STORM WATER MANAGEMENT PLAN (SWMP)
UPDATES IN PROGRESS

SPRINGVILLE CITY
Permit No. UTR090040

SPRINGVILLE CITY

STORM WATER MANAGEMENT PLAN
September 2020 – July, 2025

Submitted to:

State of Utah
Department of Environmental Quality
Division of Water Quality

Submitted by:

Springville City, Public Works Department

Revised
09/2020

SPRINGVILLE CITY

STORM WATER MANAGEMENT PLAN

TABLE OF CONTENTS

GLOSSARY ii

OVERVIEW OV-1
- PURPOSE OV-1
- SWMP COORDINATION OV-1
- STAFFING AND RESOURCE ALLOCATIONS OV-1
- WATER QUALITY CONCERNS OV-2
- SWMP DESCRIPTION OV-3
- SPECIAL CONDITIONS OV-6

CHAPTER ONE – PUBLIC EDUCATION AND OUTREACH PROGRAM 1-1
- EDUCATION AND OUTREACH PROGRAM DESCRIPTION 1-1
- UTAH COUNTY STORM WATER COALITION 1-1
- POLLUTANTS TARGETED 1-2
- COMMUNITY OUTREACH PROGRAM 1-3
- PROGRAM EVALUATION 1-7

CHAPTER TWO – PUBLIC INVOLVEMENT/PARTICIPATION PROGRAM 2-1
- PROGRAM DESCRIPTION 2-1
- PUBLIC COMMENT OPPORTUNITIES 2-2
- PUBLIC NOTICE COMPLIANCE REQUIREMENTS 2-2

CHAPTER THREE – ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM 3-1
- STORM DRAIN SYSTEM MAP 3-1
- ORDINANCE 3-2
- DRY WEATHER SCREENING PROGRAM 3-3
- ILLICIT DISCHARGE 3-4
- IDDE EDUCATION AND PUBLIC OUTREACH 3-7

CHAPTER FOUR – CONSTRUCTION SITE RUNOFF CONTROL PROGRAM 4-1
- PROGRAM DESCRIPTION 4-1
- ORDINANCE ENFORCEMENT 4-2
- STORM WATER POLLUTION PREVENTION PLAN (SWPPP) 4-3
- CONSTRUCTION SITE INSPECTIONS 4-6
- CITY PERSONNEL TRAINING 4-9
- RECORD KEEPING OF PERMITTED SITES 4-9

CHAPTER FIVE – POST-CONSTRUCTION STORM WATER MANAGEMENT 5-1
- POST-CONSTRUCTION PROGRAM DESCRIPTION 5-1
- PROGRAM ORDINANCE 5-2
- DESIGN STANDARDS FOR POST-CONSTRUCTION WATER CONTROLS 5-5
- SOP FOR INSPECTIONS AND ENFORCEMENT 5-9
- CITY PERSONNEL TRAINING 5-12

POST-CONSTRUCTION BMP INVENTORY 5-13
CHAPTER SIX – POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS PROGRAM
PROGRAM DESCRIPTION 6-1
FACILITY INVENTORY.....6-1
HIGH PRIORITY FACILITIES AND ACTIVITIES 6-3
INSPECTION OF FACILITIES.....6-3
CITY PERSONNEL TRAINING 6-3

GLOSSARY

BMP	Best Management Practice
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
PHF	Pesticides, Herbicides, and Fertilizers
SOP	Standard Operating Procedures
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
UAC	Utah Administrative Code
UPDES	Utah Pollutant Discharge Elimination System

SPRINGVILLE CITY
STORM WATER MANAGEMENT PLAN OVERVIEW

PURPOSE

This Storm Water Management Plan (SWMP) has been updated to limit, to the maximum extent practicable, the discharge of pollutants to the Springville City Municipal Separate Storm Sewer System (MS4). The development and implementation of this SWMP is to fulfill requirements under the State of Utah UPDES Permit No. UTR090000 Authorization to Discharge Municipal Storm Water dated January 1, 2020 to December 31, 2025 in accordance to section 1.1 Authority to discharge of the UTR090000

