

Storm Water Program Information

Appendix A: Public Education and Outreach

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Washington City  
Where Dixie Begins

*Storm Water Management Program*

# STORM WATER PROGRAM INFORMATION

Revised July 2016



In the last decade, Washington City has experienced unprecedented growth. The impact of the area's increased urbanization is especially evident on surface water resources in the area. With this explosive growth and revitalization, the City recognizes a need for a more proactive and comprehensive approach to manage its stormwater runoff.


This Storm Water Management Plan is a key step towards Washington City's goal of protecting and enhancing the natural water resources that exist throughout the region. Our rivers and creeks are critical to the City, and over the last ten years we've made progress in improving water quality. The privilege of living in nature's best work demands that residents, land developers, engineers, and government agencies see the environment as their primary and most precious resource. The challenge is to develop a community that maintains the environment and lives in harmony with nature. The methods we choose in developing our projects demonstrate our values and shape not only our present, but our future as well.

Washington City is committed to reducing its impact on natural waters within the City's influence.

The plan presented here is a major step forward. It calls for immediate actions that will require some types of control measures, but also outlines further actions and techniques the City will need to implement in the coming years in order to conform with local, state, and federal regulations. This Storm Water Management Plan has been developed to comply with state regulations and the Federal Storm Water Phase II Final Rule (Phase II Rule), which requires operators of small municipal separate storm sewer systems (MS4s) to obtain a National Pollutant Discharge Elimination System (NPDES) permit. Critical to future stormwater management control measures will be innovative approaches to funding future needs. In all this, the City's Storm Water Management Plan continues us along the path of progress that will make Washington City an even better place live, work, and visit.

#### **Signatory Requirement**

*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 gathered and evaluated the information submitted. Based on 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 for knowing violations.*

  
\_\_\_\_\_  
Michael D. Shaw  
Public Works Director

  
\_\_\_\_\_  
Date

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# *Executive Summary*

In the last decade, Washington City has experienced unprecedented growth. The impact of the increased urbanization is especially evident on surface water resources in the area. This growth and revitalization requires an increased need to protect and enhance the natural water resource features that exist throughout the region. The City recognizes a need for a more proactive and comprehensive approach to manage its stormwater runoff. Washington City is committed to reducing its impact on waters within the City's influence.

The purpose of the SWMP is to provide Washington City the basis for establishing effective rules, regulations, and projects that will reduce the potential for stormwater damage to life, public health, safety, property, and the environment. The City's previous SWMP and its long-term objectives have been reviewed by the City annually, and form the basis for the goals, policies and implementation actions that constitute the current Storm Water Management Plan.

## General Water Quality Concerns

Washington City has complete authority and responsibility for planning, building, operating, maintaining and regulating the stormwater drainage system within the City's permit area. Section 303(d) of the Federal Clean Water Act (CWA), requires states to identify waters that fail to meet water quality standards, and are required to develop Total Maximum Daily Loads (TMDLs) to address the specific

pollutants contributing to the water quality degradation. The Utah Department of Environmental Quality (UDEQ) has listed segments of the Virgin River within or adjacent to Washington City as being "water quality limited" on its 2002 303(d) list. The Primary pollutant of concern is Total Dissolved Solids (TDS).

The Department of Environmental Quality has acknowledged that dissolved solids from natural sources in the Virgin River, especially Pah Tempe Hot Springs, make it impossible to meet the State standard of 1,200 mg/l. Approximately 60% of the total TDS loading in this segment of the Virgin River comes from the Pah Tempe Hot Spring. Pah Tempe likely has a greater impact to the water quality of the river than any other source of pollution in the watershed. The UDEQ proposed a site-specific total dissolved solids concentration of 2,360 mg/l for the Virgin River from Pah Tempe downstream as a criterion that represents the natural background conditions of the river. The EPA approved this site-specific TMDL in 2004. More information regarding the City's discharges on waters that fail to meet water quality standards can be found in Section 3.

## Goals and Policies

The goal of this Storm Water Management Plan (SWMP) is to establish the framework and goals that will direct stormwater management for Washington City. The City has developed three overall Storm Water

Management Program goals. The goals extend from preventing pollutants in new and existing development runoff to preventing the loss of water quality in recreational water sources and habitat. The overall long-term goals for this SWMP are:

- ▶ Preserve and maintain surface waters, wetlands, and riparian areas as a functional and aesthetically pleasing for people, fish, and wildlife.
- ▶ Educate industries, businesses, and citizens on the need for water quality protection.
- ▶ Provide guidelines and regulations for the development and general community to facilitate preserving stormwater quality.

The policies and implementation actions of these goals are presented in Section 3.3 of this document.

## UPDES Storm Water Management Plan

This Storm Water Management Plan has been developed to comply with the Federal Storm Water Phase II Final Rule (Phase II Rule), which requires operators of small municipal separate storm sewer systems (MS4s) to obtain a National Pollutant Discharge Elimination System (NPDES) permit. The Phase II Rule requires compliance for MS4s that serve areas designated by the Executive Secretary of the Utah Water Quality Board in accordance with the designation criteria contained in the General Permit.

Washington City gets its discharge authorization from the Utah Department of Environmental Quality Small MS4 General UPDES Permit No. UTR 090000. This

authorization is conditioned upon the City meeting the eligibility requirements of the permit.

Six Minimum Control Measures (MCMs) constitute the majority of NPDES Stormwater Program requirements. These minimum control measures included the following:

### *Public Education and Outreach*

Distributing educational materials and performing outreach to inform citizens about the impact polluted stormwater runoff discharges can have on water quality.

### *Public Involvement and Participation*

Providing opportunities for citizens to participate in program development and implementation.

### *Illicit Discharge Detection and Elimination*

Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system.

### *Construction Stormwater Runoff Management*

Developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

### *Post-Construction Stormwater Runoff Management*

Developing, implementing, and enforcing a program to address discharges of post-construction stormwater runoff from new development and re-development areas.

*Pollution Prevention in Municipal Operations/Good Housekeeping*

Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations.

Specific Best Management Practices (BMPs) are proposed for each Minimum Control Measure, which are intended to support the reduction of pollutants in stormwater runoff to the maximum extent practicable (MEP) as required by the Federal-NPDES Phase II rules. The proposed BMPs for the SWMP are presented in sections five (5) through ten (10). The assessments and evaluations of the City's current SWMP and general water quality concerns are presented in sections one (1), three (3), and four (4). These assessments form the basis for the UPDES program elements presented in sections 5-10. The form and content of the six minimum control measure elements follows the requirements provided in DEQ's MS4 permit application guidelines.

The purpose of this section is to aid the reviewer in the examination of this document. Symbols that appear throughout the document are explained and tips for understanding terms are provided.

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## Document Organization

### i

## Document Organization

Phase II municipal permits require that permittees develop—and annually update—a Stormwater Management Program (SWMP) document.





The Washington City SWMP documents have three audiences and purposes:

- ▶ General public – to inform and involve them in developing the stormwater program.
- ▶ Utah Department of Environmental Quality – to report on plans for implementing the permit in the coming year(s).
- ▶ Elected officials and municipal staff – to use as an internal planning document.

The SWMP document is divided into two parts. The first is the program manual. The program provides regulatory context, water quality and SWMP goals and information on receiving streams and waters. The next sections provides minimum control measures provided in the permit. Each section contains:

- ▶ *Regulatory language* from Washington City’s permit to aid elected officials and municipal staff in understanding the relationship between the selected BMPs and compliance with state and federal regulations.
- ▶ *BMP selection rationale* provides a brief description and summary of why the BMPs were selected, according to permit requirements.
- ▶ *BMP Summary Tables* list each BMP, department lead, implementation schedule, and measurable goals.
- ▶ an individual *BMP Fact Sheet* provides a description, target audience, responsible party contact information, existing program elements, proposed MS4 activities, and measurable goals for each selected BMP.

Because the SWMP is a public involvement document, the City has emphasized access to a variety of audiences. Icons were created to facilitate the evaluation of the document.

| Icon  | Purpose  |
|---|--|
| <br>UPDES Sec. 4.2.3.8 | <p><b>Section Icon:</b> Indicates when information might overlap with another section. This icon appears at the start of each section ranging from Section 5 to Section 10.</p>  |
|                        | <p><b>Contact Icon:</b> Indicates when contact information is being provided. This contact information is generally for responsible parties and site locations, but will also include websites where additional information can be found.</p>  |
|                      | <p><b>Additional Information Icon:</b> Indicates additional information for the topic being discussed. The additional information will generally appear in the document margin of the same page as the symbol. It will always be located in the same section. Additional information will consist of relevant facts, definitions, water quality tips, and a variety of other related data.</p> |
|                      | <p><b>Legal Icon:</b> Indicates when an ordinance or other legal control mechanism is being discussed. Additional information regarding the control mechanism is provided in the document margin.</p>  |

# Express Review

A complete and thorough review of the document is recommended in order to understand the full scope of the Storm Water Management Program. However, the City understands the SWMP is a large document and that a complete examination is not always feasible. A procedure for an express document review is recommended below. This procedure includes the portions of the document the City recommends the reviewer examine for a basic, overall comprehension of the Stormwater Program.

## Conducting an Express Review

| Step | Action   |
|------|--|
| 1    | Read section 1, Introduction and Background                    |
| 2    | Read section 3, Water Quality and SWMP Goals                   |
| 3    | Read the BMP rationale and BMP summary tables in sections 5-10 |

Many terms and acronyms are used in the field of stormwater management and water quality. The purpose of this section is to aid those that might not be familiar with stormwater and water quality phraseology.

# Stormwater Management Terms & Definitions

## i

## Terms and Definitions

**Analytical monitoring:** refers to monitoring of waterbodies (streams, ponds, lakes, etc.) or of storm water, according to UAC R317-2-10 and 40 CFR 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants," or to State or Federally established protocols for biomonitoring or stream bioassessments.

**Beneficial Uses:** means uses of the Waters of the State, which include but are not limited to: domestic, agricultural, industrial, recreational, and other legitimate beneficial uses.

**Best Management Practices (BMPs):** Activities or structural improvements that help reduce the quantity and improve the quality of stormwater runoff. BMPs include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Clean Water Act (CWA):** Legislation that provides statutory authority for the NPDES program, which is Public law 92-500; 33U.S.C. 1251 et seq. Also known as the Federal Water Pollution Control Act.

**Control Measure:** refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to Waters of the State.

**Common plan of development or sale:** means one plan for development or sale, separate parts of which are related by any announcement, piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, plat, blueprint, contract, Permit application, zoning request, computer design, etc.), physical demarcation (including contracts) that identify the scope of the project. A plan may still be a common plan of development or sale even if it is taking place

in separate stages or phases, is planned in combination with other construction activities, or is implemented by different owners or operators.

**Drinking water:** Water, treated or untreated, which is intended for human use and consumption and considered to be free of harmful chemicals and disease-causing bacteria, cysts, viruses, or other microorganisms.

**Discharge:** refers to discharges from the Municipal Separate Storm Sewer System (MS4).

**Dry weather screening:** is monitoring done in the absence of storm events to discharges representing, as much as possible, the entire storm drainage system for the purpose of obtaining information about illicit connections and improper dumping.

**Environmental Protection Agency (EPA):** The mission of the Environmental Protection Agency is to protect human health and the environment. <http://www.epa.gov/epahome/aboutepa.htm>

**Erosion:** Removal of soil particles by wind and water. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by human activities such as farming, development, road-building, and timber harvesting.

**Escalating enforcement procedures:** refers to a variety of enforcement actions in order to apply as necessary for the severity of the violation and/or the recalcitrance of the violator.

**General Permit:** means a Permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual Permits being issued to each discharger.

**Ground water:** Water that flows below the ground surface through saturated soil, glacial deposits, or rock.

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

**High quality waters:** means any water, where, for a particular pollutant or pollutant parameter, the water quality exceeds that quality necessary to support the existing or designated uses, or which supports an exceptional use.

**Household hazardous materials:** Common everyday products that people use in and around their homes-including paint, paint thinner, herbicides, and pesticides-that, due to their chemical nature, can be hazardous if not properly disposed.



**Hydrology/Hydrologic Cycle:** The science of hydrologic cycle is addressing the properties, distribution, and circulation of water across the landscape, through the ground, and in the atmosphere.

**Illicit connection:** means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

**Illicit discharge:** means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a UPDES Permit (other than the UPDES Permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

**Impervious Surface or Cover:** The characteristic of a material which prevents the infiltration or passage of liquid through it. This may apply to roads, streets, parking lots, rooftops and sidewalks.

**Impaired waters:** means any segment of surface waters that has been identified by the Division as failing to support classified uses. The Division periodically compiles a list of such waters known as the 303(d) List.

**Large MS4:** Large municipal separate storm sewer system means all municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more as determined by the current Decennial Census by the Bureau of the Census.

**Litter:** Litter is any solid waste object (disposable item or resource) that can be held or carried in a person's hand that is left behind or placed in an inappropriate location. Any such material or item disposed of in an inappropriate manner is to be regarded as litter - the end outcome of an environmentally undesirable disposal action.

**Low Impact Development (LID):** is an approach to land development (or re-development) that works with nature to more closely mimic pre-development hydrologic functions. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. There are many practices that have been used to adhere to these

principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.

**MS4:** is an acronym for "municipal separate storm sewer system".

**Maximum Extent Practicable (MEP):** is the technology-based discharge standard for Municipal Separate Storm Sewer Systems established by paragraph 402(p)(3)(B)(iii) of the Federal Clean Water Act (CWA).

**Medium MS4:** Medium municipal separate storm sewer system means all municipal separate storm sewers that are located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census

**Monitoring:** refers to tracking or measuring activities, progress, results, etc.

**Municipal separate storm sewer system:** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) pursuant to paragraphs R317-8-1.6(4), (7), & (14), or designated under UAC R317-8-3.9(1)(a)5.

**National Pollutant Discharge Elimination System (NPDES):** Established by Section 402 of the Clean Water Act, this federally mandated system is used for regulating point source and stormwater discharges.

**Natural Filter:** A grassed, wooded or vegetative strip that acts as a filter for the runoff before the water enters a stream.

**Notice of Intent (NOI):** An application to notify the permitting authority of a facility's intention to be covered by a general permit; exempts a facility from having to submit an individual or group application.

**Non-analytical monitoring:** refers to monitoring for pollutants by means other than UAC R317-2-10 and 40 CFR 136, such as visually or by qualitative tools that provide comparative or rough estimates.

**Non-Point Source Pollution:** Pollutants from many diffuse sources. Non-point source pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even underground sources of drinking water.

**Nutrients:** A substance that provides food or nourishment, such as usable proteins, vitamins, minerals or carbohydrates. Fertilizers, particularly phosphorus and nitrogen, are the most common nutrients that contribute to eutrophication.

**Pathogens:** Microorganisms that can cause disease in other organisms or in humans, animals, and plants. They may be bacteria, viruses, or parasites and are found in sewage, in runoff from animal farms or rural areas populated with domestic and/or wild animals, and in water used for swimming. Fish and shellfish contaminated by pathogens, or the contaminated water itself, can cause serious illnesses.

**Point Source Pollution:** Pollutants from a single, identifiable source such as a factory or refinery; also called single-point-source pollution. Most of this pollution is highly regulated at the state and local levels.

**Pollutants:** A contaminant existing at a concentration high enough to endanger the environment or the public health or to be otherwise objectionable.

**Priority construction site:** means a construction site that has potential to threaten water quality when considering the following factors: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-storm water discharges and past record of non-compliance by the operators of the construction site.

**Stormwater pollution:** Water from rain, irrigation, garden hoses or other activities that picks up pollutants (cigarette butts, trash, automotive fluids, used oil, paint, fertilizers and pesticides, lawn and garden clippings and pet waste) from streets, parking lots, driveways and yards and carries them through the storm drain system and straight to the ocean. Also included are oils, grease and metals.

**Redevelopment:** is the replacement or improvement of impervious surfaces on a developed site.

**Runoff:** That portion of the precipitation on a drainage area that is discharged from the area in the stream channels. Types include surface runoff, ground water runoff or seepage. Drainage or flood discharge that leaves an area as surface flow or as pipeline flow.

**Sanitary sewer (different from the storm sewer system):** A system of underground pipes that carries sanitary waste or process wastewater to a treatment plant.

**Storm Drain System:** A vast network of underground pipes and open channels designed for flood control, which discharges straight to the ocean.

**Sediment:** Solid material, both mineral and organic, that is being transported or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level. Soil, sand, and minerals washed from land into water, usually after rain. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

**Small municipal separate storm sewer system (MS4):** is any MS4 not already covered by the Phase I program as a medium or large MS4. The Phase II Rule automatically covers on a nationwide basis all Small MS4s located in “urbanized areas” (UAs) as defined by the Bureau of the Census (unless waived by the UPDES Permitting authority), and on a case-by-case basis those Small MS4s located outside of UAs that the UPDES Permitting authority designates.

**Storm drain:** An opening leading to an underground pipe or open ditch for carrying surface runoff, separate from the sanitary sewer or wastewater system.

**Stormwater:** Precipitation that accumulates in natural and/or constructed storage and stormwater systems during and immediately following a storm event.

**Storm water management program (SWMP):** means a set of measurable goals, actions, and activities designed to reduce the discharge of pollutants from the Small MS4 to the maximum extent practicable and to protect water quality.

**Stream:** A body of water, confined within a bed and banks and having a detectable current. Stream is the umbrella term used in the scientific community for all flowing natural waters. In a river or stream, the water is influenced by gravity and flows downhill to reduce its potential

energy. The movement of water in a stream is called the current and varies from place to place and time to time dependent upon the volume of water, the slope, and shape and other characteristics of the bed.

**Total Maximum Daily Load (TMDL):** refers to a study that: 1) quantifies the amount of a pollutant in a stream; 2) identifies the sources of the pollutant; and 3) recommends regulatory or other actions that may need to be taken in order for the impaired waterbody to meet water quality standards.

**Urbanized area:** is a land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.

**Water (hydrologic) cycle:** The flow and distribution of water from the sky, to the Earth's surface, through various routes on or in the Earth, and back to the atmosphere. The main components are precipitation, infiltration, surface runoff, channel and depression storage, and groundwater.

**Waters of the State:** means all streams, lakes, ponds, marshes, water-courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private which are contained within, flow through, or border upon this state or any portion thereof, except bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife which shall not be considered to be "Waters of the State" under this definition ("UAC" R317-1-1.32).

**Water Quality:** Water is essential to human life and to the health of the environment. As a valuable natural resource, it comprises marine, estuarine, freshwater (river and lakes) and groundwater environments, across coastal and inland areas. Water has two dimensions that are closely linked - quantity and quality. Water quality is commonly defined by its physical, chemical, biological and aesthetic (appearance and smell) characteristics. A healthy environment is one in which the water quality supports a rich and varied community of organisms and protects public health. Water quality in a body of water influences the way in which communities use the water

for activities such as drinking, swimming or commercial purposes. More specifically, the water may be used by the community for:

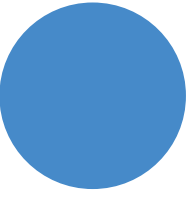
1. supplying drinking water
2. recreation (swimming, boating)
3. irrigating crops and watering stock
4. industrial processes
5. navigation and shipping
6. production of edible fish, shellfish and crustaceans
7. protection of aquatic ecosystems
8. wildlife habitats
9. scientific study and education

**Watershed:** Geographical area that drains to a specified point on a water course, usually a confluence of streams or rivers, can also be known as drainage area, catchments, or a river basin.

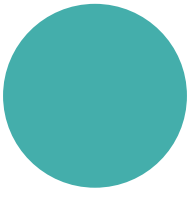
**Wetland:** An area that is inundated or saturated by surface water or groundwater at a frequency, duration, and depth sufficient to support a predominance of emergent plant species adapted to growth in saturated soil conditions.



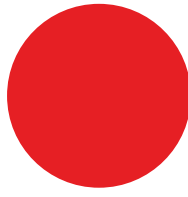
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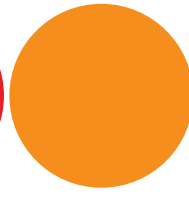
Public Education and Outreach



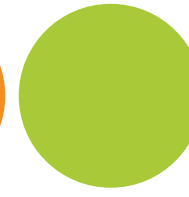
Public Involvement



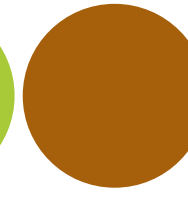
Illicit Discharge and Detection



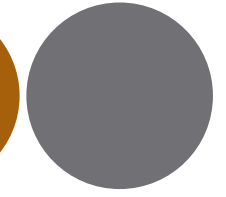
Construction Runoff



Post Construction Stormwater Management



Good Housekeeping



**Washington City**  
Where Dixie Begins

## Introduction and Background

Revised July 2016



## **Section 1.0 Introduction and Background**

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*"We do not inherit the earth from our ancestors, we borrow it from our children"* - Native American Proverb

## Section 1.0 Introduction

### 1.1

## Background and Context

The Washington City Stormwater Management Plan (Stormwater Plan) has been developed to provide policy and management guidance for activities affecting stormwater throughout the City of Washington. It is intended to help the City comply with certain State and Federal water quality requirements, and to meet local water resources management objectives. Through the implementation of the policies and management practices embodied in the Stormwater Plan, Washington City hopes to improve stormwater quality and prevent negative impacts to the region's waters.

In 2000, Washington City joined many small to medium-sized cities throughout the nation that fell under the Federal Clean Water Act (CWA) requirements to apply for and maintain a Municipal Separate Storm Sewer System (MS4) permit under the National Pollutant Discharge Elimination System (NPDES) program. Among the many provision of the State and Federal regulations guiding the issuance of the stormwater discharge permit, is the requirement that the City demonstrate its efforts to reduce pollution in urban stormwater "to the maximum extent practicable." The Clean Water Act joins the Endangered Species Act (ESA) and the Safe Drinking Water Act (SDWA) in protecting the "beneficial uses" of the nation's waters, including drinking, recreation, and fish/habitat uses.

Washington City is situated on the Virgin River, south of the Quail Creek Diversion and approximately 6 miles north of the confluence of the Santa Clara River. The area includes additional tributary streams

that are traditionally dry most of the year, various other open waterways used for irrigation purposes, and a piped storm sewer system.

In the past, the City's stormwater management practices focused on constructing new storm sewer pipe systems to replace historic irrigation ditches and send urban stormwater to the river as quickly as possible. Conveyance has been a necessary emphasis of the stormwater management program so that water quality issues could be addressed more effectively and efficiently. The City recognized that previous, traditional approaches led to deterioration of water quality by reducing the stormwater management functions associated with natural drainage ways, wetlands, riparian areas, and floodplains.

Washington City began to review the condition of the City's water resources and management capabilities in 1999 and 2000 to comply with the Federal and State regulatory programs, such as the CWA, ESA, Utah Water Quality Act, and SDWA. In 2003, Washington City published its first Stormwater Management Program created with the NPDES guidelines. The Stormwater Program and its long-term objectives have been reviewed by the City annually, and form the basis for the Goals, Policies and Implementation Actions that constitute the current Stormwater Management Plan.

## Definition

*"MS4" is an acronym for "municipal separate storm sewer system". Municipal separate storm sewer system means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) pursuant to Utah Administrative Code paragraphs R317-8-1.6(4), (7), & (14), or designated under UAC R317-8-3.9(1)(a)5: that is owned or operated by a state, city, town, county, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to Waters of the State;*

## MS4 Information

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Location                             | 37°7'10"N<br>113°30'12"W         |
| Established                          | April 15, 1857                   |
| Estimated<br>2015 City<br>Population | 24,225                           |
| Elevation                            | 2790 ft                          |
| Total Area                           | 32 sq. mi (81.7km <sup>2</sup> ) |
| Zip Code                             | 84780                            |
| Area Code                            | 435                              |

# 1.2

## Description of Permit Area

Washington City was founded on April 15, 1857, and currently serves an estimated population of 24,225 people within the city limits. The geographic boundaries of the permit area encompass approximately 32.7 square miles located within the city limits. Washington City is directly east of St George and spans from Interstate-15 exit 10 to exit 16. The permit area is bisected by the Virgin River, the primary receiving water for the City. Please see Figure 1.0 Vicinity Maps.

Washington City has complete authority and responsibility for planning, building, operating, maintaining and regulating the stormwater drainage system within the permit area. The major receiving stream within the City's jurisdiction is the Virgin River. Under Section 303(d) of the CWA, states are required to identify waters that fail to meet the water quality standards, and are required to develop Total Maximum Daily Loads (TMDLs) to address the specific pollutants contributing to the water quality degradation. The Utah Department of Environmental Quality has listed segments of the Virgin River within or adjacent to Washington City as being "water quality limited" on its 2002 303(d) list. The Primary pollutant of concern is TDS. In 2004, the EPA approved TMDL levels recommended by the Utah Department of Environmental Quality in their study TMDL Water Quality Study of the Virgin River Watershed. (UDEQ 2004)



UPDES Sec. 3.1.1.1

It was determined in the study that the Virgin River TMDL of dissolved solids from natural sources, especially Pah Tempe Hot Springs, made it impossible to meet the State standard of 1,200 mg/l. Approximately 60% of the total TDS loading in this segment of the Virgin River comes from the Pah Tempe Hot Spring. Pah Tempe likely has a greater impact to the water quality of the river than any other source of pollution in the watershed. The UDEQ study proposed a site-specific total dissolved solids concentration of 2,360 mg/l for the Virgin River from Pah Tempe downstream as a criterion that represents the natural background conditions of the river. More information regarding the City's discharges on waters that fail to meet water quality standards can be found in Section 3.

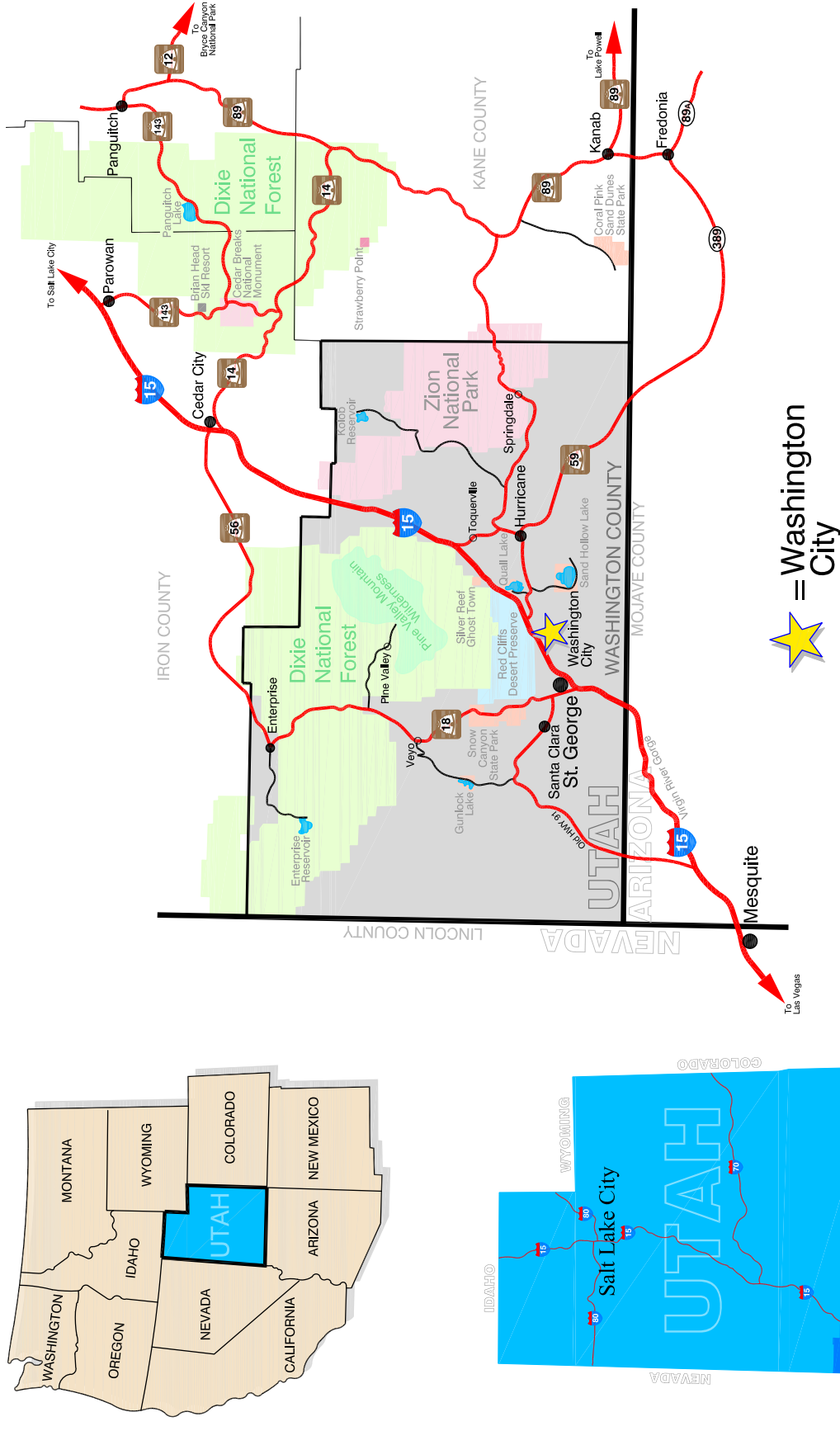


Figure 1.0 Vicinity Map

# 1.3

## SWMP Responsible Parties

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. In response to the NPDES Phase II stormwater requirements, the City has developed a MS4 plan addressing each of the six required Minimum Control Measures, as specified in the Federal-NPDES Phase II rules. The City's stormwater management program is the responsibility of the Public Works Department. However, the implementation of the City's MS4 plan will extend throughout the City organization. Please see Figure 1.1 Washington City Stormwater Organizational Chart for departments involved in implementing the Stormwater Management Plan.



UPDES Sec. 4.1.3.2

The Department of Public Safety will provide enforcement support when necessary.

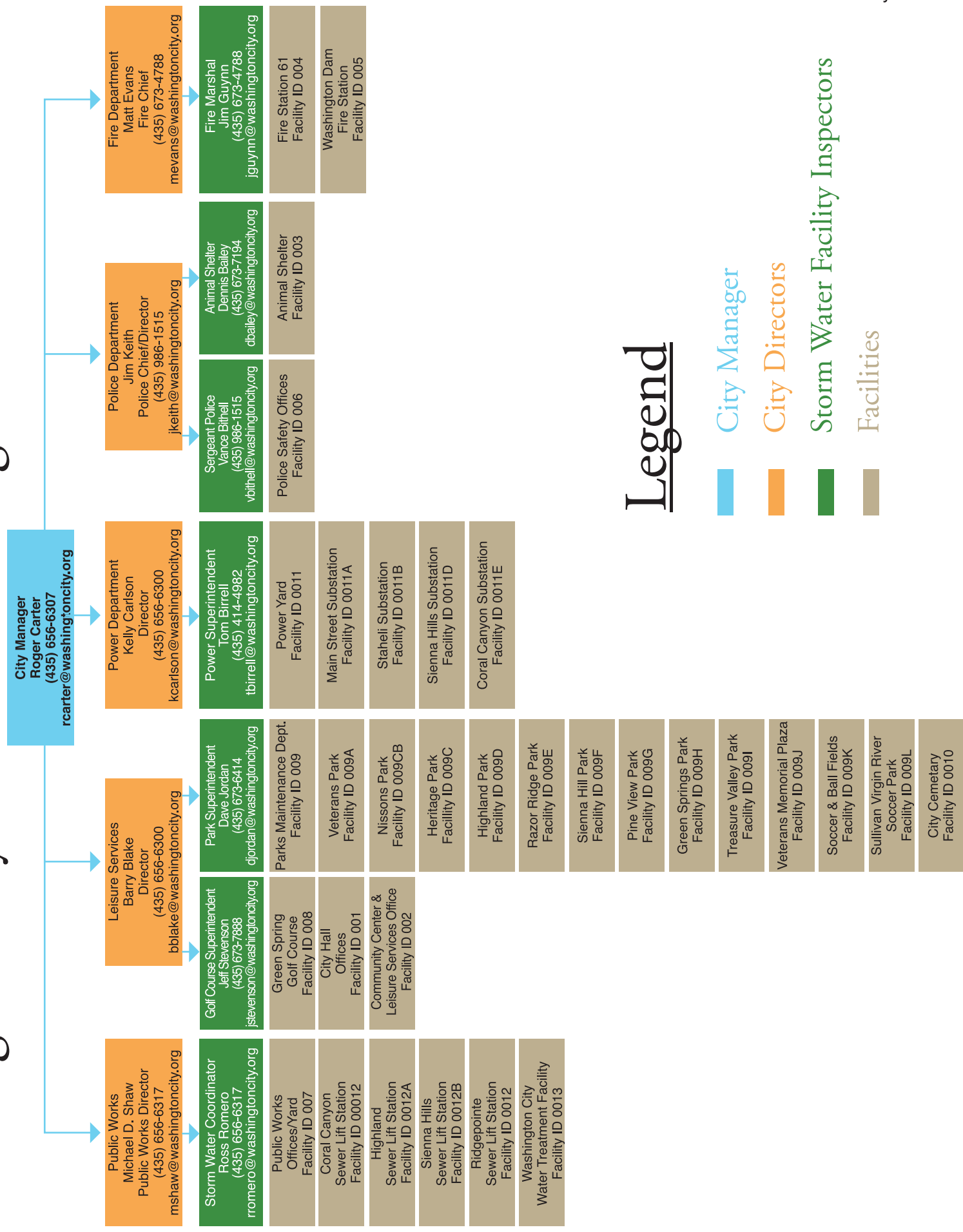


The Washington City Stormwater Coordinator will be responsible for the implementation of most BMPs and their evaluation. The involvement of the other City departments will be utilized when possible.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)

# Washington City Stormwater Organizational Chart



## Legend

- City Manager
- City Directors
- Storm Water Facility Inspectors
- Facilities

Figure 1.1 Stormwater Organizational Chart 4.1.3.2  
Section 1 | Page 6

## 1.3.1 Certification and Signature Requirements

All notices of intent, stormwater management programs, stormwater pollution prevention plans, reports, certifications or information either submitted to the Division or that the Permit requires to be maintained by Washington City, shall be signed, dated and certified as follows:

- ▶ All Permit applications shall be signed by either a principal executive officer or ranking elected official.
- ▶ Certification. Any person signing documents shall make the following 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 gathered and evaluated the information submitted. Based on 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 for knowing violations."*



UPDES Sec. 6.8



UPDES Sec. 6.8.3



The Washington City Public Works Director will oversee any revisions or modification to the SWMP.

Please contact:

**Michael D. Shaw**  
Public Works Director  
(435)656-6317  
[mshaw@washingtoncity.org](mailto:mshaw@washingtoncity.org)

# 1.4

## Fiscal Analysis & Program Funding

### Stormwater Utility Fee

Operations within the City’s Stormwater Management Program, including development and implementation of the MS4 plan, is completely funded by user fees, which are billed on a monthly basis.



In 2004, the City Council adopted ordinance 2004-14, a stormwater utility ordinance to establish and implement a stormwater utility fee. Single family residences are charged a flat fee based on average amounts of impervious area. This fee constitutes a equivalent service unit (ESU). All non-single family residential parcels pay a multiple of this equivalent service unit. The multiple factor, expressed in ESUs, is calculated by dividing total square feet of impervious surface by three thousand five hundred (3,500) square feet, rounded to the nearest whole number. Ordinance 2004-14 is available on the Washington City website and provides additional information on stormwater utility fees. [www.WashingtonCity.org](http://www.WashingtonCity.org)

Washington City charges a \$6.80 stormwater utility fee for single family residences. All non-single family residences pay a multiple of this rate based off amounts of impervious surface area. As illustrated in Figure 1.2, the City has the second lowest drainage user fee in the urbanized area.



