** has the authority to conduct inspections of the site to ensure full compliance with the provisions of this section, the approved Stormwater Pollution Prevention Plan, the Indiana Stormwater Quality Manual, and the terms and conditions of the approved permit.

For projects that meet the applicability requirements of the CSGP (i.e., for one acre or larger project sites and small commercial/industrial sites that are part of a larger common plan of development or sale), a self-monitoring program (SMP) shall be implemented by the project site owner to ensure the stormwater pollution prevention plan is working effectively. A trained individual, as defined in Appendix A, shall monitor and manage project construction and stormwater activities. Details regarding the required monitoring activities are contained in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

The stormwater pollution prevention plan shall serve as a guideline for stormwater quality but should not be interpreted to be the only basis for implementation of stormwater quality measures for a project site. The project site owner is responsible for implementing, in accordance with this section, all measures necessary to adequately prevent polluted stormwater runoff. Recommendations by the trained individual for modified stormwater quality measures should be implemented.

For projects that meet the applicability requirements of the CSGP (i.e., for one acre or larger project sites and small commercial/industrial sites that are part of a larger common plan of development or sale), a project management log shall be maintained at the project site or in the possession of on-site individuals associated with the management and operations of the construction activities. Details regarding requirements related to the project management log are contained in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

## SECTION 5

# Post-Construction Stormwater Quality Management and Channel Protection

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### (a) APPLICABILITY AND EXEMPTIONS

In addition to the requirements of Section 4, the stormwater pollution prevention plan, which is to be submitted to the **Jurisdiction Entity** as part of the Stormwater Management Permit application, must also include post-construction stormwater quality measures. These measures are incorporated as a permanent feature into the site plan and are left in place following completion of construction activities to continuously treat stormwater runoff from the stabilized site. Any project located within the corporate boundaries of the **Jurisdiction Entity** that includes clearing, grading, excavation, and other land disturbing activities, resulting in the disturbance of one (1) acre or more of total land area is subject to the requirements of this section. This includes both new development and re-development, and disturbances of land less than one (1) acre of total land area that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) acre or more of total land area. In addition, the **Jurisdiction Entity** reserves the right to require pre-treatment BMPs for proposed hot spot developments in accordance with provisions contained in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

The requirements under this section do not apply to the following activities:

- i. Agricultural land-disturbing activities, including tillage, planting, cultivation, or harvesting operations for the production of agricultural or nursery and vegetative crops, pasture renovation and establishment, the construction of agricultural conservation practices, and the installation and maintenance of agricultural subsurface field tile.
- ii. Silvicultural activities associated with nonpoint discharges (40 CFR 122.27).
- iii. Stormwater discharges associated with oil and gas exploration, production, processing or treatment operations, or transmission facilities (40 CFR 122.26),
- iv. Ditch maintenance for activities performed on a regulated drain by the county drainage board, or a ditch where the drainage board has relinquished jurisdiction to a municipality or a sanitary district in accordance with IC 36-9-27.
- v. Construction activities associated with a single-family residential dwelling disturbing less than one (1) acre, when the dwelling is not part of a larger common plan of development or sale; or individual building lots within a larger permitted project.

The requirements under this section do not apply to the following activities, provided other applicable state permits contain provisions requiring immediate implementation of soil erosion control measures:

- i. Landfills that have been issued a certification of closure under 329 IAC 10.
- ii. Coal mining activities permitted under IC 14-34.

*This section includes both the MS4-required post-construction stormwater quality provisions and the Channel Protection provisions to reduce streambank erosion. Unless the entity is designated as a MS4, the review and enforcement of the post-construction stormwater part would not fall on the entity. However, the recommended practice for all jurisdictions, whether designated as MS4 or not, is to adopt provisions stated in this model ordinance to safeguard degradation of the quality of community's water resources once the active construction is completed.*

*Non-MS4 communities who do not wish to proactively regulate the stormwater quality can delete the stormwater quality-related contents of this section (but keep the highly recommended Channel Protection requirements) and simply refer the applicants to the County's SWCD or other entity accepting the charge of reviewing plans as part of IDEM requirements.*

- iii. Municipal solid waste landfills that are accepting waste pursuant to a permit issued by the Indiana Department of Environmental Management under 329 IAC 10 that contains equivalent stormwater requirements, including the expansion of landfill boundaries and construction of new cells either within or outside the original solid waste permit boundary.

It will be the responsibility of the project site owner to complete a stormwater permit application and ensure that a sufficient construction plan is completed and submitted to the **Jurisdiction Entity** in accordance with Section 6 of this Ordinance. It will be the responsibility of the project site owner to ensure proper construction and installation of all stormwater BMP's (especially, the protection of post-stormwater BMPs during construction phase) in compliance with this Ordinance and with the approved Stormwater Management Permit, and to notify the **Jurisdiction Entity** upon completion of the project and stabilization of the site, requesting a termination inspection to be performed by the **Jurisdiction Entity**. However, all eventual property owners of stormwater quality facilities meeting the applicability requirements must comply with the requirements of this section and this Ordinance.

#### **(b) POLICY ON STORMWATER QUALITY MANAGEMENT AND CHANNEL PROTECTION**

It is recognized that developed areas, as compared to undeveloped areas, generally have increased imperviousness, decreased infiltration rates, increased runoff rates, and increased concentrations of pollutants such as fertilizers, herbicides, greases, oil, salts and other pollutants. As new development and re-development continues within the corporate boundaries of the **Jurisdiction Entity**, measures shall be taken to intercept and filter pollutants from stormwater runoff prior to reaching regional creeks, streams, and rivers. Through the use of appropriate Best Management Practices (BMPs), to treat the Water Quality Volume (WQv) or the Water Quality Flow (Qwq) stormwater runoff will be filtered and harmful amounts of sediment, nutrients, and contaminants will be removed.

It is also recognized that another concern in many Indiana streams, including those within the corporate boundaries of the **Jurisdiction Entity**, is the streambank erosion associated with urbanizing watersheds. Stream channels develop their shape in response to the volume and rate of runoff that they receive from their contributing watersheds. Research has shown that in hydrologically stable watersheds, the stream flow responsible for most of the shaping of the channel (called the bankfull flow) occurs between every one to two years. When land is developed, the volume and rate of runoff from that land increases for these comparatively small flooding events that are not normally addressed by the detention practices and the stream channel will adapt by changing its shape. As the stream channel works to reach a new stable shape, excess erosion occurs. As new development and re-development continues within the corporate boundaries of the **Jurisdiction Entity**, measures shall be taken to minimize the impact of such development or re-development on streambank erosion. Through the use of appropriate Best Management Practices (BMPs) to retain and/or detain and slowly release the Channel Protection Volume (CPv), the volume and rate of runoff for channel forming flows will be reduced in an attempt to minimize increased streambank instability and erosion in the receiving streams and channels. The

*The policy discussion noted in this paragraph (highlighted in green) relates to the highly recommended, but not IDEM-required, Channel Protection Volume requirements. Delete if the community does not wish to adopt Channel Protection Volume requirements*

BMPs that are used to address CPv requirements often also help in the required treatment of post-construction stormwater pollutants.

The project site owner shall submit to the *Jurisdiction Entity* a Stormwater Pollution Prevention Plan (SWPPP) that shows placement of appropriate BMP(s) from a pre-approved list of BMP's specified in the *Jurisdiction Entity* Stormwater Technical Standards Manual. The SWPPP submittal shall include an Operation and Maintenance Manual for all post-construction BMP(s) included in the project and a notarized Maintenance Agreement, consistent with the sample agreement provided in the *Jurisdiction Entity* Stormwater Technical Standards Manual, providing for the long-term maintenance of those BMPs, both of which shall be recorded with the deed for the property on which the project is located. The noted BMP(s) must be designed, constructed, and maintained according to guidelines provided or referenced in the *Jurisdiction Entity* Stormwater Technical Standards Manual. Practices other than those specified in the pre-approved list may be utilized. However, the burden of proof, as to whether the performance and ease of maintenance of such practices will be according to guidelines provided in the *Jurisdiction Entity* Stormwater Technical Standards Manual, would be placed with the applicant. Details regarding the procedures and criteria for consideration of acceptance of such BMP's are provided in the *Jurisdiction Entity* Stormwater Technical Standards Manual.

Gasoline outlets and refueling areas shall install appropriate practices (as noted under "Hot Spots" provision in the Technical Standards) to reduce lead, copper, zinc, and polyaromatic hydrocarbons in stormwater runoff. These requirements will apply to all new facilities and existing facilities that replace their tanks, regardless of the size of the facility.

Discharges from new development and redevelopment sites (if any) will not be allowed directly into karst features without pre-treatment.

### **(c) CALCULATIONS AND DESIGN STANDARDS AND SPECIFICATIONS**

Calculation of land disturbance should follow the guidelines discussed in Section 3(c).

The calculation methods as well as the type, sizing, and placement of all stormwater quality management measures, or BMPs shall meet the design criteria, standards, and specifications outlined in the *Jurisdiction Entity* Stormwater Technical Standards Manual.

### **(d) EASEMENT REQUIREMENTS**

All stormwater quality management systems, including detention or retention basins, filter strips, pocket wetlands, in-line filters, infiltration systems, conveyance systems, structures and appurtenances located outside of the right-of-way shall be incorporated into permanent easements. For the purposes of monitoring, inspection, and general maintenance activities, adequate easement width, as detailed in the *Jurisdiction Entity* Stormwater Technical Standards Manual, beyond

the actual footprint of the stormwater quality management facility as well as an access easement from a public right-of-way to each BMP shall be provided.

