



Summit County

Countywide Storm Water Management Program (SWMP)

Prepared in fulfillment of the requirements of:

Ohio EPA NPDES Phase II General Permits
OHQ000001 and OHQ100000
Dated 12/27/02

Prepared on Behalf of:

Co-Permittees of a Group NPDES Phase II Submittals

Prepared By:

Summit County Engineer's Office
538 E. South Street
Akron, OH 44331
(330) 643-2850

March 10, 2003
Revised April 4, 2005

Table of Contents

<u>Section</u>	<u>Page</u>
Certification	
1.0 Introduction	
1.1 Purpose	
1.2 Legal Authority	
1.3 Reporting Requirements	
1.4 Record Keeping	
2.0 Description of Co-Permittee MS4 Areas	
2.1 Impaired Water Bodies	
3.0 Control Measure 1 - Public Education and Public Outreach	
4.0 Control Measure 2 - Public Participation and Involvement	
5.0 Control Measure 3 - Illicit Discharge Detection and Elimination	
6.0 Control Measure 4 - Construction Site Runoff Control	
7.0 Control Measure 5 - Post-construction Site Runoff Control	
8.0 Control Measure 6 - Pollution Prevention/Good Housekeeping	

List of Tables

<u>Section</u>	<u>Description</u>	<u>Page</u>
1.0	Co-Permittee Contact Information	
1.1	Co-Permittee Population and Area Summary	
1.2	Co-Permittees Located Within Each Watershed	
1.3	Contact Information for Entities Providing Program Support	
1.4	Estimate of Dwellings Served by HSTSs as of March 10, 2003	
1.5	Description of Municipal Facilities	

- 2.0 Brandywine Creek Watershed - BMPs for Control Measures 1-6
- 3.0 Cuyahoga River Watershed - BMPs for Control Measures 1-6
- 4.0 Fish Creek Watershed - BMPs for Control Measures 1-6
- 5.0 Furnace Run Watershed - BMPs for Control Measures 1-6
- 6.0 Hudson Run Watershed - BMPs for Control Measures 1-6
- 7.0 Little Cuyahoga River Watershed - BMPs for Control Measures 1-6
- 8.0 Mud Brook Watershed - BMPs for Control Measures 1-6
- 9.0 Nimisila Creek Watershed - BMPs for Control Measures 1-6
- 10.0 Pigeon Creek Watershed - BMPs for Control Measures 1-6
- 11.0 Rocky River Watershed - BMPs for Control Measures 1-6
- 12.0 Schocalog Run Watershed - BMPs for Control Measures 1-6
- 13.0 Tinkers Creek Watershed - BMPs for Control Measures 1-6
- 14.0 Tuscarawas River Watershed - BMPs for Control Measures 1-6
- 15.0 Wolf Creek Watershed - BMPs for Control Measures 1-6
- 16.0 Yellow Creek Watershed (Rapidly Developing Watershed) - BMPs for Control Measures 1-6

List of Figures

- 1.0 Urbanized Area of Summit County
- 2.0 Co-Permittees and Watersheds of the SWMP

Appendices

- Appendix A Copies of Ohio EPA Permits No.: OHQ00001 and OHQ10000
- Appendix B Copies of Agreements, Letters, or Other Documents Related to this SWMP
- Appendix C Existing NPDES Permits Located Within Summit County
- Appendix D Summit County Riparian Ordinance
- Appendix E US EPA Impaired Water Body Data

\\drainage-allotment projects\Phase2\SWMP\plan files\countywideSWMP.doc

Certification

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations.”

Jim McCarthy
Summit County Executive Officer

Gene Esser, P.E., P.S.
Summit County Engineer

1.0 Introduction

This Countywide Storm Water Management Program (SWMP) is being submitted in fulfillment of the requirements of two Ohio Environmental Protection Agency (Ohio EPA) National Pollutant Discharge Elimination System (NPDES) Phase II General Permits (Ohio EPA Permits) issued on December 27, 2002 and as listed below:

- Ohio NPDES Permit No.: OHQ000001 for Small Municipal Separate Storm Sewer Systems (all watersheds in this SWMP except the Yellow Creek Watershed);
- And, Ohio NPDES Permit No.: OHQ100000 for Small Municipal Separate Storm Sewer Systems Located Within Rapidly Developing Watersheds (the Yellow Creek Watershed in this SWMP).

