Mahoning County, Mill Creek MetroParks, and the Townships of Austintown, Beaver, Boardman, Canfield, Coitsville, Poland, and Springfield

Final Storm Water Management Plan

Ohio Environmental Protection Agency

Authorization For Small Municipal Separate Storm Sewer Systems to Discharge Storm Water Under the National Pollutant Discharge Elimination System

> Prepared By: URS Corporation 800 West St. Clair Cleveland, Ohio 44113

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Acronyms Used in this Draft Include:

AWARE: Alliance for Watershed Action and Riparian Easements

BMP(s): Best Management Practice(s) CLUP: Comprehensive Land Use Plan

CWA: Clean Water Act

DOT: Department of Transportation E&SC: Erosion and Sediment Control GPS: Global Positioning System HBA: Home Builder's Association HSTS: Home Sewage Treatment System MCM: Minimum Control Measure

MEP: Maximum Extent Practical

MOU: Memorandum of Understanding

MS4: Municipal Separate Storm Sewer System

MSDS: Material Safety Data Sheet

NOI: Notice of Intent

NPDES: National Pollutant Discharge Elimination System

ODNR: Ohio Department of Natural Resources ODOT: Ohio Department of Transportation

Ohio EPA: Ohio Environmental Protection Agency

OSU: The Ohio State University PUD: Planned Unit Development SWC: Storm Water Committee

SW: Storm Water

SWCD: Soil and Water Conservation District SWMP: Storm Water Management Program

TMDL: Total Maximum Daily Load

USEPA: United States Environmental Protection Agency

WPCA: Water Pollution Control Act

I. INTRODUCTION

A. History of the Clean Water Act and Storm Water Management Regulations

In 1972, the Clean Water Act (CWA) was enacted to strengthen the Water Pollution Control Act (WPCA) of 1948. The CWA was intended to prohibit the discharge of any pollutants to Waters of the United States from a point source unless the discharge is authorized under a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program initially focused on discharges from industrial processes and municipal sewage treatment facilities. As pollution control measures for these pollutant sources were implemented and refined, it became increasingly evident that additional sources of pollution were contributing to water quality degradation. Specifically, storm water run-off was identified as a major cause of water quality impairment along with agriculture and silviculture practices.

Since 1972 and the passage of the CWA, the quality of our Nation's waters have improved dramatically. Despite this progress, degraded water bodies still exist. According to a 1996-2000 National Water Quality Inventory, a biennial summary of State surveys of water quality, an estimated forty (40) percent of surveyed water bodies are still impaired by pollution or do not meet national, state or local water quality standards. Two major contributing sources of impairments are Urban/Suburban storm water run-off and Construction site discharges.

These two contributing sources lead Congress in 1987 to amend the CWA mandating that the United States Environmental Protection Agency (USEPA) develop a phased implementation strategy for the NPDES program. Phase I of the USEPA storm water program was promulgated in 1990 and relies on NPDES permit coverage to address storm water run-off from:

- Medium/Large Municipal Separate Storm Sewer Systems (MS4s) generally serving populations of 100,000 or greater,
- Construction activity disturbing 5 acres of land or greater, and
- Ten categories of Industrial Activity.

The Storm Water Phase II program is the next step and is an extension and expansion of the Phase I program. This program requires additional owner/operators of small MS4s in urbanized areas, defined by the year 2000 US Census tract data, and owner/operators of small construction sites to address storm water run-off through the use of NPDES permits. This Phase addresses the small MS4s in addition to the following Federal, State and Tribal agencies:

- U.S. Department of Defense
- State Hospitals
- State Prisons
- State Departments of Transportation (DOT) not previously covered under a Phase I permit
- Universities
- Tribal Areas identified as small MS4s owner/operators

The Phase II rule was finalized in December 1999 and required a submittal date of March 2003. The Ohio EPA passed the final permit requirements to meet the Phase II rule on December 27, 2002. It identifies six Minimum Control Measures (MCM) that must be addressed as compliance requirements associated with this program. They are as follows:

- Public Education and Outreach on Storm Water Impacts
- Public Involvement and Public Participation

- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Controls
- Post Construction Storm Water Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

The following information is presented to support the Ohio EPA's Phase II General Permit for coverage associated with storm water discharges governed by the permit requirements. Sections I and II of the permit address coverage and Notice of Intent requirements respectively. The Notice of Intent has been completed and is submitted independent of this plan.

B. Purpose of the Permit

Mahoning County and its joint permittees, the Townships of Austintown, Beaver, Boardman, Canfield, Poland, and Springfield, and Mill Creek MetroPark (hereafter referred to as the Applicants) are jointly seeking authorization for their Small Municipal Separate Storm Sewer Systems (MS4) to discharge storm water under the National Pollutant Discharge Elimination System. In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., and the Ohio Water Pollution Control Act (Ohio Revised Code 6111) entities that discharge storm water from Small MS4s, as defined in Part 7 of this permit are authorized by the Ohio Environmental Protection Agency, hereafter referred to as "Ohio EPA," to discharge from the outfalls and to the receiving surface waters of the state identified in their Notices of Intent (NOI) Application form on file with Ohio EPA in accordance with the conditions specified in this permit. The primary objective of this requirement, outlined in 40 CFR Parts 9, 122, 123 and 124, "National Pollutant Discharge Elimination System-Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges" issued by the USEPA in December 1999, is to require the development of a storm water management plan (SWMP) that addresses the six (6) minimum control measures set forth in the regulation.

C. Storm Water Management Program

This Mahoning County Storm Water Management Plan (SWMP) is a joint plan submitted by the following regulated entities:

- Mahoning County
- Austintown Township
- Beaver Township
- Boardman Township
- Canfield Township
- Coitsville Township
- Poland Township
- Springfield Township
- Mill Creek MetroParks

These regulated entities have agreed to enter into a Memorandum of Understanding (MOU) to implement their respective storm water management plans as joint permittees, with Mahoning County taking the lead role. The MOU outlines each joint permittee's program responsibilities and reporting requirements, and acknowledges that in agreeing to this MOU they are responsible for the agreed upon measurable goals, schedule and financial responsibilities associated with this SWMP.

D. Legal Authority to Implement the Storm Water Management Program

Sections 3.1.1.2 and 3.1.1.3 of the permit require statements indicating legal authority to implement selected Best Management Practices (BMPs) associated with permit compliance. Varying levels of legal authority to implement a storm water program exist. Many of the BMPs discussed in this SWMP could be required under the subdivision regulations, building codes or health regulations of Mahoning County.

Townships have the legal authority to implement the SWMP under the government authority granted by Title 5, Chapters 501 to 521, Chapter 1502, and Chapter 5571 of the Ohio Revised Code. In addition, the Ohio Attorney General Opinion No. 85-053 states that a Township may use zoning resolutions to regulate land use in order to control sediment and storm water runoff from urban development. It is understood in this context that the definition of urban development is not restricted to high-density development common to cities, but can include large lot housing subdivisions, commercial, and industrial development.

E. Financial Ability to Implement the Storm Water Management Program

The permit clearly states that all selected measurable goals and Best Management Practices are to be to the Maximum Extent Practical (MEP). This also includes the financial impact of implementing a program of this type. The financial abilities of the joint permittees to implement the SWMP were taken into consideration during development.

In Year 1 the joint permittees will fund the activities needed to implement the SWMP through each entities General Fund. During Year 1 and Year 2, the County and each Township Storm Water Management Committees will evaluate costs of the program, and if required develop alternative funding. In order to fund the program, the joint permittees are limited to property tax revenues allocated to them by state law.

F. Overview of Community Storm Water System

The SWMP's area lies in the southern portion of northeast Ohio (Figure 1). The Mahoning River is the major stream draining the County. There are two rather small portions of the southern 1/3 of the County that lie within the Little Beaver Creek watershed.

Mahoning County covers 424 square miles. Table 1a shows the regulated areas encompassed by all the joint permittees in this SWMP. The Mahoning River and several of its tributaries (including Yellow Creek, Mill Creek and Crab Creek) drain most of the area. A small portion of the area, including portions of Poland and Springfield Townships, drains to the Little Beaver Creek. While rural portions of the County are not served by sewers, the majority of the regulated area is sewered.

Table 1a. Joint Permittees, Estimated Regulated Area Size and Watershed Location.

SWMP Joint Permittee	Area (miles ²)	Major Watersheds
Mahoning County	58	Mahoning River, Little Beaver Creek
Austintown Township	19.7	Mahoning River
Beaver Township	1.1	Mahoning River
Boardman Township	22.5	Mahoning River
Canfield Township	7.36	Mahoning Ri ver
Coitsville Township	0.12	Mahoning River
Poland Township	1.3	Mahoning River, Little Beaver Creek
Springfield Township	6.8	Mahoning River, Little Beaver Creek
Mill Creek MetroPark	4.06	Mahoning River

The storm water drainage system for Mahoning County and the Townships is a combination of ditches that run parallel to County and Township roads, and a limited number of closed pipe systems. The majority of the closed pipe systems are located in subdivisions. Mahoning County currently has a county drainage plan, which will be modified as necessary to conform to this SWMP.

Mahoning County and the joint permittee Townships operate Municipal Separate Storm Sewer Systems (MS4s). Mill Creek MetroParks has been identified as a Non-Traditional MS4 owner/operator by the Ohio EPA. These entities have combined to submit this joint SWMP. The Phase II program regulates MS4s located wholly or partially within urbanized areas, as defined by the United States Bureau of the Census. Urbanized areas include cities and townships with populations greater than 10,000 and less than 100,000 people. The permitted facilities under the County's jurisdiction include approximately 120 miles of county roads and other County facilities located within these urbanized areas (Figure 2).

G. Description of Permit Development and Decision Process

To develop this SWMP, the Applicants followed the steps detailed below:

- 1. **Storm Water Management Committee**: Created with representation from each of the joint permittees. The committee collectively provided information used to establish a baseline for Best Management Practice selection and reviewed selected BMPs. The Committee developed a Memorandum of Understanding (MOU) to implement the SWMP. The Committee will meet periodically throughout the course of the 5-year permit term to review information for the annual report, review and assess the performance of the selected BMPs, and modify practices as necessary. The Committee is made up of representatives from the Mahoning County Engineer, Mahoning County Sanitary Engineer, Board of County Commissioners, Mahoning County District Board of Health, and the Mahoning County Prosecutor; Mill Creek MetroParks; Austintown, Beaver, Boardman, Canfield, Coitsville, Poland, and Springfield Townships; and the Mahoning Soil and Water Conservation District.
- 2. Reviewed the specific requirements of the Ohio EPA draft NPDES Phase II permit: The first step in the Management plan process was to complete an internal audit of current practices, policies, resolutions, regulations and other storm water related functions or procedures. Upon completion of this audit, Best Management Practices were selected and reviewed by the Committee. A final list of BMPs, with an implementation schedule, measurable goals, responsible party, and rationale for selection was developed for the SWMP. Following the Draft SWMP, a final SWMP was prepared.
- 3. **Held Public Hearings:** The Storm Water Management Committee presented the draft SWMP at an Interested Party workshop held on February 21, 2003. A public comment period was held from Monday February 24 through Friday February 28, 2003. Copies of the Draft plan were made available at the following locations for public review and comment:
 - Mahoning County Engineer's office
 - Mahoning County District Board of Health
 - Board of County Commissioners
 - Mahoning Soil and Water Conservation District
 - Mill Creek MetroParks
 - Austintown Township
 - Beaver Township

- Boardman Township
- Canfield Township
- Coitsville Township
- Poland Township
- Springfield Township
- 4. *Approved:* The Mahoning County Engineers Office will be the responsible office and will be signed by Mr. Richard Marsico, P.E., P.S.

II. MINIMUM CONTROL MEASURES

Tables have been developed that describe each proposed BMP, and show the schedule and measurable goals, responsible parties and rationale for selection of each BMP. Since there are three general types of MS4 represented in this joint plan (County government, Township government, and a municipal park agency), there are a wide variety of needs, appropriate BMPs and authority to enforce actions. Therefore, it was necessary to develop separate tables for each joint permittee. All of the selected BMPs will be implemented to the maximum extent practical under State and local laws. Many of the BMPs are common to all the joint permittees, but there are some differences in how the BMPs can be implemented at each level. All the BMP selection tables appear in the Appendices. For each joint permittee, the tables are ordered as follows:

Appendix A	Mahoning County
Appendix B	Austintown Township
Appendix C	Beaver Township
Appendix D	Boardman Township
Appendix E	Canfield Township
Appendix F	Coitsville Township
Appendix G	Poland Township
Appendix H	Springfield Township
Appendix I	Mill Creek MetroParks

These tables form the basis of the text that follows. Bold text was taken from Ohio EPA NPDES Permit OHQ000001.

A. Public Education and Outreach, and Public Involvement and Participation (MCM #1 and #2)

The Permit Requirement under the Ohio EPA Phase II Storm Water Permit:

- 3.2.1.1 Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and steps that the public can take to reduce pollutants in storm water runoff. In the case of non-traditional MS4s (e.g. Universities, hospitals, prisons, military bases, and other government complexes), the permittee is only required to provide educational materials and outreach to employees, on-site contractors, and individuals using regulated facilities.
- 3.2.2.1 Comply with State and local public notice requirements when implementing a public involvement/participation program. In the case of non-traditional MS4s (e.g. ODOT, Universities, hospitals, prisons, military bases, and other government complexes), the permittee is only required to provide educational materials and outreach to employees, onsite contractors, and individuals using regulated facilities.

Public Education and Public Involvement Plan

Mahoning County and the joint permittees have combined MCM 1 and MCM 2 for convenience in the Storm Water Management Plan. These two MCM's are similar and would require similar BMPs. The BMPs, measurable goals, responsible parties and rationale in this Public Involvement and Public Education Plan are presented in Table 1 in each Appendix.

In addition to Table 1 the joint permittees have documented the decision process with the following information per Ohio EPA NPDES permit requirement 3.2.1.2 and 3.2.2.2.

3.2.1.2.1 & 3.2.1.2.2 Mahoning County must inform employees, on-site contractors, and individuals using Mahoning County facilities about the steps they can take to reduce storm water pollution and how to become involved in the storm water management program.

Mahoning County will inform the public about the steps they can take to reduce storm water pollution and to get involved in the Storm Water Management Program through a combination of workshops, community activities, print media, and web site postings.

3.2.1.2.3 & 3.2.2.2.3 Who are the target audiences for the Applicant's public education and involvement plan who are likely to have significant storm water impacts and why were those target audiences selected? Include a description of the types of ethnic and environmental groups engaged and steps to involve all potentially affected stakeholders including businesses, trade associations, environmental groups, homeowners associations, and educational organizations.

The target audience includes employees and citizens of Mahoning County and the joint permittee Townships, employees of Mill Creek MetroParks and contractors working on and individuals using facilities subject to this permit. The major environmental agencies involved in preparation of this SWMP are the Mahoning Soil and Water Conservation District and the Mahoning County District Board of Health. Several public involvement activities, including proposed newspaper articles, newsletters and web site information, are targeted toward very broad audiences. Other education efforts could include brochures and workshops, aimed at audiences such as businesses, homeowners associations, and contractors.

3.2.1.2.4 What are the target pollutant sources your public education plan is designed to address?

Mahoning County and its joint permittees will focus on the following target pollution sources:

- Sediment from construction activities
- Storm water quantity- as a factor in stream bank degradation, erosion, etc.
- Home Sewer Treatment Systems
- Changes in impervious cover

The focus of the SWMP will be identifying "hot spots" determined by a systematic inventory of Mahoning County's regulated areas. The impacts to be addressed will be determined by the inventory that will be conducted during this five-year permit term.

3.2.1.2.5 What is your outreach strategy, including mechanisms (e.g. printed brochures, newspapers, media, workshops, etc.) you will use to reach your target audiences, and how many people you expect to reach with the outreach strategy over the permit term?

The Mahoning County Storm Water Management Plan will rely on existing media to communicate with the target audiences. These existing resources include newspaper articles, newsletters currently provided by many of the joint permittees, and web sites. These existing resources will be supplemented with educational sessions outlined in Table 1 (Appendix A) for each joint permittee. Milestones listed in Table 1 (Appendix A) for the various practices selected include efforts to document the number of people reached.

3.2.2.2.1 How you have involved the public in the development and submittal of your NOI and SWMP.

The Mahoning County Storm Water Management Committee is comprised of personnel from each joint permittee. The Mahoning Board of County Commissioners and the various Township Trustees have been briefed throughout the decision making process. A draft of this application was made available to the public at the locations shown on page 5. A Public Notice indicating the availability of the Draft SWMP was published in the Youngstown Vindicator newspaper. The Draft SWMP was available for review and comment from 24 February through 28 February, 2003. A summary of responses will be developed after March 10, 2003.

3.2.2.2.2 What is your plan to actively involve the public in the development and implementation of your plan?

A variety of means to communicate with and educate the public are outlined in Table 1 in each Appendix. Table 1 lists opportunities for the public to comment on the SWMP during the 5-year permit term. The table also identifies activities in which members of the public can participate.

3.2.2.2.4 What types of public involvement activities are included in your plan? Where appropriate consider the following types of public involvement activities:

3.2.2.4.1 Citizen representatives on storm water management panel.

As Mahoning County moves from planning to implementation over the 5-year permit term, the current County Storm Water Management Committee could be expanded to include a citizen and a development community representative. Each joint permittee Township has created a Township Storm Water Management Committee; these could also be expanded to include a citizen representative in the future.

3.2.2.2.4.2 Public hearings.

A stakeholders meeting to introduce the plan and begin to collect public comments during plan development was held on February 21, 2003. The Draft SWMP was available for review from February 24 through February 28, 2003. Mahoning County held a Board of County Commissioners Meeting to discuss and adopt changes to the subdivision regulations. Each Township held Trustee Meetings where the changes to the zoning resolutions were discussed and adopted. Additional public hearings will be scheduled if substantial modifications are required during the 5-year permit term.

3.2.2.2.4.3 Working with citizen volunteers willing to educate others about the program.

Current plans call for using existing agencies and groups to lead the public education efforts. As the SWMP is implemented over the five-year permit term, the Storm Water Management Committees will identify opportunities for citizen volunteers to participate.

3.2.2.2.4.4 Volunteer monitoring or stream clean-up activities.

Several of the joint permittees sponsor, help sponsor or participate in monitoring or clean-up activities. These will be continued and expanded where possible.

3.2.1.2.6 & 3.2.2.2.5 Who is responsible for overall management and implementation of your Pubic Education and Involvement Plan?

The responsible parties are listed in Table 1 in each Appendix.

3.2.1.2.7 & 3.2.2.2.6 How will you evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs?

Measures to evaluate each practice are listed in Table 1 in each Appendix.

B. Illicit Discharge Detection and Elimination (MCM #3)

The Permit Requirement under the Ohio EPA Phase II Storm Water Permit:

- 3.2.3.1.1 Develop, implement, and enforce a program to detect and eliminate illicit discharges into your small MS4 (for illicit discharges to your MS4 via a neighboring interconnected MS4, you are only required to inform the neighboring MS4 and the Ohio EPA in your annual report submission, of their existence).
- 3.2.3.1.2 Develop a storm sewer system map showing the location of all outfalls and the names and locations of all surface waters of the State that receive discharges from those outfalls.
 - 3.2.3.1.2.1 Within five years of when your coverage under this general permit is granted, you must submit the following to Ohio EPA:

3.2.3.1.2.1.1 A list of all on-site sewage disposal systems connected to discharge to your MS4 (a.k.a. home sewage treatment systems (HSTS)) including addresses.

3.2.3.1.2.1.2 A storm sewer map showing the location of all HSTS connected to your MS4. This map shall include details on the type and size of conduits/ditches in your MS4 that receive discharges from HSTSs, as well as the water bodies receiving the discharges from your MS4.

3.2.3.1.3 To the extent allowable under State or local law, effectively prohibit through ordinance or other regulatory mechanism illicit discharges to your storm sewer system and implement appropriate enforcement procedures and actions.

3.2.3.1.5 Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Illicit Discharge Detection and Elimination Plan

The BMPs, measurable goals, and responsible parties in this Illicit Discharge Detection and Elimination Plan are detailed in Table 2 in each Appendix. In addition to Table 2, per Ohio EPA draft NPDES permit requirement 4.2.3.2, we are documenting our decision process with the following information required by the draft permit.

3.2.3.2.1 How you will develop a storm sewer map showing the location of all outfalls and the names and location of all receiving waters. Describe the sources of information you used for the maps, and how you plan to verify the outfall locations with field surveys. Describe how your map will be regularly updated.

Mahoning County currently has a County-wide GIS program that maintains many of the data themes needed to complete the background mapping for a storm sewer map. The County and most of the joint permittees maintain an inventory list of all culverts within their jurisdiction. A base map will be assembled, consisting of the County background mapping and the culvert inventory for each joint permittee. Once the base map is assembled, the process of mapping outfalls will begin. The SWMP calls for Mahoning County to use real time corrected Global Positioning System (GPS) surveying (sub-meter accuracy) to map outfalls. The SWMP indicates that 10% of the system will be mapped in Year 1, 20% in Years 2 and 3 each, and 25% in years 4 and 5 each. Annual updates will be performed using GPS surveys.

3.2.3.2.2 The mechanism (ordinance or other regulatory mechanism) you will use to prohibit illicit discharges and why you chose that mechanism. If you need to develop this mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.

The Mahoning County Storm Water Management Committee will be developing a model regulation at the County level. The County Committee will work with the joint permittees to adapt this County model and draft resolution language to prohibit illicit discharges at the Township level. As detailed in Table 2, the joint permittee groups will review this resolution and adopt it by Year 3.

3.2.3.2.3 Your plan to ensure through appropriate enforcement procedures and actions that your illicit discharge regulation is implemented.

Table 2 indicates that the joint permittees will adopt appropriate resolution language by Year 3 that enable appropriate enforcement procedures, to the extent allowable under state and local laws.

3.2.3.2.4 Your plan to detect and address illicit discharges to your system, including discharges from illegal dumping and spills. Your plan must include dry weather field screening for non-storm water flows and field tests of selected chemical parameters as indicators of discharge sources. Your plan must also address on-site sewage disposal systems (including failing on-lot HSTS and off-lot discharging HSTS) that flow into your storm drainage system. Your description must address the following at a minimum:

3.2.3.2.4.1 Procedures for locating priority areas which includes areas with higher likelihood of illicit connections (e.g. areas with older sanitary sewer lines, for example) or ambient sampling to locate impacted reaches.

3.2.3.2.4.2 Procedures for tracing the source of an illicit discharge, including specific techniques you will use to detect the location of the source.

3.2.3.2.4.3 Procedures for removing the source of an illicit discharge.

3.2.3.2.4.4 Procedures for program evaluation and assessment.

Each joint permittee will examine each outfall and storm conveyance for evidence of dry weather flows. The Mahoning County District Board of Health is currently developing a list of all known HSTS's in the County. The District Board of Health has committed to mapping all of the HSTS's throughout the County, starting with septic systems located in the urbanized portions of the County. The Board's plan is to map HSTS's using real-time corrected GPS surveying.

Illicit discharges can be detected using a combination of dry and wet weather sampling. If flows are detected in storm water conveyances during dry weather, it is logical to conclude that sewage or effluents other than storm water are responsible. In addition, outfalls, catch basins, manholes and pipes can be inspected for stains and deposits. Potentially illicit discharges will be examined for odors or other signs of sewage. In addition, specific tests for the presence of fecal coliforms, ammonia, and surfactants will be performed.

The volume of each detected flow will be determined. In sewered areas the process will involve examining manholes, basins and pipes upstream from the area where the illicit discharge was detected, until the discharge is no longer detected. In ditched areas the ditch will be examined upstream of the discharge. Detected illicit discharges will be traced to the source and eliminated. In sewered areas appropriate steps will be taken to replace those pipes or other structures that are leaking sewage into the storm system. In areas without sewers the causes of illicit discharges are generally failing septic systems. The Health Board will issue orders to repair or upgrade systems as required.

To evaluate the effectiveness of this program, the County will track the number of illicit discharges detected and removed over the 5-year period. We anticipate that by Year 4 the number of illicit discharges detected should begin to decrease.

3.2.3.2.5 How you plan to inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste. Include in your description how this plan will coordinate with your public education minimum measure and your pollution prevention/good housekeeping minimum measure.

The Public Involvement/Public Education section of this SWMP (MCM 1 and 2) includes steps to educate the target audiences regarding the hazards associated with illicit discharges.

3.2.3.2.6 Who is responsible for overall management and implementation of your storm water illicit discharge detection and elimination plan and, if different, who is responsible for each of the BMPs identified for this plan?

Table 2 in each Appendix identifies the responsible parties for each joint permittee. In general, responsibility for ensuring all the BMPs are implemented lies with the Mahoning Board of County Commissioners. For the Illicit Discharge program, the District Board of Health has responsibilities for detecting and eliminating discharges. Within each Township, responsibilities lie with each Township Storm Water Management Committee and with road superintendents or the Township Trustees. Responsibility for illicit discharge detection and elimination in Mill Creek MetroPark lies with the MetroPark staff.

3.2.3.2.7 How will you evaluate the success of this minimum control measure, including how you selected the measurable goals for each of the BMPs?

Table 2 in each Appendix indicates various ways Mahoning County will evaluate the success of the selected BMPs. The most obvious measurable goals were those associated with implementing the Illicit Discharge program. The first goals set were for mapping the system. Given the size of the area to be mapped, and the limited funds available for the effort, it seemed prudent to set goals based on the percentage of the total area to be mapped over the 5-year program. The schedule appears in Table 2 (Appendix A).

Implementation of the other BMPs is spread over the 5-year program as well. Again, the logical measure of success seemed to be meeting milestone dates for implementing the BMPs. These milestones are listed in Table 2 (Appendix A).

