

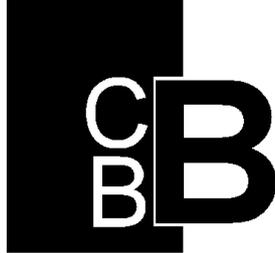
**NPDES PHASE II
GENERAL PERMIT APPLICATION
STORM WATER QUALITY MANAGEMENT PLAN
PART C: PROGRAM IMPLEMENTATION**



**Allen County, Indiana
Town of Huntertown
Town of Leo-Cedarville**

Permit #INR040131

MARCH 3, 2005



**NPDES PHASE II
STORM WATER QUALITY MANAGEMENT PLAN (SWQMP)
PART C: PROGRAM IMPLEMENTATION**

Prepared for:

**Allen County, Indiana
Town of Huntertown
Town of Leo-Cedarville**

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**Allen County, Indiana
NPDES Phase II Part C Implementation Plan**

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- D. Certification of the Informational Program for the Public Education and Outreach MCM
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- I. Certification of the Development and Implementation, of a Program to Reduce Pollutant Run-Off from Municipal Operations for the Municipal Operations Pollution Prevention and Good Housekeeping MCM
- J. Active Industrial Facilities in the MS4 Area

SUPPLEMENTAL MATERIALS
(Bound Separately but Available to Agency Upon Request)

- A. Stormwater Management Ordinance
- B. Illicit Discharge Detection and Elimination (IDDE) Plan



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1.0

INTRODUCTION

As part of the 1987 amendments to the Federal Clean Water Act (CWA), the United States Congress added Chapter 402(p) to the CWA to address the water quality impacts of stormwater discharges from industrial facilities and large to medium municipal separate storm sewer systems (MS4s). Large to medium MS4s were defined as communities serving populations of 100,000 or more and are regulated by the Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System's (NPDES) Storm Water Phase I Program.

In addition to these amendments, Congress directed the Environmental Protection Agency (EPA) to issue further regulations to identify and regulate additional stormwater discharges that were considered to be contributing to national water quality impairments. On December 8, 1999, the EPA issued regulations that expanded the existing NPDES Storm Water Program to include discharges from small MS4s in "urbanized areas" serving populations of less than 100,000 and stormwater discharges from construction activities that disturb more than one acre of land. These regulations are referred to as the NPDES Phase II Storm Water Program. The urbanized area portion of Allen County met these criteria and was consequently designated as an MS4 entity.

In the State of Indiana, the Indiana Department of Environmental Management (IDEM) is responsible for the development and oversight of the NPDES Phase II Program. The IDEM initiated adoption of the Phase II Rules that were ultimately codified as 327 IAC 15-13 (Rule 13). Rule 13 became effective on August 6, 2003 and requires designated MS4 entities to apply for permit coverage by submitting a Notice of Intent (NOI) and developing Storm Water Quality Management Plans (SWQMPs) through a phased submittal process. The IDEM's phased submittal requirements for the SWQMP include the following three components:

- Part A: Initial Application
- Part B: Baseline Characterization Report
- Part C: Program Implementation Plan

All MS4s were required to submit NOI and SWQMP Part A documents to the IDEM by November 5, 2003. SWQMP Part B and Part C documents are required to be submitted by May 3, 2004 and November 5, 2004, respectively. Allen County's NOI and SWQMP Part A documents were submitted to IDEM on November 5, 2003, and the SWQMP Part B document was submitted to IDEM on May 3, 2004. An extension letter to request a 60-day extension for the SWQMP Part C submittal and to submit annual reports on March 2006, March 2007, March 2008, and March 2009 was sent to IDEM and subsequently the request was granted by IDEM. The extended Part C submittal date is March 3, 2005.

This report has been prepared to address Rule 13 requirements for completing the SWQMP Part C: Program Implementation Report, its corresponding Certification form,

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and Certification forms for each of the six Minimum Control Measures (MCMs) for Allen County, Indiana. This report includes the following information:

- An initial evaluation of the stormwater program for the Allen County MS4 area, including information on all known structural and nonstructural storm water BMPs utilized,
- A detailed program description for each of the six MCMs, including Measurable goals with results that are related to an environmental benefit and programmatic indicators,
- A timetable for program implementation milestones, which includes milestones for each of the six MCMs,
- SWQMP-Part B: Baseline Characterization Report conclusions (BMP recommendations, additional protective measures for sensitive areas, and correcting identified water quality problems),
- A narrative and mapped description of the MS4 area boundaries that indicate responsible MS4 entity areas for each MCM, including specific (sectional/street) boundaries of the MS4 area,
- An estimate of the linear feet of MS4 conveyances within the MS4 area, segregated by MS4 type, including open ditch and pipe,
- A summary of which structural BMP types will be allowed in new development and redevelopment for the MS4 area,
- A summary of the stormwater structural BMP selection criteria and, where appropriate, associated performance standards that must be met after installation to indicate BMP effectiveness, and
- A summary of the current stormwater budget, (expected or actual) funding source, and a projection of the budget for each year within the five-year permit term.

In addition, the IDEM's SWQMP Part C: Program Implementation Report Certification Checklist and Certification forms for each of the six MCMs are included in **Appendices C through I** of this report.

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2.0 MS4 AREA DESCRIPTION

Rule 13 requires a narrative and mapped description of the MS4 area boundaries and an estimate of the linear feet of MS4 conveyances within the MS4 area. The following discussion provides an evaluation the municipal stormwater conveyance system within Allen County's MS4 area. The map of the MS4 area boundaries is **Exhibit 1** of this report.

2.1 NARRATIVE DESCRIPTION OF MS4 AREA

Allen County, the Town of Hometown, and the Town of Leo-Cedarville are working under a joint permit to fulfill requirements of Rule 13 and when references are made to the County in this document it is assumed that all mentioned activities cover the Towns as well unless otherwise specified. The MS4 area covered by this permit (herein referred to as the Allen County MS4 Area) includes all unincorporated areas of Eel River, Perry, Cedar Creek, Lake, Washington, St. Joseph, Aboite, Wayne, Adams, Pleasant, and Marion Townships. Hometown and Leo-Cedarville's MS4 boundary mirrors its jurisdictional boundary, and is located primarily in Perry and Cedar Creek Townships, respectively. The MS4 area excludes the City of Fort Wayne and New Haven. Exhibit 1 identifies the County's MS4 boundary.

The Allen County MS4 Boundary is made up of eight polygons. The first polygon starts near the southwest corner of 30N11E31 where it intersects with 99N99E54. It follows 99N99E54 in a northeast angle until it reaches the eastern edge of 30N11E31. It goes south to the southeast corner of 30N11E31. It goes east to the southeast corner of 30N11E34. It jogs north to the northeast corner of 30N11E34. It follows 30N11E26 around to its northeast corner. It goes east to the southeast corner of 30N12E19. It goes north a short distance until it reaches the Fort Wayne City boundary. It follows the Fort Wayne City boundary until the south east corner of 31N12E20. Instead of jogging in to the east it just goes straight north until 31N12E20 intersects with the Fort Wayne City boundary again. It then follows the city boundary around the northern half of the city until the northwest corner of 31N13E25. It follows this section to the southwest corner of 31N13E25. It goes east and then north around this section up to the northeast corner of 31N13E13. It goes west until the northwest corner of 31N13E14. It goes north one section to the southwest corner of 31N13E2. It follows this section all the way around to its northwest corner then into 31N13E3 until it intersects with St. Joseph River. It follows St. Joseph River northeast until the northeast corner of the section called 99N99 E Jack Hackley. It follows this section southeast until it intersects with Schwartz Road. It follows 32N13E27 east then north to its northeast corner. It goes east then north around 32N13E23 to the northeast corner of 32N13E14. It goes west until the northwest corner of 32N13E16. It goes south to the southwest corner of 32N13E21. It goes west until the southeast corner of 32N12E23. It goes north to the northeast corner of 32N12E14, then west to the northwest corner of 32N12E15. It goes south to the southwest corner of 32N12E22. It goes west for one section to the

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southeast corner of 32N12E20. It turns north until the northeast corner of 32N12E8. It goes west until the northwest corner of 32N12E7. It goes south until the southwest corner of 32N12E19. It goes all the way around the section of 32N11E25 back to its southeast corner. It goes south for one section to the southeast corner of 32N12E31 then jogs west slightly to the northwest corner of 31N12E4. It goes south until the southwest corner of 31N12E9. It goes west to the northwest corner of 31N12E18. It goes south to the southwest corner of 31N12E19. It follows this section around to its south east corner and then goes south to the southwest corner of 31N12E32. It goes west to the northwest corner of 30N11E4. It goes south to the southwest corner of 30N11E9. It goes west then south around 30N11E17 then west to the northwest corner of 30N11E19. It goes south back to the beginning where 30N11E31 intersects with 99N99E54 near its southwest corner.

The second polygon starts in 30N13E9 where the City of Fort Wayne Boundary and Maumee Road meet at the northwest corner of 30N13E9. It goes east following the Fort Wayne Boundary until the eastern edge of 30N13E1. It goes to the northeast corner of this section then west to the northeast corner of 30N13E2. It goes north to the northeast corner of 31N13E35. It goes west until it intersects with the City of Fort Wayne Boundary. It follows the boundary back to the beginning in 30N13E9.

The third boundary consists of a small rectangle in 30N13E16 where the City of Fort Wayne does not cover.

The fourth polygon is in 30N13E17 around a hole in the City of Fort Wayne Boundary.

The fifth polygon starts at the southeast corner of 30N13E15. It goes north until it intersects with the City of Fort Wayne Boundary. It then follows the boundary west and around back to the southeast corner of 30N13E15.

The sixth polygon starts at the southeast corner of 30N13E20. It goes north until it intersects with the City of Fort Wayne Boundary. It then goes southeast following the city boundary back to the starting point.

The seventh polygon starts at the southwest corner of 29N13E8 where it meets St. Mary's River. It goes east to the southeast corner 29N13E9. It goes north to the northeast corner of 29N13E4. It goes west to the southeast corner of 30N13E31. It goes north until it intersects with the City of Fort Wayne Boundary. It follows the City boundary west and south until the boundary meets the southern edge of 30N12E36. It goes east to the southeast corner of 30N12E36. It goes south to the southwest corner of 29N13E6. It goes east until it intersects the St. Mary's River. It follows the St. Mary's River back to the beginning point at the southwest corner of 29N13E8.

The eighth polygon starts at the southwest corner 29N12E2. It goes east until it meets an unknown diagonal section at the intersection of Thiele Road and Ferguson Road. It goes southeast along this section and then northeast. It goes northwest around this section until it intersects with St. Mary's River. It follows St. Mary's River northwest until

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it intersects with the City of Fort Wayne Boundary. It follows the boundary north and around until it intersects with the northern edge of 29N12E3. It goes to the northeast corner of this section and then back to the beginning at the southwest corner 29N12E2.

2.2 DESCRIPTION OF MS4 CONVEYANCE SYSTEMS

Conveyance is defined by IDEM as any structural process for transferring stormwater between at least two (2) points. The term includes piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, and roadway. IDEM further defines MS4 conveyance systems as outfall conveyance systems with a pipe diameter of twelve (12) inches or larger and open ditches with a two (2) foot or larger bottom width. Although this definition includes only the main trunks of pipes or open ditches that lead to each regulated outfall, mapping of the total conveyance system (that would also include the tributaries to the main trunks) as budgets allow will aid in illicit discharge detection and elimination efforts. **Table 2-1** lists the estimated linear feet of total conveyance systems within Allen County’s MS4 area broken down by type. This estimate will be used to determine the amount of MS4 conveyances to be mapped each year for compliance. Rule 13 requires that 25% of the outfall conveyance system be mapped each year, in years 2 through 5.

**Table 2-1
Conveyance Systems for Allen County’s MS4 Area**

Conveyance Type	Estimated Feet of Conveyance	% of Total Conveyance System
Open Storm Drain	567,600	36%
Enclosed Pipe	1,003,200	64%
Total	1,570,800	100%

2.3 PRIORITY WATERSHED RANKING AND CONCERNS

The Rule 13 SWQMP-Part B required the identification of areas having reasonable potential for or actually causing stormwater quality problems based upon relevant land use data and identified sensitive areas, as well as, existing and available water quality data. These areas are required to be given the highest priority for the selection of BMPs and the prohibition of new or significantly increased MS4 discharges. Allen County’s Part B Report concluded that certain 14-digit subwatersheds in their MS4 area are to be given the highest priority for implementation of their stormwater program. Since the submittal of Part B, IDEM 2004 data has become available and is incorporated into these report findings.

Allen County has ranked the following priority watersheds identified in Part B in an effort to further investigate water quality issues associated with stormwater runoff over the

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five-year permit term and as a means to further direct and target Rule 13 program activities. Watersheds were ranked based on water quality concerns, such as, waterbody impairments, sensitive areas, and percentage of the subwatershed's land area that is located within the County's MS4 area.

The priority subwatershed ranking protocol is as follows:

- 2004 IDEM 305(b) report findings that were correlated in the County's Part B to stormwater quality (SWQ) issues are given a higher priority since the Rule 13 program implementation can have an impact on improving subwatershed water quality;
- if a subwatershed contains a 2004 IDEM 303(d) listed waterbody, then it is given a higher priority based on its listed number;
- priority is given to those watersheds that contain surface drinking water sources and/or any waterbodies in need of protective measures to ensure that existing conditions do not deteriorate, in this case, the St. Joseph River;
- percentage of the MS4 area located within the subwatershed is a consideration because the County will implement the majority of its Rule 13 program in their delineated MS4 area; and
- proximity of the identified subwatersheds to one another, their drainage patterns, and land uses were considered.

Table 2-2 ranks the previously identified watersheds based on concerns related to the quality of stormwater runoff for the priority watersheds. The map of the priority watersheds is **Exhibit 2** of this report.

**Table 2-2
Priority Watershed Ranking and Concerns**

Priority Ranking	Watershed Name (14-digit HUC)	Watershed Concerns
1	Cedar Creek-Cedar Canyons (04100003090090)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked 41st for E. coli, impaired biotic communities, nutrients, and FCA for PCBs • SJRWI 319 Study, Phosphorus – from faulty septic systems and surface runoff from agricultural lands. Suspended Solids - from streambank erosion, erosion from agricultural lands, and urban runoff.
2	Maumee River-Bullerman Ditch (04100005010040)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked Maumee River 45th for E. coli & FCA for PCBs & Hg, Ditch ranked 266th for impaired biotic communities
3	Maumee River-River Haven (04100005010010)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked Maumee River 45th for E. coli &

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Priority Ranking	Watershed Name (14-digit HUC)	Watershed Concerns
		FCA for PCBs & Hg, stream ranked 278 th for impaired biotic communities
4	Maumee River Sixmile Creek (04100005010060)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked Maumee River 45th for E. coli & FCA for PCBs & Hg
5	Willow Creek-Willow Creek Ditch (04100003090080)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked 257th for E. coli
6	St. Mary's River-Spy Run Creek (04100004060060)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked St. Mary's River 47th for E. coli and FCA for PCBs & Hg
7	St. Mary's River-Snyder Ditch (04100004060030)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked St. Mary's River 47th for E. coli and FCA for PCBs & Hg
8	Becketts Run (04100003100030)	<ul style="list-style-type: none"> • 305(b) related to SWQ • Entire watershed consists of Allen Co and Fort Wayne MS4 area
9	St. Joseph River-Ely Run (04100003100010)	<ul style="list-style-type: none"> • 303(d) ranked St. Joseph River 46th for FCA for PCBs & Hg • St. Joseph River is surface drinking water source • High % of MS4 in watershed
10	St. Joseph River-Tiernan Ditch (04100003100020)	<ul style="list-style-type: none"> • 303(d) ranked St. Joseph River 46th for FCA for PCBs & Hg • St. Joseph River is surface drinking water source • 30% of watershed is MS4 area
11	St. Joseph River-Cedarville Reservoir (04100003070050)	<ul style="list-style-type: none"> • 303(d) ranked St. Joseph River 46th for FCA for PCBs & Hg • St. Joseph River is surface drinking water source • 25% of watershed is MS4 area
12	Aboite Creek-Big Indian/Little Indian Creeks (05120101100060)	<ul style="list-style-type: none"> • 305(b) related to SWQ • Small % of MS4 in watershed
13	Wilbur Ditch-Bottern Ditch (04100005010090)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked 267th for impaired biotic communities • MS4 area merely touches watershed
14	St. Joseph River-Schoppman Drain (04100003100040)	<ul style="list-style-type: none"> • 305(b) related to SWQ • 303(d) ranked St. Joseph River 46th for FCA for PCBs & Hg • St. Joseph River and Reservoir are surface

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Priority Ranking	Watershed Name (14-digit HUC)	Watershed Concerns
		drinking water sources • MS4 area merely touches watershed

2.4 UTILIZATION OF PRIORITY WATERSHED INFORMATION

Allen County will use the information it obtains during further investigation of water quality issues associated with stormwater runoff in the priority watersheds over the five-year permit term to direct and further target Rule 13 program activities. Program elements will be prioritized to coincide with priority watershed rankings. When practical, implementation activities will start with priority watershed #1 and will continue sequentially through ranked priority watersheds. Program priorities will be updated annually as additional water quality information becomes available. **Table 2-3** summarizes how water quality information related to the priority watersheds can be correlated to each of the Rule 13 MCMs.

**Table 2-3
Use of Priority Watershed Information**

MCM	Use of Priority Watershed Information
1	<ul style="list-style-type: none"> • Distribute stormwater educational brochures related to drinking water issues, agricultural issues and stormwater, failing septic tank, and other issues that affect stormwater quality. • SWCD agricultural educational activities focused on phosphorous use and erosion control. • Add priority watershed information to web site.
2	<ul style="list-style-type: none"> • Seek volunteers in priority watershed areas. • Identify and work with established Watershed groups in 14-digit subwatersheds.
3	<ul style="list-style-type: none"> • Prioritize mapping and screening activities. • Prioritize storm drain marking areas.
4	<ul style="list-style-type: none"> • Construction plan review and inspection activities.
5	<ul style="list-style-type: none"> • Post-construction plan review and inspection activities.
6	<ul style="list-style-type: none"> • Prioritize areas for street sweeping program. • Locate sensitive water bodies to minimize salt and sand application.

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3.0	MINIMUM CONTROL MEASURE #1 PUBLIC EDUCATION AND OUTREACH
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Rule 13 requires that residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel within the MS4 area be informed about the impacts that polluted storm water runoff can have on water quality and ways they can minimize their impact on storm water quality. A reasonable attempt must be made to reach all constituents with the MS4 area. An initial assessment of the MS4 area constituents must be conducted to determine initial constituent knowledge and practices as they relate to storm water quality. The following discussion provides information on Allen County's MS4 area Public Education and Outreach Program.

3.1 EXISTING PUBLIC EDUCATION AND OUTREACH BMPs

Compliance with this MCM requires MS4s to demonstrate that residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel within the MS4 are educated about the impacts of polluted stormwater runoff on MS4 area receiving waters.

Existing Public Education and Outreach programs and activities performed by Allen County are as follows:

- Multi-jurisdictional coordination has been established among members of local cities, County, state, and federal agencies via "Watershed Management Teams". The purpose of the teams is to coordinate water resource management efforts, such as educational websites and developing brochures, in an effort to reduce duplication.
- Allen County, in partnership with the City of Fort Wayne, the City of New Haven, the Maumee River Basin Commission (MRBC), and St. Joseph Watershed Initiative (SJRWI) have been coordinating their resources and efforts to provide public education and outreach opportunities to residents throughout the County via the "Allen County Partnership for Water Quality (ACPWQ)".
- The ACPWQ hired a full-time Water Education Specialist in the summer of 2002. This position is funded by Allen County, Fort Wayne, and New Haven. The Water Education Specialist is responsible for creating water quality brochures, providing nonpoint source information, and conducting workshops addressing nonpoint source pollution.
- The Maumee River Basin Partnership of Local Governments (MRBPLG), which includes representatives from Allen County and surrounding counties in Michigan and Ohio, has been established as a regional multi-jurisdictional coordination effort for addressing water resource issues. The MRBPLG is an advocacy group

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that seeks solutions to common water resource issues among communities on a variety of federal and state rules and regulations.