Copies of these Ohio EPA Permits are provided in Appendix A.

Under these permits, the Ohio EPA authorizes small (populations of less than 100,000 people) municipal separate storm sewer systems (MS4s) to discharge storm water under from outfalls and into the receiving waters of the state identified herein and in the accompanying Notice of Intent (NOI) submitted for this Group permit application submittal. It is understood that these Ohio EPA Permits will remain in effect until the expiration date of December 26, 2007.

The Ohio EPA Permits define a MS4 as:

“a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are: owned or operated by the federal government, state, municipality, township, county, district, or other public body (created by or pursuant to state or federal law) including special districts under state law such as a sewer district, flood control district or drainage districts, or similar entity, or a designated and approved management agency under Section 208 of the act that discharges into surface waters of the state; and designed or used for collecting or conveying solely storm water, which is not a combined sewer, and which is not a part of a publicly owned treatment works.”

All of the townships, villages, and cities within Summit County except the Village of Peninsula are located fully or partially within an urbanized area (UA) as determined by the 2000 Decennial Census by the Bureau of Census (Figure 1). Therefore the Ohio EPA identified these jurisdictions as jurisdictions that must apply for a NPDES Phase II permit. The City of Akron, with a population in excess of 100,000 people, is also not covered in this SWMP since it was required to participate in Phase I permit of the Ohio EPA NPDES program.

This SWMP has been prepared in support of an application of a joint NOI on behalf of multiple Co-Permittees as described in Section 2.3 of the Ohio EPA Permits. Section 2.3 states that a joint NOI may be filed with “one or more MS4s” as long as the SWMP

clearly describes “which permittees are responsible for implementing each of the control measures” (see Appendix A).

The list of jurisdictions and entities that have committed to participate as Co-Permittees in this program are presented in Table 1.0. Summit Metro Parks has been included in the list of Co-Permittees at their request. This SWMP does not include the following jurisdictions that elected to develop separate SWMPs and submit separate permit applications: the City of Barberton, the City of Cuyahoga Falls, the City of Fairlawn, the City of Hudson, and the City of Norton. It is the goal of the County Engineer to continue discussions with the representatives of these jurisdictions to facilitate the possible incorporation of these separate SWMPs in this program at some point in the future. Four meetings were held during the preparation of this document to allow each Co-Permittee to review and comment on the BMPs included in the program and the content of this document.

Table 1.1 presents the population of each Co-Permittee, the total area of each Co-Permittee, and the area and proportion of the UA within the boundaries of each Co-Permittee. Table 1.2 lists each Co-Permittee located within the fifteen major watersheds in Summit County. Figure 2 shows the boundaries of the fifteen watersheds delineated for this program.

This SWMP presents the BMPs proposed for a single “Rapidly Developing Watershed” as defined by the Ohio EPA. The Yellow Creek Watershed BMP table (Table 16.0) provides the accelerated implementation schedule for the Control Measures 4 and 5 BMPs as required by Ohio NPDES Permit No.: OHQ100000.

1.1 Purpose

The storm water management program described in this document has been developed with the intent to reduce the discharge of pollutants from the MS4s of the Co-Permittees to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of Ohio Revised Code 6111 as described in the Ohio EPA Permits.

Implementation of this SWMP and the Phase II Program will be carried out over a five-year period. Once fully implemented, the program will help to minimize the adverse impacts of storm water discharges from small municipalities on the region’s water resources.

This program and associated BMPs will be subject to continuous evaluation throughout the permit period. The group permit approach embraced by the Co-Permittees of this program is intended improve the effectiveness of the program by the implementation of the program on a watershed and multi-community approach. Co-Permittees of this group program will be able to consolidate resources and share successful BMP implementation

methods with other Co-Permittees thereby minimizing the use of inadequate BMP implementation methods.