#### **(e) INSPECTION, MAINTENANCE, RECORD KEEPING, AND REPORTING**

After the approval of the Stormwater Management Permit by the *Jurisdiction Entity* and the commencement of construction activities, the *Jurisdiction Entity* has the authority to conduct inspections of the work being done to ensure full compliance with the provisions of this section, the approved Stormwater Pollution Prevention Plan, the *Jurisdiction Entity* Stormwater Technical Standards Manual, and the terms and conditions of the approved permit.

Stormwater quality facilities shall be maintained in good condition, in accordance with the Operation and Maintenance procedures and schedules listed in the *Jurisdiction Entity* Stormwater Technical Standards Manual, in addition to the designed and approved performance specifications for the facilities and shall not be subsequently altered, revised, or replaced except as approved by the *Jurisdiction Entity*.

Details regarding the required stormwater BMP Maintenance Agreement, O&M Maintenance Manual, **and a Maintenance Escrow account** and their transfer to other parties or subsequent owners prior to release of the maintenance bond discussed in Section 6 of this Ordinance is provided in the *Jurisdiction Entity* Stormwater Technical Standards Manual.

The *Jurisdiction Entity* also has the authority to perform long-term, post-construction inspection of all public or privately owned stormwater quality facilities. The inspection will cover physical conditions, available water quality storage capacity and the operational condition of key facility elements. Noted deficiencies and required corrective action will be included in an inspection report.

*The perpetual maintenance requirements discussed in this section and detailed in the Technical Standards meet or exceed the newly proposed mandates by IDEM for all MS4 entities.*

*The Maintenance Escrow account is recommended to ensure availability of dedicated funding for perpetual maintenance of stormwater BMPs. This reference and the details provided in Section 6 can be deleted if the community does not wish to require this.*

## SECTION 6

# Permit Requirements and Procedures

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### (a) CONCEPTUAL DRAINAGE PLAN REVIEW

In order to gain an understanding of the drainage requirements for a specific project, a developer/applicant may submit conceptual drainage plans and calculations for review by the **Jurisdiction Entity**. The direction provided by the **Jurisdiction Entity** during such a review is based on preliminary data and shall not be construed as an acceptance or binding on either party. The following is a general listing of minimum data requirements for the review of conceptual drainage plans:

- i. Two (2) complete sets of conceptual plans showing general project layout, including existing and proposed drainage systems (plan sheets shall be larger than 11" by 17", but not to exceed 24" by 36").
- ii. General description of the existing and proposed drainage systems in narrative form.
- iii. Map showing on-site 100-year floodplain (by elevation and map) and floodway (please note if none exists).
- iv. Map showing all wetlands, lakes, and ponds on or adjacent to the site.
- v. Watershed Boundaries with State LiDAR Contours or best information possible. All contours shall be provided on the North American Vertical Datum of 1988 (NAVD '88).
- vi. Two (2) copies of drainage calculations detailing existing and proposed discharges from the site
- vii. Existing watercourse or regulated drains.

### (b) PERMIT PROCEDURES

The detailed process presented in this section applies to all development, or re-development of land, that results in land disturbance of one (1) acre or more. Individual lots with land disturbance less than one (1) acre shall refer to Sections 4 and subsection (d) below for plan review requirements and procedures. Figure 1 is a flowchart summarizing the plan review/permit approval/project termination compliance process for land disturbance of one (1) acre or more and can be found at the end of this section.

*The procedures, timelines, and flow chart provided in this section are typical approaches adopted by several MS4 entities. These should be carefully reviewed by the Jurisdiction Entity and revised based on each entity's preferences.*

#### 1. General Procedures

The project site owner shall submit an application for a Stormwater Management Permit to the **Jurisdiction Entity**. The application will include a completed application checklist, construction plan sheets, a stormwater drainage technical report, a stormwater pollution prevention plan, a BMP operation and maintenance manual, a formal recorded BMP maintenance agreement, and any other necessary support information. Specific information to be included in the application can be found in Subsection (c) below. **xx** copies of each application shall be submitted to the **Jurisdiction Entity**. The **Jurisdiction Entity** may, at its discretion, require one or more copies be submitted to other entities deemed appropriate by the **Jurisdiction Entity**.

*The number of copies required as part of the Stormwater Management Permit is a preference set by the Jurisdiction Entity.*

Additionally, a digital copy of the construction plans is required in a format accepted by the **Jurisdiction Entity**.

After the **Jurisdiction Entity**'s receipt of the application, the applicant will be notified as to whether their application was complete or insufficient. The applicant will be asked for additional information if the application is insufficient. If the application is complete, it will be reviewed in detail by the **Jurisdiction Entity** and/or its plan review consultant(s). Once all comments have been received and review completed, the **Jurisdiction Entity** will either approve the project, request modifications or deny the project. If the applicant does not agree with or accept the review findings and wishes to seek an appeal, the **Jurisdiction Entity** will place the project on the agenda of the next regularly scheduled meeting of the **Jurisdiction Entity Permitting Board**, provided the agenda for the meeting has not yet been advertised or published. If time for notification does not allow, the project shall be placed on the following regularly scheduled meeting of the **Jurisdiction Entity Permitting Board**. If the project must go through a scheduled meeting, the **Jurisdiction Entity** will furnish the applicant a complete list of comments and objections to the plans and accompanying data prior to the scheduled meeting. After the scheduled meeting, the **Jurisdiction Entity** will either issue a permit, request modifications to the construction plans, or deny the project.

For sites that meet the CSGP applicability requirements, the project site owner must notify the **Jurisdiction Entity** and IDEM before beginning construction. Notification to the **Jurisdiction Entity** shall be in the form of an email while the notification to IDEM shall be in the form of an online IDEM NOI submittal. Once a permit has been issued and the pending construction notifications submitted to the **Jurisdiction Entity** before the beginning of construction, construction may commence 48 hours after the NOI is submitted to IDEM, provided all the required local permits are in hand.

*The online IDEM NOI submittal is only required for sites that are 1 acre or larger*

Once construction starts, the project owner shall monitor construction activities and inspect all stormwater pollution prevention measures in compliance with this Ordinance and the terms and conditions of the approved permit. Upon completion of construction activities, a Certification of Completion and Compliance and as-built plans shall be submitted to the **Jurisdiction Entity**.

Once the construction site has been stabilized and all temporary erosion and sediment control measures have been removed, a notification shall be sent to the **Jurisdiction Entity**, requesting a termination inspection. The **Jurisdiction Entity**, or its representative, shall inspect the construction site to verify that the completed project is fully stabilized and meets the requirements of **Jurisdiction Entity**'s stormwater Ordinance, its technical standards, and that the terms and conditions of the permit. Once the applicant receives a signed copy of the Termination Inspection Checklist confirming compliance, they shall file the IDEM-required NOT along with a copy of the "verified" Termination Inspection Checklist through IDEM's online portal.

## **2. SWPPP Review Time Limits**

Pursuant to IC 13-18-27, before the end of the tenth (10th) working day (for sites with less than 5 acres of land disturbance) or the fourteenth (14th) working day (for sites with 5 acres or larger of land disturbance) after the day on which the SWPPP is submitted to the **Jurisdiction Entity**, the **Jurisdiction Entity** will make a preliminary determination as to whether the construction plan

associated with SWPPP is substantially complete. The above time limits only apply to the preliminary determination regarding the adequacy of the SWPPP portion of the overall stormwater permit submittal and does not affect any official or non-official permit review timelines set by the **Jurisdiction Entity** for other aspects of the stormwater permit application.

## **(c) INFORMATION REQUIREMENTS**

Specific projects or activities may be exempt from all or part of the informational requirements listed below. Exemptions are detailed in the “Applicability and Exemptions” Sections of Sections 2 through 5. If a project or activity is exempt from any or all requirements of this ordinance, an application should be filed listing the exemption criteria met, in lieu of the information requirements listed below. This level of detailed information is not required from individual residential lots, disturbing less than one (1) acre of land, developed within a larger permitted project site. Review and acceptance of such lots is covered under Section (d).

The different elements of a permit submittal include an application checklist, construction plans, a stormwater drainage technical report, a stormwater pollution prevention plan for active construction sites, a post-construction stormwater pollution prevention plan, a BMP operation and maintenance manual, a formal recorded BMP maintenance agreement, and any other necessary supporting information. All plans, reports, calculations, and narratives shall be signed and sealed by a professional engineer or a licensed surveyor, registered in the State of Indiana who also meets the definition of a Trained Individual found in Appendix A.

### **1. Application Checklist**

As part of the **Jurisdiction Entity** Stormwater Management Permit application package, the application checklist provided in the **Jurisdiction Entity** Stormwater Technical Standards Manual shall be completed by the applicant and provided along with other required supporting material.