- Educational workshops and informative brochures addressing storm drain stenciling activities, adopt-a-river programs, septic system maintenance, development within the floodplain, runoff control issues, and effective BMPs are conducted by the Allen County Surveyor's Office (ACSO), SWCD, MRBC, SJRWI, Allen County Health Department (ACHD), and/or the IDNR.
- The Allen County Parks Department maintains a Compost Education site at Fox Island Park.
- The Allen County Parks Department conducts environmental education through staff members and volunteers at selected park facilities.
- The Allen County Parks Department sponsors the Little River Wetlands project, which offers clean-up and water quality testing opportunities to volunteers and students.
- The Purdue Cooperative Extension Service (CES) Master Gardener program touches on water quality through education of proper application and ways to reduce herbicides, pesticides, and other chemical applications in lawns and gardens.
- The Horticulture newsletter, sent out by the CES, occasionally contains articles pertaining to water quality through subjects such as reduction of pesticides.
- Currently, the County is developing a website that will include water quantity and quality information and will link with other municipalities throughout the County. Additionally, the City of Fort Wayne maintains a website that includes volunteer information for stream clean-ups and tips for reducing impacts of floodwaters; however, it lacks specific stormwater information.
- The SJRWI's website has information on watershed boundaries, land use conversion, and water quality data.

Allen County's existing Public Education and Outreach activities will help ensure the County's compliance with requirements of Rule 13; however, at present these activities are not sufficient to address the requirements of Rule 13.

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3.2 PROPOSED PUBLIC EDUCATION AND OUTREACH BMPs

The following Education and Outreach BMPs will be developed and implemented by Allen County in order to comply with the minimum requirements of MCM #1. Existing BMPs identified in subsection 3.1 with any needed enhancements, as well as, any new BMPs are included in this section.

The County's MS4 area, as discussed in Part B, is comprised of both urban and agricultural lands. The County's Education and Outreach Program is therefore designed to minimize stormwater impacts originating from both land uses by informing citizens about the impacts of stormwater discharges on water bodies and the steps that they can take to reduce pollutants in stormwater runoff.

As of March 2005, Allen County has initiated implementation of a Storm Water Public Education and Outreach Program as part of this Part C Plan, which outlines the overall strategy for gradually implementing the program and its corresponding BMPs over the next four years.

Table 3-1 provides a summary of the Education and Outreach BMPs to be implemented and identifies the associated measurable goals, programmatic indicators, tracking, timeline, priority areas, and responsible parties associated with each BMP. A detailed description of each BMP is provided below.

Training for Construction Professionals

The County Surveyor's office will administer a local construction and development community education program, which will increase the construction and development community's awareness of changing erosion and sediment control standards. The training will include annual erosion and sediment control BMP training Workshops (the first starting in 2005), which focus on the County's erosion and sediment control program, construction and post-construction stormwater BMPs, special protective measures needed within the County's identified priority watersheds and sensitive areas, and dealing with highly erodible soils. IDEM and IDNR will be consulted on program content. As applicable trainings are offered by other entities, such as, IDNR, the Surveyor's office will promote these activities to construction professionals. Educating construction professionals about the proper selection, installation, inspection, and maintenance of BMPs will help to ensure compliance with the County's erosion and sediment control requirements contained in their ordinance. Information on training activities conducted will be included in the County's Rule 13 Annual Reports.

Newsletter Articles

The ACPWQ currently develops and disseminates newsletter articles for anyone requesting them, which typically consists of groups such as neighborhood associations. Articles are written in a series called "Water Matters", which features a new article every other month. The articles include a variety of information on water quality topics, such as, those related to stormwater quality. Each year the series will include an article that discusses topics such as the County's SWQMP, erosion and sediment control

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measures, agricultural issues related to stormwater quality, and other relevant stormwater information designed to enhance the urban and rural community's understanding of the County's stormwater issues. As the need arises, ACPWQ staff can develop articles to address relevant topics of concern. Staff from the ACPWQ will be responsible for drafting and disseminating the articles. The ACPWQ will document the total number of articles published, the topics of each article, and the total number of groups receiving the articles. This information will be included in the County's Rule 13 Annual Reports.

Web Site

During 2005, the ACPWQ will create a new, extensive web site addressing water quality issues in order to promote better public awareness. The web site will also be designed to educate residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel about the impacts polluted stormwater runoff can have on water quality and the ways they can minimize their impacts on storm water quality. The web site will provide dates, times, and sponsors of stormwater related events such as workshops, clean-up events and public meetings. The web site will include links to the County's SWQMP, stormwater related ordinances, and other relevant information. The web site will include a counter to identify the number of "hits" the site receives. In addition, the web site will have an e-mail function by which an individual could ask a question regarding the County's Stormwater Program or stormwater in general. Information will be added to make the public aware of the priority watershed ranking and concerns identified in subsection 2.3. The total number of hits the site receives along with any questions and answers provided will be submitted with the County's Rule 13 Annual Reports.

Stormwater Survey

During 2005, the ACPWQ will develop and conduct a Stormwater Survey to assess the public's initial knowledge and understanding of stormwater issues and to establish a baseline for MCM #1. The ACPWQ will evaluate the survey results in order to better target their education and outreach activities. The results of the survey as well as the conclusions drawn by the ACPWQ will be included with the County's first Rule 13 Annual Report to be submitted in March of 2006. Constituents could be surveyed at the end of the permit cycle to determine program effectiveness.

Stormwater Brochures

The ACPWQ has previously developed a series of six brochures which include stormwater quality information. Topics include green landscaping, household hazardous waste, stormwater pollution, septic tank issues, combined sewer overflows, and drinking water quality. The "Storm Water Activity Book" (a coloring book designed to reach grades K-3) was also previously developed and has been purchased by other Rule 13 entities around the state for distribution. The ACPWQ will continue to distribute these brochures and activity books as a means to educate residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel about the impacts polluted storm water runoff can have on water quality and the ways they can minimize their impacts on stormwater quality. Additional brochures will be

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developed as topics and targeted activities necessitate them. Brochures will be disseminated via mass mailings within priority watersheds, at local places of business, at County offices, and at the County 4-H Fair. Staff from the ACPWQ will be responsible for both production and dissemination of the brochures. Copies of the brochures along with the total number of brochures distributed will be documented and included in the County's Rule 13 Annual Reports.

Solid Waste Management District Promotions

In order to educate community members on the importance of pollution prevention and recycling programs, the County will frequently advertise and promote the activities of the Allen County Solid Waste Management District (ACSWMD). This will also help with eliminating illegal dumping activities and help to satisfy requirements of MCM #3. The District identifies and designs programs to educate and promote the importance of reducing, reusing and recycling. Such programs include: Tire Amnesty Day, Tox-Away Day, Christmas Tree Recycling, Electronics Recycling, Phone Book Recycling, Backyard Composting Demonstration Sites and the Trash-to-Treasure Art Contest. In addition to education, the District provides business and local government with financial incentives to expand recycling and composting programs in Allen County. The Diversion Credit Program supports local recyclable material processors by making it economically feasible to process and deliver recyclable materials to industry. The County will coordinate with the SWMD to estimate the total waste collected at their different facilities and in order to target activities in priority watersheds. All of this information will be included in the County's Rule 13 Annual Reports.

Soil and Water Conservation District (SWCD) Activities

Agricultural land uses account for approximately 67% of land uses within Allen County's MS4 Area. As concluded in Part B, to minimize potential impacts associated with agricultural land uses, agricultural producers need to be educated on and encouraged to use BMPs. The SWCD will encourage local agricultural producers to implement agricultural BMPs including, but not limited to, conservation tillage, nutrient and pesticide management, buffer strips, and wetland restoration. They will focus on those BMPs which are part of cost share programs. Day-to-day contacts with the agricultural community will be enhanced to include stormwater BMPs. Coordinated County activities will more effectively utilize staff and resources and targeted outreach activities will ensure education materials are directed to those who have been identified as significant contributors of stormwater pollutants. Program activities and adjustments will be documented in the County's Rule 13 Annual Reports.

Mass Media Opportunities

Mass media has been shown to be a means to gain a higher level of exposure of stormwater education information and to create a higher level of impressions, which will educate a greater number of individuals. Local radio, TV stations, and newspapers will be contacted by the ACPWQ during 2005 about possible stormwater quality Public Service Announcements (PSAs). The County will track the number of PSAs produced and the number of airings. As this activity progresses, information will be included with the County's Rule 13 Annual Reports.

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**Table 3-1
Public Education and Outreach BMPs**

Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
<p style="text-align: center;">Training for Construction Professionals</p>	<ul style="list-style-type: none"> • Administer a local construction and development community education program. • Conduct first workshop in 2005, then annually. • Promote other activities, such as regional IDNR trainings. • Track using Programmatic Indicator #2. 	<ul style="list-style-type: none"> • Offer first workshop in 2005, then annually. • On-going, promote other applicable training opportunities. 	<p>Include training on erosion and sediment control, post-construction BMPs, priority watersheds, and sensitive areas.</p>	<p>Surveyor's Office and outsourced.</p>
<p style="text-align: center;">Newsletter Articles</p>	<ul style="list-style-type: none"> • Publish one new article every other month for "Water Matters". • As need arises, develop articles to address relevant topics of concern. • Track number of articles written, groups distributed to, and titles/subject matter. 	<p>At a minimum, 6 Articles published every year, every other month.</p>	<p>Countywide.</p>	<p>ACPWQ and Surveyor's Office.</p>

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Web Site	<ul style="list-style-type: none"> • Create a new, extensive, water quality website with detailed stormwater information in 2005. • Update with new information, continually. • Answer questions generated by web site on an on-going basis. • Track total number of hits site receives and public questions asked and answers to them. 	<ul style="list-style-type: none"> • In 2005, create web site. • On-going, update information and respond to public questions. 	Include information on program priorities, watersheds, and sensitive areas.	ACPWQ and Surveyor's Office.
Stormwater Survey	<ul style="list-style-type: none"> • Develop and conduct survey by December 2005. • Evaluate survey results to assess the public's initial knowledge and understanding of stormwater issues. • Use survey results to target outreach efforts. • Track using Programmatic Indicator #1. 	<ul style="list-style-type: none"> • By December 2005, develop and conduct survey. • In March 2006, include evaluation and results in Annual Report. • In 2008, consider repeating survey. 	Countywide.	ACPWQ and Surveyor's Office.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Stormwater Educational Brochures	<ul style="list-style-type: none"> • Distribute existing ACPWQ brochures and activity books beginning in 2005 as a means to provide stormwater education materials. • As need arises, develop brochures to address relevant topics of concern. • Track number of brochures distributed and include copies with Annual Report. 	<ul style="list-style-type: none"> • Begin brochure distribution March 2005. • As needed, additional brochures distributed. 	<p><u>Priority topics include:</u></p> <ul style="list-style-type: none"> • Green Landscaping • HHW • Stormwater Pollution • Septic Tank Issues • CSOs • Drinking Water Quality <p><u>Priority areas for distribution:</u></p> <ul style="list-style-type: none"> • Within priority watersheds • Businesses • County 4-H Fair 	ACPWQ and Surveyor's Office.
Solid Waste Management District Promotions	<ul style="list-style-type: none"> • Promote activities of the ACSWMD as a means to educate community members on the importance of pollution prevention and available recycling programs, as these activities occur. • Track using Programmatic Indicators #10, #11, and #12. 	Begin 2005, then on-going.	Countywide.	SWMD, ACPWQ, and Surveyor's Office.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
<p style="text-align: center;">Soil and Water Conservation District (SWCD) Activities</p>	<ul style="list-style-type: none"> • Coordinate with the Allen County SWCD to minimize potential impacts on stormwater quality due to agricultural land uses. • Educate and encourage agricultural producers to use BMPs. • Conduct annual seminar on conservation BMPs. • Include stormwater education information in annual “Ag Day” event. • Document program activities in Annual Report. 	<p>On-going and annual activities.</p>	<p>Countywide with emphasis on agricultural land use.</p>	<p>SWCD</p>
<p style="text-align: center;">Mass Media Opportunities</p>	<ul style="list-style-type: none"> • Contact local radio, TV stations, and newspapers by November 2005 about possible Public Service Announcements (PSAs). • Document progress in Annual Report. 	<p>During 2005.</p>	<p>Countywide and include information on priority watershed concerns.</p>	<p>ACPWQ and Surveyor’s Office.</p>

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4.0

**MINIMUM CONTROL MEASURE #2
PUBLIC PARTICIPATION & INVOLVEMENT**

Rule 13 requires that documented opportunities are given to constituents within the MS4 area to participate in the storm water management program development and implementation. The MS4 entity must comply with public notice requirements to allow public comment. An initial assessment of MS4 area constituents must be conducted to identify interested individuals for participation in the MS4 area stormwater program.

4.1 EXISTING PUBLIC PARTICIPATION AND INVOLVEMENT BMPs

Compliance with MCM #2 requires MS4s to demonstrate that opportunities were provided for stakeholders to participate in the development and implementation of the MS4s SWQMP.

Existing Public Participation and Involvement programs performed by Allen County are as follows:

- The County conducts joint Drainage Board meetings with other municipalities, such as Huntertown and Leo-Cedarville. The monthly drainage board meetings and quarterly meetings with the Purdue Cooperative Extension Service (CES) are open to public.
- The Allen County SWCD sponsors public meetings that address land use conservation and water quality improvement topics.
- The Allen County Solid Waste Management District encourages public participation in proper disposal of solid wastes to reduce the volume that enters landfills.
- The Allen County Parks Department supports stream-side and road-side clean-ups as well as water quality testing opportunities for volunteers and students through the Little River Wetlands project
- The MRBC maintains a website with information on volunteer opportunities for land use conversion, flood proofing, buyouts, and floodplain mapping.

Existing Public Participation and Involvement activities performed by Huntertown are as follows:

- The Town's Street Department conducts an annual leaf/litter collection day. The Street Department collects leaves and other debris placed in front of residences throughout the Town.

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The County's existing Public Participation and Involvement activities will help ensure the County's compliance with requirements of Rule 13. However, these activities are currently not sufficient to address the requirements of Rule 13.

4.2 PROPOSED PUBLIC PARTICIPATION AND INVOLVEMENT BMPs

The following Public Participation and Involvement BMPs will be developed and implemented by Allen County in order to comply with the minimum requirements of MCM #2. Existing BMPs identified in subsection 4.1 with any needed enhancements, as well as, any new BMPs are included in this section.

As of March 2005, Allen County has initiated the implementation of a Storm Water Public Participation and Involvement Program as part of this Part C Plan, which outlines the overall strategy for gradually implementing the program and its corresponding BMPs over the next four years. The County's program is designed to engage citizens, form partnerships, and gain greater support and compliance for the program. The presumptive approach of implementing this program assumes that overall stormwater quality will improve each year by better educating the public to reduce the amount of pollutants entering the conveyance system.

Table 4-1 provides a summary of the Public Participation and Involvement BMPs to be implemented and identifies the associated measurable goals, programmatic indicators, tracking, timeline, priority areas, and responsible parties associated with each BMP. A detailed description of each BMP is provided below.

Soil and Water Conservation District (SWCD) Activities

Agricultural land uses account for approximately 67% of land uses within Allen County's MS4 Area. As concluded in Part B, to minimize potential impacts associated with agricultural land uses, agricultural producers need to be educated on and encouraged to use BMPs. The SWCD will encourage local agricultural producers to implement agricultural BMPs including, but not limited to, conservation tillage, nutrient and pesticide management, buffer strips, and wetland restoration. They will focus on those BMPs which are part of cost share programs. Day-to-day contacts with the agricultural community will be enhanced to include stormwater BMPs. Coordinated County activities will more effectively utilize staff and resources and targeted outreach activities will ensure education materials are directed to those who have been identified as significant contributors of stormwater pollutants. Program activities and adjustments will be documented in the County's Rule 13 Annual Reports submitted to IDEM.

Rule 13 Public Participation Lists

During 2005, the ACPWQ will identify those groups and individuals that would be most likely to have an interest in the County's Stormwater Program. The ACPWQ will also develop a list of volunteer activities, such as, monitoring water quality, storm drain marking, etc., that identified groups and individuals would most likely participate in.

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These lists will be used to document that sufficient opportunities were allotted to involve all constituents interesting in participating in the program. The lists, number of and information on contacts made to individuals and groups, and volunteer hours donated will be included with the County's Rule 13 Annual Reports submitted to IDEM.

Public Meetings

A public meeting was held on November 17, 2004, to give the public an opportunity to comment on the County's proposed SWQMP – Part C before it was finalized and submitted to IDEM. One public hearing was held on February 23, 2005 on the County's Stormwater Management Ordinance to give a first reading. Adoption of the Ordinance is anticipated at the March 30, 2005 public meeting of the County Commissioners. Public meetings inform citizens about stormwater impacts and gain support for the program.

Training for Construction Professionals

The County Surveyor's office will administer a local construction and development community education program, which will increase the construction and development community's awareness of changing erosion and sediment control standards. The training will include annual erosion and sediment control BMP training Workshops (the first starting in 2005), which focus on the County's erosion and sediment control program, construction and post-construction stormwater BMPs, special protective measures needed within the County's identified priority watersheds and sensitive areas, and dealing with highly erodible soils. IDEM and IDNR will be consulted on program content. As applicable trainings are offered by other entities, such as, IDNR, the Surveyor's office will promote these activities to construction professionals. Educating construction professionals about the proper selection, installation, inspection, and maintenance of BMPs will help to ensure compliance with the County's erosion and sediment control requirements contained in their ordinance. Information on training activities conducted will be included in the County's Rule 13 Annual Reports.

Storm Drain Marking

To increase citizen awareness of the County's stormwater program through public participation, beginning in 2005, the ACPWQ will organize and conduct storm drain marking activities throughout the County's MS4 area. Three hundred DAS curb markers that have a "Only Rain in the Storm Drain" message and 40 traffic vests have been purchased by the ACPWQ. Door hangers with stormwater quality information are also ready to go. The ACPWQ will identify locations such as subdivisions, commercial parks, and other areas that warrant storm drain marking and provide maps to volunteer groups. Storm drain marking activities will be targeted and first occur within priority watersheds listed in Section 2.3. During 2005, the ACPWQ will investigate tracking the placed markers through the County's GIS system. The ACPWQ will be tasked with coordinating and advertising these events and programs as well as identifying local volunteers and sponsors. The County will document the number of volunteers that participate as well as number and location of storm drains marked or cast. This information will be included in the County's Rule 13 Annual Reports submitted to IDEM.

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Citizen Complaints

The County Surveyor's Office currently handles and responds to complaints from the public on illegal dumping, illicit discharges, poor erosion control, and other activities that negatively impact stormwater quality. Citizens have the opportunity to submit such complaints by telephoning the Surveyor's Office or by coming in person to the City-County Building.

The number of complaints received, follow up on citizen reports, and corrections taken, etc. will be documented in the County's ASIST database. The database will identify the details of each complaint and the subsequent actions taken by the County as a result. All of this information will be compiled and included in the County's Rule 13 Annual Reports submitted to IDEM.

Citizen Panels and Citizen Watch Groups

The County chooses at this time not to use specific citizen panels or watch groups as part of their stormwater management program. Budgetary constraints do not allow for staff time to conduct these meetings and organize these groups.

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**Table 4-1
Public Participation and Involvement BMPs**

Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
<p align="center">Soil and Water Conservation District (SWCD) Activities</p>	<ul style="list-style-type: none"> • Coordinate with the Allen County SWCD to minimize potential impacts on stormwater quality due to agricultural land uses. • Educate and encourage agricultural producers to use BMPs. • Conduct annual seminar on conservation BMPs. • Include stormwater education information in annual "Ag Day" event. • Document program activities in Annual Report. 	<p>On-going and annual activities.</p>	<p>Countywide with emphasis on agricultural land use.</p>	<p>SWCD.</p>
<p align="center">Rule 13 Public Participation List</p>	<ul style="list-style-type: none"> • Identify and list those groups and individuals that would be most likely to have an interest in the County's Stormwater Program during 2005. • Develop a list of volunteer activities, such as, monitoring water quality, storm drain marking, etc., during 2005. • Update both lists as needed. 	<p>During 2005, then updated as needed.</p>	<p>Countywide and seek out volunteers residing in priority watersheds.</p>	<p>ACPWQ and Surveyor's Office.</p>

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
	<ul style="list-style-type: none"> • Track volunteer hours donated and include with lists and in Annual Reports. 			
Public Meetings	<ul style="list-style-type: none"> • One public meeting was held on November 17, 2004, on the County's proposed program before it was finalized. • One public hearing was held on February 23, 2005, for the first reading of the Stormwater Management Ordinance. • Hold public hearing for final adoption of Stormwater Management Ordinance by March 30, 2005. • Track using Programmatic Indicators #2 and #3. 	Complete by March 30, 2005.	Public meetings advertised countywide.	ACPWQ and Surveyor's Office.
Training for Construction Professionals	<ul style="list-style-type: none"> • Administer a local construction and development community education program. • Conduct first workshop in 2005, then annually. • Promote other activities, such as regional IDNR trainings. • Track using Programmatic Indicator #2. 	<ul style="list-style-type: none"> • Offer first workshop in 2005, then annually. • On-going, promote other applicable training opportunities. 	Include training on erosion and sediment control, post-construction BMPs, priority watersheds, and sensitive areas.	Surveyor's Office and outsourced.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Storm Drain Marking	<ul style="list-style-type: none"> • Develop and implement program by November 2005. • Track using Programmatic Indicators #3 and #4. 	Begin 2005, then on-going.	Countywide as volunteers are found.	ACPWQ and Surveyor's Office.
Citizen Complaints	<ul style="list-style-type: none"> • Listen and respond to citizen complaints. • Take appropriate follow up actions. • Document citizen reports and responses in ASIST database. • Track using Programmatic Indicators #2 and #3. 	On-going.	Countywide.	ACPWQ and Surveyor's Office.
Citizen Panels and Citizen Watch Groups	Not applicable at this time.	Not applicable.	Not applicable.	Not applicable.