1.2 Legal Authority

The Co-Permittees listed herein have provided written confirmation of their commitment to satisfy the requirements of the Ohio EPA Permits and the conditions of this SWMP. Each Co-Permittee is also in the process of enacting legislation that states their intent to participate in this SWMP. Copies of these documents are provided in Appendix B.

Township Co-Permittees in this SWMP have authority to comply with only some of the requirements of the Ohio EPA Permits. Township legal authority is described under the Ohio Revised Code (O.R.C.) as the ability to “construct, reconstruct, resurface, or improve any public road or part thereof under its jurisdiction” (O.R.C. 5571.01), and to repair roadways including facilities for the drainage of water from the surface of the roadway and removing obstacles in ditches, drain courses, or water courses (O.R.C. 5571.01, O.R.C. 5571.02, O.R.C. 5571.15, and O.R.C. 5589.06). Townships also have the authority to “regulate land uses in such a manner as to control the drainage of surface water from residential subdivisions, provided such regulation is performed by resolution, in accordance with a comprehensive plan, and for the purpose of promoting public health, safety, and morals” (Opinion of the Attorney General (OAG) 94-098). Townships are not specifically empowered allocate funds to improve the quality of the “waters of the State” through the implementation of BMPs as required by the Ohio EPA Permits.

Therefore, it appears that the Township Co-Permittees lack the legal authority to devote a portion of their budget or resources to implement and enact at least part of the BMPs required for Control Measures 3, 4, 5, and 6. State statutes could be adopted that provide townships with the necessary authority to comply with all of the requirements of the Ohio EPA Permits. A footnote on Tables 2.0 through 16.0 identifies those BMPs that will be implemented once enabling legislation is passed by the State of Ohio.

1.3 Reporting Requirements

The Co-Permittees of this SWMP recognize that the Ohio EPA Permits require the submittal of annual reports starting one year after the OHIO EPA grants General Permit coverage and continuing yearly until for five years. The annual reports will summarize:

- The status of compliance with the conditions of the Ohio EPA Permits
- An assessment of the appropriateness of the selected BMPs
- The progress achieved toward reducing the discharge of pollutants to the MEP
- The measurable goals of each of the minimum control measures
- The results of any information collected and analyzed during the previous year
- An implementation schedule of storm water activities to be undertaken during the next reporting cycle that are not already described in this SWMP

- And any proposed changes to the SWMP, BMPs, or other elements described herein.

1.4 Record Keeping

Copies of all reports required by the Ohio EPA Permits, a copy of the permit issued by the Ohio EPA, and copies of all data used to complete or evaluate the reports submitted under the Countywide Group Permit will be kept for a period of three years from the date of the report or for the life of the permit, whichever is longer. It is understood the Ohio EPA may extend this time period at any time. It is also understood that all records and reports must be kept at a location accessible to the Ohio EPA and also must be made available to the public if requested to do so in writing.

1.5 BMP Table Summary

The following sections of this document and the associated tables describe: the BMPs to be implemented under this program, the measurable goal for each BMP, the Co-Permittee responsible for implementing each BMP in a particular watershed, and the rationale for the selection of the BMPs.

Tables 2.0 through 16.0 each contain six sheets that detail the BMPs proposed per control measure for the fifteen watersheds within Summit County. The BMP tables identify the entity or Co-Permittee that is responsible for implementing a particular BMP within each Co-Permittee area. Notes at the bottom of each control measure table present a legend of the numbers and symbols used in the columns below each the name of each Co-Permittee.

Co-Permittees may be responsible for the implementation of a BMP within their area (an “x” in the Co-Permittee column); or an entity such as the Summit Soil and Water Conservation District (SSWCD) or the Summit County Combined General Health District (SCCGHD) may implement a BMP in a Co-Permittee area with the full cooperation and coordination of the Co-Permittee (an “*” in the SSCWD or SCCGHD column and a “1” or “2” in the Co-Permittee column). In some instances a BMP may not be applicable to a particular Co-Permittee area so a “NA” appears in the table. For example, a “NA” would be appropriate for a HSTS BMP if a Co-Permittee area was entirely connected to public sewer and there was no future potential for the installation of HSTS’s within the permit period.