SWMP COORDINATION

Agency:	Springville City, Public Works Department
Contact:	Mr. Brad Stapley, Public Works Director
UPDES Number:	UTR090040

STAFFING AND RESOURCE ALLOCATIONS

Responsibility for implementation of the storm water management program is divided between Springville City and the Utah County Stormwater Coalition. For the City, most of the work is performed by the Public Works Department and other Divisions and Departments; the administration of the entire program is done by the Engineering Division. The City entered into an agreement entitled, *"Interlocal Cooperation Agreement for NPDES Phase II Storm Water Public Education and Outreach Best Management Practice Compliance"* (see copy attached), which delegates Utah County responsibility for administration of the Interlocal Cooperation Agreement.

Management and oversight of the City's responsibilities under the storm water management program is funded through the City's General Fund. The revenue source for the work performed by the Utah County Stormwater Coalition is an assessment to the participating municipalities.

Water Quality Concerns

Permit Requirement 2.3.2.3

The City Storm Water Management Plan (SWMP) has been updated to meet the terms of the UPDES UTR090000 January 1, 2021 to December 31, 2026 permit and consists of the six minimum control measures established by the EPA for Phase II storm water discharges. Implementation of these control measures is expected to result in significant reductions of pollutants discharged into receiving waters. The pollutants we are more concerned about in the City are:
Sediments, trash, pathogens, fertilizers/nutrients, hydrocarbons, metals, pesticides, acid and base products, road salts and increased stream flow. These six control measures are addressed in separate chapters.

Pollutant	Source	Impacts
Sediment	Construction sites, vehicle/boat washing, agricultural sites	Destruction of aquatic habitat for fish and plants, transportation of attached oils, nutrients and other chemical contamination, increased flooding. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.
Nutrients (Phosphorus, Nitrogen Potassium, Ammonia)	Fertilizers from agricultural operations, lawns and gardens; livestock and pet waste, decaying grass and leaves, sewer overflows and leaks.	Harmful algal blooms, reduced oxygen in the water, changes in water chemistry and pH. Nutrients can result in excessive or accelerated growth of vegetation, resulting in impaired use of water in lakes and other receiving waters.
Hydrocarbons (Petroleum Products, Benzene, Toluene, Ethyl benzene, Xylene)	Vehicle and equipment fluid leaks, engine emissions, pesticides, equipment cleaning, leaking fuel storage containers, fuel spills, parking lot runoff	These pollutants are toxic to humans and wildlife at very low levels. Carcinogenic. Teratogenic.
Heavy Metals	Vehicle brake and equipment wear, engine emissions, parking lot runoff, batteries, paint and wood preservatives, fuels and fuel additives, pesticides, cleaning agents	Metals including lead, zinc, cadmium, copper, chromium and nickel are commonly found in stormwater. Metals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic.
Toxic Chemicals (Chlorides)	Pesticides, herbicides, dioxins, PCBs, industrial chemical spills and leaks, deicers, solvents,	Chemicals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic.
Debris/Litter/Trash	Improper solid waste storage and disposal, abandoned equipment, litter	Aesthetically unpleasant. Risk of decay product toxicity. Risk of aquatic animal entrapment or ingestion and death.
Pathogens (Bacteria)	Livestock, human, and pet waste, sewer overflows and leaks, septic systems	Human health risks due to disease and toxic contamination of aquatic life.

Each control measure includes Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) necessary for proper storm water management. The BMPs and SOPs include specific tasks to meet the objective of that particular control measure. The BMPs and SOPs

included in this SWMP will be implemented and reviewed through out the permit term. This SWMP is intended to be a living document with BMPs added or deleted as new BMPs arise or BMPs are found to be ineffective. Schedules for implementing the BMPs are provided along with each minimum control measure.