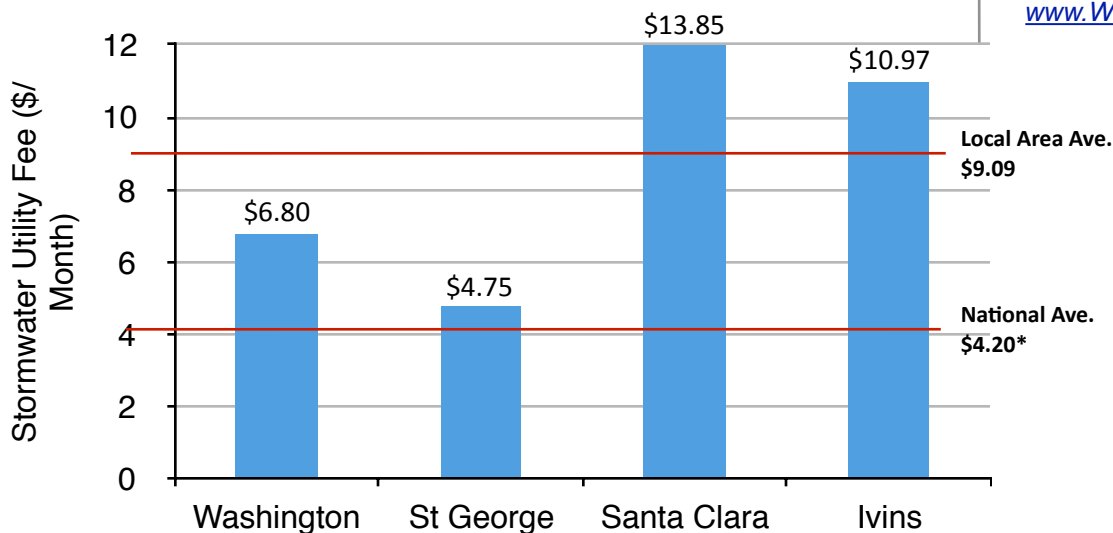
UPDES Sec. 4.1.2.2



### Ordinance

*In October 2004, Washington City adopted Ordinance NO. 2004-14. The purpose of this ordinance is to protect the health, safety and welfare of the City’s inhabitants by improving the City’s storm sewer system, managing and controlling storm water runoff, protecting property, preventing polluted waters from entering the City’s water supply and other receiving waters, and establishing a viable and fair method of financing the construction, operation and maintenance of the storm sewer system.*

[www.WashingtonCity.org](http://www.WashingtonCity.org)



**Figure 1.2 Stormwater Utility Fees in the Urbanized Area**

\*Water Environmental Federation StormwaterReport”, Year In Review: January 2015: <http://stormwater.wef.org/2015/01/stormwater-year-review-2014/>



**Washington City Stormwater Budget**

Section 4.1.2.2 of the permit requirements states: “Each Permittee must secure the resources necessary to meet all requirements of this permit. Each Permittee must conduct an annual analysis of the capital and operation and maintenance expenditures needed, allocated, and spent as well as the necessary staff resources needed and allocated to meet the requirements of this permit, including any development, implementation, and enforcement activities required. Each permittee must submit a summary of its fiscal analysis with each annual report.”

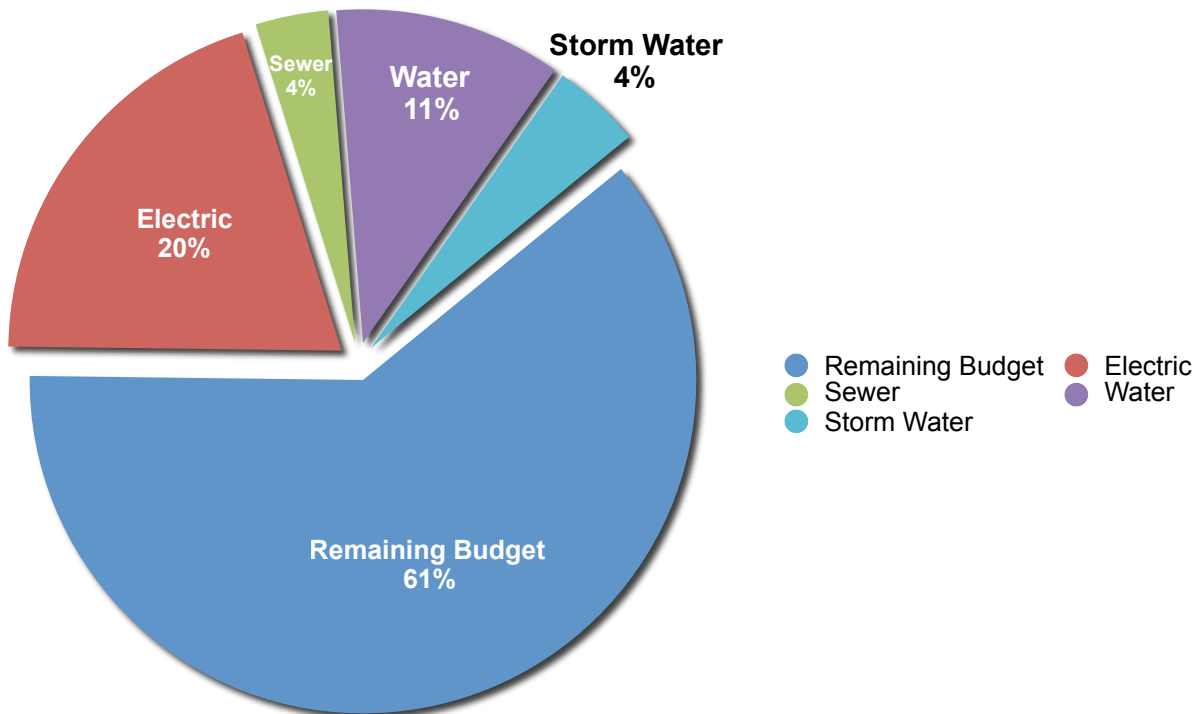
Washington City will conduct an annual analysis of its capital, operation and maintenance expenditures that are spent and allocated to meet the MS4 permit requirements. A summary of this analysis will be submitted to DEQ with the City’s annual report. Figure 1.3 represents a break down of Washington City’s 2014-15 fiscal year budget. Stormwater expenditures constitute approximately 5.9% of the City’s total operating budget. Washington City’s approved total budget for fiscal year 2014-15 is \$51,365,543.



UPDES Sec. 4.1.2.2

**Definition**

*“Urbanized area” is a land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.*



**Figure 1.3** Storm Water Budget for 2014-15 Fiscal Year

**1.5**

## NPDES Phase II BMP Requirements

Specific Best Management Practices (BMPs) are proposed for each Minimum Control Measure, which are intended to support the reduction of discharges of pollutants in stormwater runoff to the maximum extent practicable (MEP) as required by the Federal-NPDES Phase II rules. In Sections 5-10: Minimum Control Measures, a summary sheet is provided for each Minimum Control Measure at the first of the section. This summary sheet includes a list of the selected BMPs, the rationale for their development and selection, and a summary of the measurable goals and implementation schedule. In the Minimum Control Measure Sections 5-10, a fact sheet follows the summary sheet for each of the selected BMPs. Together, the summary sheets and the BMP fact sheets provide the following information in accordance with the UPDES requirements:



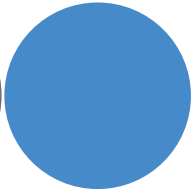
UPDES Sec. 4.1.3.1

- (1) a list of the responsible parties for the BMP implementation;
- (2) a brief description of the BMP;
- (3) a description of existing program elements
- (4) the proposed MS4 plan activities;
- (5) measurable goals; and
- (6) an implementation schedule.

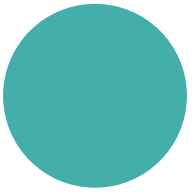
The BMP development/implementation schedule shows when certain activities will be completed on a yearly basis. The NPDES Phase II rules provide for a five-year implementation schedule starting from December 1 of 2017. This date corresponds to 180 days after the UPDES general permit became effective.

# 2

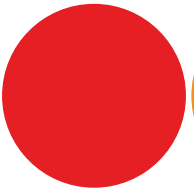
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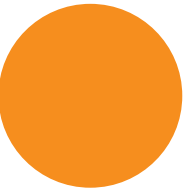
Public Education and Outreach



Public Involvement



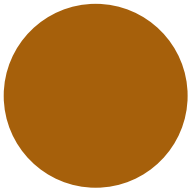
Illicit Discharge and Detection



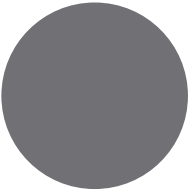
Construction Runoff



Post Construction Stormwater Management



Good Housekeeping



Washington City  
Where Dixie Begins

Permit Regulatory Context

Revised July 2016



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## **Section 2.0 Regulatory Context**

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As noted in Chapter One, the Stormwater Plan is intended to address the requirements of various Federal, State and local water resources laws and management objectives. This section summarizes the most significant Federal and State regulations.

## Section 2.0

# Regulatory Context

## 2.1 Federal Clean Water Act (CWA)

The CWA is Federal law regulating water quality and discharges to waterways under State and Federal jurisdiction. It contains the predominant Federal requirements guiding the development and implementation of Washington City's Stormwater Plan.

The EPA website provides the following history on the Clean Water Act:

“The Federal Water Pollution Control Act of 1948 was the first major U.S. law to address water pollution. Growing public awareness and concern for controlling water pollution led to sweeping amendments in 1972. As amended in 1977, the law became commonly known as the Clean Water Act (CWA).

The 1977 amendments:

- ▶ Established the basic structure for regulating pollutants discharges into the waters of the United States.
- ▶ Gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry.
- ▶ Maintained existing requirements to set water quality standards for all contaminants in surface waters.
- ▶ Made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions.

- ▶ Funded the construction of sewage treatment plants under the construction grants program.
- ▶ Recognized the need for planning to address the critical problems posed by non-point source pollution.

Subsequent amendments modified some of the earlier CWA provisions. Revisions in 1981 streamlined the municipal construction grants process, improving the capabilities of treatment plants built under the program. Changes in 1987 phased out the construction grants program, replacing it with the State Water Pollution Control Revolving Fund, more commonly known as the Clean Water State - - Revolving Fund. This new funding strategy addressed water quality needs by building on EPA-state partnerships.

Over the years, many other laws have changed parts of the Clean Water Act. Title I of the Great Lakes Critical Programs Act of 1990, for example, put into place parts of the Great Lakes Water Quality Agreement of 1978, signed by the U.S. and Canada, where the two nations agreed to reduce certain toxic pollutants in the Great Lakes. That law required EPA to establish water quality criteria for the Great Lakes addressing 29 toxic pollutants with maximum levels that are safe for humans, wildlife, and aquatic life. It also required EPA to help the States implement the criteria on a specific schedule.”

## 2.2

## National Pollutant Discharge Elimination System (NPDES) Program

In 1999, the U.S. Environmental Protection Agency (EPA) finalized what have come to be commonly known as the NPDES “Phase II” rules for stormwater. These rules govern small to medium-sized cities of 50,000-100,000 in population across the country. The Phase II rules also apply to “urbanized” areas with the same population bracket. Washington City, St George, Ivins, and Santa Clara being connected constitute an urban area based on state and federal population density specifications.

Authorization to discharge under the Utah Pollutant Discharge Elimination System (UPDES) General Permit requires that Washington City’s MS4 plan address six minimum areas, which are termed “Minimum Control Measures.” These areas are as follows:

1. Public Education and Outreach on Stormwater Impacts;
2. Public Involvement/Participation;
3. Illicit Discharges Detection and Elimination;
4. Construction Site Stormwater Runoff Control;
5. Post-Construction Stormwater Management for New Development and Redevelopment; and
6. Pollution Prevention in Municipal Operations;

Under each of these areas described above, the City’s MS4 plan must contain the following information:

- ▶ The structural and non-structural Best Management Practices (BMPs1) that the permittee or another entity will implement for each of the stormwater Minimum Control Measures;

### UPDES Sec. 4.1.2

- ▶ The measurable goals (Benchmarks) for each of the BMPs including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action; and
- ▶ The person or persons responsible for implementing or coordinating the BMPs for the permittee’s MS4 plan.

In addition to the requirements listed above, the permittee must provide a rationale for how and why each of the BMPs are selected and measurable goals for the permittee’s stormwater management program.

### UPDES sec. 4.1.1

For the convenience of the reviewer, the Department of Environmental Quality's Small MS4 General UPDES Permit requirement are being included with the Storm Water Management Plan.

---

*Section 2.3*  
**UDEQ Small MS4  
General Permit  
Requirements**

**Utah Department of Environmental Quality  
Division of Water Quality**

-

**Small MS4 General UPDES Permit  
Requirements**

**STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER QUALITY**

**Authorization to Discharge Under the  
Utah Pollutant Discharge Elimination System (UPDES)**

**General Permit for Discharges from Small Municipal Separate  
Storm Sewer Systems (MS4s)**

This Permit is issued in compliance with the provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 2004, as amended (the "Act") and the Federal Water Pollution Control Act (33 U.S.C. §§ 1251 et. seq., as amended to date), and the rules and Regulations made pursuant to those statutes.


This Permit authorizes storm water discharges to Waters of the State of Utah resulting from a Small Municipal Separate Storm Sewer System (Small MS4 ) as provided in Part 1.0 of this Permit. This authorization is conditioned upon an operator of a Small MS4 meeting the eligibility requirements in Part 1.2 of this Permit prior to filing a Notice of Intent ("NOI") to discharge under this General Permit. An operator of a Small MS4 is not covered by this General Permit if the operator submits an NOI but has not met these conditions.

This authorization is subject to the authority of the Utah Water Quality Board or the *Division* of the Utah Water Quality Board to reopen this Permit (see Part 6.22 of Permit), or to require a discharger to obtain an individual Permit (see Part 6.15 of this Permit). The issuance of a discharge Permit authorization under this General Permit does not relieve Permittees of other duties and responsibilities under the Act or rules made under that Act. Significant terms used in this Permit are defined in Part 7.0 of this Permit.

This Permit shall become effective on March 1, 2016.

This Permit and the authorization to discharge shall expire at midnight, February 28, 2021, except as described in Part 6.3 of this Permit.

Signed this 26 day of February 2016.

  
Walter L. Baker, P.E.  
Director



**UPDES GENERAL PERMIT FOR DISCHARGES FROM  
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

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## 1.0 **Coverage Under this Permit**

### 1.1. **Authority to Discharge**

This General Permit authorizes the discharge, to Waters of the State of Utah, of storm water from a Small MS4 as that term is defined in R317-8-1.6(14) and Part 7.39. of this Permit. This authorization is subject to all of the terms and conditions of this Permit. This General Permit does not authorize discharges prohibited under Part 1.4. of this Permit.

### 1.2. **Permit Area and Eligibility**

1.2.1. This Permit covers all areas of the State of Utah except Indian Country (see Part 7.22. of this Permit for a definition of “Indian Country”).

1.2.1.1. No operator of a Small MS4 described in 40 CFR 122.32 may discharge from that system without authorization from the *Division*. (See Utah Administrative Code Section R317-8-3.9(1)(h)(1)(a), which sets forth the Permitting requirement, and R317-8-1.10(13), which incorporates 40 CFR 122.32 by reference.) Authorization to discharge under the terms and conditions of this Permit is granted if:

1.2.1.1.1 It applies to an operator of a Small MS4 within the State of Utah but not within Indian Country;

1.2.1.1.2 The operator is not a “large” or “medium” MS4 as defined in 40 CFR 122.26(b)(4) or (7);

1.2.1.1.3 The operator submits a Notice of Intent (NOI) in accordance with Part 2.0 of this Permit;

1.2.1.1.4 The MS4 is located fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census;

1.2.1.1.5 The operator is ordered by the *Division* to obtain coverage under this Permit, as provided in the UPDES rules, R317-8.

1.2.2. The following are types of authorized discharges:

1.2.2.1. *Storm water discharges*. This Permit authorizes storm water discharges to waters of the State from the Small MS4s identified in 1.2.1., except as excluded in Part 1.4.

1.2.2.2. *Non-storm water discharges*. The following non-storm water discharges do not need to be addressed unless the Permittee or the *Division* identifies these discharges as significant sources of pollutants to Waters of the State or as causing or contributing to a violation of water quality standards:

- Water line flushing
- Landscape irrigation
- Diverted stream flows

- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering runoff
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Residual street wash water
- Dechlorinated water reservoir discharges
- Discharges or flows from emergency firefighting activity

### 1.3. **Local Agency Authority**

This Permit does not pre-empt or supersede the authority of local agencies to prohibit, restrict, or control discharges to storm drain systems or other water courses within their jurisdiction.

### 1.4. **Limitations on Coverage**

This Permit does not authorize:

- 1.4.1. Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are in compliance with a separate UPDES Permit or are determined not to be a substantial contributor of pollutants to Waters of the State.
- 1.4.2. Storm water discharges associated with industrial activity as defined in *Utah Administrative Code (UAC) R317-8-3.9(6)(c)*.
- 1.4.3. Storm water discharges associated with construction activity as defined in *UAC R317-8-3.9(6)(d)(10)* and *R317-8-3.9(6)(d)(11)*.
- 1.4.4. Storm water discharges currently covered under another Permit.
- 1.4.5. Discharges that would cause or contribute to in-stream exceedances of water quality standards as contained in *UAC R317-2*.
- 1.4.6. Discharges of any pollutant into any Waters of the State for which a Total Maximum Daily Load (TMDL) has been approved by EPA unless the discharge is consistent with the TMDL. This consistency determination applies at the time a Notice of Intent is submitted. If conditions change after coverage is issued, the coverage may

remain active provided the conditions and requirements of Part 3.1. of this Permit are complied with.

## **2.0 Notice of Intent and Storm Water Management Program Requirements**

**2.1.** The requirements of this Part apply only to Permittees **not** covered under the previous General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, i.e. **New Applicants**. Permittees that were covered under the previous MS4 General Permit and have submitted a notice of intent (NOI) at least **180 days** prior to the expiration date of the previous Permit, are covered by this Permit and instead must follow the requirements of Part 2.3.

2.1.2. New applicants must meet the following application requirements. The Notice of Intent (NOI) must include submittal of the Storm Water Management Program (SWMP) document. Detailed information on SWMP requirements can be found in Part 4.0 of this Permit.

2.1.3. Within **180 days** of notification from the *Division*, the operator of the MS4 shall submit a NOI form as provided by the Division at <http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm>. (The *Division* retains the right to grant permission for a later submission date upon good cause shown). One original completed NOI shall be submitted, by mail or hand delivery to:

Attention: UPDES IES  
Department of Environmental Quality  
Division of Water Quality  
195 North 1950 West  
PO Box 144870  
Salt Lake City, UT 84114-4870

2.1.4. Late submittal of an NOI is prohibited (unless permission has been granted by the *Division*). If a late NOI is submitted, authorization is only for discharges that occur after Permit coverage is granted. The *Division* reserves the right to take appropriate enforcement actions for any unpermitted discharges.

2.1.5. Where application is made by a new applicant that has assumed operational control of an MS4 for which coverage under this Permit was previously held by a separate entity, the Division may determine that the new applicant shall comply with the Permit requirements in this Permit, as directed for Renewal Permittees. Notification shall be made by the *Division* of this requirement in writing to the New Applicant prior to issuance of Permit coverage

2.1.6. Implementation of the Permittee's SWMP must include the six minimum control areas, including Measurable Goals, described in Part 4.2. Measurable Goals for each of the program areas must include, as appropriate, the year by which the Permittee will undertake required actions, including interim milestones and the frequency of the action if applicable.

- 2.1.7. Implementation of the Permittee's SWMP as described in the Permittee's application is required to begin within **30 days** after the completed application is submitted. The Permittee must fully develop and implement the SWMP as discussed in Part 4.0 of the Permit by the end of the Permit term unless a more restrictive timeframe is indicated.
- 2.1.8. If an Operator is designated by the Division as requiring Permit coverage later than one year after the effective date of this General Permit, the Division may approve alternative deadlines that would allow the Permittee to have its program areas implemented.

## **2.2. Contents of the Notice of Intent**

The Notice of Intent requires, at a minimum, the following information:

- 2.2.1. Name, address, and telephone number of the principal executive officer, ranking elected official or other duly authorized employee in charge of municipal resources used for implementation of the SWMP;
- 2.2.2. Name(s)/ identification of Waters of the State as defined by UAC R317-1-1.32 that receive discharges from the Permittee's MS4;
- 2.2.3. Name of the person responsible for overseeing implementation and coordination of the SWMP;
- 2.2.4. Summary description of the overall water quality concerns, priorities, and measurable goals specific to the Permittee that were considered in the development of the SWMP;
- 2.2.5. The SWMP document shall consist of, at a minimum, a description of the program elements that will be implemented (or already exist) for each of the SWMP minimum control measures. The plan must be detailed enough for the Division to determine the Permittee's general strategy for complying with the required items in each of the six minimum control measures in the SWMP document (see Part 4.2 of this Permit);
- 2.2.6. Information on the chosen Best Management Practices (BMPs) and the measurable goals for each of the storm water minimum control measures in Part 4.2 of this Permit and, as appropriate, the timeframe by which the Permittee will achieve required actions, including interim milestones;
- 2.2.7. Permittees which are applying as Co-Permittees shall each submit an NOI and individual SWMP document which will clearly identify the areas of the MS4 for which each of the Co-Permittees are responsible. Permittees which are relying on another entity (ies) to satisfy one or more of their Permit obligations shall include with the NOI, a summary of the Permit obligations that will be carried out by the other entity (ies). During the term of the Permit, Permittees may terminate or amend shared responsibility arrangements by notifying the *Division*, provided this does not alter implementation deadlines.
- 2.2.8. Certification and signature requirements in accordance with Part 6.8.

**2.3. Storm Water Management Program Plan Description for Renewal Permittees**

- 2.3.1. The requirements of this part apply only to **Renewal Permittees** that were previously covered under the last MS4 General Permit. New applicants are not required to meet the requirements of this Part and instead must follow the requirements of Part 2.0.
- 2.3.2. Renewal Permittees must submit a **revised SWMP document** to the Division within **120 days** of the effective date of this Permit, which includes at a minimum, the following information:
  - 2.3.2.1. Permit number;
  - 2.3.2.2. MS4 location description and map;
  - 2.3.2.3. Information regarding the overall water quality concerns, priorities, measurable goals, and interim milestones specific to the Permittee that were considered in the development and/or revisions to the SWMP document;
  - 2.3.2.4. A description of the program elements that will be implemented (or are already being implemented) in each of the six minimum control measures (see Part 4.0);
  - 2.3.2.5. A description of any modifications to ordinances or long-term/ongoing processes implemented in accordance with the previous MS4 General Permit for each of the six minimum control measures;
  - 2.3.2.6. A description of how the Permittee intends to meet the requirements of the Permit as described in Part 4.0 by either referencing existing program areas that already meet the Permit requirements or a description and relevant measurable goals that include, as appropriate, the year by which the Permittee will achieve required actions, including interim milestones.
  - 2.3.2.7. Indicate the joint submittal (s) of Co-Permittees (if applicable) and the associated responsibility (ies) in meeting requirements of the SWMP.
  - 2.3.2.8. Certification and signature requirements in accordance with Part 6.8.
  - 2.3.2.9. The revised SWMP document must contain specific details for complying with the required items in each of the six minimum control measures contained within the SWMP document (See Part 4.2.).

### 3.0 **Special Conditions**

#### 3.1. **Discharges to Water Quality Impaired Waters**

- 3.1.1. Applicability: Permittees must:
- 3.1.1.1. Determine whether storm water discharge from any part of the MS4 contributes to a 303(d) listed (i.e., impaired) waterbody. A 303(d) list of impaired waterbodies is available at: <http://www.deq.utah.gov/ProgramsServices/programs/water/wqmanagement/assessment/PreviousIR.htm>. Water quality impaired waters means any segment of surface waters that has been identified by the Division as failing to support classified uses. If the Permittee has discharges meeting these criteria, the Permittee must comply with Part 3.1.2. below and if no such discharges exist, the remainder of this Part 3.1 does not apply.
- 3.1.1.2. If the Permittee has “303(d)” discharges described above, the Permittee must also determine whether a Total Maximum Daily Load (TMDL) has been developed by the Division and approved by EPA for the listed waterbody. If there is an approved TMDL, the Permittee must comply with all requirements associated with the TMDL as well as the requirements of Part 3.1.2. below and if no TMDL has been approved, the Permittee must comply with Part 3.1.2. below and any TMDL requirements once it has been approved.
- 3.1.2. Water Quality Controls for Discharges to Impaired Waterbodies. If the Permittee discharges to an impaired waterbody, the Permittee must include in its SWMP document a description of how the Permittee will control the discharge of the pollutants of concern. This description must identify the measures and BMPs that will collectively control the discharge of the pollutants of concern. The measures should be presented in the order of priority with respect to controlling the pollutants of concern.
- 3.1.3. Where a discharge is already authorized under this Permit and is later determined to cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard, the Division will notify the Permittee of such violation(s). The Permittee must take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document these actions as required by the Division. If violations remain or re-occur, coverage under this Permit may be terminated by the Division and an alternative General Permit or individual Permit may be issued. Compliance with this requirement does not preclude any enforcement activity as provided by the Utah Water Quality Act for the underlying violation.



### **3.2. Nitrogen and Phosphorus Reduction**

- 3.2.1. As part of the Permittee's Storm Water Management Program (SWMP), all Permittees must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges from the MS4.
  - 3.2.1.1. The Permittee can meet the requirements of this section through contribution to a collaborative program (e.g., storm water coalitions) to evaluate, identify, target, and provide outreach that addresses sources State-wide or within a specific region or watershed.
  - 3.2.1.2. The Permittee must determine and target sources (e.g., residential, industrial, agricultural, or commercial) that are contributing to, or have the potential to contribute, nitrogen and phosphorus to the waters receiving the discharge authorized under this Permit.
  - 3.2.1.3. The Permittee must prioritize which targeted sources are likely to obtain a reduction in nitrogen and phosphorus discharges through education. The Permittee must distribute educational materials or equivalent outreach to the prioritized targeted sources. Educational materials or equivalent outreach must describe storm water quality impacts associated with nitrogen and phosphorus in storm water runoff and illicit discharges, the behaviors of concern, and actions that the target source can take to reduce nitrogen and phosphorus. The Permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Permit Part 4.2.1.

### **3.3. Co-Permittees**

- 3.3.1. Two or more operators of interrelated or neighboring Small MS4s may apply as Co-Permittees.
- 3.3.2. In order to be Permitted as Co-Permittees, the MS4(s) must each submit an NOI complete with BMP measurable goals and implementation milestones. Each description of the MS4(s) Storm Water Management Program Plan(s) must clearly describe which Permittees are responsible for implementing each of the control measures.
- 3.3.3. Each Co-Permittee is individually liable for:
  - 3.3.3.1. Permit compliance for discharges from portions of the MS4 where it is the operator and for areas within its legal jurisdiction;
  - 3.3.3.2. Ensuring that the six minimum control measures described in Part 4.2 are implemented for portions of the MS4 where it is the operator and in areas within its legal jurisdiction; and
  - 3.3.3.3. If any Permit conditions are established for specific portions of the MS4, Co-Permittees need only comply with the Permit conditions relating to those portions of the MS4 for which they are the operator.

- 3.3.4. Each Co-Permittee is jointly liable for compliance with annual reporting requirements listed in Part 5.5, except that a Co-Permittee is individually liable for any parts of the annual report that relate exclusively to portions of the MS4 where it is the operator.
- 3.3.5. Specific Co-Permittees are jointly liable for Permit compliance on portions of the MS4 as follows:
  - 3.3.5.1. Where operational or storm water management program implementation authority over portions of the MS4 has been transferred from one Co-Permittee to another in accordance with legally binding interagency agreements, both the owner and the operator may be jointly liable for Permit compliance on those portions of the MS4; and;
  - 3.3.5.2. Where one or more Co-Permittees jointly own or operate a portion of the MS4, each owner/operator is jointly liable for compliance with Permit conditions on the shared portion of the MS4.

#### 4.0 **Storm Water Management Program**

Permittees covered under the previous General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, i.e. **Renewal Permittees**, are expected to have fully implemented all of the following six minimum control measures as required in the previous Permit term. Permittees that were newly designated during the previous Permit term have 5 years from the date of their submitted NOI to develop, fully implement and enforce their Storm Water Management Program (SWMP). A Renewal Permittee must continue to implement its SWMP designed to reduce the discharge of pollutants from the MS4 as described in the application and submittals provided in accordance with the previous MS4 General Permit, while updating its SWMP document pursuant to this Permit. This Permit does not extend the compliance deadlines set forth in the previous MS4 General Permit unless specifically noted. All requirements contained in this renewal Permit are effective immediately unless an alternative timeframe is indicated.

#### 4.1. **Requirements**

- 4.1.1. All Permittees must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4, protect water quality, and satisfy the appropriate water quality requirements of the *Utah Water Quality Act*. The SWMP must include the six minimum control measures described in Part 4.2 of this Permit.
  - 4.1.1.1. The SWMP shall be developed and implemented in accordance with the schedules contained in Part 4.0. of this Permit.
- 4.1.2. Each Permittee shall have an ongoing documentation process for gathering, maintaining, and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate Permit compliance/non-compliance, and evaluate the effectiveness of the SWMP implementation.
  - 4.1.2.1. Each Permittee shall track the number of inspections performed, official enforcement actions taken, and types of public education activities implemented as required for each SWMP component. This information shall be provided to the Division upon request and used by the Division to determine compliance with this Permit.
  - 4.1.2.2. Each Permittee must secure the resources necessary to meet all requirements of this permit. Each Permittee must conduct an annual analysis of the capital and operation and maintenance expenditures needed, allocated, and spent as well as the necessary staff resources needed and allocated to meet the requirements of this permit, including any development, implementation, and enforcement activities required. Each permittee must submit a summary of its fiscal analysis with each annual report.
- 4.1.3. The SWMP document shall include BMPs that the Permittee or another entity will implement for each of the storm water minimum control measures.
  - 4.1.3.1. The measurable goals for each of the BMPs shall include, as appropriate, the months and years in which the Permittee will undertake required actions, including interim milestones and the frequency of the actions.

- 4.1.3.2. The SWMP document shall indicate the person or persons responsible for implementing or coordinating the BMPs contained within the SWMP document.
- 4.1.3.3. The revised SWMP document shall clearly identify the roles and responsibilities of all offices, departments, divisions, or sub-sections and if necessary other responsible entities and it shall include any necessary agreements, contracts, or memorandum of understanding (MOUs) between said entities that affect the implementation and operation of the SWMP. Necessary agreements, contracts, and MOUs shall deal with coordination or clarification of the responsibilities associated with the detection and elimination of improper connections or illicit discharges to the MS4, BMP coordination or other coordinated programs or sensitive issues of unclear or overlapping responsibility. Such agreements, contracts, and MOUs shall be retained by the Permittee as required by the SWMP document.

#### 4.2. Minimum Control Measures

The six minimum control measures that must be included in the storm water management program are:

##### 4.2.1. *Public Education and Outreach on Storm Water Impacts*

The Permittee must implement a public education and outreach program to promote behavior change by the public to reduce water quality impacts associated with pollutants in storm water runoff and illicit discharges. Outreach and educational efforts shall include a multimedia approach and shall be targeted and presented to specific audiences for increased effectiveness. The educational program must include documented education and outreach efforts for the following four audiences: (1) residents, (2) institutions, industrial and commercial facilities, (3) developers and contractors (construction), and (4) MS4-owned or operated facilities. The minimum performance measures which should be based on the land uses and target audiences found within the community include:

- 4.2.1.1. Target specific pollutants and pollutant sources determined by the Permittee to be impacting, or have the potential to impact, the beneficial uses of receiving water. This includes providing information which describe the potential impacts from storm water discharges; methods for avoiding, minimizing, reducing and /or eliminating the adverse impacts of storm water discharges; and the actions individuals can take to improve water quality, including encouraging participation in local environmental stewardship activities, based on the land uses and target audiences found within the community;
- 4.2.1.2. Provide and document information given to the general public of the Permittee's prohibitions against and the water quality impacts associated with illicit discharges and improper disposal of waste. The Permittee must at a minimum consider the following topics. These topics are not inclusive and the Permittee must focus on those topics most relevant to the community: maintenance of septic systems; effects of outdoor activities such as lawn care (use of pesticides, herbicides, and fertilizers); benefits of on-site infiltration of storm water; effects of automotive work and car washing on water quality; proper disposal of swimming pool water; and proper management of pet waste.
- 4.2.1.3. Provide and document information given to institutions, industrial, and commercial facilities on an annual basis of the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste. The Permittee must at a minimum consider the following topics. These topics are not inclusive and the Permittee must focus on those topics most relevant to the community: proper lawn maintenance (use of pesticides, herbicides and fertilizer); benefits of appropriate on-site infiltration of storm water; building and equipment maintenance (proper management of waste water); use of salt or other deicing materials (cover/prevent runoff to storm system and contamination to ground water); proper storage of materials (emphasize pollution prevention); proper management of waste materials and dumpsters (cover and pollution prevention); and proper management of parking lot surfaces (sweeping). This education can also be a part of the Illicit Discharge Detection and Elimination measure detailed in Part 4.2.3.

- 4.2.1.4. Provide and document information given to engineers, construction contractors, developers, development review staff, and land use planners concerning the development of storm water pollution prevention plans (SWPPPs) and BMPs for reducing adverse impacts from storm water runoff from development sites. This education can also be a part of the Construction Site Storm Water Runoff minimum control measure detailed in Part 4.2.4.
- 4.2.1.5. Provide and document information and training given to employees of Permittee-owned or operated facilities concerning the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste. The Permittee must at a minimum consider the following topics: equipment inspection to ensure timely maintenance; proper storage of industrial materials (emphasize pollution prevention); proper management and disposal of wastes; proper management of dumpsters; minimization of use of salt and other de-icing materials (cover/prevent runoff to MS4 and ground water contamination); benefits of appropriate on-site infiltration (areas with low exposure to industrial materials such as roofs or employee parking); and proper maintenance of parking lot surfaces (sweeping).
- 4.2.1.6. Provide and document information and training given to MS4 engineers, development and plan review staff, land use planners, and other parties as applicable to learn about Low Impact Development (LID) practices, green infrastructure practices, and to communicate the specific requirements for post-construction control and the associated Best Management Practices (BMPs) chosen within the SWMP.
- 4.2.1.7. An effective program must show evidence of focused messages and audiences as well as demonstration that the defined goal of the program has been achieved. The Permittee must define the specific messages for each audience. The Permittee must identify methods that will be used to evaluate the effectiveness of the educational messages and the overall education program. Any methods used to evaluate the effectiveness of the program must be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge.
- 4.2.1.8. The Permittee must include written documentation or rationale as to why particular BMPs were chosen for its public education and outreach program.

**4.2.2. *Public Involvement/Participation***

The Permittee must implement a program that complies with applicable State and Local public notice requirements. The SWMP shall include ongoing opportunities for public involvement and participation such as advisory panels, public hearings, watershed committees, stewardship programs, environmental activities, other volunteer opportunities, or other similar activities. The Permittee should involve potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and education organizations. The minimum performance measures are:

- 4.2.2.1. Permittees shall adopt a program or policy directive to create opportunities for the public to provide input during the decision making processes involving the development, implementation and update of the SWMP document including development and adoption of all required ordinances or regulatory mechanisms.
- 4.2.2.2. Renewal Permittees shall make the revised SWMP document available to the public for review and input within **120** days from the effective date of this Permit. New Applicants shall make the SWMP document available to the public for review and input within **180** days of receiving notification from the *Division* of the requirement for Permit coverage.
- 4.2.2.3. A current version of the SWMP document shall remain available for public review and input for the life of the Permit. If the Permittee maintains a website, the latest version of the SWMP document shall be posted on the website within **120 days** from the effective date of this Permit and shall clearly denote a specific contact person and phone number or email address to allow the public to review and provide input for the life of the Permit.
- 4.2.2.4. The Permittee must at a minimum comply with State and Local public notice requirements when implementing a public involvement/participation program.

**4.2.3. *Illicit Discharge Detection and Elimination (IDDE)***

All Permittees shall revise as necessary, implement and enforce an IDDE program to systematically find and eliminate sources of non-storm water discharges from the MS4 and to implement defined procedures to prevent illicit connections and discharges according to the minimum performance measures listed below. The IDDE program must be described in writing, incorporated as part of the Permittee's SWMP document, and contain the elements detailed in this part of the Permit. The minimum performance measures are:

- 4.2.3.1. Maintain a current storm sewer system map of the MS4, showing the location of all municipal storm sewer outfalls with the names and location of all State waters that receive discharges from those outfalls, storm drain pipe and other storm water conveyance structures within the MS4.
- 4.2.3.2. Effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges to the MS4, including spills, illicit connections, illegal dumping and

sanitary sewer overflows (“SSOs”) into the storm sewer system, require removal of such discharges consistent with Part 4.2.3.6. of this Permit, and implement appropriate enforcement procedures and actions. The Permittee must have a variety of enforcement options in order to apply escalating enforcement procedures as necessary for the severity of violation and/or the recalcitrance of the violator. Exceptions are discharges pursuant to a separate UPDES Permit (other than the UPDES Permit for discharges from the MS4) and non-storm water discharges listed in Part 1.2.2.2.

- 4.2.3.2.1 The IDDE program must have adequate legal authority to detect, investigate, eliminate and enforce against non-storm water discharges, including illegal dumping, into the MS4. Adequate legal authority consists of an effective ordinance, by-law, or other regulatory mechanism. The documented IDDE program that is included in the Permittee’s SWMP must include a reference or citation of the authority the Permittee will use to implement all aspects of the IDDE program.
- 4.2.3.3. Implement a written plan to detect and address non-storm water discharges to the MS4, including spills, illicit connections, sanitary sewer overflows and illegal dumping. The plan shall include:
- 4.2.3.3.1 Written systematic procedures for locating and listing the following priority areas likely to have illicit discharges (if applicable to the jurisdiction):
- Areas with older infrastructure that are more likely to have illicit connections;
  - Industrial, commercial, or mixed use areas;
  - Areas with a history of past illicit discharges;
  - Areas with a history of illegal dumping;
  - Areas with onsite sewage disposal systems;
  - Areas with older sewer lines or with a history of sewer overflows or cross-connections;
  - Areas upstream of sensitive waterbodies; and,
  - Other areas the Permittee determines to be likely to have illicit discharges.