C. Construction Site Storm Water Runoff Control (MCM #4)

The Permit Requirement (per Ohio EPA draft NPDES Permit)

3.2.4.1 Develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction sites that result in a land disturbance of greater

than or equal to 1 acre. Reduction of storm water discharges from construction activities disturbing less than 1 acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb 1 or more acres. Your program must include the development and implementation of, at a minimum:

- 3.2.4.1.1 An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law.
- 3.2.4.1.2 Requirements for construction site operators to implement appropriate erosion and sediment control BMPs.
- 3.2.4.1.3 Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes at the construction site that may cause adverse impacts to water quality.
- 3.2.4.1.4 Procedures for site plan review which incorporate consideration of potential water quality impacts.
- 3.2.4.1.5 Procedures for receipt and consideration of information submitted by the public.
- 3.2.4.1.6 Procedures for site inspections and enforcement of control measures.

Construction Site Storm Water Control Plan

The BMPs, measurable goals, and responsible parties in this Construction Site Storm Water Runoff Control Plan are detailed in Table 3 of each Appendix. In addition to Table 3, per Ohio EPA draft NPDES permit requirement 4.2.4.2, we are documenting our decision process with the following information required by the permit.

3.2.4.2.1 The regulatory mechanism you will use to require E&SC at construction sites and why you chose that mechanism. If you need to develop this mechanism, describe your plan and schedule to do so. If your mechanism is already developed, include a copy of the relevant sections with your SWMP.

For Mahoning County the existing Erosion and Sediment Control (E&SC) requirements are found in the Subdivision Regulations. These regulations will be modified during the 5-year permit term to meet compliance requirements and address Erosion and Sediment Control from construction sites. These regulations are also being modified as a result of the new Ohio EPA Construction permit requirements.

All of the joint permittee Townships, except Springfield Township, currently have zoning resolutions in place. In Springfield Township the only mechanisms available is the building inspection program managed through the County Building Department, the County Planning Board, County subdivision regulations and the Mahoning County District Board of Health regulations. The SWMP outlines plans to evaluate ways to include E&SC enforcement at construction sites to the zoning or building inspector's checklist.

The Mahoning Soil and Water Conservation District (SWCD) has agreed to assist the joint permittees in educating target audiences, site plan review, inspection and BMP selection for projects. A memorandum of understanding (MOU) that describes the relationship between SWCD and the Applicants will be developed in Year 1 of the Program.

3.2.4.2.2 Your plan to ensure compliance with your E&SC regulatory mechanism, including the sanctions and enforcement mechanisms you will use to ensure compliance. Describe your procedures for when you will use certain sanctions. Possible sanctions include non-monetary penalties (such as a stop work order), fines, bonding requirements, and/or permit denials for non-compliance.

Given the complexity of the enforcement process, the appropriate enforcing authority for each of the joint permittees will be identified over the course of the 5-year plan.

3.2.4.2.3 Your requirements for construction site operators to implement E&SC BMPs and control waste at construction sites that may cause adverse impacts on water quality. Such waste includes discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste.

Table 3 of each Appendix indicates goals and schedules for implementing BMPs for construction sites. Included are steps to control concrete truck washout, litter control, waste material control and access to construction sites. For each of these items the SWMP indicates that Year 1 of the program will be spent developing controls. These will be implemented in subsequent years and success will be monitored.

3.2.4.2.4 Your procedures for site plan review, including the review of preconstruction site plans, which incorporate considerations of potential water quality impacts. Describe your procedures and the rationale for how you will identify certain sites for site plan review, if not all plans will be reviewed. Describe the estimated number and percentage of sites that will have pre-construction site plan review.

Currently subdivision plans are reviewed for compliance with storm water issues at the County level, with assistance from Mahoning SWCD. Subdivision plans must contain a storm water pollution prevention plan. To begin the process, an applicant for subdivision approval submits a preliminary plat. The County Engineer, County Planning Commission and the Mahoning SWCD review the plan. The review is driven by the 1994 Ohio EPA construction permit, and the Mahoning County subdivision regulations. The Mahoning County District Board of Health also reviews sewage disposal aspects of the plan at this time.

The Townships, except for Springfield Township which has no zoning resolution, review the plans for compliance with their zoning resolutions. The Townships do not issue zoning or building approval unless the plan is in compliance with the County subdivision regulations. Once the storm water pollution prevention plan is approved, construction may begin. Current County regulations call for a \$1,000.00 fine if construction begins without and approved plan.

The SWMP calls for the County to develop a new model drainage criteria. This regulation will include items that will be reviewed for each site plan. The County will

also develop a checklist that the Townships can use to implement the new regulations. Mahoning County will develop a tracking mechanism for plan reviews, field inspections made, violations noted, and corrective actions taken. The Townships, with assistance from the County and the SWCD, will also develop procedures for reviewing commercial and industrial plans for erosion and sediment control and storm water pollution prevention.

The Townships will review and adopt the County model, or modifications of the model, for their individual zoning resolutions. The current intent is to review all site plans. The Townships will also enter into an agreement with the Mahoning SWCD for support for sediment and erosion control inspections on construction sites. The estimated number of reviews per year will be dependent upon the pace of development in each Township.

3.2.4.2.5 Your procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with your public education and involvement plan.

The Public Information and Education portion of this SWMP includes ample opportunity for public input and comment. Additional public comments will be solicited during Township Zoning and County subdivision meetings. In addition, the County and each Township will be developing a system through which the public can submit and obtain information by telephone.

3.2.4.2.6 Your procedures for site inspection and enforcement of control measures, including how you will prioritize sites for inspection.

An MOU between the Mahoning SWCD, Mahoning County, and participating Townships has been developed. Under the MOU, the SWCD will assist in providing inspection for all active construction sites.

3.2.4.2.7 Who is responsible for the overall management and implementation of your construction site storm water control plan, and if different, who is responsible for each of the BMPs identified in this plan?

The County Storm Water Management Committee, and the Mahoning County Engineer, have overall responsibility for implementing the SWMP. The responsibility for implementation and management of specific BMPs is split between Mahoning County, the participating entities and Mahoning SWCD. Responsibilities are outlined in Table 3 (Appendix A).

3.2.4.2.8 Describe how you will evaluate the success of this minimum control measure, including how you selected the measurable goals for each BMP.

Table 3 (Appendix A) lists the measurable goals for each of the proposed BMPs. In general, the first year of the Plan will involve further evaluating and drafting appropriate BMPs. These will be implemented in the following years. Measurable goals are generally stated in terms of target years for implementation of each BMP, and in quantifying items such as the number of site plan reviews completed or enforcement actions undertaken each year. Items listed for each measurable goal will be reported on annually.

D. Post-Construction Storm Water Management in New Development & Redevelopment (MCM #5)

The Permit Requirement (Per Ohio EPA draft NPDES Permit)

- 3.2.5.1.1 Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to 1 acre, including projects less than 1 acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.
- 3.2.5.1.2 Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for you community.
- 3.2.5.1.3 Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law.
- 3.2.5.1.4 Ensure adequate long-term operation and maintenance of BMPs.

Post-Construction Storm Water Management in New Development and Redevelopment Plan

The BMPs, measurable goals, and responsible parties in this Post-Construction Storm Water Management Plan are detailed in Table 4 in each Appendix. In addition to Table 4, per Ohio EPA draft NPDES permit requirement 3.2.5.2, we are documenting our decision process with the following information required by the draft permit.

3.2.5.2.1 Your program to address storm water runoff from new development and redevelopment projects. Include in this description any specific priority areas for this program.

As detailed in Table 4, we will use a combination of planning activities, education, and non-structural and structural practices to address storm water runoff from new development and redevelopment projects.

3.2.5.2.2 How your program will be specifically tailored for you local community, minimize water quality impacts, and attempt to maintain pre-development runoff conditions.

Land use in Mahoning County is largely residential communities with some commercial and institutional developments. Water quality concerns arising from the past history of the area remain, but the focus for this SWMP will be on increases in storm water runoff as impervious cover increases. These concerns include sedimentation due to construction activities and stream bank erosion, increased flooding due to increases in storm water volume and discharges of sewage to the storm system.

To address these local concerns Mahoning County will examine the current subdivision regulations, and develop appropriate changes designed to minimize the impacts of storm water runoff on receiving streams. The regulations will affect both new and

redevelopment activities within the urbanized portion of the County. Zoning resolutions in each of the joint permittee Townships will be modified as needed to require approvals of storm water management plans from the County. A mix of structural and non-structural BMPs will be proposed within the Townships.

Because these BMPs represent significant changes in storm water management in Northeast Ohio, education for landowners, developers, planners, engineers, and others is necessary to support their implementation, and is part of this plan.

3.2.5.2.3 Any non-structural BMPs in your program, including, as appropriate:

3.2.5.2.3.1 Polices and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation.

In Year 1 Beaver Township will explore modifications to its zoning resolution that will create riparian setbacks to protect streams. Mill Creek MetroParks and the Mahoning SWCD already have programs in place for accepting riparian easements.

All of the other joint permittees will be reviewing their zoning resolutions to adopt appropriate policies and ordinances.

3.2.5.2.3.2 Policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure.

These policies will be explored as the storm water regulations for Mahoning County are developed. If deemed appropriate for the joint permittees, subdivision and zoning regulations will be amended.

3.2.5.2.3.3 Education programs for developers and the public about project designs that minimize water quality impacts.

Table 4 indicates Mahoning County's plan to develop workshops to educate developers, contractors, officials and the general public regarding post-construction storm water controls.

3.2.5.2.3.4 Other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas and source control measures often thought of as a good housekeeping, preventable maintenance, and spill prevention.

Such measures will be considered as the subdivision regulations and zoning resolutions will be developed.

3.2.5.2.4 Any structural BMPs in your program, including, as appropriate:

3.2.5.2.4.1 Storage practices such as wet ponds and extended-detention outlet structures.

The development and implementation of additional specific structural BMPs will be part of the review and development of County subdivision regulations.

3.2.5.2.4.2 Filtration practices such as grassed swales, bioretention cells, sand filters, and filter strips.

The development and implementation of specific structural BMPs will be part of the review and development of subdivision regulations.

3.2.5.2.4.3 Infiltration practices such as infiltration basins and infiltration trenches.

The development and implementation of specific structural BMPs will be part of the review and development of subdivision regulations.

3.2.5.2.5 What are the mechanisms (ordinance or other regulatory mechanisms) you will use to address post-construction runoff from new developments and redevelopments and why you chose that mechanism? If you need to develop a mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.

As discussed above, the mechanisms Mahoning County and joint permittees will use to address post-construction runoff from new development and re-development include development and implementation of the Storm Water Management Plan, review and modification of current regulations and resolutions and looking at non-structural BMP practices as presented in Table 4.

We chose these mechanisms because they address the water quality concerns of the County and Townships which are related to increases in storm water runoff as land is developed. These mechanisms provide flexibility to landowners, while ensuring that new impervious cover is minimized. The flood control, erosion control, and water quality functions of watercourses and wetlands will be maintained. Any storm water generated will be managed for both quality and quantity.

3.2.5.2.6 How will you ensure the long-term operation and maintenance of your selected BMPs? Options to help ensure that future operation and maintenance responsibilities are clearly identified include an agreement between you and another party such as a post-development landowners or regional authorities.

Implementation schedules and responsible parties have been identified in Table 4. The legal issues associated with operation and maintenance were reviewed during BMP selection and plan development. Long term operation and maintenance will be addressed by developing written procedures for these BMPs and incorporating these procedures into current operating manuals or procedural documents. Non-structural BMPs, including riparian setbacks will be maintained as other existing setbacks are maintained in the County. As with all setbacks, landowners proposing activities in setbacks must request a variance and this request is reviewed, modified, and approved or disapproved by the

County Engineer, the local Planning and Zoning Commission or the Building Inspector. The riparian protection areas created through riparian setbacks will be maintained through permanent conservation easements. The easements will be held by the Mahoning SWCD or Mill Creek MetroParks.

Structural BMPs created through Mahoning County's improved storm water management regulation will be maintained by post-development landowners. A BMP has been added for each Township indicating each will develop standards for maintaining privately owned storm water management facilities.

3.2.5.2.7 Who is responsible for overall management and implementation for your post-construction plan and, if different, who is responsible for each of the BMPs identified for this program?

The responsible parties for each component of our Post-Construction Storm Water Management Plan are detailed in Table 4.

3.2.5.2.8 How will you evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs?

We will evaluate the success of this minimum measure through our ability to successfully implement non-structural BMPs by the target years shown in Table 4. Specific measures of success for each non-structural BMP will be developed and tracked over the 5-year permit period.

E. Pollution Prevention/Good Housekeeping for Municipal Operations (MCM #6)

Ohio EPA Permit Requirements

- 3.2.6.1.1 Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from community operations; and
- 3.2.6.1.2 Using training materials that are available from Ohio EPA or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

Pollution Prevention and Good Housekeeping Plan

The BMPs, measurable goals, and responsible parties in this Pollution Prevention and Good Housekeeping Plan are outlined in Table 5. In addition to Table 5, per Ohio EPA draft NPDES permit requirement 3.2.6.2, we are documenting our decision process with the following information required by the draft permit.

3.2.6.2.1 Your operation and maintenance program to prevent or reduce pollutant runoff from your community operations. Your program must specifically list the community operations that are impacted by this operation and maintenance program. You must also

include a list of industrial facilities your community owns or operates that are subject to the Ohio EPA's Industrial Storm Water General Permit or individual NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to your MS4. Include the Ohio EPA permit number or a copy of the Industrial NOI for each facility.

Mahoning County and the joint permittees performed an audit of existing conditions at all of the facilities they currently own and operate. Table 5 for each joint permittee indicates the operations each joint permittee owns and maintains. In general, each joint permittee operates one or more facilities that include maintenance garages, buildings for offices and meetings, and storage areas for equipment and materials. For each joint permittee, a schedule was developed such that operation and maintenance practices will be reviewed in detail during Year 1. Appropriate BMPs will be implemented in Year 2. The effectiveness of each BMP will be tracked and reported on during Years 3 to 5.

3.2.6.2.2 Any government employee training program you will use to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. Describe any existing, available materials you plan to use. Describe how this training program will be coordinated with the outreach program developed for the public education and involvement minimum measure and the illicit discharge minimum measure.

Each of the joint permittees in this SWMP has committed to an employee training program. Each department involved will assess its current procedures and make appropriate changes. Operation and maintenance manuals will be developed, and employees will be trained in proper procedures.

3.2.6.2.3 Your program description must specifically address the following areas:

3.2.6.2.3.1 Maintenance activities, schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants in your MS4.

Each of the joint permittees will develop a plan to clean and maintain their current storm water infrastructure. Current practices will be reviewed and appropriate changes will be implemented.

3.2.6.2.3.2 Controls for reducing or eliminating the discharge of pollutants from streets, community parking lots, maintenance and storage yards, waste transfer stations, fleet maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas you operate.

All of the joint permittees currently have street sweeping programs. Some details are provided in Table 5. Each joint permittee also has provided information on snow removal and salt storage. All of the joint permittees currently store road salt in roofed structures. Procedures that could affect storm water quantity and quality in place at each maintenance yard, community parking lot, storage area or other community facilities will be reviewed during the operations and maintenance review outlined above.

3.2.6.2.3.3 Procedures for the proper disposal of waste removed from your MS4 and your community operations, including dredge spoil, accumulated sediments, floatables, and other debris.

Each joint permittee has committed to reviewing the current policies for waste disposal. Appropriate changes to current practices will be developed as needed.

3.2.6.2.3.4 Procedures to ensure that new community flood management projects are assessed for impacts on water quality and that existing projects are assessed for incorporation of additional water quality protection devices and practices.

Each joint permittee has committed to reviewing the current policies. Appropriate changes to current practices will be developed as needed.

3.2.6.2.4 Who is responsible for overall management and implementation of your pollution prevention/good housekeeping program and, if different, who is responsible for each BMP identified in this program?

Table 5 lists the responsibilities for each of the joint permittees.

3.2.6.2.5 How you will evaluate the success of this minimum control measure, including how you selected the measurable goals for each of the BMPs.

Table 5 lists the measurable goals and schedule for each joint permittee. In general each BMP will be reviewed and developed in Year 1, and implemented in the subsequent years.

III. MONITORING, RECORD KEEPING, AND REPORTING

For each BMP we have identified the responsible parties and a schedule for implementation of the BMP. The general pattern is that annual reports will be generated. The reports will include details of how each BMP has been implemented, and how the BMP performed. The County and each Township is forming a Storm Water Management Committee. The Committees will have the responsibility for assembling each report.

IV. APPENDICES & SHARING RESPONSIBILITY

Overall responsibility for implementation of this SWMP lies with the Mahoning County Engineer. Storm Water Management Committees are being formed at the County and in each Township. These committees will be the critical links in coordinating the SWMP. The Committee for each joint permittee will have responsibility for implementing the proposed BMPs within their own jurisdiction.

Mill Creek MetroParks is in a unique position as both a joint permittee in this SWMP, and an important factor in the implementation of educational activities and non-structural BMPs for the other joint permittees. MetroParks staff already provides diverse opportunities for environmental education. These will be expanded to include more opportunities for educating various audiences on storm water management. In addition, MetroParks has experience in creating and managing easements for stream setbacks. This experience will be valuable to all the joint permittees.

The participation of the Mahoning SWCD is a critical element in the success of this plan. The Mahoning SWCD is the agency currently tasked with protecting Mahoning County surface waters

from the effects of erosion and other run off related impacts. The Mahoning SWCD will continue its current education and technical support role as an important element of this SWMP.

Table 1: Public Involvement/Participation				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments	
County Storm Water Committee: A committee was formed in order to develop the Storm Water Management Program. This Committee is comprised of the County Engineer, Mahoning County District Board of Health, County Planning Commission, Soil & Water Conservation District, Sanitary Engineer, Prosecutor's Office, Board of Commissioners, and Mill Creek Metro Park, and the County Building and GIS departments.	Committee formalized as a standing committee in Year- 1. Meeting quarterly as a minimum to review progress towards SWMP implementation.	County Commissioners: Formalize Committee as a standing body of the County. Assign County staff to ensure that Best Management Practices in Storm Water Management Program occur over the five-year permit term. Storm Water Committee will report to the County Commissioners each November on program progress and assist in reviewing annual report.	Committee provides a central location to ensure County conforms to commitment made in plan. Is the Committee the desired mechanism for implementing the plan or should a specific County agency be given the authority?	
This Committee will meet during the permit period and will monitor performance of the program.				
Public Involvement: Mahoning County announced the availability of the draft plan for review and comments by the public. Copies of the draft SWMP were placed in Township administrative offices; the County Engineer's, District Board of Health, Board of County Commissioner's, SWCD and Mill Creek MetroPark's offices, for review and comment. A meeting was held with "external" stakeholders to present the plan and to solicit comments on the plan. Finally, two public meetings were held where interested parties could come to learn about the plan, ask questions, and submit comments. All comments were considered in developing the final plan. A separate comment response summary was also prepared and is included with this submission.	Draft SWMP was discussed at County Commissioner's meeting and resolution approved adopting the County portion of the plan. Townships as Joint permittees also reviewed plan and Trustees passed resolutions adopting the plan. Copies of the Township resolutions are included with the SWMP.	County Storm Water Committee: set up meetings and prepared summary of comments. Mahoning County Commissioners: Accept public notice.	Elected officials which represent the general public were given an opportunity to review and comment on the plan. Comments were considered in preparing the final SWMP.	
 Newsletters: Several newsletters are provided to residents in the County: Mahoning County SWCD Education Newsletter – 3X/year during school year. Mahoning Matters, a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents. Pipeline – published twice a year by County Sanitary Engineer – distributed to 44,000 households. Articles on implementation of storm water program and specific storm water issues will be prepared to keep public informed about the program and increase awareness on specific issues and ways the public can assist in reducing pollutant loadings to area watersheds. 	 Provide 1 article/activity per year for Teachers on County storm water program. Provide quarterly updates on county storm water program. Also include twice a year, a specific article about storm water runoff impacts and ways citizens can be involved. Publish one article a year. 	 Mahoning County SWCD (Mahoning Matters) Mahoning County Sanitary Engineer (Pipeline) Mahoning County Engineer 	Existing mechanism to educate public about County storm water management program, broad distribution and audience.	
Storm Water Education Programs: Soil & Water Conservation District will offer a broad range of classroom and other group programs for students, teachers, and adults about erosion control and conservation: 1. Envirothons – annual high school and middle school competition on a conservation issue.	SWCD: Number of events held and number of attendees annually participating in programs. Item 5, 6, & 7 are scheduled to occur in Year 1 of SWMP. To the extent possible, a minimum of one (1) Phase II event will be scheduled each year after Year 1. Topics to be determined based on need.	Storm Water Committee: oversee education programs. Named agencies will carry out specific events: Mahoning Soil & Water Conservation District: Lead for completing listed items annually.	Existing programs with broad audience.	

Table 1: Public Involvement/Participation				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments	
 Soil and Water Stewardship: provide activity books distributed to teachers upon request. Demonstration Models: Make available to classroom teachers NPS Enviroscape and Wetland Enviroscape to teach about non-point pollution and benefits of wetlands. In-Class Presentations: Sammy Soil Saver, Water Drop Journey, and Sum of the Parts. Phase II Construction Site Regulations. Phase II BMP Workshops. Phase II and BMPs – Mahoning Valley Landscaper's Annual Meeting. 	Green Team: Number of events held and number of attendees annually participating in programs. Mahoning County District Board of Health: Number of videos provided annually. Home Builders Association: Number viewing training video annually. Local Developers and Local Business (Commercial, Industrial and store front)	Green Team: Lead for completing listed items annually. Mahoning County District Board of Health: Distribute video. Home Builders Association: Distribute video.		
 Green Team focuses on recycling awareness and conducts. 1. Classroom and youth groups presentations. 2. Teacher curriculum workshops. 3. Waste assessment activities for small businesses. 4. Tours/Field Trips. 5. Cooperative recycling education programs to reduce litter. 6. Special Collection Days- Batteries, Thermometers, Electronics, appliances, etc. 				
Mahoning County District Board of Health provides Video and information to owners of every new septic system detailing how it works and proper maintenance; including the effects of failing systems on surface and groundwater.				
Home Builders Association: Erosion and sediment control BMP training video provided by SWCD. Local Developers- Provide information on County SWMP.				
Web Site: SWMP page will be added to County web site and links provided where additional storm water information can be found. Links include: 1. County web site. 2. SWCD web site. 3. Green Team web site. 4. Mill Creek Metro Parks web site. 5. AWARE web site. 6. Mahoning County District Board of Health web site. 7. Sanitary Engineers web site. 8. Other agency web sites (OEPA, ODNR, etc.)	County to add SWMP to web site by Year 2. County site will be updated twice a year. Visits will be tracked annually. Annual requests for information. 2-Goal is to develop link with the 8 sites to the County web site in Year 1.	Storm Water Committee: Coordinate setting up web page and providing updates. Also work with SWCD and others to provide information useful to Public.	Existing mechanism. Need to identify entity in County who will manage and update page.	