### **2. Construction Plans**

Construction plan sheets (larger than 11” by 17”, but not to exceed 24” by 36” in size) and an accompanying narrative report shall describe and depict the existing and proposed conditions. Note that in order to gain an understanding of and to evaluate the relationship between the proposed improvements for a specific project section/phase and the proposed improvements for an overall multi-section (phased) project, the detailed information requested herein for the first section/phase being permitted shall be accompanied by an overall project plan that includes the location, dimensions, and supporting analyses of all detention/retention facilities, primary conveyance facilities, and outlet conditions. Construction plans shall include items listed in the application checklist provided in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

### **3. Stormwater Drainage Technical Report**

A written stormwater drainage technical report shall contain a discussion of the steps taken in the design of the stormwater drainage system. Note that in order to gain an understanding of and to evaluate the relationship between the proposed improvements for a specific project section/phase and the proposed improvements for an overall multi-section (phased) project, the detailed

information requested herein for the first section/phase being permitted shall be accompanied by an overall project plan that includes the location, dimensions, and supporting analyses of all detention/retention facilities, primary conveyance facilities, and outlet conditions. The technical report needs to include items listed in the application checklist provided in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

#### **4. Stormwater Pollution Prevention Plan for Construction Sites**

For sites with total disturbance of one (1) acre or more, a stormwater pollution prevention plan associated with construction activities shall be designed to, at least, meet the requirements of this Ordinance. The SWPPP and construction plans shall include the items listed in the application checklist provided in the **Jurisdiction Entity** Stormwater Technical Standards Manual. For land disturbances less than one (1) acre and not a part of a larger common plan of development or sale, appropriate erosion and sediment control measures that are consistent with the **Jurisdiction Entity** Technical Standards are recommended to be designed, shown on the plans, and implemented accordingly to minimize the potential for enforcement actions authorized under IC 36-1-3-14 (d).

#### **5. Post-Construction Stormwater Pollution Prevention Plan**

For sites with total land disturbance of one (1) acre or more of total land area, a post-construction stormwater pollution prevention plan shall be designed to, at least, meet the requirements of this Ordinance and shall include the information provided in the **Jurisdiction Entity** Stormwater Technical Standards Manual. The post-construction stormwater pollution prevention plan shall include items listed in the application checklist provided in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

#### **6. BMP Operation and Maintenance Manual**

An operations and maintenance (O&M) manual for all private infrastructure, including but not limited to pipes, ponds, ditches, and BMPs (when required), shall be submitted for the final plan approval and permit process. The detailed requirements for O&M manual are provided in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

#### **7. BMP Maintenance Agreement**

A formal BMP maintenance agreement will need to be prepared and notarized consistent with the sample agreement provided in Appendix B of the **Jurisdiction Entity** Stormwater Technical Standards Manual, providing for the long-term maintenance of those BMPs. This maintenance agreement shall be recorded with the deed for the property on which the project is located.

### **(d) REVIEW OF INDIVIDUAL LOTS**

For all individual lots and parcels that meet the applicability requirements of this Ordinance as discussed in Section 1(b), a formal review and issuance of an Individual Lot Plot Plan Permit will be required before a building permit can be issued. The primary purpose of the individual lot plot plan permit/approval is to ensure that the drainage from a lot being developed will not negatively impact adjacent lots or infrastructure. However, a basic erosion and sediment control plan has also been recommended to be included as part of the permit application to minimize the introduction of sediment and other pollutants to the adjacent lots and infrastructure.

*This subsection may be deleted if the entity does not wish to review or regulate individual lot plans*

This basic erosion and sediment control plan would also satisfy the lot specific SWPPP for individual lots that are part of a common plan of development or sale as defined in Appendix A of the CSGP.

For individual lots that are part of a larger permitted project, all stormwater management measures necessary to comply with this Ordinance shall be implemented in accordance with the permitted plan for the larger project.

The following information shall be submitted to the **Jurisdiction Entity**, for review and acceptance, by the individual lot operator, whether owning the property or acting as the agent of the property owner, as part of a request for review and issuance of an Individual Lot Plot Plan Permit that shall be obtained prior to the issuance of a building permit. An individual lot permit application form as well as a plot plan review checklist is included in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

- I. A site layout for the subject lot and all adjacent lots showing building pad location, building pad dimensions, building pad elevations, proposed or existing swales, and the anticipated drainage patterns.
- II. Certification of Compliance, stating that the individual lot plan is consistent with the Stormwater Management Permit, as approved by the **Jurisdiction Entity**, for the larger project (if the individual lot is part of a larger permitted project). In addition, the builders of the individual lots that are part of a larger permitted project are required to complete a Construction Stormwater Residential Development Registration form (State Form 53049) or equivalent and maintain it onsite. A copy of this form is included in the **Jurisdiction Entity** Stormwater Technical Standards Manual.
- III. Name, address, telephone number, and list of qualifications of the trained individual in charge of the mandatory stormwater pollution prevention self-monitoring program for the project site.

Additionally, a general erosion and sediment control plan is attached to the Individual Lot Plot Plan Permit application and may be adopted by applicants on residential lots within a larger common plan of development or sale. A lot specific SWPPP is required to be maintained on-site of all residential lots that are part of a larger common plan of development or sale. The purpose of this plan is to minimize the introduction of sediment and other pollutants to the adjacent lots and infrastructure. This general erosion and sediment control plan may satisfy the lot specific SWPPP for individual lots that are part of a common plan of development or sale, as defined in Appendix A of the CSGP, provided that it is customized for the specific lot. At a minimum, a lot-specific SWPPP retained on-site must include the following measures:

1. Installation and maintenance of a stable construction site access.
2. Installation and maintenance of appropriate perimeter erosion and sediment control measures prior to land disturbance.
3. Implementation of temporary stabilization on the building site
4. Minimization of sediment discharge and tracking from the lot.
5. Provisions to clean-up sediment that is either tracked or washed onto roads so that bulk clearing of sediment does not include flushing the area with water and cleared sediment is redistributed or disposed of in a manner that is in compliance with all applicable statutes and rules.
6. Implementation of practices to eliminate wastes or unused building materials including, but not limited to garbage, debris, cleaning wastes, wastewater,

*Although not currently included in the IDEM permit, the recommended practice for all jurisdictions is to adopt Individual Lot Plan Permit provisions stated in this model ordinance to safeguard against degradation of the quality of community's water resources as well as to protect adjacent lot owners from negative impacts from the individual lot being developed.*

concrete or cementitious washout water, mortar/masonry products, soil stabilizers, lime stabilization materials, and other substances from being carried from the building site by runoff or wind. Wastes and unused building materials must be managed and disposed of in accordance with all applicable statutes and regulations.

7. Provisions to repair and stabilize adjacent lots disturbed by an individual lot operator with permanent surface stabilization.
8. Management of construction, domestic, and demolition waste to prevent the discharge of pollutants and windblown debris, including covering or otherwise securing waste receptacles to minimize the discharge of pollutants.
9. Completion of final stabilization taking into account weather and season. Upon issuance of the certificate of occupancy and concurrence of the homeowner, the homeowner is responsible to maintain the sediment control measures until final stabilization has occurred.

Note that pursuant to IC 36-1-3-14, an erosion and sediment control plan is not required for individual lots and parcels of less than one acre in size that are not part of a common plan of development or sale. However, to minimize the potential for enforcement measures discussed in IC 36-1-3-14(d), providing information and adherence to the erosion control measures listed in Item ii (above) is also highly recommended.

The individual lot operator is responsible for installation and maintenance of all erosion and sediment control measures until the site is stabilized.

## **(e) CHANGES TO PLANS**

Any changes or deviations in the detailed plans and specifications after approval of the applicable Stormwater Management Permit shall be filed with, and accepted by, the **Jurisdiction Entity** prior to the land development involving the change. Copies of the changes, if accepted, shall be attached to the original plans and specifications.

## **(f) FEE STRUCTURE**

### **1. FEE AMOUNT**

As a condition of the submittal and the review of development plans by the **Jurisdiction Entity**, the applicant shall agree to pay the **Jurisdiction Entity** the applicable fee, as set by the **Jurisdiction Entity** with respect to the review of all drainage submittals, preliminary plans, final plans, construction plans and accompanying information and data, as well as prepaid inspection fees.

### **2. TIME OF PAYMENT**

Prior to acceptance of the applicant's final stormwater management plan, the **Jurisdiction Entity** will furnish a written statement to the applicant specifying the total amount due the **Jurisdiction Entity** in connection with the review of the applicant's submittals, plans and accompanying information and data, including the amount required to be paid by applicant for review and pre-paid inspection fees.

*This procedure should be modified if the entity has a set application fee that must be paid when the application is submitted.*

As a condition of acceptance of final drainage plans by the **Jurisdiction Entity**, applicant shall pay to the **Jurisdiction Entity** the sum set forth in said statement.

The **Jurisdiction Entity** may issue such a billing statement before the project advances to the final acceptance stage, and such payment is due by applicant upon receipt of said billing statement regardless of whether the project is advanced to the final acceptance stage.

The **Jurisdiction Entity** shall have the right to not accept the drainage improvements or to not approve the advancement of any project for which the applicable fees have not been paid.

### 3. METHOD OF PAYMENT

Fees shall be paid by one of the following methods:

- Check
- Certified Check
- Cashier's Check
- Credit Card (if accepted)

All checks shall be made payable to the: **Jurisdiction Entity's Address**

### 4. REFUND OF PAYMENT

Fees are refundable **only** if the **Jurisdiction Entity** determines that compliance by the development or project to this Ordinance is not necessary.

### 5. FEE SCHEDULE

Stormwater Permit Application and Inspection Fees will be in accordance with the fee schedule set by **Jurisdiction Entity** as a separate ordinance or resolution.