The Permittee must document the basis for its selection of each priority area and create a list of all priority areas identified in the system. This priority area list must be updated annually to reflect changing priorities.

- 4.2.3.3.2 Field inspections of areas which are considered a priority area as identified in Permit Part 4.2.3.3.1. Compliance with this provision shall be achieved by inspecting each priority area annually at a minimum. All field assessment activities shall utilize an inspection form to document findings.
- 4.2.3.3.3 Dry weather screening (See Definition 7.13) activities for the purpose of verifying outfall locations and detecting illicit discharges that discharge within the Permittee’s jurisdiction to a receiving water. All outfalls shall be inspected at least once during the 5-year Permit term. Dry weather screening activities shall utilize an inspection form to document findings.



- 4.2.3.3.4 If the Permittee discovers or suspects that a discharger may need a separate UPDES Permit (e.g., Industrial Storm Water Permit, Dewatering Permit), the Permittee shall notify the Division.
- 4.2.3.4. Implement standard operating procedures (SOPs) or similar type of documents for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, using field tests of selected chemical parameters as indicators of discharge sources, collecting and analyzing water samples for the purpose of determining sanctions or penalties, and/or other detailed inspection procedures.
- 4.2.3.5. Implement standard operating procedures (SOPs) or similar type of documents for characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee by the hotline or other telephone number described in 4.2.3.9. These procedures shall include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. Compliance with this provision will be achieved by initiating an investigation immediately upon being alerted of a potential illicit discharge.
- 4.2.3.5.1 When the source of a non-storm water discharge is identified and confirmed, the Permittee must record the following information in an inspection report: the date the Permittee became aware of the non-storm water discharge, the date the Permittee initiated an investigation of the discharge, the date the discharge was observed, the location of the discharge, a description of the discharge, the method of discovery, date of removal, repair, or enforcement action; date, and method of removal verification. Analytical monitoring may be necessary to aid in the identification of potential sources of an illicit discharge and to characterize the nature of the illicit discharge. The decision process for utilizing analytical monitoring must be fully documented in the inspection report.
- 4.2.3.6. Implement standard operating procedures (SOPs) or similar type of documents for ceasing the illicit discharge, including notification of appropriate authorities; notification of the property owner; technical assistance for removing the source of the discharge or otherwise eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated. Illicit discharges to the MS4 are prohibited and any such discharges violate this Permit and remain in violation until they are eliminated. Upon detection, the Permittee shall require immediate cessation of improper disposal practices upon confirmation of responsible parties in accordance with its enforceable legal authorities established pursuant to Part 4.2.3.2.1. of this Permit.
- 4.2.3.6.1 All IDDE investigations must be thoroughly documented and may be requested at any time by the *Division*. If a Permittee is unable to meet the minimum performance measures outlined in Parts 4.2.3.5. or 4.2.3.6., the Permittee must immediately submit to the *Division* written documentation or rationale describing the circumstances why compliance with the minimum performance measures was not possible. All IDDE documentation shall be retained by the Permittee as required by the SWMP document.

- 4.2.3.7. Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.
- 4.2.3.8. Permittees shall promote or provide services for the collection of household hazardous waste.
- 4.2.3.9. Permittees shall publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges. A written record shall be kept of all calls received, all follow-up actions taken, and any feedback received from public education efforts.
- 4.2.3.9.1 The Permittee must develop a written spill/dumping response procedure, and a flow chart for internal use, that shows the procedures for responding to public referrals of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the Permittee. The procedure and list must be incorporated as part of the IDDE program and incorporated into the Permittee's SWMP document. The list must be maintained and updated as changes occur.
- 4.2.3.10. Permittees shall implement procedures for program evaluation and assessment which includes maintaining a database for mapping, tracking of the number and type of spills or illicit discharges identified; and inspections conducted.
- 4.2.3.11. Permittees shall at a minimum, ensure that all staff, contracted staff, or other responsible entities receives annual training in the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections. All Permittees shall ensure that all new hires are trained immediately upon hire and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing. The Permittee shall provide training to all field staff that as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4. The Permittee shall also train office personnel who might receive initial reports of illicit discharges. Training shall include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge. Training records must be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall include a summary of such training in the annual report.
- 4.2.3.12. The Division reserves the right to request documentation or further study of a particular non-storm water discharge of concern, to require a reasonable basis for allowing the non-storm water discharge and excluding the discharge from the Permittee's program, and to require inclusion of the discharge in the Permittee's program, if water quality concerns cannot otherwise be reasonably satisfied.

**4.2.4. *Construction Site Storm Water Runoff Control***

All Permittees shall revise as necessary, implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre

that are part of a larger common plan of development or sale according to the minimum performance measures listed below. Public and private projects, including projects proposed by the Permittee's own departments and agencies, shall comply with these requirements. The minimum performance measures are:

- 4.2.4.1. Revise as necessary and enforce an ordinance or other regulatory mechanism that requires the use of erosion and sediment control practices at construction sites. The ordinance or other regulatory mechanism shall, at a minimum, be equivalent with the requirements set forth in the most current UPDES Storm Water General Permits for Construction activities which can be found at <http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm>. The ordinance or other regulatory mechanism shall include sanctions to ensure compliance. The ordinance or other regulatory mechanism shall apply, at a minimum, to construction projects disturbing greater than or equal to one acre and to construction projects of less than one acre that are part of a larger common plan of development or sale. Existing local requirements to apply storm water controls at sites less than 1 acre or not part of a Common Plan of Development may be retained.
  - 4.2.4.1.1 The ordinance or other regulatory mechanism shall, at a minimum, require construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs as necessary to protect water quality, reduce the discharge of pollutants, and control waste such as, but not limited to, discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. The SWPPP requirements must be, at a minimum, equivalent with the SWPPP requirement set forth in the most current UPDES Storm Water General Permits for Construction Activities, which can be found at: <http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm>.
  - 4.2.4.1.2 Permittees shall ensure construction operators obtain and maintain coverage under the current UPDES Storm Water General Permits for Construction Activities for the duration of the project. Coverage can be obtained by completing a NOI as well as renewed online at [https://secure.utah.gov/account/login.html?returnToUrl=https%3A//secure.utah.gov/stormwater/ui\\_authentication](https://secure.utah.gov/account/login.html?returnToUrl=https%3A//secure.utah.gov/stormwater/ui_authentication).
  - 4.2.4.1.3 The ordinance shall include a provision for access by qualified personnel to inspect construction storm water BMPs on private properties that discharge to the MS4.
- 4.2.4.2. Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism which shall include:
  - 4.2.4.2.1 Standard operating procedures (SOPs) or similar type of documents that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators which shall include appropriate, escalating enforcement procedures and actions.
  - 4.2.4.2.2 Documentation and tracking of all enforcement actions.
  - 4.2.4.3. Develop and implement SOPs or similar type of documents for pre-construction Storm Water Pollution Prevention Plan (SWPPP) review and keep records for, at a

minimum, all construction sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure plans are complete and in compliance with State and Local regulations. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer. Prior to construction, the Permittee shall:

- 4.2.4.3.1 Conduct a pre-construction SWPPP review which includes a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development.
- 4.2.4.3.2 Incorporate into the SWPPP review procedures the consideration of potential water quality impacts and procedures for pre-construction review which shall include the use of a checklist.
- 4.2.4.3.3 Identify priority construction sites considering the following factors at a minimum:
  - Soil erosion potential;
  - Site slope;
  - Project size and type;
  - Sensitivity of receiving waterbodies;
  - Proximity to receiving waterbodies; and,
  - Non-storm water discharges and past record of non-compliance by the operators of the construction site.
- 4.2.4.4. All Permittees shall develop and implement SOPs or similar type of documents for construction site inspection and enforcement of construction storm water pollution control measures. The procedures must clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The Permittee must have the authority to the extent authorized by law to impose sanctions to ensure compliance with the local program. These procedures and regulatory authorities must be written and documented in the SWMP. The construction site storm water runoff control inspection program must provide:
  - 4.2.4.4.1 Inspections of all new construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale at least monthly by qualified personnel using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at <http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm>.
  - 4.2.4.4.2 The Permittee must inspect all phases of construction: prior to land disturbance, during active construction, and following active construction. The Permittee must document in its SWMP the procedure for being notified by construction operators/owners of their completion of active construction so that verification of final stabilization and removal of all temporary control measures may be conducted. This procedure must be provided to the construction operator/owner before active construction begins.
  - 4.2.4.4.3 Inspections by the MS4 of priority construction sites defined in Part 7.36. must be conducted at least biweekly (every two weeks) using the Construction Storm Water

Inspection Form (Checklist) found on the Division's website at <http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm>.

- 4.2.4.4.4 Based on site inspection findings, the permittee must take all necessary follow-up actions (i.e., reinspection, enforcement) to ensure compliance in accordance with the permittee's enforcement strategy. These follow-up and enforcement actions must be tracked and documented.
- 4.2.4.4.5 Permittees shall publicly provide and publicize a hotline or other local telephone number for public reporting of storm water related issues on construction sites, such as tracking onto streets. Records of violations, enforcement actions and corrective actions taken shall be tracked and documented.
- 4.2.4.5 The Permittee must ensure that all staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement, are annually trained to conduct these activities. The training can be conducted by the MS4 or outside training can be attended. Such training must extend to third-party inspectors and plan reviewers as well. The Permittee shall ensure that all new hires are trained upon hire and before commencing storm water related duties and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.
- 4.2.4.6. All Permittees shall implement a procedure to maintain records of all projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Permittees shall keep records which include but are not limited to, site plan reviews, SWPPPs, inspections and enforcement actions including verbal warnings, stop work orders, warning letters, notices of violation, and other enforcement records. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer.

**4.2.5. *Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)***

All Permittees shall revise as necessary, implement and enforce a program to address post-construction storm water runoff to the MS4 from new development and redevelopment construction sites disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, according to the minimum performance measures listed below. The objective of this control measure is for the hydrology associated with new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water. The water quality considerations of this minimum control measure do not replace or substitute for water quantity or flood management requirements implemented on the local level for new developments. The water quality controls may be incorporated into the design of structures intended for flow control; or water quality control may be achieved with separate control measures. The program must apply to private and public development sites, including roads.

The minimum performance measures are:

- 4.2.5.1. Develop and adopt an ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites. The ordinance or other regulatory mechanism shall apply, at a minimum, to new development and redevelopment sites that discharge to the MS4 and that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Existing local requirements to apply storm water controls at smaller sites shall be retained. The ordinance or other regulatory mechanism shall require BMP selection, design, installation, operation and maintenance standards necessary to protect water quality and reduce the discharge of pollutants to the MS4.
- 4.2.5.2. Implement an enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism. Procedures for enforcement of BMPs include:
  - 4.2.5.2.1 Procedures that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators which shall include appropriate, escalating enforcement procedures and actions.
  - 4.2.5.2.2 Documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4. Documentation shall include:
    - How long-term storm water BMPs were selected;
    - The pollutant removal expected from the selected BMPs; and
    - The technical basis which supports the performance claims for the selected BMPs.
- 4.2.5.3. The Permittee's new development/redevelopment program must have requirements or standards to ensure that any storm water controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality. BMPs must be selected that address pollutants known to be discharged or anticipated to be discharged from the site.
  - 4.2.5.3.1 The Permittee's new development/redevelopment program shall include non-structural BMPs such as requirements and standards to minimize development in areas susceptible to erosion and sediment loss; to minimize the disturbance of native soils and vegetation; to preserve areas in the municipality that provide important water quality benefits; to implement measures for flood control; and to protect the integrity of natural resources and sensitive areas.
  - 4.2.5.3.2 For new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, the program shall include a process which requires the evaluation of a Low Impact Development (LID) approach which encourages the implementation of BMPs that infiltrate, evapotranspire or harvest and use storm water from the site to protect water quality. Structural controls may include green infrastructure practices such as rainwater harvesting, rain gardens, permeable

pavement, and vegetated swales. If an LID approach cannot be utilized, the Permittee must document an explanation of the reasons preventing this approach and the rationale *for the chosen alternative controls* on a case by case basis for each project.

Since 2010, rainwater harvesting is legal in the State of Utah. Depending on the volume of rainwater collected and stored for beneficial use, the Permittee must meet the requirements of the Utah Division of Water Rights to harvest rainwater found on their website: <http://waterrights.utah.gov/forms/rainwater.asp>

- 4.2.5.3.3 The Permittee must develop a plan to retrofit existing developed sites that are adversely impacting water quality. The retrofit plan must be developed to emphasize controls that infiltrate, evapotranspire or harvest and use storm water discharges. The plan must include a ranking of control measures to determine those best suited for retrofitting as well as those that could later be considered for retrofitting. The Permittee must include the following when developing the criteria for the retrofit plan:
- Proximity to waterbody
  - Status of waterbody to improve impaired waterbodies and protect unimpaired waterbodies
  - Hydrologic condition of the receiving waterbody
  - Proximity to sensitive ecosystem or protected area
  - Any upcoming sites that could be further enhanced by retrofitting storm water controls
- 4.2.5.3.4 Each Permittee shall develop and define specific hydrologic method or methods for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs in their jurisdiction and to facilitate plan review. Within **180 days** from the effective date of this Permit, new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale must manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 90th percentile rainfall event. This objective must be accomplished by the use of practices that are designed, constructed, and maintained to infiltrate, evapotranspire and/or harvest and reuse rainwater. The 90th percentile rainfall event is the event whose precipitation total is greater than or equal to 90 percent of all storm events over a given period of record. If meeting this retention standard is technically infeasible, a rationale shall be provided on a case by case basis for the use of alternative design criteria. The project must document and quantify that infiltration, evapotranspiration and rainwater harvesting have been used to the maximum extent technically feasible and that full employment of these control are infeasible due to site constraints.
- 4.2.5.4. All Permittees shall adopt and implement procedures for site plan review which evaluate water quality impacts. The procedures shall apply through the life of the project from conceptual design to project closeout. Prior to construction, Permittees shall:

- 4.2.5.4.1 Review post-construction plans for, at a minimum, all new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure.
- 4.2.5.4.2 Permittees shall provide developers and contractors with preferred design specifications to more effectively treat storm water for different development types such as industrial parks, commercial strip malls, retail gasoline outlets, restaurants, parking lots, automotive service facilities, street and road construction, and projects located in, adjacent to, or discharging to environmentally sensitive areas.
- 4.2.5.4.3 Permittees shall keep a representative copy of information that is provided to design professionals; and if information is distributed to a large number of design professionals at once, the dates of the mailings and lists of recipients.
- 4.2.5.5. All Permittees shall adopt and implement SOPs or similar type of documents for site inspection and enforcement of post-construction storm water control measures. These procedures must ensure adequate ongoing long-term operation and maintenance of approved storm water control measures.
- 4.2.5.5.1 The ordinance or other regulatory mechanism shall include provisions for post-construction access for Permittees to inspect storm water control measures on private properties that discharge to the MS4 to ensure that adequate maintenance is being performed. The ordinance or other regulatory mechanism may, in lieu of requiring that the Permittee's staff inspect and maintain storm water controls on private property, instead require private property owner/operators or qualified third parties to conduct maintenance and provide annual certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality. In this case, the Permittee must require a maintenance agreement addressing maintenance requirements for any control measures installed on site. The agreement must allow the Permittee to conduct oversight inspections of the storm water control measures and also account for transfer of responsibility in leases and/or deeds. The agreement must also allow the Permittee to perform necessary maintenance or corrective actions neglected by the property owner/operator, and bill or recoup costs from the property owner/operator as needed.
- 4.2.5.5.2 Permanent structural BMPs shall be inspected at least once during installation by qualified personnel. Upon completion, the Permittee must verify that long-term BMPs were constructed as designed.
- 4.2.5.5.3 Inspections and any necessary maintenance must be conducted annually by either the Permittee or through a maintenance agreement, the property owner/operator. On sites where the property owner/operator is conducting maintenance, the Permittee shall inspect those storm water control measures at least once every five years, or more frequently as determined by the Permittee to verify and ensure that adequate maintenance is being performed. The Permittee must document its findings in an inspection report which includes the following:
- Inspection date;
  - Name and signature of inspector;



- Project location;
  - Current ownership information;
  - A description of the condition of the storm water control measure including the quality of: vegetation and soils; inlet and outlet channels and structures; catch basins; spillways; weirs, and other control structures; and sediment and debris accumulation in storage as well as in and around inlet and outlet structures; and,
  - Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and reinspection dates.
- 4.2.5.6. Permittees shall ensure that all staff involved in post-construction storm water management, planning and review, and inspections and enforcement receive adequate training on an annual basis. Training shall be provided or made available for staff in the fundamentals of long-term storm water management through the use of structural and non-structural control methods. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall ensure that all new hires are trained upon hire and before commencing storm water related duties and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing.
- 4.2.5.7. The Permittee must maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redeveloped sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. This inventory shall include both public and private sector sites located within the Permittee's service area.
- 4.2.5.7.1 Each entry to the inventory must include basic information on each project, such as project's name, owner's name and contact information, location, start/end date, etc. In addition, inventory entries must include the following for each project:
- Short description of each storm water control measure (type, number, design or performance specifications);
  - Short description of maintenance requirements (frequency of required maintenance and inspections); and
  - Inspection information (date, findings, follow up activities, prioritization of follow-up activities, compliance status).
- 4.2.5.7.2 Based on inspections conducted pursuant to Part 4.2.5.5., the Permittee must update the inventory as appropriate where changes occur in property ownership or the specific control measures implemented at the site.

**4.2.6. *Pollution Prevention and Good Housekeeping for Municipal Operations***

All Permittees shall implement a program for Permittee-owned or operated facilities, operations and structural storm water controls that includes standard operating procedures (SOPs), pollution prevention BMPs, storm water pollution prevention plans or similar type of documents, and a training component that have the ultimate goal of preventing or reducing the runoff of pollutants to the MS4 and Waters of the State. All components of the program shall be included in the SWMP document and must identify the department (and where appropriate, the specific staff) responsible for performing each activity described in this section. The Permittee must develop an inventory of all such Permittee-owned or operated facilities. The Permittee must review this inventory annually and update as necessary. The minimum performance measures are:

4.2.6.1. Permittees shall develop and keep current a written inventory of Permittee-owned or operated facilities and storm water controls that may include but is not limited to:

- Composting facilities
- Equipment storage and maintenance facilities
- Fuel farms
- Hazardous waste disposal facilities
- Hazardous waste handling and transfer facilities
- Incinerators
- Landfills
- Landscape maintenance on municipal property
- Materials storage yards
- Pesticide storage facilities
- Public buildings, including libraries, police stations, fire stations, municipal buildings, and similar Permittee-owned or operated buildings
- Public parking lots
- Public golf courses
- Public swimming pools
- Public works yards
- Recycling facilities
- Salt storage facilities
- Solid waste handling and transfer facilities
- Street repair and maintenance sites
- Vehicle storage and maintenance yards
- Permittee-owned and/or maintained structural storm water controls

4.2.6.2. All Permittees shall assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1. for their potential to discharge to storm water the following typical urban pollutants: sediment, nutrients, metals, hydrocarbons (e.g., benzene, toluene, ethylbenzene and xylene), pesticides, chlorides, and trash. Other pollutants may be associated with, but not generated directly from, the municipally-owned or operated facilities, such as bacteria, chlorine, organic matter, etc. Therefore, the Permittee must determine additional pollutants associated with its facilities that could be found in storm water

discharges. A description of the assessment process and findings must be included in the SWMP document.

- 4.2.6.3. Based on the assessment required in Part 4.2.6.2., the Permittee must identify as “high-priority” those facilities or operations that have a high potential to generate storm water pollutants. Among the factors that must be considered in giving a facility a high priority ranking is the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must be performed outside (e.g., changing automotive fluids), proximity to waterbodies, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).
- 4.2.6.4. Within **180 days** from the effective date of this Permit, the Permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) or similar type document for each “high-priority” Permittee-owned or operated facility. The SWPPP shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with activity from the facility. The SWPPP shall describe and ensure the implementation of standard operating practices (SOPs) that are to be used to reduce the pollutants in storm water discharges associated with activity at the facility and to ensure compliance with the terms and conditions of this Permit. This document shall be tailored and retained at all “high priority” facility locations. The SWPPP shall include a site map showing the following information:
- Property boundaries;
  - Buildings and impervious surfaces;
  - Directions of storm water flow (use arrows);
  - Locations of structural control measures;
  - Location and name of the nearest defined drainage(s) which could receive runoff from the facility, whether it contains water or not;
  - Locations of all storm water conveyances including ditches, pipes, basins, inlets, and swales;
  - Locations where the following activities are exposed to storm water:
    - Fixed fueling operations;
    - Vehicle and equipment maintenance and/or cleaning areas;
    - Brine making areas;
    - Loading/unloading areas;
    - Waste storage or disposal areas;
    - Liquid storage tanks;
    - Process and equipment operating areas;
    - Materials storage or disposal areas;
  - Locations where significant spills or leaks have occurred;
  - Locations of all visual storm water monitoring points;
  - Locations of storm water inlets and outfalls, with a unique identification code for each outfall and an approximate outline of the areas draining to each outfall;

- Locations of all non-storm water discharges;
- Locations of sources of run-on to your site from adjacent property.

4.2.6.5. The following inspections shall be conducted at “high priority” Permittee-owned or operated facilities:

4.2.6.5.1 Weekly visual inspections: The Permittee must perform weekly visual inspections of “high priority” facilities in accordance with the developed SOPs to minimize the potential for pollutant discharge. The Permittee must look for evidence of spills and immediately clean them up to prevent contact with precipitation or runoff. The weekly inspections must be tracked in a log for every facility and records kept with the SWMP document. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

4.2.6.5.2 Quarterly comprehensive inspections: At least once per quarter, a comprehensive inspection of “high priority” facilities, including all storm water controls, must be performed, with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar pollutant-generating areas. The quarterly inspection results must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. An inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

4.2.6.5.3 Quarterly visual observation of storm water discharges: At least once per quarter, the Permittee must visually observe the quality of the storm water discharges from the “high priority” facilities (unless climate conditions preclude doing so, in which case the Permittee must attempt to evaluate the discharges four times during the wet season). Any observed problems (e.g., color, foam, sheen, turbidity) that can be associated with pollutant sources or controls must be remedied to prevent discharge to the storm drain system. Visual observations must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. The inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

4.2.6.6. SOPs shall be developed and implemented for the following types of facilities and/or activities listed below:

4.2.6.6.1 Buildings and facilities: SOPs shall address, but is not limited to: Permittee-owned or operated offices, police and fire stations, pools, parking garages, and other Permittee-owned or operated buildings or utilities. The SOPs must address the use, storage and disposal of chemicals and ensure through employee training, that those responsible for handling these products understand and implement the SOPs. All Permittee-owned or operated facilities must develop and ensure that spill prevention plans are in place, if applicable, and coordinate with the local fire department as necessary. The SOPs must address dumpsters and other waste management which includes, but is not limited to, cleaning, washing, painting and other maintenance activities. The Permittee must include a description of schedules and SOPs for sweeping parking lots and keeping the area surrounding the facilities clean to minimize runoff of pollutants. All Permittees must maintain an inventory of all floor drains inside all Permittee-owned or operated buildings. The inventory must be kept

current. The Permittee must ensure that all floor drains discharge to appropriate locations.

- 4.2.6.6.2 Material storage areas, heavy equipment storage areas and maintenance areas. Permittees shall develop and implement SOPs to protect water quality at each of these facilities owned or operated by the Permittee.
- 4.2.6.6.3 Parks and open space. SOPs shall address, but are not limited to: the proper application, storage, and disposal of fertilizer, pesticides, and herbicides including minimizing the use of these products and using only in accordance with manufacturer's instructions; sediment and erosion control; evaluation of lawn maintenance and landscaping activities to ensure practices are protective of water quality such as, proper disposal of lawn clippings and vegetation, and use of alternative landscaping materials such as drought tolerant plants. The SOPs must address the management of trash containers at parks and other open spaces which include scheduled cleanings and establishing a sufficient number of containers, and for placing signage in areas concerning the proper disposal of pet wastes. The SOPs must also address the proper cleaning of maintenance equipment, building exterior, trash containers and the disposal of the associated waste and wastewater. Permittees shall implement park and open space maintenance pollution prevention/good housekeeping practices at all park areas, and other open spaces owned or operated by the Permittee.
- 4.2.6.6.4 Vehicle and Equipment. SOPs shall address, but are not limited to: vehicle maintenance and repair activities that occur on Permittee-owned or operated vehicles. BMPs should include using drip pans and absorbents under or around leaky vehicles and equipment or storing indoors where feasible. Fueling areas for Permittee-owned or operated vehicles and equipment shall be evaluated. If possible, place fueling areas under cover in order to minimize exposure. The O & M program shall include SOPs to ensure that vehicle wash waters are not discharged to the MS4 or Waters of the State. This Permit strictly prohibits such discharges.
- 4.2.6.6.5 Roads, highways, and parking lots. SOPs shall address, but are not limited to: SOPs and schedule for sweeping streets and Permittee-owned or operated parking lots and any other BMPs designed to reduce road and parking lot debris and other pollutants from entering the MS4; road and parking lot maintenance, including pothole repair, pavement marking, sealing and repaving; cold weather operations, including plowing, sanding, and application of deicing compounds and maintenance of snow disposal areas; right-of-way maintenance, including mowing, herbicide and pesticide application; and municipally-sponsored events such as large outdoor festivals, parades or street fairs. The Permittee must ensure that areas used for snow disposal will not result in discharges to receiving waters.
- 4.2.6.6.6 Storm water collection and conveyance system. SOPs shall address, but are not limited to: SOPs and schedules for the regular inspection, cleaning, and repair of catch basins, storm water conveyance pipes, ditches and irrigation canals, culverts, structural storm water controls, and structural runoff treatment and/or flow control facilities. Permittees shall implement catch basin cleaning, storm water system maintenance, scheduled structural BMP inspections and maintenance, and pollution prevention/good housekeeping practices. Permittees shall prioritize storm sewer system maintenance, with the highest priority areas being maintained at the greatest

frequency. Priorities should be driven by water quality concerns, the condition of the receiving water, the amount and type of material that typically accumulates in an area, or other location-specific factors. All Permittee-owned or operated storm water structural BMPs including but not limited to, swales, retention/detention basins or other structures must be inspected annually to ensure that they are properly maintained to reduce the discharge of pollutants into receiving waters. Permittees shall ensure and document proper disposal methods of all waste and wastewater removed from the storm water conveyance system. These disposal methods apply to, but are not limited to, street sweeping and catch basin cleaning. Materials removed from the MS4 shall be dewatered in a contained, impervious area and discharged to the local sanitary sewer (with approval of local authorities) where feasible. The solid material shall be stored and disposed of properly to avoid discharge to Waters of the State during a storm event. Any other treatment and disposal measures shall be reviewed and approved by the Division. Some materials removed from storm drains and open channels may require special handling and disposal, and may not be authorized to be disposed of in a landfill.

- 4.2.6.6.7. Other facilities and operations Permittees shall identify any facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff, and develop, implement, and document the appropriate BMPs and SWPPP to protect water quality from discharges from these sites.
- 4.2.6.7. If a Permittee contracts with a third-party to conduct municipal maintenance or allows private developments to conduct their own maintenance, the contractor shall be held to the same standards as the Permittee. This expectation must be defined in contracts between the Permittee and its contractors or the contractors of private developments. The Permittee shall be responsible for ensuring, through contractually-required documentation or periodic site visits that contractors are using appropriate storm water controls and following the standard operating procedures, storm water control measures, and good housekeeping practices of the Permittee.
- 4.2.6.8. The Permittee must develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the Permittee or that discharge to the MS4. This process must include consideration of controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives. A description of this process must be included in the SWMP document
  - 4.2.6.8.1 Existing flood management structural controls must be assessed to determine whether changes or additions should be made to improve water quality. A description of this process and determinations should be included in the SWMP document.
- 4.2.6.9. Public construction projects shall comply with the requirements applied to private projects. All construction projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, owned or operated by the Permittee are required to be covered under the General UPDES Permits for Storm Water Discharges Associated with Construction Activities.
- 4.2.6.10. The Permittee shall ensure that all employees, contracted staff, and other responsible entities that have primary construction, operation, or maintenance job functions that

are likely to impact storm water quality receive annual training. The Permittee shall identify target individuals to participate in the training sessions and ensure that all such employees receive training upon being hired and annually thereafter, at a minimum. Training shall address the importance of protecting water quality, the requirements of this Permit, operation and maintenance requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, SOPs and SWPPPs for the various Permittee-owned or operated facilities and procedures for reporting water quality concerns, including potential illicit discharges. Training records must be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing.

#### **4.3. Sharing Responsibility**

- 4.3.1. Implementation of one or more of the six minimum measures may be shared with another entity, or the entity may fully take over the measure. A Permittee may rely on another entity only if:
- 4.3.2. The other entity, in fact, implements the control measure;
- 4.3.3. The particular control measure, or component of that measure, is at least as stringent as the corresponding Permit requirement; and
- 4.3.4. The other entity agrees to implement the control measure through a written agreement. This obligation must be maintained as part of the description given in the Permittee's SWMP document. If the other entity agrees to report on the minimum control measure, the Permittee must supply the other entity with the reporting requirements contained in Part 5.5. of this Permit. If the other entity fails to implement the control measure, then the Permittee remains liable for any discharges due to that failure to implement.
- 4.3.5. The Permittee conducts training of the responsible entity on the Permit requirements and applicable standard operating procedures.

#### **4.4. Reviewing and Updating Storm Water Management Programs**

- 4.4.1. *Storm Water Management Program Review:* All Permittees must conduct, at a minimum, an annual review of the SWMP document in conjunction with preparation of the annual report required in Part 5.5.
- 4.4.2. *Storm Water Management Program Update:* A Permittee may change the SWMP document during the life of the Permit in accordance with the following procedures:
  - 4.4.2.1. Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP document may be made at any time upon written notification to the Division.

- 4.4.2.2. Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP document with an alternate BMP may be adopted at any time, provided the analysis is clearly outlined and subsequently approved by the Division. An analysis shall include:
  - 4.4.2.2.1 An explanation of why the BMP is ineffective or infeasible,
  - 4.4.2.2.2 Expectations or report on the effectiveness of the replacement BMP, and
  - 4.4.2.2.3 An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced, or has achieved those goals.
- 4.4.3. Change requests or notifications must be made in writing and signed in accordance with Part 6.8.
- 4.4.4. Change requests or notifications will receive confirmation and approval or denial in writing from the Division.
- 4.4.5. Storm Water Management Program Updates required by the Division: The Division may require changes to the SWMP as needed to:
  - 4.4.5.1. Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;
  - 4.4.5.2. Include more stringent requirements necessary to comply with new Federal regulatory requirements; or
  - 4.4.5.3. Include such other conditions deemed necessary by the Division to comply with the goals and requirements of the Clean Water Act.



## 5.0 **Narrative Standard, Monitoring, Recordkeeping and Reporting**

### 5.1. **Narrative Standard**

It shall be unlawful, and a violation of this Permit, for the Permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste, or conditions which produce undesirable aquatic life or which produces objectionable tastes in edible aquatic organisms; or concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures

### 5.2. **Analytical Monitoring**

Permittees are not required to conduct analytical monitoring (see definition in Part 7.3) during the effective term of this Permit, with the following exceptions:

- 5.2.1. Water quality sampling may be required for compliance with TMDLs, pursuant to Part 3.1. of this Permit.
- 5.2.2. Sampling or testing may be required for characterizing illicit discharges pursuant to Parts 4.2.3.4., 4.2.3.5., and 4.2.3.5.1 of this Permit.
- 5.2.3. In the event that the MS4 elects to conduct analytical monitoring as part of its Storm Water Management Program, the Permittee is required to comply with Part 6.18. of this Permit.

### 5.3. **Non-analytical Monitoring**

- 5.3.1. Non-analytical monitoring (see definition in Part 7.32.) such as visual dry weather screening is required to comply with Part 4.2.3.3.2 of this Permit.

### 5.4. **Record keeping**

- 5.4.1. Permittees must keep all supplementary documents associated with this Permit (e.g., Storm Water Management Program (SWMP) document, SWMP Implementation Schedule) current and up to date to achieve the purpose and objectives of the required document.
- 5.4.2. All modifications to supplementary documents must be submitted to the *Division* in accordance with Parts 4.4 and 6.8.
- 5.4.3. The *Division* may at any time make a written determination that parts or all of the supplementary documents are not in compliance with this Permit, wherein the Permittee must make modifications to these parts within a time frame specified by the *Division*.
- 5.4.4. The Permittee shall retain all required plans, records of all programs, records of all monitoring information, copies of all reports required by this Permit, and records of

all other data required by or used to demonstrate compliance with this Permit, for at least five years. This period may be explicitly modified by alternative provisions of this Permit or extended by request of the *Division* at any time.

- 5.4.5. The Permittee must make records, including the Notice of Intent (NOI) and the SWMP document, available to the public if requested.

**5.5. Reporting**

- 5.5.1. The Permittee must submit an annual report to the Division by October 1 for the reporting period of July 1 to June 30 of each year of the Permit term.
- 5.5.2. The report must be submitted using the report form provided on the *Division's* website at <http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm>.
- 5.5.3. The Permittee shall sign and certify the annual report in accordance with Part 6.8.
- 5.5.4. Signed copies of the Annual Report and all other reports required herein, shall be submitted to:

Department of Environmental Quality  
Division of Water Quality  
PO Box 144870  
195 North 1950 West  
Salt Lake City, UT 84114-4870

## **6.0 Standard Permit Conditions**

### **6.1. Duty to Comply**

The Permittee must comply with all conditions of this Permit. Any Permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. The Permittee shall give advance notice to the Division of any planned changes in the Permitted facility or activity, which may result in noncompliance with Permit requirements.

### **6.2. Penalties for Violations of Permit Conditions**

The *Act* provides that any person who violates a Permit condition implementing provisions of the *Act* is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates Permit conditions or the Act is subject to a fine not exceeding \$25,000 per day of violation. Any person convicted under *UCA 19-5-115(2)* a second time shall be punished by a fine not exceeding \$50,000 per day.

### **6.3. Duty to Reapply**

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new Permit. The application shall be submitted at least **180 days** before the expiration date of this Permit. Continuation of expiring Permits shall be governed by regulations promulgated at *UAC R317-8-5* and any subsequent amendments.

### **6.4. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.

### **6.5. Duty to Mitigate**

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

### **6.6. Duty to Provide Information**

The Permittee shall furnish to the Division, within a time specified by the Division, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Division, upon request, copies of records required to be kept by this Permit.

**6.7. Other Information**

When the Permittee becomes aware that it failed to submit any relevant facts in a Permit application, or submitted incorrect information in a Permit application or any report to the Division, it shall promptly submit such facts or information.

**6.8. Signatory Requirements**

All notices of intent, storm water management programs, storm water pollution prevention plans, reports, certifications or information either submitted to the *Division* or that this Permit requires to be maintained by the Permittee, shall be signed, dated and certified as follows:

- 6.8.1. All Permit applications shall be signed by either a principal executive officer or ranking elected official.
- 6.8.2. All reports required by the Permit and other information requested by the Division shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 6.8.2.1. The authorization is made in writing by a person described above and submitted to the Division, and,
  - 6.8.2.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
  - 6.8.2.3. Changes to authorization. If an authorization under *Part 6.8.2.* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *Part 6.8.2.* must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 6.8.3. *Certification.* Any person signing documents under this Part shall make the following 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 gathered and evaluated the information submitted. Based on 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 for knowing violations."

**6.9 Availability of Reports**

Except for data determined to be confidential under the Government Records Access and Management Act (*see* particularly Utah Code Ann. § 63-2-309) and Utah Code Ann. § 19-1-3-6, all reports prepared in accordance with the terms of this Permit shall be available for public inspection at the office of the Division. As required by the *Act*, Permit applications, Permits and effluent data shall not be considered confidential.

**6.10. Penalties for Falsification of Reports**

The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both. Utah Code Ann. § 19-5-115(4)

**6.11. Penalties for Tampering**

The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this Permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

**6.12. Oil and Hazardous Substance Liability**

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under the "*Act*".