Table 1: Public Involvement/Participation				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments	
 Community activities: Community events will be used to educate public about SWMP: 1. YSU, HM health, and AWARE sponsor annual Community Clean-up on Earth Day. 2. AWARE Annual Watershed Festival. 3. Mill Creek Metro Parks annual litter/trash cleanup day for stream corridors located within the Metro Park system. 4. County Fair displays by various County agencies. 	Number of events held annually during 5 year permit term.	County Commissioners: Partners for Community Clean-up day SWCD: Organize and provide education materials at watershed festival. Mill Creek Metro Parks: Organize annual litter/trash cleanup. Storm Water Committee: Coordinate County fair displays.	Need to determine if this adequate or if other events exist. Also, need to get commitments from other County entities on determine what additional events they might develop around a storm water theme.	
 Brochures, Flyers, Factsheets, and Handouts: The following information will be made available to Townships and County residents: 1. Mahoning SWCD – Conservation Car Wash Tips. 2. Mahoning SWCD- Water Conservation Why should you care? 3. OEPA – Protecting Ohio's water. 4. OSU Extension Fact Sheets related to Storm water. 5. Map of County watersheds. 6. Mahoning SWCD – BMP Pocket Guide for contractors – available by Year-2. 7. Mahoning County District Board of Health packet on onsite treatment systems. 	Number of copies of each brochure provided annually to County offices involved with SWMP.	SWCD, Mahoning County District Board of Health, OEPA, AWARE, The Green Team: Provide printed materials on listed topics.	Consider developing a separate SWMP brochure that is updated as necessary. Brochure can also be provided to Townships. Brochure should describe goals of program, describe storm sewer mapping effort, define what is an illicit discharge, benefits of program, and other major elements of program.	

	on and Elimination Plan	
Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Initiate storm sewer system mapping and Inventory preparation in Year 1 with completion by Year 5.	Storm Water Management Committee: Insure schedule for map development is met.	Need confirmation on details of developing storm sewer system. Is County Engineer to map system and locate all outfalls.
Map 10% of outfalls for Year-1, 20% of outfalls for Year-2 and Year-3, and 25% of the outfalls for Year-4 and Year-5, with completion at the end of Year 5.	County Engineer: Develop map of storm sewer system and locate and digitize outfall locations (see also below).	
· · · · · · · · · · · · · · · · · · ·	County Auditor: Establish map standards for integrating data into County GIS system.	
Locate and map 25% of systems annually, using the existing database, until completed at the end of Year 5. Update these mapped systems with GPS.	Mahoning County District Board of Health: Determine number, type, and location of HSTS and provide information to County Storm Water Committee (County Engineer?)	Mahoning County District Board of Health was planning to initiate county wide program. Will need to secure memorandum of understanding (MOU) that they will focus on urbanized portion of County first.
Develop protocols and detection program procedures in Year 1. Commence illicit discharge detection program in Year 2 and complete by Year 5.	County Engineer & Mahoning County District Board of Health: Develop protocols and refine detection program through permit term.	
	County Engineer: Inspect outfalls for dry weather flows and notify Mahoning County District Board of Health or the OEPA for assistance in determining source and possible elimination options.	
Adopt regulation by the end of Year 2. Number of enforcement actions taken annually to eliminate illicit discharges.	Storm Water Committee: Review model regulations, tailor to County needs, and recommend adoption to County Planning Commission.	
	County Planning Commission: Develop regulation for incorporation into County subdivision regulations.	
	Mahoning County District Board of Health: Responsible for notifying HSTS owners.	
	Initiate storm sewer system mapping and Inventory preparation in Year 1 with completion by Year 5. Map 10% of outfalls for Year-1, 20% of outfalls for Year-2 and Year-3, and 25% of the outfalls for Year-4 and Year-5, with completion at the end of Year 5. Add location of all HSTS by end of Year 5. Locate and map 25% of systems annually, using the existing database, until completed at the end of Year 5. Update these mapped systems with GPS. Develop protocols and detection program procedures in Year 1. Commence illicit discharge detection program in Year 2 and complete by Year 5. Adopt regulation by the end of Year 2. Number of enforcement actions taken annually to	Initiate storm sewer system mapping and Inventory preparation in Year 1 with completion by Year 5. Map 10% of outfalls for Year-1, 20% of outfalls for Year-2 and Year-3, and 25% of the outfalls for Year-4 and Year-5, with completion at the end of Year 5. Add location of all HSTS by end of Year 5. Locate and map 25% of systems annually, using the existing database, until completed at the end of Year 5. Update these mapped systems with GPS. Develop protocols and detection program procedures in Year 1. Commence illicit discharge detection program in Year 2 and complete by Year 5. Adopt regulation by the end of Year 2. Number of enforcement actions taken annually to eliminate illicit discharges. Storm Water Management Committee: Insure schedule for map development is met. County Engineer: Develop map of storm sewer system and locate and digitize outfall locations (see also below). County Auditor: Establish map standards for integrating data into County GIS system. Mahoning County District Board of Health: Determine number, type, and location of HSTS and provide information to County Storm Water Committee (County Engineer?) County Engineer & Mahoning County District Board of Health: Develop protocols and refine detection program through permit term. County Engineer & Mahoning County District Board of Health or the OEPA for assistance in determining source and possible elimination options. Storm Water Committee: Review model regulations, tailor to County needs, and recommend adoption to County Planning Commission: Develop regulations. Mahoning County District Board of Health:

Table 2: Illicit Discharge Detection and Elimination Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Total Maximum Daily Load (TMDL) (OEPA Permit Section 1.3.6): In order to meet OEPA Permit Section 1.3.6 requirements, which addresses TMDL approved watersheds, the following issues need to be addressed by the Township: 1. Determine if the Township is located within a TMDL watershed. 2. Determine what pollutants and what sources of pollutants are present in the TMDL watershed. 3. Determine if the Township is a "Significant Contributor" of pollutants that are present in the TMDL watershed (i.e., is your Township a major source of the pollutants present?). • If the Township is not a significant contributor, the Township should be able to demonstrate how they came to this conclusion. • If the Township is a significant contributor, develop strategies to achieve necessary pollution reduction within the impaired stream segment(s). • The Township should be able to demonstrate how they determined the amount of pollutant needed to be reduced within the impaired stream segment(s), and how much pollutant was reduced (i.e., water sampling to verify the amounts removed).	Year-1- Complete TMDL Planning Schedule/Map Year-2-to-Year-5- Develop Significant Contributor Process. Implement upon USEPA approved TMDL watershed.	Responsible Party Mahoning County Engineers Office/ Township Storm Water Committee/ SWCD/AWARE/Township Storm Water Committee.	Rationale/Comments	

Table 3: Construction Site Storm Water Control Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Adopt enhanced erosion and sediment control regulations. These enhanced regulations will require erosion and sediment control (E&SC) using a range of best management practices per ODNR Rainwater Manual, control of construction site waste, site plan review, site inspection, and enforcement. Townships to also adopt or enhance existing sediment & erosion control regulations (see individual Township SWMPs)	County Planning Commission develop model regulations in Year 2.	Storm Water Committee: Review model regulations and determine recommended approach. County Planning Commission: Develop Phase II compliant model regulations for incorporation into subdivision regulations.	Implement program including enforcement mechanism to reduce pollutants from construction sites.	
Workshop on E&SC Regulations: County will provide workshops on erosion and sediment control best management practices, how to comply with the regulations, and other information relevant to developers.	Beginning after regulations passed and annually.	SWCD: Provide workshop, see Table 1. Storm Water Committee: Host and advertise workshops each year.	Implement program to reduce pollutants from construction sites.	
Enter into Memorandum of Understanding with SWCD: Develop MOU or resolution to allow cooperation between SWCD and County. Through this MOU or resolution, SWCD will provide support to the County on site plan review, inspection, and enforcement.	Enter into MOU or resolution after adoption of enhanced E&SC regulations.	SWCD: Provide sample MOU for Community consideration. Storm Water Committee: Review model MOU with SWCD, modify as necessary for County needs, and recommend adoption to the County Commissioners.	Implement program to reduce pollutants from construction sites.	
Review E&SC plans: County Engineer, the Townships (except Springfield) and SWCD will review site plans for construction sites.	Reviews begin after regulations and MOU adopted and training complete. Plans for regulated sites reviewed prior to granting zoning permits.	County Engineer: Review E&SC SWCD: Review E&SC plans.	Implement program to reduce pollutants from construction sites. Site plans are generally reviewed at the Township level.	
Inspect active sites: SWCD will inspect active construction sites.	Inspections begin after regulations and MOU adopted and training complete.	SWCD: Inspect active sites.	Implement program to reduce pollutants from construction sites.	
Enforcement actions: A mechanism should be developed so that when inspection reveals that work is not proceeding in accordance with approved E&SC plan, a stop work order halting construction may be issued. Draft enforcement language in conjunction with County Prosecutor and Planing Commission and County Engineer	adopted and training complete and as necessary.	SWCD: Determine necessary enforcement and issue stop work orders and corrective action requirements. County Prosecutor: Responsible for prosecuting violators of County E&SC regulations.	Implement program to reduce pollutants from construction sites.	
Respond to public complaints regarding construction activities: In addition to regular inspections of active construction sites, the County will advertise through its newsletter a phone number for residents concerned about specific construction activities.	Establish phone number in Year-1 and include on all print media under Public Education and Involvement Program.	Storm Water Committee: Ensure BMP completed. SWCD: Review complaints and respond appropriately.	Implement program to reduce pollutants from construction sites.	

Table 3: Construction Site Storm Water Control Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Develop Updated Erosion & Sediment Control Inspection Checklist: Updated checklist to be developed to assist builders, contractors, and County agencies with implementation of County E&SC regulations.	Checklist to be updated after the adoption of enhanced E&SC regulations which is expected to occur in Year 3.	Mahoning SWCD: develop checklist. Sanitary Engineer: incorporate checklist into construction specifications for projects. County Engineer: incorporate checklist into construction specifications for projects. Building Inspector: use to ensure that all projects in Springfield Township comply with E&SC regulations.	Implement program to reduce pollutants from construction sites.	
 Concrete Truck Wash Out- Develop procedures for concrete truck washout. The procedures should address: Selection of the location for washout activities. Procedures to prevent the run off of washout effluent. Final clean up of washout area. 	Year-1- Draft regulations and procedures governing concrete truck wash out. Include in revised sub-division regulations. Year-2-to-Year-5- Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office/ Township Storm Water Committee Township Zoning Officer		
Construction Site Ingress/Egress- Develop procedures and standard drawings for site ingress/egress during construction. Develop ingress/egress sequencing to match construction sequencing. Review current standards available from other regulated entities.	Year-1- Draft regulations and procedures governing concrete truck wash out. Include in revised sub-division regulations. Year-2-to-Year-5 Document and track effectiveness for	Mahoning County Engineers Office/ Township Storm Water Committee Township Zoning Officer		

Table 4: Post-Construction Storm Water				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Storm Water Management Regulations: County to develop Phase II compliant post-construction storm water regulations defining structure and nonstructural measures required to minimize water quantity and quality impacts of storm water runoff on receiving streams. The regulations will effect both new and redevelopment activities within the urbanized portion of the County.	Model regulations will be reviewed and approach recommended in Year 1. County Planning Commission to draft regulations and hold public hearings on regulations in Year 2. Post construction regulation adopted and incorporated into County Subdivision regulations by end of Year 3.	Storm Water Committee: To secure and review model regulations and recommend overall approach. County Planning Commission: Develop regulations for adoption by County Commissioners. County Commissioners: Approve County storm water regulations.	County will be responsible for developing regulations for inclusion in subdivision regulations. Townships will need to amend their zoning resolutions to require need for approved storm water plan from County. Actual approach will need to be worked out.	
Workshops for Development Community: Workshops for landowners, builders, developers, and community officials on storm water management will be conducted as part of the public education and involvement portion of the plan.	See Table 1 above.	See Table 1 above.	Training programs required.	
Open space preservation: Townships have authority to zone land use in accordance with a comprehensive plan and zoning resolution. Therefore, townships to the maximum extent practicable will consider open space preservation consistent with their community goals and zoning resolutions.	See Township SWMPs.	See Township SWMPs.	Township responsibility.	
Measures reducing impervious cover: Townships have authority to zone land use in accordance with a comprehensive plan and zoning resolution. Therefore, townships to the maximum extent practicable will consider open space preservation consistent with their community goals and zoning resolutions.	See Township SWMPs.	Mahoning County –Sub-Division Regulations to review potential for adding impervious cover limitations. See Township SWMPs.	Mahoning County to review current sub- division for ability to incorporate impervious cover requirements. Township responsibility.	
Conservation residential subdivisions: Townships have authority to zone land use in accordance with a comprehensive plan and zoning resolution. Therefore, townships to the extent practicable will consider open space preservation consistent with their zoning resolutions.	See Township SWMPs.	See Township SWMPs.	Township responsibility.	
Riparian and Wetland Setbacks: Townships have authoring to zone land use in accordance with their comprehensive plan and zoning resolution. Therefore, townships to the maximum extent practicable will consider open space preservation consistent with their community goals and zoning resolutions.	See Township SWMPs.	See Township SWMPs.	Township responsibility. Currently only Beaver Township is drafting riparian and wetland setback language to be presented as resolution to the trustees. County subdivision regulations could be amended to include riparian setback requirements.	

Table 5: Pollution Prevention and Good Housekeeping Plan					
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments		
Controls for reducing or eliminating pollutant discharges from facilities: Current facilities comply with all local, state, and federal regulations for storm water management. A review will be completed to assess additional controls that may be required to minimize discharges from facilities to the maximum extent practicable.	Complete assessment by end of Year 2. Implement recommended controls as resources permit through Year 5 of permit.	Storm Water Committee: Conduct review of current practices and identify any additional controls required to meet goals of Phase II to the maximum extent practicable.	Need to address Phase II requirements for control of pollutants.		
County staff education program on pollution prevention: Employees undergo training. Extent of training depends upon County agency.	Review O&M activities in Year 1 and document findings and recommendations. Update O&M procedures in Year 2. Revise training to include storm water management component in Year 3. Conduct training as needed for new employees, report annually on number of employees receiving training.	Storm Water Committee: Review County O&M activities and training. Recommend O&M procedures revisions and training needs. County Sanitary Engineer: Develop training program as recommended by SWC. County Engineer: Implement training program per recommendations of SWC.	Need to implement training component to prevent or reduce pollutant runoff from community operations.		
Street Sweeping and Catch Basin Cleaning: County roadway berms, streets, and catch basins are cleaned to minimize clogging of catch basins. Catch basins are inspected and cleaned out once a year. Develop Procedures for Storm Sewer System Maintenance and tracking of maintenance performed.	Quantity of street sweepings disposed of annually. Number of catch basins inspected and cleaned out annually. Review environmentally sound alternatives for the disposal of collected materials.	County Engineer: Maintains equipment and program for County.	Need to confirm frequency. What happens to sweeping debris?		
Salt Storage and Applications: De-icing materials should be stored under cover and in a manner that prohibits drainage to surface water.	Number of tons of salt applied annually. Current perimeter drainage and outfall location inventory/map. Post-event clean-up: a. At loading Area b. During field over applications	County Engineer: Maintains storage bins and applies salt to County roads.	County uses an average of 8,000 tons per season. The County does have a "bare pavement policy" however road salt applications are controlled by strict application guidelines to minimize amount and still maintain motorist safety. Salt is stored in covered domes at County maintenance facilities. Also grit is used to reduce amount of salt used on roadways depending upon temperature. Salt storage systems minimizes contamination of surface and groundwater. Application rates established to use road salt efficiently while maintaining motorist safety.		

Table 5: Pollution Prevention and Good Housekeeping Plan					
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments		
Storm Water System Maintenance: Ditches are maintained to control storm water. When cleaned, back slopes are cut where necessary to make maintenance easier and to prevent erosion.	Linear feet of ditch cleaned/maintained annually. Review storm water system maintenance for pollution prevention options in 2003.	County Engineer: Ditch cleaning amounts and review of procedures to determine BMPs to reduce erosion & sedimentation.			
Fleet Maintenance: Oil is drained from equipment into drain pans and transferred to an above-ground tank for recycling by Safety Kleen System, Inc. Antifreeze is also recycled. All chemicals with MSDS are stored in maintenance garages. Disposal of these materials is provided by a contractor who is required to disposal of material in accordance with local, state, and federal laws.	Amount of oil and other chemicals recycled annually.	County Engineer: County Engineer equipment. Sanitary Engineer: Sanitary engineer equipment and other county vehicles.	Controls for reducing or eliminating discharge of pollutants.		
Vehicle Washing: Vehicle washing is done either in the garage or outside of the maintenance facility. Determine drainage associated with vehicle washing activity.	Completed review in Year 1. Implementation of recommendations by Year 5 of permit.	Storm Water Committee: Review procedures and make recommendations for any changes needed.			
Household Hazardous Waste Drop off: Develop a program through which residents can safely dispose of household hazardous materials.	Year 1: review existing program. Year 2 to Year 5: Develop and implement tracking procedures. Document the program's performance.	Mahoning County Solid Waste Division (Green Team)	The County currently performs this function		

AUSTINTOWN TOWNSHIP BMP RECOMMENDATIONS

Table 1: Public Involvement/Participation					
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments		
Township Storm Water Management Committee: Form a Committee to assist Township Trustees with implementation of Storm Water Management Program. This Committee will include one or more Trustee(s), selected department heads, and a resident. This Committee will meet during the permit period and will monitor performance of the program. The Committee will develop a plan to contact target groups - service stations, commercial properties, and homeowner associations, directly. Newsletters: Several newsletters are provided to residents in the Township. 4. Mahoning SWCD Education Newsletter – 3 times per	Year 1: Committee formalized as a standing body. Year 2 to Year 5: Committee to assist Mahoning County Engineers with Storm water programs, project implementation, and annual reporting.	Township Storm Water Management Committee: Formalize the Committee as a standing body of the Township. Assign Township staff to ensure that Best Management Practices in Storm Water Management Program are implemented over the five-year permit term. Township Storm Water Management Committee will report to Trustees each November on program progress and assist in reviewing and providing information for the annual report. Township Storm Water Management Committee, Mahoning SWCD, OSU Extension/Mahoning County RREAP, and Mahoning River Consortium.	Committee formation for program implementation and reporting. Committee members will form the core group of the responsible party. Current Newsletters exist and will be modified to include storm water and water quality topics. Tracking mechanism is already in place for these newsletters.		
year during school year. 5. <i>Mahoning Matters</i> , a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents.	Provide quarterly updates on county storm water program. Year 2 to Year 5: Record number and publications placed in.		Mahoning SWCD newsletter and Mahoning Matters reach all residents.		
Public Meetings: Township Trustee meetings (held twice monthly) both are announced in local print media and televised.	Year 1: (2 nd or 3 rd quarter) - present SWMP at Township Meeting. Year 1 to Year 3: Implement SWMP Best Management Practices (BMPs). Year 3 to Year 5: Assess, report, and evaluate Plan BMPs.	Township Storm Water Management Committee	Public Meetings currently held 2 times per month. Media to incorporate storm water/water quality issues.		

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Community Activities: Activities for the general public include: 1. Recycling programs for both Township facilities and residents. Austintown also recycles with Mahoning County Green Team. 2. Public Events and Workshops a. Household hazardous waste collection is linked to County Green Team Special Collections. b. General community clean ups organized by County organizations. c. SWCD events available to all Township residents.	Year 1: Continue program, Develop process to track amounts and report totals for annual report. Year 2 to Year 5: Track amounts, report totals and assess and modify selected BMPs as necessary. Year 1: Hold household hazardous waste collections at least twice a year beginning in. Year 2: Organize one annual general community cleanup. Year 2 to Year 5: Implement Annual Clean-up Day.	Mahoning SWCD, Mahoning County, and/or Mahoning County Solid Waste District, AWARE, The Green Team: Provide education materials at events, staff displays, and conduct household hazardous waste collections. Township Storm Water Management Committee: Advertise events and provide notice of collection days in newsletter and in local paper.	County and Township community events held annually. Source to interact with the Public to incorporate water quality issues, programs, or updates.
Brochures, Flyers, Factsheets, and Handouts: 1. The Township will make available at the Township Hall the following information available from County and other agencies and organizations: a. Handouts with building/zoning permits. b. Mahoning SWCD – Mahoning Matters. c. Mahoning SWCD – Conservation Car Wash Tips. d. Mahoning SWCD- Water Conservation, Why should you care? e. Ohio EPA – Protecting Ohio's water. f. OSU Extension Fact Sheets related to Storm Water. g. Map of County watersheds and regulated areas. 2. Update existing Township brochures and other documents with storm water management information.	 Year 1: Developing "handout" tracking program. Identify target audiences. Year 2 to Year 5: Diversify "handouts" to meet and reach target audiences. Year 1: Develop material for at least two publications. Add additional publications each year afterwards. Year 2 to Year 5: Track and assess storm water program information and update as necessary. 	Mahoning SWCD, Mahoning County District Board of Health, Ohio EPA, AWARE: Provide printed materials on listed topics. County Storm Water Management Committee: Copy and distribute materials, and establish a policy on the schedule and methods of dissemination	County and Townships currently have Newsletters used to reach the Public on news, events, or information. Recommendation is to develop a storm water specific brochure to have available for public events.

Table 2: Illicit Discharge Detection and Elimination Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party Rationale/Comments		
Map storm sewer system: Construction drawings exist for the current storm sewer system. Culvert locations are currently mapped. Map storm sewer system with:	Year 1: Work with the Mahoning County Engineers Office to determine those sewer system attributes to be collected. Begin System Inventory in the later part of Year 1.	Mahoning County District Board of Health: Determine number, type, and location of outfalls. County Storm Water Management Committee: Insure schedule for map development is met.	County currently has a Base Map of the County and Townships. Townships to build off the County Base map to inventory their respective storm sewer outfalls and systems.	
 a. Location of outfalls. b. Names and location of surface waters which outfalls discharge. c. Location of Home Sewage Treatment System (HSTS). d. Type and size of conduits/ditches through which HSTS discharge. 	Year 1 to Year 5: Determine Inventory schedule (percent completed per year). Year 1 to Year 5: Work with the Mahoning County District Board of Health to locate and map HSTS Outfalls, add these to the Storm Sewer Base map by Year 5.	Road Superintendent: Locate and map outfall locations.		
Develop program to detect and eliminate illicit discharges: Develop a program to: a. Identify the source of any dry weather flow(s) in the storm sewer system. Quantify the volume of any flows detected. b. Document, trace, and eliminate any illicit discharges. c. Draft resolutions allowing the Township to implement this BMP. d. Detect and identify illicit discharges that may originate outside the Township. These will be reported to the County.	Year 1: Develop Illicit Detection Program/process. Year 1 to Year 2: Identify Program Areas to implement process. Year 2 to Year 3: Track, report, and document Illicit sources removed. Year 3 to Year 5: Assess BMPs selected for removal and modify as necessary.	Township Storm Water Management Committee: Develop draft program and refine through permit term. Road Superintendent	Currently no program exists at the County or Township level	
Adopt resolutions prohibiting illicit discharges: Prohibit illicit discharges to the storm sewer system and implement enforcement procedures as necessary. Determine legal authority to implement this BMP.	Year 1: Draft County Zoning Resolution. Year 2: Adopt Mahoning County model Zoning Resolution. Year 2 to Year 5: Enforce Zoning Resolution and document number of violations.	Mahoning County: Develop model resolutions. Township Storm Water Management Committee: Review model resolutions, tailor resolutions to community needs, and recommend adoption to Zoning Commission and Trustees. Zoning Commission and Trustees: Recommend and adopt resolutions.	Current enforcement does not exist. Enforcement to be developed at the Township level through Township Resolutions and supported by the County.	

Table 2: Illicit Discharge Detection and Elimination Plan					
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals Responsible Party Rationale/Commen				
Total Maximum Daily Load (TMDL) (Ohio EPA Permit Section 1.3.6): In order to meet Ohio EPA Permit Section 1.3.6 requirements, which addresses TMDL approved watersheds, the following issues need to be addressed by the Township: a. Determine if the Township is located within a TMDL watershed. b. Determine what pollutants and what sources of pollutants are identified in the TMDL watershed. c. Determine if the Township is a "Significant Contributor" of pollutants that are identified in the TMDL watershed (i.e., is your Township a major source of the pollutants present?). • If the Township is not a "significant contributor", the Township should be able to demonstrate how this conclusion was reached. • If the Township is a "significant contributor", develop strategies to achieve necessary pollution reduction within the impaired stream segment(s). • The Township should be able to demonstrate how they determined the amount of pollutant needed to be reduced within the impaired stream segment(s), and how much pollutant was reduced (i.e., water sampling to document the amounts removed).	Year 1: Complete TMDL Planning Schedule and map. Year 2 to Year 5: Develop Significant Contributor Process. Implement upon USEPA approved TMDL watershed.	Mahoning County Engineers Office, Township Storm Water Management Committee, Mahoning SWCD, and AWARE.	No current TMDL program exists at either the County or Township level. This will be developed as a requirement associated with this permit.		

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Adopt erosion and sediment control zoning resolutions. These resolutions will require erosion and sediment control (E&SC), control of construction site waste, development of site plan review checklist, site plan review, site inspection, and enforcement. The details of these activities are included as individual BMPs included in this table.	Year 1 to Year 2: Review the Mahoning County model resolution, adapt this as needed and adopt a resolution in the 4 th quarter. Year 3: Work with SWCD to develop a Sediment and Erosion Control Inspection Program. Year 4: Implement updated Inspection Program. Year 4 to Year 5: Track, assess and evaluate, and modify as needed, selected BMPs associated with the Inspection Program.	Mahoning County: Provide Phase II compliant model zoning resolution. Township Storm Water Management Committee: Review model, tailor to community needs, and recommend adoption to Council. Zoning Commission and Trustees: Consider and adopt appropriate zoning resolutions.	Current sub-division resolutions are in place and these will be modified to meet the MS4 requirements and Construction permit requirements.
Workshop on E&SC Resolutions: The Committee will provide workshops on erosion and sediment control BMPs, how to comply with the resolutions, and other information relevant to developers.	Year 1: Complete Inspection Training Program with Mahoning SWCD. Internal and External Training. Draft MOU with Mahoning SWCD for Workshops, training and site plan review and potential site inspections and enforcement. Year 2 to Year 5: Develop training/workshop schedule. Track and evaluate training elements and modify as needed.	Mahoning SWCD: Provide workshop. County Storm Water Management Committee: Host and advertise workshops each year.	Mahoning County SWCD currently holds workshops. However, an Erosion and Sedimentation Control module will be added to assist with compliance.
Enter into Memorandum of Understanding (MOU) with Mahoning SWCD: Through this MOU, Mahoning SWCD will provide support to the Township regarding site plan review and inspection.	Year 1: Complete MOU draft language, adopt this in the 4 th quarter of Year 1. Year 2 to Year 4: Implement programs, procedures, and resolutions in the MOU. Year 4 to Year 5: Track effectiveness of the selected BMPs and evaluate and modify the BMPs as necessary.	Mahoning SWCD: Provide sample MOU for Community consideration. Township Storm Water Management Committee: Review model MOU with Mahoning SWCD, modify as necessary for Community needs, and recommend adoption to the Trustees. Trustees: Adopt MOU.	No current Memorandum of Understanding exists, however, one will be created.
Review site plans: Zoning Inspector will review site plans of construction sites. Currently review is provided for building zones and building setbacks.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review and evaluate the BMP and make necessary modifications. Year 1 to Year 5: Track and report on the effectiveness of the BMP.	Zoning Inspector, Mahoning SWCD, and Mahoning County Engineers Office: Will review E&SC Plan.	The Mahoning County Engineers Office in addition to Mahoning SWCD currently reviews all subdivision plans. Site plans are currently reviewed by the Township Zoning officer, using a checklist based on Township zoning and County subdivision regulations. The checklist will be updated.

	Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Construction debris collection and disposal: Develop standards for appropriate on-site collection systems or containers. Document disposal procedures. Develop resolutions to enforce non-compliance. Develop procedures for site inspections.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Mahoning SWCD, Mahoning County Engineers Office, Township Storm Water Management Committee, and Fire Departments	Mahoning SWCD currently inspects sites for construction debris containment. This will be added to the revised checklist.	
Inspect active sites: Inspectors will inspect active construction sites. Currently, inspector's field reports are required for storm sewer installation, on-site detention, downspouts, final grade of new construction, storm inlets, road and curb cuts, and asphalt installation.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Revise current inspection checklist as needed. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Inspect active sites. Road Superintendent Mahoning County District Board of Health Mahoning County Engineers	Currently is performed by Mahoning SWCD in conjunction with the Mahoning County Engineers Office.	
Enforcement actions: When inspection reveals that work is not proceeding in accordance with approved E&SC plan, the Zoning Inspector may issue a stop work order, halting construction until problems are corrected or refer to the County Prosecutor for enforcement action.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Enforcement ability/capability to be determined through township resolutions.	Currently, limited enforcement mechanisms are in place. Regulations and Enforcement actions will be developed at a later date within the five-year implementation window for compliance.	
Respond to public complaints regarding construction activities: In addition to regular inspections of active construction sites, the Township will advertise through its newsletter and on the web site, a phone number for residents concerned about specific construction activities.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Township Storm Water Management Committee: Insure BMP completed. Zoning Inspector: Review complaints and respond appropriately. Zoning inspector is yet to be identified.	Currently, there are limited forms or ways the public can supply comments and/or concerns	
Concrete Truck Wash Out: Develop procedures for concrete truck washout. The procedures should address: Selection of the location for washout activities. Procedures to prevent the run off of washout effluent. Final clean up of washout area.	Year 1: Draft resolutions and procedures governing concrete truck wash out. Include in revised sub-division resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently addressed by Mahoning SWCD and is required on the submitted SWP3 plans.	