The person responsible for the implementation or coordination of a particular BMP for an entity or Co-Permittee is listed in Tables 1.0 and 1.3. The Summit County Engineer’s Office will provide coordination and oversight to the Co-Permittees of the Countywide SWMP in addition to the implementation of this program within the Summit County MS4 area. The Engineer’s Office will also facilitate and coordinate meetings and provide a centralized location for the implementation and evaluation records throughout the permit period.

2.0 Description of Co-Permittee MS4 Areas

Summit County

Bath Township

Boston Township

Copley Township

Coventry Township

Franklin Township

Northfield Center Township

Richfield Township

Sagamore Hills Township

Springfield Township

Twinsburg Township

City of Macedonia

City of Munroe Falls

City of Stow

City of Tallmadge

City of Twinsburg

Village of Boston Heights

Village of Clinton

Village of Lakemore

Village of Mogadore

Village of New Franklin

Village of Northfield

Village of Northfield

Village of Richfield

Village of Silver Lake

2.1 Impaired Water Bodies

The US EPA 303(d) list of impaired waters lists many of the water bodies in Summit County as having some sort of water quality impairment. Impaired water bodies in the Cuyahoga River State Basin include: Brandywine Creek, the Cuyahoga River (Brandywine Creek to Tinkers Creek, Little Cuyahoga River to Yellow Creek, Yellow Creek to Brandywine Creek); Fish Creek; Mud Brook, Pond Brook, Tinkers Creek headwaters to Pond Brook, and Pond Brook to Cuyahoga River), and Yellow Creek. Impaired water bodies in the Muskingum River State Basin include: Hudson Run, Long Lake Nimisila Creek, Nimisila Reservoir, Summit Lake, Turkeyfoot Lake, and the Tuscarawas River (headwaters to Wolf Creek, and Pigeon Run to Sandy Creek, and Wolf Creek to Chippewa Creek). A copy of the US EPA impairment data for each of these water bodies is included in Appendix E.

3.0 Control Measure 1 - Public Education and Public Outreach

The Countywide SWMP program for Control Measure 1 has been developed through a series of monthly meetings that began in 2002. The Summit Soil and Water Conservation District (SSWCD) organized a Public Involvement and Public Education (PIPE) meetings to assemble local entities and jurisdictions to discuss and create a program of BMPs for Control Measures 1 and 2. The Control Measure 1 BMPs presented in this SWMP were reviewed and revised for inclusion in this program by the attendees of PIPE meetings. The Co-Permittees of this program have evaluated each BMP to ensure that BMP could be successfully implemented throughout their area. The BMPs for Control Measure 1 are presented in Tables 2.0 through 16.0.

The SSWCD will continue to coordinate the PIPE meetings during the permit period and will also implement the BMPs for Control Measure 1 if a Co-Permittee chooses not to implement the BMPs using it's own staff and resources. Co-Permittees that have chosen to utilize the SSWCD to implement the BMPs on their behalf will initiate agreements with the SSWCD. Tables 2.0 through 16.0 identify whether the SSWCD or the individual Co-Permittee will be implementing a particular BMP for Control Measure 1. A copy of a letter from the SSWCD that confirms their commitment to implement the BMPs for Control Measures 1 as shown in Tables 2.0 through 16.0 is included in Appendix B.

The Co-Permittees of this SWMP have chosen a mix of Public Education and Outreach BMPs that are a modification of existing education and outreach programs or are new BMPs created specifically for the Phase II program. The BMPs selected for Control Measure 1 include workshops, brochures, the creation of a Phase II link on the County webpage, articles in local newspapers or newsletters, videos, presentations to the public, and mailings. Each of these BMPs has been developed to focus on a specific target audience or audiences within the County. The target audiences for Control Measure 1 BMPs include: businesses, adult residents, teachers, young adults, students, and home sewage treatment system (HSTS) users. Regular PIPE meetings will be continued throughout the permit period to discuss the implementation of the BMPs, the effectiveness of any BMPs already implemented, and a revision to the BMPs as necessary to increase their effectiveness in contributing to reducing the discharge of pollutants in storm water.