**6.13. Property Rights**

The issuance of this Permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

**6.14. Severability**

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

**6.15. Requiring a Different Permit**

The *Division* may require the Permittee authorized by this Permit to obtain an individual *UPDES* Permit. Any interested person may petition the *Division* to take action under this paragraph. The *Division* may require the Permittee authorized to discharge under this Permit to apply for an individual *UPDES* Permit only if the Permittee has been notified in writing that a Permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form (as necessary), a statement setting a deadline for the Permittee to file the application, and a statement that on the effective date of the municipal *UPDES* Permit, coverage

under this Permit shall automatically terminate. Permit applications shall be submitted to the address of the *Division of Water Quality* shown in *Part 5.5* of this Permit. The *Division* may grant additional time to submit the application upon request of the applicant. If the municipality fails to submit in a timely manner a municipal *UPDES* Permit application as required by the *Division*, then the applicability of this Permit to the Permittee is automatically terminated at the end of the day specified for application submittal.

**6.16. State/Federal Laws**

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by *UCA 19-5-117* and *Section 510* of the *Clean Water Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.

**6.17. Proper Operation and Maintenance**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit and with the requirements of the SWMP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by the Permittee only when necessary to achieve compliance with the conditions of the Permit.

**6.18. Monitoring and Records**

- 6.18.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- 6.18.2. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the *Division* at any time.
- 6.18.3. Records of monitoring information shall include:
  - 6.18.3.1 The date, exact place, and time of sampling or measurements;
  - 6.18.3.2 The name(s) of the individual(s) who performed the sampling or measurements;
  - 6.18.3.3 The date(s) and time(s) analyses were performed;
  - 6.18.3.4 The name(s) of the individual(s) who performed the analyses;
  - 6.18.3.5 The analytical techniques or methods used; and
  - 6.18.3.6 The results of such analyses.

**6.19. Monitoring Procedures**

Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10*, unless other test procedures have been specified in this Permit.

**6.20. Inspection and Entry**

The Permittee shall allow the *Division* or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- 6.20.1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Permit;
- 6.20.2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this Permit; and
- 6.20.3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).
- 6.20.4. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by law, any substances or parameters at any location.

**6.21. Permit Actions**

This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit modification, revocation and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Permit condition.

**6.22. Storm Water-Reopener Provision**

At any time during the duration (life) of this Permit, this Permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "Waters-of-State".

## 7.0 **Definitions**

Definitions related to this Permit and small municipal separate storm sewers (MS4s).

- 7.1. “40 CFR” refers to Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal government.
- 7.2. "Act" means the *Utah Water Quality Act*.
- 7.3. “Analytical monitoring” refers to monitoring of waterbodies (streams, ponds, lakes, etc.) or of storm water, according to UAC R317-2-10 and 40 CFR 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants,” or to State or Federally established protocols for biomonitoring or stream bioassessments.
- 7.4. “Beneficial Uses” means uses of the Waters of the State, which include but are not limited to: domestic, agricultural, industrial, recreational, and other legitimate beneficial uses.
- 7.5. “Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- 7.6. “CWA” means *The Clean Water Act of 1987*, formerly referred to as the Federal Water Pollution Control Act.
- 7.7. "Co-Permittee" means any operator of a regulated Small MS4 that is applying jointly with another applicant for coverage under this Permit. A Co-Permittee owns or operates a regulated Small MS4 located within or adjacent to another regulated MS4. A Co-Permittee is only responsible for complying with the conditions of this Permit relating to discharges from the MS4 the Co-Permittee owns or operates. See also 40 CFR 122.26(b)(1).
- 7.8. “Control Measure” refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to Waters of the State.
- 7.9. “Common plan of development or sale” means one plan for development or sale, separate parts of which are related by any announcement, piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, plat, blueprint, contract, Permit application, zoning request, computer design, etc.), physical demarcation (including contracts) that identify the scope of the project. A plan may still be a common plan of development or sale even if it is taking place in separate stages or phases, is planned in combination with other construction activities, or is implemented by different owners or operators.
- 7.10. “Director” means the director of the Utah Division of Water Quality, otherwise known as the *Division* of the Utah Water Quality Board.
- 7.11. “Division” means the Utah Division of Water Quality.
- 7.12. "Discharge" for the purpose of this Permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4).



- 7.13.** "Dry weather screening" is monitoring done in the absence of storm events to discharges representing, as much as possible, the entire storm drainage system for the purpose of obtaining information about illicit connections and improper dumping.
- 7.14.** "Escalating enforcement procedures" refers to a variety of enforcement actions in order to apply as necessary for the severity of the violation and/or the recalcitrance of the violator.
- 7.15.** "Entity" means a governmental body or a public or private organization.
- 7.16.** "EPA" means the United States Environmental Protection Agency.
- 7.17.** "General Permit" means a Permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual Permits being issued to each discharger.
- 7.18.** "Ground water" means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.
- 7.19.** "High quality waters" means any water, where, for a particular pollutant or pollutant parameter, the water quality exceeds that quality necessary to support the existing or designated uses, or which supports an exceptional use.
- 7.20.** "Illicit connection" means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.
- 7.21.** "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a UPDES Permit (other than the UPDES Permit for discharges from the municipal separate storm sewer) and discharges resulting from emergency firefighting activities.
- 7.22.** "Impaired waters" means any segment of surface waters that has been identified by the Division as failing to support classified uses. The Division periodically compiles a list of such waters known as the 303(d) List.
- 7.23.** "Indian Country" is defined as in 40 CFR §122.2 to mean:
- 7.23.1.** All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
  - 7.23.2.** All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
  - 7.23.3.** All Indian allotments, the Indian titles to which have not been extinguished, including right-of-ways running through the same.

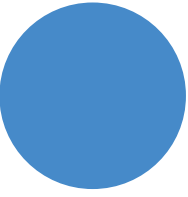
- 7.24.** “Large MS4” *Large municipal separate storm sewer system* means all municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more as determined by the current Decennial Census by the Bureau of the Census.
- 7.25.** “Low Impact Development” (LID) is an approach to land development (or re-development) that works with nature to more closely mimic pre-development hydrologic functions. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.
- 7.26.** "MS4" is an acronym for "municipal separate storm sewer system".
- 7.27.** "Maximum Extent Practicable" (MEP) is the technology-based discharge standard for Municipal Separate Storm Sewer Systems established by paragraph 402(p)(3)(B)(iii) of the Federal Clean Water Act (CWA), which reads as follows: “Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.”
- 7.28.** “Medium MS4” *Medium municipal separate storm sewer system* means all municipal separate storm sewers that are located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census
- 7.29.** “Monitoring” refers to tracking or measuring activities, progress, results, etc.;
- 7.30.** "Municipal separate storm sewer system" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) pursuant to paragraphs R317-8-1.6(4), (7), & (14), or designated under UAC R317-8-3.9(1)(a)5:
- 7.30.1.** that is owned or operated by a state, city, town, county, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to Waters of the State;
- 7.30.2.** that is designed or used for collecting or conveying storm water;
- 7.30.3.** which is not a combined sewer; and
- 7.30.4.** which is not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR 122.2.
- 7.31.** “NOI” is an acronym for “Notice of Intent” to be covered by this Permit and is the mechanism used to “register” for coverage under a General Permit.

- 7.32.** “Non-analytical monitoring” refers to monitoring for pollutants by means other than UAC R317-2-10 and 40 CFR 136, such as visually or by qualitative tools that provide comparative or rough estimates.
- 7.33.** “Operator” is the person or entity responsible for the operation and maintenance of the MS4.
- 7.34.** "Outfall" means a point source as defined by UAC R317-8-1.5(34) at the point where a municipal separate storm sewer discharges to Waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other Waters of the State and are used to convey waters of the State.
- 7.35.** “Phase II areas” means areas regulated under UPDES storm water regulations encompassed by Small MS4's (see definition 7.39.).
- 7.36.** “Priority construction site” means a construction site that has potential to threaten water quality when considering the following factors: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-storm water discharges and past record of non-compliance by the operators of the construction site.
- 7.37.** “Redevelopment” is the replacement or improvement of impervious surfaces on a developed site.
- 7.38.** “Runoff” is water that travels across the land surface, or laterally through the ground near the land surface, and discharges to water bodies either directly or through a collection and conveyance system. Runoff includes storm water and water from other sources that travels across the land surface.
- 7.39.** “SWMP” is an acronym for storm water management program. The SWMP document is the written plan that is used to describe the various control measures and activities the Permittee will undertake to implement the storm water management plan.
- 7.40.** “SWPPP” is an acronym for storm water pollution prevention plan.
- 7.41.** “Small municipal separate storm sewer system” is any MS4 not already covered by the Phase I program as a medium or large MS4. The Phase II Rule automatically covers on a nationwide basis all Small MS4s located in “urbanized areas” (UAs) as defined by the Bureau of the Census (unless waived by the UPDES Permitting authority), and on a case-by-case basis those Small MS4s located outside of UAs that the UPDES Permitting authority designates.
- 7.41.1.** This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.
- 7.42.** “SOP” is an acronym for standard operating procedure which is a set of written instructions that document a routine or repetitive activity. For the purpose of this Permit, SOPs should emphasize pollution control measures to protect water quality.
- 7.43.** "Storm water" means storm water runoff, snowmelt runoff, and surface runoff and drainage.

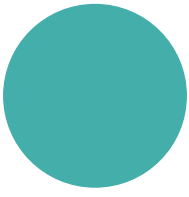
- 7.43.** “Storm water management program” means a set of measurable goals, actions, and activities designed to reduce the discharge of pollutants from the Small MS4 to the maximum extent practicable and to protect water quality.
- 7.44.** “TMDL” is an acronym for “Total Maximum Daily Load” and in this Permit refers to a study that: 1) quantifies the amount of a pollutant in a stream; 2) identifies the sources of the pollutant; and 3) recommends regulatory or other actions that may need to be taken in order for the impaired waterbody to meet water quality standards.
- 7.45.** “Urbanized area” is a land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.
- 7.46.** “Waters of the State” means all streams, lakes, ponds, marshes, water-courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private which are contained within, flow through, or border upon this state or any portion thereof, except bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife which shall not be considered to be “Waters of the State” under this definition (“UAC” R317-1-1).

# 3

## Section



Public Education and Outreach



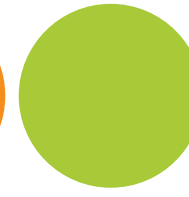
Public Involvement



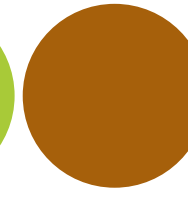
Illicit Discharge and Detection



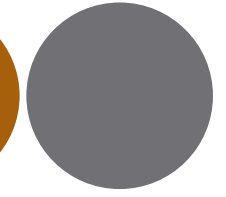
Construction Runoff



Post Construction Stormwater Management



Good Housekeeping



Washington City  
Where Dixie Begins

Water Quality and SWMP Goals

Revised July 2016



## **Section 3.0 Introduction and Background**

|         |  |       |
|---------|--|-------|
| 3.1     | TMDL Identification and Pollutant Minimization | 1 - 2 |
| Figures | Figure 3.0 & 3.1                               | 3 - 4 |
| 3.2     | BMP Implementation for Primary Pollutant       | 5 - 6 |
| 3.3     | Measurable Goals for SWMP Development          | 7 - 9 |

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Information regarding the overall water quality concerns, priorities, and measurable goals specific to the development of the SWMP. New to Washington City's SWMP is the addition of the MS4 contributing to an impaired water body.

## Section 3.0

# Water Quality - SWMP Goals

### 3.1

## TMDL Identification and Pollutant Minimization



UPDES Sec. 3.1.1.1

Under Section 303(d) of the CWA, states are required to identify waters that fail to meet water quality standards, and are required to develop Total Maximum Daily Loads (TMDLs) to address the specific pollutants contributing to the water quality degradation. The Utah Department of Environmental Quality has listed segments of the Virgin River within or adjacent to Washington City as being “water quality limited” on its 2002 303(d) list. The Primary pollutant of concern is Total Dissolved Solids (TDS).

In September 2004, the EPA approved TMDL levels recommended by the Utah Department of Environmental Quality in their study TMDL Water Quality Study of the Virgin River Watershed (TMDL Study). It was determined in the study that the Virgin River TMDL of dissolved solids from natural sources, especially Pah Tempe Hot Springs, made it impossible to meet the State standards of 1,200 mg/l. Pah Tempe likely has a greater impact to the water quality of the river than any other source of pollution in the watershed. Approximately 60% of the total TDS loading in the segment of the lower Virgin River comes from the Pah Tempe Hot Spring. The TMDL Study proposed a site-specific total dissolved solids concentration of 2,360 mg/l for the Virgin River from Pah Tempe downstream as a criterion that represents the natural background conditions of the river. The EPA approved the recommended site-specific TDS concentration.

Upon adoption of the TMDLs, it was understood that all parties with discharges to the rivers, including Washington City, would either be allocated pollution limits for discharges to the affected waters i.e., numerical limits-based requirements, or be required to implement certain practices and provisions to minimize the pollutant (BMP-based requirements).

The TMDL Water Quality Study of the Virgin River Watershed recommended implementing Best Management Practices (BMPs) and regulations to minimize the TDS loading. Several specific BMPs were suggested to reduce the loadings and impacts in the Virgin River from Bloomington to the Washington Fields Diversion. (UDEQ 2004)

Figure 3.0 provides a wider perspective of major washes and rivers in Washington County. Figure 3.1 illustrates the segments of the Virgin River that are listed as water quality impaired.

## Definition

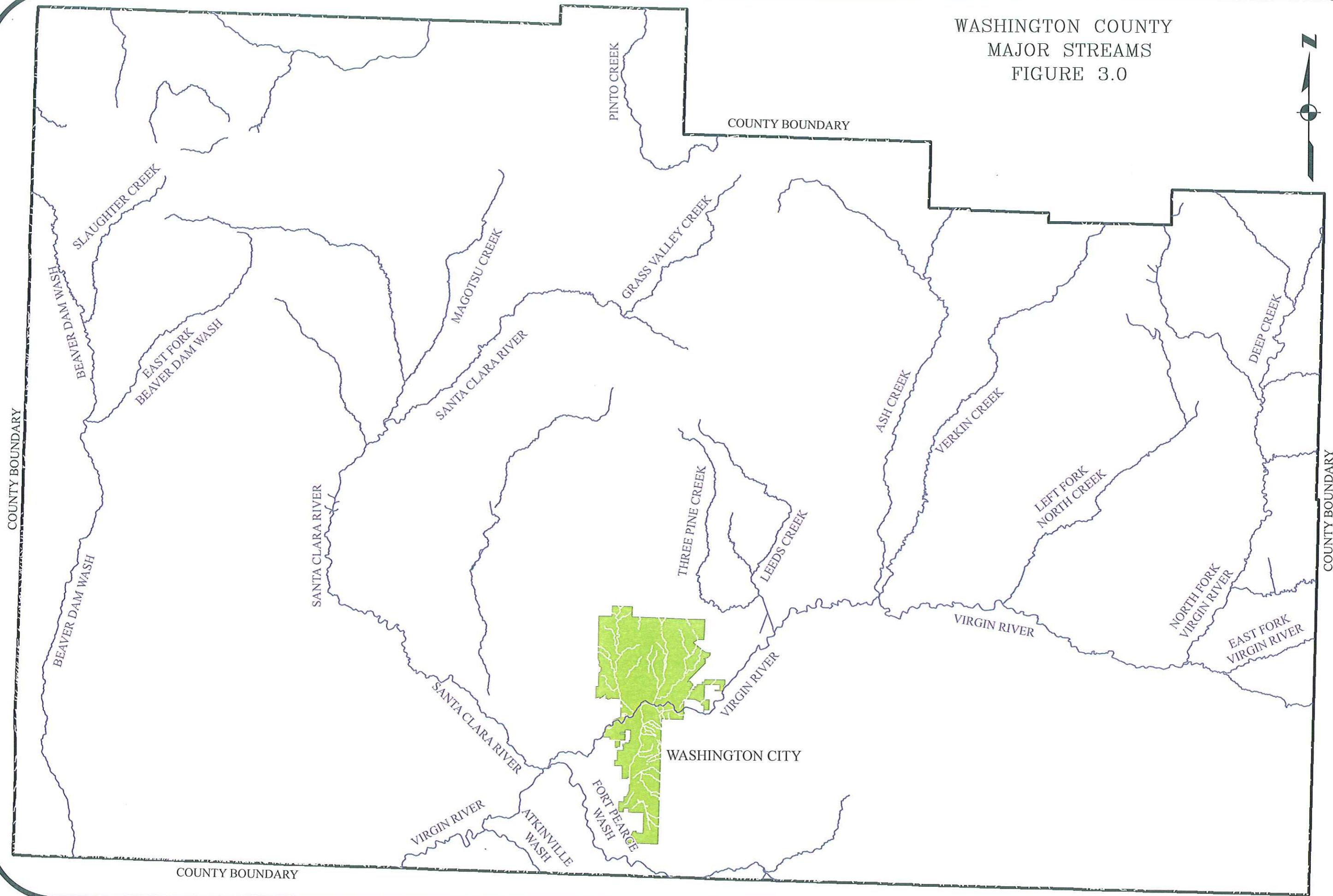
*“TMDL” is an acronym for “Total Maximum Daily Load” and in this Permit refers to a study that: 1) quantifies the amount of a pollutant in a stream; 2) identifies the sources of the pollutant; and 3) recommends regulatory or other actions that may need to be taken in order for the impaired waterbody to meet water quality standards.*

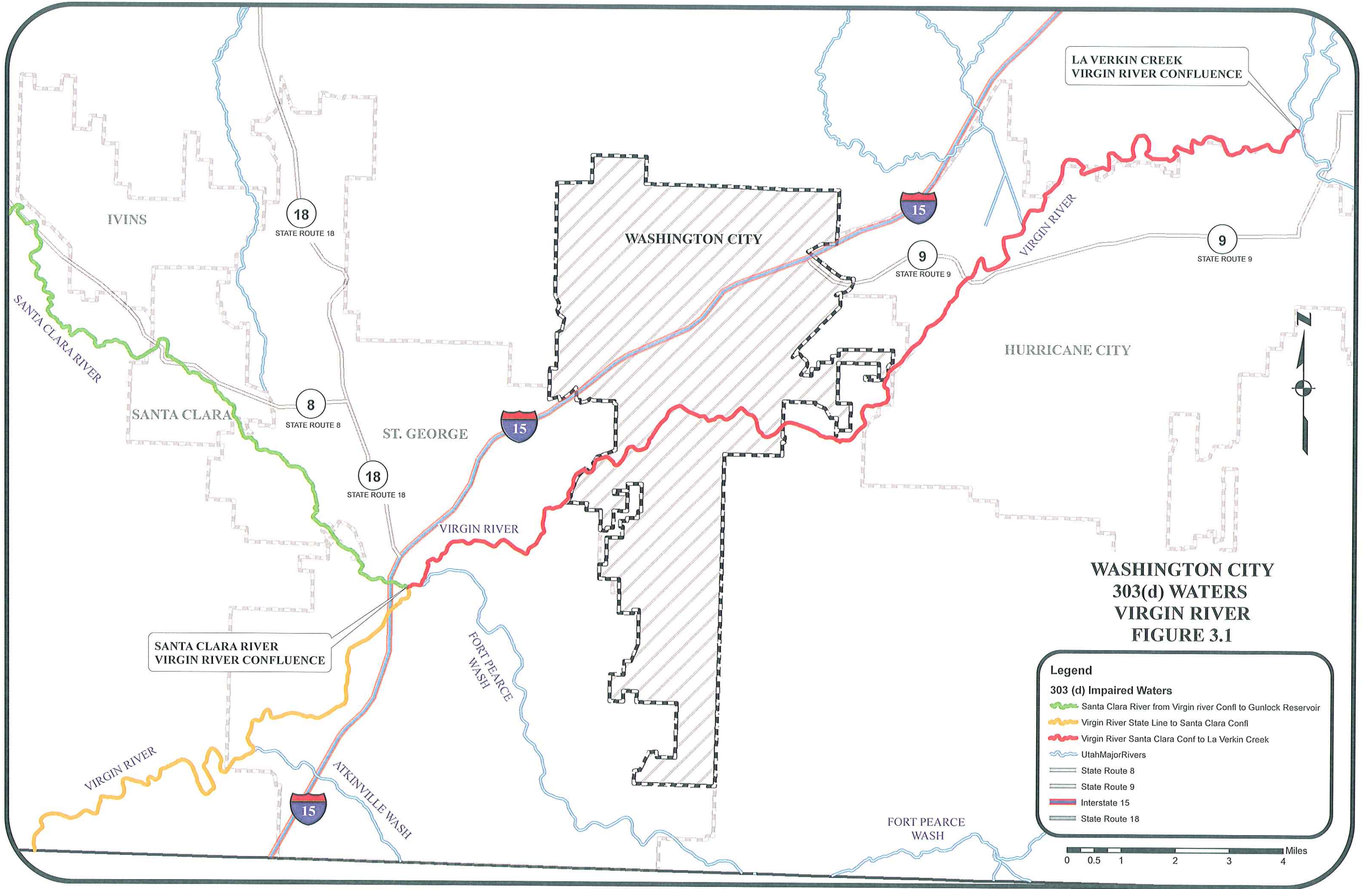


## **Figures 3.0 & 3.1**

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WASHINGTON COUNTY  
MAJOR STREAMS  
FIGURE 3.0





LA VERKIN CREEK  
VIRGIN RIVER CONFLUENCE

SANTA CLARA RIVER  
VIRGIN RIVER CONFLUENCE

**WASHINGTON CITY  
303(d) WATERS  
VIRGIN RIVER  
FIGURE 3.1**

**Legend**

**303 (d) Impaired Waters**

- Santa Clara River from Virgin river Confl to Gunlock Reservoir
- Virgin River State Line to Santa Clara Confl
- Virgin River Santa Clara Confl to La Verkin Creek
- Utah Major Rivers
- State Route 8
- State Route 9
- Interstate 15
- State Route 18

0 0.5 1 2 3 4 Miles

## 3.2

## BMP Implementation for Primary Pollutant

The 2004 study by the DEQ recommended several BMPs to reduce loadings with varying engineering intensity levels. The recommended BMPs are presented in Table 3.3.



UPDES Sec. 3.1.2

**Table 3.3** DEQ Recommended BMPs\*

| Practice Number | Practice Name                         | Intensity Level             |
|-----------------|---------------------------------------|-----------------------------|
| <b>100</b>      | <b>Construction Site Management</b>   | <b>Passive Management</b>   |
| <b>140</b>      | <b>Irrigation Water Management</b>    | <b>Passive Management</b>   |
| 160             | Nutrient Management                   | Passive Management          |
| 190             | Residue Management                    | Passive Management          |
| 200             | Cover Crop                            | Active Management           |
| <b>210</b>      | <b>Exotic Removal</b>                 | <b>Active Management</b>    |
| <b>221</b>      | <b>Seeding</b>                        | <b>Active Management</b>    |
| 240             | Filter Strips                         | Active Management           |
| <b>80</b>       | <b>Pole/Post Plantings</b>            | <b>Active Management</b>    |
| 270             | Waste Utilization                     | Active Management           |
| <b>331</b>      | <b>Erosion Control Fabric</b>         | <b>Mild Engineering</b>     |
| <b>333</b>      | <b>Silt Fence</b>                     | <b>Mild Engineering</b>     |
| <b>334</b>      | <b>Straw Bale</b>                     | <b>Mild Engineering</b>     |
| <b>400</b>      | <b>Detention Basin</b>                | <b>Moderate Engineering</b> |
| 421             | Rack Vane                             | Moderate Engineering        |
| 422             | Rock Weir                             | Moderate Engineering        |
| <b>423</b>      | <b>Toe Rock</b>                       | <b>Moderate Engineering</b> |
| <b>450</b>      | <b>Irrigation Pipeline</b>            | <b>Moderate Engineering</b> |
| 452             | Irrigation Sprinklers                 | Moderate Engineering        |
| <b>454</b>      | <b>Irrigation Tail Water Recovery</b> | <b>Moderate Engineering</b> |
| 520             | Cross-Vane Weir Diversion             | Intense Engineering         |
| <b>521</b>      | <b>Rock Rip-Rock</b>                  | <b>Intense Engineering</b>  |
| <b>522</b>      | <b>Stream Channel Stabilization</b>   | <b>Intense Engineering</b>  |

\* TMDL Water Quality Study of the Virgin River Watershed

The highlighted areas of Table 3.0 represent the BMPs that Washington City is currently implementing or partnering with other organizations to implement. Since the TMDLs were established in 2004, the City has taken a proactive approach to reducing TDS loadings. One of the most significant improvements completed in the last six years was piping all the irrigation canals and ditches being used for runoff and irrigation in Washington Fields. Runoff from this large agricultural area was considered Washington City's greatest impact on the water quality of the Virgin River. Managing this runoff and controlling pollutant discharges became the City's top priority. Washington City has spent more than 3 million dollars over the last 6 years in storm sewer infrastructure planning, design, and construction.

In 2006, the Washington City Public Works Department published its first addition of the Washington City Grading Manual. The purpose of this manual is to implement effective grading, drainage, erosion, and sediment control Best Management Practices. The manual is a comprehensive document that provides suitable guidance for use by a wide range of individuals involved in construction. The Washington City Council adopted the grading manual as ordinance, and in doing so effectively adopted an ordinance the specifications and regulations outlined in the manual. This manual is the tool that Washington City has elected to implement the BMPs recommended to control the TMDL of Total Dissolved Solids discharged into the Virgin River.

The manual is published on the Washington City Public Works website and available to the public. It includes specifications for the DEQ recommended BMPs relevant to Washington City.

In the upcoming years, Washington City intends to continue implementing BMPs included in the Grading Manual to reduce and monitor TDS loadings to the river. No later than year four (4) of this permit, the City intends to update its grading manual and investigate analytical monitoring for controlling pollutant discharge.

Washington City is committed to reducing its impact on impaired waters within the City's influence.



## Additional Information

*The Washington City Grading Manual is published on the Washington City Public Works website and available to the public. It includes specifications for the DEQ recommended BMPs relevant to Washington City.*

<http://new.washingtoncity.org/services/index.php?sub=PublicWorks>



UPDES Sec. 3.1.2

# 3.3

## Measurable Goals for SWMP Development



UPDES Sec. 2.3.2.3

The following goals are long-term outcomes Washington City desires to accomplish with its SWMP. The policies provide specific direction consistent with local goals, as well as State and Federal requirements. Implementation Actions include BMPs discussed in detail in the NPDES MS4 plan and other actions needed to achieve local objectives.



### # 1

### Preserve and maintain surface waters, wetlands, and riparian areas as a functional and aesthetically pleasing for people, fish, and wildlife.

#### Policies

- ▶ The City will implement permitting programs, educational outreach, compliance inspections and enforcement activities as needed to reduce erosion, sedimentation, illicit discharges, and other pollution impacts to the City’s waterways.
- ▶ Through the development review process, the City will facilitate development that is protective of significant open waterways, wetlands, and riparian areas.

#### Implementation Actions

- ▶ The City will implement and continue to refine/improve BMPs for all City activities with potential to impact water quality and/or the functions of waterways, wetlands, and riparian areas.
- ▶ The City will implement and continue to refine/improve BMPs for all City activities with potential to impact water quality and/or the functions of waterways, wetlands, and riparian areas.

In addition to the above implementation actions, BMPs for the following Minimum Control Measures will be implemented:

- ▶ Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to reduce or eliminate sedimentation from construction sites as a contributor to poor water quality and quantity management.
- ▶ Implement BMPs consistent with NPDES Minimum Control Measure #5, Post- Construction Stormwater Management for New Development and Redevelopment, so new development at a minimum maintains the functioning of the stormwater drainage system, and doesn’t contribute to future degradation.
- ▶ Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, which is critical to maintaining properly functioning wetland and riparian areas and open channels.

# # 2

## Educate Industries, businesses, and citizens on the need for water quality protection.

### Policies

- ▶ The City will develop targeted education and outreach and technical assistance programs regarding practices and obligations for keeping debris and pollutants out of the stormwater drainage system. Stakeholder groups will be trained in appropriate erosion control and sediment prevention practices, as well as stormwater management BMPs.
- ▶ The City will seek to form partnerships with neighborhoods or groups interested in providing assistance in maintaining local waterways.
- ▶ The City will develop, implement, and enforce appropriate building, design, and Municipal Codes to address water quality compliance issues, including pollution, habitat, and aesthetic issues, to encourage the development of urban waterways that are positive amenities in the community.

### Implementation Actions

- ▶ The City will continue to support outreach and education efforts regarding water quality, riparian and wetland areas, including business, contractor, and developer outreach programs to educate these parties about their impacts on stormwater quality.
- ▶ The City will continue to maintain enforcement and compliance activities, including inspections, technical assistance, and Code enforcement.

In addition to the above implementation actions, BMPs included in the NPDES MS4 plan for the following Minimum Control Measures will be implemented:

- ▶ Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to engage the public in the efforts to create positive urban amenities.
- ▶ Implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to ensure that waterways are safe, meet State water quality standards, and can function as positive amenities.

# # 3

## Provide guidelines and regulations for the development, and general, community for preserving stormwater quality.

### Policies

- ▶ The City will develop and implement Codes addressing water quality and natural resource management, consistent with State and Federal requirements, to provide clear and objective standards for development.
- ▶ The City will develop, within fiscal constraints, adequate stormwater infrastructure, and will maintain a Stormwater Capital Facilities Master Plan that identifies public and private infrastructure needed to facilitate planned growth patterns.

### Implementation Actions

- ▶ The City will continue to update its Stormwater Capital Facilities Master Plan.
- ▶ The City will pursue capital projects supporting stormwater infrastructure development, consistent with fiscal restraints, State and Federal requirements, and the needs of the community. These projects will be identified in the Stormwater Capital Facility Master Plan.

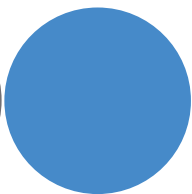
In addition to the above implementation actions, BMPs included in the MS4 plan for the following Minimum Control Measures (See Chapter Five MS4 Plan) will be implemented:

- ▶ Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to ensure that the development community is knowledgeable and informed regarding stormwater regulations.
- ▶ Implement BMPs consistent with NPDES Minimum Control Measure #2, Public Involvement/Participation, to ensure that the public has adequate input into new requirements or regulations.

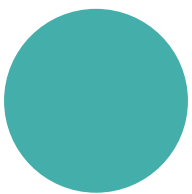


# 4

## section



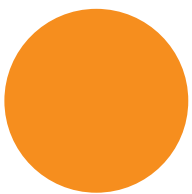
Public Education and Outreach



Public Involvement



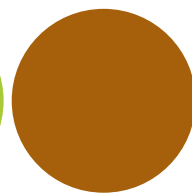
Illicit Discharge and Detection



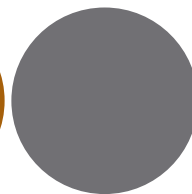
Construction Runoff



Post Construction Stormwater Management



Good Housekeeping



Washington City  
Where Dixie Begins

Receiving Streams and Mapping

Revised July 2016



## **Section 4.0 Receiving Streams and Storm Sewer Mapping**

4.1 Washington City's Drainage System

1 - 2

Information regarding Washington City's Drainage Systems. Several large drainage basins influence the City. The City's storm sewer system encompasses an extensive network of pipe, open waterways, and flood control structures. In 2004, an outfall inventory was conducted by the City to identify known and unknown stormwater outfalls.

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## Section 4.0

### Receiving Streams

### - Storm Sewer Mapping

## 4.1

# Washington City's Drainage Systems

### Overview Of Washington City's Stormwater Drainage Systems

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. The City performs all operation and maintenance on the public drainage system that is designed and constructed to public standards and located within easements or rights-of-way, or property that has been conveyed or dedicated to the City. The City also maintains open channels throughout the city, many of which are old irrigation canals.

The geographic area covered by this Stormwater Plan includes approximately 31.6 square miles inside Washington City limits

Washington City's stormwater drainage system encompasses 46 miles of piped drainage system, and more than 50 miles of open channel waterway throughout the area. The storm sewer system includes more than 1,200 as-built catch basins. More than 3,950 asphalt miles of streets were swept in 2015 to remove pollutants and debris.

The City's stormwater drainage system also includes many private stormwater management facilities that help moderate and reduce the volume and pollutant content of stormwater leaving private property and entering the public stormwater drainage. These systems have been incorporated into newly developing properties since the late 1990s and include both mechanical pollutant removal devices, and other landscape

features that use natural processes to clean and reduce the volume of stormwater discharge that flows to the public system.

### **Stormwater Drainage Basin Characterization**

Washington City's stormwater drainage system has several major drainage basins that discharge to the Virgin River. A drainage basin can be described as a geographic area within which stormwater drains from many small systems converging on larger drainage ways, ultimately culminating in outfalls to rivers or major drainage ways. The character and condition of the drainage ways varies significantly throughout Washington City's basins. The condition of the drainage ways depends greatly on surrounding land uses and contributing drainages. A more complete description of each of the City's basins, and smaller sub basins, is included in the City's Stormwater Capital Facility Plan. The Capital Facility Plan is available to the public on Washington City's Public Works website.

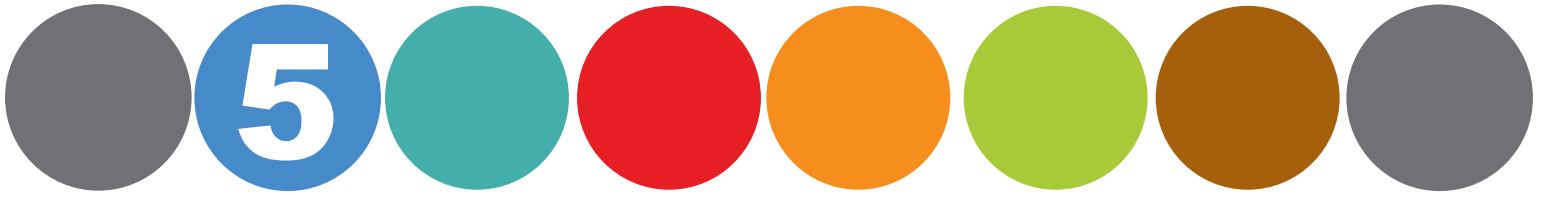
### **Washington City Outfall Inventory, 2004**

An inventory of outfalls to the City's stormwater drainage system was conducted in 2004. The purpose of this inventory was to identify and map both known and unknown stormwater outfalls. This inventory characterized outfalls by size and location, and successfully identified previously unknown contribution points to the City's stormwater drainage system. This information enables the City to more accurately predict runoff rates and areas where drainage systems may be operating beyond design capacity. It also enables the City to identify locations and sources of pollutants entering the stormwater drainage system. The Outfall Inventory is maintained in a GIS database.

## Did You Know?

*Washington City's Drainage System has more than:*

- ▶ *1,362 as-built catch basins.*
- ▶ *56.7 miles of piped storm sewer.*
- ▶ *51.6 miles of open channel waterways.*
- ▶ *3,950 asphalt miles of streets were swept in 2010 to remove pollutants and debris.*



section



**Washington City**  
Where Dixie Begins

**Public Education and Outreach**

Revised July 2016

## Section 5.0 Public Education and Outreach

|        |   |     |   |
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| 5.1    | Regulation  | 1 - | 1 |
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### *Education for Residence*

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| 5.3  | PE-1 Developing an Outreach Strategy | 8 -  | 9  |
| 5.4  | PE-2 Classroom Education             | 10 - | 11 |
| 5.5  | PE -3 Using the Media                | 12 - | 13 |
| 5.6  | PE-4 Stormwater Outreach Materials   | 14 - | 15 |
| 5.7  | PE-5 Landscape and Lawn Care         | 16 - | 17 |
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| 5.9  | PE-7 Pet Waste Management            | 20 - | 21 |
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| 5.11 | PE-9 On-Site Septic Systems          | 23 - | 23 |
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### *Education for Business*

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|      |   |      |    |
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| 5.13 | PE-11 Landscape and Lawn Care for Businesses        | 25 - | 26 |
| 5.14 | PE-12 On-Site Infiltration for Businesses           | 27 - | 27 |
| 5.15 | PE-13 Building Equipment Maintenance                | 28 - | 28 |
| 5.16 | PE-14 Proper Storage of Materials                   | 29 - | 29 |
| 5.17 | PE-15 Stormwater Outreach for Commercial Businesses | 30 - | 31 |

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## Section 5.0 Public Education and Outreach Continued

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### *Education for Developers, Contractors, and Engineers*

5.18 PE-16 Stormwater Outreach Materials: Presentations 32 - 33

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### *Education for City Employees*

5.19 PE-17 Municipal Training and Education 34 - 35

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The following sections present the Public Education and Outreach Best Management Practices Washington City has determined to use in accomplishing its water quality goals and complying with state and federal regulations.

## Section 5.0

# Public Education & Outreach

## 5.1 Regulation



“The Permittee must implement a public education and outreach program to promote behavior change by the public to reduce water quality impacts associated with pollutants in storm water runoff and illicit discharges. Outreach and educational efforts shall include a multimedia approach to be targeted and presented to specific audiences for increased effectiveness. The educational program must include documented education and outreach efforts for the following four audiences:

- ▶ Residents,
- ▶ Businesses, Institutions, and Commercial Facilities,
- ▶ Developers and Contractors (construction), and
- ▶ MS4-owned or operated Facilities.