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Construction Site Ingress/Egress- Develop procedures and standard drawings for site ingress/egress during construction.	Year 1: Draft resolutions and procedures governing construction site ingress/egress. Include in revised subdivision resolutions.	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently not addressed or required as part of the SWP3 plans.
 Develop ingress/egress sequencing to match construction sequencing. Review current standards available from other regulated entities. 	Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.		

Table 4: Post-Construction Storm Water			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Workshops for Development Community: Develop workshops on storm water management for landowners, builders, developers, and community officials.	Year 1: Develop workshop agenda and hold workshop in the later part of Year 1. Year 2 to Year 5: Update workshop content and hold workshop annually, document attendance, and topics for reporting purposes.	Mahoning County: Provide workshops. Township Storm Water Management Committee: Advertise through web site, newsletter, and local newspapers.	Workshops have been held in the past for developers and contractors.
Storm Water Management Resolutions: Adopt the Mahoning County model storm water management regulations –(i.e. Updated Sub-division Regulations) as zoning resolutions. These resolutions will include provisions for both new development and redevelopment activities. The revisions would be based on MS4 and New Construction Permit requirements.	 Year 1: Review and develop sub-division regulation update process: Revise current resolutions to include construction and post-construction requirements per New Construction Permit. Entertain the possibility of developing a storm water design manual for establishing storm water design criteria. Document current construction site run-off control BMPs in revised sub-division regulations. Year 1 to Year 3: Develop inspection procedures and the legal authority to inspect and enforce construction site run-off violations. Year 2 to Year 5: Develop a program to track inspection program effectiveness and effectiveness of the selected BMPs. 	Zoning Commission: Review resolution, work with Mahoning County to tailor to community needs, and recommend adoption to Trustees. Township Storm Water Management Committee: Assist Zoning Commission in review and tailoring of model resolution.	Currently addressed in the sub-division resolutions and these will be modified to address MS4 permit requirements.
Develop Strategies and Policies to address maintenance of privately owned storm water facilities. The Township will identify all privately owned storm water facilities and develop and implement standards for their maintenance.	Year 1: Identify facilities and maintenance responsibilities. Review potential standards. Year 2 to Year 5: Adopt maintenance standards.	Township Storm Water Management Committee and Township Trustees	Should be handled on a Planning Commission level through sub-division resolutions.

	Table 5: Pollution Prevention and G	ood Housekeeping Plan	
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Operation and maintenance program to prevent or reduce storm water pollution from community operations.	Year 1: Review and develop draft Operation and Maintenance procedures related to storm water pollution reduction.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents to develop an O&M program.	Currently no plan in place to address these issues.
This Operation and Maintenance (O&M) program will cover the activities listed in the MS4 permit section 3.2.6.	Year 2 to Year 4: Implement the selected BMPs.	Road Superintendents: Assist in O&M program development. Implement O&M	
·	Year 4 to Year 5: Track BMP effectiveness and modify as needed.	program.	
	Year 1 to Year 5: Road Superintendents to conduct quarterly training on O&M procedures and reporting.		
Staff education program on pollution prevention: Identify potential sources of pollution resulting from daily maintenance operations. Train all appropriate Township staff in proper methods of pollution reduction, reporting	Year 1: Develop Employee Storm Water pollution program in conjunction with Mahoning County and Mahoning SWCD training.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents, develop education program.	Currently no plan in place to address these issues.
and tracking.	Year 1 to Year 4: Review training programs and update or modify as necessary.	Road Superintendents: Assist in education program development. Implement education program.	
	Year 3 to Year 5: Track training effectiveness, develop means to track and report on training effectiveness.	program.	
Street Sweeping: Street sweeping- document procedures and quantity for reporting.	Year 1: Develop additional procedures for street sweeping and disposal of spoils.	Road Superintendents: Insure compliance.	The Township currently sweeps every street beginning April 1 st until completed. Sweeping performed annually- draft procedures.
	Year 2 to Year 5: Implement any revised street sweeping procedure and document effectiveness.		
Litter Pickup: Participation in an annual litter pickup program.	Year 1: Develop a process to track litter collected. Year 1 to Year 3: Develop a process to identify areas	Township Storm Water Management Committee.	The Township participates in the Mahoning County Green team litter pickup program. An annual pickup program is held. Township currently is
	where trash collected. Year 2 to Year 5: Track, evaluate, and modify BMP as necessary. Document effectiveness.		aligned with Mahoning County Green Team.
Salt Storage and Applications:	Year 1: Review current salt storage area drainage	Road Superintendent: Insure compliance.	The Township applies de-icing materials based on
Document handling, storage and post-event clean up procedures.	system.		road conditions. Salt is currently stored under cover and aggregate de-icing materials are stored outside. De-icing materials are loaded using front-
Gain knowledge of current site drainage relative to salt storage.	Year 1 to Year 5: Modify drainage system if necessary. Develop clean up procedures. Draft salt storage procedures. Document application procedures and procedures for clean up if excess salt is applied or a salt spill occurs. Track and evaluate the BMP and document effectiveness.		end loaders and spread using dump truck mounted box-spreaders. Review and understand storage drainage.

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Mowing Practices: Document mowing practices/procedures for the growing season.	Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report.	Road Superintendent: Insure compliance.	The Township currently mows all roadside rights- of-ways and four Township cemeteries. Mowing begins April 1 and ends at the first hard frost each year. The Road and Parks Department clears and chips brush. Mowing currently performed annually- draft procedures for in field fueling.
 Storm Water System Maintenance: Annual catch basin maintenance and inspections. The systems should be inspected before and after any significant storm event. An inspection checklist should be used. Annual ditch maintenance and inspection. 	Year 1: Continue the current maintenance schedule. Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards.	Road Superintendent: Insure compliance. Township Supervisors and Township Storm Water Management Committee: Lead the assessment and drafting of guidelines for storm water management facilities.	Catch basin clean-out program in place, draft procedures for program. All catch basins are cleaned annually. The system is inspected before and after any significant storm event. An inspection checklist is currently used. There is no written inspection procedure. Ditches are maintained on an as-needed basis and to reestablish inverts that may have been affected by sedimentation or debris.
 Storage of construction materials and disposal of spoil: 1. Aggregates should be properly stored. 2. Construction debris should be properly disposed of in an appropriate landfill. 	Year 1: Develop plans to move bulk materials to inside storage. Develop guidelines for storage of construction materials and construction debris. Year 1 to Year 5: Continue current practice. Track and record the amount and type of debris disposed of.	Township Supervisors and Township Storm Water Management Committee	All site drainage is directed toward sediment/detention pond. It is cleaned once a year to maintain volume. Aggregates are stored outside in piles. Construction debris is taken to the BFI landfill.
Fleet Maintenance: Township currently has full service fleet maintenance. BMP will be developed to addressing vehicle maintenance activities, vehicle washing areas and vehicle recycling procedures.	Year 1: Review current site drainage. Draft vehicle washing procedures and location. Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness.	Road Superintendents: Insure compliance.	All washing is done in road department wash bay. Site drawings show drains are connected to sanitary sewer system. The Township has a full service vehicle maintenance shop. There are no standards for truck washing
Recycling/Separation/Disposal: The Township currently recycles oil to reuse for heat. Freon is recovered for reuse. Paper, cardboard, cans, glass, tires and #1 and #2 plastics are recycled. Document these amounts.	Year 1 to Year 5: Track and evaluate BMP and document effectiveness. Modify as necessary and report on any modifications.	Township Supervisors, Township Storm Water Management Committee, and Mahoning County Division of Recycling.	Drop off sites and curb side recycling are handled by the Mahoning County Division of Recycling. The Township currently recycles oil to reuse for heat. Freon is recovered for reuse. Paper, cardboard, cans, glass, tires and #1 and #2 plastics are recycled.
Oil And Water Separators: Follow proper use/ maintenance and disposal procedures and recommended practices.	Year 1: Document procedures. Year 2 to Year 5: Track and evaluate amounts cleaned and assess the effectiveness of the BMP.	Township Supervisors and Township Storm Water Management Committee	Oil and water separators are cleaned and the material is land filled. Maintenance is done by others. Draft procedures.
Spill Management Procedures: Spill management is the responsibility of the Austintown Fire Department.	Year 1 to Year 5: Review spill management procedures and update as needed.	Township Supervisors, Fire Department, and Township Storm Water Management Committee	Current practice handled by Township Fire Department. Draft procedures are followed for disposal.

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Township Storm Water Management Committee: Form a Committee to assist Township Trustees with implementation of Storm Water Management Program. This Committee will include one or more Trustee(s), selected department heads, and a resident. This Committee will meet during the permit period and will monitor performance of the program. The Committee will develop a plan to contact target groups - service stations, commercial properties, and homeowner associations, directly.	Year 1: Committee formalized as a standing body. Year 2 to Year 5: Committee to assist Mahoning County Engineers with Storm water programs, project implementation, and annual reporting.	Township Storm Water Management Committee: Formalize the Committee as a standing body of the Township. Assign Township staff to ensure that Best Management Practices in Storm Water Management Program are implemented over the five-year permit term. Township Storm Water Management Committee will report to Trustees each November on program progress and assist in reviewing and providing information for the annual report.	Committee formation for program implementation and reporting. Committee members will form the core group of the responsible party.
 Newsletters: Several newsletters are provided to residents in the Township. 6. Mahoning SWCD Education Newsletter – 3 times per year during school year. 7. Mahoning Matters, a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents. 	Year 1: Provide 2 articles annually on storm water issues of interest to Township. Provide 1 article or activity per year for Teachers on county storm water program. Provide quarterly updates on county storm water program. Year 2 to Year 5: Record number and publication placed in.	Township Storm Water Management Committee, Mahoning SWCD, OSU Extension/Mahoning County RREAP, and Mahoning River Consortium.	Current Newsletters exist and will be modified to include storm water and water quality topics. Tracking mechanism is already in place for these newsletters. Mahoning SWCD newsletter and Mahoning Matters reach all residents.
Public Meetings: Township Trustee meetings (held monthly) are both announced in local print media and televised.	Year 1: (2 nd or 3 rd quarter) - present SWMP at Township Meeting. Year 1 to Year 3: Implement SWMP Best Management Practices (BMPs). Year 3 to Year 5: Assess, report, and evaluate Plan BMPs.	Township Storm Water Management Committee	Public Meetings currently held once per month. Media to incorporate storm water/water quality issues.
Website Develop a Beaver Township Website	Year 1: Develop a schedule for website start-up. Year 2 to Year 3: Develop and implement website.	Township Storm Water Management Committee and Mahoning SWCD	Beaver Township currently has some information that appears on the Mahoning County and Mahoning SWCD websites.

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
 Community Activities: Activities for the general public include: Recycling programs for both Township facilities and residents. Beaver also recycles with Mahoning County Green Team. Public Events and Workshops Household hazardous waste collection is linked to County Green Team Special Collections. General community clean ups organized by County organizations. SWCD events available to all Township residents. 	Year 1: Continue program, Develop process to track amounts and report totals for annual report. Year 2 to Year 5: Track amounts, report totals and assess and modify selected BMPs as necessary. Year 1: Hold household hazardous waste collections at least twice a year beginning in. Year 2: Organize one annual general community cleanup. Year 2 to Year 5: Implement Annual Clean-up Day.	Mahoning SWCD, Mahoning County, and/or Mahoning County Solid Waste District, AWARE, The Green Team: Provide education materials at events, staff displays, and conduct household hazardous waste collections. Township Storm Water Management Committee: Advertise events and provide notice of collection days in newsletter and in local paper.	County and Township community events held annually. Source to interact with the Public to incorporate water quality issues, programs, or updates.
 Brochures, Flyers, Factsheets, and Handouts: The Township will make available at the Township Hall the following information available from County and other agencies and organizations: Handouts with building/zoning permits. Mahoning SWCD – Mahoning Matters Mahoning SWCD – Conservation Car Wash Tips. Mahoning SWCD- Water Conservation, Why should you care? Ohio EPA – Protecting Ohio's water. OSU Extension Fact Sheets related to Storm Water. Map of County watersheds and regulated areas. Update existing Township brochures and other documents with storm water management information. 	 Year 1: Developing "handout" tracking program. Identify target audiences. Year 2 to Year 5: Diversify "handouts" to meet and reach target audiences. Year 1: Develop material for at least two publications. Add additional publications each year afterwards. Year 2 to Year 5: Track and assess storm water program information and update as necessary. 	Mahoning SWCD, Health Department, Ohio EPA, AWARE: Provide printed materials on listed topics. County Storm Water Management Committee: Copy and distribute materials, and establish a policy on the schedule and methods of dissemination	County and Townships currently have Newsletters used to reach the Public on news, events, or information. Recommendation is to develop a storm water specific brochure to have available for public events.

Recommended			
Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Map storm sewer system:	Year 1: Work with the Mahoning County Engineers Office to determine those sewer system attributes to be	Health Department: Determine number, type, and location of outfalls.	County currently has a Base Map of the County and Townships. Townships to
No storm sewer system mapping exists. A culvert inventory has been completed, but the locations are not currently mapped. Map storm sewer system with:	collected. Begin System Inventory in the later part of Year 1 .	County Storm Water Management Committee: Insure schedule for map development is met.	build off the County Base map to inventory their respective storm sewer outfalls and systems.
mapped. Map storm sewer system with.	begin System inventory in the later part or rear 1 .	Schedule for map development is met.	Outlans and systems.
a. Location of outfalls.b. Names and location of surface waters which outfalls discharge.	Year 1 to Year 5: Determine Inventory schedule (percent completed per year).	Road Superintendent: Locate and map outfall locations.	
c. Location of Home Sewage Treatment System (HSTS).	Year 1 to Year 5: Work with the Mahoning County Health Department to locate and map HSTS Outfalls, add these to the Storm Sewer Base map by Year 5.		
 d. Type and size of conduits/ditches through which HSTS discharge. 	add these to the Storm Sewer base map by Tear 5.		
Develop program to detect and eliminate illicit discharges:	Year 1: Develop Illicit Detection Program/process.	Township Storm Water Management Committee: Develop draft program and refine through permit term.	Currently no program exists at the County or Township level
Develop a program to:	Year 1 to Year 2 : Identify Program Areas to implement process.		
 a. Identify the source of any dry weather flow(s) in the storm sewer system. Quantify the volume of any flows detected. 	Year 2 to Year 3: Track, report, and document Illicit sources removed.	Road Superintendent	
b. Document, trace, and eliminate any illicit discharges.c. Draft resolutions allowing the Township to implement this BMP.	Year 3 to Year 5: Assess BMPs selected for removal and modify as necessary.		
 d. Detect and identify illicit discharges that may originate outside the Township. These will be reported to the County. 			
Adopt resolutions prohibiting illicit discharges:	Year 1: Draft County Zoning Resolution.	Mahoning County: Develop model resolutions.	Current enforcement does not exist. Enforcement to be developed at the
Prohibit illicit discharges to the storm sewer system and implement enforcement procedures as necessary. Determine legal authority to implement this BMP.	Year 2: Adopt Mahoning County model Zoning Resolution.	Township Storm Water Management Committee: Review model resolutions, tailor resolutions to community needs, and recommend adoption to Zoning Commission	Township level through Township Resolutions and supported by the County.
	Year 2 to Year 5 : Enforce Zoning Resolution and document number of violations.	and Trustees.	
		Zoning Commission and Trustees: Recommend and adopt resolutions.	

Table 2: Illicit Discharge Detection and Elimination Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Total Maximum Daily Load (TMDL) (Ohio EPA Permit Section 1.3.6): In order to meet Ohio EPA Permit Section 1.3.6 requirements, which addresses TMDL approved watersheds, the following issues need to be addressed by the Township: a. Determine if the Township is located within a TMDL watershed. b. Determine what pollutants and what sources of pollutants are identified in the TMDL watershed. c. Determine if the Township is a "Significant Contributor" of pollutants that are identified in the TMDL watershed (i.e., is your Township a major source of the pollutants present?). • If the Township is not a "significant contributor", the Township is a "significant contributor", develop strategies to achieve necessary pollution reduction within the impaired stream segment(s). • The Township should be able to demonstrate how they determined the amount of pollutant needed to be reduced within the impaired stream segment(s), and how much pollutant was reduced (i.e., water sampling to document the amounts removed).	Year 1: Complete TMDL Planning Schedule and map. Year 2 to Year 5: Develop Significant Contributor Process. Implement upon USEPA approved TMDL watershed.	Mahoning County Engineers Office, Township Storm Water Management Committee, Mahoning SWCD, and AWARE.	No current TMDL program exists at either the County or Township level. This will be developed as a requirement associated with this permit.

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Adopt erosion and sediment control zoning resolutions. These resolutions will require erosion and sediment control (E&SC), control of construction site waste, development of site plan review checklist, site plan review, site inspection, and enforcement. The details of these activities are included as individual BMPs included in this table.	Year 1 to Year 2: Review the Mahoning County model resolution, adapt this as needed and adopt a resolution in the 4 th quarter. Year 3: Work with SWCD to develop a Sediment and Erosion Control Inspection Program. Year 4: Implement updated Inspection Program. Year 4 to Year 5: Track, assess and evaluate, and modify as needed, selected BMPs associated with the Inspection Program.	Mahoning County: Provide Phase II compliant model zoning resolution. Township Storm Water Management Committee: Review model, tailor to community needs, and recommend adoption to Council. Zoning Commission and Trustees: Consider and adopt appropriate zoning resolutions.	Current sub-division resolutions are in place and these will be modified to meet the MS4 requirements and Construction permit requirements.
Workshop on Erosion & Sediment Control (E&SC) Resolutions: The Committee will provide workshops on erosion and sediment control BMPs, how to comply with the resolutions, and other information relevant to developers.	Year 1: Complete Inspection Training Program with Mahoning SWCD. Internal and External Training. Draft MOU with Mahoning SWCD for Workshops, training and site plan review and potential site inspections and enforcement. Year 2 to Year 5: Develop training/workshop schedule. Track and evaluate training elements and modify as needed.	Mahoning SWCD: Provide workshop. County Storm Water Management Committee: Host and advertise workshops each year.	Mahoning County SWCD currently holds workshops. However, an Erosion and Sedimentation Control module will be added to assist with compliance.
Enter into Memorandum of Understanding (MOU) with Mahoning SWCD: Through this MOU, Mahoning SWCD will provide support to the Township regarding site plan review and inspection.	Year 1: Complete MOU draft language, adopt this in the 4 th quarter of Year 1. Year 2 to Year 4: Implement programs, procedures, and resolutions in the MOU. Year 4 to Year 5: Track effectiveness of the selected BMPs and evaluate and modify the BMPs as necessary.	Mahoning SWCD: Provide sample MOU for Community consideration. Township Storm Water Management Committee: Review model MOU with Mahoning SWCD, modify as necessary for Community needs, and recommend adoption to the Trustees. Trustees: Adopt MOU.	No current Memorandum of Understanding exists, however, one will be created.
Review site plans: Zoning Inspector will review site plans of construction sites. Currently review is provided for building zones and building setbacks.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review and evaluate the BMP and make necessary modifications. Year 1 to Year 5: Track and report on the effectiveness of the BMP.	Zoning Inspector, Mahoning SWCD, and Mahoning County Engineers Office: Will review E&SC Plan.	The Mahoning County Engineers Office in addition to Mahoning SWCD currently reviews all subdivision plans. Site plans are currently reviewed by the Township Zoning officer, using a checklist based on Township zoning and County subdivision regulations. The checklist will be updated.

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Construction debris collection and disposal: Develop standards for appropriate on-site collection systems or containers. Document disposal procedures. Develop resolutions to enforce non-compliance. Develop procedures for site inspections.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Mahoning SWCD, Mahoning County Engineers Office, Township Storm Water Management Committee, and Fire Departments	Mahoning SWCD currently inspects sites for construction debris containment. This will be added to the revised checklist.
Inspect active sites: Inspectors will inspect active construction sites. Currently, inspector's field reports are required for storm sewer installation, on-site detention, downspouts, final grade of new construction, storm inlets, road and curb cuts, and asphalt installation.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Revise current inspection checklist as needed. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Inspect active sites. Road Superintendent Health Department Mahoning County Engineers	Currently is performed by Mahoning SWCD in conjunction with the Mahoning County Engineers Office.
Enforcement actions: When inspection reveals that work is not proceeding in accordance with approved E&SC plan, the Zoning Inspector may issue a stop work order, halting construction until problems are corrected or refer to the County Prosecutor for enforcement action.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Enforcement ability/capability to be determined through township resolution.	Currently, limited enforcement mechanisms are in place. Regulations and Enforcement actions will be developed at a later date within the five-year implementation window for compliance.
Respond to public complaints regarding construction activities: In addition to regular inspections of active construction sites, the Township will advertise through its newsletter and on the web site, a phone number for residents concerned about specific construction activities.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Township Storm Water Management Committee: Insure BMP completed. Zoning Inspector: Review complaints and respond appropriately. Zoning inspector is yet to be identified.	Currently, there are limited forms or ways the public can supply comments and/or concerns
Concrete Truck Wash Out: Develop procedures for concrete truck washout. The procedures should address: Selection of the location for washout activities. Procedures to prevent the run off of washout effluent. Final clean up of washout area.	Year 1: Draft resolutions and procedures governing concrete truck wash out. Include in revised sub-division resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently addressed by Mahoning SWCD and is required on the submitted SWP3 plans.

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Construction Site Ingress/Egress- Develop procedures and standard drawings for site ingress/egress during construction. • Develop ingress/egress sequencing to match	Year 1 : Draft resolutions and procedures governing construction site ingress/egress. Include in revised subdivision resolutions.	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently not addressed or required as part of the SWP3 plans.
 Develop ingress/egress sequencing to match construction sequencing. Review current standards available from other regulated entities. 	Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.		

Table 4: Post-Construction Storm Water			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Workshops for Development Community: Develop workshops on storm water management for landowners, builders, developers, and community officials.	Year 1: Develop workshop agenda and hold workshop in the later part of Year 1. Year 2 to Year 5: Update workshop content and hold workshop annually, document attendance, and topics for reporting purposes.	Mahoning County: Provide workshops. Township Storm Water Management Committee: Advertise through web site, newsletter, and local newspapers.	Workshops have been held in the past for developers and contractors.
Riparian and Wetland setbacks: Township currently working to adopt zoning regulations creating setbacks from certain watercourses and wetlands.	Year 1: Review current Township Building setback resolutions. Year 1 to Year 2: Revise and modify to incorporate post construction run-off controls. Year 2 to Year 5: Draft Township resolutions to include language to address these BMPs. Report and track status and effectiveness of selected BMPs and passed resolutions.	Zoning Commission: Review the BMP and recommend approval or disapproval. If disapproval is recommended, recommend alternative BMP. Township Storm Water Management Committee: Assist the Zoning commission in review. If the community decides not to implement the BMP, suggest other non-structural BMPs to meet the requirements of Minimum Control Measure #5.	
Storm Water Management Resolutions: Adopt the Mahoning County model storm water management resolutions—(i.e. Updated Sub-division Regulations) as zoning resolutions. These resolutions will include provisions for both new development and redevelopment activities. The revisions would be based on MS4 and New Construction Permit requirements.	 Year 1: Review and develop sub-division regulation update process: Revise current resolutions to include construction and post-construction requirements per New Construction Permit. Entertain the possibility of developing a storm water design manual for establishing storm water design criteria. Document current construction site run-off control BMPs in revised sub-division resolutions. Year 1 to Year 3: Develop inspection procedures and the legal authority to inspect and enforce construction site run-off violations. Year 2 to Year 5: Develop a program to track inspection program effectiveness and effectiveness of the selected BMPs. 	Zoning Commission: Review resolution, work with Mahoning County to tailor to community needs, and recommend adoption to Trustees. Township Storm Water Management Committee: Assist Zoning Commission in review and tailoring of model resolution.	Currently addressed in the sub-division resolutions and these will be modified to address MS4 permit requirements.
Develop Strategies and Policies to address maintenance of privately owned storm water facilities. The Township will identify all privately owned storm water facilities and develop and implement standards for their maintenance.	Year 1: Identify facilities and maintenance responsibilities. Review potential standards. Year 2 to Year 5: Adopt maintenance standards and resolutions.	Township Storm Water Management Committee and Township Trustees	Should be handled on a Planning Commission level through sub-division resolutions.