## (g) REQUIRED ASSURANCES

This section shall apply to all projects whether the stormwater management system or portions thereof will be dedicated to the **Jurisdiction Entity** or retained privately. As a condition of approval and issuance of the permit, the **Jurisdiction Entity** shall require the applicant to provide assurance in form of an irrevocable letter of credit or a bond when the stormwater management plan has been accepted and before construction begins. Said assurance will guarantee a good faith execution of the stormwater drainage plan, the applicable construction elements of the stormwater quality management plan, and any permit conditions. The assurance shall be for an amount equal to 125 percent of the total costs of all stormwater management measures for the entire project. The above-mentioned costs shall be based on an estimate as prepared by an Indiana registered professional engineer or land surveyor. Said costs shall be for the installation and ongoing monitoring and maintenance of storm drainage infrastructure, detention/retention facilities, and post-construction BMP's, as regulated under this Ordinance, until the construction is completed, the site is stabilized, and as-built plans are accepted by the **Jurisdiction Entity**. Per a context-based interpretation of IC 36-1-3-14, assurances may not be required by the MS4 entity for the construction-related erosion and sediment control measures part of the overall project. However, the MS4 entity may use other means at its disposal to ensure that the final stabilization of the site is achieved per the CSGP requirements.

*The amount and specifics of assurances should be reviewed by entity's legal counsel and typical values provided here revised as appropriate for each entity.*

Assurances shall be for a minimum of \$5,000. All other performance bonds, maintenance bonds or other assurances required by the **Jurisdiction Entity** in accordance with any and all other ordinances shall also apply and so be required.

Local governmental jurisdictions may require additional performance and/or maintenance assurances. Specifically, the said assurance is intended to guarantee that the following be installed, and continuously monitored and maintained during the construction under the provisions of this Ordinance and the **Jurisdiction Entity** Stormwater Technical Standards Manual:

- Storm sewer system
- Sub-Surface Drains (SSD)
- Detention facilities
- Post-construction BMPs
- Monuments and Markers

If adequate assurances are set aside by the project site owner for the overall project, proof of total assurance can be submitted in place of an individual stormwater assurance.

## **(h) TERMS AND CONDITIONS OF PERMITS**

In granting a Stormwater Management Permit, the **Jurisdiction Entity** may impose such terms and conditions as are reasonably necessary to meet the purposes of this Ordinance. The project site owner shall ensure compliance with such terms and conditions. Non-compliance with the terms and conditions of permits will be subject to enforcement as described in Section 7.

The project site owner shall inform all general contractor, construction management firms, grading or excavating contractors, utility contractors, and the contractors that have primary oversight on individual building lots of the terms and conditions of the Stormwater Management Permit and the schedule for proposed implementation.

It is the intent of this Ordinance to direct the community's physical growth away from sensitive areas and towards areas that can support it without compromising water quality. In the event that a project site is determined to impact or discharge to a Sensitive Area or is located in an Impact Drainage Area, the **Jurisdiction Entity** may require more stringent stormwater quantity and quality measures than detailed in this Ordinance or in the latest edition of the *Indiana Stormwater Quality Manual*.

### **1. Determination of Sensitive Areas**

Sensitive Areas include wetlands, karst areas, threatened or endangered species habitat, outstanding waters, impaired waters, recreational waters, and surface drinking water sources. Any discharge from a stormwater practice that is a Class V injection well shall meet the Indiana groundwater quality standards and registered with US EPA as required by the IDEM. If wetlands are suspected on a site, a wetland delineation should be completed by the applicant in accordance with the methodology established by the U.S. Army Corps of Engineers (USACE) to ensure that the wetland areas are avoided or the required state and federal authorizations are obtained. The need for the applicant to check for the presence of threatened or endangered species habitat will be determined on a case-by-case basis. Special terms and conditions for development determined to impact or discharge to any Sensitive Area shall be included in the Stormwater Management Permit.

## 2. Determination of Impact Drainage Areas

The following areas shall be designated as Impact Drainage Areas, unless good reason for not including them is presented to the **Jurisdiction Entity**.

*The setbacks noted in this subsection are suggested amounts based on experience with various entities. They may be changed by the Jurisdiction Entity to match their specific needs*

- i. A floodway or floodplain as designated by the most updated FEMA Code dealing with floodplain regulation and/or by the Best Available Data through IDNR-Division of Water.
- ii. Land within 25 feet of each bank of any ditch within the Jurisdiction Entity's system.
- iii. Land within 15 feet of the centerline of any stormwater infrastructure or enclosed conduit within the Jurisdiction Entity's system.
- iv. Land within 75 feet of each bank of a county open regulated drain.
- v. Land within 50 feet of a natural drainageway.
- vi. Land within 75 feet of the centerline of any tiled regulated drain.
- vii. Land within the Fluvial Erosion Hazard (FEH) corridor.
- viii. Land within the expected breach inundation zone of an existing or proposed new dam, and areas protected from flooding by a levee.

*Items vii and viii may be deleted if the entity does not wish to regulate FEH corridors or the dam and levee related provisions*

The **Jurisdiction Entity** is authorized, but is not required, to classify certain geographical areas as Impact Drainage Areas. In determining Impact Drainage Areas, the **Jurisdiction Entity** may consider such factors as topography, soil type, capacity of existing drains, and distance from adequate drainage facility.

Land that does not have an adequate outlet, taking into consideration the capacity and depth of the outlet, may be designated as an Impact Drainage Area by the **Jurisdiction Entity**. Special terms and conditions for development within any Impact Drainage Area shall be included in the Stormwater Management Permit.

## 3. Determination of Designated Drainage Areas Served by Regional Facilities

The **Jurisdiction Entity** is authorized, but is not required, to classify certain geographical areas as Designated Drainage Areas that are or will be served by regional facilities, such as a regional pond. In such cases, an Infrastructure Development Fee (IDF) rate may be established for the Designated Drainage Area. The basis for determining such a fee for a proposed development or re-development within a Designated Drainage Area will be as detailed in the **Jurisdiction Entity** Stormwater Technical Standards Manual.

*Other alternatives, such as designating the area as an Impact Drainage Area and passing a resolution to set the fee have also been used by some jurisdictions and can be adopted by the entity as appropriate.*

### (i) CERTIFICATION OF AS-BUILT PLANS

This section shall apply to all projects whether the stormwater management system or portions thereof will be dedicated to the **Jurisdiction Entity** or retained privately. After completion of construction of the project and before the release of required performance assurances referenced in Section (g) above, a professionally prepared and certified 'as-built' set of plans (record drawings) shall be submitted to the **Jurisdiction Entity** for review. These as-built plans/record drawings shall be prepared and certified by the Engineer of Record, i.e., the company/engineer who originally prepared the construction plans. Additionally, a digital copy of the 'as-built' plans (record drawings) as well as finalized digital

versions of all analyses, models, manuals, and reports that are consistent with the as-built conditions is required in a format acceptable to the **Jurisdiction Entity**. These plans shall include all pertinent data relevant to the completed storm drainage system and stormwater management facilities, and shall include:

1. Pipe size and pipe material
2. Invert elevations
3. Top rim elevations
4. Elevation of the emergency overflow (spillway) for ponds
5. Grades along the emergency flood routing path(s)
6. Pipe structure lengths
7. All proposed elevations, lengths, sizes, etc. shall be struck and as-built values shall be noted
8. BMP types, dimensions, and boundaries/easements
9. "As-planted" plans for BMP's, as applicable
10. Data and calculations showing detention basin storage volume
11. Data and calculations showing BMP treatment capacity
12. Certified statement on plans stating the completed storm drainage system and stormwater management facilities substantially comply with construction plans and the Stormwater Management Permit as approved by the **Jurisdiction Entity**. (See certificate in the Stormwater Technical Standards Manual).

#### **(j) POST-PROJECT MAINTENANCE BOND AND VERIFICATIONS**

In addition to as-built plans and the certification of completion and compliance, following the release of performance assurances, the property owner, developer, or contractor shall be required to file a two-year maintenance bond or other acceptable guarantee with the **Jurisdiction Entity** in an amount not to exceed twenty five percent (25%) of the cost of the stormwater management system located outside the public road rights-of-way, and in a form satisfactory to the **Jurisdiction Entity** in order to assure that such stormwater system installation was done according to standards of good workmanship, that the materials used in the construction and installation were of good quality and construction, and that such project was done in accordance with the accepted plans, and this Ordinance and that any off-site drainage problems that may arise, whether upstream or downstream of such project, will be corrected if such drainage problems are determined by **Jurisdictional Entity** to have been caused by the development of such project. The bond or other acceptable guarantee shall be in effect for a period of two years after the date of the release of required performance assurances referenced in Section (g) above. The beneficiary of all maintenance bonds shall be the **Jurisdiction Entity** Council.