The Permittee must include written documentation or rationale as to why particular BMPs were chosen for its public education and outreach program”.

The following sections present the Public Education and Outreach BMPs Washington City has determined to use in accomplishing its water quality goals and complying with state and federal regulations.



UPDES Sec. 4.2.1



UPDES Sec. 4.2.1.8



## 5.2

# BMP Selection Rationale



UPDES Sec. 4.2.1.8

Washington City selected the following BMPs in order to cover a wide range of audience including homeowners, businesses, developers, contractors, engineers, and municipal employees. Coordinating with other agencies like the Washington County Water Conservancy District, Dixie Clean Storm Water Coalition, and others, helps to address a wider range of water quality concerns while taking advantages of events that are already being hosted, making the program more cost effective and efficient.

A particular priority of the City is to keep staff informed and educated on regional stormwater-related issues, such as existing materials and information available for common use (e.g., monitoring data and results of BMP evaluations), and issues such as DEQ's TMDL implications for City stormwater management activities.

Washington City's strategy for developing and distributing the public education materials is to start with information such as the most typical sources of pollutants in stormwater runoff and the impacts associated with those pollutants, and making this information available as educational handouts, flyers, and mailings. The primary pollutant of concern for the City identified in DEQ's Virgin River TMDL study is TDS. Future activities will include outreach presentations, advertisements, and workshops for the public, businesses, industry, and various other stakeholders, to educate them on impacts that the City's stormwater management program may have, and what they can do to improve stormwater quality.

A summary of the BMPs chosen for Public Education and Outreach are presented in Table 5.0. This summary also presents the BMP implementation schedule.

| Permit   | B M P ID | Best Management Practice (BMP)         | Lead Agency | Implementation and Measurable Goals  |   |                             |                                     |                                      |
|--|----------|--|-------------|--|---|-----------------------------|-------------------------------------|--------------------------------------|
|  |          |  |             | Year One   | Year Two  | Year Three                  | Year Four                           | Year Five                            |
| <b>4.2.1 Public Education and Outreach</b>         |          |  |             |  |   |                             |                                     |                                      |
| <b>4.2.1.1 Develop Municipal Outreach Strategy</b> |          |  |             |  |   |                             |                                     |                                      |
|  | PE-1     | <i>Developing an Outreach Strategy</i> | PW          | Review current outreach strategy implementation                                | Develop and implement measurement methods for outreach elements | Update outreach strategy    | Implement updated outreach strategy | Review outreach strategy             |
|  |          |  | PW          | Review audience survey form  | Update form and conduct survey at Cotton Days                   | Review audience survey form | Update form and conduct survey      | Review audience survey form          |
| <b>Promoting the Stormwater Message</b>            |          |  |             |  |   |                             |                                     |                                      |
|  | PE-2     | <i>Classroom Education</i>             | PW          | Continue participation in Water Fair   |   |                             | Update Water Fair presentation      | Continue participation in Water Fair |
|  | PE-3     | <i>Using the Media</i>                 | PW          | Continue use of website for posting stormwater information and program updates |   |                             |                                     |                                      |
|  |          |  | PW          | Update PSA message, as needed to inform public                                 |   |                             |                                     |                                      |

Table 5.0 Public Education & Outreach BMP Summary Table Cont.

| Permit | B M P ID | Best Management Practice (BMP) | Lead Agency | Lead Agency | Implementation and Measurable Goals |          |            |           |           |
|--------|----------|--------------------------------|-------------|-------------|-------------------------------------|----------|------------|-----------|-----------|
|        |          |                                |             |             | Year One                            | Year Two | Year Three | Year Four | Year Five |

**Education Displays, Pamphlets, Booklets, and Bill Inserts**

Table 5.0 Public Education & Outreach BMP Summary Table Cont.

|      |                                      |  |  |  |  |  |  |                                      |  |
|------|--------------------------------------|--|--|--|--|--|--|--------------------------------------|--|
| PE-4 | <b>Stormwater Outreach Materials</b> |  |  |  | Continue Cotton Days educational display                               |  |  | Update Cotton Days education display | Continue Cotton Days education display |
|      |                                      |  |  |  | Continue offering handouts at the city office                          |  |  |                                      |  |
|      |                                      |  |  |  | Continue promotional giveaways at Cotton Days booth and Water Fair     |  |  |                                      |  |
|      |                                      |  |  |  | Continue providing quarterly information to include in City newsletter |  |  |                                      |  |

| Permit  | B M P ID | Best Management Practice (BMP)  | Lead Agency | Implementation and Measurable Goals   |          |            |           |  |
|---------|----------|---------------------------------|-------------|---|----------|------------|-----------|--|
|         |          |                                 |             | Year One  | Year Two | Year Three | Year Four | Year Five  |
| 4.2.1.2 |          | <b>Education for Homeowners</b> |             |   |          |            |           |  |
| PE-5    |          | Lawn Care                       | PW          | Continue to offer Lawn care information to residents on City website, provide handouts at educational displays at Cotton Days and Washington City Nights.       |          |            |           | Update lawn care website information, handouts, and educational display  |
| PE-6    |          | Auto Washing                    | PW          | Continue offering auto washing information to resident on the City Website. Provide handouts at educational displays at Cotton Days and Washington City Nights. |          |            |           | Update Auto Washing on City's website, handouts, and educational display |
| PE-7    |          | Pet Waste                       | PW          | Continue offering Pet Waste information to resident on the City Website. Provide handouts at educational displays at Cotton Days and Washington City Nights.    |          |            |           | Update Pet Waste on City's website, handouts, and educational display    |

Table 5.0 Public Education & Outreach BMP Summary Table Cont.

Table 5.0 Public Education & Outreach BMP Summary Table Cont.

| Permit ID | Best Management Practice (BMP)            | Lead Agency | Implementation and Measurable Goals  |          |  |           |   |  |
|-----------|---|-------------|--|----------|--|-----------|---|--|
|           |   |             | Year One   | Year Two | Year Three   | Year Four | Year Five   |  |
| PE-7      |   | PW          | Continue signage and pet waste initiatives   |          |  |           |   |  |
| PE-8      | Swimming Pool Water                       | PW          | Continue offering information to resident on the City Website regarding Swimming Pool Water. Provide handouts at educational displays at Cotton Days and Washington City Nights. |          |  |           | Update Swimming Pool Water information on City's website, handouts, and educational display |  |
|           |   | PW          | Develop handouts for inclusion in City pool permits  |          |  |           | Continue to provide handouts to residents pulling permits for pool construction             |  |
| PE-9      | On-Site Septic Systems                    | PW          | Continue offering Septic Systems to resident on the City Website. Provide handouts at educational displays at Cotton Days and Washington City Nights.                            |          |  |           | Continue to provide handouts to residents regarding Septic Systems.                         |  |
| PE-12     | Proper Management of Auto Repair Industry | PW          | Continue offering handouts at the city office and Post information on Cities website.  |          | Contact industrial owners and educate them of this BMP |           |   |  |

| Permit         | B M P ID | Best Management Practice (BMP)                             | Lead Agency | Implementation and Measurable Goals   |          |            |           |                |  |
|----------------|----------|--|-------------|---|----------|------------|-----------|----------------|--|
|                |          |  |             | Year One  | Year Two | Year Three | Year Four | Year Five      |  |
|                | PE-13    | Building Equipment & Storage                               | PW          | Continue offering Building Equipment & Storage information to proper targeted group. Provide the information on the City Website. Provide handouts at educational displays at Cotton Days and Washington City Nights. |          |            |           | Update Handout |  |
|                | PE-15    | Stormwater Outreach for Commercial Business                | PW          | Continue to Post Information on Website   |          |            |           |                |  |
| <b>4.2.1.3</b> |          | <b>Education for Developers, Contractors and Engineers</b> |             |   |          |            |           |                |  |
|                | PE-16    | Stormwater Outreach for Commercial Business                | PW          | Continue to implement Grading Manual and BMP Handbook   |          |            |           |                |  |
|                |          |  | PW          | Continue with the developed presentation for SUHBA; when requested  |          |            |           |                |  |
|                |          |  | PW          | Track number of attendees and evaluate knowledge on stormwater topics through survey  |          |            |           |                |  |

Table 5.0 Public Education & Outreach BMP Summary Table Cont.

## 5.3

# PE-1 Developing an Outreach Strategy

People pollute. People can stop pollution. Education is less expensive and more effective than mitigation.

### Category

Municipal Outreach Program

### Target Audience

General Public

### Responsible Party

Public Works

## BMP Description

The intent of this BMP is to engage the general public's interest in preventing stormwater pollution. Washington City recognizes the public has varying levels of background knowledge of both stormwater management and its role in reducing stormwater pollution.



UPDES Sec. 4.2.1

Based on this recognition, the City is taking a multi-pronged approach to outreach efforts by:

- ▶ Generating basic awareness of stormwater pollution,
- ▶ Educating at a more sophisticated level using more substantive content, and
- ▶ Building on existing recognition of the issue to prompt behavior changes that reduce pollution (or the opportunities for pollution).



## Responsible Party

The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[romero@washingtonty.org](mailto:romero@washingtonty.org)

## Existing Program Elements

Washington City developed an outreach campaign as part of the previous permit cycle. First a problem statement was generated, and research conducted on the viability of the problem statement. Second, the audience was identified and motivations and values discussed. Strategies and tactics were then identified to appeal to the target audiences and effectively deliver the strategy. Thirdly, specific messages were then constructed to appeal to each audience segment. Media contact information was also developed. Also, a benchmark survey was conducted in the last permit cycle to better understand the audience demographic. This campaign has informed the public education and outreach efforts.

To improve evaluation and tracking for campaign, a Post Event Report (PER) was created. The PER includes an event summary, name, location, organizer, date(s), organizer overview, event objectives, facilities, type, frequency, expected and actual attendance and contact information.

## Proposed MS4 Activities

Washington City will update its outreach campaign in year three. This update will include a revised problem statement, additional research, updated audience profiles using data from surveys, and improved evaluation strategies. Data from construction and post-construction inspections, illicit discharges, and good housekeeping activities will also be utilized.

The Dixie Clean Storm Water Coalition will also be used to coordinate efforts with neighboring MS4's. The outreach campaign will be used to foster partnerships to focus overall efforts in public education and outreach and maximize effectiveness.

A watershed map with political boundaries overlaid and a background issues sheet will be prepared to raise awareness with stakeholders of common issues and potential solutions.

## Measurable Goals

Washington City will use the following goals to measure its progress in its stormwater outreach materials BMP implementation.

- ▶ Update Outreach Campaign. (Year 3)
- ▶ Conduct attitude survey to determine behavior changes. (Years 1, 3, 5)
- ▶ Track number of participants in campaign events. (Years 1-5)
- ▶ Develop map of watershed with political boundaries overlaid. (Year 1)
- ▶ Prepare issues background sheet. (Year 1)
- ▶ Participate in Dixie Clean Storm Water Coalition (Years 1-5)



# 5.4

## PE-2 Classroom Education

The City works with the Washington County Water Conservancy District and partners with the annual Water Fair held at Dixie State University. Washington City developed a stormwater-related program for each fourth grade class that attends the Water Fair.

### Category

Promoting the Stormwater Message

### Target Audience

General Public

### Responsible Party

Public Works

### BMP Description



UPDES Sec. 4.2.1.2

Classroom education will play an integral role in Washington City’s stormwater pollution education and outreach program. By providing stormwater education, the City hopes to convey the message not only to students but also to their parents. The City will work to partner with educators and experts to develop storm water-related program for the classroom.

perhaps involved at earlier ages. Schoolchildren often tell their parents what they learn in school. Therefore, teaching children about stormwater is an effective way to pass environmental awareness to their parents and throughout the entire community

City employees and professionals from the community will present these lessons and short seminars in the stormwater field through volunteer opportunities. This strategy will serve a dual purpose in accomplishing Public Involvement from the community.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

An example of BMP implementation would be helping schools that request stormwater outreach materials. Washington City can provide a range of educational aids, like simple photocopied handouts, overheads, posters and slide shows, and displays.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

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A long term goal for the City is to facilitate stormwater education being integrated directly into school curriculum. The benefits of teaching schoolchildren about stormwater issues are plentiful. These children will learn about environmental issues early and will therefore become interested and

## Existing Program Elements

Beginning in 2004, Washington City has been a participant in the annual Water Fair organized by the Washington County Water Conservancy District. The Water Fair is held for two days in May on the Dixie College Campus and is attended by approximately 1,900 local 4th graders. Washington City presents ten sessions. The goal of the Water Fair event is to build awareness of both water conservation and cleanliness. The original presentation, “H2O Makes Everything Go”, presented 2004-2009, focused on the water cycle and the relationship between human interaction and water quality. The presentation was updated in 2010 using a collaborative process with classroom educators to “A Day in the Life of the Virgin River”. This presentation was debuted at the 2010 Water Fair by the Washington City Stormwater Coordinator and a local community educator volunteer. The new presentation takes a more focused approach to pollutants of community concern and is designed to reinforce the concept that individuals drive change and everyone can make a difference when it comes to water pollution.

## Proposed MS4 Activities

Washington City intends to continue participation in the Water Fair throughout the current permit cycle. The format provides an opportunity to reach a large audience with a reasonable time investment. Improved methods of evaluation for pre and post knowledge will be to evaluate in a short survey after message delivery.

Washington City is also exploring the possibility of providing a classroom lesson plan for use by local educators to further the classroom education goals.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in Classroom Education BMP implementation.

- ▶ Continue to attend Water Fair (Years 1-5)
- ▶ Develop and implement Evaluation Tactic for Water Fair (Year 1)
- ▶ Develop Education Package for schools (Year 5).
- ▶ Update Water Fair Presentation. (Year 4)

# 5.5

## PE-3 Using the Media

The media can enhance a pollution prevention campaign and educate a targeted or mass audience about stormwater.

### Category

Promoting the Stormwater Message

### Target Audience

General Public

### Responsible Party

Public Works

### BMP Description

The media can greatly enhance a stormwater pollution prevention campaign. It can educate a targeted or mass audience about the problems of and solutions to stormwater pollution. A campaign can raise awareness of, and spark interest in, stormwater management. Surveys show that the public is interested in environmental issues, particularly when they involve water quality, drinking water, or recreation.

E-mail is the preferred communication medium among many citizens, business people, and agency officials. The City will work toward an active stormwater program that will establish an e-mail list server to keep stakeholders updated on meetings, policy discussions, and other developments. Implementing this communication link will provide a written record of the communication.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

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## Existing Program Elements

By tracking our visitors IP Address we can calculate that that our resident have taken advantage of our website. A survey conducted by Washington City in 2005 showed that 33% of its residents visit the Washington City Website. However, in 2015 a total of 109,958 users visited Washington City’s website. This is an increase of 44%. It was determined that the City website is a good place to post stormwater information. The City will continue to post information on the Public Works department's page and any other relevant department's page.

## Proposed MS4 Activities

### Develop PSAs

Washington City develop a Public Service Announcement (PSA) using information developed from audience surveys and its public education and outreach campaign. The PSAs deliver short stormwater messages to the public regarding events or pollution prevention information. The PSA is delivered by Cherry Creek Radio in cooperation with Dixie Storm Water Coalition.

### Media Kits

In year three of the current permit cycle, a media kit will be compiled to facilitate partnerships with local media. The media kit will include a watershed map, background information on pollutants specific to the area, contact list, and news articles with quotes on pollution prevention.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in its Using the Media BMP implementation.

- ▶ Develop Media Kit that includes (Year 3):
  - ▶ Watershed Map
  - ▶ Background information on pollutants specific to the area
  - ▶ Contact List
  - ▶ News articles with quotes on pollution prevention
- ▶ Continue posting stormwater information on Washington City website. (Years 1-5)
- ▶ Update PSA's annually. (Year 5)

# 5.6

## PE-4 Stormwater Outreach Materials

The City will provide education displays, pamphlets, and bill inserts to raise awareness of crucial stormwater issues.

### Category

Education Displays, Pamphlets, Booklets, & Bill Inserts

### Target Audience

General Public

### Responsible Party

Public Works

### BMP Description

A portfolio of educational brochures was developed for all Public Works staff to assist with educating and informing the public about activities that may adversely impact stormwater quality.

### Existing Program Elements

A portfolio containing a broad range of informational and educational handouts was developed by the City for staff working in the field or responding to complaints of spills, dumping, or other problematic practices. Public Work’s staff are trained in the use of the handouts, as well as information concerning the City’s Municipal Code with regard to illegal activities covered by the handouts.



### Responsible Party

The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The purpose of this portfolio is to insure that this material is readily available for distribution when opportunities arise. The handouts inform residents that their activities may cause significant pollution levels downstream, harming fish, plants, and aquatic life, as well as potentially harming people swimming or recreating in the waterway.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

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The portfolios include handouts and brochures on a wide variety of household and construction BMPs, including concrete clean out, car washing, restaurant and business stormwater BMPs, pet waste disposal, and more, addressing situations which are frequently observed. Staff responsible for the portfolio were briefed on the content and purpose of the handouts, and provisions were developed for updating and refilling the portfolios as the material was used.

The City has several locations and events that stormwater outreach materials are distributed. Information in the form of handouts, brochures, and posters is provided at the Washington City and Public Works Offices. The following tactics are used as particular opportunities for material distribution.

#### **Cotton Days Booth:**

Washington City annually sponsors a community activity called Cotton Days. This activity is a major event in the summer where the citizens of Washington City gather to celebrate the founding of the City.

The Cotton Days Celebration is a great opportunity to reach a large group of people. At Cotton Days, the Public Works Department staffs a stormwater booth that showcases educational displays and provides outreach materials. The City's stormwater survey is also conducted at this time. With this survey, the general knowledge and attitude of the public regarding stormwater can be determined.

#### **Washington City Night at the Community Center:**

Washington City Community Center is popular with city residents for swimming, rock climbing, holiday themed festivals, and community classes. In 2014 the Washington City night, at the Community Center, was held on October 6th 2014. Approximately 1,000 community members received stormwater outreach information and promotional giveaways.

## **Proposed MS4 Activities**

Washington City will primarily focus on improving tracking and evaluation methods for existing stormwater outreach materials. Washington City will educate it's residents in Cotton Days, Washington City Nights, and the Water Fair. We will also continue to play a vital roll in the Dixie Clean Storm Water Coalition.

## **Measurable Goals**

---

Washington City will use the following goals to measure its progress in its stormwater outreach materials BMP implementation.

- ▶ Continue to staff a stormwater booth at Cotton Days and Washington City Night. (Years 1-5)
- ▶ Improve tracking and evaluation methods for booths. (Year 1)
- ▶ Continue to provide stormwater information for inclusion in the City quarterly newsletter. (Years 1-5)
- ▶ Continue offering handouts at the City offices. (Year 1-5)
- ▶ Update stormwater handouts. (Year 4)
- ▶ Continue promotional giveaways promoting stormwater message at Cotton Days, Water Fair, and Washington City Night. (Years 1-5)



UPDES Sec. 4.1.2.1

# 5.7

## PE-5 Landscape and Lawn Care

This management measure uses education and outreach to control the effects of landscaping and lawn care practices on stormwater.

### Category

Education for Residents

### Target Audience

Residents

### Responsible Party

Public Works



UPDES Sec. 4.2.1.2

### BMP Description

This management measure uses education and outreach to control the effects of landscaping and lawn care practices on stormwater. Lawns produce significant amounts of nutrient-rich stormwater runoff. Pesticide runoff can contaminate drinking water supplies with chemicals toxic to both humans and aquatic organisms.

Fertilizer isn't a problem if it's used carefully. If too much fertilizer is used or applied at the wrong time, it can easily wash off the lawn or garden into storm drains and then flow untreated into lakes or streams. Just like in a garden, fertilizer in lakes and streams makes plants grow. In water bodies, extra fertilizer can mean extra algae and aquatic plant growth. Too much algae harms water quality and makes boating, fishing and swimming unpleasant. As algae decay, they use up oxygen in the water that fish and other wildlife need.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

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## Existing Program Elements

Few residents consider lawn fertilizer a cause of water quality problems. Few suburban and rural landowners are aware of their lawn's nutrient needs. Helping residents, municipalities, and lawn care professionals learn methods to reduce fertilizer and pesticide application, water use, and land disturbance can help alleviate the effects of a major source of stormwater pollution in residential communities.

Part of Washington City's current outreach campaign is to alert residents of the impact that their landscaping and lawns have on stormwater quality. Information regarding the impact of lawns and landscaping have in nutrient pollutant loading is available on the Washington City Website. This information is also available as handouts at the City offices and offered on educational displays at Cotton Days and Washington City Night.

## Proposed MS4 Activities

Washington City will continue offering lawn care and landscaping information on the City's website, handouts, and educational displays at events like Cotton Days and Washington City Night.

## Measurable Goals

Washington City will use the following goals to measure its progress in its landscape and lawn care BMP implementation.

- ▶ Continue offering lawn care and landscaping information on the City's website and handouts at events like Cotton Days. (Years 1-5)
- ▶ Update handouts based on additional data collected in other minimum control measures and the revised outreach campaign. (Year 4)



### Clean Water Tip

How can you fertilize and help keep our waters clean?

- ▶ Use fertilizers sparingly. Many plants do not need as much fertilizer or need it as often as one might think.
- ▶ Don't fertilize before a rainstorm. Consider using organic fertilizers - they release nutrients more slowly.
- ▶ Use commercially available compost or make your own using garden waste. Mixing compost with your soil means your plants will need less chemical fertilizer and puts your waste to good use. Commercial compost and soil amendments may be available from your solid waste or wastewater utility as well as your local garden store



[www.WashingtonCity.org](http://www.WashingtonCity.org)



# 5.8

## PE-6 Auto Washing

This management measure involves educating the general public on the impacts of outdoor washing of automobiles.

### Category

Education for Residents

### Target Audience

Residents

### Responsible Party

Public Works



UPDES Sec. 4.2.1.2

### BMP Description

This management measure involves educating the general public, businesses, and municipal fleets (public works, school buses, fire, police, and parks) on the water quality impacts of the outdoor washing of automobiles and how to avoid allowing polluted runoff to enter the storm drain system.

Car washing is a common routine for residents and a popular way for organizations such as scout troops, schools, and sports teams to raise funds. Outdoor car washing that uses detergent-rich water flows down the street and into the storm drain. Most stormwater impacts from car washing are from residents, businesses, and charity car wash fundraisers that discharge polluted wash water to the storm drain system.

Currently, Washington City's pollution prevention program incorporates proper car washing practices as part of an overall message to residents on ways to reduce stormwater pollution.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

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## Existing Program Elements

Currently, Washington City's pollution prevention program incorporates proper car washing practices as part of an overall message to residents on ways to reduce stormwater pollution. Information on where, and how, residents should wash their cars is provided on the City website. The water quality impacts of outdoors auto washing is also provided in the handouts distributed at the City offices and events like Cotton Days and Washington City Night.

## Proposed MS4 Activities

The most important things to consider in washing an automobile, or recreational vehicle, is where and how it is done. Most soap contains phosphates and other chemicals that harm fish and water quality. The soap, together with the dirt and oil washed from the vehicle, flows into nearby storm drains which run directly into lakes, rivers or marine waters. The phosphates from the soap can cause excess algae to grow. Algae looks bad, smells bad, and harms water quality. As algae decay, the process uses up oxygen in the water that fish need.

Washington City will continue offering information regarding auto washing on the City's website, and handouts at events like Cotton Days.

The information on the website and in the handouts will be updated in year three (3) of this permit to reflect new information and/or improved pollution prevention techniques.

## Measurable Goals

Washington City will use the following goals to measure its progress in its auto washing BMP implementation.

- ▶ Continue offering auto washing information on the City's website and handouts at events like Cotton Days. (Years 1-5)
- ▶ Update handouts based on additional data collected in other minimum control measures and the revised outreach campaign. (Year 4)



### Clean Water Tip

How can you wash your car and help keep our waters clean?

- ▶ Use soap sparingly. Use a hose nozzle with a trigger to save water.
- ▶ Pour your bucket of soapy water down the sink when you're done, not in the street. Or wash your car on a grassy area so the ground can filter the water naturally.
- ▶ Best of all, take your car to a commercial car wash, especially if you plan to clean the engine or the bottom of your car. Most car washes reuse wash water several times before sending it to the sewer system for treatment.

To find out more about the impacts from washing your vehicle and what you can do to prevent water pollution, visit the Washington City Website.



[www.WashingtonCity.org](http://www.WashingtonCity.org)

# 5.9

## PE-7 Pet Waste

This measure provides education on how pet waste harms water quality and how citizens can prevent this water pollution.

### Category

Education for Residents

### Target Audience

Residents

### Responsible Party

Public Works



UPDES Sec. 4.2.1.2

### BMP Description

When pet waste is improperly disposed, it can be picked up by stormwater runoff and washed into storm drains or nearby waterbodies. Since storm drains do not always connect to treatment facilities, untreated animal feces often end up in lakes and streams, causing significant water pollution.

Decaying pet waste consumes oxygen and sometimes releases ammonia. Low oxygen levels and ammonia can damage the health of fish and other aquatic life. Pet waste carries bacteria, viruses, and parasites that can threaten the health of humans and wildlife. Pet waste also contains nutrients that promote weed and algae growth (eutrophication). Cloudy and green, Eutrophic water makes swimming and recreation unappealing or even unhealthy.

This BMP consist of distributing materials that explain how pet waste harms water quality and how citizens can help reduce water pollution. Additionally, Washington City will continue to install signage as part of its outreach strategy.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

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## Existing Program Elements

Currently, Washington City's pollution prevention program incorporates proper pet waste disposal practices as part of an overall message to residents on ways to reduce stormwater pollution. Information on proper pet waste disposal is provided on the City Website. The water quality impacts of improper waste disposal is also provided in the handouts distributed at the City offices and events like Cotton Days.

Washington City implements pet waste management programs by posting signs in parks or other pet-frequented areas.

## Proposed MS4 Activities

Sign posting is one of the outreach strategies used by Washington City. These signs designate areas where dog walking is prohibited, where waste must be recovered, or where dogs can roam freely.

In addition to postings, the City has installed "pet waste stations" with waste receptacles and a supply of waste collection bags, scoops, and shovels.

Washington City will continue to implement its sign posting strategy and "pet waste stations". The City encourages residents to dispose of pet waste in the trash, bury it in their yards, or flush it down the toilet.

## Measurable Goals

Washington City will use the following goals to measure its progress in its Pet Waste BMP implementation.

- ▶ Continue offering pet waste information on the City's website and handouts at events like Cotton Days. (Years 1-5)
- ▶ Update handouts based on additional data collected in other minimum control measures and the revised outreach campaign. (Year 4)
- ▶ Continue signage and pet waste station initiatives. (Years 1-5)



### Clean Water Tip

How can you get rid of pet waste and help keep our waters clean? Here are some options.

- ▶ Scoop it up and flush it down the toilet. That's best because then your community sewage treatment plant or your septic system treats the pet waste.
- ▶ Seal the waste in a plastic bag and throw it in the garbage.
- ▶ Bury small quantities in your yard where it can decompose slowly. Dig a hole one foot deep. Put three to four inches of waste at the bottom of the hole. Cover the waste with at least eight inches of soil. Bury the waste in several different locations in your yard and keep it away from vegetable gardens.



[www.WashingtonCity.org](http://www.WashingtonCity.org)

# 5.10 PE-8 Swimming Pool Water

This management measure is to raise awareness of the adverse impact chlorinated water has on water quality.

### Category

Education for Residents

### Target Audience

Residents

### Responsible Party

Public Works



UPDES Sec. 4.2.1.2

## BMP Description

Chlorinated water discharged to surface waters has an adverse effect on water quality. Swimming pools are a major source of chlorinated water discharged into sanitary and storm sewer systems. An average swimming pool holds 19,000 gallons of highly chlorinated water, which is toxic to wildlife and fish. This management measure is to raise awareness of the adverse impact chlorinated water has on water quality.



## Responsible Party

The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

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## Existing Program Elements

There are currently elements that exist in the program that provide information about the adverse affects of swimming pool water on water quality, or how to properly dispose of it.

## Proposed MS4 Activities

Washington City has post information regarding Swimming Pool Water on its website: <https://washingtoncity.org/publicworks/PoolSpas.pdf> and handouts have been developed and distribute at community events.

## Measurable Goals

Washington City will use the following goals to measure its progress in its swimming pool water BMP implementation.

- ▶ Provide information on proper disposal on City Website (Year 1)
- ▶ Develop and distribute handout with swimming pool permits (Year 1)
- ▶ Develop handout to distribute with swimming pool permits. (Year 1)
- ▶ Update website information and handouts (Year 4)

# 5.11

## PE-9 On-site Septic Systems

This management measure is to raise awareness of the potential adverse impact on-site septic systems have on water quality.

### Category

Education for Residents

### Target Audience

Residents

### Responsible Party

Public Works

### BMP Description

A failing septic system is a threat to human and environmental health. Dangerous bacteria, viruses and high levels of nitrogen can be discharged to the groundwater table, which may lead to the contamination of groundwater, drinking wells that are down-grade of the failing system. These same pollutants may be fed into nearby waterways by groundwater, resulting in pollutant discharge to streams, rivers and lakes used for fishing, swimming, boating, and recreation. Pollutants of this nature can lead to sickness, skin irritations, and can be harmful to aquatic life.



UPDES Sec. 4.2.1.2

### Existing Program Elements

There are currently elements that exist in the program that provide information about the adverse effects of improperly installed and/or maintained septic systems have on water quality.

### Proposed MS4 Activities

Washington City has posted information regarding on-site septic systems on its website: <https://washingtoncity.org/services/publicworks/stormwater/septicssystems> and handouts have been developed and distributed at community events.

### Measurable Goals

Washington City will use the following goals to measure its progress in its on-site septic system BMP implementation.

- ▶ Post information on website (Year 1)
- ▶ Update website information and handouts (Year 4)

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtoncity.org](mailto:rromero@washingtoncity.org)

# 5.12 PE-10 On-site Infiltration

This management measure is to raise awareness of the potential advantages of on-site infiltration.

### Category

Education for Homeowners

### Target Audience

Homeowners

### Responsible Party

Public Works



UPDES Sec. 4.2.1.2

## BMP Description

This management measure is to raise awareness of the potential advantages of on-site infiltration and promote Low Impact Design (LID) practices. In LID, natural landscape features are utilized to detain, infiltrate, and treat runoff. This approach is widely endorsed by city, state, and federal agencies at all levels.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtoncity.org](mailto:rromero@washingtoncity.org)

## Existing Program Elements

There are currently no elements in the existing program that provide information about the advantages of LID practices in treating stormwater.

## Proposed MS4 Activities

Washington City is interested in utilizing LID practices for stormwater treatment because of its potential to aid in controlling pollutant loading and its relatively low implementation cost. Information regarding LID practices will be posted on the City's website within year one (1) to raise awareness. In year four, the website information will be updated and handouts will be developed to distribute at community events. LID practices will be incorporated in other Minimum Control Measures within this Stormwater Management Plan.

## Measurable Goals

Washington City will use the following goals to measure its progress in its on-site infiltration BMP implementation.

- ▶ Post information on website (Years 1-5)
- ▶ Update website information and develop handout (Year 4)
- ▶ Incorporate LID practices throughout the Storm Water Management Plan

# 5.13

## PE-11 Landscape and Lawn Care for Businesses

This management measure uses education and outreach to control the effects of landscaping and lawn care practices on stormwater.

### Category

Education for Business

### Target Audience

Business

### Responsible Party

Public Works



UPDES Sec. 4.2.1.3

### BMP Description

This management measure uses education and outreach to control the effects of landscaping and lawn care practices on stormwater. Lawns produce significant amounts of nutrient-rich stormwater runoff. Pesticide runoff can contaminate drinking water supplies with chemicals toxic to both humans and aquatic organisms.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

### Existing Program Elements

Few residents consider lawn fertilizer a cause of water quality problems. Few suburban and rural landowners are aware of their lawn's nutrient needs. Helping residents, municipalities, and a lawn care professionals learn methods to reduce fertilizer and pesticide application, water use, and land disturbance can help alleviate the effects of a major source of stormwater pollution in residential communities.

Part of Washington City's current outreach campaign is to alert residents of the impact that their landscaping and lawns have on stormwater quality. Information regarding the impact of lawns and landscaping have in nutrient pollutant loading is available on the Washington City Website. This information is also available as handouts at the City offices.



## Proposed MS4 Activities

Fertilizer isn't a problem if it's used carefully. If too much fertilizer is used or applied it at the wrong time, it can easily wash off the lawn or garden into storm drains and then flow untreated into lakes or streams. Just like in a garden, fertilizer in lakes and streams makes plants grow. In water bodies, extra fertilizer can mean extra algae and aquatic plant growth. Too much algae harms water quality and makes boating, fishing and swimming unpleasant. As algae decay, they use up oxygen in the water that fish and other wildlife need.

Washington City will continue offering lawn care and landscaping information on the City's website, and handouts at events like Cotton Days.

The information on the website and in the handouts will be updated in year four of this permit to reflect new information and/or improved pollution prevention techniques.

Washington City will develop a handout to accompany related industries, institutions and commercial facilities yearly upon license renewal; informing them of the water quality impacts associated with illicit discharges and improper disposal of waste.



[www.WashingtonCity.org](http://www.WashingtonCity.org)

## Measurable Goals

Washington City will use the following goals to measure its progress in its landscape and lawn care BMP implementation.

- ▶ Continue to post information on city website and offer handouts at city events (Years 1-5)
- ▶ Develop handout to accompany city business license renewal for related industries. (Year 1)
- ▶ Update website information and handouts (Year 4)



### Clean Water Tip

How can you fertilize and help keep our waters clean?

- ▶ Use fertilizers sparingly. Many plants do not need as much fertilizer or need it as often as one might think.
- ▶ Don't fertilize before a rainstorm. Consider using organic fertilizers - they release nutrients more slowly.
- ▶ Use commercially available compost or make your own using garden waste. Mixing compost with your soil means your plants will need less chemical fertilizer and puts your waste to good use. Commercial compost and soil amendments may be available from your solid waste or wastewater utility as well as your local garden store

# 5.14

## PE-12 On-site Infiltration for Businesses

This management measure is to raise awareness of the potential advantages of on-site infiltration.

### Category

Education for Business

### Target Audience

Business

### Responsible Party

Public Works



UPDES Sec. 4.2.1.2

### BMP Description

This management measure is to raise awareness of the potential advantages of on-site infiltration and promote LID practices. In LID, natural landscape features are utilized to detain, infiltrate, and treat runoff. This approach is widely endorsed by agencies at all levels.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

### Existing Program Elements

There are currently no elements in the existing program that provide information about the advantages of LID practices in treating stormwater.

### Proposed MS4 Activities

Washington City is interested in utilizing LID practices for stormwater treatment because of its potential to aid in controlling pollutant loading and its relatively low implementation cost. Information regarding LID practices will be posted on the City’s website within year one to raise awareness. In year four, the website information will be updated and handouts will be developed to distribute at community events. LID practices will be incorporated in other Minimum Control Measures within this Stormwater Management Plan

### Measurable Goals

Washington City will use the following goals to measure its progress in its on-site infiltration BMP implementation.

- ▶ Post information on website (Year 1)
- ▶ Update website information and develop handout (Year 4)
- ▶ Incorporate LID practices throughout the Storm Water Management Plan (Years 1-5)

# 5.15

## PE-13 Building Equipment Maintenance

This management measure uses education and outreach to control the effects of landscaping and lawn care practices on stormwater.

### Category

Education for Business

### Target Audience

Business

### Responsible Party

Public Works



UPDES Sec. 4.2.1.3

### BMP Description

This management measure uses education and outreach to control the effects of building equipment and maintenance practices on stormwater. Activities associated with building equipment maintenance such as hazardous materials storage, pest control, parking lot cleaning and waste storage and disposal are potentially hazardous to water quality if pollutants enter storm drain systems or receiving waters.

### Responsible Party

The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.



The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
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(435)656-6317  
[rromero@washingtonty.org](mailto:rromero@washingtonty.org)

### Existing Program Elements

This practice deals with the confinement of the maintenance, repair, cleaning, and storage of construction machinery, vehicles, and equipment, to areas specifically designed and designated for those purposes. It is applicable to both temporary and permanent sites and facilities, whether open or covered. It emphasizes the importance of controlling runoff from these areas.

### Proposed MS4 Activities

In the first permit year Washington City will develop a handout to educate business owners on proper methods and procedures to use in their building and equipment maintenance programs to minimize their impact on water quality. A standard procedure for including the handout with all new and renewal business licenses will also be implemented. Information developed for the handout will also be posted on the website.

### Measurable Goals

Washington City will use the following goals to measure its progress for its building equipment maintenance BMP implementation.