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Operation and maintenance program to prevent or reduce storm water pollution from community operations.	Year 1 : Review and develop draft Operation and Maintenance procedures related to storm water pollution reduction.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents to develop an O&M program.	Currently no plan in place to address these issues.
This Operation and Maintenance (O&M) program will cover the activities listed in the MS4 permit section 3.2.6.	Year 2 to Year 4: Implement the selected BMPs.	Road Superintendents: Assist in O&M program development. Implement O&M	
	Year 4 to Year 5: Track BMP effectiveness and modify as needed.	program.	
	Year 1 to Year 5: Road Superintendents to conduct quarterly training on O&M procedures and reporting.		
Staff education program on pollution prevention: Identify potential sources of pollution resulting from daily maintenance operations. Train all appropriate Township staff in proper methods of pollution reduction, reporting	Year 1: Develop Employee Storm Water pollution program in conjunction with Mahoning County and Mahoning SWCD training.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents, develop education program.	Currently no plan in place to address these issues.
and tracking.	Year 1 to Year 4: Review training programs and update or modify as necessary.	Road Superintendents: Assist in education program development. Implement education program.	
	Year 3 to Year 5: Track training effectiveness, develop means to track and report on training effectiveness.	program.	
Street Sweeping: Draft sweeping procedures to track and report effectiveness and report on quantities.	Year 1: Develop additional procedures for street sweeping and disposal of spoils.	Road Superintendents: Insure compliance.	The Township currently provides street sweeping on an as-needed basis. Sweeping performed annually- draft procedures.
	Year 2 to Year 5: Implement any revised street sweeping procedure and document effectiveness.		
Litter Pickup: Continue Adopt-A-Highway program. Develop a means to	Year 1: Develop a process to track litter collected.	Township Storm Water Management Committee.	"Adopt a Highway" groups currently operate in the Township. These should be used to serve as
report volume of litter collected	Year 1 to Year 3: Develop a process to identify areas where trash collected.		models for a "Township led" regular pick-up. Township currently is aligned with Mahoning County Green Team.
	Year 2 to Year 5: Track, evaluate, and modify BMP as necessary. Document effectiveness.		County Green Team.
Salt Storage and Applications:	Year 1: Review current salt storage area drainage	Road Superintendent: Insure compliance.	The Township applies de-icing materials based on
Document handling, storage and post-event clean up procedures.	system.		road conditions. Salt is currently stored under cover. Review and understand storage drainage.
	Year 1 to Year 5: Modify drainage system if necessary.		
Gain knowledge of current site drainage relative to salt	Develop clean up procedures. Draft salt storage procedures. Document application procedures and		
storage.	procedures. Document application procedures and procedures for clean up if excess salt is applied or a salt		
	spill occurs. Track and evaluate the BMP and document		

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
	effectiveness.		
Mowing Practices: Document mowing procedures and practices	Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report.	Road Superintendent: Insure compliance.	The Township currently mows all roadside at least twice a year. Mowing currently performed annually- draft procedures for in field fueling.
Storm Water System Maintenance: Procedures for annual catch basin maintenance and inspections, and ditch maintenance and inspection.	Year 1: Continue the current maintenance schedule. Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards.	Road Superintendent: Insure compliance. Township Supervisors and Township Storm Water Management Committee: Lead the assessment and drafting of guidelines for storm water management facilities.	No on-site inspection of storm drains occurs once detention and retention facilities are installed. The Road Superintendent inspects culverts. There is no written inspection procedure. Ditches are maintained on an as-needed basis with no current written guidelines.
Storage of construction materials and disposal of spoil: 1. Develop material storage practices. 2. Construction debris should be properly disposed of in an appropriate landfill.	Year 1: Develop plans to move bulk materials to inside storage. Develop guidelines for storage of construction materials and construction debris. Year 1 to Year 5: Continue current practice. Track and record the amount and type of debris disposed of.	Township Supervisors and Township Storm Water Management Committee	All site drainage is directed toward sediment/detention pond. It is cleaned once a year to maintain volume. Aggregates are stored outside in piles. Construction debris is taken to the BFI landfill.
Fleet Maintenance: Review current vehicle washing and maintenance bay drainage. Develop procedures to track and report on the handling of vehicle fluids, tires, and batteries. Vehicle maintenance and washing shall take place in an appropriate area.	Year 1: Review current site drainage. Draft vehicle washing procedures and location. Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness.	Road Superintendents: Insure compliance.	All washing is done in road department wash bay. Site drawings show drains are connected to sanitary sewer system. The Township has a full service vehicle maintenance shop. There are no standards for truck washing.
Recycling/Separation/Disposal: Document current vehicle and litter collection programs and modify to allow for tracking and reporting.	Year 1 to Year 5: Track and evaluate BMP and document effectiveness.	Township Supervisors, Township Storm Water Management Committee, and Mahoning County Division of Recycling.	Drop off sites and curb side recycling are handled by the Mahoning County Division of Recycling. The Township currently operates a recycling center behind the Township safety Building. Paper, cardboard, cans, glass, tires and #1 and #2 plastics are recycled. Develop and document procedures for collection, disposal, and tracking.

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Township Storm Water Management Committee: Form a Committee to assist Township Trustees with implementation of Storm Water Management Program. This Committee will include one or more Trustee(s), selected department heads, and a resident. This Committee will meet during the permit period and will monitor performance of the program. The Committee will develop a plan to contact target groups (service stations, commercial properties, and homeowner associations) directly.	Year 1: Committee formalized as a standing body. Year 2 to Year 5: Committee to assist Mahoning County Engineers with Storm water programs, project implementation and annual reporting.	Township Storm Water Management Committee Formalize the Committee as a standing body of the Township. Assign Township staff to ensure that Best Management Practices in Storm Water Management Program are implemented over the five-year permit term. Township Storm Water Management Committee will report to Trustees each November on program progress and assist in reviewing and providing information for the annual report.	Committee formation for program implementation and reporting. Committee members will form the core group of the responsible party.
Newsletters: Several newsletters are provided to residents in the Township. 8. Mahoning SWCD Education Newsletter – 3 times per year during school year. 9. Mahoning Matters, a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents.	Year 1: Provide 2 articles annually on storm water issues of interest to Township. Provide 1 article or activity per year for Teachers on county storm water program. Provide quarterly updates on county storm water program. Year 2 to Year 5: Record number and publication placed in.	Township Storm Water Management Committee, Mahoning SWCD, OSU Extension/Mahoning County RREAP and the Mahoning River Consortium.	Current Newsletters exist and will be modified to include storm water and water quality topics. Tracking mechanism is already in place for these newsletters. Mahoning SWCD newsletter and Mahoning Matters reach all residents.
Public Meetings: Discuss storm water topics at Township Trustee meetings.	Year 1: (2 nd or 3 rd quarter) - present SWMP at Township Meeting. Year 1 to Year 3: Implement SWMP Best Management Practices (BMPs). Year 3 to Year 5: Assess, report, and evaluate Plan BMPs.	Township Storm Water Management Committee	Media to incorporate storm water/water quality issues.

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
 Community Activities: Activities for the general public include: 5. Recycling programs for both Township facilities and residents. Canfield also recycles with Mahoning County Green Team. 6. Public Events and Workshops a. Household hazardous waste collection is linked to County Green Team Special Collections. b. General community clean ups organized by County organizations. c. SWCD events available to all Township residents. 	Year 1: Continue program, Develop process to track amounts and report totals for annual report. Year 2 to Year 5: Track amounts, report totals and assess and modify selected BMPs as necessary. Year 1: Hold household hazardous waste collections at least twice a year. Year 2: Organize one annual general community cleanup. Year 2 to Year 5: Implement Annual Clean-up Day.	Mahoning SWCD, Mahoning County, and/or Mahoning County Solid Waste District, AWARE, The Green Team: Provide education materials at events, staff displays, and conduct household hazardous waste collections. Township Storm Water Management Committee: Advertise events and provide notice of collection days in newsletter and in local paper.	County and Township community events held annually. Source to interact with the Public to incorporate water quality issues, programs, or updates.
Publications, including books and newspapers: 1. Canfield Town Crier: Provided weekly 2. Youngstown Vindicator 3. Youngstown/Warren Regional Chamber Review	Year 1 to Year 5: Provide at least two articles per year on storm water issues of interest to Township.	Township Storm Water Management Committee	
Website: Develop a page in cooperation with a local/county organization (i.e. SWCD) hi-lighting Canfield Township.	Year 1: Develop schedule for website startup. Year 2 to Year 3: Develop and implement website.	Township Storm Water Management Committee	
Storm Water Education Campaign Grade School and High School Level Educational Programs. (Poster Contest, Coloring Contest, Model Demonstrations)	Year 1: Evaluate current program and recommend updates. Year 2 to Year 3: Implement updates.	Township Storm Water Management Committee	

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Best Management Practice/Strategy Brochures, Flyers, Factsheets, and Handouts: 5. The Township will make available at the Township Hall the following information available from County and other agencies and organizations: a. Handouts with building/zoning permits. b. Mahoning SWCD – Mahoning Matters. c. Mahoning SWCD – Conservation Car Wash Tips. d. Mahoning SWCD- Water Conservation, Why should you care? e. Ohio EPA – Protecting Ohio's water. f. OSU Extension Fact Sheets related to Storm Water. g. Map of County watersheds and regulated areas. 6. Update existing Township brochures and other documents with storm water management information.	Year 1: Developing "handout" tracking program. Identify target audiences. Year 2 to Year 5: Diversify "handouts" to meet and reach target audiences. Year 1: Develop material for at least two publications. Add additional publications each year afterwards. Year 2 to Year 5: Track and assess storm water program information and update as necessary.	Mahoning SWCD, Mahoning County District Board of Health, Ohio EPA, AWARE: Provide printed materials on listed topics. County Storm Water Management Committee: Copy and distribute materials, and establish a policy on the schedule and methods of dissemination	County and Townships currently have Newsletters used to reach the Public on news, events, or information. Recommendation is to develop a storm water specific brochure to have available for public events.

Table 2: Illicit Discharge Detection and Elimination Plan						
Recommended Best Management Practice/Strategy	Recommended Best Management Practice/Strategy Schedule and Measurable Goals Responsible Party Rationale/Comme					
Map storm sewer system: Construction drawings exist for the current storm sewer system. Culvert locations are currently mapped. Map storm sewer system with:	Year 1: Work with the Mahoning County Engineers Office to determine those sewer system attributes to be collected. Begin System Inventory in the later part of Year 1.	Mahoning County District Board of Health: Determine number, type, and location of outfalls. County Storm Water Management Committee: Insure schedule for map development is met.	County currently has a Base Map of the County and Townships. Townships to build off the County Base map to inventory their respective storm sewer outfalls and systems.			
 a. Location of outfalls. b. Names and location of surface waters which outfalls discharge. c. Location of Home Sewage Treatment System (HSTS). d. Type and size of conduits/ditches through which HSTS discharge. 	Year 1 to Year 5: Determine Inventory schedule (percent completed per year). Year 1 to Year 5: Work with the Mahoning County District Board of Health to locate and map HSTS Outfalls, add these to the Storm Sewer Base map by Year 5.	Road Superintendent: Locate and map outfall locations.				
Develop program to detect and eliminate illicit discharges: Develop a program to: a. Identify the source of any dry weather flow(s) in the storm sewer system. Quantify the volume of any flows detected. b. Document, trace, and eliminate any illicit discharges. c. Draft resolutions allowing the Township to implement this BMP. d. Detect and identify illicit discharges that may originate outside the Township. These will be reported to the County.	Year 1: Develop Illicit Detection Program/process. Year 1 to Year 2: Identify Program Areas to implement process. Year 2 to Year 3: Track, report, and document Illicit sources removed. Year 3 to Year 5: Assess BMPs selected for removal and modify as necessary.	Township Storm Water Management Committee: Develop draft program and refine through permit term. Mahoning County District Board of Health: Work with the Township to detect and eliminate illicit discharges. Road Superintendent: Report suspect areas to the District Board of Health.	Currently no program exists at the County or Township level. Canfield Township believes it does not have the legal authority to identify and eliminate illicit discharges.			
Adopt resolutions prohibiting illicit discharges: Prohibit illicit discharges to the storm sewer system and implement enforcement procedures as necessary. Determine legal authority to implement this BMP.	Year 1: Review Draft County Resolution. Year 2 to Year 5: Work with the Mahoning County Storm water Management Committee and the County District Board of Health to develop a mechanism to enforce the prohibition on illicit discharges and document number of violations.	Mahoning County: Develop model resolutions. Township Storm Water Management Committee: Review model resolutions, work with the Mahoning County Storm water Management Committee and the County District Board of Health to develop a mechanism to enforce the prohibition on illicit discharges and document number of violations. Mahoning County District Board of Health: Work with the Township to detect and eliminate illicit discharges Zoning Commission and Trustees: Recommend and adopt mechanisms.	Current enforcement does not exist. Enforcement to be developed at the County level. Canfield Township does not believe it has the authority to enforce a prohibition against illicit discharges at the Township level.			

Table 2: Illicit Discharge Detection and Elimination Plan			
Recommended Best Management Practice/Strategy Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Total Maximum Daily Load (TMDL) (Ohio EPA Permit Year 1: Complete TMDL Planning Schedule and map. Mahoning Coun	nty Engineers Office, Township Storm ment Committee, Mahoning SWCD, and	No current TMDL program exists at either the County or Township level. This will be developed as a requirement associated with this permit.	

	Table 3: Construction Site Storn	n Water Control Plan	
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Adopt erosion and sediment control zoning resolutions. These resolutions will require erosion and sediment control (E&SC), control of construction site waste, development of site plan review checklist, site plan review, site inspection, and enforcement. The details of these activities are included as individual BMPs included in this table.	Year 1 to Year 2: Review the Mahoning County model resolution, adapt this as needed and adopt a resolution in the 4 th quarter. Year 3: Work with SWCD to develop a Sediment and Erosion Control Inspection Program. Year 4: Implement updated Inspection Program.	Mahoning County: Provide Phase II compliant model zoning resolution. Township Storm Water Management Committee: Review model, tailor to community needs, and recommend adoption to Trustees. Zoning Commission and Trustees: Consider and adopt	Current zoning resolutions are in place and these will be modified to meet the MS4 requirements and Construction permit requirements.
	Year 4 to Year 5: Track, assess and evaluate, and modify as needed, selected BMPs associated with the Inspection Program.	appropriate zoning resolutions.	
Workshop on Erosion & Sediment Control (E&SC) Resolutions: The Committee will provide workshops on erosion and sediment control BMPs, how to comply with the resolutions, and other information relevant to developers.	Year 1: Complete Inspection Training Program with Mahoning SWCD. Internal and External Training. Draft MOU with Mahoning SWCD for Workshops, training and site plan review and potential site inspections and enforcement. Year 2 to Year 5: Develop training/workshop schedule. Track and evaluate training elements and modify as needed.	Mahoning SWCD: Provide workshop. County Storm Water Management Committee: Host and advertise workshops each year.	Mahoning County SWCD currently holds workshops. However, an Erosion and Sedimentation Control module will be added to assist with compliance.
Enter into Memorandum of Understanding (MOU) with Mahoning SWCD: Through this MOU, Mahoning SWCD will provide support to the Township regarding site plan review and inspection.	Year 1: Complete MOU draft language, adopt this in the 4 th quarter of Year 1. Year 2 to Year 4: Implement programs, procedures, and resolutions in the MOU. Year 4 to Year 5: Track effectiveness of the selected BMPs and evaluate and modify the BMPs as necessary.	Mahoning SWCD: Provide sample MOU for Community consideration. Township Storm Water Management Committee: Review model MOU with Mahoning SWCD, modify as necessary for Community needs, and recommend adoption to the Trustees. Trustees: Adopt MOU.	No current Memorandum of Understanding exists, however, one will be created.
Review site plans: Zoning Inspector will review site plans of construction sites. Currently review is provided for building zones and building setbacks.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review and evaluate the BMP and make necessary modifications. Year 1 to Year 5: Track and report on the effectiveness of the BMP.	Zoning Inspector, Mahoning SWCD, and Mahoning County Engineers Office: Will review E&SC Plan.	The Mahoning County Engineers Office in addition to Mahoning SWCD currently reviews all subdivision plans. Site plans are currently reviewed by the Township Zoning officer, using a checklist based on Township zoning and County subdivision regulations. The checklist will be updated.

	Table 3: Construction Site Storn	n Water Control Plan	
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Construction debris collection and disposal: Develop standards for appropriate on-site collection systems or containers. Document disposal procedures. Develop resolutions to enforce non-compliance. Develop procedures for site inspections.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Mahoning SWCD, Mahoning County Engineers Office, Township Storm Water Management Committee, and Fire Departments	Mahoning SWCD currently inspects sites for construction debris containment. This will be added to the revised checklist.
Inspect active sites: Inspectors will inspect active construction sites. Currently, inspector's field reports are required for storm sewer installation, on-site detention, downspouts, final grade of new construction, storm inlets, road and curb cuts, and asphalt installation.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Revise current inspection checklist as needed. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Inspect active sites. Road Superintendent Mahoning County District Board of Health Mahoning County Engineers	Currently is performed by Mahoning SWCD in conjunction with the Mahoning County Engineers Office.
Enforcement actions: When inspection reveals that work is not proceeding in accordance with approved E&SC plan, the Zoning Inspector may issue a stop work order, halting construction until problems are corrected or refer to the County Prosecutor for enforcement action.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Yet to be identified.	Currently, limited enforcement mechanisms are in place. Regulations and Enforcement actions will be developed at a later date within the five-year implementation window for compliance.
Respond to public complaints regarding construction activities: In addition to regular inspections of active construction sites, the Township will advertise through its newsletter and on the web site, a phone number for residents concerned about specific construction activities.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Township Storm Water Management Committee: Insure BMP completed. Zoning Inspector: Review complaints and respond appropriately. Zoning inspector is yet to be identified.	Currently, there are limited forms or ways the public can supply comments and/or concerns

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Concrete Truck Wash Out: Develop procedures for concrete truck washout. The procedures should address: Selection of the location for washout activities. Procedures to prevent the run off of washout effluent. Final clean up of washout area.	Year 1: Draft resolutions and procedures governing concrete truck wash out. Include in revised sub-division resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office Township Storm Water Management Committee Zoning Department Road Department	Currently addressed by Mahoning SWCD and is required on the submitted SWP3 plans.
Construction Site Ingress/Egress- Develop procedures and standard drawings for site ingress/egress during construction. Develop ingress/egress sequencing to match construction sequencing. Review current standards available from other regulated entities.	Year 1: Draft resolutions and procedures governing construction site ingress/egress. Include in revised subdivision resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office Township Storm Water Management Committee Zoning Department Road Department	Currently not addressed or required as part of the SWP3 plans.

Table 4: Post-Construction Storm Water			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Workshops for Development Community: Develop workshops on storm water management for landowners, builders, developers, and community officials.	Year 1: Develop workshop agenda and hold workshop in the later part of Year 1. Year 2 to Year 5: Update workshop content and hold workshop annually, document attendance, and topics for reporting purposes.	Mahoning County: Provide workshops. Township Storm Water Management Committee: Advertise through web site, newsletter, and local newspapers.	Workshops have been held in the past for developers and contractors.
Riparin and Wetland Setbacks: The Township will explore adopting zoning resolution creating setbacks from certain watercourses and wetlands	Year 1: Review current Township Building Set-Back resolutions. Year 1 to Year 2: Revise and modify to incorporate post construction run-off controls. Year 2 to Year 5: Draft township resolutions to include language to address these BMPs. Report and track status and effectiveness of selected BMPs and passed resolutions.	Zoning Commission: Review the BMP and recommend approval or disapproval. If disapproval is recommended, recommend alternative BMP. Township Storm Water Management Committee: Assist the Zoning Commission in review. If the community decides not to implement the BMP, suggest other non-structural BMPs to meet the requirements of Pollution Prevention and Good Housekeeping.	Currently no township resolutions exist governing this BMP.
Storm Water Management Resolutions: Adopt the Mahoning County model storm water management resolutions—(i.e. Updated Sub-division Resolutions) as zoning resolutions. These resolutions will include provisions for both new development and redevelopment activities. The revisions would be based on MS4 and New Construction Permit requirements.	 Year 1: Review and develop sub-division resolution update process: Revise current resolutions to include construction and post-construction requirements per New Construction Permit. Document current construction site run-off control BMPs in revised sub-division resolutions. Year 1 to Year 3: Develop inspection procedures and the legal authority to inspect and enforce construction site run-off violations. Year 2 to Year 5: Develop a program to track inspection program effectiveness and effectiveness of the selected BMPs. 	Zoning Commission: Review resolution, work with Mahoning County to tailor to community needs, and recommend adoption to Trustees. Township Storm Water Management Committee: Assist Zoning Commission in review and tailoring of model resolution.	

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Operation and maintenance program to prevent or reduce storm water pollution from community operations.	Year 1: Review and develop draft Operation and Maintenance procedures related to storm water pollution reduction.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents to develop an O&M program.	Currently no plan in place to address these issues.
This Operation and Maintenance (O&M) program will cover the activities listed in the MS4 permit section 3.2.6.	Year 2 to Year 4: Implement the selected BMPs. Year 4 to Year 5: Track BMP effectiveness and modify as needed.	Road Superintendents: Assist in O&M program development. Implement O&M program.	
	Year 1 to Year 5: Road Superintendents to conduct quarterly training on O&M procedures and reporting.		
Staff education program on pollution prevention: Identify potential sources of pollution resulting from daily maintenance operations. Train all appropriate Township staff in proper methods of pollution reduction, reporting	Year 1: Develop Employee Storm Water pollution program in conjunction with Mahoning County and Mahoning SWCD training.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents, develop education program.	Currently no plan in place to address these issues.
and tracking.	Year 1 to Year 4: Review training programs and update or modify as necessary.	Road Superintendents: Assist in education program development. Implement education program.	
	Year 3 to Year 5: Track training effectiveness, develop means to track and report on training effectiveness.		
Street Sweeping: Document procedures for street sweeping indicating frequency, amount collected.	Year 1: Develop procedures for street sweeping and disposal of spoils.	Road Superintendents: Insure compliance.	Currently no written procedures. Sweeping completed as needed.
	Year 2 to Year 5: Implement any revised street sweeping procedure and document effectiveness.		
Litter Pickup: Continue current relationship with Mahoning County Green team and draft procedures to track events participated in, amounts collected for reporting.	Year 1: Develop a process to track litter collected. Year 1 to Year 3: Develop a process to identify areas where trash collected.	Township Storm Water Management Committee.	The Township participates in the Mahoning County Green team litter pickup program. An annual pickup program is held. Township currently is aligned with Mahoning County Green Team.
	Year 2 to Year 5: Track, evaluate, and modify BMP as necessary. Document effectiveness.		
Salt Storage and Applications: Document handling, storage and post-event clean up procedures.	Year 1: Review current salt storage area drainage system.	Road Superintendent: Insure compliance.	The Township applies de-icing materials based on road conditions. Salt is currently stored under cover. Review and understand storage drainage.
Gain knowledge of current site drainage relative to salt storage.	Year 1 to Year 5: Modify drainage system if necessary. Develop clean up procedures. Draft salt storage procedures. Document application procedures and procedures for clean up if excess salt is applied or a salt spill occurs. Track and evaluate the BMP and document effectiveness.		

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Mowing Practices: Document mowing procedures/Practices for reporting purposes	Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report.	Road Superintendent: Insure compliance.	The Township currently mows twice a year, once between June 1-15, and once between August 1-15, and at other times as needed.
 Storm Water System Maintenance: 3. Annual catch basin maintenance and inspections. The systems should be inspected before and after any significant storm event. An inspection checklist should be used. 4. Annual ditch maintenance and inspection. 	Year 1: Continue the current maintenance schedule. Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards.	Road Superintendent: Insure compliance. Township Supervisors and Township Storm Water Management Committee: Lead the assessment and drafting of guidelines for storm water management facilities.	Storm Sewer System is continually inspected. No inspection checklist is currently being used. There is no written inspection procedure. Ditches are maintained on an as-needed.
Storage of construction materials and disposal of spoil: 1. Aggregates should be properly stored. 2. Construction debris should be properly disposed of in an appropriate landfill.	Year 1: Develop plans to move bulk materials to inside storage. Develop guidelines for storage of construction materials and construction debris. Year 1 to Year 5: Continue current practice. Track and record the amount and type of debris disposed of.	Township Supervisors and Township Storm Water Management Committee	
Fleet Maintenance: . Review current vehicle washing and maintenance bay drainage. Develop procedures to track and report on the handling of vehicle fluids, tires, and batteries. Vehicle maintenance and washing shall take place in an appropriate area.	Year 1: Review current site drainage. Draft vehicle washing procedures and location. Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness.	Road Superintendents: Insure compliance.	Site drawings show drains are connected to sanitary sewer system. The Township has a full service vehicle maintenance shop. There are no standards for truck washing
Recycling/Separation/Disposal: Document vehicle materials recycled and volumes of litter collected in conjunction w/ Mahoning County Green team.	Year 1 to Year 5: Track and evaluate BMP and document effectiveness.	Township Supervisors, Township Storm Water Management Committee, and Mahoning County Division of Recycling.	Drop off sites and curb side recycling are handled by the Mahoning County Division of Recycling. The Township currently recycles oil to reuse for heat. Freon is recovered for reuse. Paper, cardboard, cans, glass, tires and #1 and #2 plastics are recycled.
Oil And Water Separators: Follow proper use and maintenance procedures.	Year 1: Document procedures. Year 2 to Year 5: Track and evaluate amounts cleaned and assess the effectiveness of the BMP.	Township Supervisors and Township Storm Water Management Committee	Oil and water separators are cleaned and the material is land filled. Maintenance is done by others on an as-needed basis. Draft procedures.
Spill Management Procedures: Spill management is the responsibility of the Canfield Fire Department.	Year 1 to Year 5: Review spill management procedures and update as needed.	Township Supervisors, Fire Department, and Township Storm Water Management Committee	Current practice handled by Township Fire Department. Draft procedures are followed for disposal.