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5.0	MINIMUM CONTROL MEASURE #3 ILLCIT DISCHARGE DETECTION AND ELIMINATION
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Rule 13 requires the development and implementation of a strategy to detect and eliminate illicit discharges to the MS4 conveyance. A storm sewer system map showing the location of all outfalls and MS4 conveyances under the MS4 operator’s control and the names and locations of all waters that receive discharges from those outfalls must be developed. Through an ordinance or other regulatory mechanism, illicit discharges must be prohibited from entering the MS4 conveyances and appropriate enforcement procedures and actions are required.

A plan must be developed to detect, address, and eliminate illicit discharges, including illegal dumping into the MS4 conveyance. This plan must locate problem areas via dry weather screening or other means, determine the source, remove or otherwise correct illicit connections, and document actions taken. The plan must also identify all active industrial facilities within the MS4 area that discharge into the MS4 conveyance.

All public employees, businesses, and the general public must be educated about the hazards associated with illicit discharges and the improper disposal of waste. The educational effort must include informational brochures and guidances for specific audiences and school curricula and the public reporting of illicit discharges and spills. In order to give the public alternatives to improper disposal of wastes, the MS4 entities must initiate or help coordinate existing recycling programs in the MS4 area for commonly dumped wastes, such as motor oil, antifreeze, and pesticides.

5.1 EXISTING ILLICIT DISCHARGE IDENTIFICATION AND ELIMINATION BMPs

Compliance with this MCM requires MS4s to develop and implement a strategy to detect and eliminate illicit discharges to the MS4 conveyance system. To this end, the County will need to develop a storm sewer system map that identifies specified conveyances and outfalls. In addition, to maximize effectiveness, it will be important for all field staff to receive training and education regarding illicit discharges to ensure that staff identify and respond to illicit discharges appropriately.

Existing Illicit Discharge Detection and Elimination activities performed by Allen County are as follows:

- The Allen County Health Department (ACHD) follows the state statute regarding health hazards, such as septic tie-in with stormwater sewers. Additionally, the ACHD follows the state regulation, which prohibits open discharge of sanitary sewers, such as discharge into a stormwater sewer.
- The ACHD has performed dye testing and water quality testing for E. coli at various locations throughout the County to identify failing septic systems.

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- The ACHD has partially identified effluent pipes discharging into stormwater conveyance structures.
- Complaints of non-stormwater discharges into stormwater conveyance systems are handled by staff at the ACHD. The ACHD works with land owners or businesses to eliminate the non-stormwater discharge. If the violation is not remedied, then the ACHD has the authority to assess fines.
- Based on previous studies conducted by IDEM, the ACHD has prioritized some illegal discharge areas and are working with regional sewer districts to install sanitary sewers.
- ACHD works with the ACPWQ to develop educational materials and programs to educate residences and businesses regarding illicit discharges and proper maintenance of septic systems.
- The Allen County SWCD hosts several workshops for homeowners regarding proper septic maintenance.
- The Allen County Solid Waste Management District enforces illegal dumping that occurs within the County through County and State ordinances.

The existing Illicit Discharge Detection and Elimination activities discussed above will help ensure Allen County's compliance with requirements of Rule 13. However, these activities are currently not sufficient to address the requirements of Rule 13.

5.2 PROPOSED ILLICIT DISCHARGE DETECTION AND ELIMINATION BMPs

The following Storm Water Illicit Discharge Detection and Elimination (IDDE) BMPs will be developed and implemented by Allen County in order to comply with the minimum requirements of MCM #3. Existing BMPs identified in subsection 5.1 with any needed enhancements, as well as, any new BMPs are included in this section.

As of March 2005, Allen County has initiated the implementation of a Storm Water Illicit Discharge Detection and Elimination Program as part of this Part C Plan, which outlines the overall strategy for gradually implementing the program and its corresponding BMPs over the next four years. The County's program is designed to gain a thorough awareness of the County's separate storm conveyance system and thereby allowing the identification and elimination of illicit discharges entering the system. The program also establishes the legal, technical, and educational means needed to eliminate illicit discharges. The County's reduction goal is to remove 25% of cross connections and illicit discharges from their total conveyance system each year for permit years two through five.

Table 5-1 provides a summary of the IDDE BMPs listed below and identifies the

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associated measurable goals, programmatic indicators, tracking, timeline, priority areas, and responsible parties associated with each BMP. Detailed description of each BMP is provided below.

Stormwater System Map

As required by Rule 13, the County will develop a storm sewer system map that identifies the locations of all outfalls and conveyances under the MS4 operator's control. Having this map will increase effectiveness of County responses to illicit discharges entering the storm sewer system. Conveyance is defined by IDEM as any structural process for transferring stormwater between at least two (2) points. The term includes piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, and roadway. IDEM further defines MS4 conveyance systems as outfall conveyance systems with a pipe diameter of twelve (12) inches or larger and open ditches with a two (2) foot or larger bottom width. Although this definition includes only the main trunks of pipes or open ditches that lead to each regulated outfall, mapping of the total conveyance system (that would also include the tributaries to the main trunks) as budgets allow will aid in illicit discharge detection and elimination efforts.

Existing as-builts identifying storm sewer systems in newly developed county areas will be utilized when possible. Only conveyance systems with a pipe diameter of twelve inches or larger and open ditches with a two foot or larger bottom width will be mapped. The map will also identify all waters that receive discharges from those outfalls. As required by Rule 13, 25% of the conveyance system will be mapped in the second year of the permit. An additional 25% of the system will be mapped in each of the consecutive years of the permit resulting in 100% of the system being mapped at the end of the five-year permit term. The County will begin mapping the stormwater conveyance systems within the priority watersheds as identified within Section 2.3. Mapping activities will be documented and included in the County's Rule 13 Annual Reports submitted to IDEM.

Illicit Discharge Detection and Elimination Ordinance

As required by Rule 13, the County will develop, implement and enforce an Illicit Discharge Detection and Elimination (IDDE) Ordinance, which provides legal authority to keep illicit discharges out of the stormwater conveyance system. The IDDE Ordinance is included in the Stormwater Management Ordinance that addresses illicit discharges, construction runoff, and post-construction runoff. Adoption of the Ordinance is anticipated at the March 30, 2005 public meeting of the County Commissioners. The County Surveyor's Office will be responsible for enforcing the requirements of the IDDE Ordinance. The County's Stormwater Management Ordinance, which includes the Rule 13 IDDE Ordinance requirements, is a supplemental document that is bound separately from this report. Any activities towards revising the ordinance will be documented in the County's Rule 13 Annual Reports submitted to IDEM.

Illicit Discharge Detection and Elimination Plan

The County has developed an IDDE Plan, which is a supplemental document that is

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bound separately from this report, to ensure effective detection and elimination of illicit discharges to and in Allen County's separate storm sewer system. The County's IDDE Plan identifies the methods for detecting, addressing and eliminating illicit discharges, including illegal dumping, into the County's MS4 conveyance system. The plan includes specifics on dry weather screening, methods for determining the source of illicit discharges, removing or correcting illicit connections and documenting actions taken. Existing Health Department E. coli monitoring, dye testing, and filming portions of the system will be incorporated into the IDDE plan. Only conveyance systems with a pipe diameter of twenty-four inches or larger and open ditches with a two foot or larger bottom width will be screened. The County has identified all active industrial facilities within the MS4 area that discharge into the County's storm sewer system. A table listing these industrial facilities taken from the County's IDDE Plan is included in Appendix J. The County's presumptive approach and reduction goal is to remove 25% of cross connections and illicit discharges from their total conveyance system each year for permit years two through five. The IDDE Plan will target activities within the priority watersheds as identified within Section 2.3. Program adjustments will be documented in the County's Rule 13 Annual Reports submitted to IDEM.

Citizen Complaints

The County Surveyor's Office currently handles and responds to complaints from the public on illegal dumping, illicit discharges, poor erosion control, and other activities that negatively impact stormwater quality. Citizens have the opportunity to submit such complaints by telephoning the Surveyor's Office or by coming in person to the City-County Building.

The number of complaints received, follow up on citizen reports, and corrections taken, etc. will be documented in the County's ASIST database. The database will identify the details of each complaint and the subsequent actions taken by the County as a result. All of this information will be compiled and included in the County's Rule 13 Annual Reports submitted to IDEM.

Storm Drain Marking

To increase citizen awareness of the County's stormwater program through public participation, beginning in 2005, the ACPWQ will organize and conduct storm drain marking activities throughout the County's MS4 area. Three hundred DAS curb markers that have a "Only Rain in the Storm Drain" message and 40 traffic vests have been purchased by the ACPWQ. Door hangers with stormwater quality information are also ready to go. The ACPWQ will identify locations such as subdivisions, commercial parks, and other areas that warrant storm drain marking and provide maps to volunteer groups. Storm drain marking activities will be targeted and first occur within priority watersheds listed in Section 2.3. During 2005, the ACPWQ will investigate tracking the placed markers through the County's GIS system. The ACPWQ will be tasked with coordinating and advertising these events and programs as well as identifying local volunteers and sponsors. The County will document the number of volunteers that participate as well as number and location of storm drains marked or cast. This information will be included in the County's Rule 13 Annual Reports submitted to IDEM.

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The County's ordinance requires that all new installations or replacements of cast iron catch basins, grates, and inlet covers for county and/or privately owned projects be permanently cast with a customized message, such as, a trout emblem and "DUMP NO WASTE, DRAINS TO WATERWAYS" message. The County will track number of and locations of units installed and report this as part of the County's Rule 13 Annual Reports submitted to IDEM. Cast iron provides an effective, low cost means to discourage illicit dumping in conjunction with the County's storm drain marking program. Cast designs serve as an enduring directive against dumping and build public awareness of the dangers of water pollution and its impact on local waterways.

Solid Waste Management District Promotions

In order to educate community members on the importance of pollution prevention and recycling programs, the County will frequently advertise and promote the activities of the Allen County Solid Waste Management District (ACSWMD). This will also help with eliminating illegal dumping activities and help to satisfy requirements of MCM #3. The District identifies and designs programs to educate and promote the importance of reducing, reusing and recycling. Such programs include: Tire Amnesty Day, Tox-Away Day, Christmas Tree Recycling, Electronics Recycling, Phone Book Recycling, Backyard Composting Demonstration Sites and the Trash-to-Treasure Art Contest. In addition to education, the District provides business and local government with financial incentives to expand recycling and composting programs in Allen County. The Diversion Credit Program supports local recyclable material processors by making it economically feasible to process and deliver recyclable materials to industry.

The County will coordinate with the SWMD to estimate the total waste collected at their different facilities and in order to target activities in priority watersheds. In addition, all stormwater related educational activities that occur within the County's MS4 area will be documented. All of this information will be included in the County's Rule 13 Annual Reports.

Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training

The County will conduct training for staff on the hazards associated with illicit discharges and improper disposal of waste and pollution prevention, including ways to manage activities to prevent substantial quantities of chemicals and water from entering the conveyance system. Appropriate MS4 entity staff will be trained beginning in 2005 and periodic refresher sessions will be conducted at least annually. The County will document training opportunities provided and attendees. Trainings will emphasize how substantial quantities of chemicals and water can lead to elevated levels of nutrients and toxins in receiving waters. Information will be presented on priority watersheds and sensitive areas. Additional topics will include proper storage and disposal of hazardous wastes, vegetative waste handling, fertilizer and pesticide application, and the function of implemented BMPs. The number of trainings, number of staff attending trainings, and information presented will be tracked and reported in the County's Rule 13 Annual Reports submitted to IDEM.

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**Table 5-1
Illicit Discharge Detection and Elimination BMPs**

Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Stormwater System Map	<ul style="list-style-type: none"> • Map 25% of the conveyance system between 2005 and 2008 in conjunction with screening efforts. • Track using Programmatic Indicators #5 and #6. 	<ul style="list-style-type: none"> • Begin March 2005, then on-going. • 25% complete end of 2005 • 50% complete end of 2006 • 75% complete end of 2007 • 100% complete end of 2008 	<ul style="list-style-type: none"> • Map all main trunk lines of conveyances with 12" and larger diameter and open conveyances with a 2' and larger bottom width. • Begin mapping activities in priority watershed areas: <ol style="list-style-type: none"> 1. Cedar Creek-Cedar Canyons 2. Maumee River-Bullerman Ditch 3. Maumee River-River Haven 4. Maumee River Sixmile Creek 5. Willow Creek-Willow Creek Ditch 6. St. Mary's River-Spy Run Creek 7. St. Mary's River-Snyder Ditch 8. Becketts Run 9. St. Joseph River-Ely Run 10. St. Joseph River-Tiernan Ditch 11. St. Joseph River-Cedarville Reservoir 12. Aboite Creek-Big Indian/Little Indian Creeks 13. Wilbur Ditch-Bottern Ditch 14. St. Joseph River-Schoppman Drain 	Surveyor's Office.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Illicit Discharge Detection and Elimination (IDDE) Ordinance.	Adopt Stormwater Management Ordinance by March 30, 2005.	Implementation beginning March 30, 2005.	Countywide.	Surveyor's Office.
IDDE Plan	<ul style="list-style-type: none"> • Identify and eliminate illicit storm sewer connections. • Enhance existing Health Department die screening program. • Check 25% of the conveyance system for years 2-5 of the permit in conjunction with mapping and screening efforts. • Update program priorities annually. • Track using Programmatic Indicators #7, #8, and #9. 	Implementation beginning March 2005, then updated annually.	<ul style="list-style-type: none"> • Begin in and work through 14-digit watersheds areas that have E. coli listings in 305(b) or 303(d) reports. • Prioritize outfalls checked for further, detailed follow up investigations. 	Surveyor's Office.
Citizen Complaints	<ul style="list-style-type: none"> • Listen and respond to citizen complaints. • Take appropriate follow up actions. • Document citizen reports and responses in ASIST database. • Track using Programmatic Indicators #2 and #3. 	On-going.	Countywide.	ACPWQ and Surveyor's Office.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Storm Drain Marking	<ul style="list-style-type: none"> • Develop and implement program by November 2005. • Track using Programmatic Indicators #3 and #4. 	Begin 2005, then on-going.	Countywide as volunteers are found.	ACPWQ and Surveyor's Office.
Solid Waste Management District Promotions	<ul style="list-style-type: none"> • Promote activities of the ACSWMD as a means to educate community members on the importance of pollution prevention and available recycling programs, as these activities occur. • Track using Programmatic Indicators #10, #11, and #12. 	Begin 2005, then on-going.	Countywide.	SWMD, ACPWQ, and Surveyor's Office.
Annual IDDE, Good Housekeeping, & Pollution Prevention Staff Training	<ul style="list-style-type: none"> • Develop training program and conduct one in 2005. • Conduct annual refresher training. • Track using Programmatic Indicator #2. 	Begin in 2005, then annual updates.	Focus on MS4 conveyance system, MS4 operational areas, and Highway Department Facilities.	Outsourced.

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6.0	MINIMUM CONTROL MEASURE #4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL
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Rule 13 requires the development of an ordinance or other regulatory mechanism and establishment of a construction program that controls polluted runoff from construction activities that disturb one or more acres of land in the MS4 area. This construction program must include a permitting process, erosion control plan review process, site inspections, and enforcement. The permitting process must include a requirement for the construction project site owner to submit a copy of the permit application directly to IDEM. MS4 entities must provide an opportunity to the local SWCD to provide comments and recommendations to the MS4 operator on individual projects.

The construction program must include requirements for the implementation of appropriate BMPs on construction sites to control sediment, erosion, and other waste. MS4 entities must review and approve construction plans submitted by the construction site operator before construction activity commences. Procedures must be developed for site inspection and enforcement to ensure that BMPs are properly installed. These procedures must include a means to identify priority sites for inspection and enforcement, as well as, a means to receive and consider public inquiries, concerns, and information submitted regarding local construction activities. A tracking process must be implemented in which submitted public information is documented and then given to appropriate staff for follow up.

MS4 area personnel responsible for plan review, inspection, and enforcement of construction activities shall receive annual training.

6.1 EXISTING CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

Compliance with MCM #4 requires MS4s to develop, implement, manage, and enforce an erosion and sediment control program for construction activities that disturb one or more acres of land within the MS4 area. In Allen County, stormwater runoff controls for all construction activities are currently regulated under the Allen County Drainage and Sediment Control Ordinance. In the Town of Hometown and Town of Leo-Cedarville, stormwater runoff controls for all construction activities are currently regulated via the Allen County's Drainage and Sediment Control Ordinance. Additionally, Allen County relies on the SWCD and the IDNR Division of Soil Conservation for implementation of Indiana's Rule 5 program for minimizing stormwater runoff from construction activities.

Existing local Construction Site Runoff Control activities implemented by Allen County are as follows:

- The Allen County Drainage and Sediment Control Ordinance contains enforcement language relating to runoff control, but not for site inspections. The ordinance states that all erosion control measures required by the ordinance shall meet the design criteria, standards, and specifications for erosion control

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measures outlined in “Indiana Handbook for Erosion Control in Developing Areas, Guidelines for Protecting Water Quality Through the Control of Soil Erosion and Sedimentation on Construction Sites”, published by the Division of Soil Conservation, IDNR (October, 1992). If the requirements of the ordinance are not met, no building permit will be issued.

- The Allen County Surveyor’s Office conducts plan review items regarding new construction, including plat reviews, detention requirements, construction plans, and permit applications.
- The SWCD reviews and approves erosion and sediment control plans according to Rule 5 requirements (sites disturbing 5 acres or more of land) for Allen County.
- The Complaint Section of the Allen County Surveyor’s Office handles complaints received by the general public. A representative follows up with the complaint by performing a site visit and assessing the issue. The Surveyor’s Office handles the complaint if it pertains to agricultural drainage issues or water quantity issues within subdivisions. If the complaint relates to erosion control within subdivisions, then the complaint is redirected to the NRCS, which has enforcement capabilities through the issuance of fines.

Existing local Construction Site Runoff Control activities implemented by Hometown are as follows:

- All plan reviews for the Town are conducted by the Allen County Plan Commission.
- All new construction plans are submitted to the Allen County Surveyor’s Office, which conducts plan review items regarding new construction, including plat reviews, detention requirements, construction plans, and permit applications.
- Inspection of sites is performed at the recommendation of the Allen County Surveyor’s Office or through citizen complaints.

Existing local Construction Site Runoff Control activities implemented by Leo-Cedarville are as follows:

- All new construction plans are submitted to the Allen County Surveyor’s Office, which conducts plan review items regarding new construction, including plat reviews, detention requirements, construction plans, and permit applications.
- All street projects are submitted to the Allen County Highway Department for review.

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- Citizen complaints regarding construction activities are handled by the Clerk Treasurer or Town Council. The Town Council reviews the complaint and directs it toward the Town Engineer or Allen County Surveyor's Office.

The existing Construction Site Stormwater Control activities discussed above will help ensure the County's compliance with requirements of Rule 13. However, these activities are currently not sufficient to address the requirements of Rule 13.

6.2 PROPOSED CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

The following Construction Site Stormwater Runoff Control BMPs will be developed and implemented by Allen County in order to comply with the minimum requirements of MCM #4. Existing BMPs identified in subsection 6.1 with any needed enhancements, as well as, any new BMPs are included in this section. The County's stormwater ordinance will be implemented on a county-wide basis.

As of March 2005, Allen County has initiated the implementation of a Construction Site Stormwater Runoff Control Program as part of this Part C Plan, which outlines the overall strategy for gradually implementing the program and its corresponding BMPs over the next four years. The County's program is designed to minimize the amount of sediment and other pollutants from being discharged from construction sites. The presumptive approach of implementing this program assumes that these pollutants will be reduced each year.

Table 6-1 provides a summary of the Construction Site, stormwater quality BMPs to be implemented and identifies the associated measurable goals, programmatic indicators, tracking, timeline, priority areas, and responsible parties associated with each BMP. Detailed description of each BMP is provided below.