*The duration of maintenance bond or assurances typically is between 2 and 5 years.*

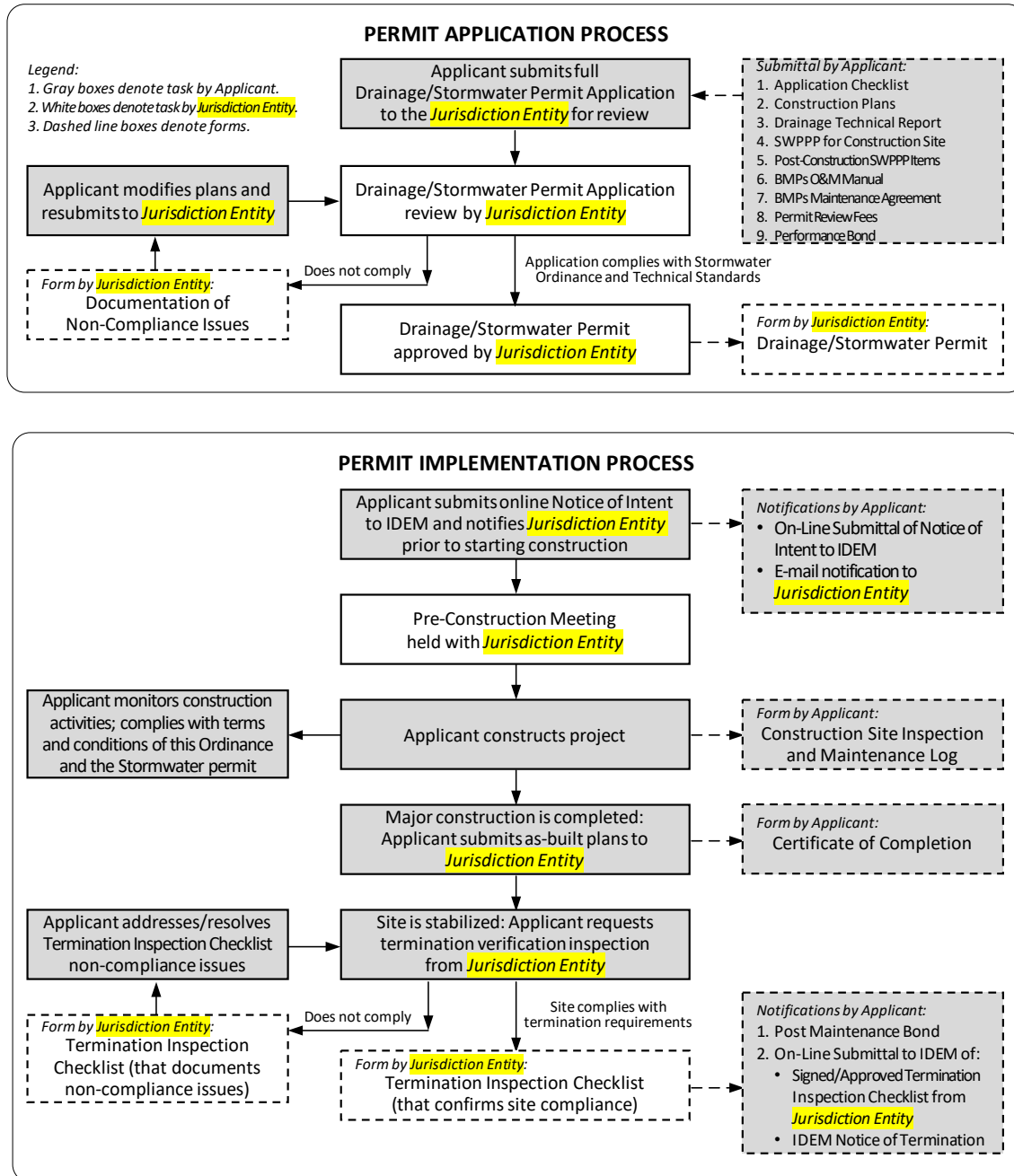
To verify that all stormwater infrastructure is functioning properly, visual recordings (via closed circuit television) of such infrastructure, including all subsurface drains, shall be required twice, once following the completion of installation of the stormwater management system and submittal of as-builts, and the second time before release of maintenance bonds. These visual recordings will be scheduled by the **Jurisdiction Entity** and paid for by the developer. Notices shall be provided to the **Jurisdiction Entity** within 72 hours following the completion of installation and again at least 60 days prior to the expiration date of the maintenance bond so that the noted recordings may be scheduled. Reports summarizing the results of the

*This provision is optional and typically used by entities that take the storm sewer system as a regulated drain system*

noted visual recordings shall be reviewed and accepted by the *Jurisdiction Entity* before the plat is recommended for recording and again before the maintenance bond shall be recommended to be released.

Additional requirements for transfer of any applicable stormwater BMP Maintenance Agreement, O&M Maintenance Manual, and Maintenance Escrow accounts (if any) to subsequent owners prior to release of the maintenance bond is discussed in Section 5 of this ordinance.

**Figure 1: Permit Approval and Project Termination Sign-off Process**



*This chart is typical for an MS4 entity. Non-MS4 entities who do not wish to voluntarily adopt prudent higher standards may need to revise parts of this chart as appropriate. For convenience, the chart is formatted as an editable PowerPoint object. Double-click the chart to edit the PowerPoint slide*

*In non-MS4 communities, IDEM may still require an IDEM-sanctioned entity to perform the plan review as required by the IDEM CSGP*

*In non-MS4 communities, IDEM may still require an IDEM-sanctioned entity to perform the NOT inspections as required by the IDEM CSGP*

## SECTION 7

# Compliance and Enforcement

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### (a) COMPLIANCE WITH THIS ORDINANCE

To secure compliance with the requirements of this Ordinance, violations thereof shall be subject to the enforcement provisions set forth under (b) following. Additionally, compliance with the requirements set forth in the local Zoning Ordinances is also necessary. Compliance with all applicable ordinances of the **Jurisdiction Entity** as well as with applicable State of Indiana statutes and regulations shall also be required. Unless otherwise stated, all other specifications referred to in this Ordinance shall be the most recent edition available.

#### 1. Definitions

- i. **Violation.** Any action or inaction which violates the provisions of this Ordinance, the requirements of an approved stormwater management design plan or permit, and/or the requirements of a recorded stormwater maintenance agreement may be subject to the enforcement actions outlined in this Section. Any such action or inaction is deemed to be a public nuisance and may be abated by injunctive or other equitable relief, in addition to and separate from the imposition of any of the enforcement actions described below.
- ii. **Compliance.** The act of correcting a violation or violations within the time frame specified by the **Jurisdiction Entity**.
- iii. **Offense.** Both a violation and a failure of compliance on a particular project constitute an "offense." If there are multiple violations or multiple failures of compliance on the same project, each shall be considered a separate offense as further stated in section (b)(3).

#### 2. Warning Notice

When the **Jurisdiction Entity** finds that any person has violated, or continues to violate, any provision of this ordinance, or any order issued hereunder, the **Jurisdiction Entity** may serve upon that person a written Warning Notice, specifying the particular violation believed to have occurred and requesting the discharger to immediately investigate the matter and to seek a resolution whereby any offending discharge will cease. Investigation and/or resolution of the matter in response to the Warning Notice in no way relieves the alleged violator of liability for any violations occurring before or after receipt of the Warning Notice. Nothing in this subsection shall limit the authority of the **Jurisdiction Entity** to take any action, including emergency action or any other enforcement action, without first issuing a Warning Notice.

### (b) ENFORCEMENT OF THIS ORDINANCE

#### 1. Notice of Violation/Citation

If the **Jurisdiction Entity** determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, an approved stormwater management design plan, a recorded stormwater management maintenance agreement, or the provisions of this ordinance, it may issue a written Notice of Violation to such applicant or other responsible person and the owner of the property. Where a person is engaged in an activity covered by this ordinance without having first secured a permit, the notice of violation shall be served on the

owner or the responsible person in charge of the activity being conducted on the site.

The notice of violation can be in the form of a citation ticket and/or a written letter that would contain detailed inspection findings, conclusions of law, disposition of warning or fines assessed, stipulated remedial actions as discussed with the responsible party representative, reasonable deadlines for those remedial actions, and the date of re-inspection.

**2. Compensatory Action**

In lieu of enforcement proceedings, penalties, and remedies authorized by this ordinance, the **Jurisdiction Entity** may impose upon a violator, alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, public education, etc.

**3. Civil Penalties for Violations**

Any person who commits an offense under this Ordinance commits a civil infraction subject to a fine not to exceed \$2,500 for each offense, plus costs, damages, and expenses. Each day such violation occurs or continues without a compliance action that is satisfactory to the **Jurisdiction Entity** may be deemed a separate offense and shall make the violator liable for the imposition of a fine for each day. The rights and remedies provided for in this section are cumulative and in addition to any other remedies provided by law. An admission or determination of responsibility shall not exempt the offender from compliance with the requirements of this Ordinance.

*The amount of maximum fine noted may be changed by the Jurisdiction Entity to match their specific needs*

Any person who aids or abets a person in a violation of this Ordinance shall be subject to the penalties provided in this section.

The **Jurisdiction Entity** has established an Enforcement Response Schedule as noted in the table below that standardizes the approach that the **Jurisdiction Entity** may, in its discretion, employ in dealing with stormwater regulations offenses subject to this Ordinance and the associated Technical Standards document. When so employed, this Schedule shall apply separately to each offense in the following manner: The first offense is the underlying violation itself, while the subsequent offenses 2 thru 4 (as necessary) are failures of compliance.