December 1.1	Table 1: Public Involveme		
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments
Township Storm Water Management Committee: Form a Committee to assist Township Trustees with implementation of Storm Water Management Program. This Committee will include one or more Trustee(s), selected department heads, and a resident. This Committee will meet during the permit period and will monitor performance of the program. The Committee will develop a plan to contact target groups - service stations, commercial properties, and homeowner associations, directly.	Year 1: Committee formalized as a standing body. Year 2 to Year 5: Committee to assist Mahoning County Engineers with Storm water programs, project implementation, and annual reporting.	Township Storm Water Management Committee: Formalize the Committee as a standing body of the Township. Assign Township staff to ensure that Best Management Practices in Storm Water Management Program are implemented over the five-year permit term. Township Storm Water Management Committee will report to Trustees each November on program progress and assist in reviewing and providing information for the annual report.	Committee formation for program implementation and reporting. Committee members will form the core group of the responsible party.
 Newsletters: Several newsletters are provided to residents in the Township. 10. Mahoning SWCD Education Newsletter – 3 times per year during school year. 11. Mahoning Matters, a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents. 	Year 1: Provide 2 articles annually on storm water issues of interest to Township. Provide 1 article or activity per year for Teachers on county storm water program. Provide quarterly updates on county storm water program. Year 2 to Year 5: Record number and publication placed in.	Township Storm Water Management Committee, Mahoning SWCD, OSU Extension/Mahoning County RREAP, and Mahoning River Consortium.	Current Newsletters exist and will be modified to include storm water and water quality topics. Tracking mechanism is already in place for these newsletters. Mahoning SWCD newsletter and Mahoning Matters reach all residents.
Public Meetings: Township Trustee meetings (held monthly) are both announced in local print media and televised.	Year 1: (2 nd or 3 rd quarter) - present SWMP at Township Meeting. Year 1 to Year 3: Implement SWMP Best Management Practices (BMPs). Year 3 to Year 5: Assess, report, and evaluate Plan BMPs.	Township Storm Water Management Committee	Public Meetings currently held 2 times per month. Media to incorporate storm water/water quality issues.

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments
Community Activities: Activities for the general public include:	Year 1: Continue program, Develop process to track amounts and report totals for annual report. Year 2 to Year 5: Track amounts, report totals and	Mahoning SWCD, Mahoning County, and/or Mahoning County Solid Waste District, AWARE, The Green Team: Provide education materials at events, staff displays, and conduct household hazardous waste	County and Township community events held annually. Source to interact with the Public to incorporate water quality issues, programs, or updates.
 7. Recycling programs for both Township facilities and residents. Austintown also recycles with Mahoning County Green Team. 8. Public Events and Workshops 	assess and modify selected BMPs as necessary. Year 1: Hold household hazardous waste collections at least twice a year beginning in.	Township Storm Water Management Committee: Advertise events and provide notice of collection days in newsletter and in local paper.	
 a. Household hazardous waste collection is linked to County Green Team Special Collections. b. General community clean ups organized by County organizations. c. SWCD events available to all Township 	Year 2: Organize one annual general community cleanup.		
residents.	Year 2 to Year 5: Implement Annual Clean-up Day.		
Brochures, Flyers, Factsheets, and Handouts:7. The Township will make available at the Township Hall the following information available from County and	Year 1: Developing "handout" tracking program. Identify target audiences.	Mahoning SWCD, Mahoning County District Board of Health, Ohio EPA, AWARE: Provide printed materials on listed topics.	County and Townships currently have Newsletters used to reach the Public on news, events, or information. Recommendation is to develop a storm
other agencies and organizations: a. Handouts with building/zoning permits. b. Mahoning SWCD – Mahoning Matters. c. Mahoning SWCD – Conservation Car Wash	Year 2 to Year 5: Diversify "handouts" to meet and reach target audiences.	County Storm Water Management Committee: Copy and distribute materials, and establish a policy on the schedule and methods of dissemination	water specific brochure to have available for public events.
Tips. d. Mahoning SWCD- Water Conservation, Why should you care? e. Ohio EPA – Protecting Ohio's water.	Year 1: Develop material for at least two publications. Add additional publications each year afterwards.		
 e. Ohio EPA – Protecting Ohio's water. f. OSU Extension Fact Sheets related to Storm Water. g. Map of County watersheds and regulated areas. 	Year 2 to Year 5: Track and assess storm water program information and update as necessary.		
Update existing Township brochures and other documents with storm water management information.			

Table 2: Illicit Discharge Detection and Elimination Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Map storm sewer system: Construction drawings exist for the current storm sewer system. Culvert locations are currently mapped. Map storm sewer system with:	Year 1: Work with the Mahoning County Engineers Office to determine those sewer system attributes to be collected. Begin System Inventory in the later part of Year 1.	Mahoning County District Board of Health: Determine number, type, and location of outfalls. County Storm Water Management Committee: Insure schedule for map development is met.	County currently has a Base Map of the County and Townships. Townships to build off the County Base map to inventory their respective storm sewer outfalls and systems.
 a. Location of outfalls. b. Names and location of surface waters which outfalls discharge. c. Location of Home Sewage Treatment System (HSTS). d. Type and size of conduits/ditches through which HSTS discharge. 	Year 1 to Year 5: Determine Inventory schedule (percent completed per year). Year 1 to Year 5: Work with the Mahoning County District Board of Health to locate and map HSTS Outfalls, add these to the Storm Sewer Base map by Year 5.	Road Superintendent: Locate and map outfall locations.	
Develop program to detect and eliminate illicit discharges: Develop a program to:	Year 1: Develop Illicit Detection Program/process. Year 1 to Year 2: Identify Program Areas to implement process.	Township Storm Water Management Committee: Develop draft program and refine through permit term.	Currently no program exists at the County or Township level
a. Identify the source of any dry weather flow(s) in the storm sewer system. Quantify the volume of any flows detected.	Year 2 to Year 3: Track, report, and document Illicit sources removed.	Road Superintendent	
b. Document, trace, and eliminate any illicit discharges.c. Draft resolutions allowing the Township to implement this BMP.d. Detect and identify illicit discharges that may originate	Year 3 to Year 5: Assess BMPs selected for removal and modify as necessary.		
outside the Township. These will be reported to the County.			
Adopt resolutions prohibiting illicit discharges:	Year 1: Draft County Zoning Resolution.	Mahoning County: Develop model resolutions.	Current enforcement does not exist. Enforcement to be developed at the
Prohibit illicit discharges to the storm sewer system and implement enforcement procedures as necessary. Determine legal authority to implement this BMP.	Year 2: Adopt Mahoning County model Zoning Resolution.	Township Storm Water Management Committee: Review model resolutions, tailor resolutions to community needs, and recommend adoption to Zoning Commission	Township level through Township Resolutions and supported by the County.
	Year 2 to Year 5: Enforce Zoning Resolution and document number of violations.	and Trustees. Zoning Commission and Trustees: Recommend and	
		adopt resolutions.	

Table 2: Illicit Discharge Detection and Elimination Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Total Maximum Daily Load (TMDL) (Ohio EPA Permit Section 1.3.6): In order to meet Ohio EPA Permit Section 1.3.6 requirements, which addresses TMDL approved watersheds, the following issues need to be addressed by the Township:	Year 1: Complete TMDL Planning Schedule and map. Year 2 to Year 5: Develop Significant Contributor Process. Implement upon USEPA approved TMDL watershed.	Mahoning County Engineers Office, Township Storm Water Management Committee, Mahoning SWCD, and AWARE.	No current TMDL program exists at either the County or Township level. This will be developed as a requirement associated with this permit.	
 a. Determine if the Township is located within a TMDL watershed. b. Determine what pollutants and what sources of pollutants are identified in the TMDL watershed. c. Determine if the Township is a "Significant Contributor" of pollutants that are identified in the TMDL watershed (i.e., is your Township a major source of the pollutants present?). If the Township is not a "significant contributor", the Township should be able to demonstrate how this conclusion was reached. If the Township is a "significant contributor", develop strategies to achieve necessary pollution reduction within the impaired stream segment(s). The Township should be able to demonstrate how they determined the amount of pollutant needed to be reduced within the impaired stream segment(s), and how much pollutant was reduced (i.e., water sampling to document the amounts removed). 				

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Adopt erosion and sediment control zoning resolutions. These resolutions will require erosion and sediment control (E&SC), control of construction site waste, development of site plan review checklist, site plan review, site inspection, and enforcement. The details of these activities are included as individual BMPs included in this table.	Year 1 to Year 2: Review the Mahoning County model resolution, adapt this as needed and adopt a resolution in the 4 th quarter. Year 3: Work with SWCD to develop a Sediment and Erosion Control Inspection Program.	Mahoning County: Provide Phase II compliant model zoning resolution. Township Storm Water Management Committee: Review model, tailor to community needs, and recommend adoption to Council.	Current sub-division resolutions are in place and these will be modified to meet the MS4 requirements and Construction permit requirements.
	Year 4: Implement updated Inspection Program. Year 4 to Year 5: Track, assess and evaluate, and modify as needed, selected BMPs associated with the Inspection Program.	Zoning Commission and Trustees: Consider and adopt appropriate zoning resolutions.	
Workshop on Erosion & Sediment Control (E^SC) Resolutions: The Committee will provide workshops on erosion and sediment control BMPs, how to comply with the resolutions, and other information relevant to developers.	Year 1: Complete Inspection Training Program with Mahoning SWCD. Internal and External Training. Draft MOU with Mahoning SWCD for Workshops, training and site plan review and potential site inspections and enforcement. Year 2 to Year 5: Develop training/workshop schedule. Track and evaluate training elements and modify as needed.	Mahoning SWCD: Provide workshop. County Storm Water Management Committee: Host and advertise workshops each year.	Mahoning County SWCD currently holds workshops. However, an Erosion and Sedimentation Control module will be added to assist with compliance.
Enter into Memorandum of Understanding (MOU) with Mahoning SWCD: Through this MOU, Mahoning SWCD will provide support to the Township regarding site plan review and inspection.	Year 1: Complete MOU draft language, adopt this in the 4 th quarter of Year 1. Year 2 to Year 4: Implement programs, procedures, and resolutions in the MOU. Year 4 to Year 5: Track effectiveness of the selected BMPs and evaluate and modify the BMPs as necessary.	Mahoning SWCD: Provide sample MOU for Community consideration. Township Storm Water Management Committee: Review model MOU with Mahoning SWCD, modify as necessary for Community needs, and recommend adoption to the Trustees. Trustees: Adopt MOU.	No current Memorandum of Understanding exists, however, one will be created.
Review site plans: Zoning Inspector will review site plans of construction sites. Currently review is provided for building zones and building setbacks.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review and evaluate the BMP and make necessary modifications. Year 1 to Year 5: Track and report on the effectiveness of the BMP.	Zoning Inspector, Mahoning SWCD, and Mahoning County Engineers Office: Will review E&SC Plan.	The Mahoning County Engineers Office in addition to Mahoning SWCD currently reviews all site plans. The checklist will be updated.

Table 3: Construction Site Storm Water Control Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Construction debris collection and disposal: Develop standards for appropriate on-site collection systems or containers. Document disposal procedures. Develop resolutions to enforce non-compliance. Develop procedures for site inspections.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Mahoning SWCD, Mahoning County Engineers Office, Township Storm Water Management Committee, and Fire Departments	Mahoning SWCD currently inspects sites for construction debris containment. This will be added to the revised checklist.	
Inspect active sites: Inspectors will inspect active construction sites. Currently, inspector's field reports are required for storm sewer installation, on-site detention, downspouts, final grade of new construction, storm inlets, road and curb cuts, and asphalt installation.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Revise current inspection checklist as needed. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Inspect active sites. Road Superintendent Mahoning County District Board of Health Mahoning County Engineers	Currently is performed by Mahoning SWCD in conjunction with the Mahoning County Engineers Office.	
Enforcement actions: When inspection reveals that work is not proceeding in accordance with approved E&SC plan, the Zoning Inspector may issue a stop work order, halting construction until problems are corrected or refer to the County Prosecutor for enforcement action.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Enforcement ability/capability to be determined through Township resolutions.	Currently, limited enforcement mechanisms are in place. Regulations and Enforcement actions will be developed at a later date within the five-year implementation window for compliance.	
Respond to public complaints regarding construction activities: In addition to regular inspections of active construction sites, the Township will advertise through its newsletter and on the web site, a phone number for residents concerned about specific construction activities.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Township Storm Water Management Committee: Insure BMP completed. Zoning Inspector: Review complaints and respond appropriately. Zoning inspector is yet to be identified.	Currently, there are limited forms or ways the public can supply comments and/or concerns	
Concrete Truck Wash Out: Develop procedures for concrete truck washout. The procedures should address: • Selection of the location for washout activities. • Procedures to prevent the run off of washout effluent. • Final clean up of washout area.	Year 1: Draft resolutions and procedures governing concrete truck wash out. Include in revised sub-division resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently addressed by Mahoning SWCD and is required on the submitted SWP3 plans.	

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Construction Site Ingress/Egress- Develop procedures and standard drawings for site ingress/egress during construction. Develop ingress/egress sequencing to match construction sequencing. Review current standards available from other regulated entities.	construction site ingress/egress. Include in revised sub-	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently not addressed or required as part of the SWP3 plans.

Table 4: Post-Construction Storm Water				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Workshops for Development Community: Develop workshops on storm water management for landowners, builders, developers, and community officials.	Year 1: Develop workshop agenda and hold workshop in the later part of Year 1. Year 2 to Year 5: Update workshop content and hold workshop annually, document attendance, and topics for reporting purposes.	Mahoning County: Provide workshops. Township Storm Water Management Committee: Advertise through web site, newsletter, and local newspapers.	Workshops have been held in the past for developers and contractors.	
Storm Water Management Resolutions: Adopt the Mahoning County model storm water management resolutions—(i.e. Updated Sub-division Regulations) as zoning resolutions. These resolutions will include provisions for both new development and redevelopment activities. The revisions would be based on MS4 and New Construction Permit requirements.	 Year 1: Review and develop sub-division regulation update process: Revise current resolutions to include construction and post-construction requirements per New Construction Permit. Entertain the possibility of developing a storm water design manual for establishing storm water design criteria. Document current construction site run-off control BMPs in revised sub-division regulations. Year 1 to Year 3: Develop inspection procedures and the legal authority to inspect and enforce construction site run-off violations. Year 2 to Year 5: Develop a program to track inspection program effectiveness and effectiveness of the selected BMPs. 	Zoning Commission: Review resolution, work with Mahoning County to tailor to community needs, and recommend adoption to Trustees. Township Storm Water Management Committee: Assist Zoning Commission in review and tailoring of model resolution.	Currently addressed in the sub-division resolutions and these will be modified to address MS4 permit requirements.	
Develop Strategies and Policies to address maintenance of privately owned storm water facilities. The Township will identify all privately owned storm water facilities and develop and implement standards for their maintenance.	Year 1: Identify facilities and maintenance responsibilities. Review potential standards. Year 2 to Year 5: Adopt maintenance standards.	Township Storm Water Management Committee and Township Trustees	Should be handled on a Planning Commission level through sub-division resolutions.	

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Operation and maintenance program to prevent or reduce storm water pollution from community operations.	Year 1: Review and develop draft Operation and Maintenance procedures related to storm water pollution reduction.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents to develop an O&M program.	Currently no plan in place to address these issues.
This Operation and Maintenance (O&M) program will cover the activities listed in the MS4 permit section 3.2.6.	Year 2 to Year 4: Implement the selected BMPs. Year 4 to Year 5: Track BMP effectiveness and modify as needed.	Road Superintendents: Assist in O&M program development. Implement O&M program.	
	Year 1 to Year 5: Road Superintendents to conduct quarterly training on O&M procedures and reporting.		
Staff education program on pollution prevention: Identify potential sources of pollution resulting from daily maintenance operations. Train all appropriate Township staff in proper methods of pollution reduction, reporting and	Year 1: Develop Employee Storm Water pollution program in conjunction with Mahoning County and Mahoning SWCD training.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents, develop education program.	Currently no plan in place to address these issues.
tracking.	Year 1 to Year 4: Review training programs and update or modify as necessary.	Road Superintendents: Assist in education program development. Implement education program.	
	Year 3 to Year 5 : Track training effectiveness, develop means to track and report on training effectiveness.		
Street Sweeping: Draft procedures for reporting frequency and amount of material collected during operations.	Year 1: Develop additional procedures for street sweeping and disposal of spoils.	Road Superintendents: Insure compliance.	The Township currently conducts post- winter street sweeping program
	Year 2 to Year 5: Implement any revised street sweeping procedure and document effectiveness.		
Litter Pickup: Continue participating in Mahoning County program, develop a means of documenting amount of litter collected for reporting purposes.	Year 1: Develop a process to track litter collected. Year 1 to Year 3: Develop a process to identify areas where trash collected.	Township Storm Water Management Committee.	The Township participates in the Mahoning County Division of Recycling litter pickup program.
	Year 2 to Year 5: Track, evaluate, and modify BMP as necessary. Document effectiveness.		
Salt Storage and Applications:	Year 1: Review current salt storage area drainage	Road Superintendent: Insure compliance.	The Township applies de-icing
Document handling, storing and post-event clean-up practices.	system.		materials based on road conditions. Salt is currently stored under cover.
Gain knowledge of salt storage drainage systems.	Year 1 to Year 5: Modify drainage system if necessary. Develop clean up procedures. Draft salt storage procedures. Document application procedures and procedures for clean up if excess salt is applied or a salt spill occurs. Track and evaluate the BMP and		

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
	document effectiveness.		
Mowing Practices: Document mowing practices/procedures for reporting purposes.	Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report.	Road Superintendent: Insure compliance.	The Township currently mows all roadside rights-of-ways when grass reaches 6 inches height, otherwise the Township mows three times per year
 Storm Water System Maintenance: 5. Annual catch basin maintenance and inspections. The systems should be inspected before and after any significant storm event. An inspection checklist should be used. 6. Annual ditch maintenance and inspection. 	Year 1: Continue the current maintenance schedule. Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards.	Road Superintendent: Insure compliance. Township Supervisors and Township Storm Water Management Committee: Lead the assessment and drafting of guidelines for storm water management facilities.	Catch basin clean-out program in place, draft procedures for program. All catch basins are cleaned annually. The system is inspected before and after any significant storm event. An inspection checklist is currently used. There is no written inspection procedure. Ditches are maintained on an as-needed basis and to re-establish inverts that may have been affected by sedimentation or debris.
 Storage of construction materials and disposal of spoil: Aggregates should be properly stored. Construction debris should be properly disposed of in an appropriate landfill. 	Year 1: Develop plans to move bulk materials to inside storage. Develop guidelines for storage of construction materials and construction debris. Year 1 to Year 5: Continue current practice. Track and	Township Supervisors and Township Storm Water Management Committee	No standard procedures exist for storing construction materials.
	Year 1 to Year 5 : Continue current practice. Track and record the amount and type of debris disposed of.		
Fleet Maintenance: Review current vehicle washing and maintenance bay drainage. Develop procedures to track and report on the handling of vehicle fluids, tires, and batteries. Vehicle maintenance and washing shall take place in an appropriate area.	Year 1: Review current site drainage. Draft vehicle washing procedures and location. Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness.	Road Superintendents: Insure compliance.	Vehicle maintenance is currently out- sourced. The Township should takes steps to ensure that vehicle parking areas are functioning properly.

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Recycling/Separation/Disposal: Develop procedures to track and report vehicle material recycled, litter through the Mahoning County litter pick-up program and current township practices for plastic, paper and hazardous waste collection operations.	Year 1 to Year 5: Track and evaluate BMP and document effectiveness.	Township Supervisors, Township Storm Water Management Committee, and Mahoning County Division of Recycling.	The Township currently participates in the Mahoning County Green team activities. The Township should develop a formal recycling plan for Township materials.
Oil And Water Separators: Follow proper use and maintenance procedures.	Year 1: Document procedures. Year 2 to Year 5: Track and evaluate amounts cleaned and assess the effectiveness of the BMP.	Township Supervisors and Township Storm Water Management Committee	Oil and water separators are cleaned and the material is land filled. Maintenance is done by others. Draft procedures.
Spill Management Procedures: Spill management is the responsibility of the Coitsville Fire Department.	Year 1 to Year 5: Review spill management procedures and update as needed.	Township Supervisors, Fire Department, and Township Storm Water Management Committee	Current practice handled by Township Fire Department. Draft procedures are followed for disposal.

Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments
Township Storm Water Management Committee: Form a Committee to assist Township Trustees with implementation of Storm Water Management Program. This Committee will include one or more Trustee(s), selected department heads, and a resident. This Committee will meet during the permit period and will monitor performance of the program. The Committee will develop a plan to contact target groups - service stations, commercial properties, and homeowner associations, directly.	Year 1: Committee formalized as a standing body. Year 2 to Year 5: Committee to assist Mahoning County Engineers with Storm water programs, project implementation, and annual reporting.	Township Storm Water Management Committee: Formalize the Committee as a standing body of the Township. Assign Township staff to ensure that Best Management Practices in Storm Water Management Program are implemented over the five-year permit term. Township Storm Water Management Committee will report to Trustees each November on program progress and assist in reviewing and providing information for the annual report.	Committee formation for program implementation and reporting. Committee members will form the core group of the responsible party.
Newsletters: Several newsletters are provided to residents in the Township. 12. Mahoning SWCD Education Newsletter – 3 times per year during school year. 13. Mahoning Matters, a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents.	Year 1: Provide 2 articles annually on storm water issues of interest to Township. Provide 1 article or activity per year for Teachers on county storm water program. Provide quarterly updates on county storm water program. Year 2 to Year 5: Record number and publication placed in.	Township Storm Water Management Committee, Mahoning SWCD, OSU Extension/Mahoning County RREAP, and Mahoning River Consortium.	Current Newsletters exist and will be modified to include storm water and water quality topics. Tracking mechanism is already in place for these newsletters. Mahoning SWCD newsletter and Mahoning Matters reach all residents.
Publications, including books and newspapers: Poland Town Crier – provided weekly Youngstown Vindicator Youngstown/Warren Regional Chamber of Review.	Year 1 to Year 5: Provide quarterly updates on storm water and water quality issues and the county's storm water program	Township Storm Water Committee	Poland activities are often mentioned in these publications.
Website: Add information hi-lighting water quality and storm water management to the existing website.	Year 1: Develop and add information. Year 2 to Year 5: Track effectiveness as the number of website visits per year.	Township Storm Water Committee	Poland currently operates a website

	Table 1: Public Involvement/Participation			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments	
Public Meetings: Township trustee meetings are held at regular intervals.	Year 1 : (2 nd or 3 rd quarter) - present SWMP at Township Meeting.	Township Storm Water Management Committee	Township trustee meetings are held at regular intervals.	
	Year 1 to Year 3: Implement SWMP Best Management Practices (BMPs).			
	Year 3 to Year 5: Assess, report, and evaluate Plan BMPs.			
Community Activities:	Year 1: Continue program, Develop process to track amounts and report totals for annual report.	Mahoning SWCD, Mahoning County, and/or Mahoning County Solid Waste District, AWARE, The Green	County and Township community events held annually. Source to interact with the	
Activities for the general public include:	Year 2 to Year 5: Track amounts, report totals and	Team : Provide education materials at events, staff displays, and conduct household hazardous waste	Public to incorporate water quality issues, programs, or updates.	
 Recycling programs for both Township facilities and residents. Austintown also recycles with Mahoning County Green Team. 	assess and modify selected BMPs as necessary.	Township Storm Water Management Committee:		
Public Events and Workshops	Year 1: Hold household hazardous waste collections at least twice a year beginning in.	Advertise events and provide notice of collection days in newsletter and in local paper.		
 d. Household hazardous waste collection is linked to County Green Team Special Collections. e. General community clean ups organized by County organizations. 	Year 2: Organize one annual general community cleanup.			
 f. SWCD events available to all Township residents. 	Year 2 to Year 5: Implement Annual Clean-up Day.			
Brochures, Flyers, Factsheets, and Handouts: 9. The Township will make available at the Township Hall the following information available from County and	Year 1: Developing "handout" tracking program. Identify target audiences.	Mahoning SWCD, Mahoning County District Board of Health, Ohio EPA, AWARE: Provide printed materials on listed topics.	County and Townships currently have Newsletters used to reach the Public on news, events, or information. Recommendation is to develop a storm	
other agencies and organizations: a. Handouts with building/zoning permits. b. Mahoning SWCD – Mahoning Matters. c. Mahoning SWCD – Conservation Car Wash	Year 2 to Year 5: Diversify "handouts" to meet and reach target audiences.	County Storm Water Management Committee: Copy and distribute materials, and establish a policy on the schedule and methods of dissemination	water specific brochure to have available for public events.	
Tips. d. Mahoning SWCD- Water Conservation, Why should you care?	Year 1: Develop material for at least two publications. Add additional publications each year afterwards.			
 e. Ohio EPA – Protecting Ohio's water. f. OSU Extension Fact Sheets related to Storm Water. 	Year 2 to Year 5: Track and assess storm water program information and update as necessary.			
 g. Map of County watersheds and regulated areas. 				
 Update existing Township brochures and other documents with storm water management information. 				

Table 2: Illicit Discharge Detection and Elimination Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Map storm sewer system: Construction drawings exist for the current storm sewer system. Culvert locations are currently mapped. Map	Year 1: Work with the Mahoning County Engineers Office to determine those sewer system attributes to be collected.	Mahoning County District Board of Health: Determine number, type, and location of outfalls. County Storm Water Management Committee: Insure	County currently has a Base Map of the County and Townships. Townships to build off the County Base map to inventory their respective storm sewer
storm sewer system with:	Begin System Inventory in the later part of Year 1 .	schedule for map development is met.	outfalls and systems.
a. Location of outfalls.b. Names and location of surface waters which outfalls discharge.	Year 1 to Year 5: Determine Inventory schedule (percent completed per year).	Road Superintendent: Locate and map outfall locations.	
c. Location of Home Sewage Treatment System (HSTS).d. Type and size of conduits/ditches through which HSTS discharge.	Year 1 to Year 5: Work with the Mahoning County District Board of Health to locate and map HSTS Outfalls, add these to the Storm Sewer Base map by Year 5.		
Develop program to detect and eliminate illicit discharges:	Year 1: Develop Illicit Detection Program/process. Year 1 to Year 2: Identify Program Areas to implement	Township Storm Water Management Committee: Develop draft program and refine through permit term.	Currently no program exists at the County or Township level
Develop a program to:	process.	Road Superintendent	
 a. Identify the source of any dry weather flow(s) in the storm sewer system. Quantify the volume of any flows detected. 	Year 2 to Year 3: Track, report, and document Illicit sources removed.		
 b. Document, trace, and eliminate any illicit discharges. c. Draft resolutions allowing the Township to implement this BMP. d. Detect and identify illicit discharges that may originate outside the Township. These will be reported to the County. 	Year 3 to Year 5: Assess BMPs selected for removal and modify as necessary.		
Adopt resolutions prohibiting illicit discharges:	Year 1: Draft County Zoning Resolution.	Mahoning County: Develop model resolutions.	Current enforcement does not exist. Enforcement to be developed at the
Prohibit illicit discharges to the storm sewer system and implement enforcement procedures as necessary. Determine legal authority to implement this BMP.	Year 2: Adopt Mahoning County model Zoning Resolution. Year 2 to Year 5: Enforce Zoning Resolution and document number of violations.	Township Storm Water Management Committee: Review model resolutions, tailor resolutions to community needs, and recommend adoption to Zoning Commission and Trustees.	Township level through Township Resolutions and supported by the County.
		Zoning Commission and Trustees: Recommend and adopt resolutions.	