Several of the Control Measure 1 BMPs listed in Table 1 will also be implemented by the Summit County Combined General Health Department (SCCGHD) with the full support and cooperation of each Co-Permittee. The SCCGHD maintains a database of the existing HSTSs throughout the county (Table 1.4) and has existing public education and outreach materials that can be readily applied to the Phase II requirements with very little modification. The SCCGHD will implement the HSTS BMPs for Control Measure 1 on a countywide basis.

4.0 Control Measure 2 - Public Participation and Involvement

The Countywide SWMP program for Control Measure 2 has been developed through a series of monthly PIPE meetings that began in 2002. As stated in the previous section, the SSWCD organized the PIPE meetings to assemble local entities and jurisdictions to discuss and create a program of BMPs for Control Measures 1 and 2. The Control Measure 2 BMPs presented in this SWMP were reviewed and revised for inclusion in this program. The Co-Permittees have evaluated each BMP to ensure that each could be successfully implemented throughout their area. Co-Permittees participating in this SWMP attended these meetings and have contributed to the development of the BMPs for Control Measure 2 as presented in Tables 2.0 through 16.0.

The SSWCD coordinated the meetings and will implement the BMPs for Control Measure 2 if a Co-Permittee chooses not to implement the BMPs using its own staff and resources. As stated in Section 3.0, Co-Permittees that have chosen to utilize the SSWCD to implement BMPs on their behalf will initiate agreements with the SSWCD. Tables 2.0 through 16.0 identify whether the SSWCD or the individual Co-Permittee will be implementing a particular BMP for Control Measure 2.

The Co-Permittees of this SWMP has chosen a mix of Public Participation and Involvement BMPs are a modification of existing programs or new BMPs created specifically for this Phase II program. The BMPs selected for Control Measure 2 include: continued participation by the Co-Permittees in the PIPE meetings throughout the permit period; creating opportunities for young adults to earn storm water related community service hours; the creation of a storm water badge program for boy scouts; the participation of the Co-Permittees and the public in watershed planning groups; and the creation and implementation of volunteer stream monitoring groups. These BMPs have been developed to focus on a specific target audience or audiences within the County. The target audiences include community leaders, adult residents, young adults, and students. The PIPE meetings will be continued on a regular interval throughout the permit period to discuss the implementation of these BMPs, the effectiveness of any BMPs already implemented, and any revisions to the BMPs that are necessary to increase their effectiveness.

5.0 Control Measure 3 - Illicit Discharge Detection and Elimination

Co-Permittees are required by the Ohio EPA permits to map the location of their MS4's outfalls and the location of the home sewage treatment systems (HSTS) that discharge to the system. This SWMP includes a program to map the storm sewer system in each MS4 and incorporate the storm sewer system on a layer on the Summit County GIS system.

The Summit County Engineer's Office (SCEO) and the Summit County Combined General Health Department (SCCGHD), in cooperation with each Co-Permittee, will coordinate the accumulation of data on each of the MS4 and the HSTS within each Co-Permittee area. The location and characteristics of each MS4 and each known or identified outfall will be obtained by each Co-Permittee. The consolidation of the data onto the County GIS system will be an effort shared among those Co-Permittees with GIS capabilities and expertise. Another benefit of a group storm water program.

Many of the Co-Permittees participating in this program have partially completed storm sewer system maps of their MS4. If a Co-Permittee does not have an existing storm sewer system map, then that Co-Permittee will begin the creation of a map of their MS4 by reviewing available storm drainage plans (e.g. construction drawings, subdivision plans, etc.) and possibly even the digitization of construction plans. In addition many of the Co-Permittees will complete field surveys of their MS4 to fully characterize the system. Co-Permittee field surveys will include streams, ditches, and other water courses to identify outfalls, pollutant sources, and the location of any illicit connections to the system. Field data sheets will be provided to the Co-Permittees to standardize the accumulation of the field survey data. It is anticipated that hand held GPS units may also be used to complete a portion of the field surveys associated with the creation of at least a portion of the storm sewer system maps.