- ▶ Post information on website (Year 1)
- ▶ Continue to handout educational material.

# 5.16

## PE-14 Proper Storage of Materials

Responsible management of common chemicals can significantly reduce polluted runoff.

Category

Education for Business

Target Audience

Business

Responsible Party

Public Works



UPDES Sec. 4.2.1.3

### BMP Description

Responsible management of common chemicals, such as fertilizers, solvents, paints, cleaners, and automotive products, can significantly reduce polluted runoff. Such products must be handled properly in all stages of development, use, and disposal. Materials management entails the selection of the individual product, the correct use and storage of the product, and the responsible disposal of associated waste(s).

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtoncity.org](mailto:rromero@washingtoncity.org)

### Existing Program Elements

There are currently no elements in the existing program that provide information to business owners about proper storage of common chemicals and materials.

### Proposed MS4 Activities

In the first permit year Washington City will develop information to post on its website to educate business owners on proper methods and procedures to use in their materials storage management to minimize their impact on water quality. A standard procedure for developing and distributing handouts to businesses will also be implement in year three (3). Information developed for the handouts and website will be updated as needed. Information regarding proper material storage will also be included in the Public Works hold message.

### Measurable Goals

- ▶ Develop and post information on website. (Years 1-5)
- ▶ Develop and distribute handouts to local businesses. (Year 3-5)
- ▶ Track number of handouts distributed. (Years 3-5)
- ▶ Evaluate website and handouts annually. (Years 1-5)

# 5.17

## PE-15 Stormwater Outreach for Commercial Businesses

The target audience for this BMP is industry and business groups whose activities influence the health of watersheds

### Category

Education for Business

### Target Audience

Business

### Responsible Party

Public Works



UPDES Sec. 4.2.1.3

### BMP Description

The target audience for this BMP is industry and business groups whose activities influence the health of watersheds. Many commercial activities contribute to stormwater pollution (such as vehicle washing, landscape fertilization, and improper hazardous waste disposal). The City will address these types of commercial activities specifically in business outreach strategy. Because many business practices use materials and chemicals that are harmful to the environment, it is important business owners, operators, and employees to know about practices that should be avoided to maintain and improve water quality.

With this outreach program for businesses, the City expects to increase public awareness about water quality issues.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

### Existing Program Elements

Washington City’s Illicit Discharge Detection and Elimination Program contains a draft outreach campaign element for businesses. This element includes education on how to detect illicit discharge and alert business owners of the impact their activities have on stormwater quality.

## Proposed MS4 Activities

The City will develop an outreach campaign designed to educate business owners on proper management of waste materials and dumpsters and proper management of parking lot surfaces (sweeping). More specifically, the City will develop and distribute material to business owners on the proper way to dispose of trash and debris collected when sweeping or cleaning parking lot surfaces. The City will also encourage all business owners that have dumpsters to make sure they are covered and not leaking pollutants out onto the ground. This education will be incorporated as a part of the Illicit Discharge Detection and Elimination program.

In year one (1) of this permit cycle, the City will develop and post information on its website. In year three (3), the City will develop and distribute information to business owners on proper storage of materials for waste management and dumpsters, and proper maintenance of parking structures. The following items are example topics that could be contained in a booklet.

- ▶ Promptly cleaning up vehicle leaks
- ▶ Using a rag or absorbent material to properly dispose of automotive fluids
- ▶ Regularly sweeping the parking lot and picking up litter
- ▶ Avoiding washing down the parking lot unless a mop for spot cleaning is used
- ▶ Disposing of the mop water to a sanitary sewer
- ▶ Rinsing the parking lot with water only (no soap) after first sweeping it up and cleaning up oil spots with an absorbent, or collecting the soapy rinse water and pumping it to the sanitary sewer

The City will require each commercial business to have a spill response and prevention procedure included as part of the sites SWPPP.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in its stormwater outreach for commercial businesses BMP implementation.

- ▶ Continue to post information on city website and offer handouts at city events (Years 1-5)
- ▶ Develop handout to accompany city business license renewal for related industries. (Year 1)
- ▶ Update website information and handouts (Year 4)

# 5.18

## PE-16 Stormwater Outreach Materials for Developer, Contractors and Engineers

The target audience for this BMP is developers, contractors, and engineers whose activities influence the health of watersheds.

### Category

Education for Developers, Contractors, & Engineers

### Target Audience

Developers, Contractors, & Engineers

### Responsible Party

Public Works



UPDES Sec. 4.2.1.4

### BMP Description

The target audience for this BMP is developers, contractors, and engineers whose activities influence the health of watersheds. Many activities form contractors and developers contribute to stormwater pollution (such as land grading, ). The City will address the types of activities conducted by developers and engineers specifically in an outreach strategy. Engineers and developers have an important part in pollution prevention. In both the design and construction of new development, an opportunity to implement control measures directly into a project is presented. Construction sites are particularly places of potential pollution. Because many construction sites store and use materials and chemicals that are harmful to the environment, it is important that contractors and their employees know about practices that should be avoided to maintain and improve water quality.

With this outreach program for developers and contractors, the City expects to increase public awareness about water quality issues.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)

## Existing Program Elements

Components in Washington City's managing construction runoff minimum control measure are directed at contractors, developers, and engineers. In particular, the City provides BMPs for construction sites to implement. These BMPs are reviewed by the City in the contractors SWPPP. The Washington City Grading Manual and BMP Handbook are both provided to minimize the effects of development and re-development on the environment.

## Proposed MS4 Activities

Washington City will continue to implement its current control measures. In addition to the information in the Grading Manual and Best Management Practices Handbook, the City intends to develop presentations targeted at building professionals. The City will present an informative presentation at the Southern Utah Home Builders Association (SUHBA), the primary professional association for contractors and developers. With this presentations, the City expects to provide information to the majority of engineers, construction contractors, developers, development review staff, and land use planners in the area. The material presented will included the development of storm water pollution prevention plans (SWPPPs) and BMPs for reducing adverse impacts from storm water runoff from development sites.

As previously mentioned, the Construction Site Runoff control measure will included additional information of the development of a SWPPP. The grading manual will be updated to reflect the requirements of DEQ and will be the City's primary education and implementation tool for contractors, developers, and engineers.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in its stormwater outreach for developers, contractors, and engineers BMP implementation.

- ▶ Continue to implement Grading Manual and BMP Handbook. (Years 1-5)
- ▶ Develop presentation for SUHBA. (Year 1)
- ▶ Present at SUHBA. (Year 1-5)
- ▶ Update presentation for SUHBA and present at SUHBA. (Years 1-5)
- ▶ Track number of attendees at presentations. ( Years 1-5)
- ▶ Evaluate attendees knowledge on stormwater related issues at presentations. (Years 1-5)



# 5.19

## PE-17 Municipal Employee Training and Education

The City will implement a training program designed to teach staff about potential sources of stormwater contamination

### Category

Education for City Employees

### Target Audience

City Employees

### Responsible Party

Public Works



UPDES Sec. 4.2.1

### BMP Description

The City will implement a training program designed to teach staff about potential sources of stormwater contamination and ways to minimize the water quality impact of municipal activities, such as park and open space maintenance, fleet and building maintenance, construction and land disturbances, and storm drain system maintenance. Training will include a general stormwater awareness message pollution prevention/good housekeeping measures, spill response and prevention, and information about the operation and maintenance and operation of structural BMPs. Proper disposal of trash and debris will be specifically addressed.

The City training program will also include information on stormwater pollution prevention plans (SWPPPs) for municipal facilities and BMPs recommended for use in the field to prevent contaminated discharges. Washington City field staff will be trained to recognize, track, and report illicit discharges.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
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## Existing Program Elements

Washington City has established a training programs for field maintenance staff to address safety, materials handling, waste disposal, or other issues. The City's training program format is a classroom style. These meetings include watching Educational DVDs with any additional questions addressed. Basic stormwater information and details about pollution prevention and BMPs are also addressed. Quizzes are given at the completion of the training and scores recorded in employee files.



UPDES Sec. 4.2.1.5

## Measurable Goals

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Washington City will use the following goals to measure its progress in its municipal training BMP implementation.

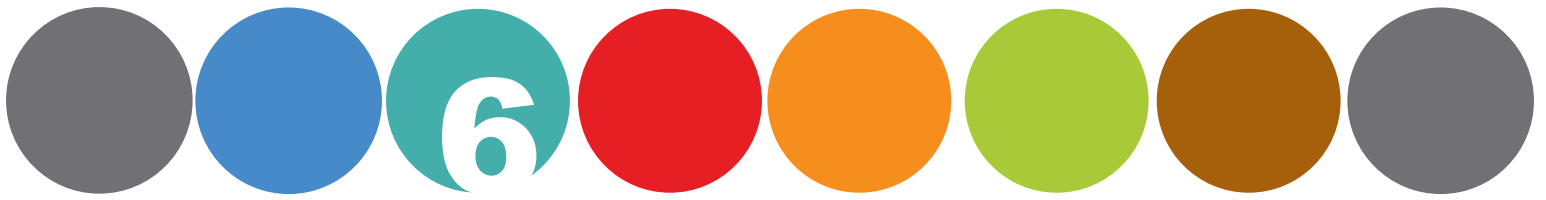
- ▶ Continue to conduct training; track dates, topics, attendees; and quiz results. (Years 1-5)

## Proposed MS4 Activities

The City will conduct more comprehensive training when new employees are hired. Whenever possible, the City will provide additional in-field training to demonstrate proper implementation of operation and maintenance of BMPs and housekeeping measures at municipal facilities. DVDs will continue to be the primary tool used during training.



UPDES Sec. 4.2.1.7



section 9



**Washington City**  
Where Dixie Begins

**Public Involvement and Participation**

Revised July 2016

## Section 6.0 Public Involvement and Participation

|        |  |     |   |
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### *Soliciting Public Opinion*

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The following sections present the Public Involvement and Participation Best Management Practices Washington City has determined to use in accomplishing its water quality goals and complying with state and federal regulations.

## Section 6.0 Public Involvement & Participation

### 6.1 Regulation



“The Permittee must implement a program that complies with applicable State and Local public notice requirements. The SWMP shall include ongoing opportunities for public involvement and participation such as advisory panels, public hearings, watershed committees, stewardship programs, environmental activities, other volunteer opportunities, or other similar activities. The Permittee should involve potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and education organizations. Permittees shall adopt a program or policy directive to create opportunities for the public to provide input during the decision making processes involving the development, implementation and update of the SWMP document including development and adoption of all required ordinances or regulatory mechanisms. If the Permittee maintains a website, the latest version of the SWMP document shall be posted on the website to allow the public to review and provide input.

The Permittee must at a minimum comply with State and Local public notice requirements when implementing a public involvement/participation program.”



UPDES Sec. 4.2.2



UPDES Sec. 4.2.2.3

## 6.2

# BMP Selection Rationale

The City selected the following two BMPs to address the Public Involvement/Participation Minimum Control Measure #2 and to complement its public education efforts. PI-1 details the public involvement and participation required under the UPDES program. Certain policies, implementation actions, and BMPs included in the Stormwater Plan may trigger requirements for additional public involvement, such as amending the Municipal Code, the Development Code, or implementing new ordinances. These processes will have a public involvement component in their own right, which will be adhered to in the normal City approval processes.



UPDES Sec. 4.2.2

Washington City is participating in an informal organization known as the Dixie Clean Storm Water Coalition. This organization gathers monthly to discuss stormwater related issues that affect the area. The coalition is comprised of representatives of the various municipalities, as well as private consultants. Washington City would like to see this coalition take a more active role in stormwater management for the area, particularly in the area of public involvement. Through the next five years, the City will encourage the coalition to take on the role of organizing citizen participation in periodic cleanup efforts, or assisting with educational or interpretive events. The following BMPs are expected to help the City achieve these goals.



UPDES Sec. 4.2.2.1

Table 6.0 Public Involvement BMP Summary Table Continued

| Permit       | Best Management Practice (BMP)                                    | Lead | Implementation and Measurable Goals  |   |            |   |  |
|--------------|---|------|--|---|------------|---|--|
|              |   |      | Year One   | Year Two  | Year Three | Year Four   | Year Five  |
| <b>4.2.2</b> | <b>Public Involvement/Participation</b>                           |      |  |   |            |   |  |
|              | <b>Soliciting Public Opinion</b>                                  |      |  |   |            |   |  |
| 4.2.2        | PI-1 <i>Public Involvement/ Participation Program Development</i> | PW   |  |   |            |   | Create opportunities for the public to provide input during the decision making processes involved in the SWMP |
| 4.2.2.2      |   | PW   | Make revised SWMP program available to the public for review and input                   |   |            |   |  |
| 4.2.2.3      |   | PW   | Make current version of the SWMP program available for public review on the City website |   |            |   |  |
| 4.2.2.4      |   | PW   | Comply with public notice requirements   |   |            |   |  |
|              |   | PW   |  | Use information from biannual survey to gauge public attitude toward pollution prevention |            | Use information from biannual survey to gauge public attitude toward pollution prevention |  |

Table 6.0 Public Involvement BMP Summary Table Continued

| Permit | Best Management Practice (BMP)                  |    | Implementation and Measurable Goals   |          |            |           |           |
|--------|---|----|---|----------|------------|-----------|-----------|
|        |   |    | Year One  | Year Two | Year Three | Year Four | Year Five |
| PI-2   | City Council Involvement                        | PW | Develop and implement presentation to City Council on SWMP program requirements                                 |          |            |           |           |
|        |   | PW | Solicit feedback from City Council members annually. Factor information obtained into communication strategies. |          |            |           |           |
| PI-3   | Watershed Organization/<br>Stakeholder Meetings | PW | Continue meeting with Dixie Clean Storm Water Coalition; Track meeting dates, agendas, and attendance           |          |            |           |           |



# 6.3

## PI-1 Public Participation/Involvement Program Development

Stakeholders should be informed of water quality issues in their community and asked to contribute their ideas.

| Category                  | Target Audience | Responsible Party |
|---------------------------|-----------------|-------------------|
| Soliciting Public Opinion | General Public  | Public Works      |

### BMP Description and Selection Rationale

Public involvement and public participation naturally require the inclusion of stakeholders. Stakeholders for Washington City’s Stormwater Management Plan includes citizens, local school groups, community leaders, local and state government representatives, and business owners in the watershed.

A public participation program is a way to inform citizens about stormwater impacts, in addition to gaining support for the stormwater management program.



#### Definition

*Stakeholders are individuals or groups in the community that are most affected by Washington City’s Stormwater Program. They have a vested interest in the waterbody and stormwater activities.*



## Responsible Party

The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
 Stormwater Coordinator  
 (435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements



UPDES Sec. 4.2.2.1

Washington City currently provides several opportunities for public involvement and participation. In 2003, the City published a Community Project List. The Community Project List is a compilation of community projects posted at City Hall to encourage volunteerism and community involvement. In 2004, Washington City developed a Community Hotline as a mechanism for the public to report illicit discharges.

As previously stated, Washington City is participating in an informal organization know as the Southern Utah Stormwater Management Coalition. The coalition meets monthly to discuss stormwater related issues that affect the area. The organization is comprised of representatives from the various municipalities, as well as private consultants.

A long term goal of the stormwater coalition is to share the cost of implementation for their respective stormwater management programs,

particularly in the areas where their programs overlap. For example, all the MS4s in the area will need to implement elements like public outreach and education, and public involvement.

In 2005, Washington City conducted a base line attitude survey. One primary focus of the survey was how the community felt about stormwater management as a spending priority. The results of the survey indicated that approximately 83% of residents agree that stormwater management should be made a spending priority.

In the seven years since the City implemented its first Stormwater Management Plan, public involvement has fallen short of the City's goals. Within the next permit period, Washington City intends to boost this aspect of its SWMP.

## Proposed MS4 Activities

Through the next five years, the City will work to provide additional opportunities for public involvement in its Stormwater Program. The areas in this minimum control measure the City will focus on include public meetings and providing more opportunities for stormwater related activities in the community. The City will investigate implementing program elements like adopt-a-stream, community clean up, and community monitoring.

As previously mentioned in the Public Education and Outreach section, the City hopes to utilize professionals from the community for its stormwater education and outreach efforts. Washington City will investigate creating an opportunity for local colleges to be involved by assisting the City in its survey efforts.

Washington City will work toward soliciting opinion and feedback from the public on processes involved in the SWMP. One technique the City will implement to accomplish this is to provide an area for comments and feedback on the website where the SWMP is posted.

## Measurable Goals

Washington City will use the following goals to measure its progress in the Public Participation Program implementation.

- ▶ Make revised SWMP available to the public for review and input. (Year 1)
- ▶ Post the SWMP on Washington City's website for public review and comments for the life of the permit. (Year 1-5)
- ▶ Comply with local public notice requirements. (Years 1-5)
- ▶ Use information from biannual survey to gauge public attitude toward pollution prevention. (Year 2 &4)
- ▶ Investigate community involvement activities, including clean-up and monitoring. (Year 4)



UPDES Sec. 4.2.2.2



UPDES Sec. 4.2.2.2

# 6.4

## PI-2 City Council Involvement

The goal of this BMP is to maintain an informed and involved City Council through communication of program requirements and strategies.

|                           |                 |                   |
|---------------------------|-----------------|-------------------|
| Category                  | Target Audience | Responsible Party |
| Soliciting Public Opinion | General Public  | Public Works      |

### BMP Description and Selection Rationale

The goal of this BMP is to maintain an informed and involved City Council through periodic communication of program requirements, regulations, strategies, and outcomes. The City Council is an important partner in the implementation of a successful stormwater management program. They establish citywide goals and policies, guide strategy development, and ultimately approve funding for stormwater management planning and capital project implementation.

Implementation of the Stormwater Management Program is a task that will require the participation of all the City departments. Traditionally, Public Works has been responsible for the implementation of the SWMP. Although the Public Works Department will continue to oversee the Stormwater Plan, a successful SWMP will require participation and cooperation from all departments.

The scope of this permit is too large for Public Works to handle alone.

The City Council is in a position to help facilitate cooperation from the City departments and the Councils involvement will be vital for the program to be successful.



### Important

The City Council is in a position to help facilitate cooperation from all City departments, and their involvement will be vital for the Stormwater Program to be successful.

The scope of this permit is too large for Public Works to implement alone.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**

Storm Water Coordinator  
(435)656-6317

[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements

The City Council and Planning Commission are important partners in the implementation of a successful stormwater management program. They establish citywide goals and policies, guide strategy development, and ultimately approve funding for stormwater management planning and capital project implementation.

## Proposed MS4 Activities

The Public Works Department will continue to update the City Council through informational communication packet items, and periodic presentation. The goal is to communicate the overall scope of the program and to receive feedback from the council.

## Measurable Goals

A presentation regarding the SWMP program requirements, regulations, strategies will be given to the City Council in year one (1) of the permit Cycle.

Communication efforts will be evaluated by soliciting feedback from City Council members at least once a year. Information obtained from the feedback will be factored into staff communication strategies through adaptive management.

If feedback indicates communication avenues are not effective, a different approach will be developed and implemented.

**6.5**

# PI-3 Watershed Organization/ Stakeholder Meetings

The City will encourage the development of a local stormwater coalition to restore, protect, and promote the natural resources of the watershed

|                                  |                        |                          |
|----------------------------------|------------------------|--------------------------|
| <b>Category</b>                  | <b>Target Audience</b> | <b>Responsible Party</b> |
| <b>Soliciting Public Opinion</b> | <b>General Public</b>  | <b>Public Works</b>      |

## BMP Description

A watershed organization/stakeholders meeting incorporates the ideas and resources of many different groups into a single organization. The groups can consist of local governments, citizens, nonprofit environmental groups, and local universities, among others. The City will encourage the development of a local stormwater coalition. The purpose of which is to restore, protect, and promote the natural resources of the watershed. To accomplish this, a watershed organization will work to implement public education and stormwater management programs, stream clean-up events, or restoration activities.

One of the benefits of stakeholder meetings is the variety of ideas from people of all backgrounds and interests. Some participants will be more knowledgeable than others, and they can share their expertise with the other stakeholders. In some cases, stakeholders might belong to other groups with overlapping concerns. In such cases, resources can be pulled together to achieve corresponding goals.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
 Storm Water Coordinator  
 (435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)

## Existing Program Elements

Washington City is participating in an organization known as the Dixie Clean Storm Water Coalition. This organization gathers monthly to discuss stormwater related issues that affect the area. The coalition is comprised of representatives of the various municipalities, as well as private consultants and area contractors and developers. Washington City would like to see this coalition take a more active role in stormwater management for the area, particularly in the area of public involvement.

## Proposed MS4 Activities

Through the next five years, the City will encourage the coalition to take on the role of organizing citizen participation, or assisting with educational or interpretive events.

## Measurable Goals

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Washington City will use the following goals to measure its progress in the Public Participation Program implementation.

- ▶ Continue participating in the Dixie Clean Storm Water Coalition. (Years 1-5)
  
- ▶ Track meeting dates, times, attendees, and agendas. (Years 1-5)



# section 7



**Washington City**  
Where Dixie Begins

## **Illicit Discharge Detection and Elimination**

Revised July 2016



## Section 7.0 Illicit Discharge Detection and Elimination

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### *Developing an IDDE Program*

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### *Public Reporting*

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### *Trash and Illegal Dumping*

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### *Education for Municipal Employees*

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|     |  |         |
|-----|--|---------|
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The following sections present the Illicit Discharge Detection and Elimination Best Management Practices Washington City has determined to use in accomplishing its water quality goals and complying with state and federal regulations.

## Section 7.0 Illicit Discharge Detection & Elimination

### 7.1 Regulation



“Washington City has developed, implement and enforce an IDDE program to systematically find and eliminate sources of non-storm water discharges from the MS4 and has implemented the procedures to prevent illicit connections and discharges according to the minimum performance measures listed below: The Purpose of the ordinance is to provide for the health, safety, and general welfare of the cities of Washington City through the regulation of non-storm water discharge to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the UPDES permit process. The object of this ordinance are:

- 1: To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges y any use.
2. To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system.
3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

Effectively Washington City Public Works has implemented a Stormwater Pollution Prevention Plan which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and actions to eliminate or reduce pollution discharges to the Stormwater. Whenever the Public Works Department finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (a) The performance of monitoring, analyses, and reporting;
- (b) The elimination of illicit connections or discharges;
- (c) That violating discharges, practices, or operations shall cease and desist;
- (d) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
- (e) Payment of a fine to cover administrative and remediation costs; and
- (f) The implementation of source control or treatment BMPs



UPDES Sec. 4.2.3

## 7.2

# BMP Selection Rationale



UPDES Sec. 4.2.3

Washington City selected the following BMPs to address the Illicit Discharge Detection and Elimination requirements set forth by DEQ. BMPs ID-1 and ID-2 describe the City's processes that respond to and document complaints regarding water quality, including illicit discharges, in fulfillment of permit requirements. These two BMPs include a hotline for complaints and protocols for the most efficient and effective follow-up actions in response to calls. Outfall inventory and mapping is a project the City has already completed and will maintain during the permit period in accordance with permit requirements. BMP ID-1 includes the monitoring program conducted by the City to identify and track the sources of illicit discharges. The City's program to prohibit and enforce elimination of illicit discharges is described under BMP ID-1, and addresses section 4.2.3.2 of the permit requirements.

Requirements to inform the public regarding the hazards of illicit discharges is implemented through several of the public education BMPs. Proper trash and debris disposal is addressed specifically through BMP ID-3. Requirements addressing non-stormwater discharges require that the City assess these discharges, and determine if they adversely impact the stormwater system. If they are found to cause an adverse impact, appropriate management practices or regulations will be developed and implemented. This assessment and appropriate follow up will be conducted as BMP ID-1.

Per DEQ requirements, Washington City will publicly list and publicize a hotline for public reporting of spills and other illicit discharges. A written record shall be kept of all calls received, all follow-up actions taken, and any feedback received from public education efforts. BMP ID-2 addresses this requirement.

| Permit       | Best Management Practice (BMP)   | Implementation and Measurable Goals |   |  |  |  |  |
|--------------|--|-------------------------------------|---|--|--|--|--|
|              |  | Year One                            | Year Two  | Year Three   | Year Four  | Year Five  |  |
| <b>4.2.3</b> | <b>Illicit Discharge Detection and Elimination (IDDE)</b>                          |                                     |   |  |  |  |  |
| 4.2.3.1      | <b>Developing an IDDE Program</b>  |                                     |   |  |  |  |  |
|              | <i>ID-1 Illicit Discharge Detection and Elimination (IDDE) Program Development</i> | PW                                  | Update storm sewer mapping  |  |  |  |  |
| 4.2.3.2      |  | PW                                  | Review illicit discharge ordinance  | Update ordinance if necessary                                |  |  |  |
| 4.2.3.3.1    |  | PW                                  | Implement written systematic procedures for locating and listing priority illicit discharge areas                                 | Update priority illicit discharge areas list                 |  |  |  |
| 4.2.3.3.2    |  | PW                                  | Conduct field assessment activities on 20% of priority areas  | Conduct field assessment activities on 20% of priority areas | Conduct field assessment activities on 20% of priority areas | Conduct field assessment activities on 20% of priority areas | Conduct field assessment activities on 20% of priority areas |
| 4.2.3.3.3    |  | PW                                  | 20% of Dry weather screening will be inspected yearly. With all outfalls inspected at least once during the 5 year Permit period. |  |  |  |  |
| 4.2.3.4      |  | PW                                  | Implement SOPs for source tracing   | Review source tracing SOPs                                   | Update source tracing SOPs                                   |  |  |
| 4.2.3.5      |  | PW                                  | Implement SOPs for characterizing the nature and potential impact of illicit discharges   | Review characterization SOPs                                 | Update characterization SOPs                                 |  |  |

| Permit    | Best Management Practice (BMP) | Implementation and Measurable Goals   |  |  |           |           |
|-----------|--------------------------------|---|--|--|-----------|-----------|
|           |                                | Year One  | Year Two   | Year Three   | Year Four | Year Five |
| 4.2.3.5.1 | PW                             | Implement inspection report form and decision process for utilizing analytical monitoring                         | Review inspection report form and analytical monitoring decision process | Update inspection report form and analytical monitoring decision process |           |           |
| 4.2.3.6   | PW                             | Implement SOPs for ceasing the illicit discharge  | Review ceasing illicit discharge SOPs                                    | Update ceasing illicit discharge SOPs                                    |           |           |
| 4.2.3.6.1 | PW                             | Implement documentation procedures for IDDE investigations  | Review documentation procedures for IDDE investigations                  | Update IDDE investigation procedures                                     |           |           |
| 4.2.3.9.1 | PW                             | Implement a written spill/dumping response procedure  | Review spill/dumping response procedure                                  | Update spill/dumping response procedure                                  |           |           |
| 4.2.3.10  | PW                             | Implement procedures for program evaluation and assessment  | Review program evaluation and assessment procedures                      | Update program evaluation and assessment procedures                      |           |           |
| 4.2.3.10  | PW                             | Implement database for mapping, tracking number and type of spill or illicit discharges, and inspection conducted | Review database procedures   | Update database procedures   |           |           |

**Trash and Illegal Dumping**

|         |      |                                    |    |  |
|---------|------|------------------------------------|----|--|
| 4.2.3.7 | ID-2 | <i>Trash and Debris Management</i> | PW | Inform public employees, business, and the general public of hazards associated with illicit discharges and improper disposal of waste |
|---------|------|------------------------------------|----|--|

| Permit                                   | Best Management Practice (BMP)                        |    | Implementation and Measurable Goals  |   |            |           |           |
|--|---|----|--|---|------------|-----------|-----------|
|  |   |    | Year One   | Year Two  | Year Three | Year Four | Year Five |
| 4.2.3.8                                  |   | PW | Continue to conduct Community Cleanup Day  |   |            |           |           |
|  |   | PW | Promote services for the collection of household hazardous wastes  |   |            |           |           |
| <b>Public Reporting</b>                  |   |    |  |   |            |           |           |
| 4.2.3.9                                  | ID-3 <i>Community Hotline</i>                         | PW | Publicly list and publicize telephone number for public reporting of spills and other illicit discharges   |   |            |           |           |
|  |   | PW | Implement tracking system to maintain written record of calls received, follow-up actions taken, and feedback received from public education efforts | Continue to maintain record of calls received, follow-up actions taken, and feedback received |            |           |           |
| <b>Education for Municipal Employees</b> |   |    |  |   |            |           |           |
| 4.2.3.1.1                                | ID-4 <i>Municipal Employee Training and Education</i> | PW | Continue to employee training; track dates, attendance, topics, and quiz results   |   |            |           |           |

# 7.3

## ID-1 Illicit Discharge Detection and Elimination Program Development

Washington City has develop a comprehensive program to address non-stormwater discharges, including ordinances and procedures.

**Category**  
**Developing an IDDE Program**

**Target Audience**  
**Construction, Commercial, & Municipal**

**Responsible Party**  
**Public Works**



UPDES Sec. 4.2.3.1 & 2

Stormwater regulations define an "illicit discharge" as any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a UPDES Permit (other than the UPDES Permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities." Common sources of non-stormwater, dry weather discharges in urban areas include apartments and homes, car washes, restaurants, airports, landfills, and gas stations, to name a few.

Dry weather discharges contribute significant pollutants to receiving waters. The detection and elimination of illicit discharges is important to protect and restore urban waterways. The development of an effective municipal illicit discharge detection and elimination (IDDE) program requires the establishment of adequate legal authority to prohibit illicit discharges; to assess and prioritize potential areas, pollutants, or behaviors of concern; to coordinate existing resources; to establish a mechanism to track activities; and to establish measurable goals.

Washington City will develop a comprehensive program to address non-stormwater discharges, including reporting hotlines and response procedures.

The City will focus on tracing and eliminating illicit discharges that flow into City infrastructure. The City will prioritize areas for targeted investigation, such as dry weather screening at outfalls.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)

## Existing Program Elements

### Outfall Inventory and Mapping



UPDES Sec. 4.2.3.1

An initial task to locating and eliminating illicit discharges is surveying, inventorying, and mapping all outfalls to the stormwater drainage system. An outfall map, in conjunction with systematic monitoring and sampling, forms the basis for further investigations. Washington City initiated a stormwater drainage system outfall inventory in 2004, which involved a physical inspection of the entire drainage system. At the same time, staff inventoried and mapped all of the outfalls within the City. The updated outfall map (included in the City's Geographic Information System) and outfall database have been completed. The inventory database includes information regarding the precise location of each outfall, its source, and additional relevant information such as observed outfall condition. The physical inspection also resulted in locating dozens of additional unmapped and previously unknown outfalls to the stormwater drainage system.

### Illicit Discharge Ordinance:

Washington City has established an illicit discharge ordinance to prohibit non-storm water discharges to its drainage system, including spills, illicit connections, illegal dumping and sanitary sewer overflows ("SSOs") into the storm sewer system. Enforcement procedures and action have been developed pursuant to DEQ's requirements. [www.WashingtonCity.org](http://www.WashingtonCity.org)

### IDDE Handbook

Washington City has established an IDDE Handbook that includes a plan to address non-storm water discharges to the MS4, including spills, illicit connections, sanitary sewer overflows, and illegal dumping. The IDDE Handbook has been developed to comply with sections 4.2.3.3 to 4.2.3.6 of the UPDES General Permit requirements.



## Definition

*An SSO (Sanitary Sewer Overflow) is a discharge of untreated sanitary wastewater. SSOs are illegal and must be eliminated.*



## Ordinance

*In October 2009, Washington City adopted Ordinance NO. 2009-15. This ordinance establishes methods for controlling introduction of pollutants into the City storm sewer system. For more information, please visit the Washington City Website.*

[www.WashingtonCity.org](http://www.WashingtonCity.org)



Currently, Washington City has developed and is implementing the following elements of the **IDDE Handbook**:



UPDES Sec. 4.2.3.3.1

- ▶ Written systematic procedures for locating and listing priority areas in the City that are likely to have illicit discharges. This priority area list will be updated annually to reflect changing priorities. A map indicating priority outfalls has been provided in Appendix C.



UPDES Sec. 4.2.3.4

- ▶ Standard Operating Procedures (SOPs) for tracing the source of an illicit discharge in accordance with the City's Storm Drain Network Tracking Illicit Discharge Investigation Procedures. This procedures include a Tracking Field Sheet that records visual inspections



UPDES Sec. 4.2.3.5

- ▶ SOPs for characterizing the nature of illicit discharges reported by the hotline. These procedures include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. An investigation is initiated immediately upon being alerted of a potential illicit discharge.



UPDES Sec. 4.2.3.5.1

- ▶ An Illicit Discharge Detection Report Form has been developed in the event the source of a non-storm water discharge is identified and confirmed. The report was developed to meet the requirements of section 4.2.3.5.1 of the permit requirements. Currently, there are no provisions for analytical monitoring.



UPDES Sec. 4.2.3.6

- ▶ Enforcement SOPs for ceasing illicit discharge. These procedures have been developed to comply with section 4.2.3.6 of the permit requirements. Illicit discharges to the MS4 are prohibited. Upon detection, Washington City requires immediate cessation of improper disposal practices upon confirmation of responsible parties in accordance with its Illicit Discharge Detection and Elimination ordinance previously referenced.



UPDES Sec. 4.2.3.3.1

- ▶ SOPs for field assessment activities (ORIs) for the purpose of verifying outfall locations and detecting illicit discharges. Activities including dry weather screening of outfalls or facilities serving priority areas, as well as routine dry weather screening of all outfalls that discharge within Washington City.

## Proposed MS4 Activities

### Outfall Inventory and Mapping

The outfall mapping effort will be ongoing as new development and redevelopment result in the construction of new outfalls to the stormwater drainage system. Ongoing efforts will include, yearly map updates from “as-built” plans. Periodic additional updates to capture outfalls from new developments or newly permitted dischargers will be conducted as needed.

### Field Assessment Activities

Washington City will field assess at least 20 percent of its Class 1 priority areas to detect illicit discharges within one year of receiving coverage from the general permit. The City will field assess an additional 20 percent of the identified high priority water bodies or other high priority area each year thereafter. Field assessment activities shall utilize an Outfall Reconnaissance Inventory Form (ORI) to document findings.

### Update IDDE Report Form

Analytical monitoring may be necessary to aid in the identification of potential sources of an illicit discharge and to characterize the nature of the illicit discharge. Washington City intends to develop procedures in determining if analytical monitoring will be required.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in the Illicit Discharge Detection and Elimination Program development and implementation.

- ▶ Conduct GIS map updates at least annually and conduct physical re-inspections of new or redeveloped areas every five (5) years.
- ▶ Review Existing illicit discharge ordinance in year one (1) and update, if necessary, in year two (2).
- ▶ Do field assessment activities
  - Dry weather screening of priority areas.
  - Routine dry weather screening.
  - Annually inspect 20% of priority areas. (Years 1-5)
  - Annually inspect 20% of Class 2 routine areas (Years 1-5)
- ▶ Develop SOP in determining whether analytical monitoring will be necessary. (Year 1)
- ▶ Update priority area list annually. (Years 1-5)

# 7.4 ID-2 Community Hotline

Washington City will provide a hotline for public reporting and spill and other illicit discharges.

| Category         | Target Audience | Responsible Party |
|------------------|-----------------|-------------------|
| Public Reporting | General Public  | Public Works      |



### UPDES Sec. 4.2.3.9 **BMP Description**

Section 4.2.3.9 of the permit regulation states, “Permittees shall publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges. A written record shall be kept of all calls received, all follow-up actions taken, and any feedback received from public education efforts”.



### **Responsible Party**

The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
 Stormwater Coordinator  
 (435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements

Washington City is currently implementing a hotline for the receipt of complaints/reports of illicit discharges or spills, and maintains a tracking system documenting complaints/incidents and follow-up actions taken. The City uses a database system to record information from the caller. Once the incident information is entered into the system, a city work-order is generated and SOPs implemented to respond to public referrals of illicit discharge.



UPDES Sec. 4.2.3.9.1

### Spill Response Handbook

Washington City has currently developed a Spill Response Handbook. This handbook contains written spill/dumping response procedures and a flow chart for internal use, that shows the procedures for responding to public referrals of spills, dumping, or illicit discharges. Also included in the handbook are the various responsible agencies, and their contacts, who would be involved in an illicit discharge incidence response. The contact list will be maintained and updated as changes occur. Spill/dumping response forms are included for documenting the nature of spill/dumping.

## Proposed MS4 Activities

The hotline number will continue to be provided on informational brochures.



**Stormwater Hotline**  
**(435) 656-6317**  
**After Hours**  
**(435) 634-5730**

## Measurable Goals

Washington City will use the following goals to measure its progress in its Community Hotline BMP development and implementation.