*The table below should be reviewed and revised as appropriate by each entity*

Offense #	Type of Response Anticipated
1 <sup>st</sup> offense	Verbal Telephone Notice, Letter of Violation or Written Warning and Administrative Penalty
2 <sup>nd</sup> offense	Letter of Violation, Administrative Penalty and/or Site Visit
3 <sup>rd</sup> offense	Letter of Violation, Administrative Penalty and/or Site Visit
4 <sup>th</sup> offense	Letter of Violation, Administrative Penalty and/or Site Visit

Likewise, in order to standardize the approach that the **Jurisdiction Entity** may, in its discretion, employ in the imposition of Administrative Penalties, the **Jurisdiction Entity** has established the following Schedule of Administrative Penalties. Again, the penalty for the 1st offense would apply to the violation itself, while the subsequent penalties 2 through 4 (as necessary) would apply to failures of compliance. In its discretion, the **Jurisdiction Entity** may impose penalties up to the amount specified in this Schedule.

*The amount of penalty/fine noted in this table may be changed by the Jurisdiction Entity to match their specific needs*

Offense #	Penalty
1 <sup>st</sup> offense	Warning
2 <sup>nd</sup> offense	\$500.00
3 <sup>rd</sup> offense	\$1,000.00
4 <sup>th</sup> offense	\$2,500.00

#### 4. Stop Work Order

In addition to the penalties listed above, if land disturbance activities are conducted contrary to the provisions of this Ordinance or accepted final stormwater management plans, the **Jurisdiction Entity** may order the work stopped by notice in writing served on any person engaged in the doing or causing of such work to be done, and any such persons shall forthwith stop such work until authorized by the **Jurisdiction Entity** to proceed with the work.

Per IC 13-18-27-18, if the **Jurisdiction Entity** has made a conclusive favorable determination concerning a construction plan (including SWPPP) and work on the construction project has begun, the **Jurisdiction Entity** may not order work on the construction project to stop on the grounds that the erosion and sediment control measures included in the construction plan are not adequate unless the project site owner is notified in writing of the inadequacies that the **Jurisdiction Entity** perceives in the erosion and sediment control measures and the perceived inadequacies are not resolved within seventy-two (72) hours after the project site owner receives the written notice. In addition, per IC 36-1-3-14, If a land disturbing activity would result in the disturbance of less than one (1) acre of total land area and is not part of a larger common plan of development or sale, a stop work order can only be issued after first a written warning is issued to the person conducting a land disturbing who fails to control sediment or dust from leaving the site and if corrective action has not been initiated within forty-eight (48) hours of receiving the written warning. However, the above limitations do not prohibit the **Jurisdiction Entity** from ordering work on a construction project to stop immediately if the project site owner is creating a public health hazard or a safety hazard.

A Stop Work Order will be posted on the site by the **Jurisdiction Entity** and it is unlawful for any person to remove the notice or continue any work on the site without permission from the **Jurisdiction Entity**. The **Jurisdiction Entity** may also undertake or cause to be undertaken, any necessary or advisable protective measures to prevent violations of this Ordinance or to avoid or reduce the effects of noncompliance herewith. The cost of any such protective measures shall be the responsibility of the owner of the property upon which the work is being done and the responsibility of any person carrying out or participating in the work.

The **Jurisdiction Entity** may bring an action under IC 34-28-5-1 (b), to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4), to enforce a stop work order against any person who neglects or fails to comply with a stop work order.

#### 5. Withhold Certificate of Occupancy

The **Jurisdiction Entity** may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise satisfied the requirements of this ordinance as determined by the **Jurisdiction Entity**.

## **6. Suspension, Revocation, or Modification of Permits**

The **Jurisdiction Entity** may suspend, revoke, or modify any existing permit that the violator may also have been previously granted. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated upon such conditions as the **Jurisdiction Entity** may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

## **7. Suspension of Access to the Stormwater Drainage System**

### **i. Emergency Cease and Desist Orders**

When the **Jurisdiction Entity** finds that any person has violated, or continues to violate, any provision of this ordinance, or any order issued hereunder, or that the person's past violations are likely to recur, and that the person's violation(s) has (have) caused or contributed to an actual or threatened discharge to the MS4 or waters of the United States which reasonably appears to present an imminent or substantial endangerment to the health or welfare of persons or to the environment, the **Jurisdiction Entity** may issue an order to the violator directing it immediately to cease and desist all such violations and directing the violator to immediately comply with all ordinance requirements and take such appropriate preventive action as may be needed to properly address a continuing or threatened violation, including immediately halting operations and/or terminating the discharge.

Any person notified of an emergency order directed to it under this Subsection shall immediately comply and stop or eliminate its endangering discharge. In the event of a discharger's failure to immediately comply voluntarily with the emergency order, the **Jurisdiction Entity** may commence court action against such person under IC 34-28-5-1 (b), to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4), to enforce a stop work order.

The **Jurisdiction Entity** may allow the person to recommence its discharge when it has demonstrated to the satisfaction of the **Jurisdiction Entity** that the period of endangerment has passed, unless further termination proceedings are initiated against the discharger under this ordinance. A person that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful discharge and the measures taken to prevent any future occurrence, to the **Jurisdiction Entity** within 5 days of receipt of the emergency order. Issuance of an emergency cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the violator.

### **ii. Suspension Due to Illicit Discharges in Emergency Situations**

The **Jurisdiction Entity** may, without prior notice, suspend stormwater drainage system discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the stormwater drainage system or waters of the state if the violator fails to comply with a suspension order issued in an emergency, the **Jurisdiction Entity** may take such steps as deemed necessary to prevent or minimize damage to the stormwater drainage system or waters of the state, or to minimize danger to persons.

### iii. Suspension Due to the Detection of Illicit Discharge

Any person discharging to the stormwater drainage system in violation of this ordinance may have their stormwater drainage system access terminated if such termination would abate or reduce an illicit discharge. The **Jurisdiction Entity** will notify a violator of the proposed termination of its stormwater drainage system access. The violator may petition the **Jurisdiction Entity** for a reconsideration and hearing. A person commits an offense if the person reinstates stormwater drainage system access to premises terminated pursuant to this Section, without the prior approval of the **Jurisdiction Entity**.

## (c) COST OF ABATEMENT OF THE VIOLATION

In addition to any other remedies, should any owner fail to comply with the provisions of this ordinance, the **Jurisdiction Entity** may, after giving notice and opportunity for compliance, have the necessary work done, and the owner shall be required to promptly reimburse the **Jurisdiction Entity** for all costs of such work.

Nothing herein contained shall prevent the **Jurisdiction Entity** from taking such other lawful action as may be necessary to prevent or remedy any violation. All costs connected therewith shall accrue to the person or persons responsible. Costs include, but are not limited to, repairs to the stormwater drainage system made necessary by the violation, as well as those penalties levied by the EPA or IDEM for violation of the **Jurisdiction Entity**'s NPDES permit, administrative costs, attorney fees, court costs, and other costs and expenses associated with the enforcement of this Ordinance, including sampling and monitoring expenses.

If the amount due for abatement of the violation is not paid within a timely manner as determined by the decision of the **Jurisdiction Entity** or by the expiration of the time in which to file an appeal, the **Jurisdiction Entity** may commence a court action to recover the costs assessed under IC 34-28-5-1 (b), to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4).

## (d) APPEALS

### 1. Appeal of Notice of Violation

Any person to whom any provision of this Ordinance has been applied may appeal in writing, not later than 30 days after the action or decision being appealed from, to the **appropriate board** of the **Jurisdiction Entity** the action or decision whereby any such provision was so applied. Such appeal shall identify the matter being appealed, and the basis for the appeal. The **appropriate board** of the **Jurisdiction Entity** shall consider the appeal and make a decision whereby it affirms, rejects or modifies the action being appealed. In considering any such appeal, the **appropriate board** of the **Jurisdiction Entity** may consider the recommendations of the **Jurisdiction Entity** Staff and the comments of other persons having knowledge of the matter. In considering any such appeal, the **appropriate board** may grant a variance from the terms of this Ordinance to provide relief, in whole or in part, from the action being appealed, but only upon finding that the following requirements are satisfied:

- i. The application of the Ordinance provisions being appealed will present or cause practical difficulties for a development or development site; provided, however, that practical difficulties shall not include the need for the developer to incur additional reasonable expenses in order to comply with the Ordinance; and
- ii. The granting of the relief requested will not substantially prevent the goals and purposes of this Ordinance, nor result in less effective management of stormwater runoff.
- iii. Any person who has appealed a violation to the *appropriate board* may appeal an adverse decision of the Board to the *Jurisdiction Entity's County* court within 60 days of the Boards order, all pursuant to IC 36-1-6-9 (e) & (f).

## **2. Enforcement Measures After Appeal**

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 5 days of the decision of the *appropriate board* upholding the decision of the *Jurisdiction Entity*, then representatives of the *Jurisdiction Entity* shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property, including the commencing of a court action under IC 34-28-5-1 (b), to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4), to enforce the order of the *appropriate board*.



# Abbreviations and Definitions

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## (a) ABBREVIATIONS

<b>BMP</b>	Best Management Practice
<b>CSGP</b>	Construction Stormwater General Permit
<b>CWA</b>	Clean Water Act
<b>EPA</b>	Environmental Protection Agency
<b>IDEM</b>	Indiana Department of Environmental Management
<b>MS4</b>	Municipal Separate Storm Sewer System
<b>MS4GP</b>	Municipal Separate Storm Sewer System General Permit
<b><u>USACE</u></b>	United States Army Corps of Engineers

## (b) DEFINITIONS

**Agricultural land disturbing activity.** Tillage, planting, cultivation, or harvesting operations for the production of agricultural or nursery vegetative crops. The term also includes pasture renovation and establishment, the construction of agricultural conservation practices, and the installation and maintenance of agricultural drainage tile.