The County GIS system will be used to generate the storm sewer system map and the HSTS map for the each of the Co-Permittee MS4 areas. The base layer of the maps will consist of digital orthophotography of Summit County flown in April, 2000. It is anticipated that the storm sewer system map and the HSTS map will include the following GIS layers: hydrologic features including the waters of the state; interstate highways, local roads and railroads; political boundaries of the cities, villages and/or townships; watershed boundaries; municipally-owned outfalls and privately-owned storm sewer outfalls (the definition of an "outfall" to be determined by Ohio EPA); HSTS discharge locations; storm drainage facilities (storm sewers, catch basins/inlets; road-side ditches, detention basins and storage facilities); and areas of known illicit discharges. Procedures will be developed to update and maintain the storm sewer system map and the HSTS map as data becomes available from each Co-Permittee throughout the permit period.

Co-Permittees will also develop and implement legislation that will establish a mechanism to control and eliminate illicit connections and discharges. This legislation

will also establish a mechanism to ensure that the future discharges from sanitary and storm facilities for new projects are adequately controlled and monitored. It is anticipated that legislation enacted would also provide each municipal with the authority and right to access property to conduct testing or field surveys as necessary to identify if these facilities have been properly constructed.

The SCCGHD will implement the BMPs that involve HSTSs under Control Measure 3. The SCCGHD has an existing database of known HSTSs located within Summit County. The SCCGHD will update this database utilizing the assistance and cooperation of the Co-Permittees as the BMPs are implemented during the permit period. Many of HSTS related BMPs are revisions to existing programs already in place and implemented by the SCCGHD. It is the goal of this BMP program to have the revised and field verified HSTS database completed by the end of the 5-year permit period. This revised and verified database will be used to generate the HSTS map required by the Ohio EPA permits.

The SCCGHD will coordinate the HSTS BMPs countywide. These BMPs will include activities such as: HSTS installation inspections, the registration of HSTS installers and liquid waste haulers, investigations of failing HSTS's, site evaluations for new HSTS systems, a mandatory pumping program for existing HSTSs, and the inspection of existing HSTSs for residential properties undergoing a deed transfer. All of the Co-Permittees in the program will be participating in the SCCGHD HSTS portion of Control Measure 3 unless a Co-Permittee area is entirely connected to public sewer and there is no future potential for the installation of HSTS's within the permit period (see Tables 2.0 through 16.0).

The SCCGHD will also implement an Operation and Maintenance program BMP on a countywide basis for semi-public onsite wastewater treatment facilities located in the Co-Permittee areas (see Table 1.4). These systems services properties of 4 units and larger and have a treatment capacity of 25,000 gallons per day. The BMP will include annual inspections of the systems, coordination and follow-up with the Ohio EPA on any problems the system might have, and construction inspection procedures for new or replacement systems.

The education of the public regarding illegal discharges and improper waste handling practices is identified under Control Measure 3 of the Ohio EPA Permits. This BMP appears in the tables for Control Measure 3 in this SWMP even though it will be implemented as a public education BMP under Control Measure 1. This BMP will be implemented by the SSWCD and evaluated at the regular PIPE meetings. Brochures will be created to address illegal dumping and waste disposal and stakeholder meetings will be held to educate local businesses about effective pollution prevention through the control of illegal discharges. Citizen participation and reporting will be encouraged to involve the public in the countywide anti-illegal dumping program.

Appendix C includes copies of records on hazardous materials incidents that have occurred in the county since the 1970's, and information on facilities with current

industrial NPDES permits in place within Summit County (obtained from the Ohio EPA and U.S. EPA websites).

6.0 Control Measure 4 - Construction Site Runoff Control

Under Control Measure 4, the Co-Permittee is required to develop, implement, and enforce a program to reduce pollutants in any storm water runoff from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one 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 one acre or more. It is the intent of Ohio EPA that MS4 operators include the conditions of the soon to be finalized Ohio EPA “Authorization for Storm Water Discharges Associated with Construction Activity Under the National Pollutant Discharge Elimination System (Ohio EPA Permit No.: OH C000002) in the implementation of Control Measure 4. It is the intent of the Co-Permittees of this SWMP to review and incorporate the requirements of the Ohio EPA Construction Permit once the final permit is made available to the public.