- ▶ Each year the number of calls received and the follow-up actions will be tracked. Information regarding the complaint will also be documented in databases maintained by Public Works. (Years 1-5)
- ▶ Continue to publicly list and publicize a Community Hotline number for public reporting of spills and other illicit discharges. (Years 1-5)
- ▶ Continue to improve cartêgraph management system as required. (Years 1-5)
- ▶ Implement illicit discharge website reporting. (Year 3)



### Important

**DON'T LET POLLUTERS RUIN OUR RIVERS AND STREAMS!**

Call the hotline to report the following problems:

- ▶ Illegal dumping
- ▶ Trash or debris
- ▶ Foul smells
- ▶ Spills
- ▶ Unusual colors or cloudiness

# 7.5

## ID-3 Trash and Debris Management

Washington City will facilitate proper trash removal by providing assistance to the community in their trash disposal and raising awareness.

**Category**  
  
**Trash and  
Illegal  
Dumping**

**Target Audience**  
  
**General  
Public**

**Responsible Party**  
  
**Public  
Works**



UPDES Sec. 4.2.3.7

### BMP Description

Trash and debris have become significant pollutants and detract from the aesthetics of a landscape.

Trash also poses a threat to wildlife and human health (e.g., choking hazards to wildlife and bacteria to humans). Citizens should be informed about the environmental consequences of littering. The City will facilitate proper trash disposal by providing assistance to the community in their trash removal.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

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## Existing Program Elements

Washington City currently implements a Community Cleanup Day. Monthly, the City provides a free trash collection service. This service is provided to facilitate proper waste management in the community. The City characterizes the type of trash and debris collected on Community Cleanup Day. Using this data, the City can more effectively target the communities common pollutants in their Public Education and Outreach Campaign.



UPDES Sec. 4.2.3.8

Part of the training program that the City implements for its employees specifically addresses the proper disposal of trash and debris.

Washington County Solid Waste (WCSW) operates a landfill that accepts household hazardous waste at specified dates and locations. The landfill is located at the following address.

325 N Landfill Rd  
 Washington, UT  
 84780  
 (435) 673-2813

For more information, included dates and times for pick up, visit the WCSW website.

<http://www.wcsw.org/household-hazardous-waste/>



## Proposed MS4 Activities

Washington City will continue to implement community Cleanup day. The City will investigate focusing on this issue in its Public Education and Outreach program.

## Measurable Goals

Washington City will use the following goals to measure its progress in its Trash and Debris Management BMP development and implementation.

- ▶ Continue to implement Community Cleanup Day and provide a free trash collection service monthly.
- ▶ Track the number of hours dedicated to Community Cleanup Day.
- ▶ Continue to track and characterize types of trash and debris. (Year 1-5)
- ▶ Use the Public Education and Outreach materials to educate citizens on the effects of litter on stormwater quality. (Year 4)



### Additional Information

*Washington County Solid Waste accepts the following types of materials:*

- ▶ Toxic Flammable Liquids
- ▶ Corrosive Liquid Acidic Inorganic
- ▶ Lithium Battery
- ▶ Toxic Solids Organic
- ▶ Mercury Contained in Articles
- ▶ Fluorescent Lamps
- ▶ Corrosive Liquid Acidic Organic
- ▶ Batteries Wet with Acid
- ▶ Medical Waste
- ▶ Caustic Alkali Liquids
- ▶ Batteries Dry Containing Potassium
- ▶ Propylene
- ▶ Propane
- ▶ Paint Related Materials
- ▶ Flammable Liquids
- ▶ Paint Thinners
- ▶ Aerosols
- ▶ Household Hazardous Waste
- ▶ Tire Recycling
- ▶ Used Oil

**7.6**

# ID-4 Municipal Employee Training and Education

Washington City will teach staff about sources of stormwater contamination and ways to minimize the water quality impact of municipal activities.

**Category**  
  
**Education for City Employees**

**Target Audience**  
  
**Municipal Employees**

**Responsible Party**  
  
**Public Works**

## BMP Description



UPSES Sec. 4.2.3.1.1

The City will implement a training program designed to teach staff about potential sources of stormwater contamination and ways to minimize the water quality impact of municipal activities, such as park and open space maintenance, fleet and building maintenance, construction and land disturbances, and storm drain system maintenance. Training will include a general stormwater awareness message pollution prevention/good housekeeping measures, spill response and prevention, and information about the operation and maintenance and operation of structural BMPs. Proper disposal of trash and debris will be specifically addressed.

The City training program will also include information on stormwater pollution prevention plans (SWPPPs) for municipal facilities and BMPs recommended for use in the field to prevent contaminated discharges. Washington City field staff will be trained to recognize, track, and report illicit discharges.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements

Washington City currently uses a multi-faceted approach to municipal employee education through in-house training programs, on-the-job reinforcement, general awareness and education materials, and workshops and conferences.

In-house training is conducted in a classroom style program using Educational DVDs. Topics include spill prevention and spill reporting and response. Employees watch the topic, discuss the material, do classroom exercises and take quizzes.

After this training, on-the job-reinforcement is conducted with employees involved in illicit discharge detection and prevention activities such as outfall reconnaissance. Periodically, managers check employee's work practices to ensure BMPs are implemented properly.

General awareness and education materials are both presented by and received by employees as part of public education and outreach efforts.

Workshops and conferences about pollution prevention and stormwater management BMPs are attended by program managers.

## Proposed MS4 Activities

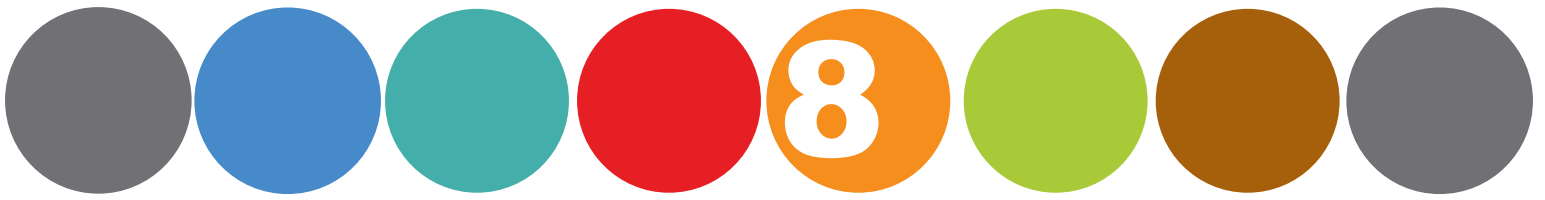
Washington City will continue to implement its current training program.

## Measurable Goals

Washington City will use the following goals to measure its progress in its Employee Training BMP development and implementation.

- ▶ Track dates of training workshops and conferences. (Years 1-5)
- ▶ Track number and names of attendees to training workshops and conferences. (Years 1-5)
- ▶ Track training workshops and conference topics. (Years 1-5)
- ▶ Track training workshops and conference quiz results. (Years 1-5)
- ▶ Evaluate IDDE training program and update if necessary. (Year 3)





section



**Washington City**  
Where Dixie Begins

**Construction Runoff**

Revised July 2016



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## Section 8.0 Construction Stormwater Management

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The following sections present the Construction Site Stormwater Runoff Control Best Management Practices. Washington City has determined to use these BMPs to accomplish its water quality goals and comply with state and federal regulations.

## Section 8.0

# Construction Site Stormwater Runoff Control

## 8.1 Regulation

“All Permittees shall develop, implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale according to the minimum performance measures listed below; including, projects proposed by the Permittee’s own departments and agencies, shall comply with these requirements.



UPDES Sec. 4.2.4

All Permittees shall develop and implement SOPs or similar type of documents for construction site inspection and enforcement of construction storm water pollution control measures. The procedures must clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The Permittee must have the authority to the extent authorized by law to impose sanctions to ensure compliance with the local program. These procedures and regulatory authorities must be written and documented in the SWMP.”



UPDES Sec. 4.2.4.2

## 8.2

# BMP Selection Rationale

Washington City selected the following BMPs to address each component of the construction site runoff control requirements.

Regulatory authority for implementation and enforcement of the City's erosion and sediment control program is provided by ordinance. The Grading Manual provide a framework for oversight of construction that requires erosion and sediment control measures during construction or redevelopment of sites disturbing greater than or equal to 1 acre. Specific requirements for construction site operators are addressed during the Site Plan Review review processes and are included in the City's Grading Manual, which has been adopted by the City Council as ordinance. Grading Permits require the development of erosion and sediment control plans.



UPDES Sec. 4.2.4.1

Additionally, the ordinance, through the Grading Manual, provides authority to regulate construction sites to prevent or control wastes that can adversely impact water quality. The adopted manuals, ordinances, and programs fulfill requirements set forth by DEQ. The training of City staff to recognize and correct erosion problems on construction sites and to enforce the provisions of the City's adopted ordinances, is a critical component of Washington City's Stormwater Management Program. The training component is being addressed and specific staff are being prepared for permitting, inspections, and enforcement. The City's Grading Manual requires construction operators to apply sediment and erosion control BMPs and actively follow their SWPPP.



UPDES Sec. 4.2.4.1.1

| Permit             | Best Management Practice (BMP)                         | Implementation and Measurable Goals |  |   |   |           |
|--------------------|--|-------------------------------------|--|---|---|-----------|
|                    |  | Year One                            | Year Two   | Year Three  | Year Four   | Year Five |
| <b>4.2.4</b>       | <b>Construction Runoff</b>                             |                                     |  |   |   |           |
| <b>4.2.4.1</b>     | <b>Municipal Program Oversight</b>                     |                                     |  |   |   |           |
|                    | CSW-1 <i>Ordinance</i>                                 | PW                                  | Update existing ordinance  | Review ordinance  | Update ordinance, if necessary  |           |
| <b>4.2.4.2</b>     |  | PW                                  | Review and update existing enforcement strategies  | Review enforcement strategies                               | Update enforcement strategies, if necessary                               |           |
| <b>4.2.4.1.1</b>   |  | PW                                  | Amend Grading Manual to clarify need for construction site SWPPPs and a provision for access by qualified personnel to inspect site BMPs |   |   |           |
| <b>4.2.4.3.1-2</b> | CSW-2 <i>Construction Phase Plan Review</i>            | PW                                  | Review and update existing construction-phase stormwater plan review procedures  | Review construction-phase stormwater plan review procedures | Update construction-phase stormwater plan review procedures, if necessary |           |
| <b>4.2.4.4.3</b>   | CSW-3 <i>Municipal Construction Program Inspection</i> | PW                                  | Implement biweekly inspections of identified priority sites  | Continue biweekly inspections of identified priority sites  |   |           |

|           |  |  |  |  |  |
|-----------|--|--|--|--|--|
| 4.2.4.4.1 | Continue to conduct monthly inspections of active construction sites                     |  |  |  |  |
| 4.2.4.2.2 | Track number and type of enforcement actions   |  |  |  |  |
| 4.2.4.5   | Continue to conduct employee training; track dates, attendance, topics, and quiz results |  |  |  |  |
| 4.2.4.4   | Develop and implement SOPs for construction site inspection and enforcement              | Review SOPs for construction site inspection and enforcement | Update SOPs for construction site inspection and enforcement |  |  |

**Construction Site Planning and Management**

|       |                                      |    |  |                                   |  |   |
|-------|--------------------------------------|----|--|-----------------------------------|--|---|
| CSW-4 | <i>Construction Sequencing</i>       | PW | Update existing sequencing recommendations in grading manual | Review sequencing recommendations | Update sequencing recommendation, if necessary |   |
|       |                                      |    |  |                                   |  | Track number of plans using construction sequencing |
| CSW-5 | <i>Land Grading</i>                  | PW | Update existing recommendations in grading manual            | Review recommendations            | Update recommendation, if necessary            |   |
| CSW-6 | <i>Preserving Natural Vegetation</i> | PW | Update existing recommendations in grading manual            | Review recommendations            | Update recommendation, if necessary            |   |

**Good Housekeeping/Materials Management**

|       |   |    |   |                     |                                   |  |
|-------|---|----|---|---------------------|-----------------------------------|--|
| CSW-7 | <i>Best Management Practices Handbook</i> | PW | Review and update existing BMP Handbook | Review BMP Handbook | Update BMP handbook, if necessary |  |
|-------|---|----|---|---------------------|-----------------------------------|--|

**8.3**

# CSW-1 Erosion and Sediment Control Ordinance

This BMP is intended to provide for maintenance, review, and augmentation of City Ordinances and Codes.

**Category**  
  
**Municipal Program Oversight**

**Target Audience**  
  
**Contractors, Owners, Developers, and Engineers**

**Responsible Party**  
  
**Public Works**



UPDES Sec. 4.2.4.2.1

## BMP Description

This BMP is intended to provide for maintenance, review, and augmentation of City Ordinances and Codes. These ordinances have been adopted to enable administration and enforcement of programs aimed at reducing and/or eliminating erosion and sedimentation associated with both public and private construction land alteration.

Erosion and sedimentation from construction sites can lead to reduced water quality and other environmental problems. Per DEQ requirements, Washington City must implement a stormwater management program that includes a component for controlling erosion and sediment on construction sites disturbing at least one acre, or sites less than one acer that are part of a common development. The permit requirements state that the City must establish the appropriate legal authority to accomplish this.

To comply with these regulations, Washington City will use its grading ordinance as the legal mechanism for triggering erosion and sediment control requirements.

## Washington City Hot Line

This BMP establishes enforcement response expectations. Appropriately, failure to respond to enforcement actions or repeated violations will result in escalating enforcement against the offending party.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)

## Existing Program Elements

In October 2006, the City adopted a comprehensive Grading Manual. This manual was published in conjunction with Washington City's Best Management Practices Handbook. The goal of the Grading Manual is to facilitate the implementation of effective grading, drainage, and erosion and sediment control BMPs as a standard for all land disturbances.

The Manual clearly outlines Washington City's grading permitting program that has been developed to promote environmentally sound construction practices. The Grading Manual contains an element that requires construction operators to prepare a sediment and erosion control plan that specifies the control strategy and BMPs they plan to implement to protect water quality. The Manual does not currently specify this requirement as a "Storm Water Pollution Prevention Plan (SWPPP)". However, the City has required contractors to submit a State SWPPP with their grading permit applications for the last year to ensure that their erosion and sediment control plan addresses all the necessary elements stated in the construction general permit.

Legal authority has been granted by the City Council to enforce the programs outline in the Manual. This legal authority will continue to be used as the regulatory component for controlling erosion and sediment on construction sites.

The City currently has a written enforcement strategy to implement the enforcement provisions of the Grading Manual. Standard operating procedures include escalating enforcement procedures and actions. These SOPs include specific processes and sanctions to minimize the occurrence of pollutant discharge and obtain compliance from violators.



### Definition

*A Storm Water Pollution Prevention Plan (SWPPP) is for stormwater discharge. The SWPPP includes erosion prevention measures and sediment controls that, when implemented, will decrease soil erosion and off-site non-point pollution on a parcel of land.*



### Ordinance

*In October 2006, Washington City adopted Ordinance NO. 2006-30. This ordinance establishes methods for controlling erosion and sediment control. By formally adopting the Washington City Grading Manual. For more information, please visit the Washington City Website.*

[www.WashingtonCity.org](http://www.WashingtonCity.org)

UPDES Sec. 4.2.3.1



UPDES Sec. 4.2.4.2





## Proposed MS4 Activities

Washington City will continue to use its Grading Manual as its legal authority to enforce erosion and sediment control regulations on construction sites. Any ordinance requirements not currently being met by the City will be added to the Grading Manual and the manual will be the implementation tool for inspection, erosion, and sediment control requirements. The City intends to review its existing grading ordinance to ensure that proper authority has been granted per DEQ requirements.



UPDES Sec. 4.2.4.1.1

The Grading Manual will be amended to clarify the requirement for construction operators to prepare a Storm Water Pollution Prevention Plan that applies sediment and erosion control BMPs as necessary to protect water quality. These plans will also outline measures to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. The SWPPP requirements will be equivalent with the SWPPP requirement set forth in the UPDES Storm Water General Permit for Construction Activities.



UPDES Sec. 4.2.4.1.3

The Grading Manual will be updated to include a provision for access by qualified personnel to inspect construction storm water BMPs on private properties that discharge to the MS4.



UPDES Sec. 4.2.4.2.2

The Manual will continue to establish enforcement response expectations. As required, failure to respond to enforcement actions or repeated violations will result in escalating enforcement against the offending party. These enforcement actions are clearly outlined in SOPs and the Grading Manual.

Washington City will document and track all enforcement actions.

## Measurable Goals

Washington City will use the following goals to measure its progress in its erosion and sediment control ordinance BMP implementation.

- ▶ Review and update existing written enforcement strategies. (Year 2)
- ▶ Review ordinance. (Year 2)
- ▶ Review enforcement strategies. (Year 2)
- ▶ Update ordinance if necessary. (Year 3)

# 8.4

## CSW-2 Construction Phase Plan Review

Washington City will develop and implement a construction site runoff control program for construction activities.

**Category**  
Municipal Program Oversight

**Target Audience**  
Contractors, Developers, and Engineers

**Responsible Party**  
Public Works

### BMP Description



UPDES Sec. 4.2.4.1

Washington City will develop and implement a construction site runoff control program to address stormwater runoff from construction activities that result in a land disturbance of one acre or greater.

Construction activities that disturb more than an acre, or sites less than an acre that are part of a larger common development, may pose a significant threat to local waterways based on the large amount of exposed soil. Therefore, implementing proper best management practices can greatly reduce the impacts to the City’s receiving waterbodies.

The City’s procedures for site plan review will include key staff conducting reviews, developing a system to track plans, developing procedures for consistent plan review, and training staff.

The procedures will also include:

- ▶ A pre-construction SWPPP review.
- ▶ An evaluation of the plan for opportunities to use low impact design (LID).
- ▶ Identifying priority construction sites, as defined in the permit requirements.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)

## Existing Program Elements



UPDES Sec. 4.2.4.3.1

Washington City requires that contractors conduct a “pre-construction” meeting where City inspectors meet with the contractor and their erosion and sediment control plan is evaluated. In the future, the City will ensure that a Storm Water Pollution Prevention Plan (SWPPP) review has been conducted prior to the pre-construction meeting being scheduled so the City can ensure plans are complete and in compliance with State and Local regulations.



UPDES Sec. 4.2.4.3.2

The procedures for the pre-construction review have already been developed and include the use of a SWPPP review checklist developed by the City. In addition to the pre-construction review procedures, SOPs for identifying priority site have also been developed. The priority site SOPs have yet to be implemented into the City’s review process.

The City has developed a SWPPP processes procedure for contractors/owners that outlines the process to prepare and submit a SWPPP to the state and City. This SWPPP process procedure is also designed to aid them in preparing plans that are complete and in compliance with regulations. This aid also outlines the process to prepare and submit a SWPPP to the state and City.

Washington City keeps records for all construction sites that disturb greater than or equal to one acre. These records included construction sites that are less than one acre, but are part of a larger development.



## Definition

*“Low Impact Development” (LID) is an approach to land development (or re-development) that works with nature to more closely mimic pre-development hydrologic functions. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. - UPDES Sec. 7.25*

## Proposed MS4 Activities

Washington City staff will review stormwater site plans to ensure they address requirements and protect water quality. Review staff will ensure that water quality objectives, erosion and sediment control requirements, and BMP maintenance are adequately considered.



UPDES Sec. 4.2.4.1.1

The UPDES Storm Water General Permit for Construction Activities requires that construction sites disturbing greater than or equal to one acre have a site-specific Stormwater Pollution Prevention Plan (SWPPP) for their stormwater discharges. This SWPPP will be submitted to the City for review when the contractor/citizen applies for a grading permit. A construction project tracking system will be utilized and the construction site operator will be required to submit proof of a Notice of Intent (NOI) submittal to the state before the City approves a project.



UPDES Sec. 4.2.4.1.2

The UPDES Storm Water General Permit for Construction Activities requires that construction sites disturbing greater than or equal to one acre have a site-specific Stormwater Pollution Prevention Plan (SWPPP) for their stormwater discharges. This SWPPP will be submitted to the City for review when the contractor/citizen applies for a grading permit. A construction project tracking system will be utilized and the construction site operator will be required to submit proof of a Notice of Intent (NOI) submittal to the state before the City approves a project.



UPDES Sec. 4.2.4.3.1

Washington City will conduct a pre-construction SWPPP review that will include a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development. Procedures for the pre-construction review have been developed and include the use of a checklist.



UPDES Sec. 4.2.4.4.1

Washington City must inspect all phases of construction prior to land disturbance; and actively follow construction. The Permittee must document in its SWMP all active construction and send it to Washington City on a monthly basis.



UPDES Sec. 4.2.4.4.2

Furthermore, the contractor these inspections, BMP's and SOP's must be written in the SWMP document and must clearly state who is responsible for the site inspection.



UPDES Sec. 4.2.4.3.3

Procedures for identifying priority sites have been developed by the City. The City's review process will include identifying priority construction sites, as defined in the permit requirements. These Priority sites will be inspected biweekly. (Defined in Part 7.36)

## Measurable Goals

Washington City will use the following goals to measure its progress in its Construction Phase Plan Review BMP implementation.

- ▶ Incorporate into review procedures the evaluation of potential LID design opportunities. (Year 3)
- ▶ Incorporate into review procedures the identification of high priority construction sites. (Year 1)
- ▶ Update construction phase stormwater plan review procedures if necessary. (Year 3)
- ▶ Update review procedures for LID evaluation. (Year 3)
- ▶ Update review procedures for identifying priority construction sites. (Year 3)

# 8.5

## CSW-3 Municipal Construction Inspection Program

This BMP focuses on the City developing a construction inspection program and inspecting construction sites within its jurisdiction.

**Category**  
  
**Municipal Program Oversight**

**Target Audience**  
  
**Contractors, Developers, and Engineers**

**Responsible Party**  
  
**Public Works**

### BMP Description

Construction sites lacking adequate stormwater controls can contribute significant amounts of sediment to streams and rivers. To reduce the water quality impacts of active construction sites, UPDES regulations require construction projects greater than one acre, or sites less than one acre that are part of a larger common development, to install and maintain appropriate erosion and sediment control, stormwater management, and housekeeping BMPs.

In addition, the UPDES regulations require Washington City to implement programs to control runoff from construction sites. These regulation include reviewing construction plans, conducting site inspections, and enforcing control measures necessary to minimize water quality impacts. This BMP focuses on the City developing a construction inspection program and inspecting construction sites within its jurisdiction.

Washington City has provided a Hotline for the community to report Storm Water related Issues. Records of these violations are kept, along with the violation and follow up. These Hotline Numbers will be on each contractors signs for individuals to report on a certain site.

**Hotline Number: (435) 656-6317**

**After Hours: (435) 634-5730**



UPDES Sec. 4.2.4.4.5

### Responsible Party

The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.



The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements

Washington City has developed SOPs for construction site inspection and to enforce construction storm water pollution control measures. These procedures specify who is responsible for site inspections and who has authority to implement enforcement procedures.

UPDES Sec. 4.2.4.2.1



The City utilizes the Public Safety Department to impose penalties and ensure compliance with the Stormwater Program requirements.

UPDES Sec. 4.2.4.4.2



Currently, Washington City conducts monthly inspections for active construction sites. These inspections are filed with the Public Works Department. The City has developed a procedure for construction operators/owners to notify the City when active construction is completed, so that verification of final stabilization and removal of all temporary control measures can be conducted.

UPDES Sec. 4.2.4.4.2



The City inspects all phases of construction. An inspection is conducted prior to land disturbance, during active construction, and following active construction.

UPDES Sec. 4.2.4.6



All City employees whose primary job duties are related to permitting, plan review, construction site inspections, and enforcement, are trained by the City to conduct these responsibilities. The City utilizes education videos to train their employees. Training records are kept by the City that include dates, activity descriptions, and names of staff in attendance.



### Definition

*Priority construction site means a construction site that has potential to threaten water quality when considering the following factors: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-storm water discharges and past record of non-compliance by the operators of the construction site.*

## Proposed MS4 Activities

UPDES Sec. 4.2.4.4.4



The City will continue inspections of all new construction sites with a land disturbance of greater than or equal to one acre, or sites less than one acre that are part of a larger common development. These inspections will be conducted monthly. The City will conduct biweekly inspections of identified priority sites using the state Construction Storm Water Inspection Form. Based on site inspection results, the City will take necessary follow-up actions to facilitate compliance in accordance with the City enforcement strategy.

UPDES Sec. 4.2.4.4.3



The City will continue inspections of all new construction sites with a land disturbance of greater than or equal to one acre. These inspections will be conducted monthly. The City will conduct biweekly inspections of identified priority sites using the Construction Storm Water Inspection Form. Based on site inspection results, the City will take necessary follow-up actions to facilitate compliance in accordance with the City enforcement strategy.

UPDES Sec. 4.2.4.6



Washington City will keep inspections and enforcement actions that include verbal warnings, stop work orders, warning letters, notices of violation, and other enforcement records. The City will continue to track and document its enforcement actions with their cartêgraph system.

UPDES Sec. 4.2.4.6



All City employees whose primary job duties are related to implementing the construction storm water program, will continue to receive training as outlined in Section 4.2.4.5 of the permit requirements. Washington City will continue to promote the development of the Stormwater Coalition and encourage it to train municipal employees.

## Measurable Goals

Washington City will use the following goals to measure its progress in its Municipal Stormwater Inspection Program BMP implementation.

- ▶ Implement biweekly inspections of identified priority sites. (Year 1)
- ▶ Continue to conduct monthly inspections of active construction sites. (Years 1-5)
- ▶ Conduct biweekly inspections of identified priority sites. (Years 1-5)
- ▶ Tack number and type inspections. (Years 1-5)
- ▶ Track number of enforcement actions. (Years 1-5)
- ▶ Train 50% of City staff annually whose primary duties are related to implementing the Stormwater Program. (Years 1-5)

# 8.6

## CSW-4 Construction Sequencing

Construction sequencing is a work schedule that coordinates grading and the installation of erosion and sediment control measures

**Category**  
**Construction Site Planning & Management**

**Target Audience**  
**Contractors, Developers, and Engineers**

**Responsible Party**  
**Public Works**

### BMP Description

Construction sequencing is a specified work schedule that coordinates the timing of grading activities and the installation of erosion and sediment control measures. Washington City currently recommends in its grading manual that contractors/owners develop a construction sequence schedule. This sequence schedule is intended to reduce on-site erosion and off-site sedimentation by performing grading and installing erosion and sediment control practices in accordance with a planned schedule.

The Manual recommends that grading activities and construction are completed with soils effectively stabilized on one part of the site before grading and construction commence at another part.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)



## Existing Program Elements

In Section 3.2 of Washington City's Grading Manual, the ten elements of an effective grading plan are provided.

Included on this list of effective elements is the recommendation that contractors/owners develop a construction sequence schedule. Construction sequencing is a specified work schedule that coordinates the timing of land-disturbing activities and the installation of erosion and sediment control measures. This sequence schedule is intended to reduce on-site erosion and off-site sedimentation by performing grading and installing erosion and sediment control practices in accordance with a planned schedule. Only disturbing the required parts of a site help to prevent erosion from inactive parts.

The Manual recommends that grading activities and construction are completed with soils effectively stabilized on one part of the site before grading and construction commence at another part.

## Proposed MS4 Activities

The City will continue to recommend that contractors/owners incorporate a construction sequencing component into their grading plan. The construction sequencing recommendation will be reviewed and updated, if necessary, through the life of the permit.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in its Construction Sequencing BMP implementation.

- ▶ Update sequencing recommendations in the Grading Manual. (Year 1)
- ▶ Review construction sequencing recommendations. (Year 2)
- ▶ Update construction sequencing recommendations in Grading manual if necessary. (Year 3)
- ▶ Evaluate number of grading plans incorporating grading sequencing. (Years 1-5 )

# 8.7

## CSW-5 Land Grading

Land grading provides more suitable topography to control surface runoff, soil erosion, and sedimentation during and after construction.

### Category

Construction Site Planning & Management

### Target Audience

Contractors, Developers, and Engineers

### Responsible Party

Public Works

### BMP Description

Section 3 of the Grading Manual, recommends techniques for land grading. Land grading involves grading and reshaping a surface to planned grades as determined by an engineering survey, evaluation, and layout. While land grading provides more suitable topography for buildings and facilities, it can also help to control surface runoff, soil erosion, and sedimentation during and after construction.

This BMP is to apply particularly to steep slopes. The Grading Manual requires approved permanent stabilization for slopes that meet or exceed a rise to run ratio of 3:1.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
 Stormwater Coordinator  
 (435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements

In Section 3.2 of Washington City's Grading Manual, the ten elements of an effective grading plan are provided.

Included on this list of effective elements is the recommendation that contractors/owners utilize land grading as a means to control surface runoff, erosion, and sediment during and after construction.

This BMP is applicable to sites with uneven or steep topography or easily erodible soils. Land grading is designed to stabilize slopes and decreases runoff velocity.

The Manual particularly focuses on protecting steep slopes. Steep slopes can be comprised of existing slopes that are to be preserved, or cut/fill slopes created during the grading process. For example, the Manual stipulates that no proposed slopes shall exceed a rise to run ratio of 3:1 runoff shall be diverted away from steep slopes and recommends that terracing be incorporated in the grading of steep slopes. Land grading should be a key consideration for **Construction Sequencing**, so that exposed soils are minimized at any given time during construction.

The Grading Manual recommends that grading activities should maintain existing drainage patterns as much as possible.

## Proposed MS4 Activities

The City will continue to require that contractors/owners incorporate a land grading component into their grading plan. The land grading requirement will be reviewed and updated, if necessary, through the life of the permit.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in its Land Grading BMP implementation.

- ▶ Update existing land grading recommendations in the Grading Manual. (Year 1)
- ▶ Review land grading recommendations. (Year 2)
- ▶ Update land grading recommendations in Grading Manual if necessary. (Year 3)

# 8.8

## CSW-6 Preserving Natural Vegetation

Natural vegetation reduces runoff by intercepting rainfall, protecting soil surface from the impact of raindrops and holding soil in place,

### Category

Construction Site Planning & Management

### Target Audience

Contractors, Developers, and Engineers

### Responsible Party

Public Works

### BMP Description

The principle advantage of preserving natural vegetation is that it provides erosion control, stormwater detention, biofiltration, and aesthetic values to a site during and after construction activities. Also, natural vegetation reduces stormwater runoff by intercepting rainfall, protecting soil surface from the impact of raindrops, holding soil particles in place, maintaining the soil's capacity to absorb water, and promoting infiltration. Natural vegetation usually requires less maintenance (e.g., irrigation, fertilizer) than planting new vegetation.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
 Stormwater Coordinator  
 (435)656-6317  
[rromero@washingtoncity.org](mailto:rromero@washingtoncity.org)

## Existing Program Elements

A development BMP that Washington City recommends in its Grading Manual for site operators to incorporate into their grading plan is site “fingerprinting.” Fingerprinting involves clearing and grading only areas that are necessary for building activities and equipment traffic. Maintaining undisturbed temporary or permanent buffer zones in the grading operation provides a low-cost sediment control measure that will help reduce runoff and offsite sedimentation.

The City recommends that contractors/owners design their grading plans with erosion and sediment control and stormwater management goals in mind. To ensure that the plan is implemented as intended, contractors should carefully supervise grading crews.

## Proposed MS4 Activities

The City will continue to recommend that contractors/owners incorporate fingerprinting into their grading plan. This recommendation will be reviewed and updated, if necessary, through the life of the permit.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in its Preserving Natural Vegetation BMP implementation.

- ▶ Update existing preserving natural vegetation recommendations in the Grading Manual. (Year 4)
- ▶ Review preserving natural vegetation recommendations. (Year 5)
- ▶ Update preserving natural vegetation recommendations in Grading manual if necessary. (Year 5)

## 8.9

# CSW-7 Best Management Practices Handbook

Easy access to preferred construction and post-construction BMPs helps contractors make better decisions for managing construction run-off.

### Category

Runoff,  
Erosion, &  
Sediment  
Control

### Target Audience

Contractors,  
Developers,  
and Engineers

### Responsible Party

Public  
Works

## BMP Description

Choosing effective construction BMPs is one of the key challenges facing anyone interested in improving or protecting water quality. In 2006, Washington City published Washington City Grading Manual. Having access to preferred construction and post-construction BMPs helps contractors make better decisions. In this hand book each preferred BMP is discussed in terms of:

- ▶ description and purpose
- ▶ objectives
- ▶ suitable applications
- ▶ limitations
- ▶ potential alternatives
- ▶ general implementation, design and layout, and materials,
- ▶ installation
- ▶ inspection and maintenance

Do and don't picture references are provided for each BMP, as well as a standard drawing for inclusion with construction plans.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements

Washington City's currently publishes the Best Management Practices and Grading Plan Standard Notes and Details in conjunction with the Grading Manual field section. The handbook is also available on the City website. BMPs are selected from the handbook as part of an integrated process for obtaining grading permits.

The handbook provides contractors easy access to preferred BMPs to improve the overall quality of projects graded within the City.

## Proposed MS4 Activities

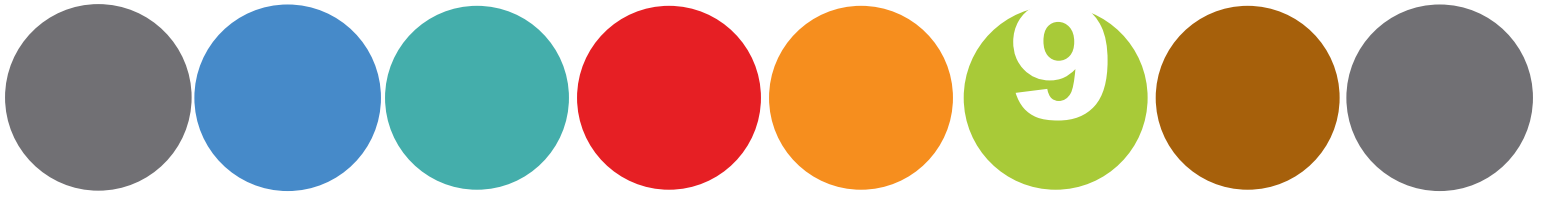
The City will continue to use the Grading Manual to obtain grading permits. In year one of the permit cycle, the BMP handbook will be reviewed and updated. Based on data collected in years one and two, the BMP handbook will be review again in year three and recommendations made for changes. The BMP handbook will be updated again in year five, if necessary.

## Measurable Goals

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Washington City will use the following goals to measure its progress in its Best Management Practices Handbook BMP implementation.

- ▶ Review and update BMP handbook. (Year 3)



section



**Washington City**  
Where Dixie Begins

**Post-construction Stormwater Management**

Revised July 2016



## Section 9.0 Post-Construction Stormwater Management

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### *Municipal Program Elements*

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The following sections present the Post-Construction Stormwater Runoff Control Best Management Practices that Washington City has determined to use. In accomplishing its water quality goals and complying with state and federal regulations.

## Section 9.0

### Post-Construction Stormwater Management

## 9.1 Regulation



“All Permittees shall revise as necessary, implement and enforce a program to address Post-Construction storm water runoff to the MS4 from new development and redevelopment construction sites disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, according to the minimum performance measures listed below.

The object of this control measure is for the hydrology associated with the new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water. The water quality considerations of this minimum control measure do not replace or substitute for water quantity or flood management requirements implemented on the local level for new developments. The water quality controls may be incorporated into the design of structures intended for flow control; or water quality control may be achieved with separate control measures. The program must apply to private and public development sites, including roads.



UPDES Sec. 4.2.5

## 9.2

## BMP Selection Rationale

Washington City has developed and adopted an ordinance, Ordinance 2012-07, that focuses on the Post-Construction Management. This ordinance includes Best Management Practices, Enforcement, Penalties, and requires new development and redevelopment to acquire a Post-Construction Stormwater Management Plan.



UPDES Sec. 4.2.3

The City selected the following BMPs to meet the Post-Construction minimum control measures requirements. The Washington City Grading Manual requires that new developments and re-development incorporate stormwater management control measure BMPs to reduce the impacts associated with stormwater runoff generated at the site.



UPDES Sec. 4.2.5.1

Washington City included with this ordinance, routine maintenance inspection to maintain the original line, grade and hydraulic capacity; including the original purpose of the facility. Washington City will use enforcement through the Code Enforcement Officer, the Public Works Director, or their designee who is authorized by the Municipality to administer and enforce this ordinance.



UPDES Sec. 4.2.5.2

The Manual will continue to establish enforcement response expectations. As required, failure to respond to enforcement actions or repeated violations will result in escalating enforcement against the offending party. These enforcement actions are clearly outlined in developed SOPs and the Grading Manual.