Erosion and Sediment Control Ordinance

To minimize water quality impacts of development occurring within Allen County and ensure that new and redevelopment within the County's MS4 area is managed as efficiently as possible, the County is in the process of updating their existing Storm Drainage, and Erosion and Sediment Control Ordinance (SDESCO) into a comprehensive, Stormwater Management Ordinance to meet the minimum requirements of 327 IAC 15-5 (Rule 5). Adoption of the Ordinance is anticipated at the March 30, 2005 public meeting of the County Commissioners. This updated ordinance will be administered and enforced through the County Surveyor's Office. This ordinance addresses illicit discharges, construction runoff, and post-construction runoff. The County will review the Stormwater Management Ordinance annually to ensure it meets the minimum requirements of Rule 5. The County's comprehensive Stormwater Management Ordinance is a supplemental document that is bound separately from this report. Any activities towards revising the ordinance will be documented in the County's Rule 13 Annual Reports submitted to IDEM.

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Plan Review, Site Inspection, and Enforcement

The County Surveyor's Office will hire new staff or outsource services to conduct Erosion and Sediment Control plan reviews, construction site inspections, and if necessary to refer sites for enforcement actions. A copy of each development plan will be sent to the SWCD for review as well. The Surveyor's Office will perform construction site inspections and, if necessary, refer sites for enforcement actions. This will ensure that construction plans are being implemented properly and that sites are in compliance with the County's ordinance. Activities will be prioritized in accordance with the County's "Procedure for Prioritizing Construction Program Activities" (described on the next page). Beginning March 2005, review 100% of construction plans and inspect 100% of sites once and 50% of sites twice. Construction site operator compliance improvement will be documented via requested plan revisions made, corrections made in response to inspection reports and forms requests, and enforcement action required corrections. Enforcement actions include requiring corrective actions, fines, and/or stop work orders. Activities will be documented as part of the Monthly Construction Site Project Summary submitted to IDEM as described in Section 10.3.

Staff Training

The County Surveyor's office will hire new staff or outsource services and conduct annual staff trainings for new and existing staff. The County will ensure that an adequate amount and skill level of staffing is in place or services can be outsourced to account for increased workloads associated with performing erosion and sediment control plan review, inspection, and enforcement as mandated by Rule 13. All County staff or hired consultants involved in plan review and site inspection activities will be trained. Training program content will include information on construction and post-construction BMPs and priority watershed concerns. Current staff and/or new staff, or hired consultants, responsible for construction site plan review and construction site inspections will receive, at a minimum, annual erosion and sediment control training. All training activities including the specific curriculum, as well as the number of staff trained, will be included in the County's Rule 13 Annual Reports submitted to IDEM. Staff and/or outsourced services contracts will be in place and trained by March 2005.

Erosion and Sediment Control and Post-Construction BMP Tracking Database

The County Surveyor's Office will use the County's ASIST database to track the status of construction projects, Erosion and Sediment Control activities, and post-construction BMPs. The database will ensure efficient management and accurate reporting on the status of development within Allen County. The database will be utilized to track and document Erosion and Sediment Control violations, community complaints, public informational requests, and location of sites in relation to priority watershed areas identified in subsection 2.3. The database will therefore serve as an aid to inspection staff for follow-up inspections and, if necessary, enforcement actions. The database will be implemented in March of 2005. The County Surveyor's Office will submit reports from the database to the IDEM monthly. All activities associated with the database will be summarized and included in the County's Rule 13 Annual Reports submitted to IDEM.

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Training for Construction Professionals

The County Surveyor's Office will administer a local construction and development community education program, which will increase the construction and development community's awareness of changing erosion and sediment control standards. The training will include annual erosion and sediment control BMP training workshops (the first starting in 2005), which focus on the County's erosion and sediment control program, construction and post-construction stormwater BMPs, special protective measures needed within the County's identified priority watersheds and sensitive areas, and dealing with highly erodible soils. IDEM and IDNR will be consulted on program content. As applicable trainings are offered by other entities, such as, IDNR, the Surveyor's office will promote these activities to construction professionals. Educating construction professionals about the proper selection, installation, inspection, and maintenance of BMPs will help to ensure compliance with the County's erosion and sediment control requirements contained in their ordinance. Information on training activities conducted will be included in the County's Rule 13 Annual Reports submitted to IDEM.

Procedure for Prioritizing Construction Activities

The County will prioritize construction activities for the inspection and enforcement process to ensure that construction and development site inspections are as effective as possible. For each project site, County staff will evaluate the nature and extent of the construction activity, topography, highly erodible soils, soil suitability for septic systems, and priority watersheds (as well as their receiving waters) as described in Part B to determine how frequently these sites need to be inspected. Sites great than or equal to 5 acres in size, located near a receiving water, as well as sites containing slopes greater than or equal to 4%, wetlands, and/or endangered, threatened, or rare species will likely be prioritized for more frequent inspections. As the County's construction program develops, the County will periodically evaluate their priorities for construction activities. Updates to County procedures will be submitted in the County's Rule 13 Annual Reports.

Inspection and Enforcement Documentation

The County will use IDNR's existing inspection and enforcement form for their Erosion and Sediment Control inspectors to complete following each site inspection to ensure that County procedures are consistent with State's Rule 5 program. County inspectors will be required to document Erosion and sediment control BMP adequacies and inadequacies identified during each visit. All construction site managers will be given a copy of the form following each inspection and be required to sign suggesting their understanding and willingness to address any BMP inadequacies identified. If follow-up inspections prove that the identified BMP inadequacies were not addressed, the form will identify enforcement measures to be taken by the County. Information from completed forms will be entered into the County's ASIST database.

Quality Assurance/Quality Control (QA/QC) of overall program

In order to ensure consistency with the State's Rule 5 program and maintain overall

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program quality, the County will comply with Rule 5 on County owned and operated projects. In March 2005, the County will work with IDEM & IDNR to seek approval for program and to review County owned and operated projects. The County will request meetings with the agencies to review the County's program at least annually. The County will track the number of County projects subject to Rule 5, the number of IDNR and IDEM meetings, and information discussed in meetings. This action will correct program deficiencies or make updates based on new information or technology.

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**Table 6-1
Construction Site Stormwater Runoff Control BMPs**

Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Erosion and Sediment Control Ordinance	<ul style="list-style-type: none"> • Adopt Comprehensive Stormwater Management Ordinance by March 30, 2005. • Track permits issued using Programmatic Indicator #13. 	Implementation beginning March 30, 2005.	Countywide.	Surveyor's Office.
Plan Review, Site Inspection, and Enforcement	Review 100% of construction plans and inspect 100% of sites once and 50% of sites twice, beginning March 2005.	Beginning March 2005, then on-going.	Use written Procedure for Prioritizing Construction Program Activities.	Surveyor's Office and outsourced.
Staff Training	<ul style="list-style-type: none"> • Hire and train staff by March 2005. • Conduct annual staff trainings. 	First training of all staff by March 2005, then annually.	Include training on erosion and sediment control, post-construction BMPs, priority watersheds, and sensitive areas.	Surveyor's Office and outsourced.
Erosion and Sediment Control and Post-Construction BMP Tracking Database	<ul style="list-style-type: none"> • Implement tracking system by March 2005. • Send reports to IDEM monthly. • Track using Programmatic Indicators #13, #14, #15, #16, #17, #18, #20, and #21. 	<ul style="list-style-type: none"> • Begin tracking March 2005, then on-going. • Monthly reports to IDEM. 	Countywide.	Surveyor's Office and outsourced.
Training for Construction Professionals	<ul style="list-style-type: none"> • Administer a local construction and development community education program. • Conduct first workshop in 2005, then annually. • Promote other activities, such as regional IDNR 	<ul style="list-style-type: none"> • Offer first workshop in 2005, then annually. • On-going, promote other applicable training opportunities. 	Include training on erosion and sediment control, post-construction BMPs, priority watersheds, and sensitive areas.	Surveyor's Office and outsourced.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
	trainings. • Track using Programmatic Indicator #2.			
Procedure for Prioritizing Construction Activities	• Implement procedure by March 30, 2005. • Track using Programmatic Indicator #15.	Begin March 30, 2005.	Use written Procedure for Prioritizing Construction Program Activities.	Surveyor's Office and outsourced.
Inspection and Enforcement Documentation	• Complete IDNR forms as part of on-going program. • Enter information into ASIST.	Start in 2005, then on-going.	Use written Procedure for Prioritizing Construction Program Activities.	Surveyor's Office and outsourced.
QA/QC of Overall Program	• Comply with Rule 5 on County owned and operated projects. • In March 2005, work with IDEM & IDNR to seek approval for program and to review County owned and operated projects. • Review with agencies at least annually.	First in March 2005, then annually.	Ensure that projects are meeting goals for written Procedure for Prioritizing Construction Program Activities.	Surveyor's Office and outsourced.

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7.0	MINIMUM CONTROL MEASURE #5 POST-CONSTRUCTION STORM WATER RUNOFF CONTROL
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Rule 13 requires the development of an ordinance or other regulatory mechanism and establishment of a post-construction program that addresses runoff from new development and redevelopment areas that disturb one or more acres of land in the MS4 area. This program must include a permitting process, plan review process, site inspections, and enforcement. MS4 area personnel responsible for plan review, inspection, and enforcement of post-construction BMPs shall receive annual training.

Where appropriate, MS4 entities must use a combination of storage, infiltration, filtering, or vegetative practices to reduce the impact of pollutants in storm water runoff on receiving waters in areas that are the responsibility of the MS4 entity. A written Operational and Maintenance (O&M) Plan must be developed and implemented for all existing storm water structural BMPs, which are under the control of the MS4 entity. As new post-construction BMPs are added to areas under the control of the MS4 entity, the O&M Plan must be updated accordingly.

7.1 EXISTING POST-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

Compliance with MCM #5 requires MS4s to develop a program for managing post-construction BMPs that will ensure adequate, long-term stormwater quality benefits in new development and redevelopment activities. Once construction is complete, post-construction practices specified by the MS4 must be implemented to ensure stormwater quality is maintained from the developed site via an enforceable ordinance or other regulatory mechanism.

Existing Post-Construction Site Stormwater Runoff Control activities implemented by Allen County are as follows:

- The Allen County Surveyor’s Office requires the following structural controls for post construction runoff:
 - excavated excess spoil from detention basins shall have a slope no steeper than 4:1 for safety, erosion control, stability, and ease of maintenance
 - grass or other suitable vegetative cover shall be provided throughout the entire detention storage basin area
 - safety ledge and maintenance ledge required for wet-bottom basins
 - for detention ponds with a normal pool greater than 3.0 acres, material such as stone, riprap, or other material/planting is required to prevent erosion due to wave action
 - periodic maintenance is required in lakes to control weeds
 - debris removal from stormwater detention basins is required
 - if required, aeration facilities to prevent pond stagnation should be provided

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- open channels side slopes shall be no steeper than 3:1 and flatter slopes may be required to prevent erosion and ease of maintenance
- channel stability inspection of open channels created to convey stormwater runoff is required after construction is complete
- The Allen County Surveyor's Office has established guidelines for managing files pertaining to the County's stormwater management program. Data sets including design plans, reports, previously approved projects, and as-builts. All files are kept on-site and indefinitely in hard copy format. The ACSO also maintains the Rule 5 plans, applications, and correspondence. These too are kept on-site in hard copy format indefinitely.
- The Allen County Surveyor's Office requires a permanent erosion control plan of all graded and non-hard surface areas within the proposed development, as planned for completion.
- The Allen County Surveyor's Office requires maintenance procedures by responsible parties to keep all of the land under adequate cover and erosion at an acceptable minimum.
- The Allen County Surveyor's Office requires as-built plans, which include storm drainage and erosion control systems, before final acceptance of the proposed project.
- The County maintains a MicroStation GIS database. The Allen County Surveyor's Office uses ArcView for its GIS data, which contains descriptions of known BMPs in the St. Joseph Watershed.

Existing Post-Construction Site Stormwater Runoff Control activities implemented by Leo-Cedarville are as follows:

- The Town requires as-built drawings to be submitted once the project has been constructed.

The existing Post-Construction Stormwater Runoff Control activities discussed above will help ensure the County's compliance with requirements of Rule 13. However, these activities are currently not sufficient to address the requirements of Rule 13.

7.2 PROPOSED POST-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

The following Post-Construction Site Stormwater Runoff Control BMPs will be developed and implemented by Allen County in order to comply with the minimum requirements of MCM #5. Existing BMPs identified in subsection 7.1 with any needed enhancements, as well as, any new BMPs are included in this section. The County's

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ordinance will be implemented on a countywide basis.

As of March 2005, Allen County has initiated the implementation of a Post-Construction Site Stormwater Runoff Control Program as part of this Part C Plan, which outlines the overall strategy for gradually implementing the program and its corresponding BMPs over the next four years. The County's program is designed to ensure adequate stormwater quality is maintained from developed sites. The presumptive approach of implementing this program assumes that overall stormwater quality will improve each year. The technological standards required as part of the County's ordinance contains specific reduction goal percentages for each BMP.

Table 7-2 provides a summary of the Post-Construction Site Runoff BMPs to be implemented and identifies the associated measurable goals, programmatic indicators, tracking, timeline, priority areas, and responsible parties associated with each BMP. Detailed description of each BMP is provided below.

Post-Construction Control Ordinance

The County is in the adoption process of a comprehensive, county-wide ordinance that meets the minimum requirements of 327 IAC 15-13 (Rule 13) by including post-construction site runoff control measures. The post-construction provisions are part of a comprehensive, Stormwater Management Ordinance that addresses illicit discharges, construction runoff, and post-construction runoff. Adoption of the Ordinance is anticipated at the March 30, 2005 public meeting of the County Commissioners. The post-construction provisions will minimize the water quality impacts from new development within Allen County and ensure that new/redevelopment within the County's MS4 area is managed as efficiently as possible. The ordinance will be administered and enforced through the County Surveyor's Office. The County will review the ordinance annually to ensure it meets the minimum requirements of Rule 5. The County's comprehensive Stormwater Management Ordinance is a supplemental document that is bound separately from this report.

Post-construction BMPs continue to treat stormwater after construction has been completed and the site has been stabilized. Installing certain BMPs, such as bioretention areas and sand filters, prior to stabilization can cause failure of the measure due to clogging from sediment. If such BMPs are installed prior to site stabilization, Allen County will require that they will be protected by traditional erosion control measures.

Conversely, detention ponds and other BMPs can be installed during construction and used as sediment control measures. In those instances, Allen County will require that the construction sequence ensures the pond is cleaned out with pertinent elevations and storage and treatment capacities reestablished as noted in the accepted stormwater management plan.

Allen County has adopted a policy that the control of stormwater runoff quality will be based on the management of Total Suspended Solids (TSS). This requirement is being

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adopted as the basis of Allen County’s stormwater quality management program for all areas of jurisdiction.

Allen County has designated 12 pre-approved BMP methods to be used alone or in combination to achieve the 80% TSS removal stormwater quality goals for a given project. These BMP measures are listed along with their anticipated average TSS removal rates in **Table 7-1**. Pre-approved BMPs have been proven/are assumed to achieve the average TSS removal rates indicated in Table 7-1. Anyone applying for a County permit desiring to use a different TSS removal rate for these BMPs must follow the requirements discussed in the County’s Technical Standards Document for Innovative BMPs. Details regarding the applicability and design of these pre-approved BMPs are contained within fact sheets presented in Appendix D of the County’s Technical Standards Document.

Note that a single BMP measure may not be adequate to achieve the water quality goals for a project. It is for this reason that a “treatment train”, a number of BMPs in series, is often required for a project.

**TABLE 7-1
Pre-approved Post-construction BMPs**

BMP Description	Anticipated Average % TSS Removal Rate ^E
Bioretention ^A	75
Constructed Wetland	65
Underground detention	70
Extended Dry Detention ^B	72
Infiltration Basin ^A	87
Infiltration Trench ^A	87
Media Filtration – Underground Sand	80
Media Filtration – Surface Sand	83
Storm Drain Insert ^D	NA ^C
Filter Strip	48
Vegetated Swale	60
Wet Detention	80

Notes:

- A. Based on capture of 0.5-inch of runoff volume as best available data. Effectiveness directly related to captured runoff volume, increasing with larger capture volumes.
- B. Test results are for three types of ponds: extended wet detention, wet pond and extended dry detention

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- C. NA may indicate that the BMP is not applicable for the pollutant, but may also indicate that the information is simply Not Available. Independent testing should be provided, rather than the manufacturer's testing data.
- D. Must provide vendor data for removal rates.
- E. Removal rates shown are based on typical results. These rates are also dependent on proper installation and maintenance. The ultimate responsibility for determining whether additional measures must be taken to meet the Ordinance requirements for site-specific conditions rests with the applicant.

Allen County has established minimum standards for the selection and design of construction water quality BMPs in their Technical Standards document. The information provided establishes performance criteria for stormwater quality management and procedures to be followed when preparing a BMP plan for compliance. Post-Construction BMPs must be sized to treat the water quality volume, WQv, for detention-based BMPs or the water quality discharge, Qwq, for flow-through BMPs. The Technical Standards Document provides the methodology for calculating the WQv and Qwq values.

BMPs not previously accepted by Allen County must be certified by a professional engineer licensed in State of Indiana and accepted through Allen County. American Society for Testing and Materials (ASTM) standard methods must be followed when verifying performance of new measures. New BMPs, individually or in combination, must meet the 80% TSS removal rate at 50-125 micron range (silt/fine sand) without reentrainment and must have a low to medium maintenance requirement to be considered by Allen County. Testing to establish the TSS removal rate must be conducted by an independent testing facility, not the BMP manufacturer.

Plan Review, Site Inspection, and Enforcement

The County Surveyor's Office will hire new staff or outsource services to conduct post-construction BMP plan reviews in conjunction with Erosion and Sediment Control plan reviews, post-construction BMP inspections in conjunction with construction site inspections, and if necessary to refer sites for enforcement actions. Plans will be reviewed to ensure compliance with the technological standards required as part of the County's ordinance containing specific reduction goal percentages for each BMP. A copy of each development plan will be sent to the SWCD for review as well. The Surveyor's Office will perform construction site inspections and, if necessary, refer sites for enforcement actions. This will ensure that post-construction BMP plans are being implemented properly and that sites and BMPs are in compliance with the County's ordinance. Activities will be prioritized in accordance with the County's "Procedure for Prioritizing Construction Program Activities". Beginning March 2005, review 100% of construction and post-construction plans and inspect 100% of sites once and 50% of sites twice. Construction site operator compliance improvement will be documented via requested plan revisions made, corrections made in response to inspection reports and forms requests, and enforcement action required corrections. Enforcement actions include requiring corrective actions, fines, and/or stop work orders. Activities will be documented as part of the Monthly Construction Site Project Summary submitted to

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IDEM as described in Section 10.3.

Staff Training

The County will hire new staff or outsource services and conduct annual staff trainings for new and existing staff. The County will ensure that an adequate amount and skill level of staffing is in place or services can be outsourced to account for increased workloads associated with performing Erosion and Sediment Control plan review, inspection, and enforcement as mandated by Rule 13. All County staff and hired consultants involved in plan review and site inspection activities will be trained in accordance with the County's ordinance. Training program content will include information on construction and post-construction BMPs and priority watershed concerns. Current staff and/or new staff, or hired consultants responsible for construction site plan review and construction site inspections will receive, at a minimum, annual post-construction BMP training. Staff/outsourced service contracts will be in place and trained by March 2005. The County will track number of construction sites inspected.

Inspection and Enforcement Documentation

The County will use the inspection and enforcement forms from their Technical Standards Manual in conjunction with the exiting IDNR form for Erosion and Sediment Control and Post-construction BMP inspectors to complete following each site inspection. County inspectors will be required to document Erosion and Sediment Control and Post-construction BMP adequacies and inadequacies identified during each visit. All construction site managers will be given a copy of the form(s) following each inspection and be required to sign suggesting their understanding and willingness to address any BMP inadequacies identified. If follow-up inspections prove that the identified BMP inadequacies were not addressed, the form will identify enforcement measures to be taken by the County. Information from completed forms will be entered into the County's ASIST database.

Post-construction BMP Operation and Maintenance Plan

Currently, the County does not own or operate any stormwater quality BMPs. If the County has need of this in the future then, the County will develop and implement an Operation and Maintenance (O&M) Plan for County owned post-construction BMPs to ensure long-term effectiveness and adequacy of newly installed BMPs.

Erosion and Sediment Control and Post-Construction BMP Tracking Database

The County Surveyor's Office will use the County's ASIST database to track the status of construction projects, Erosion and Sediment Control activities, and post-construction BMPs. The database will ensure efficient management and accurate reporting on the status of development within Allen County. The database will be utilized to track and document Erosion and Sediment Control violations, community complaints, public informational requests, and location of sites in relation to priority watershed areas identified in subsection 2.3. The database will therefore serve as an aid to inspection staff for follow-up inspections and, if necessary, enforcement actions. The database will be implemented in March of 2005. The County Surveyor's Office will submit reports

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from the database to the IDEM monthly. All activities associated with the database will be summarized and included in the County's Rule 13 Annual Reports submitted to IDEM.

