

4.0 FLOOD MANAGEMENT

4.1 OVERVIEW

Flood management covers maintenance and management of publicly owned or operated water quality structures and the requirements for projects or areas being assessed for flood management improvements. Projects are also evaluated to determine feasibility of adding water quality structures that will reduce pollutants.



"Wetland plantings at F-Lake Regional (stormwater quantity (detention) and quality control) Basin, Lafayette, IN" used by permission of the Tippecanoe County Surveyor's Office.

4.2 SITE ASSESSMENT

4.2.1 New Flood Management Projects

Regulation: 327 IAC 15-13-17(4)	Written documentation that publicly owned or operated flood management projects are assessed for their impacts on water quality.
Implementation BMPs	<ul style="list-style-type: none"> When an MS4 is evaluating publicly owned or operated flood management projects (such as basins), the MS4 is required to consider and evaluate the impact the design has on water quality. The directive to the MS4 is to reduce the discharge of pollutants to the maximum extent practicable (MEP). That directive extends to the design of flood management structures; whereby, structures should not negatively impact water quality. Maintain documentation that the project was reviewed for water quality.
Programmatic Indicator	Number, type, and location of structural BMPs installed.
Possible Measurable Goals	<ul style="list-style-type: none"> Document the number of publicly owned or operated detention or retention basins. Maintain documentation of engineering feasibility evaluations, environmental, social, economic impacts, or public input. Number of BMPs implemented, or improvement in the reduction of discharge of pollutants (specific to the MS4's pollutants of concern), and water quality impact evaluation. Decrease stormwater pollution by inspecting structural, publicly owned and operated BMPs at least annually. Review new publicly owned or operated projects for stormwater quantity and quality management.
Documentation	Documentation of evaluation process and number of water quality controls implemented.
Advanced BMPs (optional)	Develop an overall stormwater master plan for community.

4.2.2 Existing Flood Management Projects & Structural BMP Maintenance

Regulation: 327 IAC 15-13-17(4)	Written documentation that existing flood management projects are examined for incorporation of additional water quality protection devices or practices.
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Implementation BMPs	<ul style="list-style-type: none"> • Assess existing flood management projects to determine if stormwater quality protection devices or practices can be incorporated. • MS4 should inspect all public flood management structures and features at a frequency that meets the requirements of maintaining the particular structure or device (i.e. retention or detention ponds every year or devices per the manufacturers recommend instructions). • Develop a maintenance program for structural stormwater quality controls by creating and maintaining written documentation/procedures and include a frequency or schedule for inspections. • List or identify each public structural BMP. • Create a form to document the structural BMP inspections.
Programmatic Indicator	<ul style="list-style-type: none"> • Number, type, and location of structural BMPs inspected. • Number, type, and location of structural BMPs maintained or improved to function properly.
Possible Measurable Goals	<ul style="list-style-type: none"> • MS4 will inspect the public basins and water quality devices, compare inspection findings to the design performance standards, and provide necessary maintenance on a yearly basis. • Decrease stormwater pollution by inspecting publicly owned or operated structural BMPs at least annually and correcting any issues.
Documentation	Maintain copies of assessments, inspection forms and maintenance records for at least the length of the permit term or longer if enforcement actions have been implemented.
Advanced BMPs (optional)	Identify additional projects or locations that the municipality operates.
Additional Resources	USEPA Stormwater BMPs - Measurable Goals Guidance for Phase II Small MS4