UPDES Sec. 4.2.5.2.1

Table 9.0 Post-Construction Stormwater Management BMP Summary Table

| Permit       | Best Management Practice (BMP)           | Implementation and Measurable Goals |          |   |  |  |
|--------------|--|-------------------------------------|----------|---|--|--|
|              |  | Year One                            | Year Two | Year Three  | Year Four                                  | Year Five                                  |
| <b>4.2.5</b> | <b>Post Construction Runoff</b>          |                                     |          |   |  |  |
|              | <b><i>Municipal Program Elements</i></b> |                                     |          |   |  |  |
| 4.2.5.1      | PSW-1 Post Construction Runoff Ordinance | PW                                  |          |   | Review ordinance                           | Update ordinance                           |
| 4.2.5.2      |  | PW                                  |          |   | Review enforcement strategies              | Update enforcement strategies              |
| 4.2.5        |  | PW                                  |          | Implement post-construction access for City inspectors or private owner/ third party inspectors   | Review post construction access            | Update post construction access            |
| 4.2.5.5.1    |  | PW                                  |          | Implement private party maintenance agreement   | Review private party maintenance agreement | Update private party maintenance agreement |
| 4.2.5.2.2    |  | PW                                  |          | Implement documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants. | Review documentation                       | Update documentation                       |

**Table 9.0 Post-Construction Stormwater Management BMP Summary Table**

|           |       |                                       |    |                            |   |   |   |
|-----------|-------|---------------------------------------|----|----------------------------|---|---|---|
| 4.2.5.3   | PSW-2 | <i>Innovative BMPs for Site Plans</i> | PW |                            | Implement requirements and standards for new and redevelopment to prevent or minimize water quality impacts | Review requirements and standards   | Update requirements and standards   |
| 4.2.5.3.1 |       |                                       | PW | Review non-structural BMPs | Update non-structural BMPs  | Review non-structural BMPs  | Update non-structural BMPs  |
|           |       |                                       | PW |                            |   | Develop process to evaluate and encourage a Low Impact Development (LID) Approach | Update process to evaluate and encourage LID approach                             |
| 4.2.5.3.3 |       |                                       | PW |                            |   | Review plan to retrofit existing sites that are adversely impacting water quality | Update plan to retrofit existing sites that are adversely impacting water quality |
| 4.2.5.3.4 |       |                                       | PW |                            | Implement specific hydrologic method or methods for calculating runoff volumes and flow                     | Review hydrologic method or methods for calculating runoff volumes and flow       | Update hydrologic method or methods for calculating runoff volumes and flow       |

**Table 9.0 Post-Construction Stormwater Management BMP Summary Table**

|           |              |   |    |   |   |  |  |  |
|-----------|--------------|---|----|---|---|--|--|--|
|           |              |   | PW | Track number of existing developed site that have been retrofit |   |  |  |  |
| 4.2.5.4   | <i>PSW-3</i> | <i>Post Construction Phase Plan Review</i>            | PW |   |   |  | Review construction phase stormwater plan review procedures  | Update construction phase stormwater plan review procedures                          |
| 4.2.5.4.1 |              |   | PW |   |   |  | Incorporate into review procedures the evaluation of potential use of low impact design (LID) and green infrastructure | Update LID and green infrastructure evaluation procedures                            |
| 4.2.5.4.2 |              |   | PW | Develop preferred design specifications for development types   | Implement preferred design specifications for development types |  | Review preferred design specifications for development types   | Update preferred design specifications for development types                         |
| 4.2.5.4.3 |              |   | PW |   |   |  |  |  |
| 4.2.5.5   | <i>PSW-4</i> | <i>Municipal Post-Construction Inspection Program</i> | PW |   |   |  | Review SOPs for site inspection and enforcement of post-construction stormwater BMPs                                   | Update SOPs for site inspection and enforcement of post-construction stormwater BMPs |

Table 9.0 Post-Construction Stormwater Management BMP Summary Table

4.2.4.5.6

|    |   |   |
|----|---|---|
| PW |   | Inspect permanent structural BMPs at least once during installation                               |
| PW |   | Inspect permanent structural controls once every five years                                       |
| PW |   | Track number and type of enforcement actions imposed for post-construction stormwater infractions |
| PW |   | Track number of inspections performed during permanent structural BMP installation                |
| PW |   | Track number of annual certifications from site owner/operators                                   |
| PW | Conduct stormwater training and certification program for city permitting, plan review, post-construction site inspection and enforcement staff |   |
| PW | Develop inventory of post-construction structural control measures  | Update inventory of post-construction structural control measures                                 |

# 9.3

## PSW-1 Post-Construction Stormwater Management Ordinance

This BMP is intended to provide for maintenance, review, and augmentation of City Ordinances and Codes.

### Category

Municipal Program Elements

### Target Audience

Contractors, Owners, Developers, and Engineers

### Responsible Party

Public Works

### BMP Description

This BMP is intended to ensure that Washington City Post-Construction Storm Water Management Ordinance are maintained to require new developments to incorporate stormwater quality and quantity management facilities (structural and non-structural) into site plans and land divisions.

The regulations are intended to meet the requirements of Minimum Control Measure by ensuring that post-construction stormwater runoff from new development and redevelopment is treated to minimize adverse impacts on the stormwater drainage system and preserve riparian function to the maximum extent practicable. The Development Code provisions ensure that land use/development proposals incorporate structural systems (such as oil/water separators) and non-structural systems into site designs. The Engineering Design Standards and Procedures Manual provides specific guidance and flexible options to ensure the stormwater quality systems are structurally sound and effective at meeting the BMP objective.



UPDES Sec. 4.2.5.2.2

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

Ross Romero  
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(435)656-6317  
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## Existing Program Elements

In October 2006, the City adopted a comprehensive Grading Manual. This manual was published in conjunction with Washington City's Best Management Practices Handbook. The goal of the Grading Manual is to facilitate the implementation of effective grading, drainage, and erosion and sediment control BMPs as a standard for all land disturbances.



UPDES Sec. 4.2.5.3.1

The Manual clearly outlines Washington City's grading permitting program that has been developed to promote environmentally sound construction practices. The Grading Manual contains an element that requires construction operators to stabilize a construction site before the site's active construction status can be terminated.



Legal authority has been granted by the City Council to enforce the programs outlined in the Manual.



UPDES Sec. 4.2.5.3

The Grading Manual has been amended to require post-construction BMP selection, design, installation, operation and maintenance standards necessary to protect water quality and reduce the discharge of pollutants to the MS4.



### Definition

*A Storm Water Pollution Prevention Plan (SWPPP) is for stormwater discharge. The SWPPP includes erosion prevention measures and sediment controls that, when implemented, will decrease soil erosion and off-site non-point pollution on a parcel of land.*



### Ordinance

*In October 2006, Washington City adopted Ordinance NO. 2009-15. This ordinance establishes methods for controlling post-construction runoff by formally adopting the Washington City Grading Manual. For more information, please visit the Washington City Website.*

[www.WashingtonCity.org](http://www.WashingtonCity.org)

# Municipal Post-Construction Inspection Program



UPDES Sec. 4.2.5.5.1

Washington City has adopted an ordinance that requires long-term post-construction storm water controls at new development and redevelopment sites that are greater than one acre, or less than one acre that are part of a larger common development. This ordinance will also include a provision for access by qualified personnel to inspect post-construction storm water BMPs on private properties that discharge to the MS4. The City will review its existing Grading Manual to ensure that technical requirements set forth, at a minimum, meet the requirements of the UPDES Storm Water General Permit for Construction Activities. The Manual will be the regulatory mechanism for inspection, erosion, and sediment control requirements.



UPDES Sec. 4.2.5.4

The City will implement procedures for site plan review which will evaluate water quality impacts. The procedures shall apply through the life of the project from conceptual design to project closeout.



UPDES Sec. 4.2.5.4.1

Furthermore, review post-construction plans for, at a minimum, all new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure.



UPDES Sec. 4.2.5.5.2

Permanent structural BMPs shall be inspected at least once during installation by a qualified personnel. Upon completion, the Permittee must verify that long-term BMPs were constructed as designed.



UPDES Sec. 4.2.5.5.3

Inspections and any necessary maintenance must be conducted annually by Permittee, or owner/operator. On sites where the proper owner/operator is conducting maintenance, the Permittee must inspect those storm water control measures at least once every five years, or more frequently as determined by the Permittee. The findings must be documented in an inspection report.

## Measurable Goals

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Washington City will use the following goals to measure its progress in its post-construction stormwater management ordinance BMP implementation.

- ▶ Review ordinance. (Year 3)
- ▶ Update ordinance if necessary. (Year 4)
- ▶ Review enforcement strategies. (Year 3)
- ▶ Update enforcement strategies if necessary. (Year 4)
- ▶ Develop documentation on how the requirements of the ordinance or other regulatory measure will protect water quality. (Year 3)

# 9.4

## PSW-2 Innovative BMPs for Site Plans

This BMP is intended to meet the requirements of the permit that requires Washington City to have a development/redevelopment program.

### Category

Municipal Program Elements

### Target Audience

Contractors, Owners, Developers, and Engineers

### Responsible Party

Public Works

### BMP Description

This BMP meets the requirements of the permit that require Washington City’s development/redevelopment program to have requirements or standards to ensure that any storm water controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality.

This BMP requires property owners and operators to include a combination of structural and non-structural BMPs and ensure adequate long-term operation and maintenance of BMPs.

Washington City’s development/redevelopment program includes non-structural BMPs to minimize development in areas susceptible to erosion and sediment loss. These BMPs are intended to minimize the disturbance of native soils and vegetation, and to preserve areas in the municipality that provide important water quality benefits.



UPDES Sec. 4.2.5.3.1

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

Washington City requires that contractors ensure that final BMPs are installed at the appropriate times in accordance with the accepted grading plans and Grading Manual. The City requires that the final BMPs be in installed and functioning before a Notice of Termination (NOT) is issued by the City. It is the responsibility of the project manager to ensure that final BMPs are installed at the earliest opportunity.



UPDES Sec. 4.2.5.3.1

The City has provided a Grading Manual. This publication includes structural and non-structural BMPs that are recommended by the City to stabilize areas that are susceptible to erosion and sediment loss. The BMPs are also intended to implement measures for flood control and protect the integrity of natural resources and sensitive areas.

Some BMPs have specific time requirements for installation and are identified in the Grading Manual.



## Definition

*Submission of a Notice of Termination (NOT) constitutes notice that the owner (and his/her agent) of the site identified on the NOT form is no longer authorized to discharge storm water associated with construction activity by UPDES Permit No. UTR090000.*



UPDES Sec. 4.2.5.3.2

## MS4 Activities

The City's is investigating a procedure for publication in it will include a process to evaluate and encourage a Low Impact Development (LID) approach to the implementation of structural BMPs, where feasible, that infiltrate or evapotranspire to protect water quality.

The City's evaluation of structural controls will include green infrastructure practices such as rainwater harvesting, rain gardens, permeable pavement, and vegetated swales. The selection and design of post-construction controls will meet the stipulations of section 4.2.5.3.2 in the permit requirements. The considerations to be used in evaluation post-construction controls include; clogging or obstruction issues, freeze-thaw problems, effect on slope stability, groundwater, and the ability to effectively maintain the control.



## Definition

*Non-structural BMPs are just that; non-structural. There are no physical structures associated with these types of BMPs. Non-structural BMPs are designed to limit the amount of pollutants available in the environment that would potentially end up in stormwater runoff. Non-structural BMPs typically lessen the need for the more costly structural BMPs. Non-structural BMPs can be achieved through such things as education, management and development practices. Some examples include ordinances and practices associated with land use and comprehensive site planning.*



UPDES Sec. 4.2.5.3.3

The City of Washington is investigating a plan and procedures to retrofit existing developed sites that are adversely impacting water quality. The retrofit plan will emphasize green infrastructure, where feasible. The City's plan could include a ranking of control measures to determine those best suited for retrofitting as well as those that could later be considered for retrofitting. The City will meet the requirements set forth in section 4.2.5.3.3 when developing the criteria for the retrofit plan.



UPDES Sec. 4.2.5.7

Washington City will maintain an inventory of all Post-Construction structural storm water control measures installed and implemented at new developments and redeveloped sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The inventory shall include both public and private sector sites located within the Permittee's service area.



UPDES Sec. 4.2.5.7.1

The Inventory List must include basic information on each project, such as, owner's name, contact information, location, start/end date, a description of the design specifications, short description of maintenance requirements and inspection information.



UPDES Sec. 4.2.5.7.2

Based on 4.2.5.7.1 the Permittee must update the inventory when changes occur; such as, ownership and specific control measures implemented at the site change.

## Measurable Goals

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Washington City will use the following goals to measure its progress in its innovative BMPs for site plans implementation.

- ▶ Develop process to evaluate and encourage a LID approach to the implementation of structural BMPs. (Year 3)
- ▶ Implement LID approach to structural BMPs. (Year 4)
- ▶ Develop plan to retrofit existing developed sites that are adversely impacting water quality. (Year 5)
- ▶ Implement retrofit plan. (Year 5)
- ▶ Track number of existing developed sites that have been retrofit. (Years 5)

## Existing Program Elements



UPDES Sec. 4.2.5.4.1

Washington City has a Grading Manual. Included in this Manual are several BMPs the City recommends contractors implement for construction and post-construction site stormwater control. To be in compliance with the requirements set forth by DEQ.



UPDES Sec. 4.2.5.4.1

The City's pre-construction review procedure is discussed in Section 8. Prior to construction, the City reviews the SWPPPs for all new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common development. Currently, the SWPPP review include an element for long-term storm water management measures for post-construction controls.



## Additional Information

*The Washington City Grading Manual is on the Washington City Public Works website and available to the public. It includes specifications for the recommended BMPs relevant to post-construction runoff control.*

<http://new.washingtoncity.org/services/index.php?sub=PublicWorks>

# 9.5

## PSW-3 Municipal Post-Construction Inspection Program

Per DEQ requirements, Washington City is responsible for implementing BMP inspections and maintenance programs.

### Category

Municipal Program Elements

### Target Audience

Contractors, Owners, Developers, and Engineers

### Responsible Party

Public Works



UPDES Sec. 4.2.5.5.1

### BMP Description

In accordance with DEQ requirements, Washington City is responsible for implementing BMP inspections and maintenance programs. These programs are required to have penalties in place to deter infractions. Stormwater BMPs should be inspected on a regular basis for continued effectiveness and structural integrity. Scheduled inspections will vary among BMPs. For example, structural BMPs such as storm drain drop inlet protection will probably require more frequent inspections to ensure proper operation. During each inspection, the City inspector documents whether the BMP is performing correctly, if the BMP has been damaged since the last inspection, and, if so, what should be done to repair it.

Routine inspection and maintenance helps prevent potential nuisances and reduces the need for repair maintenance. Maintenance of BMPs also reduces the chance of pollutants being in stormwater runoff by finding and fixing problems before the next storm event.

### Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)





UPDES Sec. 4.2.5.5.2

Qualified City staff, or a qualified third party, will inspect permanent structural BMPs at least once during installation.



UPDES Sec. 4.2.5.7

Washington City will develop an inventory of all post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common development as stipulated in sections 4.2.5.7, 4.2.5.7.1, and 4.2.5.7.2 in the permit requirements.



UPDES Sec. 4.2.5.6

Washington City will review and update existing stormwater training and certification program for City permitting, plan review, post-construction site inspection, and enforcement staff. The City training will emphasize in the fundamentals of long-term storm water management through the use of structural and non-structural control methods.

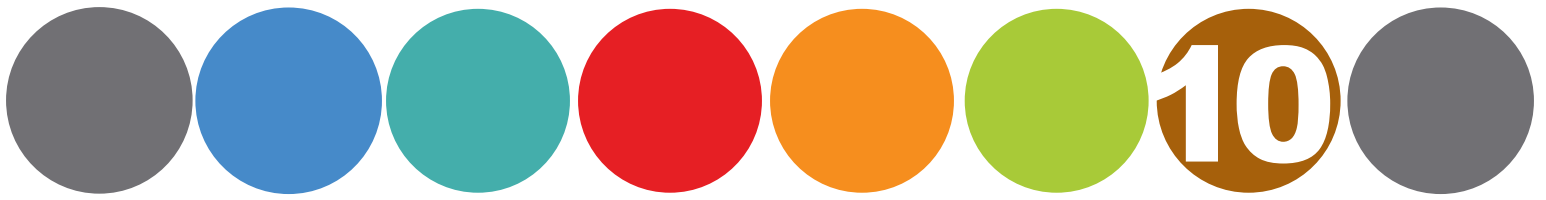
The City will maintain training records for dates, activities, and names of staff in attendance.

## Measurable Goals

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Continued:

- ▶ Track number of annual certifications from site owner/operators. (Years 2-5)
- ▶ Track number of inspections City conducts of permanent stormwater control measures. (Years 2-5)



section



**Washington City**  
Where Dixie Begins

**Good Housekeeping**

Revised July 2016

## Section 10.0 Pollution Prevention/Good Housekeeping

|        |   |       |
|--------|---|-------|
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### *Municipal Facilities*

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The following sections present the Pollution Prevention and Good Housekeeping Best Management Practices. Washington City has determined to use these BMPs to accomplish its water quality goals and comply with the state and federal regulations.

*Section 10.0*  
**Pollution Prevention & Good Housekeeping**

**10.1 Regulation**



“All Permittees shall implement a program for Permittee—owned or operated facilities, operations and structural storm water controls that includes standard operations procedures (SOPs), pollution prevention BMPs, storm water pollution prevention plans or similar type of documents, and a training component that have the ultimate goal of preventing or reducing the runoff of pollutants to the MS4 and Waters of the State. All components of the program shall be included in the SWMP document and must identify the department (and where appropriate, the specific staff) responsible for performing each activity described in this section. The Permittee must develop an inventory of all such Permittee-owned or operated facilities. The Permittee must review this inventory annually and update as necessary. The Minimum performance measures are:



UPDES Sec. 4.2.6

Permittees shall develop and Keep current a written inventory of Permittee—owned or operated facilities and storm water controls that may include but is not limited to:

- Composting Facilities
- Fuel Farms
- Incinerators
- Landfills
- Material storage yards
- Public Buildings
- Municipal Buildings
- Public golf courses
- Public work yards
- Salt Storage Facilities
- Street repair and maintenance sites
- Permittee—owned and/or maintained structural storm water controls
- Equipment storage and maintenance facilities
- Hazardous waste disposal facilities
- Hazardous waste handling and transfer facilities
- Landscape maintenance on municipal property
- Pesticide storage facilities
- Libraries, Police Stations, Fire Stations
- Public Parking Lots
- Public swimming pools
- Recycling facilities
- Solid waste handling and transfer facilities
- Vehicle Storage and maintenance yards



UPDES Sec. 4.2.6.1

# Regulation Continue

All Permittees shall assess the written inventory of Permittee—owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1 for their potential to discharge to the storm water the following is typical urban pollutants: sediment, nutrients, metals, hydrocarbons (e.g., benzene, toluene, ethylbenzene and xylene), pesticides, chlorides, and trash. Other pollutants may be associated with, but not generated directly from the municipally—owned or operated facilities, such as bacteria chlorine, organic matter, etc. Therefore, the permittee must determine additional pollutants associated with its facilities that could be found in storm water discharges. A description of the assessment process and findings must be included in the SWMP.



UPDES Sec. 4.2.6.2

Based on the assessment required in part 4.2.6.2, the Permittee must identify as “high-priority” those facilities or operations that have a potential to generate storm water pollutants. Among the factors that must be considered in giving a facility a high priority ranking is the amount of urban pollutants stored at the site, the identification improperly stored materials, activities that must be performed outside (e.g., changing automotive fluids), proximity to waterbodies, poor housekeeping practices, and discharge of pollutant(s) of concern to impair water(s).



UPDES Sec. 4.2.6.3

Washington City has developed an inspection report for each Permittee—owned or operated facilities. This inspection report is located at the facilities and kept current by weekly and quarterly inspection reports. The inspection report details the property boundaries, the buildings impervious surface, location of structural control measures, location and name of the nearest defined drainage which could receive runoff from the facility, whether it contains water or not, location of all storm water conveyances, including ditches, pipes, basins, inlets and seals. Location where the following activities are exposed to storm water: fixed fueling operations, vehicle and equipment maintenance and or cleaning area; brine making areas, loading and unloading area, waste storage or disposal areas, liquid storage tanks, process and equipment operating areas, materials storage or disposal areas. Each facilities is unique and may not need all of the above information on their inspection report.



UPDES Sec. 4.2.6.4

Inspection reports have been developed for Building and Facilities; including, Permittee—owned and operated offices, police and fire station, pools, parking garages (4.2.6.6.1). Inspection reports have been developed for material storage areas (4.2.6.6.2). Inspection reports have been developed for parks and ope spaces and includes the proper storage and disposal of fertilizer, pesticides and herbicides (4.2.6.6.3).



UPDES Sec. 4.2.6.6

Inspection reports have been developed for Vehicle maintenance and repair activities that occurs on Permittee—owned or operated vehicles (4.2.6.6.4).

Inspection reports have been developed for schedule sweeping streets and Permittee—owned and operated parking lots maintenance, pavement marking, sealing and repaving, right of way maintenance, including mowing, herbicide and pesticide and pesticide application; and municipally—sponsored events, parades or street fairs (4.2.6.6.5).

Inspection reports have been developed for scheduled for the regular inspection, cleaning and repair of catch basins, storm water conveyance pipes, ditches and irrigation canals, culverts, structural storm water controls, and structural runoff treatment and/or flow control facilities (4.2.6.6.6)

# 10.2

## BMP Selection Rationale

The City selected the following BMPs, to address minimum control measure and Pollution Prevention in Municipal Operations.

BMP GH-1 outlines how Washington City owns and operates numerous facilities, including maintenance yards, parks, office buildings, schools, and other city-owned properties. The objective of this BMP in managing stormwater at municipal facilities is to prevent pollutants released during city activities from entering storm drain systems or receiving waters. To effectively prevent or reduce stormwater pollution, the City will inventory its facilities and associated activities to assess potential impacts on stormwater quality and revise activities or implement new measures as needed. These activities and control measures will be described in a Operations and Maintenance Program. This program describes management actions that will be taken to reduce pollution from City sites or activities.



UPDES Sec. 4.2.6.1

BMP GH-2 is intended to comply with section 4.2.6.5.1, 4.2.6.5.2 and 4.2.6.5.3 of the permit requirements. This section stipulates that an O&M program has been designed for City-owned or operated facilities and includes the following inspections:

- ▶ Weekly visual inspections
- ▶ Quarterly comprehensive inspections.
- ▶ Quarterly visual observation of stormwater discharges.



UPDES Sec. 4.2.6.5

To comply with DEQ requirements, the City has develop SOPs, inspection reports, and has facility logs to track and record facility inspections.

BMP GH-3 outlines Washington City's employee training program. This program is designed to teach staff about potential sources of stormwater contamination and ways to minimize the water quality impact of municipal activities, such as park and open space maintenance, fleet and building maintenance, construction and land disturbances, and storm drain system maintenance.

| Permit       | BMP ID      | Best Management Practice (BMP)                          | Lead | Implementation and Measurable Goals                                       |          |   |           |  |
|--------------|-------------|---|------|---|----------|---|-----------|--|
|              |             |   |      | Year One  | Year Two | Year Three  | Year Four | Year Five  |
| <b>4.2.6</b> |             | <b>Municipal Pollution Prevention/Good Housekeeping</b> |      |   |          |   |           |  |
| 4.2.6.1      | <i>GH-1</i> | <i>Municipal Facilities Management</i>                  | PW   |   |          |   |           | Update inventory, as necessary                         |
| 4.2.6.2      |             |   | PW   |   |          |   |           | Conduct assessments, as necessary                      |
| 4.2.6.3      |             |   | PW   |   |          | Develop high-priority facilities list                       |           | Update high-priority facilities list, as necessary     |
| 4.2.6.4      |             |   | PW   |   |          | Develop facility specific SOPs for high-priority facilities |           | Update SOPs for high-priority facilities, as necessary |
| 4.2.6.4      |             |   | PW   | Develop inventory of floor drains inside City owned or operated buildings |          | Update floor drain inventory, as necessary                  |           |  |
| 4.2.6.4.2    |             |   | PW   | Develop map of storm drains located on City owned or operated properties  |          | Update storm drain map, as necessary                        |           |  |
|              |             |   | PW   |   |          | Develop building and facility O&M Program(s)                |           | Update O&M Program(s), as necessary                    |

| Permit    | Best Management Practice (BMP)           | Implementation and Measurable Goals |   |   |                                     |           |
|-----------|--|-------------------------------------|---|---|-------------------------------------|-----------|
|           |  | Year One                            | Year Two  | Year Three  | Year Four                           | Year Five |
| 4.2.6.6.2 | PW                                       |                                     |   | Develop material storage areas, heavy equipment storage areas and maintenance areas O&M Program(s)                                | Update O&M Program(s), as necessary |           |
| 4.2.6.6.3 | PW                                       |                                     |   | Develop parks and open space O&M Program(s)   | Update O&M Program(s), as necessary |           |
| 4.2.6.6.4 | PW                                       |                                     |   | Develop vehicle and equipment O&M Program   | Update O&M Program(s), as necessary |           |
| 4.2.6.6.5 | PW                                       |                                     |   | Develop roads, highways, and parking lots O&M Program(s)  | Update O&M Program(s), as necessary |           |
| 4.2.6.6.6 | PW                                       |                                     |   | Develop stormwater collection and conveyance system O&M Program(s)  | Update O&M Program(s), as necessary |           |
| 4.2.6.8   | PW                                       |                                     |   | Develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls |                                     |           |
| 4.2.6.6.1 | <i>GH-2 Municipal Inspection Program</i> | PW                                  | Develop and implement O&M Program for inspections | Update O&M Program(s), as necessary   |                                     |           |
| 4.2.6.5.1 |  | PW                                  | Develop weekly visual inspections                 | Conduct inspections; Document findings and address violations   |                                     |           |



| Permit    | Best Management Practice (BMP)                        | Implementation and Measurable Goals |   |   |           |           |
|-----------|---|-------------------------------------|---|---|-----------|-----------|
|           |   | Year One                            | Year Two  | Year Three  | Year Four | Year Five |
| 4.2.6.5.2 |   | PW                                  | Develop quarterly comprehensive inspections   | Conduct inspections; Document findings and address violations |           |           |
| 4.2.6.5.3 |   | PW                                  | Develop quarterly visual observation of stormwater discharge inspections                | Conduct inspections; Document findings and address violations |           |           |
| 4.2.6.10  | <i>GH-3 Municipal Employee Training and Education</i> | PW                                  | Continue to conduct employee training; Track dates, topics, attendees, and quiz results |   |           |           |

# 10.3 GH-1 Municipal Facilities Management

The objective of this BMP is to prevent pollutants released during city activities from entering storm drain systems or receiving waters.

| Category             | Target Audience       | Responsible Party |
|----------------------|-----------------------|-------------------|
| Municipal Facilities | Municipal Departments | Public Works      |


 UPDES Sec. 4.2.6

## BMP Description


Washington City owns and operates numerous facilities, including maintenance yards, parks, office buildings, schools, and other city-owned properties. The objective of managing stormwater at municipal facilities is to prevent pollutants released during city activities from entering storm drain systems or receiving waters.

 UPDES Sec. 4.2.6.8.1

To effectively prevent or reduce stormwater pollution, the City will inventory its facilities and associated activities to assess potential impacts on stormwater quality and revise activities or implement new measures as needed.

 UPDES Sec. 4.2.6.9

Public construction projects shall comply with the requirements applied to private projects .

 UPDES Sec. 4.2.6.10

All employees, contracted staff, and other responsible entities that have primary construction, operation, or maintenance job functions that are likely to impact storm water quality need to receive annual training. Training records must be kept; including dates, names, positions of staff, activities or course description. Follow-up training shall be provided as needed to address changes in procedures.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
 Stormwater Coordinator  
 (435)656-6317  
[romero@washingtontcity.org](mailto:romero@washingtontcity.org)

## Existing Program Elements

UPDES Sec. 4.2.6.1



Washington City has developing an O&M program for each City owned or operated facility. An organization chart illustrating the department party responsible for performing each activity described in this section has been developed. This organization chart can be found in Section 1.3.

The City has developed an inventory of all City owned or operated facilities. This facility inventory will be reviewed and updated annually as necessary.

## MS4 Activities

UPDES Sec. 4.2.6



Washington City has develop and implement an operations and maintenance (O & M) program for all City owned or operated facilities. Per DEQ requirements, the O&M program has incorporated operations, SOPs and structural storm water controls. The program is intended to prevent or reduce pollutant runoff from City owned or operated facilities. The program was developed pursuant to section 4.2.6 of the permit requirements.

UPDES Sec. 4.2.6.1



The inventory list will be updated annually or as necessary. Washington City does not currently have any facilities covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities.

UPDES Sec. 4.2.6.2



After the facility inventory list has been created, the facilities will be initially assessed for their potential to contribute the typical urban pollutants as outlined in section 4.2.6.2 to stormwater runoff. Once this assessment has been completed, the SWMP document will be amended to include a description of the assessment process and findings.

UPDES Sec. 4.2.6.3



Based on the facility assessment, the City will identify “high-priority” facilities or operations that have a high potential to generate storm water pollutants. Included in the criteria for a high priority ranking, as outlined in section 4.2.6.3, is the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must be performed outside, proximity to waterbodies, poor housekeeping practices, and the discharge of Washington City’s pollutant of concern to the Virgin River.



UPDES Sec. 4.2.6

For each “high priority” facility that the City identifies, it will develop facility-specific standard operating procedures (SOPs). These SOPs will include BMPs that will reduce the discharge of pollutants to the MS4. The City will investigate LID techniques for all new and redeveloped Permittee-owned or operated facilities.



UPDES Sec. 4.2.6.4

For each City owned facility, or City sponsored activity, a site specific O&M manual/program will be developed. The O&M program will include appropriate pollution prevention and good housekeeping procedures, as defined in sections 4.2.6.4.1 to 4.2.6.4.7 for all of the following types of facilities and/or activities:

Buildings and Facilities.

- ▶ Material storage areas, heavy equipment storage areas , and maintenance areas.
- ▶ Parks and open space
- ▶ Vehicle and Equipment
- ▶ Roads, highways, and parking lots
- ▶ Stormwater collection and conveyance system
- ▶ Other facilities and operations that would be reasonably be expected to discharge contaminated runoff



UPDES Sec 4.2.6.4

Washington City will develop an inventory of all floor drains located in City owned or operated facilities. This inventory will be developed in conjunction with an exhibit of each City facility illustrating the location of the storm drain system. The storm drain inventory and site maps will be completed within 180 days, as stipulated by DEQ.



UPDES Sec 4.2.6.7

If Washington City contracts with a third party to conduct municipal maintenance, the City will ensure, through contractually-required documentation or periodic site visits, that the third party is using appropriate storm water controls and following the standard operating procedures, storm water control measures, and good housekeeping practices the City would use conduct municipal maintenance.

## Measurable Goals

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Washington City will use the following goals to measure its progress in its municipal facilities management BMP implementation.

- ▶ Develop map of storm drains located on City owned or operated properties (Year 1)
- ▶ Update storm drain map for City owned or operated properties, as necessary (Years 2-5)



UPDES Sec. 4.2.6.8

Washington City will develop and implement a procedure to assess the water quality impacts in the design of all new flood management structural controls that are associated with the City or that discharge to the City's storm sewer system. This procedure will also include assessing existing flood management structural controls to determine whether changes or additions should be made to improve water quality. In developing these procedures, the City will consider controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives.

## Measurable Goals

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Continued:

- ▶ Update O&M Program(s), as necessary (Years 4-5)
- ▶ Clean 20% of City catch basins; Track number and results (Years 1-5)
- ▶ Sweep at least 100% of City streets; Track miles and debris (Years 1-5)
- ▶ Develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls (Years 1-5)

# 10.4 GH-2 Municipal Post-Construction Inspection Program

To comply with DEQ requirements, the City will develop SOPs, inspection reports, and facility logs to track and record facility inspections.

**Category**  
**Municipal Facilities**

**Target Audience**  
**Municipal Departments**

**Responsible Party**  
**Public Works**



UPDES Sec. 4.2.6.6

## BMP Description

Section 4.2.6.6 of the permit requirements stipulates that an O&M program designed for City-owned or operated facilities be developed and include the following inspections:

- ▶ Weekly visual inspections
- ▶ Quarterly comprehensive inspections.
- ▶ Quarterly visual observation of stormwater discharges.

To comply with DEQ requirements, the City will develop SOPs, inspection reports, and unique facility logs to track and record facility inspections.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
Stormwater Coordinator  
(435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements



UPDES Sec. 4.2.6.6

Washington City has developed standard operating procedures and inspection forms for all City-owned or operated facilities. These inspection procedures and forms have been developed pursuant to section 4.2.6.6 of the permit requirements and include:

- ▶ Weekly visual inspections
- ▶ Quarterly comprehensive inspections.

These developed forms and procedures will be implemented into a Municipal Post Construction Program that will be included in the facility Operation and Maintenance Manuals.

## Proposed MS4 Activities

As previously mentioned, Washington City has developed SOPs and inspection forms for all City-owned or operated facilities. These inspection procedures and forms will be implemented in year one (1) of this permit cycle. The Washington City Stormwater Organizational chart in Section 1.3 outlines the parties responsible for inspections at each facility. The City is required to conduct and record the following types of inspections.

### Weekly visual inspections

The City will perform weekly visual inspections of high priority facilities in accordance with the developed SOPs to minimize the potential for pollutant discharge. The purpose of these weekly visual inspections is to identify evidence of spills or illicit discharge and immediately clean them up to prevent contact with precipitation or runoff. A log has been created for every facility to track and record inspections. The inspection log includes spill reports that identifies any deficiencies and the corrective actions taken to rectify the deficiencies.



UPDES Sec. 4.2.6.5.1



## Definition

*"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a UPDES Permit (other than the UPDES Permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.*



UPDES Sec. 4.2.6.5.2

#### Quarterly comprehensive inspections:

At least once per quarter, the City will conduct a comprehensive inspection of high priority facilities in accordance with developed SOPs. This comprehensive inspection will focus on waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar pollutant generating areas as stipulated in DEQ's permit requirements. A log has been created for every facility to track and record quarterly comprehensive inspections. The inspection log includes spill reports that identifies any deficiencies and the corrective actions taken to rectify the deficiencies.



UPDES Sec. 4.2.6.6.3

#### Quarterly visual observation of storm water discharges:

At least once per quarter, the City will visually observe the quality of the storm water discharges from its high priority facilities pursuant to section 4.2.6.6.3 of the permit requirements. Any observed problems that can be associated with pollutant sources or controls will be rectified to prevent discharge to the storm drain system. SOPs, inspection reports, and a facility log will be developed to track and record visual observations. The inspection report will include any identified deficiencies and the corrective actions taken to rectify the deficiencies.

## Measurable Goals

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Washington City will use the following goals to measure its progress in its municipal post-construction inspection program BMP implementation.

- ▶ Re-evaluate inspection forms year (3)



# 10.5 GH-3 Municipal Employee Training and Education Program

Washington City will train all municipal staff about general stormwater awareness and the detection of illicit discharges.

|   |   |  |
|---|---|--|
| <p><b>Category</b></p> <p><b>Municipal Facilities</b></p> | <p><b>Target Audience</b></p> <p><b>Municipal Departments</b></p> | <p><b>Responsible Party</b></p> <p><b>Public Works</b></p> |
|---|---|--|



UPDES Sec. 4.2.6.8

## BMP Description

Washington City’s employee training programs is designed to teach staff about potential sources of stormwater contamination and ways to minimize the water quality impact of municipal activities, such as park and open space maintenance, fleet and building maintenance, construction and land disturbances, and storm drain system maintenance. The City training program will include a general stormwater awareness message, pollution prevention/good housekeeping measures, and spill response and prevention. The training program will also include information on stormwater pollution prevention plans (SWPPPs) for municipal facilities and BMPs recommended for use in the field to prevent contaminated discharges.

Washington City field staff should be trained to recognize, track, and report illicit discharges.

Because municipalities expect residents and business owners to practice pollution prevention and good housekeeping, City employees should set an example for the rest of the community to follow.

## Responsible Party



The Washington City Stormwater Coordinator will be responsible for the implementation of this BMP and its evaluation. The involvement of the other City departments will be utilized when possible.

The Washington City Stormwater Coordinator will oversee the implementation and evaluation of this BMP.

Please contact:

**Ross Romero**  
 Stormwater Coordinator  
 (435)656-6317  
[rromero@washingtontcity.org](mailto:rromero@washingtontcity.org)

## Existing Program Elements



UPDES Sec. 4.2.6.7

Washington City has established a training programs for field maintenance staff to address safety, materials handling, waste disposal, or other issues. The City's training program format is a classroom style. These meetings include watching Educational DVDs with any additional questions addressed. Basic stormwater information and details about pollution prevention and BMPs are also addressed. Quizzes are given at the completion of the training and scores recorded in employee files.

## Measurable Goals

---

Washington City will use the following goals to measure its progress in its municipal training BMP implementation.

- ▶ Continue to conduct training; track dates, topics, attendees; and quiz results. (Years 1-5)

## Proposed MS4 Activities



UPDES Sec. 4.2.6.7

The City will conduct more comprehensive training when new employees are hired. Whenever possible, the City will provide additional in-field training to demonstrate proper implementation of operation and maintenance of BMPs and housekeeping measures at municipal facilities. DVDs will continue to be the primary tool used during training.