Once the Final Ohio EPA Construction Permit is available the Co-permittees will develop ordinances or other regulatory mechanisms to require compatible erosion and sediment controls, as well as mechanisms or sanctions to ensure compliance with the legislation. The legislation will also include requirements for: construction site operators to implement appropriate erosion and sediment control BMPs; construction site operators to control waste at the construction site; procedures for site plan review; procedures for the receipt and consideration of information submitted by the public, and mechanisms for site inspection and enforcement of the inspections. The group permit approach embraced by this SWMP will allow Co-Permittees to share in the development of new ordinances that address construction site storm water runoff controls under Control Measure 4.

Developer workshops implemented as a BMP for Control Measure 1 will inform and educate developers regarding the new requirements of the Construction Permit once it is finalized. The County Stormwater Manual and Subdivision regulations already in place for Summit County will be reviewed and revised as necessary to be in conformance with the final Construction Permit language.

The SSWCD already provides site plan review services and construction site inspection services for erosion and sediment control measures and storm water pollution prevention plans for many of the Co-Permittees participating in this program. Agreements already in place between the Co-Permittees and the SSWCD have been modified or are in the process of being modified to include construction sites greater than one acre in size of disturbance. The SSWCD will therefore implement the site plan review and inspection procedures BMP on behalf of most of the Co-Permittees in this program (see Tables 2.0 through 16.0). A letter is provided in Appendix B that presents SSWCD commitment and ability to implement these BMPs on behalf of the Co-Permittees in this program.

The Control Measure 4 portion of the table for the Yellow Creek Watershed reflects the accelerated implementation schedule for the watershed as required by Ohio EPA Permit

No.: OHQ100000 for “Rapidly Developing Watersheds.” The Yellow Creek Watershed BMPs for Control Measure 4 are to be completed within 3 years instead of 5 years as required by the baseline permit implemented in the other watersheds in Summit County.

7.0 Control Measure 5 - Post-Construction Site Runoff Control

Control Measure 5 of the Ohio EPA permits address permanent post-construction site runoff controls for new development and redevelopment projects that disturb greater than or equal to one acre. Again this includes projects less than one acre in size that are part of a larger common plan of development or sale and that discharges into the MS4. The goal of Control Measure 5 is to prevent or minimize water quality impacts from construction sites through the implementation of a combination of structural and non-structural BMPs.

Structural post-construction controls will be incorporated into Summit County and local regulations and manuals. The Summit County Storm Water Manual and the Summit Subdivision Regulations will be revised to incorporate structural post-construction controls. The regulations and manuals will be revised to include the following potential structural controls: storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, bioretention cells; and infiltration practices such as infiltration basins and infiltration trenches.

This program will establish and implement non-structural BMPs to address post-construction site runoff. Summit County adopted a Riparian Setback Ordinance (No. 2002-154) on May 29, 2002 (a copy of the ordinance is included in Appendix D). This ordinance establishes setbacks from streams and wetland areas depending upon the type and size of the stream or wetlands. Many of the Co-Permittees in addition to Summit County have already adopted this ordinance for their MS4 area while the remaining Co-Permittees will implement a similar ordinance within the permit period.

The Control Measure 5 portion of the table for the Yellow Creek Watershed reflects the accelerated implementation schedule for the watershed as required by Ohio EPA Permit No.: OHQ100000 for "Rapidly Developing Watersheds." The Yellow Creek Watershed BMPs for Control Measure 5 are to be completed within 3 years instead of 5 years as required by the baseline permit implemented in the other watersheds in Summit County.