Table 2: Illicit Discharge Detection and Elimination Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Total Maximum Daily Load (TMDL) (Ohio EPA Permit Section 1.3.6): In order to meet Ohio EPA Permit Section 1.3.6 requirements, which addresses TMDL approved watersheds, the following issues need to be addressed by the Township:	Year 1: Complete TMDL Planning Schedule and map. Year 2 to Year 5: Develop Significant Contributor Process. Implement upon USEPA approved TMDL watershed.	Mahoning County Engineers Office, Township Storm Water Management Committee, Mahoning SWCD, and AWARE.	No current TMDL program exists at either the County or Township level. This will be developed as a requirement associated with this permit.
 a. Determine if the Township is located within a TMDL watershed. b. Determine what pollutants and what sources of pollutants are identified in the TMDL watershed. c. Determine if the Township is a "Significant Contributor" of pollutants that are identified in the TMDL watershed (i.e., is your Township a major source of the pollutants present?). 			
 If the Township is not a "significant contributor", the Township should be able to demonstrate how this conclusion was reached. If the Township is a "significant contributor", develop strategies to achieve necessary pollution reduction within the impaired stream segment(s). The Township should be able to demonstrate how they determined the amount of pollutant needed to be reduced within the impaired stream segment(s), and how much pollutant was reduced (i.e., water sampling to document the amounts removed). 			

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Adopt erosion and sediment control zoning resolutions. These resolutions will require erosion and sediment control (E&SC), control of construction site waste, development of site plan review checklist, site plan review, site inspection, and enforcement. The details of these activities are included as individual BMPs included	Year 1 to Year 2: Review the Mahoning County model resolution, adapt this as needed and adopt a resolution in the 4 th quarter. Year 3: Work with SWCD to develop a Sediment and Erosion Control Inspection Program.	Mahoning County: Provide Phase II compliant model zoning resolution. Township Storm Water Management Committee: Review model, tailor to community needs, and recommend adoption to Council.	Current sub-division resolutions are in place and these will be modified to meet the MS4 requirements and Construction permit requirements.
in this table.	Year 4: Implement updated Inspection Program. Year 4 to Year 5: Track, assess and evaluate, and modify as needed, selected BMPs associated with the Inspection Program.	Zoning Commission and Trustees: Consider and adopt appropriate zoning resolutions.	
Workshop on Erosion & Sediment Control (E&SC) Resolutions: The Committee will provide workshops on erosion and sediment control BMPs, how to comply with the resolutions, and other information relevant to developers.		Mahoning SWCD: Provide workshop. County Storm Water Management Committee: Host and advertise workshops each year.	Mahoning County SWCD currently holds workshops. However, an Erosion and Sedimentation Control module will be added to assist with compliance.
Enter into Memorandum of Understanding (MOU) with Mahoning SWCD: Through this MOU, Mahoning SWCD will provide support to the Township regarding site plan review and inspection.	Year 1: Complete MOU draft language, adopt this in the 4 th quarter of Year 1. Year 2 to Year 4: Implement programs, procedures, and resolutions in the MOU. Year 4 to Year 5: Track effectiveness of the selected BMPs and evaluate and modify the BMPs as necessary.	Mahoning SWCD: Provide sample MOU for Community consideration. Township Storm Water Management Committee: Review model MOU with Mahoning SWCD, modify as necessary for Community needs, and recommend adoption to the Trustees. Trustees: Adopt MOU.	No current Memorandum of Understanding exists, however, one will be created.
Review site plans: Zoning Inspector will review site plans of construction sites. Currently review is provided for building zones and building setbacks.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review and evaluate the BMP and make necessary modifications. Year 1 to Year 5: Track and report on the effectiveness of the BMP.	Zoning Inspector, Mahoning SWCD, and Mahoning County Engineers Office: Will review E&SC Plan.	The Mahoning County Engineers Office in addition to Mahoning SWCD currently reviews all subdivision plans. Site plans are currently reviewed by the Township Zoning officer, using a checklist based on Township zoning and County subdivision regulations. The checklist will be updated.

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Construction debris collection and disposal: Develop standards for appropriate on-site collection systems or containers. Document disposal procedures. Develop resolutions to enforce non-compliance. Develop procedures for site inspections.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Mahoning SWCD, Mahoning County Engineers Office, Township Storm Water Management Committee, and Fire Departments	Mahoning SWCD currently inspects sites for construction debris containment. This will be added to the revised checklist.
Inspect active sites: Inspectors will inspect active construction sites. Currently, inspector's field reports are required for storm sewer installation, on-site detention, downspouts, final grade of new construction, storm inlets, road and curb cuts, and asphalt installation.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Revise current inspection checklist as needed. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspector: Inspect active sites. Road Superintendent Mahoning County District Board of Health Mahoning County Engineers	Currently is performed by Mahoning SWCD in conjunction with the Mahoning County Engineers Office.
Enforcement actions: When inspection reveals that work is not proceeding in accordance with approved E&SC plan, the Zoning Inspector may issue a stop work order, halting construction until problems are corrected or refer to the County Prosecutor for enforcement action.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Zoning Inspectors: Enforcement ability/capability to be determined through Township resolutions.	Currently, limited enforcement mechanisms are in place. Regulations and Enforcement actions will be developed at a later date within the five-year implementation window for compliance.
Respond to public complaints regarding construction activities: In addition to regular inspections of active construction sites, the Township will advertise through its newsletter and on the web site, a phone number for residents concerned about specific construction activities.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Township Storm Water Management Committee: Insure BMP completed. Zoning Inspector: Review complaints and respond appropriately. Zoning inspector is yet to be identified.	Currently, there are limited forms or ways the public can supply comments and/or concerns
Concrete Truck Wash Out: Develop procedures for concrete truck washout. The procedures should address: Selection of the location for washout activities. Procedures to prevent the run off of washout effluent. Final clean up of washout area.	Year 1: Draft resolutions and procedures governing concrete truck wash out. Include in revised sub-division resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently addressed by Mahoning SWCD and is required on the submitted SWP3 plans.

Table 3: Construction Site Storm Water Control Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
 Construction Site Ingress/Egress- Develop procedures and standard drawings for site ingress/egress during construction. Develop ingress/egress sequencing to match construction sequencing. Review current standards available from other regulated entities. 	Year 1: Draft resolutions and procedures governing construction site ingress/egress. Include in revised subdivision resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office and Township Storm Water Management Committee	Currently not addressed or required as part of the SWP3 plans.

Table 4: Post-Construction Storm Water				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Workshops for Development Community: Develop workshops on storm water management for landowners, builders, developers, and community officials.	Year 1: Develop workshop agenda and hold workshop in the later part of Year 1. Year 2 to Year 5: Update workshop content and hold workshop annually, document attendance, and topics for reporting purposes.	Mahoning County: Provide workshops. Township Storm Water Management Committee: Advertise through web site, newsletter, and local newspapers.	Workshops have been held in the past for developers and contractors.	
Riparian and Wetland setbacks: Township will explore adopting zoning regulations creating setbacks from certain watercourses and wetlands.	Year 1: Review current Township Building setback resolutions. Year 1 to Year 2: Revise and modify to incorporate post construction run-off controls. Year 2 to Year 5: Draft Township resolutions to include language to address these BMPs. Report and track status and effectiveness of selected BMPs and passed resolutions.	Zoning Commission: Review the BMP and recommend approval or disapproval. If disapproval is recommended, recommend alternative BMP. Township Storm Water Management Committee: Assist the Zoning commission in review. If the community decides not to implement the BMP, suggest other non-structural BMPs to meet the requirements of Minimum Control Measure #5.	Currently no township resolutions exist governing this BMP.	
Storm Water Management Resolutions: Adopt the Mahoning County model storm water management resolutions—(i.e. Updated Sub-division Regulations) as zoning resolutions. These resolutions will include provisions for both new development and redevelopment activities. The revisions would be based on MS4 and New Construction Permit requirements.	 Year 1: Review and develop sub-division regulation update process: Revise current resolutions to include construction and post-construction requirements per New Construction Permit. Entertain the possibility of developing a storm water design manual for establishing storm water design criteria. Document current construction site run-off control BMPs in revised sub-division regulations. Year 1 to Year 3: Develop inspection procedures and the legal authority to inspect and enforce construction site run-off violations. Year 2 to Year 5: Develop a program to track inspection program effectiveness and effectiveness of the selected BMPs. 	Zoning Commission: Review resolution, work with Mahoning County to tailor to community needs, and recommend adoption to Trustees. Township Storm Water Management Committee: Assist Zoning Commission in review and tailoring of model resolution.	Currently addressed in the sub-division resolutions and these will be modified to address MS4 permit requirements.	

Table 5: Pollution Prevention and Good Housekeeping Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Operation and maintenance program to prevent or reduce storm water pollution from community operations.	Year 1: Review and develop draft Operation and Maintenance procedures related to storm water pollution reduction.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents to develop an O&M program.	Currently no plan in place to address these issues.	
This Operation and Maintenance (O&M) program will cover the activities listed in the MS4 permit section 3.2.6.	Year 2 to Year 4: Implement the selected BMPs. Year 4 to Year 5: Track BMP effectiveness and modify as needed.	Road Superintendents: Assist in O&M program development. Implement O&M program.		
	Year 1 to Year 5: Road Superintendents to conduct quarterly training on O&M procedures and reporting.			
Staff education program on pollution prevention: Identify potential sources of pollution resulting from daily maintenance operations. Train all appropriate Township staff in proper methods of pollution reduction, reporting	Year 1: Develop Employee Storm Water pollution program in conjunction with Mahoning County and Mahoning SWCD training.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents, develop education program.	Currently no plan in place to address these issues.	
and tracking.	Year 1 to Year 4: Review training programs and update or modify as necessary.	Road Superintendents: Assist in education program development. Implement education program.		
	Year 3 to Year 5: Track training effectiveness, develop means to track and report on training effectiveness.			
Street Sweeping: Draft procedures for reporting frequency and amount of material collected during this operation.	Year 1: Develop additional procedures for street sweeping and disposal of spoils.	Road Superintendents: Insure compliance.	Township streets are currently swept twice annually	
	Year 2 to Year 5: Implement any revised street sweeping procedure and document effectiveness.			
Litter Pickup: Document procedures for reporting amount collected and number of participants in the program.	Year 1: Develop a process to track litter collected. Year 1 to Year 3: Develop a process to identify areas where trash collected. Year 2 to Year 5: Track, evaluate, and modify BMP as necessary. Document effectiveness.	Township Storm Water Management Committee.	"REDUCE REUSE RECYCLE" Poland Township's Website provides residents and business owners with information on what can be recycled and where they can take the materials for drop off. The Township participates in the Mahoning County Division of Recycling litter pickup program.	
Salt Storage and Applications:	Year 1: Review current salt storage area drainage system.	Road Superintendent: Insure compliance.	Litter is collected as needed. Winter weather maintenance is	
Develop procedures addressing handling, storage and post-event clean ups.	Year 1 to Year 5: Modify drainage system if necessary. Develop clean up procedures. Draft salt storage		conducted as needed.	
Gain knowledge of current salt storage drainage systems.	procedures. Document application procedures and procedures for clean up if excess salt is applied or a salt			

Table 5: Pollution Prevention and Good Housekeeping Plan			
Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
spill occurs. Track and evaluate the BMP and document effectiveness.			
Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report.	Road Superintendent: Insure compliance.	The Township currently mows all roadside rights of way two-three times annually and is brushed as needed	
Year 1: Continue the current maintenance schedule.	Road Superintendent: Insure compliance.	The system is normally inspected	
Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards.	Township Supervisors and Township Storm Water Management Committee: Lead the assessment and drafting of guidelines for storm water management	annually. Ditches are maintained on an as-needed basis	
Ver 1: Develop plane to move bulk meterials to incide		Road repair materials, Aggregates and	
storage. Develop guidelines for storage of construction materials and construction debris.	Management Committee	Construction debris composted and reused as needed.	
Year 1 to Year 5: Continue current practice. Track and record the amount and type of debris disposed of.			
Year 1: Review current site drainage. Draft vehicle washing procedures and location.	Road Superintendents: Insure compliance.	The Township vehicle maintenance shop and/or parking facility, fire department	
Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness.			
Year 1 to Year 5: Track and evaluate BMP and document effectiveness.	Township Supervisors, Township Storm Water Management Committee, and Mahoning County Division of Recycling.		
	spill occurs. Track and evaluate the BMP and document effectiveness. Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report. Year 1: Continue the current maintenance schedule. Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards. Year 1: Develop plans to move bulk materials to inside storage. Develop guidelines for storage of construction materials and construction debris. Year 1 to Year 5: Continue current practice. Track and record the amount and type of debris disposed of. Year 1: Review current site drainage. Draft vehicle washing procedures and location. Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness. Year 1 to Year 5: Track and evaluate BMP and document	spill occurs. Track and evaluate the BMP and document effectiveness. Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report. Year 1: Continue the current maintenance schedule. Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards. Year 1: Develop plans to move bulk materials to inside storage. Develop guidelines for storage of construction materials and construction debris. Year 1 to Year 5: Continue current practice. Track and record the amount and type of debris disposed of. Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness. Year 1 to Year 5: Track and evaluate BMP and document effectiveness. Year 1 to Year 5: Track and evaluate BMP and document effectiveness. Year 1 to Year 5: Track and evaluate BMP and document effectiveness. Year 1 to Year 5: Track and evaluate BMP and document effectiveness. Year 1 to Year 5: Track and evaluate BMP and document effectiveness. Year 1 to Year 5: Track and evaluate BMP and document effectiveness.	

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Oil And Water Separators: Follow proper use and maintenance procedures.	Year 1: Document procedures. Year 2 to Year 5: Track and evaluate amounts cleaned and assess the effectiveness of the BMP.	Township Supervisors and Township Storm Water Management Committee	Oil and Water Separators are inspected and cleaned every two years
Spill Management Procedures: Spill management is the responsibility of the Austintown Fire Department.	Year 1 to Year 5: Review spill management procedures and update as needed.	Township Supervisors, Fire Department, and Township Storm Water Management Committee	Current practice handled by Township Fire Department. Draft procedures are followed for disposal.

Table 1: Public Involvement/Participation				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Township Storm Water Management Committee: Form a Committee to assist Township Trustees with implementation of Storm Water Management Program. This Committee will include one or more Trustee(s), selected department heads, and a resident. This Committee will meet during the permit period and will monitor performance of the program. The Committee will develop a plan to contact target groups (service stations, commercial properties, and homeowner associations) directly. Newsletters: Several newsletters are provided to residents in the Township. 14. Mahoning SWCD Education Newsletter – 3 times per year during school year. 15. Mahoning Matters, a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents.	Year 1: Committee formalized as a standing body. Year 2 to Year 5: Committee to assist Mahoning County Engineers with Storm water programs, project implementation, and annual reporting. Year 1: Provide 2 articles annually on storm water issues of interest to Township. Provide 1 article or activity per year for Teachers on county storm water program. Provide quarterly updates on county storm water program. Year 2 to Year 5: Record number and publications placed in.	Township Storm Water Management Committee: Formalize the Committee as a standing body of the Township. Assign Township staff to ensure that Best Management Practices in Storm Water Management Program are implemented over the five-year permit term. Township Storm Water Management Committee will report to Trustees each November on program progress and assist in reviewing and providing information for the annual report. Township Storm Water Management Committee, Mahoning SWCD, OSU Extension/Mahoning County RREAP, and Mahoning River Consortium.	The Committee will be formed to manage implementation and reporting. Committee members will form the core group of the responsible party. Current Newsletters exist and will be modified to include storm water and water quality topics. Tracking mechanism is already in place for these newsletters. Mahoning SWCD newsletter and Mahoning Matters reach all residents.	
Public Meetings: Township Trustee meetings are held on regular basis. Notices for meetings appear in local newspapers.	Year 1: (2 nd or 3 rd quarter) - present SWMP at Township Meeting. Year 1 to Year 3: Implement SWMP Best Management Practices (BMPs). Year 3 to Year 5: Assess, report, and evaluate Plan BMPs.	Township Storm Water Management Committee	Public Meetings currently held once a month. Media to incorporate storm water/water quality issues.	

Recommended Schedule and Responsible Party		Responsible Party	Rationale/Comments
Best Management Practice/Strategy Community Activities:	Measurable Goals Year 1: Continue program, Develop process to track	Mahoning SWCD, Mahoning County, and/or	County community events are held
ctivities for the general public include:	amounts and report totals for annual report.	Mahoning County Solid Waste District, AWARE, The Green Team: Provide education materials at events, staff displays, and conduct household hazardous waste	annually. Existing programs can be modified to include information on the SWMP.
9. Recycling programs for both Township facilities and residents. Springfield also recycles with	Year 2 to Year 5: Track amounts, report totals and assess and modify selected BMPs as necessary.	collections.	SWIVIF.
Mahoning County Green Team.10. Public Events and Workshops a. Household hazardous waste collection is linked	Year 1: Hold household hazardous waste collections at least twice a year.	Township Storm Water Management Committee: Advertise events and provide notice of collection days in newsletter and in local paper.	
to County Green Team Special Collections. b. General community clean ups organized by County organizations.	Year 2: Organize one annual general community cleanup.		
c. SWCD events available to all Township residents.3. Adopt-A-Mile. Springfield Township should	Year 2 to Year 5: Implement Annual Clean-up Day.		
examine the Adopt-A-Mile program currently active in Beaver Township.	Year 2 to Year 5: Implement Adopt-A-Mile if selected as BMP. If not, review. Assess alternative BMP's to implement.		
rochures, Flyers, Factsheets, and Handouts: 1. The Township will make available at the Township Hall	Year 1: Developing "handout" tracking program. Identify target audiences.	Mahoning SWCD, Health Department, Ohio EPA, AWARE: Provide printed materials on listed topics.	The County currently has various newsletters used to inform residents. Specific items presenting information of the country currently has various newsletters.
the following information available from County and other agencies and organizations: a. Handouts with building permits. b. Mahoning SWCD – Mahoning Matters. c. Mahoning SWCD – Conservation Car Wash	Year 2 to Year 5: Diversify "handouts" to meet and reach target audiences.	County Storm Water Management Committee: Copy and distribute materials, and establish a policy on the schedule and methods of dissemination	stormwater management can easily be developed.
Tips. d. Mahoning SWCD- Water Conservation, Why should you care?	Year 1: Develop material for at least two publications. Add additional publications each year afterwards.	The Green Team	
 e. Ohio EPA – Protecting Ohio's water. f. OSU Extension Fact Sheets related to Storm Water. 	Year 2 to Year 5: Track and assess storm water program information and update as necessary.	Mahoning County Building Department	
 g. Map of County watersheds and regulated areas. 			

Table 2: Illicit Discharge Detection and Elimination Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Map storm sewer system with: a. Location of outfalls. b. Names and location of surface waters which outfalls discharge. c. Location of Home Sewage Treatment System (HSTS). d. Type and size of conduits/ditches through which HSTS discharge.	Year 1: Work with the Mahoning County Engineers Office to determine those sewer system attributes to be collected. Begin System Inventory in the later part of Year 1. Year 1 to Year 5: Determine Inventory schedule (percent completed per year). Year 1 to Year 5: Work with the Mahoning County Health Department to locate and map HSTS Outfalls,	Health Department: Determine number, type, and location of HSTS outfalls. County Storm Water Management Committee: Insure schedule for map development is met. Road Superintendent: Locate and map outfall locations.	The County currently has a base map of the County and Townships. The Townships will use the County Base map to inventory their respective storm sewer outfalls and systems.	
Develop program to detect and eliminate illicit discharges: Develop a program to: h. Identify the source of any dry weather flow(s) in the storm sewer system. Quantify the volume of any flows detected. i. Document, trace, and eliminate any illicit discharges. j. Draft resolutions allowing the Township to implement this BMP. k. Detect and identify illicit discharges that may originate outside the Township. These will be reported to the County.	add these to the Storm Sewer Base map by Year 5. Year 1: Develop Illicit Detection Program/process. Year 1 to Year 2: Identify Program Areas to implement process. Year 2 to Year 3: Track, report, and document Illicit sources removed. Year 3 to Year 5: Assess BMPs selected for removal and modify as necessary.	Township Storm Water Management Committee: Develop draft program and refine through permit term. Road Superintendent	Currently no program exists at the County or Township level	
Adopt resolutions prohibiting illicit discharges: Explore ways to prohibit illicit discharges to the storm sewer system and implement enforcement procedures, using existing mechanisms at the County level. NOTE: Springfield Township has no current zoning resolution, and therefore currently has no mechanism to adopt language to prohibit illicit discharge.	Year 1: Review procedures, develop MOU with the County for assistance with regulations and enforcement. Year 2 to Year 5: Implement agreement.	Mahoning County: Develop model resolutions. Township Storm Water Management Committee: Review model resolutions, develop appropriate agreements with the Mahoning County Storm Water Management Committee and the Mahoning County SWCD.	No mechanism currently exists to prohibit illicit discharges at the Township level. Springfield Township has no zoning resolution.	

Table 2: Illicit Discharge Detection and Elimination Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Total Maximum Daily Load (TMDL) (Ohio EPA Permit Section 1.3.6): In order to meet Ohio EPA Permit Section 1.3.6 requirements, which addresses TMDL approved watersheds, the following issues need to be addressed by the Township:	Year 1: Complete TMDL Planning Schedule and map. Year 2 to Year 5: Develop Significant Contributor Process. Implement upon USEPA approved TMDL watershed.	Mahoning County Engineers Office, Township Storm Water Management Committee, Road Superintendent, Mahoning SWCD, and AWARE.	No current TMDL program exists at either the County or Township level. This will be developed as a requirement associated with this permit.	
 a. Determine if the Township is located within a TMDL watershed. b. Determine what pollutants and what sources of pollutants are identified in the TMDL watershed. c. Determine if the Township is a "Significant Contributor" of pollutants that are identified in the TMDL watershed (i.e., is your Township a major source of the pollutants present?). 				
 If the Township is not a "significant contributor", the Township should be able to demonstrate how this conclusion was reached. If the Township is a "significant contributor", develop strategies to achieve necessary pollution reduction within the impaired stream segment(s). The Township should be able to demonstrate how they determined the amount of pollutant needed to be reduced within the impaired stream segment(s), and how much pollutant was reduced (i.e., water sampling to document the amounts removed). 				

	Table 3: Construction Site Storn	n Water Control Plan	
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Adopt erosion and sediment control zoning resolutions. These resolutions will require erosion and sediment control (E&SC), control of construction site waste, development of site plan review checklist, site plan review, site inspection, and enforcement. The details of these activities are included as individual BMPs included in this table. NOTE: Springfield Township has no current zoning resolution, and therefore lacks the legal mechanism to adopt additional erosion and sedimentation controls.	Year 1 to Year 2: Work with Mahoning County to ensure that County building and planning reviews will be modified to include updated E&SC reviews. Year 3 to Year 5: Track, assess and evaluate, and modify as needed, selected BMPs associated with the Inspection Program.	Mahoning County: Provide Phase II compliant model regulation. Township Storm Water Management Committee: work with Mahoning County to ensure appropriate reviews are accomplished in Springfield Township	Springfield Township has no current zoning resolution in place. Erosion and sedimentation reviews are currently performed by Mahoning County.
Workshop on Erosion & Sediment Control (E&SC) Resolutions: The Committee will provide workshops on erosion and sediment control BMPs, how to comply with the resolutions, and other information relevant to developers.	Year 1: Complete Inspection Training Program with Mahoning SWCD. Internal and External Training. Draft MOU with Mahoning SWCD for Workshops, training and site plan review and potential site inspections and enforcement. Year 2 to Year 5: Develop training/workshop schedule. Track and evaluate training elements and modify as needed.	Mahoning SWCD: Provide workshop. County Storm Water Management Committee: Host and advertise workshops each year.	Mahoning County SWCD currently holds workshops. However, an Erosion and Sedimentation Control module will be added to assist with compliance.
Enter into Memorandum of Understanding (MOU) with Mahoning SWCD: Through this MOU, Mahoning SWCD will provide support to the Township regarding site plan review and inspection.	Year 1: Complete MOU draft language, adopt this in the 4 th quarter of Year 1. Year 2 to Year 4: Implement programs, procedures, and resolutions in the MOU. Year 4 to Year 5: Track effectiveness of the selected BMPs and evaluate and modify the BMPs as necessary.	Mahoning SWCD: Provide sample MOU for Community consideration. Township Storm Water Management Committee: Review model MOU with Mahoning SWCD, modify as necessary for Community needs, and recommend adoption to the Trustees. Trustees: Adopt MOU. With the Mahoning SWCD	No current Memorandum of Understanding exists, however, one will be created.
Review site plans: Mahoning County Building Department will review site plans of construction sites. Currently review is provided for building zones and building setbacks.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review and evaluate the BMP and make necessary modifications. Year 1 to Year 5: Track and report on the effectiveness of the BMP.	Building Inspector, Mahoning SWCD, and Mahoning County Engineers Office: Will review E&SC Plan.	The Mahoning County Engineers Office and the Mahoning SWCD currently reviews all subdivision plans. Site plans are currently reviewed by the Mahoning County Building Department, using a checklist based on County subdivision regulations. The checklist will be updated.