**Best Management Practices.** Design, construction, and maintenance practices and criteria for stormwater facilities that minimize the impact of stormwater runoff rates and volumes, prevent erosion, and capture pollutants.

**Capacity (of a Storm Drainage Facility).** The maximum flow that can be conveyed or stored by a storm drainage facility without causing damage to public or private property.

**Channel.** A portion of a natural or artificial watercourse which periodically or continuously contains moving water, or which forms a connecting link between two bodies of water. It has a defined bed and banks which serve to confine the water.

**Compliance.** The act of correcting a violation or violations within the time frame specified by the **Jurisdiction Entity**.

**Construction activity.** Land disturbing activities, and land disturbing activities associated with the construction of infrastructure and structures. This term does not include routine ditch or road maintenance or minor landscaping projects.

**Construction site access.** A stabilized stone surface at all points of ingress or egress to a project site, for the purpose of capturing and detaining sediment carried by tires of vehicles or other equipment entering or exiting the project site.

**Construction Support Activities.** Include but are not limited to the following: concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas. Such activities shall not support multiple, unrelated projects, be a commercial/industrial operation, or continue to operate beyond the completion of the construction activity for the project it supports.

**Contiguous.** Adjoining or in actual contact with.

**Contour.** An imaginary line on the surface of the earth connecting points of the same elevation.

**Contractor or subcontractor.** An individual or company hired by the project site or individual lot owner, their agent, or the individual lot operator to perform services on the project site.

**Conveyance.** Any structural method for transferring stormwater between at least two points. The term includes piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, and roadways.

**Critical Duration Analysis.** The process of testing different rainfall durations to find that “critical duration”, which produces the highest peak runoff or the highest storage volume.

**Depressional Storage Area.** Non-riverine depressions in the earth where stormwater collects. The volumes are often referred to in units of acre-feet.

**Detention.** Managing stormwater runoff by temporary holding and controlled release.

**Detention Basin.** A facility constructed or modified to restrict the flow of stormwater to a prescribed maximum rate, and to detain concurrently the excess waters that accumulate behind the outlet.

**Developer.** Any person financially responsible for construction activity, or an owner of property who sells or leases, or offers for sale or lease, any lots in a subdivision.

**Development.** Any man-made change to improved or unimproved real estate including but not limited to:

- i. Construction, reconstruction, or placement of a building or any addition to a building;
- ii. Construction of flood control structures such as levees, dikes, dams or channel improvements;
- iii. Construction or reconstruction of bridges or culverts;
- iv. Installing a manufactured home on a site, preparing a site for a manufactured home, or installing a recreational vehicle on a site for more than hundred eight (180) days;
- v. Installing utilities, erection of walls, construction of roads, or similar projects;
- vi. Mining, dredging, filling, grading, excavation, or drilling operations;

- vii. Storage of materials; or
- viii. Any other activity that might change the direction, height, or velocity of flood or surface waters.

“Development” does not include activities such as the maintenance of existing buildings and facilities such as painting, re-roofing, resurfacing roads, or gardening, plowing and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent buildings.

**Discharge.** In the context of water quantity provisions, usually the rate of water flow. A volume of fluid passing a point per unit time commonly expressed as cubic feet per second, cubic meters per second, gallons per minute, or millions of gallons per day. In the context of water quality provisions, the discharge means any addition of liquids or solids to a water body or a flow conveyance facility

**Disposal.** The discharge, deposit, injection, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that the solid waste or hazardous waste, or any constituent of the waste, may enter the environment, be emitted into the air, or be discharged into any waters, including ground waters.

**Ditch.** A man-made, open watercourse in or into which excess surface water or groundwater drained from land, stormwater runoff, or floodwaters flow either continuously or intermittently.

**Drain.** A buried slotted or perforated pipe or other conduit (subsurface drain) or a ditch (open drain) for carrying off surplus groundwater or surface water.

**Drainage.** The removal of excess surface water or groundwater from land by means of ditches or subsurface drains. Also see Natural drainage.

**Drainage Area.** The area draining into a stream at a given point. It may be of different sizes for surface runoff, subsurface flow and base flow, but generally the surface runoff area is considered as the drainage area.

**Duration.** The time period of a rainfall event.

**Environment.** The sum total of all the external conditions that may act upon a living organism or community to influence its development or existence.

**Erosion.** The wearing away of the land surface by water, wind, ice, gravity, or other geological agents. The following terms are used to describe different types of water erosion:

- *Accelerated erosion*--Erosion much more rapid than normal or geologic erosion, primarily as a result of the activities of man.
- *Channel erosion* --An erosion process whereby the volume and velocity of flow wears away the bed and/or banks of a well-defined channel.
- *Gully erosion* --An erosion process whereby runoff water accumulates in narrow channels and, over relatively short periods, removes the soil to considerable depths, ranging from 1-2 ft. to as much as 75-100 ft.

- **Rill erosion**--An erosion process in which numerous small channels only several inches deep are formed; occurs mainly on recently disturbed and exposed soils (see Rill).
- **Splash erosion**--The spattering of small soil particles caused by the impact of raindrops on wet soils; the loosened and spattered particles may or may not be subsequently removed by surface runoff.
- **Sheet erosion**--The gradual removal of a fairly uniform layer of soil from the land surface by runoff water.

**Erosion and sediment control.** A practice, or a combination of practices, to minimize sedimentation by first reducing or eliminating erosion at the source and then as necessary, trapping sediment to prevent it from being discharged from or within a project site.

**Filter Strip.** Usually a long, relatively narrow area (usually, 20-75 feet wide) of undisturbed or planted vegetation used near disturbed or impervious surfaces to filter stormwater pollutants for the protection of watercourses, reservoirs, or adjacent properties.

**Flood (or Flood Waters).** A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of surface waters from any source.

**Floodplain.** The channel proper and the areas adjoining the channel which have been or hereafter may be covered by the regulatory or 100-year flood. Any normally dry land area that is susceptible to being inundated by water from any natural source. The floodplain includes both the floodway and the floodway fringe districts.

**Floodway.** The channel of a river or stream and those portions of the floodplains adjoining the channel which are reasonably required to efficiently carry and discharge the peak flow of the regulatory flood of any river or stream.

**Floodway Fringe.** That portion of the flood plain lying outside the floodway, which is inundated by the regulatory flood.

**Fluvial Erosion Hazard (FEH) Corridor.** Fluvial Erosion Hazard corridors represent the areas along the streams (including the channel and immediate overbanks areas) that are believed to be subject to stream movement or streambank erosion. These corridors have been delineated for most actively migrating and relatively stationary streams in Indiana through an Indiana Silver Jackets initiative.

**Footing Drain.** A drain pipe installed around the exterior of a basement wall foundation to relieve water pressure caused by high groundwater elevation.

**Gasoline outlet.** An operating gasoline or diesel fueling facility whose primary function is the resale of fuels. The term applies to facilities that create five thousand (5,000) or more square feet of impervious surface, or generate an average daily traffic count of one hundred (100) vehicles per one thousand (1,000) square feet of land area.

**Grade.** (1) The inclination or slope of a channel, canal, conduit, etc., or natural ground surface usually expressed in terms of the percentage the vertical rise (or fall) bears to the corresponding horizontal distance. (2) The finished surface of a canal bed, roadbed, top of embankment, or bottom of excavation; any surface prepared to a design elevation for the support of construction, such as paving or the laying of a conduit. (3) To finish the surface of a canal bed, roadbed, top of embankment, or bottom of excavation, or other land area to a smooth, even condition.

**Grading.** The cutting and filling of the land surface to a desired slope or elevation.

**Groundwater.** Accumulation of underground water, natural or artificial. The term does not include manmade underground storage or conveyance structures.

**Habitat.** The environment in which the life needs of a plant or animal are supplied.

**Hot Spot Development.** Projects involving land uses considered to be high pollutant producers such as vehicle service and maintenance facilities, vehicle salvage yards and recycling facilities, vehicle and equipment cleaning facilities, fleet storage areas for buses, trucks, etc., industrial/commercial or any hazardous waste storage areas or areas that generate such wastes, industrial sites, restaurants and convenience stores, any activity involving chemical mixing or loading/unloading, outdoor liquid container storage, public works storage areas, commercial container nurseries, and some high traffic retail uses characterized by frequent vehicle turnover.

**Illicit Discharge.** Any discharge to a conveyance that is not composed entirely of stormwater except naturally occurring floatables, such as leaves or tree limbs. Illicit discharges include polluted flows from direct and indirect connections to the MS4 conveyance, illegal dumping, and contaminated runoff.

**Impaired Waters.** Waters that do not or are not expected to meet applicable water quality standards, as included on IDEM's CWA Section 303(d) List of Impaired Waters.

**Impervious surface.** Surfaces, such as pavement and rooftops, which prevent the infiltration of stormwater into the soil.

**Individual building lot.** A single parcel of land within a multi-parcel development.

**Individual lot operator.** A contractor or subcontractor working on an individual lot.

**Individual lot owner.** A person who has financial control of construction activities for an individual lot.

**Infiltration.** Passage or movement of water into the soil. Infiltration practices include any structural BMP designed to facilitate the percolation of runoff through the soil to groundwater. Examples include infiltration basins or trenches, dry wells, and porous pavement.