8.0 Control Measure 6 - Pollution Prevention/Good Housekeeping

Control Measure 6 of the Ohio EPA Permits addresses pollution prevention and good housekeeping for municipal operations. Each Co-Permittee will be required to implement a program that includes personnel training and that has the ultimate goal of reducing or preventing the discharge of pollutants in storm water runoff from municipal operations. The BMPs in this section include: employee training to prevent and reduce storm water pollution from municipal operations; revising existing storm water plans or creating new storm water plans for municipal facilities; developing a maintenance program for municipal facilities and operations that describes how the proposed storm water controls will be maintained and inspected; development of waste control and disposal practices for municipal operations and facilities; and the incorporation of water quality controls in the design of flood control management projects.

Table 1.5 presents the municipal facilities located within each of the Co-Permittee area and the types of activities that take place at each facility. These facilities include park and open space maintenance facilities and operations, county and municipal fleet vehicle and equipment maintenance facilities, road department maintenance facilities and operations, salt storage areas, and storm water system maintenance operations.

The main focus of the BMPs for Control Measure 6 will be the preparation of a storm water plan or program for the facilities or specific operations within each Co-Permittee area. Municipal facilities and operations will be inspected or observed so that existing storm water control measures already in place can be observed and documented. Components of other plans already in place at the facilities such as spill response and prevention plans will be incorporated into the storm water plans or expended upon as necessary. This program will combine storm water controls into a single program or plan which can be used by the Co-Permittees to perform regular employee training and to document and record BMPs and control that are implemented at the facilities.

Storm water pollution control programs at vehicle maintenance facilities could include specific BMP as: enhanced fluid spill response and containment procedures; proper disposal of waste materials, alteration of practices involving the cleanup and storage of automotive fluids and cleaning of vehicle parts, and waste reduction and recycling.

Possible specific storm water controls to reduce discharges to storm drains from vehicle washing activities might include: washing vehicles on gravel, grass, or other permeable surfaces; blocking off the storm drain or using an insert to catch wash water; directing wash water from the wash area into a sanitary sewer drain; pumping wash water onto grass or landscaping to provide filtration; and using only biodegradable soaps.

The Co-Permittees need to adhere to the same construction site soil erosion and sediment controls required of private developments. Co-Permittees that are engaged in construction projects should develop soil erosion and sediment controls and assure that they are fully implemented.

Proper application of road salt also reduces storm water pollution. By routinely calibrating spreaders, a program manager can prevent over-application of deicing materials. In addition to reducing the effects of these materials on the aquatic environment, cost savings may be realized due to reductions in the purchase of deicing materials. Training for transportation employees in proper deicer application techniques, the timing of deicer application, and what type of deicer to apply will also determine the impacts on water quality and aquatic habitat.

Hazardous materials management will also be included in the storm water plan. The program will address such specific BMPs as: storing materials away from high-traffic areas; storing containers on pallets or equivalent structures; implementing inspections for leaks; and covering hazardous materials and the materials handling areas.

Material handling procedures and storage requirements will be evaluated to reduce spill potential and impacts on storm water quality. Possible BMPs to implemented at Co-Permittee facilities include: recycling, reclaiming, or reusing materials, installing leak detection devices, overflow controls, and diversion berms; disconnecting any drains that lead to the storm sewer, and performing preventative maintenance on storage tanks, valves, pumps, pipes, and other equipment.

The spill response plan should: identify individuals responsible for implementing the plan; define safety measures to be taken with each kind of waste; specify how to notify appropriate authorities, such as police and fire departments, hospitals, or publicly-owned treatment works for assistance; and describe procedures for containing, diverting, isolating, and cleaning up the spill.

Appendix C includes information on facilities with industrial NPDES permits in place within Summit County. The tables in Appendix C were downloaded from the Ohio EPA and US EPA websites and list the NPDES permits countywide. The location of these permits relative to the boundaries of a particular MS4 will be determined as each storm sewer system is field verified and delineated for the storm sewer system map generated as a BMP under Control Measure 3 of this program.

Tables

Figures

Appendix A

Copies of Ohio EPA Permits No.: OHQ100000 and OHQ000001

Appendix B

Copies of Agreements, Letters, or Other Documents Related to this SWMP

Appendix C

Existing NPDES Permits Located Within Summit County

Appendix D

Summit County Riparian Setback Ordinance

Appendix E

US EPA Impaired Water Body Data