Training for Construction Professionals

The County Surveyor's office will administer a local construction and development community education program, which will increase the construction and development community's awareness of changing erosion and sediment control standards. The training will include annual erosion and sediment control BMP training Workshops (the first starting in 2005), which focus on the County's erosion and sediment control program, construction and post-construction stormwater BMPs, special protective measures needed within the County's identified priority watersheds and sensitive areas, and dealing with highly erodible soils. IDEM and IDNR will be consulted on program content. As applicable trainings are offered by other entities, such as, IDNR, the Surveyor's office will promote these activities to construction professionals. Educating construction professionals about the proper selection, installation, inspection, and maintenance of BMPs will help to ensure compliance with the County's erosion and sediment control requirements contained in their ordinance. Information on training activities conducted will be included in the County's Rule 13 Annual Reports.

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**Table 7-2
Post-construction Site Stormwater Runoff Control BMPs**

Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Post-Construction Control Ordinance	<ul style="list-style-type: none"> • Adopt Comprehensive Stormwater Management Ordinance by March 30, 2005. • Review construction and post-construction plans as part of MCM #4. • Track permits issued using Programmatic Indicator #13. 	Implementation beginning March 30, 2005.	Countywide.	Surveyor's Office.
Plan Review, Site Inspection, and Enforcement	Review 100% of construction plans and inspect 100% of sites once and 50% of sites twice, beginning March 2005.	Beginning March 2005, then on-going.	Use written Procedure for Prioritizing Construction Program Activities.	Surveyor's Office and outsourced.
Staff Training	<ul style="list-style-type: none"> • Hire and train staff by March 2005. • Conduct annual staff trainings. 	First training of all staff by March 2005, then annually.	Include training on erosion and sediment control, post-construction BMPs, priority watersheds, and sensitive areas.	Surveyor's Office and outsourced.
Inspection and Enforcement Documentation	<ul style="list-style-type: none"> • Complete forms as part of on-going program. • Enter information into ASIST database. 	Start in 2005, then on-going.	Use written Procedure for Prioritizing Construction Program Activities.	Surveyor's Office and outsourced.
Post-construction BMP Operation and Maintenance (O&M) Plan	<ul style="list-style-type: none"> • If necessary, develop Post-construction BMP O&M Plan. • Track using Programmatic Indicator #19. 	If situation arises.	County owned & operated structural stormwater quality BMPs.	Surveyor's Office and outsourced.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Erosion and Sediment Control and Post-Construction BMP Tracking Database	<ul style="list-style-type: none"> • Implement tracking system by March 2005. • Send reports to IDEM monthly. • Track using Programmatic Indicators #13, #14, #15, #16, #17, #18, #20, and #21. 	<ul style="list-style-type: none"> • Begin tracking March 2005, then on-going. • Monthly reports to IDEM. 	Countywide.	Surveyor's Office and outsourced.
Training for Construction Professionals	<ul style="list-style-type: none"> • Administer a local construction and development community education program. • Conduct first workshop in 2005, then annually. • Promote other activities, such as regional IDNR trainings. • Track using Programmatic Indicator #2. 	<ul style="list-style-type: none"> • Offer first workshop in 2005, then annually. • On-going, promote other applicable training opportunities. 	Include training on erosion and sediment control, post-construction BMPs, priority watersheds, and sensitive areas.	Surveyor's Office and outsourced.

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8.0	MINIMUM CONTROL MEASURE #6 POLLUTION PREVENTION AND GOOD HOUSEKEEPING
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Rule 13 requires the development and implementation of a program to prevent or reduce polluted runoff from municipal operations within the MS4 area. The program must include written documentation of maintenance activities, maintenance schedules, and long term inspection procedures for BMPs to reduce floatables and other pollutants discharged from the separate storm sewers.

Controls must be implemented for reducing or eliminating the discharge of pollutants from operational areas, including roads, parking lots, maintenance and storage yards, and waste transfer stations. Written procedures must be developed and implemented for the proper disposal of waste or materials removed from separate storm sewer systems and operational areas. New flood management projects must be assessed via written documentation for their impacts on water quality and existing flood management projects must be examined for incorporation of additional water quality protection devices or practices. MS4 entity employees must be properly trained on various topics, such as, fertilizer and pesticide application, and the function of BMPs. Such training must be documented in writing.

8.1 EXISTING POLLUTION PREVENTION AND GOOD HOUSEKEEPING BMPs

Compliance with MCM #6 requires MS4s to develop and implement a program to prevent or reduce pollutant runoff from municipal operations within the MS4 area. Allen County and the Town of Hometown are currently implementing a number of recommended Stormwater Pollution Prevention BMPs. The Town of Leo-Cedarville does not own any municipal operation facilities at this time.

Existing Pollution Prevention and Good Housekeeping BMPs implemented by Allen County are as follows:

- The Allen County Parks Department has an in-service employee training for chemical handling.
- The Allen County Highway Department maintains three (3) barns for road salt storage.
- The Highway Department employees attend annual training on the handling and application of herbicides utilized in roadside spraying.
- The Highway Department notifies the Allen County Emergency Agency regarding any roadside spills.
- The Highway Department submits a Rule 5 plan to the Allen County Surveyor's Office and SWCD for all road projects.

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Existing Pollution Prevention and Good Housekeeping BMPs implemented by the Town of Hometown are as follows:

- The Town's Street Department performs vehicle wash downs at a privately owned car wash facility.
- The Street Department purchases salt from the Allen County Highway Department and has barns for salt storage.

The existing Pollution Prevention and Good Housekeeping activities discussed above will help ensure the County's compliance with requirements of Rule 13. However, these activities are currently not sufficient to address the requirements of Rule 13.

8.2 PROPOSED POLLUTION PREVENTION AND GOOD HOUSEKEEPING BMPs

The following Pollution Prevention and Good Housekeeping BMPs will be developed and implemented by Allen County in order to comply with the minimum requirements of MCM #6. Existing BMPs identified in subsection 8.1 with any needed enhancements, as well as, any new BMPs are included in this section.

As of March 2005, Allen County has initiated the implementation of a Pollution Prevention and Good Housekeeping Program as part of this Part C Plan, which outlines the overall strategy for gradually implementing the program and its corresponding BMPs over the next four years. The County's program is designed to address the quality of stormwater discharges from County activities to their MS4 conveyance system. The presumptive approach of implementing this program assumes that overall stormwater quality will improve each year by reducing the amounts of pollutants entering the conveyance system. Reduction goal percentages will be correlated to amounts of BMPs installed, amounts of material collected from BMPs, and plans implemented. For example, when a certain amount of street sweeping material is collected, it is assumed that the unknown total amount of material entering the conveyance system is reduced by the amount collected.

Table 8-2 provides a summary of the Pollution Prevention and Good Housekeeping BMPs to be implemented and identifies the associated measurable goals, programmatic indicators, tracking, timeline, priority areas, and responsible parties associated with each BMP. Detailed description of each BMP is provided below.

MS4 Conveyance System Maintenance

Beginning in 2005, the County will begin a program designed to inspect and maintain the County's MS4 conveyance system. Regular maintenance allows the conveyance system to work efficiently and removes pollutants. The County will only focus upon those portions of the conveyance system with twelve-inch pipes or ditches with two-foot

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bottom widths. The program will focus on stabilizing unvegetated portions of the County's conveyance system (ditches, swales and road side shoulders) since unvegetated areas can produce erosion and sediment pollution, as well as repairing and cleaning catch basins, trash racks and other structural components of the County's conveyance system. Currently the County has a hydroseeder that is used for stabilization. Inspection and maintenance activities will be performed by staff from the County Surveyor's office and/or the County Highway Department. The County intends to inspect the entire system within the County's MS4 area in the first permit term. Maintenance needs will be prioritized and improvement needs will be conducted as funding allows.

All inspection staff will receive annual training on proper inspection and maintenance techniques. The county will document, in the County's ASIST database, the estimated or actual linear feet of the County's conveyance system that is cleaned, repaired and or vegetated as well as the specific locations at which these activities are conducted. In addition, the County will estimate the amount of material collected from catch basins, trash racks and other structural BMPs. County staff will also be trained on the County's SWQMP tracking requirements to ensure all activities associated with conveyance system inspections and maintenance are documented. The County will document all activities associated with conveyance system maintenance. This information will be included in the County's Rule 13 Annual Reports submitted to IDEM. **Table 8-1** outlines the County's MS4 conveyance system maintenance activities.

**Table 8-1
Storm Sewer System Maintenance Scheduled Activities**

Activity	Schedule for Performing Activity
A. Periodic Litter Pickup	County staff will annually conduct litter pickup events along major thoroughfares, at stormwater outfalls, and other areas to be prioritized during the first permit term.
B. Periodic BMP Structure Cleaning	County owned and operated BMPs will be maintained as specified in their O&M manuals. However, long term storm sewer catch basin maintenance schedules will be determined after the first permit term. During the first permit term all town catch basins will be cleaned on an annual basis.
C. Periodic Pavement Sweeping	All streets and MS4 owned parking lots will be swept two times per year.
D. Roadside Shoulder and Ditch Stabilization	All road side shoulder and ditches will be inspected annually.
E. Planting and Proper Care of Roadside	Roadside inspections will include

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Activity	Schedule for Performing Activity
Vegetation	vegetative inspections.
F. Remediation of Outfall Scouring	All stormwater outfalls will be evaluated for scouring and erosion on an annual basis. Decisions for remedial actions will be made at the time of problem identification.

Street Sweeping Program

The County will use its ASIST database for tracking street sweeping activities. Currently, street sweeping is done annually in the spring in subdivisions to remove debris accumulated over the winter and to keep potential pollutants from entering the storm drains. Otherwise, sweeping is done only on an “on call” basis when the County is contracted by groups, such as, home owners associations. The County has contracted with a waste disposal company to collect and dispose of all materials collected. To ensure accurate reporting and documentation of the County’s pollution prevention programs, the County will track the estimated or actual amount of material by weight collected from street sweeping, as well as, the street miles swept in the maintenance database. This information will be consolidated and included in the County’s Rule 13 Annual Reports submitted to IDEM.

Salt and Sand Management

The County Highway Department will manage their salt and sand storage and application in an effort to maintain public safety while minimizing the potential for salt and sand runoff. Currently salt is stored in three barns with asphalt floors that were recently constructed on the grounds of the Highway Department facilities. Sand is currently stored in the salt barns as well so the County currently has all storage areas covered or otherwise improved to minimize stormwater exposure. Beginning in 2005, the County will investigate the feasibility of utilizing catch basin inserts in the stormwater inlets at the Highway Department facilities in an effort to trap sand and other debris that may originate from the facilities. If installed, the inserts will be inspected by Highway Department personnel monthly and after significant rain events and replaced as necessary.

In addition, salt and sand is mixed and loaded into trucks on asphalt areas by the storage barns. The County makes every effort to keep this mixed material dry and from being exposed to precipitation since wet sand is more difficult for the trucks to spread. Beginning in 2005, the Highway Department will annually document the total weight/cubic yards of salt and sand applied. Also, Highway Department personnel will be instructed to contain salt and sand spilled during mixing and loading by utilizing machinery and hand tools to maintain cleanliness and minimize the risks of stormwater runoff. Also, once the snow and/or ice has melted, Highway Department personnel will sweep, as necessary, those areas of the facility that have accumulated sand and other debris as a result of day-to-day operations.

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County staff will be trained annually on the importance of containing salt and sand, the proper methods of maintaining catch basin inserts (if applicable), and documenting the amount of salt and sand applied annually. County staff will also be trained on the County's SWQMP tracking requirements and ASIST database to ensure all activities associated with salt and sand management are documented. All activities associated with salt and sand management will be included in the County's Rule 13 Annual Reports submitted to IDEM, including documenting the number and location of and the estimated or actual amount, in tons, of salt and sand used for snow and ice control.

Snow Disposal Areas

The County does not have any large accumulations of snow from highway clearing activities due to the relatively light amount of snow fall in the County. Snow is simply pushed off to the side of highways. However, beginning in 2005, snow that is cleared and pushed into large piles from County operational areas, such as, the Highway Department Facility and the Government Center will be located away from stormwater inlets and conveyances to ensure that there is minimal potential for pollutant runoff impact on MS4 area receiving waters.

Spill Prevention and Clean Up

Beginning in 2006, the County will begin implementing spill prevention and clean up procedures at County owned and operated facilities. The County Highway Department facilities will primarily be the location for which these measures will be implemented in order to reduce the impact of accidental spills of concentrated solutions, acids, alkalis, salts, oils, or other polluting materials that could contaminate stormwater runoff from areas like the maintenance facility. Measures will include using products like leak and spill wipers, mats, absorbents, and drain covers.

County has a spill response plan posted at the County Highway Department where fuels and other chemicals are used, mixed and or stored. The posting of these plans will ensure efficient and effective response to accidental chemical spills thereby reducing the potential for spills to come into contact with stormwater runoff.

If a County refueling area replaces an existing tank system or adds a new tank system, the project will be evaluated for the feasibility of installing storm water quality BMPs. If this situation occurs, the County will report on the project in the County's Rule 13 Annual Reports submitted to IDEM.

County staff will also be trained on the County's SWQMP tracking requirements to ensure all activities associated with chemical spill response are documented. The County will document all activities associated with chemical spill response. This information will be included in the County's Rule 13 Annual Reports submitted to IDEM.

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Vehicle Maintenance Areas

Vehicle maintenance areas can be significant sources of stormwater pollutants. To minimize the impacts vehicle maintenance areas have on stormwater runoff, the County utilizes oil and water separators within the Highway Department's two maintenance facilities. The oil and water separators are operated and maintained according to the manufacturer's specifications. Beginning in 2005, the County will begin documenting all maintenance activities associated with the oil and water separators. Relevant staff will receive annual training on the function and importance of the separator, how to maintain the separator and how to properly dispose of the oil and grit collected. The County will document training activities, maintenance activities, and estimate the amount of waste collected via the separator. The County will also document the methods by which all materials collected were disposed of. This information will be included in the County's Rule 13 Annual Reports submitted to IDEM.

In 2005, the County will investigate where discharges flow from their shop floor drains and other conveyances in their highway facility. All shop floor drains will either be sealed or connected to a publicly owned treatment works. All stockpiled materials will be located away from storm inlets and other stormwater conveyances. The Highway Facility yard will be kept in an orderly manner and clear of debris or other materials that may be mobilized in stormwater runoff.

County staff will also be trained on the County's SWQMP tracking requirements to ensure all activities related to improving storm water quality associated with oil and water separator and vehicle maintenance area are documented. All activities associated with this BMP will be included with the County's Rule 13 Annual Reports submitted to IDEM.

Wash Water Management

All wash waters and wastewaters are currently prohibited from entering waters of the state without a valid NPDES Wastewater Permit. Pollutants from washing activities, such as, detergents and solids can not enter into separate storm water conveyances unless they are properly controlled. As identified in Part B, the County will implement procedures, such as, requiring vehicles to be washed at a commercial car wash to eliminate all equipment or vehicle wash waters and concrete or asphalt hydro demolition wastewaters from entering stormwater runoff beginning in March 2005. Currently, all County cars are taken to commercial car washes. In 2005, the County will investigate the best method for handling washing activities for 36 large trucks. The County will report on wash waters eliminated and new BMPs installed, if applicable in the County's Rule 13 Annual Reports submitted to IDEM.

Fertilizer and Pesticide Management

County Staff members utilize fertilizers and pesticides for a variety of purposes. The following actions will help minimize pesticide and fertilizer use for the County and will help minimize the impacts of these chemicals on stormwater runoff. In 2005, the County will develop a list of all County staff who store, transport, or apply fertilizer

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and/or pesticides as well as which facilities are utilized for storage purposes. These staff members will be required, beginning in 2005, to receive annual training on proper handling, mixing, use, and storage of fertilizers and pesticides. If necessary, additional County staff will be required to obtain training to apply pesticides from the Office of the State Chemist (OISC). Currently the County has four staff members that have their OISC commercial applicator certification and attend annual training.

All facilities in which fertilizers and pesticides are stored will be evaluated annually for safety. In the event a facility is determined to pose a stormwater risk, the County will take the proper steps to ensure fertilizers and pesticides are stored properly. The County will document all activities associated with fertilizer and pesticide management including the areas within the County's MS4 area on which fertilizers and pesticides are utilized and to estimate the amount of each material utilized. County staff will receive annual training on the County's SWQMP tracking requirements to ensure all activities associated with fertilizers and pesticides are documented. All information specific to fertilizer and pesticide management will be included in the County's Rule 13 Annual Reports submitted to IDEM.

Canine Park Location

Pet waste has been shown to be a major contributor of stormwater pollution. If applicable and necessary, Allen County will require that all Canine Parks must be sited at least one hundred fifty (150) feet away from a surface waterbody. The County will track the number or percentage and location of Canine Parks sited at least one hundred fifty (150) feet away from a surface waterbody. Special attention will be paid to any potential Canine Parks being located in priority watershed areas. The Surveyor's office will review sites in conjunction with construction plan reviews and report results in the County's Rule 13 Annual Reports submitted to IDEM.

Waste Disposal

Removal of accumulated materials (wastes) is part of routine maintenance of the conveyance system. Wastes are also generated from County operational areas. The County will ensure that wastes collected are disposed of in a manner that prevents them from contaminating stormwater runoff. Beginning in 2005, the County will document the disposal of all waste generated from operational areas and from maintaining the County's stormwater conveyance system. Such wastes include, but are not limited to, dredge spoil, accumulated sediments, floatables and debris. Currently adjacent property owners are contacted by the County to see if they would like to reuse the material as fill. County staff will continue to determine if the waste generated can be reused, recycled or requires disposal in a sanitary landfill. The County will contract with a private firm for those wastes that require disposal in a landfill. Relevant County staff will receive training on the County's SWQMP tracking requirements to ensure all activities associated with waste disposal are documented. The County will document all activities associated with waste disposal including the types of waste generated, the amount of waste generated and the method by which the waste was disposed. This information will be included in the County's Rule 13 Annual Reports submitted to IDEM.

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Flood Management Projects

The County will document that new county-owned flood management projects are assessed for their impacts on water quality on an on-going basis and in 2007, existing county owned flood management projects (if there are any) are examined for incorporation of additional water quality protection devices or practices. During the pre-construction phase for new projects, a determination will be made to see if a practice can be modified to address the reduction of pollutants associated with stormwater runoff or if additional BMPs can be designed into the watershed of the project to improve the water quality. This preliminary review will better use limited resources to plan for water quality BMPs before a project is constructed since water quality and water quantity issues are interrelated.

Existing flood management projects and structural BMPs built to address stormwater quantity problems will be reviewed to determine if it is feasible to retrofit them with stormwater quality control measures. Where it is not feasible to retrofit the practice, alternative approaches may include implementation of practices within the watershed of a basin. Each existing project and BMP may not support a retrofit, but the review will be conducted and results will be reported in the County's Rule 13 Annual Reports submitted to IDEM.

Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training

The County will conduct training for staff on the hazards associated with illicit discharges and improper disposal of waste and pollution prevention, including ways to manage activities to prevent substantial quantities of chemicals and water from entering the conveyance system. Appropriate MS4 entity staff will be trained beginning in 2006 and periodic refresher sessions will be conducted at least annually. The County will document training opportunities provided and attendees. Trainings will emphasize how substantial quantities of chemicals and water can lead to elevated levels of nutrients and toxins in receiving waters. Information will be presented on priority watersheds and sensitive areas. Additional topics will include proper storage and disposal of hazardous wastes, vegetative waste handling, fertilizer and pesticide application, and the function of implemented BMPs. The number of trainings, number of staff attending trainings, and information presented will be tracked and reported in the County's Rule 13 Annual Reports submitted to IDEM.