**Land Surveyor.** A person licensed under the laws of the State of Indiana to practice land surveying.

**Larger common plan of development or sale.** A plan, undertaken by a single project site owner or a group of project site owners acting in concert, to offer lots for sale or lease; where such land is contiguous, or is known, designated, purchased or advertised as a common unit or by a common name, such land shall be presumed as being offered for sale or lease as part of a larger common plan. The term also includes phased or other construction activity by a single entity for its own use.

**Municipal Separate Storm Sewers.** An MS4 meets all the following criteria: (1) is a conveyance or system of conveyances owned by the state, county, city, town, or other public entity; (2) discharges to waters of the U.S.; (3) is designed or used for collecting or conveying stormwater; (4) is not a combined sewer; and, (5) is not part of a Publicly Owned Treatment Works (POTW).

**National Pollutant Discharge Elimination System.** A permit developed by the U.S. EPA through the Clean Water Act. In Indiana, the permitting process has been delegated to IDEM. This permit covers aspects of municipal stormwater quality.

**Natural Drainage.** The flow patterns of stormwater runoff over the land in its pre-development state.

**Nutrient(s).** (1) A substance necessary for the growth and reproduction of organisms. (2) In water, those substances (chiefly nitrates and phosphates) that promote growth of algae and bacteria.

**Offense.** Both a violation and a failure of compliance on a particular project. If there are multiple violations or multiple failures of compliance on the same project, each shall be considered a separate Offense.

**Open Drain.** A natural watercourse or constructed open channel that conveys drainage water.

**Outfall.** The point, location, or structure where a pipe or open drain discharges to a receiving body of water.

**Outlet.** The point of water disposal from a stream, river, lake, tidewater, or artificial drain.

**Percolation.** The movement of water through soil.

**Pervious.** Allowing movement of water.

**Point Source.** Any discernible, confined, and discrete conveyance including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or maybe discharged (P.L. 92-500, Section 502[14]).

**Porous pavement.** A type of infiltration practice to improve the quality and reduce the quantity of stormwater runoff via the use of manmade, pervious pavement which allows runoff to percolate through the pavement and into underlying soils

**Professional Engineer.** A person licensed under the laws of the State of Indiana to practice professional engineering.

**Project site.** The entire area on which construction activity is to be performed.

**Project site owner.** The person required to submit a stormwater permit application and required to comply with the terms of this ordinance, including a developer or a person who has financial and operational control of construction activities, and project plans and specifications, including the ability to make modifications to those plans and specifications.

**Receiving Stream, Receiving Channel, or Receiving Water.** The body of water into which runoff or effluent is discharged. The term does not include private drains, unnamed conveyances, retention and detention basins, or constructed wetlands used as treatment.

**Recharge.** Replenishment of groundwater reservoirs by infiltration and transmission from the outcrop of an aquifer or from permeable soils.

**Redevelopment.** Development occurring on a previously developed site.

**Refueling area.** An operating gasoline or diesel fueling area whose primary function is to provide fuel to equipment or vehicles.

**Regional Pond.** A detention/retention basin sized to detain/retain the runoff from the entire watershed, on-site and off-site, tributary to the pond's outlet.

**Regulatory Flood.** The discharge or elevation associated with the 100-year flood as calculated by a method and procedure which is acceptable to and approved by the Indiana Department of Natural Resources – Division of Water and/or the Federal Emergency Management Agency. The "regulatory flood" is also known as the "base flood".

**Release Rate.** The amount of stormwater release from a stormwater control facility per unit of time.

**Reservoir.** A natural or artificially created pond, lake or other space used for storage, regulation or control of water. May be either permanent or temporary. The term is also used in the hydrologic modeling of storage facilities.

**Retention.** The storage of stormwater to prevent it from leaving the development site. May be temporary or permanent.

**Retention basin.** A type of storage practice, that has no positive outlet, used to retain stormwater runoff for an indefinite amount of time. Runoff from this type of basin is removed only by infiltration through a porous bottom or by evaporation.

**Riparian habitat.** A land area adjacent to a waterbody that supports animal and plant life associated with that waterbody.

**Runoff.** That portion of precipitation that flows from a drainage area on the land surface, in open channels, or in stormwater conveyance systems.

**Sediment.** Solid material (both mineral and organic) that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface.

**Sedimentation.** The process that deposits soils, debris and other unconsolidated materials either on the ground surfaces or in bodies of water or watercourses.

**Site.** The entire area included in the legal description of the land on which land disturbing activity is to be performed.

**Slope.** Degree of deviation of a surface from the horizontal, measured as a numerical ratio or percent. Expressed as a ratio, the first number is commonly the horizontal distance (run) and the second is the vertical distance (rise)--e.g., 2:1. However, the preferred method for designation of slopes is to clearly identify the horizontal (H) and vertical (V) components (length (L) and Width (W) components for horizontal angles). Also note that according to international standards (Metric), the slopes are presented as the vertical or width component shown on the numerator--e.g., 1V:2H. Slope expressions in this Ordinance follow the common presentation of slopes--e.g., 2:1 with the metric presentation shown in parentheses--e.g., (1V:2H). Slopes can also be expressed in "percent". Slopes given in percent are always expressed as  $(100 \times V/H)$  --e.g., a 2:1 (1V:2H) slope is a 50% slope.

**Soil.** The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.

**Soil and Water Conservation District.** A public organization created under state law as a special-purpose district to develop and carry out a program of soil, water, and related resource conservation, use, and development within its boundaries. A subdivision of state government with a local governing body, established under IC 14-32.

**Solid Waste.** Any garbage, refuse, debris, or other discarded material.

**Spill.** The unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge, or other loss of petroleum, hazardous substances, extremely hazardous substances, or objectionable substances. The term does not include releases to impervious surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil.

**Storm Sewer.** A closed conduit for conveying collected stormwater, while excluding sewage and industrial wastes. Also called a storm drain.

**Stormwater.** Water resulting from rain, melting or melted snow, hail, or sleet.

**Stormwater Management System.** A collection of structural and non-structural practices and infrastructure designed to manage stormwater on a site. This system may include but is not limited to erosion control measures, storm drainage infrastructure, detention/retention facilities, and stormwater quality BMP's.

**Stormwater Pollution Prevention Plan.** A plan developed to minimize the impact of stormwater pollutants resulting from construction activities.

**Stormwater Runoff.** The water derived from rains falling within a tributary basin, flowing over the surface of the ground or collected in channels or conduits.

**Stormwater Quality Management Plan.** A comprehensive written document that addresses stormwater runoff quality.

**Stormwater Quality Measure.** A practice, or a combination of practices, to control or minimize pollutants associated with stormwater runoff.

**Stormwater Drainage System.** All means, natural or man-made, used for conducting stormwater to, through or from a drainage area to any of the following: conduits and appurtenant features, canals, channels, ditches, storage facilities, swales, streams, culverts, streets and pumping stations.

**Subdivision, Major.** Any land that is divided or proposed to be divided into four (4) or more lots, whether contiguous or subject to zoning requirements, for the purpose of sale or lease as part of a larger common plan of development or sale.

**Subdivision, Minor.** Any land that is divided or proposed to be divided into less than four (4) lots, whether contiguous or subject to zoning requirements, for the purpose of sale or lease as part of a larger common plan of development or sale.

**Subsurface Drain.** A pervious backfield trench, usually containing stone and perforated pipe, for intercepting groundwater or seepage.

**Surface Runoff.** Precipitation that flows onto the surfaces of roofs, streets, the ground, etc., and is not absorbed or retained by that surface but collects and runs off.

**Swale.** An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water. Swales conduct stormwater into primary drainage channels and may provide some groundwater recharge.

**Topography.** The representation of a portion of the earth's surface showing natural and man-made features of a give locality such as rivers, streams, ditches, lakes, roads, buildings and most importantly, variations in ground elevations for the terrain of the area.

**Trained individual.** An individual who is trained and experienced in the principles of stormwater quality, including erosion and sediment control as may be demonstrated by state registration, professional certification (such as CESSWI and/or CPESC certification), or other documented and applicable experience or coursework as deemed sufficient by the **Jurisdiction Entity** that enable the individual to make judgments regarding stormwater control or treatment and monitoring.

**Urbanization.** The development, change or improvement of any parcel of land consisting of one or more lots for residential, commercial, industrial, institutional, recreational or public utility purposes.

**Violation.** Any action or inaction which violates the provisions of this Ordinance or the Technical Standards, the requirements of an approved stormwater management design plan or permit, and/or the requirements of a recorded

stormwater maintenance agreement may be subject to the enforcement actions outlined in Section 7 of this Ordinance. Any such action or inaction is deemed to be a public nuisance and may be abated by injunctive or other equitable relief in addition to, and separate from, the imposition of any of the enforcement actions described in Section 7 of this Ordinance.

**Water Quality.** A term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its suitability for a particular purpose.

**Water Resources.** The supply of groundwater and surface water in a given area.

**Waterbody.** Any accumulation of water, surface, or underground, natural or artificial, excluding water features designed and designated as water pollution control facilities.

**Watercourse.** Any river, stream, creek, brook, branch, natural or man-made drainageway in or into which stormwater runoff or floodwaters flow either continuously or intermittently.

**Watershed.** The region drained by or contributing water to a specific point that could be along a stream, lake or other stormwater facility. Watersheds are often broken down into subareas for the purpose of hydrologic modeling.

**Wetlands.** Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.