Table 3: Construction Site Storm Water Control Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Construction debris collection and disposal: Develop standards for appropriate on-site collection systems or containers. Document disposal procedures. Develop resolutions to enforce non-compliance. Develop procedures for site inspections.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Mahoning SWCD, Mahoning County Engineers Office, Township Storm Water Management Committee, and Fire Departments	Mahoning SWCD currently inspects sites for construction debris containment. This will be added to the revised checklist.	
Inspect active sites: Inspectors will inspect active construction sites. Currently, inspector's field reports are required for storm sewer installation, on-site detention, downspouts, final grade of new construction, storm inlets, road and curb cuts, and asphalt installation.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Revise current inspection checklist as needed. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Building Inspector: Inspect active sites. Road Superintendent Health Department Mahoning County Engineers	Inspection is currently performed by the Mahoning SWCD in conjunction with the Mahoning County Engineers Office.	
Enforcement actions: When inspection reveals that work is not proceeding in accordance with approved E&SC plan, the building department may issue a stop work order, halting construction until problems are corrected or refer to the County Prosecutor for enforcement action.	• •	County Storm Water Management Committee Mahoning County Building Inspector Township Stormwater Management Committee	Currently, limited enforcement mechanisms are in place. Regulations and Enforcement actions will be developed at a later date within the five-year implementation window for compliance. The Township will rely on the Mahoning County Building Department and the County Engineers for enforcement.	
Respond to public complaints regarding construction activities: In addition to regular inspections of active construction sites, the Township will advertise through the use of newsletters a phone number for residents concerned about specific construction activities.	Year 1: Draft and approve procedures for reporting, documentation, and enforcement ability. Year 2 to Year 4: Review, evaluate BMP, and make necessary modifications. Year 1 to Year 5: Track and report on BMP effectiveness.	Township Storm Water Management Committee: Ensure BMP completed. Building Department: Review complaints and respond appropriately.	Currently, there are limited forms or ways the public can supply comments and/or concerns	

Table 3: Construction Site Storm Water Control Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Concrete Truck Wash Out: Develop procedures for concrete truck washout. The procedures should address: Selection of the location for washout activities. Procedures to prevent the run off of washout effluent. Final clean up of washout area.	Year 1: Draft resolutions and procedures governing concrete truck wash out. Include in revised sub-division resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office and Township Storm Water Management Committee	Truck washout procedures are not currently addressed by Mahoning SWCD but are required on the submitted storm water pollution prevention plans.	
 Construction Site Ingress/Egress- Develop procedures and standard drawings for site ingress/egress during construction. Develop ingress/egress sequencing to match construction sequencing. Review current standards available from other regulated entities. 	Year 1: Draft resolutions and procedures governing construction site ingress/egress. Include in revised subdivision resolutions. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mahoning County Engineers Office and Township Storm Water Management Committee	Construction ingress and egress is currently not addressed or required as part of the storm water pollution prevention plans.	

Table 4: Post-Construction Storm Water				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Workshops for Development Community: Develop workshops on storm water management for landowners, builders, developers, and community officials.	Year 1: Develop workshop agenda and hold workshop in the later part of Year 1. Year 2 to Year 5: Update workshop content and hold workshop annually, document attendance, and topics for reporting purposes.	Mahoning County SWCD: Provide workshops. Township Storm Water Management Committee: Advertise through the County web site, newsletter, and local newspapers.	Workshops have been held in the past for developers and contractors.	
Storm Water Management Resolutions: Adopt the Mahoning County model storm water management regulations –(i.e. Updated Sub-division Regulations) as zoning resolutions. These resolutions will include provisions for both new development and redevelopment activities. The revisions would be based on MS4 and New Construction Permit requirements. NOTE: Springfield Township has no current zoning resolution, and therefore lacks the legal mechanism to adopt additional storm water management controls.	Year 1: Review Mahoning County regulations and procedures and the Townships legal authority. Year 1 to Year 3: Work with Mahoning County to ensure that the County's Storm Water Management criteria are implemented during the County Department's inspection and review of plans. Work with County Departments to Develop inspection procedures and the legal authority to inspect and enforce construction site run-off violations. Year 2 to Year 5: Develop a program to track inspection program effectiveness and effectiveness of the selected BMPs.	County Building Commission: Review resolution, work with Mahoning County to tailor to community needs, and recommend adoption to Trustees. Township Storm Water Management Committee: Assist Building Commission in review and tailoring of model resolution.	Springfield Township has no zoning resolution. Currently addressed in the County sub-division resolutions and these will be modified to address MS4 permit requirements. The County Drainage Criteria Manual will be updated.	
Develop Strategies and Policies to address maintenance of privately owned storm water facilities. The Township will identify all privately owned storm water facilities and develop and implement standards for their maintenance. NOTE: Springfield Township has no current zoning resolution, and therefore lacks the legal mechanism to adopt controls on privately owned storm water management facilities.	Year 1 to Year 3: Work with Mahoning County to determine whether the County's policies on privately owned facilities can be implemented in Springfield Township.	Township Storm Water Management Committee and Township Trustees	Springfield Township has no zoning resolution Should be handled on a Planning Commission level through subdivision resolutions.	

Table 5: Pollution Prevention and Good Housekeeping Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Operation and maintenance program to prevent or reduce storm water pollution from community operations.	Year 1: Review and develop draft Operation and Maintenance procedures related to storm water pollution reduction.	Township Storm Water Management Committee: Working with Maintenance/Road Superintendents to develop an O&M program.	Operation and maintenance procedures are in place but are not currently documented.	
This Operation and Maintenance (O&M) program will cover the activities listed in the MS4 permit section 3.2.6.	Year 2 to Year 4: Implement the selected BMPs. Year 4 to Year 5: Track BMP effectiveness and modify as needed. Year 1 to Year 5: Road Superintendents to conduct	Road Superintendents: Assist in O&M program development. Implement O&M program.		
Staff education program on pollution prevention:	quarterly training on O&M procedures and reporting. Year 1: Develop Employee Storm Water pollution	Township Storm Water Management	Springfield Township currently has a small	
Identify potential sources of pollution resulting from daily maintenance operations. Train all appropriate Township staff in proper methods of pollution reduction, reporting	program in conjunction with Mahoning County and Mahoning SWCD training.	Committee: Working with Maintenance/Road Superintendents, develop education program.	permanent staff of four.	
and tracking.	Year 1 to Year 4: Review training programs and update or modify as necessary.	Road Superintendents: Assist in education program development. Implement education program.		
	Year 3 to Year 5: Track training effectiveness, develop means to track and report on training effectiveness.			
Street Sweeping: Document sweeping procedures for frequency and amounts collected for reporting purposes.	Year 1: Develop additional procedures for street sweeping and disposal of spoils.	Road Superintendents: Insure compliance.	The Township currently begins sweeping in April. Sweeping performed annually.	
	Year 2 to Year 5: Implement any revised street sweeping procedure and document effectiveness.			
Litter Pickup: Continue association with County Green team. Document amounts collected for reporting purposes.	Year 1: Develop a process to track litter collected. Year 1 to Year 3: Develop a process to identify areas	Township Storm Water Management Committee.	The Township participates in the Mahoning County Green team litter pickup program. An annual pickup program is held. Township currently is	
amounts collected for reporting purposes.	where trash collected.		aligned with Mahoning County Green Team.	
	Year 2 to Year 5 : Track, evaluate, and modify BMP as necessary. Document effectiveness.			
Salt Storage and Applications: Document handling, storage and post-event clean up procedures.	Year 1: Review current salt storage area drainage system.	Road Superintendent: Insure compliance.	The Township applies de-icing materials based on road conditions. Treatment begins upon notice by local law enforcement agency	
Gain knowledge of current site drainage relative to salt storage.	Year 1 to Year 5: Modify drainage system if necessary. Develop clean up procedures. Draft salt storage procedures. Document application procedures and procedures for clean up if excess salt is applied or a salt spill occurs. Track and evaluate the BMP and document			

Table 5: Pollution Prevention and Good Housekeeping Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals effectiveness.	Responsible Party	Rationale/Comments	
Mowing Practices: Document mowing practices/procedures for the growing season.	Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report.	Road Superintendent: Insure compliance.	The Township mows twice annually, beginning in June and again in August.	
Storm Water System Maintenance: 9. Annual catch basin maintenance and inspections. The systems should be inspected before and after any significant storm event. An inspection checklist should be used. 10. Annual ditch maintenance and inspection.	Year 1: Continue the current maintenance schedule. Develop written procedures and standards. Continue the current maintenance schedule. Develop written procedures and standards.	Road Superintendent: Insure compliance. Township Supervisors and Township Storm Water Management Committee: Lead the assessment and drafting of guidelines for storm water management facilities.	The system is normally inspected after any significant storm event.	
Storage of construction materials and disposal of spoil: 1. Aggregates should be properly stored. 2. Construction debris should be properly disposed of in an appropriate landfill.	Year 1: Develop plans to move bulk materials to inside storage. Develop guidelines for storage of construction materials and construction debris. Year 1 to Year 5: Continue current practice. Track and record the amount and type of debris disposed of.	Township Supervisors and Township Storm Water Management Committee		
Fleet Maintenance: BMP will be developed to addressing vehicle maintenance activities, vehicle washing areas and vehicle recycling procedures.	Year 1: Review current site drainage. Draft vehicle washing procedures and location. Year 2 to Year 5: Develop a vehicle wash area, program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness.	Road Superintendents: Insure compliance.		

Table 5: Pollution Prevention and Good Housekeeping Plan					
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments		
Recycling/Separation/Disposal: BMP will be developed to quantify the amount of materials recycled, separated and disposed of.	Year 1 to Year 5: Track and evaluate BMP and document effectiveness. Modify as necessary and report on any modifications.	Township Supervisors, Township Storm Water Management Committee, and Mahoning County Division of Recycling.	Drop off sites and curb side recycling are handled by the Mahoning County Division of Recycling.		
Oil And Water Separators: Determine if Oil and Water Separators are in place and identify the location of the apparatus. Follow proper use/maintenance and disposal procedures and recommended practices.	Year 1: Document procedures. Year 2 to Year 5: Track and evaluate amounts cleaned and assess the effectiveness of the BMP.	Township Supervisors and Township Storm Water Management Committee			
Spill Management Procedures: Spill management is the responsibility of the Springfield Fire Department.	Year 1 to Year 5: Review spill management procedures and update as needed.	Township Supervisors, Fire Department, and Township Storm Water Management Committee	Current practice handled by Township Fire Department. Draft procedures are followed for disposal.		

Table 1: Public Involvement/Participation				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments	
Storm Water Committee: The County will form a Committee to assist Township Trustees, Mahoning County representatives and Mill Creek MetroParks with the implementation of a Storm Water Management Program. This Committee will include one or more Mill Creek MetroParks representative, Township Trustees, selected county department heads and residents. This Committee will meet during the permit period and will monitor performance of the program. The Committee will develop a plan to contact target groups - service stations, commercial properties and homeowner associations, directly.	Year 1: Establish a County Storm Water Management Committee.	Mill Creek MetroParks: Help form the Committee, and assign a representative. Assign staff to ensure that Best Management Practices in Storm Water Management Program are implemented over the five-year permit term. Report to Mahoning County Storm Water Committee each November on program progress and to assist in reviewing and providing information for the annual report.	The Committee will oversee the implementation of the Storm Water Management Plan. As a non-traditional MS4 participating in this SWMP, Mill Creek MetroParks will have responsibility for implementing appropriate BMP's in their facilities. In addition, Mill Creek MetroParks has experience in non-structural stormwater BMP's, and can provide this experience to the County and other participants.	
Public Involvement: The County announced availability of draft SWMP for review and comments by public. Copies of draft SWMP were placed throughout the county, including the Mill Creek MetroParks Administration Office, for review and comment. A meeting was held with "external" stakeholders to present the plan and to solicit comments on the plan. Finally, two public meetings were held where the public could come to learn about the plan, ask questions, and submit comments. All comments were considered in developing the final plan.	Resolution will be approved by the Board of Park Commissioners adopting the MetroParks' portion of the plan.	Mill Creek MetroParks	SWMP was discussed at Board of Park Commissioner's meeting. Resolution R-03-01 was approved on 1/13/03 agreeing to participate in the Mahoning County SWMP.	
Newsletters: Several newsletters are provided to residents in Mahoning County. 16. Mahoning County SWCD Education Newsletter – 3 times a year during school year. 17. Mahoning Matters, a quarterly publication of Mahoning SWCD – distributed to 104,686 county residents.	Year 2 to Year 5: Provide information and assistance to the SWCD for annual article/activity on County Storm Water Program.	Mill Creek MetroParks/SWCD	Mill Creek MetroParks does not have their own newsletter.	

Table 1: Public Involvement/Participation				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rational/Comments	
 Brochures, Flyers, Factsheets, and Handouts: 1. Mill Creek MetroParks will make available the following information available from County and other agencies and organizations: Mahoning SWCD – Conservation Car Wash Tips. Mahoning SWCD- Water Conservation Why should you care? OEPA – Protecting Ohio's water. OSU Extension Fact Sheets related to SW. Map of County watersheds and regulated areas. AWARE Brochure. 	Year 1: Assist the County SWMP Committee in developing and recommending revisions to existing brochures. The revisions will explain portions of the SWMP to the public. Year 2 to Year 5: Provide brochures at MetroParks facilities. Make additional printed materials available to the public at MetroPark Facilities. Monitor and report quantities taken by the public.		Mill Creek MetroParks and other agencies and organizations currently have a variety of printed material. The MetroParks' material is regularly available to the public at numerous locations.	
Web Site: SWMP will be added to County web site and links provided where additional storm water information can be found. Links include: 1. County web site 2. SWCD web site 3. Green Team web site 4. AWARE web site 5. County Health Department web site 6. Sanitary Engineers web site 7. Other agency web sites (OEPA, ODNR, etc.)	Year 1: Add appropriate storm water information and provide links on the MetroParks website to other local and regional websites. Track the number of annual website visits.	Mill Creek MetroParks	Mill Creek MetroParks currently operates a website with a variety of information on MetroParks Facilities and activities. Information and links to the County stormwater management web pages can be added to the site.	
Community activities: Community events will be used to educate public about SWMP. 11. Annual community clean-up on Earth Day. 12. AWARE annual watershed festival. 13. MetroParks annual litter/trash clean-up for stream corridors and properties.	Year 1: Continue the current programs. Develop a process to track the number of events held and the number of attendees at each event. Year 2 to Year 5: Track events and attendance, report totals and assess and modify the selected BMP's as necessary. Help the County Storm Water Management Committee organize and hold an annual general community cleanup.	Storm Water Committee/Mill Creek MetroParks	Currently sponsors annual litter/trash cleanup day for stream sides and properties throughout the Mill Creek MetroParks (by Boy Scouts & Girl Scouts)	
Storm Water Education Campaign Grade School educational programs	Year 1: Evaluate current programs and recommend updates. Year 2 to Year 3: Implement updates. Track number of students at programs and report to Storm Water Management Committee.	Mill Creek MetroParks	MetroParks currently runs a number of educational programs for schools. Education staff will explore ways to add some information about stormwater management to these programs. The intent is not to develop a stand-alone stormwater education program, but to incorporate storm water issues into standard programming.	

Table 2: Illicit Discharge Detection and Elimination Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
 Inventory & Map storm sewer system: 5. Location of outfalls. 6. Names and location of surface waters to which outfalls discharge. 7. Location of HSTS. 8. Type and size of conduits/ditches through which HSTS 	Year 1: Work with the Mahoning County Engineers Office to determine the storm sewer system attributes to be collected. Late Year 1: Begin System Inventory.		Existing maps, drawings, and data for MetroParks storm sewers and Facilities are available to help complete the inventory and mapping.	
discharge.	Year 1 to Year 5: Determine Inventory schedule (percent completed per year) Year 1 to Year 5: Work with the Mahoning County Health Department to locate and map HSTS Outfalls within the Mill Creek MetroParks. Add these to the Storm Sewer Base map by Year 5.	MetroParks/Mahoning County Engineer: Locate and digitize outfall locations.		
 Develop program to detect and eliminate illicit discharges: Inspect outfalls for dry weather flows in the storm sewer systems within the MetroParks. Determine source of illicit discharge and possible methods to eliminate the source. Establish reporting and notification procedures if origin of illicit discharge is traced to properties outside of MetroParks. 	procedures. Year 2 to Year 4: Commence illicit discharge detection	MetroParks: Develop protocols and refine detection program through permit term.	MetroParks police periodically inspect creeks and streams for illicit discharges, but no official program is in place.	
Adopt regulations prohibiting illicit discharges: Prohibit illicit discharges to the storm sewer system and implement enforcement procedures as necessary.	Year 1: Review existing rules and regulations. Year 2: Adopt revised rules and regulations. Track number of annual enforcement actions taken to eliminate illicit discharges.	Mill Creek MetroParks: Review and revise rules and regulations.	Existing MetroParks rules and regulations can be modified. Section 13.0 of the MetroParks General Rules and Regulations is entitled "Littering, Garbage, Leaves, Grass Clippings, Refuse and Foreign Materials."	

Table 2: Illicit Discharge Detection and Elimination Plan						
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party				Rationale/Comments
Total Maximum Daily Load (TMDL)	Year 1: Complete TMDL Planning Schedule/Map	MetroParks/Mahoning	County	Storm	Water	
In order to meet OEPA Permit Section 1.3.6 requirements,		Committee				
which addresses TMDL approved watersheds, the	·					
following issues need to be addressed by Mill Creek	·					
MetroParks:	watershed.					
1. Determine whether any Mill Creek MetroParks facility is located within a TMDL watershed.						
2. Determine what pollutants and sources of pollutants are present in the TMDL watershed.						
3. Determine whether Mill Creek MetroParks is a "Significant Contributor" of pollutants that are present in the TMDL watershed.						
If the Mill Creek MetroParks is not a significant						
contributor, Mill Creek MetroParks should be able to demonstrate how they came to this conclusion.						
If Mill Creek MetroParks is a significant						
contributor, develop strategies to achieve necessary pollution reduction within the impaired stream						
segment(s).						
Mill Creek MetroParks should be able to demonstrate how						
they determined the amount of pollutant needed to be						
reduced within the impaired stream segment(s), and how						
much pollutant was reduced (i.e., water sampling to verify						
the amounts removed).						

Table 3: Construction Site Storm Water Control Plan				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Review erosion and sediment control Specifications: Existing details, specifications and inspection practices for construction projects will be reviewed and revised, as necessary.	Year 2: Implement updated inspection program and incorporate revisions to specifications and details.	Mill Creek MetroParks/SWCD	Mill Creek MetroParks currently requires contractors to follow strict erosion and sedimentation guidelines.	
	Year 2 to Year 5: Track, assess and evaluate and modify as needed selected BMP's associated with Inspection Program.			
Workshop on E&SC Regulations: The County will provide workshops on erosion and sediment control best management practices, how to comply with the regulations, and other information relevant to developers/contractors.	Beginning after regulations passed annually. Consider hosting one workshop in years 2 to 5.	SWCD/Mill Creek MetroParks	Mill Creek MetroParks staff can assist SWCD in developing and implementing the workshop program.	
 Concrete Truck Wash Out: Continue the existing procedures regulating concrete truck washout for MetroParks projects. Develop specifications for concrete truck washout for contract projects. 	Year 1: Draft specifications and procedures governing concrete truck wash out. Include in contract documents. Year 2 to Year 5: Document and track effectiveness for reporting purposes. Revise BMP as necessary.	Mill Creek MetroParks	Mill Creek MetroParks already controls the selection of the location for washout activities, and requires precautions to prevent the run off of washout effluent, and requires final clean up of washout area.	

Table 4: Post-Construction Storm Water				
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Riparian and Wetland Setbacks: The County and Townships will explore adopting zoning regulations creating setbacks from certain watercourses and wetlands. Mill Creek MetroParks can assist the County and Townships in developing set-back ordinances and implementing riparian preservation.	i i cai i to i cai zi. Dovolop standards for riparian area		Mill Creek MetroParks and SWCD currently manages riparian easements located in Mahoning County.	

	Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments	
Operation and maintenance program to prevent or reduce storm water pollution from community operations: This Operation and Maintenance program will cover the activities listed in the MS4 permit section 3.2.6.	Year 1: Review and develop draft Operation and Maintenance procedures related to storm water pollution reduction. Year 2 to Year 4: Implement the selected BMPs Year 4 to Year 5: Track BMP effectiveness and modify as needed. Year 1 to Year 5: Conduct training on O/M procedures and reporting.	Mill Creek MetroParks	Current operation maintenance procedures will be assembled into a manual.	
Staff education program on pollution prevention: Identify potential sources of pollution resulting from daily maintenance operations. Train all appropriate staff in proper methods of pollution reduction, reporting and tracking.	Year 1 to Year 2: Develop Employee Storm Water pollution program in conjunction with County and SWCD training. Year 1 to Year 4: Review training programs and update and modify as necessary. Year 3 to Year 5: Track training effectiveness, develop means to track and report on training effectiveness.	Mill Creek MetroParks	Currently, internal training conducted at beginning of each season for seasonal employees. Occasionally for Full-time.	
Street Sweeping: Develop written procedures and specifications for street sweeping and disposal of spoils.	Year 1: Develop procedures for street sweeping and disposal of spoils. Year 2 to Year 5: Implement any street sweeping procedure and document effectiveness.	Mill Creek MetroParks	Annual street sweeping conducted in MetroParks by outside contractor.	
Litter Pickup: An annual pickup program is held. Continue daily litter pick-up; Track trash and recycled material quantities.	Year 1: Develop a process to track litter collected. Year 1 to Year 3: Develop and document a process to identify areas where trash collected. Year 2 to Year 5: Track, evaluate and modify BMP as necessary. Document effectiveness.	Mill Creek MetroParks	General Litter Pick-up is accomplished throughout the MetroParks on a daily basis by department personnel. Recyclables are separated from collected material and balance is put in dumpsters. Dumpsters are emptied by outside contractor and taken to an approved landfill.	
Salt Storage and Applications: The MetroParks applies de-icing materials based on road conditions. Salt is currently stored in a salt dome.	Year 1: Review current salt storage area drainage system. Year 1 to Year 5: Modify drainage system if necessary. Develop clean up procedures. Draft salt storage procedures. Document application procedures and procedures for clean up if excess salt is applied or a salt spill occurs. Track and evaluate the BMP and document effectiveness.	Mill Creek MetroParks	Winter de-icing accomplished with 50/50 mix of slag and salt.	

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Mowing Practices: Mowing of lawn areas and roadsides to 3" height on weekly basis.	Year 1: Review current mowing procedures, revise as needed. Year 2 to Year 5: Implement any revised mowing procedures. Track and evaluate the BMP and document effectiveness for report.	Mill Creek MetroParks	Brush clearing is done manually with a clearing saw or hand tools and all brush is chipped for reuse as mulch. Occasional invasive species may be stump treated with roundup as they are cut, but no other chemical controls are utilized.
Storm Water System Maintenance: Ditch maintenance is minimal. Material is stored and used as fill where and when needed. Catch basins are periodically cleaned out.	Year 1: Review current maintenance procedures. Develop written procedures and standards. Year 2 to Year 5: Implement any revised procedures.	Mill Creek MetroParks	
 Storage of construction materials and disposal of spoil: 1. Ditch spoils are transported to service facility and used as fill where and when needed. 2. Construction debris is taken to the BFI landfill. 	Year 1: Develop guidelines for storage of construction materials and construction debris. Year 2 to Year 5: Implement any revised procedures.	Mill Creek MetroParks	
Fleet Maintenance: Review current vehicle washing and maintenance bay drainage. Develop procedures to track and report on the handling of vehicle fluids, tires, and batteries. Vehicle maintenance and washing shall take place in an appropriate area.	Year 1: Review current maintenance procedures. Year 2 to Year 5: Develop a vehicle wash area, and program to document amount of vehicle fluids recycled and disposed of. Track and evaluate BMP and document effectiveness.	Mill Creek MetroParks	Mill Creek MetroParks refurbished their vehicle maintenance area, and takes care to handle all maintenance and washing activities properly. Tires are recycled through Mahoning County Program.
Recycling/Separation/Disposal: Bottles and cans from refuse container throughout the MetroParks are recycled. Collected tree leaves are bartered to CBS Topsoil. All petroleum products are recycled. Green Team sponsored recycling at facilities.	Year 1 to Year 5: Track and evaluate BMP and document effectiveness.	Mill Creek MetroParks	

Table 5: Pollution Prevention and Good Housekeeping Plan			
Recommended Best Management Practice/Strategy	Schedule and Measurable Goals	Responsible Party	Rationale/Comments
Oil And Water Separators: Oil & Water Separator to be cleaned out by outside vendors.	Year 1: Document procedures annually. Year 2 to Year 5: Track and evaluate amounts cleaned and assess the effectiveness of the BMP.	Mill Creek MetroParks	Septic tanks are emptied yearly by outside contractor. Oil and water separators are inspected and cleaned annually.
Herbicide and Pesticides: Herbicide and Pesticide handling/application training accomplished under requirements of pesticide applicators license.	Year 1: Document procedures Year 2 to Year 5: Track and evaluate amount of materials applied.	Mill Creek MetroParks	Whenever a non-certified employee is used for H/P application, that employee must complete training for trained serviceman as mandated by the ODA Pesticide Regulation Section.
Spill Management Procedures: Spill controlled by absorbent pads and tubes. Disposal by proper method. Spill response includes absorbent mats to catch oil and gasoline spills.	Review spill management procedures and update as needed by the end of Year 1 .	Mill Creek MetroParks	Safety programs on an on-going basis