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**Table 8-2
Pollution Prevention and Good Housekeeping BMPs**

Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
MS4 Conveyance System Maintenance	<ul style="list-style-type: none"> • Conduct inspection and maintenance program beginning in 2005. • Prioritize maintenance needs based on inspections and improve as funding allows. • Conduct annual training, beginning in 2005. • Track using Programmatic Indicators #26, #27, #28, #29, and #32. 	Begin in 2005, then on-going.	Unstable, unvegetated, scoured, or eroded roadside shoulders and/or ditches.	Outsourced and Highway Department.
Street Sweeping Program	<ul style="list-style-type: none"> • Implement tracking system by March 2005. • Track using Programmatic Indicator #33. 	Begin tracking March 2005.	Remove salt, sand, and debris from winter activities.	Highway Department.
Salt and Sand Management	<ul style="list-style-type: none"> • Implement BMPs beginning in 2005 and as part of on-going permit activities and as budgets allow. • Track using Programmatic Indicators #30 & #31. 	<ul style="list-style-type: none"> • Begin in 2005, then on-going. • In 2005, investigate catch basin insert use. 	Application on County Highways and Highway Department Facilities.	Highway Department
Snow Disposal Areas	Use designated areas beginning in Winter 2005, then on-going each Winter.	Begin in 2005, then on-going each winter.	Highway Department Facilities and Government Center.	Highway Department

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
Spill Prevention and Clean Up	<ul style="list-style-type: none"> • Conduct as part of on-going permit activities. • Track using Programmatic Indicator #23, if applicable, & #24. 	Begin in 2006, then on-going.	Highway Department Facilities	Highway Department
Vehicle Maintenance Areas	Begin in 2005, then activities will be on-going as part of regular good housekeeping practices.	Begin in 2005, then on-going.	Highway Department Facilities, especially around storm inlets and/or conveyances.	Outsourced and Highway Department.
Wash Water Management	Eliminate wash waters from entering separate storm system in 2005.	<ul style="list-style-type: none"> • Begin in 2005, then on-going. • In 2005, investigate alternative for large truck washing. 	Highway Department Facilities	Outsourced and Highway Department.
Fertilizer and Pesticide Management	<ul style="list-style-type: none"> • Ensure contractors are certified by OISC. • Track using Programmatic Indicator #25. 	Begin in 2005, then on-going.	Train contract staff on priority watersheds and sensitive areas, as well as, stormwater program.	Outsourced and Highway Department.
Canine Park Location	If applicable, Allen County will track the number or percentage and location of canine parks sited at least one hundred fifty (150) feet away from a surface waterbody to compile with Programmatic Indicator #34.	If necessary.	Special attention will be paid to any potential canine parks being located in priority watershed areas.	Surveyor's office
Waste Disposal	<ul style="list-style-type: none"> • Document disposal of all wastes, beginning in 2005. • On-going, determine if waste can be recycled, reused, or 	Begin in 2005, then on-going.	Highway Department Facilities	Outsourced and Highway Department.

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Best Management Practice (BMP)	Measurable Goals, Tracking, and Programmatic Indicators	Timeline	Priority Areas	Responsible Party
	<ul style="list-style-type: none"> goes to landfill • Contract with private firm in 2005. 			
Flood Management Projects	<ul style="list-style-type: none"> • On-going, document that all new and existing flood management projects are assessed for incorporation of additional water quality devices or practices. • Review of existing projects completed by 2007. 	On-going documentation and review in 2007.	Projects in priority watershed areas will be reviewed first.	Surveyor's office.
Annual IDDE, Good Housekeeping, & Pollution Prevention Staff Training	<ul style="list-style-type: none"> • Develop training program by March 2006. • Conduct first training course in 2006. • Conduct annual refresher training. • Track using Programmatic Indicator #2. 	Training held in 2006, then annual updates.	Focus on MS4 conveyance system, MS4 operational areas, and Highway Department Facilities.	Outsourced.

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9.0 MS4 PROGRAM COSTS

Rule 13 requires a summary of the current storm water budget, expected or actual funding sources, and a projection of the budget for each year within the five-year permit term. Resources used for developing and implementing the storm water program should be documents in order to demonstrate that monies, equipment, and staff are being and will be utilized for the program.

The overall fiscal impact of the requirement of Rule 13 may be grouped under three categories: SWQMP Development costs, Part C Implementation costs, and “other” compliance costs. This chapter details the cost of plan implementation (Part C) and it includes the additional expense for developing the SWQMP, continuous characterization, and data reporting. In the numbers detailed below, no monetary value is placed on volunteer hours.

9.1 SWQMP DEVELOPMENT COSTS

The development of the SWQMP must be completed by the end of the first year of the permit term. Tasks include completion of a Notice of Intent (NOI), and completion of Part A, Part B, and Part C (this document) of the SWQMP.

NOI and Part A: The costs associated with completion of the NOI and Part A are mainly organizational and administrative. An initial list of known receiving waters was compiled. Public Notice was published in the local newspaper. Preliminary estimates of existing and expected budgets had to be included, and an Operator was identified. The estimated cost to compile the information needed for the NOI and Part A submittal was \$4,000.

Part B Baseline Characterization: Part B involved collection and assessment of existing data for the receiving waters identified in Part A. This data was then used to characterize the baseline water quality conditions in the MS4 area, identify sensitive areas, and guide the development of Part C. Existing BMPs had to be identified and their effectiveness evaluated. The tasks associated with Part B were research, analysis, and report writing. The estimated cost to complete Part B was \$22,000. This cost does not include additional costs associated with responding to the NOD that the IDEM issued the County.

Development of the Part C Implementation Plan: The estimated cost for developing an Implementation Plan is \$49,000 and includes fees for engineering consultants and includes time and materials contributed by Allen County.

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9.2 DETAILED PART C IMPLEMENTATION COSTS BY MCM OVER 2004-2008

This section details the cost of implementing the program described in this document. There are 6 MCMs within the implementation plan. Costs for each individual MCM are summarized below. Since different plan elements have different start-up timelines, costs are also broken down by permit year, March through December.

MCM #1 Public Education and Outreach: The cost to implement this MCM throughout the first 5-year permit term is estimated to be \$95,000. Most of the implementation deadlines for this MCM are in the second permit year with some start-up costs incurred during the second permit year. Estimated annual costs for this MCM are \$25,000 for the second year, \$24,000 for the third year, and \$23,000 for the fourth and fifth years. These costs will cover such tasks as reproduction and distribution of educational brochures, web site development and maintenance, and other tasks as outlined in Chapter 3. The County will work with the ACPWQ to complete the BMPs in this plan.

MCM #2 Public Participation and Involvement: The cost to implement this MCM throughout the first 5-year permit term is estimated to be \$138,000. Most of the implementation deadlines for this MCM are in the second permit year with some start-up costs incurred during the second permit year. Estimated annual costs for this MCM are \$14,000 for the first year and \$31,000 for the second, third, fourth, and fifth years. These costs will cover such tasks as public involvement in plan development, promotion of Clean-Up Events, the "Report-A-Polluter" Program, and Storm Drain Marking events. The costs include presentation materials for public meetings and hearings, mailings to volunteer groups.

MCM #3 Illicit Discharge Detection and Elimination: The cost to implement this MCM throughout the first 5-year permit term is estimated to be \$946,000. The implementation deadlines for this MCM are mainly in the second permit year, with some start-up costs beginning in the first permit year. Annual costs for this MCM are \$18,000 for the first year, \$238,000 for the second year, and \$230,000 for the third, fourth and fifth years. These costs will cover such tasks as mapping the storm sewer system and screening for pollutants, development of an illicit discharge ordinance, and collection of household hazardous wastes and lawn wastes. The costs include training for system inspectors, field equipment for system inspectors, computer hardware and software upgrades for GIS mapping, and staff hours.

MCM #4 Construction Site Runoff Control: The cost to implement this MCM throughout the first 5-year permit term is estimated to be \$1,813,000. The implementation deadlines for this MCM are mainly in the second permit year, with some preparation work beginning in the first permit year. Annual costs for this MCM are \$13,000 for the first year and \$450,000 for the second, third, fourth, and fifth years. These costs will cover such tasks as development of an ordinance for controlling construction site runoff, establishment of a local stormwater permit procedure, and an inspection and

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enforcement program. The costs include training for plan reviewers, and site inspectors, computer hardware and software upgrades tracking, and staff hours.

MCM #5 Post-Construction Stormwater Management: The cost to implement this MCM throughout the permit life is estimated to be \$131,000. The implementation deadlines for this MCM are mainly in the second permit year, with some preparation work beginning in the first permit year. Annual costs for this MCM are \$27,000 for the first year and \$26,000 for the second, third, fourth, and fifth years. These costs will cover such tasks as development of an ordinance for post-construction stormwater quality management, establishment of a local stormwater permit procedure, and an inspection and enforcement program. The costs include training for plan reviewers, site inspectors, computer hardware and software upgrades for tracking, and staff hours.

MCM #6 Pollution Prevention and Good Housekeeping: The cost to implement this MCM throughout the first 5-year permit term is estimated to be \$478,000. The implementation deadlines for this MCM are entirely delayed until after the first permit year. Annual costs for this MCM are \$30,000 for the first year and \$112,000 for the second, third, fourth, and fifth years. These costs will cover such tasks as the development of maintenance schedules and a database, the implementation of Salt and Sand Storage BMPs, an MS4 Conveyance System Maintenance Plan, and staff training.

9.3 OTHER COMPLIANCE COSTS 2005 – 2008

Beyond development and implementation of the SWQMP, Rule 13 requires on-going MS4 area characterization, monthly and annual status reports, and renewal of permit application at the end of the 5 year permit term.

On-going Characterization: Rule 13 requires regulated communities to continue collecting and evaluating data on water quality throughout the permit life. The cost for this on-going characterization assumes that the County will implement a River Watch program, conduct a watershed study in a priority watershed, and encourage other watershed groups to do water quality characterization studies. The estimated cost for on-going characterization is \$25,000 dollars per year. This cost estimate includes report generation. On-going mapping and screening are included in the cost for MCM 3 implementation.

Status Reporting: Much of the data collection and data management cost of this task is absorbed by the implementation of the MCMs. The estimated cost to compile and organize the volume of data that will be generated is \$5,000 per year. IDEM has provided a template for monthly and annual reports. For each annual report, some additional time and effort will be needed to evaluate the effectiveness of the plan and to determine if adjustments are needed to the BMPs and/or measurable goals. This cost is included in the estimates above.

Permit Application Renewal: At the end of this five-year permit term, the County will need to take a close look at what is and is not working with their plan. Additional BMPs

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can be added and ineffective BMPs can be dropped. It is expected that the level of effort needed to complete the evaluation of the existing program, make changes, and submit a permit renewal application to IDEM will be similar to the effort required for the original. Therefore, the estimated cost to prepare the permit renewal application is \$50,000 (includes 5 years of inflation).

On-going As Needed Technical Assistance: Throughout the term of the permit, the County may require assistance in the form of professional engineering services in order to address tasks associated with NPDES Phase II compliance issues. These tasks may include, but are not limited to, BMP evaluation, MS4 conveyance mapping, plan reviews, inspections, training modules, ordinances, and coordination with IDEM. The cost for on-going technical assistance is estimated to be \$25,000 for each year.

New Staff: The County will need to hire at least three additional staff to meet the workload demands of the Rule 13 program. It is anticipated that the County will hire an MS4 Coordinator, Technical/Engineer position, and an inspector. The estimated cost for these three staff positions is estimated to be \$200,000 for each year.

9.4 TOTAL SWQMP PROGRAM COSTS 2004 – 2008

Table 9-1 summarizes total program costs, which includes the costs for all tasks described above in Sections 9.1, 9.2, and 9.3. The total estimated cost of compliance with Rule 13 is \$4,746,000 for the first 5-year permit term.

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**Table 9-1
Total Program Costs**

	November 2003-Mar. 2005	Mar. 2005-Dec. 2005	Mar. 2006-Dec. 2006	Mar. 2007-Dec. 2007	Mar. 2008-Nov. 2008	Total
NOI and SWQMP Part A	\$4,000	N/A	N/A	N/A	N/A	\$4,000
SWQMP Part B	\$22,000	N/A	N/A	N/A	N/A	\$22,000
SWQMP Part C (development)	\$49,000	N/A	N/A	N/A	N/A	\$49,000
Implement MCM1	\$0	\$25,000	\$24,000	\$23,000	\$23,000	\$95,000
Implement MCM2	\$14,000	\$31,000	\$31,000	\$31,000	\$31,000	\$138,000
Implement MCM3	\$18,000	\$238,000	\$230,000	\$230,000	\$230,000	\$946,000
Implement MCM4	\$13,000	\$450,000	\$450,000	\$450,000	\$450,000	\$1,813,000
Implement MCM5	\$27,000	\$26,000	\$26,000	\$26,000	\$26,000	\$131,000
Implement MCM6	\$30,000	\$112,000	\$112,000	\$112,000	\$112,000	\$478,000
On-going Characterization	N/A	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
Annual Report	N/A	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000
Permit Renewal	N/A	N/A	N/A	N/A	\$50,000	\$50,000
On-going Assistance	N/A	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
New Staff	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$800,000
Total	\$177,000	\$1,137,000	\$1,128,000	\$1,127,000	\$1,177,000	\$4,746,000

9.5 BUDGETARY NEEDS

The total estimated costs provided above are gross costs. Some of the costs are already covered by existing budgets or passed on to the permit applicants/development communities. If these costs/resources are taken into account, the additional amount needed to achieve compliance with Rule 13 would reduce to approximately \$2,093,000. The estimated net annual costs breakdown is \$38,000 for the first year (2004), \$507,000 for the second year (2005), \$499,000 for the third year (2006), \$499,000 for the fourth year (2007), and \$550,000 for the fifth year (2008). In order begin implementing requirements of Rule 13; the County will rely on a combination of permit fees, general fund dollars, and potentially additional user fees.

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10.0

SUMMARY

Implementation of Allen County's Rule 13 required stormwater quality program will improve the overall quality of stormwater discharges entering into the County's separate storm sewer system. In order to successfully implement the Rule 13 program, the County must pay attention to reporting requirements contained in the programmatic indicators, adhere to mandated time lines, and be aware of next steps beyond the Part C document.

10.1 PROGRAMMATIC INDICATORS

As a visual aid to Allen County and to help evaluate Rule 13 permit compliance, **Table 10-1** lists the programmatic indicators that are required in Rule 13. The table further identifies those required and chosen BMPs that will fulfill these required programmatic indicators.

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**Table 10-1
Programmatic Indicators**

Programmatic Indicator	Description	BMP addressing Programmatic Indicator
1	Number or percentage of citizens, segregated by type of constituent that have an awareness of storm water quality issues.	Stormwater Survey
2	Number and description of meetings, training sessions, and events conducted to involve citizen constituents in the storm water program.	<ul style="list-style-type: none"> • Rule 13 Public Participation Lists • Public Meetings • Training for Construction Professionals • Storm Drain Marking • Annual IDDE, Good Housekeeping, & Pollution Prevention Staff Training • “Report-A-Polluter” Program
3	Number or percentage of citizen constituents that participate in storm water quality improvement programs.	<ul style="list-style-type: none"> • Rule 13 Public Participation Lists • Public Meetings • Training for Construction Professionals • Storm Drain Marking • “Report-A-Polluter” Program
4	Number and location of storm drains marked or cast, segregated by marking method.	Storm Drain Marking
5	Estimated or actual linear feet or percentage of MS4 mapped and indicated on an MS4 area map.	Stormwater System Map
6	Number and location of MS4 area outfalls mapped.	Stormwater System Map
7	Number and location of MS4 area outfalls screened for illicit discharges.	Illicit Discharge Detection and Elimination Plan
8	Number and location of illicit discharges detected.	Illicit Discharge Detection and Elimination Plan
9	Number and location of illicit discharges eliminated.	Illicit Discharge Detection and Elimination Plan
10	Number of and estimated or actual amount of material, segregated by type, collected from HHW collections in the MS4 area.	Solid Waste Management District Promotions
11	Number and location of constituent drop-off centers for automotive fluid recycling.	Solid Waste Management District Promotions

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Programmatic Indicator	Description	BMP addressing Programmatic Indicator
12	Number or percentage of constituents that participate in the HHW collections.	Solid Waste Management District Promotions
13	Number of construction sites obtaining an MS4 entity-issued storm water run-off permit in the MS4 area.	<ul style="list-style-type: none"> • Erosion and Sediment Control and Post-Construction BMP Tracking Database • Erosion and Sediment Control Ordinance • Post-Construction Control Ordinance
14	Number of construction sites inspected.	Erosion and Sediment Control and Post-Construction BMP Tracking Database
15	Number and type of enforcement actions taken against construction site operators.	<ul style="list-style-type: none"> • Erosion and Sediment Control and Post-Construction BMP Tracking Database • Procedures for Prioritizing Construction Activities
16	Number of, and associated construction site name and location for, public informational requests received.	Erosion and Sediment Control and Post-Construction BMP Tracking Database
17	Number, type, and location of structural BMPs installed.	Erosion and Sediment Control and Post-Construction BMP Tracking Database
18	Number, type, and location of structural BMPs inspected.	Erosion and Sediment Control and Post-Construction BMP Tracking Database
19	Number, type, and location of structural BMPs maintained or improved to function properly.	Post-Construction BMP Operation and Maintenance Plan
20	Type and location of nonstructural BMPs utilized.	Erosion and Sediment Control and Post-Construction BMP Tracking Database
21	Estimated or actual acreage or square footage of open space preserved and mapped in the MS4 area, if applicable.	Erosion and Sediment Control and Post-Construction BMP Tracking Database
22	Estimated or actual acreage or square footage of pervious and impervious surfaces mapped in the MS4 area, if applicable.	Not Applicable; County not set up to track
23	Number and location of new retail gasoline outlets or municipal, state, federal, or institutional refueling areas, or outlets or refueling areas that replaced existing tank systems that have installed storm water BMPs.	Not Applicable; County not set up to track

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Programmatic Indicator	Description	BMP addressing Programmatic Indicator
24	Number and location of MS4 entity facilities that have containment for accidental releases of stored polluting materials.	Spill Prevention and Clean Up
25	Estimated or actual acreage or square footage, amount, and location where pesticides and fertilizers are applied by a regulated MS4 entity to places where storm water can be exposed within the MS4 area.	Fertilizer and Pesticide Management
26	Estimated or actual linear feet or percentage and location of unvegetated swales and ditches that have an appropriately-sized vegetated filter strip.	MS4 Conveyance System Maintenance
27	Estimated or actual linear feet or percentage and location of MS4 conveyances cleaned or repaired.	MS4 Conveyance System Maintenance
28	Estimated or actual linear feet or percentage and location of roadside shoulders and ditches stabilized, if applicable.	MS4 Conveyance System Maintenance
29	Number and location of storm water outfall areas remediated from scouring conditions, if applicable.	MS4 Conveyance System Maintenance
30	Number and location of deicing salt and sand storage areas covered or otherwise improved to minimize storm water exposure.	Sand and Sand Management
31	Estimated or actual amount, in tons, of salt and sand used for snow and ice control.	Salt and Sand Management
32	Estimated or actual amount of material by weight collected from catch basin, trash rack, or other structural BMP cleaning.	<ul style="list-style-type: none"> • MS4 Conveyance System Maintenance • Waste Disposal
33	Estimated or actual amount of material by weight collected from street sweeping, if utilized.	Street Sweeping Program
34	If applicable, number or percentage and location of canine parks sited at least one hundred fifty (150) feet away from a surface waterbody.	Canine Park Location

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10.2 Master Timeline

The following Master Time outlines all BMPs that have been and will be completed by Allen County during their first five-year permit term.

Permit Year	MCM	BMP
2004	1	<ul style="list-style-type: none"> • Newsletter Articles (4) • Soil & Water Conservation District Activities
	2	<ul style="list-style-type: none"> • Public Meetings
	3	<ul style="list-style-type: none"> • Illicit Discharge Detection & Elimination (IDDE) Ordinance Development
	4	<ul style="list-style-type: none"> • Erosion & Sediment Control Ordinance
	5	<ul style="list-style-type: none"> • Post-Construction Control Ordinance • Post-Construction BMP Operation and Maintenance Plan
2005	1	<ul style="list-style-type: none"> • Training for Construction Professionals • Newsletter Articles (4) • Web site • Stormwater Survey • Distribute Stormwater Educational Brochures • Solid Waste Management District Promotions • Soil & Water Conservation District Activities • Mass Media Opportunities
	2	<ul style="list-style-type: none"> • Develop Rule 13 Public Participation List • Public Meeting • Storm Drain Marking
	3	<ul style="list-style-type: none"> • Stormwater System Map • IDDE Plan • IDDE and Good Housekeeping & Pollution Prevention Staff Training
	4	<ul style="list-style-type: none"> • Plan Review, Site Inspection, and Enforcement • Staff Training • Use Erosion & Sediment Control and Post-construction BMP Tracking Database • Develop and Implement Procedure for Prioritizing Construction Activities • Inspection and Enforcement Documentation • QA/QC of Overall Program
	5	<ul style="list-style-type: none"> • Included with MCM #4

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Permit Year	MCM	BMP
	6	<ul style="list-style-type: none"> • MS4 Conveyance System Maintenance • Street Sweeping Program • Salt and Sand Management • Snow Disposal Areas • Spill Prevention and Clean Up • Vehicle Maintenance Areas • Wash Water Management • Fertilizer and Pesticide Management • Canine Park Location, if applicable • Waste Disposal • Flood Management Projects
2006	1	<ul style="list-style-type: none"> • Training for Construction Professionals • Newsletter Articles (4) • Web Site • Distribute Stormwater Educational Brochures • Solid Waste Management District Promotions • Soil & Water Conservation District Activities
	2	<ul style="list-style-type: none"> • Update Rule 13 Public Participation List • Storm Drain Marking • "Report-A-Polluter" Program
	3	<ul style="list-style-type: none"> • Stormwater System Map • IDDE Plan • IDDE and Good Housekeeping & Pollution Prevention Staff Training
	4	<ul style="list-style-type: none"> • Plan Review, Site Inspection, and Enforcement • Staff Training • Use Erosion & Sediment Control and Post-construction BMP Tracking Database • Implement Procedure for Prioritizing Construction Activities • Inspection and Enforcement Documentation • QA/QC of Overall Program
	5	<ul style="list-style-type: none"> • Included with MCM #4

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Permit Year	MCM	BMP
	6	<ul style="list-style-type: none"> • MS4 Conveyance System Maintenance • Street Sweeping Program • Salt and Sand Management • Snow Disposal Areas • Spill Prevention and Clean Up • Vehicle Maintenance Areas • Wash Water Management • Fertilizer and Pesticide Management • Canine Park Location, if applicable • Waste Disposal • Flood Management Projects
2007	1	<ul style="list-style-type: none"> • Training for Construction Professionals • Newsletter Articles (4) • Web Site • Distribute Stormwater Educational Brochures • Solid Waste Management District Promotions • Soil & Water Conservation District Activities
	2	<ul style="list-style-type: none"> • Update Rule 13 Public Participation List • Storm Drain Marking • "Report-A-Polluter" Program
	3	<ul style="list-style-type: none"> • Stormwater System Map • IDDE Plan • IDDE and Good Housekeeping & Pollution Prevention Staff Training
	4	<ul style="list-style-type: none"> • Plan Review, Site Inspection, and Enforcement • Staff Training • Use Erosion & Sediment Control and Post-construction BMP Tracking Database • Implement Procedure for Prioritizing Construction Activities • Inspection and Enforcement Documentation • QA/QC of Overall Program
	5	<ul style="list-style-type: none"> • Included with MCM #4

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Permit Year	MCM	BMP
	6	<ul style="list-style-type: none"> • MS4 Conveyance System Maintenance • Street Sweeping Program • Salt and Sand Management • Snow Disposal Areas • Spill Prevention and Clean Up • Vehicle Maintenance Areas • Wash Water Management • Fertilizer and Pesticide Management • Canine Park Location, if applicable • Waste Disposal • Flood Management Projects
2008	1	<ul style="list-style-type: none"> • Training for Construction Professionals • Newsletter Articles (4) • Web Site • Stormwater Survey • Distribute Stormwater Educational Brochures • Solid Waste Management District Promotions • Soil & Water Conservation District Activities
	2	<ul style="list-style-type: none"> • Update Rule 13 Public Participation List • Storm Drain Marking • "Report-A-Polluter" Program
	3	<ul style="list-style-type: none"> • Stormwater System Map • IDDE Plan • IDDE and Good Housekeeping & Pollution Prevention Staff Training
	4	<ul style="list-style-type: none"> • Plan Review, Site Inspection, and Enforcement • Staff Training • Use Erosion & Sediment Control and Post-construction BMP Tracking Database • Implement Procedure for Prioritizing Construction Activities • Inspection and Enforcement Documentation • QA/QC of Overall Program
	5	<ul style="list-style-type: none"> • Included with MCM #4

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Permit Year	MCM	BMP
	6	<ul style="list-style-type: none"> • MS4 Conveyance System Maintenance • Street Sweeping Program • Salt and Sand Management • Snow Disposal Areas • Spill Prevention and Clean Up • Vehicle Maintenance Areas • Wash Water Management • Fertilizer and Pesticide Management • Canine Park Location, if applicable • Waste Disposal • Flood Management Projects

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10.3 Next Steps

As progress is made in implementing Allen County's Storm Water Quality Management Plan, elements contained in required annual program reports, monthly construction reports, and on-going water quality characterizations will need to be tracked. Rule 13 does provide program flexibility in that if a BMP proves to be ineffective or infeasible, then Allen County may change their program and incorporate a different BMP.

Annual Reports

Starting in March 2006, Allen County must submit annual reports to IDEM on their Rule 13 permit program. In subsequent permit terms, reports must be submitted only in years two and four.

Annual Reports must include:

- Progress towards development, implementation, and enforcement of all MCMs, including updated programmatic indicator data;
- A summary of complaints received and follow-up investigation results related to storm water quality issues;
- Updated measurable goals;
- Storm water BMPs installed or initiated;
- Follow-up or additional water quality characterization information;
- An updated active industrial facilities list;
- Implementation problems encountered, including BMP changes due to ineffectiveness or infeasibility;
- Funding sources and expenditures;
- Changes to MS4 area boundaries, including land areas added to the MS4 area via annexation or other similar means;
- Identified storm water quality improvement projects; and
- Updated receiving water information.

Monthly Construction Site Activity Reports

Allen County must submit monthly construction site project summary reports no later than the last day of the following month to IDEM. If no projects occur within a given month, a report does not need to be submitted. Reports must include those projects for which there has been a new permit application or termination notice and must contain:

- A list of all construction and post-construction project site names;
- Project site addresses;
- Project site construction duration timeframes; and
- An indication of enforcement actions undertaken.

Agency Inspections

To evaluate Rule 13 permit compliance, IDEM and/or IDNR staff may periodically inspect Allen County and review its stormwater program. The MS4 Operator for Allen County should be prepared to answer questions and provide documentation of program elements. The point of contact for such inspections will be the County Surveyor's Office. The Surveyor's Office may call upon responsible entities identified in the BMP tables for assistance in such inspections. IDEM may request data to facilitate the

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identification or qualification of pollutants that may be released to the environment from an MS4 conveyance or to determine effectiveness of the MCMs.

On-going Water Quality Characterization

As new water quality information becomes available and updates are made to data sources that were reviewed as part of the County's SWQMP – Part B: Baseline Water Quality Report, Allen County will review that information and adjust their Rule 13 program accordingly. As water quality reports become available, the County can review this information and compare it to their list of ranked priority watersheds. If different areas are identified as needing additional measures, then the County will adjust its priorities for program implementation or adjust or add program elements to address newly identified concerns.

Priority Watershed Activities

In an effort to further investigate ranked priority watersheds identified in subsection 2.3, Allen County should explore implementing Watershed Management Plans for these watersheds. Allen County should first investigate whether any organized watershed groups exist in the priority watersheds and whether they have developed and/or have begun implementing a Watershed Management Plan. If a group does exist and has a plan developed, then Allen County should be an active participant in watershed activities that overlap with the Rule 13 program goals.

If no group exists, then Allen County should try to develop their own Watershed Management Plan for each of the priority watersheds. IDEM 319 and 205(j) and IDNR LARE (watershed diagnostic studies) grant programs could provide funds to develop and implement Watershed Management Plans. As specific goals and pollutants of concern are specifically identified within priority watersheds related to stormwater runoff, the county should incorporate measures into their Rule 13 program to address these issues.

Rule 13 Permit Renewal

Permit renewal applications are due at least sixty days prior to the expiration date for the Rule 13 permit. Allen County's expiration date will be on November 5, 2008. Permit coverage under the renewal NOI will begin on the date of expiration from the previous five-year permit term. IDEM may reissue permits on a watershed basis, which may change these dates. Subsequent permits will require Allen County to maintain and, where possible, improve their performance in implementing the six MCMs.

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Appendix A

REFERENCES

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Indiana Department of Environmental Management. 327 IAC 15-13 Final Rule. August 2003.

Indiana Department of Environmental Management. Rule 13 Guidance Document. May 2003.

U.S. EPA – Office of Water. Storm Water Phase II Compliance Assistance Guide. March 2000.

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MOU	Memorandum of Understanding
MRBC	Maumee River Basin Commission
MS4	Municipal Separate Storm Sewers
NOD	Notice of Deficiency
NOI	Notice of Intent
NPDES	National Pollution Discharge Elimination System
OISC	Office of the Indiana State Chemist
O&M	Operational and Maintenance
PCB(s)	Polychlorinated Biphenyls
PSAs	Public Service Announcements
QA/QC	Quality Assurance/Quality Control
Qwq	Water Quality Discharge
SWCD	Soil and Water Conservation District
SWMD	Solid Waste Management District
SWQ	Stormwater Quality
SWQMP	Storm Water Quality Management Plan
TSS	Total Suspended Solids
WQv	Water Quality Volume

DEFINITIONS

Backwater. The rise in water surface elevation caused by some obstruction such as a narrow bridge opening, buildings or fill material that limits the area through which the water shall flow.

Base Flood. See "Regulatory Flood".

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Base Flood Elevation (BFE). The water surface elevation corresponding to a flood having a one percent probability of being equaled or exceeded in a given year.

Base Flow. Stream discharge derived from groundwater sources as differentiated from surface runoff. Sometimes considered to include flows from regulated lakes or reservoirs.

Benchmark. A marked point of known elevation from which other elevations may be established.

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.

Buffer Strip. An existing, variable width strip of vegetated land intended to protect water quality and habitat.

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.

Catch Basin. A chamber usually built at the curb line of a street for the admission of surface water to a storm sewer or subdrain, having at its base a sediment sump designed to retain grit and detritus below the point of overflow.

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.

Channel Improvement. Alteration, maintenance, or reconstruction of the channel area for the purpose of improving the channel capacity or overall drainage efficiency. The noted "improvement" does not necessarily imply water quality or habitat improvement within the channel or its adjacent area.

Channel Stabilization. Protecting the sides and bed of a channel from erosion by controlling flow velocities and flow directions using jetties, drops, or other structures and/or by fining the channel with vegetation, riprap, concrete, or other suitable lining material.

Combined Sewer Overflow. A system designed so that during dry periods the wastewater is carried to a treatment facility. During storm events, the excess water is discharged directly into a river, stream, or lake without treatment.

Compost. Organic residue (or a mixture of organic residue and soil) that has undergone biological decomposition until it has become relatively stable humus.

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Comprehensive Stormwater Management Program. A comprehensive stormwater program for effective management of stormwater quantity and quality throughout the community.

Constructed Wetland. A manmade shallow pool that creates growing conditions suitable for wetland vegetation and is designed to maximize pollutant removal.

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

Contour Line. Line on a map which represents a contour or points of equal elevation.

Control Structure. A structure designed to control the rate of flow that passes through the structure, given a specific upstream and downstream water surface elevation.

Conveyance. Any structural method for transferring stormwater between at least two points.

County Surveyor. A constitutional officer of the county, elected to a 4-year term from the county at large. Primary duties of the surveyor include maintaining annexation descriptions, legal survey book, and section corner record book. Surveyor is also an ex-officio member of the County Drainage Board and the technical authority on the construction, reconstruction, and maintenance of all regulated drains or proposed regulated drains in the county. Other major responsibilities of the surveyor include administering filter strip programs, membership in the County Plan Commission, and Training to the Indiana Alcoholic Beverage Commission.

Cross-Section. A graph or plot of ground elevation across a stream valley or a portion of it, usually along a line perpendicular to the stream or direction of flow.

Culvert. A closed conduit used for the conveyance of surface drainage water under a roadway, railroad, canal or other impediment.

Dam. A barrier to confine or impound water for storage or diversion, to prevent gully erosion, or to retain soil, sediment, or other debris.

Design Storm. A selected storm event, described in terms of the probability of occurring once within a given number of years, for which drainage or flood control improvements are designed and built.

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

Detention Storage. The temporary detaining of storage of stormwater in storage facilities, on rooftops, in streets, parking lots, school yards, parks, open spaces or other

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areas under predetermined and controlled conditions, with the rate of release regulated by appropriately installed devices.

Detention Time. The theoretical time required to displace the contents of a tank or unit at a given rate of discharge (volume divided by rate of discharge).

Discharge. 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.

Ditch. A man-made, open drainageway 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 (soil). As a natural condition of the soil, drainage refers to both the frequency and duration of periods when the soil is free of saturation. Soil drainage conditions are defined as:

- *Well-drained*--Excess water drains away rapidly, and no mottling occurs within 36 in. of the surface.
- *Moderately well drained*--Water is removed from the soil somewhat slowly resulting in small but significant periods of wetness, and mottling occurs between 18 and 36 in.
- *Somewhat poorly drained*--Water is removed from the soil slowly enough to keep it wet for significant periods but not all of the time, and mottling occurs between 8 to 18 in.
- *Poorly drained*--Water is removed so slowly that it is wet for a large part of the time, and mottling occurs between 0 and 8 in.
- *Very poorly drained*--Water is removed so slowly that the water table remains at or near the surface for the greater part of the time; there may also be periods of surface ponding; the soil has a black to gray surface layer with mottles up to the surface.

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.

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Drainage Board. A board consisting of three to five persons including the county executive (commissioners) or members appointed by the executive body (at least one of the Board member must be a county executive). The County Surveyor serves on the Board as an ex-officio, non-voting member. In a county having a consolidated city, the department of public works of the consolidated city comprises the drainage board. The Board is responsible for adopting drain classifications and a long-range plan, and for making decisions regarding the design, construction, reconstruction, and/or maintenance of regulated drains in the county.

Dry Well. A type of infiltration practice that allows stormwater runoff to flow directly into the ground via a bored or other excavated opening in the ground surface.

Duration. The time period of a rainfall event.

Earth Embankment. A man-made deposit of soil, rock, or other material often used to form an impoundment.

Economic Development Income Tax. A tax implemented to generate revenue for cities, towns, and the county to be utilized for economic development projects, capital projects, and economic development organizations.

Emergency Spillway. Usually a vegetated earth channel used to safely convey flood discharges around an impoundment structure.

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).

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- *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.

Filter Strip. Usually a long, relatively narrow area (usually, 20-75 feet wide) of undisturbed or planted vegetation used to retard or collect sediment for the protection of watercourses, reservoirs, or adjacent properties. See also Classified Filter Strip.

Floatable. Any solid waste that will float on the surface of the water.

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.

Flood Frequency. A statistical expression of the average time period between floods equaling or exceeding a given magnitude. For example, a 100-year flood has a magnitude expected to be equaled or exceeded on the average of once every hundred years; such a flood has a one-percent chance of being equaled or exceeded in any given year. Often used interchangeably with "recurrence interval".

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 flood plains adjoining the channel which are reasonably required to efficiently carry and discharge the peak flow of the regulatory flood of any river or stream.

French Drain. A drainage trench backfilled with a coarse, water-transmitting material; may contain a perforated pipe.

Geographical Information System. A computer system capable of assembling, storing, manipulation, and displaying geographically referenced information. This technology can be used for resource management and development planning.

Geotextile Fabric. A woven or non-woven, water-permeable synthetic material used to trap sediment particles, prevent the clogging of aggregates with fine grained soil particles, or as a separator under road aggregate..

Geotextile Liner. A synthetic, impermeable fabric used to seal impoundments against leaks.

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Global Positioning System. A system that provides specially coded satellite signals that is processed by a receiver, which determines position, velocity, and time. The system is funded and controlled by the U.S. Department of Defense.

Grade. (1) The slope of a road, a channel, or natural ground. (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.

Grass. A member of the botanical family Graminae, characterized by blade-like leaves that originate as a sheath wrapped around the stem.

Grassed Waterway. A natural or constructed waterway, usually broad and shallow, covered with erosion-resistant grasses and used to safely conduct surface water from an area.

Ground Cover (horticulture). Low-growing, spreading plants useful for low-maintenance landscape areas.

Ground Water. Accumulation of underground water, natural or artificial.

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

Household Hazardous Waste. Solid waste generated by households that is ignitable, toxic, reactive, corrosive, or otherwise poses a threat to human health or the environment.

Hydrologic Unit Code. A numeric United States Geologic Survey code that corresponds to a watershed area.

Hydrology. The science of the behavior of water in the atmosphere, on the surface of the earth, and underground. A typical hydrologic study is undertaken to compute flowrates associated with specified flood events.

Illicit Discharge. Any discharge to an MS4 conveyance that is not composed entirely of stormwater.

Impervious. Not allowing infiltration.

INDOT. Indiana Department of Transportation. Generally used here to refer to specifications contained in the publication "INDOT Standard Specifications."

Infiltration. Passage or movement of water into the soil.

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Invert. The inside bottom of a culvert or other conduit.

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

Minimum Control Measure (MCM). Minimum measures required by the NPDES Phase II program. The six (6) MCMs are: Public education and outreach, Public participation and involvement, Illicit discharge detection and elimination, Construction site runoff control, Post-construction runoff control, and Pollution prevention and good housekeeping.

Mulch. A natural or artificial layer of plant residue or other materials covering the land surface which conserves moisture, holds soil in place, aids in establishing plant cover, and minimizes temperature fluctuations.

MS4 Operator. The person responsible for development, implementation, or enforcement of the MCMs for a designated MS4 area.

Municipal Separate Storm Sewers. An MS4: (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's).

Mutual Drain. A drain that: (1) Is located on two or more tracts of land that are under different ownership; (2) Was established by the mutual consent of all the owners; and (3) Was not established under or made subject to any drainage statute.

National Geodetic Vertical Datum of 1929 (NGVD 1929). The nationwide, Federal Elevation datum used to reference topographic elevations to a known value.

National Pollution 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 run-off over the land in its pre-development state.

Nonpoint Source Pollution. Pollution that enters a water body from diffuse origins on the watershed and does not result from discernable, confined, or discrete conveyances.

Normal Depth. Depth of flow in an open conduit during uniform flow for the given conditions.

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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.

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

Open Space. Any land area devoid of any disturbed or impervious surfaces created by industrial, commercial, residential, agricultural, or other manmade activities.

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

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

Peak Discharge. The maximum instantaneous flow from a given storm condition at a specific location.

Percolation. The movement of water through soil.

Perennial Stream. A stream that maintains water in its channel throughout the year.

Permeability (soil). The quality of a soil that enables water or air to move through it. Usually expressed in 'inches per hour or inches per day.

Pervious. Allowing movement of water.

Pesticides. Chemical compounds used for the control of undesirable plants, animals, or insects. The term includes insecticides, herbicides, algicides, rodenticides, nematicides, fungicides, and growth regulators.

pH. A numerical measure of hydrogen ion activity, the neutral point being 7.0. All pH values below 7.0 are acid, and all above 7.0 are alkaline.

Phosphorus (available). Inorganic phosphorus that is readily available for plant growth.

Piping. The formation of "pipes" by underground erosion. Water in the soil carries the fine soil particles away, and a series of eroded tubes or tunnels develop. These openings will grow progressively larger and can cause a dam failure.

Point Source. Any discernible, confined, and discrete conveyance including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container,

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rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or maybe discharged (P.L. 92-500, Section 502[14]).

Porosity. The volume of pore space in soil or rock.

Private Drain. A drain that: (1) Is located on land owned by one person or by two or more persons jointly; and (2) was not established under or made subject to any drainage statute.

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

Programmatic Indicator. Any data collected by an MS4 entity that is used to indicate implementation of one (1) or more minimum control measures.

Publically Owned Treatment Works. A municiple operation that breaks down and removes contaminants in the wastewater prior to discharging to a stream through primary and/or secondary treatment systems.

Rainfall Intensity. The rate at which rain is falling at any given instant, usually expressed in inches per hour.

Receiving Stream. The body of water into which runoff or effluent is discharged.

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

Recurrence Interval. A statistical expression of the average time between floods equaling or exceeding a given magnitude.

Redevelopment. Alterations of a property that change a site or building in such a way that there is disturbances of one (1) acre or more of land.

Regulated Drain. A drain, either open channel or closed tile/sewer, subject to the provisions of the Indiana Drainage Code, I.C.-36-9-27.

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 and the Federal Emergency Management Agency. The "regulatory flood" is also known as the "base flood".

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.

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

Revetment. Facing of stone or other material, either permanent or temporary, placed along the edge of a stream to stabilize the bank and protect it from the erosive action of the stream. Also see Revetment riprap.

Riparian. Of, on, or pertaining to the banks of a stream, river, or pond.

Riprap. Broken rock, cobble, or boulders placed on earth surfaces, such as the face of a dam or the bank of a stream, for protection against the action of water (waves). Revetment riprap is material graded such that: (1) no individual piece weighs more than 120 lbs. and (2) 90-100% will pass through a 12-inch sieve, 20-60% through a 6-inch sieve, and not more than 10% through a 12-inch sieve.

Riverine. Relating to, formed by, or resembling a stream (including creeks and rivers).

River Restoration. Restoring the channel of a stream or ditch to its perceived original, non-obstructed capacity by means of clearing & snagging, obstruction removal, and inexpensive streambank protection measures. The term "restoration", as noted, does not necessarily imply restoration or improvement of water quality or habitat within the channel or its adjacent area.

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

Sand. (1) Soil particles between 0.05 and 2.0 mm in diameter. (2) A soil textural class inclusive of all soils that are at least 70% sand and 15% or less clay.

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 materials either on the ground surfaces or in bodies of water or watercourses.

Sensitive Water. A water body in need of protection or remediation base on its: providing habitat for threatened or endangered species, usage as a public water supply intake, relevant community value, or exception use classification

Settling Basin. An enlargement in the channel of a stream to permit the settling of debris carried in suspension.

Silt. (1) Soil fraction consisting of particles between 0.002 and 0.05 mm in diameter. (2) A soil textural class indicating more than 80% silt.

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Silt Fence. A fence constructed of wood or steel supports and either natural (e.g. burlap) or synthetic fabric stretched across area of non-concentrated flow during site development to trap and retain on-site sediment due to rainfall runoff.

Single Family Rate. A user fee that is a revenue source generated from people who use or benefit from stormwater management services.

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 handbook follow the common presentation of slopes--e.g., 2:1 with the metric presentation shown in parenthesis--e.g., (1V:2H). Slopes can also be expressed in "percents". Slopes given in percents are always expressed as $(100 \cdot V/H)$ -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. Also see alluvial soil, Clay, Cohesive soil, Loam, Permeability (soil), Sand, Silt, Soil horizon, Soil profile, Subsoil, Surface soil, Topsoil.

Soil and Water Conservation District (SWCD). 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.

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

Special Flood Hazard Area. An area that is inundated during the 100-Year flood.

Storm Duration. The length of time that water may be stored in any stormwater control facility, computed from the time water first begins to be stored.

Storm Event. An estimate of the expected amount of precipitation within a given period of time. For example, a 10-yr. frequency, 24-hr. duration storm event is a storm that has a 10% probability of occurring in any one year. Precipitation is measured over a 24-hr. period.

Storm Frequency. The time interval between major storms of predetermined intensity and volumes of runoff--e.g., a 5-yr., 10-yr. or 20-yr. storm.

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

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 (SWQMP). A comprehensive written document that addresses stormwater runoff quality within an MS4 area. The SWQMP is divided into three (3) submittal parts: Part A – Initial Application, Part B – Baseline Characterization and On-going Monitoring Plan, and Part C – Program Implementation.

Storm Sewer. A sewer that carries stormwater, surface drainage, street wash, and other wash waters but excludes sewage and industrial wastes. Also called a storm drain.

Stream. See Intermittent stream, Perennial stream, Receiving stream.

Streambanks. The usual boundaries (not the flood boundaries) of a stream channel. Right and left banks are named facing downstream.

Stream Gauging. The quantitative determination of stream flow using gauges, current meters, weirs, or other measuring instruments at selected locations (see Gauging station').

Stream Length. The length of a stream or ditch, expressed in miles, from the confluence of the stream or ditch with the receiving stream to the upstream extremity of the stream or ditch, as indicated by the solid or dashed, blue or purple line depicting the stream or ditch on the most current edition of the seven and one-half (72) minute topographic quadrangle map published by the United States Geological Survey, measured along the meanders of the stream or ditch as depicted on the map.

Subarea/Subbasin. Portion of a watershed divided into homogenous drainage units which can be modeled for purposes of determining runoff rates. The subareas/subbasins have distinct boundaries, as defined by the topography of the area.

Subsoil. The B horizons of soils with distinct profiles. In soils with weak profile development, the subsoil can be defined as the soil below which roots do not normally grow.

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

Subwatershed. A watershed subdivision of unspecified size that forms a convenient natural unit. See also Subarea.

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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.

Suspended Solids. Solids either floating or suspended in water.

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.

Tile Drain. Pipe made of perforated plastic, burned clay, concrete, or similar material, laid to a designed grade and depth, to collect and carry excess water from the soil.

Tile Drainage. Land drainage by means of a series of tile lines laid at a specified depth, grade, and spacing.

Topographic Map. Graphical portrayal of the topographic features of a land area, showing both the horizontal distances between the features and their elevations above a given datum.

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.

Topsoil. (1) The dark-colored surface layer, or a horizon, of a soil; when present it ranges in depth from a fraction of an inch to 2-3 ft. (2) Equivalent to the plow layer of cultivated soils. (3) Commonly used to refer to the surface layer(s), enriched in organic matter and having textural and structural characteristics favorable for plant growth.

Total Maximum Daily Load. Method used to establish allowable loadings for specified pollutants in a surface water resource to meet established water quality standards.

Toxicity. The characteristic of being poisonous or harmful to plant or animal life. The relative degree or severity of this characteristic.

Tributary. Based on the size of the contributing drainage area, a smaller watercourse which flows into a larger watercourse.

Turbidity. (1) Cloudiness of a liquid, caused by suspended solids. (2) A measure of the suspended solids in a liquid.

Underdrain. A small diameter perforated pipe that allows the bottom of a detention basin, channel or swale to drain.

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Unified Soil Classification System (USCS). A system of classifying soils that is based on their identification according to particle size, gradation, plasticity index, and liquid limit.

Uniform Flow. A state of steady flow when the mean velocity and cross-sectional area remain constant in all sections of a reach.

Urbanized Area. A land area comprising one (1) or more places that together have a residential population of at least fifty thousand (50,000) and an overall population density of at least five hundred (500) people per square mile.

Vegetative Stabilization. Protection of erodible or sediment producing areas with: permanent seeding (producing long-term vegetative cover), short-term seeding (producing temporary vegetative cover), or sodding (producing areas covered with a turf of perennial sod-forming grass) .

Water Body. Any accumulation of water, surface, or underground, natural or artificial.

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.

Water Table. (1) The free surface of the groundwater. (2) That surface subject to atmospheric pressure under the ground, generally rising and falling with the season or from other conditions such as water withdrawal.

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 facilities. Watersheds are often broken down into subareas for the purpose of hydrologic modeling.

Watershed Area. All land and water within the confines of a drainage divide. See also Watershed.

Weir. A channel-spanning structure for measuring or regulating the flow of water.

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 and/or those wetland areas that are under the COE jurisdiction.

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**Appendix C SWQMP PART C: PROGRAM IMPLEMENTATION
CERTIFICATION CHECKLIST**

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**Appendix D CERTIFICATION OF THE INFORMATIONAL PROGRAM
FOR THE PUBLIC EDUCATION AND OUTREACH MCM**

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**Appendix E CERTIFICATION OF THE PUBLIC PARTICIPATION AND
INVOLVEMENT PROGRAM FOR THE PUBLIC PARTICIPATION
AND INVOLVEMENT MCM**

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**Appendix F CERTIFICATION OF THE PLAN TO DETECT, ADDRESS
AND ELIMINATE ILLICIT DISCHARGES FOR THE ILLICIT
DETECTION AND ELIMINATION MCM**

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**Appendix G CERTIFICATION OF THE DEVELOPMENT,
IMPLEMENTATION, MANAGEMENT AND ENFORCEMENT
OF AN EROSION AND SEDIMENT CONTROL PROGRAM FOR THE
CONSTRUCTION SITE STORMWATER RUNOFF CONTROL MCM**

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**Appendix H CERTIFICATION OF THE DEVELOPMENT,
IMPLEMENTATION, MANAGEMENT AND ENFORCEMENT
OF A POST-CONSTRUCTION STORMWATER RUNOFF CONTROL
PROGRAM FOR THE POST-CONSTRUCTION SITE STORMWATER
RUNOFF CONTROL MCM**

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**Appendix I CERTIFICATION OF THE DEVELOPMENT AND
IMPLEMENTATION OF A PROGRAM TO REDUCE POLLUTANT
RUNOFF FROM MUNICIPAL OPERATIONS FOR THE MUNICIPAL
OPERATIONS POLLUTION PREVENTION AND GOOD HOUSEKEEPING MCM**

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Appendix J LISTING OF ACTIVE INDUSTRIAL FACILITIES

**Table 3
Active Industrial Facilities in the MS4 Area**

Facility Name	Mailing Address	City	Zip Code	Telephone Number	SIC Code	Locational Address	Locational City
Absolute Machine	7303 W County Line Rd S	Roanoke	46783	260-672-9525	3599	7303 W County Line Rd S	Roanoke
Adco Inc	1303 Hathaway Rd	Fort Wayne	46845	260-637-1922	3544	1303 Hathaway Rd	Fort Wayne
Admetco Inc	PO Box 10089	Fort Wayne	46850-0089	260-432-7300	3341	7625 Vicksburg Pike	Fort Wayne
Adroit Co	PO Box 189	Huntertown	46748-0189	260-637-8386	3544	14714 Lima Rd	Fort Wayne
Arcola Engine Service	11720 Bass Rd	Fort Wayne	46818	260-625-4119	3599	11720 Bass Rd	Fort Wayne
Bentz Transport Products Inc	PO Box 85019	Fort Wayne	46885-0019	260-441-0404	3713	4532 Allen Martin Dr	Fort Wayne
Berry's Welding/Trailer Hitch	9328 Lima Rd	Fort Wayne	46818	260-489-4816	3441	9328 Lima Rd	Fort Wayne
Bookbinding Skinner Hand	2936 Cunningham Dr	Fort Wayne	46804	260-485-3038	2789	2936 Cunningham Dr	Fort Wayne
Burns Cabinets & Displays Inc	5415 US Highway 30 E	Fort Wayne	46803	260-493-1290	2434	5415 US Highway 30 E	Fort Wayne
C & C Packing Co Inc	3115 Carroll Rd	Fort Wayne	46818	260-637-3011	2013	3115 Carroll Rd	Fort Wayne
C&M Fine Pack Inc	7707 Vicksburg Pike	Fort Wayne	46804	260-436-7225	3089	7707 Vicksburg Pike	Fort Wayne
Caim Inc	PO Box 99	Huntertown	46748-0099	260-637-9559	3089	2403 W Shoaff Rd Bldg B	Huntertown
Calhoun Lumber Inc	1314 W Cook Rd	Fort Wayne	46825	260-489-4313	2421	1314 W Cook Rd	Fort Wayne
Creative Coatings Inc	7505 Freedom Way	Fort Wayne	46818	260-489-3580	3479	7505 Freedom Way	Fort Wayne
D & N Micro Products Inc	4410 W Washington Center Rd	Fort Wayne	46818	260-484-6414	3679	4410 W Washington Center Rd	Fort Wayne
Dan Walters & Sons Inc	8113 Lima Rd	Fort Wayne	46818	260-489-5268	3999	8113 Lima Rd	Fort Wayne
Diversified Tools & Machines	2701 W Wallen Rd	Fort Wayne	46818	260-489-0272	3544	2701 W Wallen Rd	Fort Wayne

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Facility Name	Mailing Address	City	Zip Code	Telephone Number	SIC Code	Locational Address	Locational City
DKM Embroidery Inc	7722 Lima Rd	Fort Wayne	46818	260-490-3561	2395	7722 Lima Rd	Fort Wayne
Dunfee Tool Inc	6111 Cross Creek Blvd	Fort Wayne	46818	260-490-0037	3544	6111 Cross Creek Blvd	Fort Wayne
Embroidery Design Inc	2205 Braemar Dr	Fort Wayne	46814	260-625-5538	3944	2205 Braemar Dr	Fort Wayne
Envelope Service Inc	7101 Lincoln Pkwy	Fort Wayne	46804	260-432-6277	2752	7101 Lincoln Pkwy	Fort Wayne
First Gear Inc	7606 Freedom Way	Fort Wayne	46818	260-490-3238	3462	7606 Freedom Way	Fort Wayne
Fort Wayne Plastics Inc	510 Sumpter St	Fort Wayne	46804	260-432-2520	3089	510 Sumpter St	Fort Wayne
Fort Wayne Pools Inc	6930 Gettysburg Pike	Fort Wayne	46804	260-459-4100	3949	6930 Gettysburg Pike	Fort Wayne
Fort Wayne Wilbert Vault Inc	PO Box 11100	Fort Wayne	46855-1100	260-432-5031	3272	222 N Thomas Rd	Fort Wayne
Graphics Systems Inc	8421 Mayhew Rd	Fort Wayne	46835	260-485-9667	3599	8421 Mayhew Rd	Fort Wayne
Graycraft Signs Plus Inc	7103 W Jefferson Blvd	Fort Wayne	46804	260-432-3760	3993	7103 W Jefferson Blvd	Fort Wayne
Gresley Tool Inc	PO Box 10	Hoagland	46745-0010	260-447-3777	3599	9101 Trentman Rd	Fort Wayne
H & H Sales Co Inc	PO Box 686	Huntertown	46748-0686	260-637-3177	3713	16339 Lima Rd	Huntertown
Hanger Prosthetics & Orthotics	7802B W Jefferson Blvd	Fort Wayne	46804	260-456-5998	3842	7802B W Jefferson Blvd	Fort Wayne
Heartland Industries Inc	PO Box 338	Huntertown	46748-0338	260-637-3875	2452	16335 Lima Rd	Huntertown
Heartland Industries Inc De	9048 Lima Rd	Fort Wayne	46818	260-489-6879	3448	9048 Lima Rd	Fort Wayne
Home Guard Industries Inc	PO Box 39	Grabill	46741-0039	260-627-6060	3442	13101 S Main St	Grabill
Hoosier Metal Crafters	10429 Hosler Rd	Leo-Cedarville	46765	260-627-6452	3446	10429 Hosler Rd	Leo-Cedarville
Hub City Inc	7520 Freedom Way	Fort Wayne	46818	260-489-1131	3566	7520 Freedom Way	Fort Wayne
Hy-TEC Fiberglass Inc	2201 Suppliers Ct	Fort Wayne	46818	260-489-6601	3089	2201 Suppliers Ct	Fort Wayne
Icon Exhibits	8333 Clinton Park Dr	Fort Wayne	46825	260-482-8700	2541	8333 Clinton Park Dr	Fort Wayne
Indiana Die Molding LLC	9100 Front St	Fort Wayne	46818	260-489-3528	3089	9100 Front St	Fort Wayne
Industrial Metal Products Inc	4519 Allen Martin Dr	Fort Wayne	46806	260-447-7900	3444	4519 Allen Martin Dr	Fort Wayne
International Wire Group Inc	7222 Engle Rd	Fort Wayne	46804	260-459-8600	3366	7222 Engle Rd	Fort Wayne
Irving Ready-	13415	Fort Wayne	46845	260-637-	3273	13415 Coldwater Rd	Fort Wayne

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Facility Name	Mailing Address	City	Zip Code	Telephone Number	SIC Code	Locational Address	Locational City
Mix Inc	Coldwater Rd			3101			
ITT Industries	PO Box 3700	Fort Wayne	46801-3700	260-451-6000	3669	1919 W Cook Rd	Fort Wayne
James Brunson Inc	7928 Lima Rd	Fort Wayne	46818	260-489-9131	3446	7928 Lima Rd	Fort Wayne
Kamaya Inc	6407 Cross Creek Blvd	Fort Wayne	46818	260-489-1533	3676	6407 Cross Creek Blvd	Fort Wayne
KDA Furniture & Interiors Inc	1611 Pheasant Run	Huntertown	46748	260-637-3304	2521	1611 Pheasant Run	Huntertown
Klotz Special Formula Products	7424 Freedom Way	Fort Wayne	46818	260-490-0489	2992	7424 Freedom Way	Fort Wayne
Lincoln Food Service Products	PO Box 1229	Fort Wayne	46801-1229	260-459-8200	3556	1111 N Hadley Rd	Fort Wayne
Lube-Line Corp	906 Carroll Rd	Fort Wayne	46845	260-637-3779	3569	906 Carroll Rd	Fort Wayne
Master Spas Inc	6927 Lincoln Pkwy	Fort Wayne	46804	260-436-9100	3949	6927 Lincoln Pkwy	Fort Wayne
Merco-Savory Inc	PO Box 1229	Fort Wayne	46801-1229	260-459-8200	3556	1111 N Hadley Rd	Fort Wayne
Merin Interiors	9613 Wolf River Pl	Fort Wayne	46804	260-436-6975	2391	9613 Wolf River Pl	Fort Wayne
Mill Bread Co	7121 W Jefferson Blvd	Fort Wayne	46804	260-436-8700	2051	7121 W Jefferson Blvd	Fort Wayne
Minnich Mfg Inc	2421 W Wallen Rd	Fort Wayne	46818	260-489-5357	3599	2421 W Wallen Rd	Fort Wayne
Minnick Concrete Products Inc	PO Box 11100	Fort Wayne	46855-1100	260-432-5031	3272	222 N Thomas Rd	Fort Wayne
Mudrony Jewelry Design	7411 Oak Ln	Fort Wayne	46804	260-432-9865	3911	7411 Oak Ln	Fort Wayne
Northern Apex Corp	16335 Lima Rd # 9B	Huntertown	46748	260-637-2739	3643	16335 Lima Rd # 9B	Huntertown
Outman Industries Inc	14924 Pulver Rd	Fort Wayne	46845	260-338-1425	3643	14924 Pulver Rd	Fort Wayne
Parametric Machining Inc	16335 Lima Rd Ste 4A	Huntertown	46748	260-338-1564	3599	16335 Lima Rd Ste 4A	Huntertown
PIP Printing	7315 W Jefferson Blvd	Fort Wayne	46804	260-436-4484	2752	7315 W Jefferson Blvd	Fort Wayne
Plastic Composites Co	8301 Clinton Park Dr	Fort Wayne	46825	260-484-3139	3089	8301 Clinton Park Dr	Fort Wayne
Precision Laser Services Inc	14730 Lima Rd	Fort Wayne	46818	260-744-4375	3479	14730 Lima Rd	Fort Wayne
Precision Welding Corp	PO Box 511	Huntertown	46748-0511	260-637-5514	3544	16403 Lima Rd	Huntertown
Press Seal Gasket Corp	PO Box 10482	Fort Wayne	46852-0482	260-436-0521	3053	6932 Gettysburg Pike	Fort Wayne
Price Machine & Tool Inc	16335 Lima Rd Ste 9A	Huntertown	46748	260-637-5890	3599	16335 Lima Rd Ste 9A	Huntertown

**Allen County, Indiana
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Facility Name	Mailing Address	City	Zip Code	Telephone Number	SIC Code	Locational Address	Locational City
R S & R Machining Grinding	2714 Covington Woods Blvd	Fort Wayne	46804	260-436-7719	3599	2714 Covington Woods Blvd	Fort Wayne
Rmt Inc	PO Box 431	Huntertown	46748-0431	260-637-4649	3599	2420 W Shoaff Rd	Huntertown
S & S Tool Inc	15127 Pulver Rd	Fort Wayne	46845	260-637-6449	3544	15127 Pulver Rd	Fort Wayne
Scheumann Cabinet Co	8809 Winchester Rd	Fort Wayne	46819	260-747-3509	2434	8809 Winchester Rd	Fort Wayne
Silver Square Tech Inc	12204 Covington Rd	Fort Wayne	46814	260-625-4030	2721	12204 Covington Rd	Fort Wayne
Solae Central Soya	PO Box 1400	Fort Wayne	46801-1400	260-425-5100	2075	1946 W Cook Rd	Fort Wayne
Specialty Mold & Die	PO Box 504	Huntertown	46748-0504	260-637-5514	3599	16403 Lima Rd	Huntertown
Terex Advance Mixer	PO Box 80070	Fort Wayne	46898-0070	260-497-0728	3713	7727 Freedom Way	Fort Wayne
Tippman Industrial Products	4520 Ellenwood Dr	Fort Wayne	46806	260-441-9574	3559	4520 Ellenwood Dr	Fort Wayne
Top-Notch Tool Corp	PO Box 10672	Fort Wayne	46853-0672	260-434-1734	3544	6932 Gettysburg Pike	Fort Wayne
Wayne Chemical Inc	7114 Homestead Rd	Fort Wayne	46814	260-432-1120	2842	7114 Homestead Rd	Fort Wayne
Wayne Steel Supply Inc	7707 Freedom Way	Fort Wayne	46818	260-489-6249	3599	7707 Freedom Way	Fort Wayne
Wings N Things Fabrication	1829 Kroemer Rd	Fort Wayne	46808	260-432-2992	3441	1829 Kroemer Rd	Fort Wayne
XI Specialty Percussion Inc	16335 Lima Rd Ste 5	Huntertown	46748	260-637-5684	3931	16335 Lima Rd Ste 5	Huntertown
Yellow Book USA Inc	11118 Coldwater Rd # 101	Fort Wayne	46845	260-338-1044	2741	11118 Coldwater Rd # 101	Fort Wayne