SWMP Description

Permit Requirement 2.3.2.4 Description of the Program Elements

Chapter One – Public Education and Outreach Program

This measure is intended to achieve greater public support for the storm water management program and greater compliance through education. An informed public can significantly contribute to the success of the program.

Education is emphasized in this SWMP because of its cost-effectiveness. It is a proactive approach because it prevents pollution rather than reactively treating pollution after it has occurred. The Education an Outreach Program includes:

- Fourth Grade Educational Program
- Utah County Storm Water Coalition
- Community/Residential Outreach Program
- Commercial Outreach Program
- Urban Development Outreach Program
- City Employees Training Program
- Utah Stormwater Advisory Committee

Chapter Two – Public Involvement/Participation Program

This measure is intended to provide opportunities for the public to play an active role in both the development and implementation of the storm water management program. An active community is important to the success of the program. The BMPs in this chapter not only serve to involve the public, but also serve to educate the public on storm water issues. The Program includes:

- Program Description
- Comment Opportunities
- Public Notice Compliance Requirements
- Public Participation

Chapter Three – Illicit Discharges and Improper Disposal Program

This measure is intended to minimize illicit discharges into the storm drain system. Illicit discharges are discharges other than storm water. Storm drain systems are not designed to accept, convey, or discharge non-storm water flows. Eliminating illicit discharges helps prevent pollutants from entering receiving waters. The Program includes:

- Storm Drain System Map
- Ordinance

- Dry Weather Screening Program
- Illicit Discharge
- IDDE Education and Public Outreach

Chapter Four – Construction Site Storm Water Runoff Control Program

This measure is intended to minimize polluted storm water runoff from construction activities. Construction activities can contribute significant levels of sediment to storm water runoff if erosion and sediment controls are not implemented. The Program Include:

- Program Description
- Ordinance
- Storm Water Pollution Prevention Plan (SWPPP)
- Construction Site Inspections
- City Personnel Training
- Record Keeping of Permitted Sites

Chapter Five – Post-Construction Storm Water Management Program

This measure is intended to minimize the impact to storm water quality caused by development and redevelopment. The increase in impervious areas caused by development can cause an increase in the type and quantity of pollutants in storm water runoff. Prior planning and design to minimize pollutants in runoff from these areas is an important component to storm water quality management. The Program Include:

- Program Description
- Ordinance
- Design Standards for Post-Construction Water Controls
- Review of Post-Construction Water Controls
- SOPs for Inspections and Enforcement
- City Personnel Training
- Post-Construction BMP Inventory

Chapter Six – Pollution Prevention/Good Housekeeping for Municipal Operations Program

This measure is intended to ensure a reduction in the amount and type of storm water pollutants by establishing routine activities in the operation and maintenance of municipal operations that affect storm water runoff. Setting particular guidelines for source controls and materials management is an important component to storm water quality management. The Program includes:

- Operation and Maintenance Program Description
- Facilities Inventory
- High Priority Facilities and Activities
- Inspection of Facilities

- City Personnel Training

Permit Requirement 2.3.2.5 Modifications to City Ordinance

Modifications to the city ordinance are under review and are expected to be adopted by **January 2021**, below is a quick review of the changes.

Title 10 Chapter 9 Land Disturbance Permit.

- Land Disturbance Permit- Defines and regulates land disturbance activities. Permitting thresh holds for land disturbance activities were lowered to include all disturbance areas over 7,500 square feet and land disturbance areas smaller than the 7,500 square feet as required by the City Engineer. Charge fees for Land Disturbance Permits. Require a performance bond for projects the City Engineer deems needed.
- Post Construction requirements- as built plans to be turned in to the City Engineer stamped by a certified Engineer as to the proper building and installation of post construction BMP facilities. Require maintenance agreements from person responsible for the maintenance of post construction BMP facilities.
- Violations- Requires compliance with the appropriate UPDES Construction permits, gives enforcement escalation guidance.

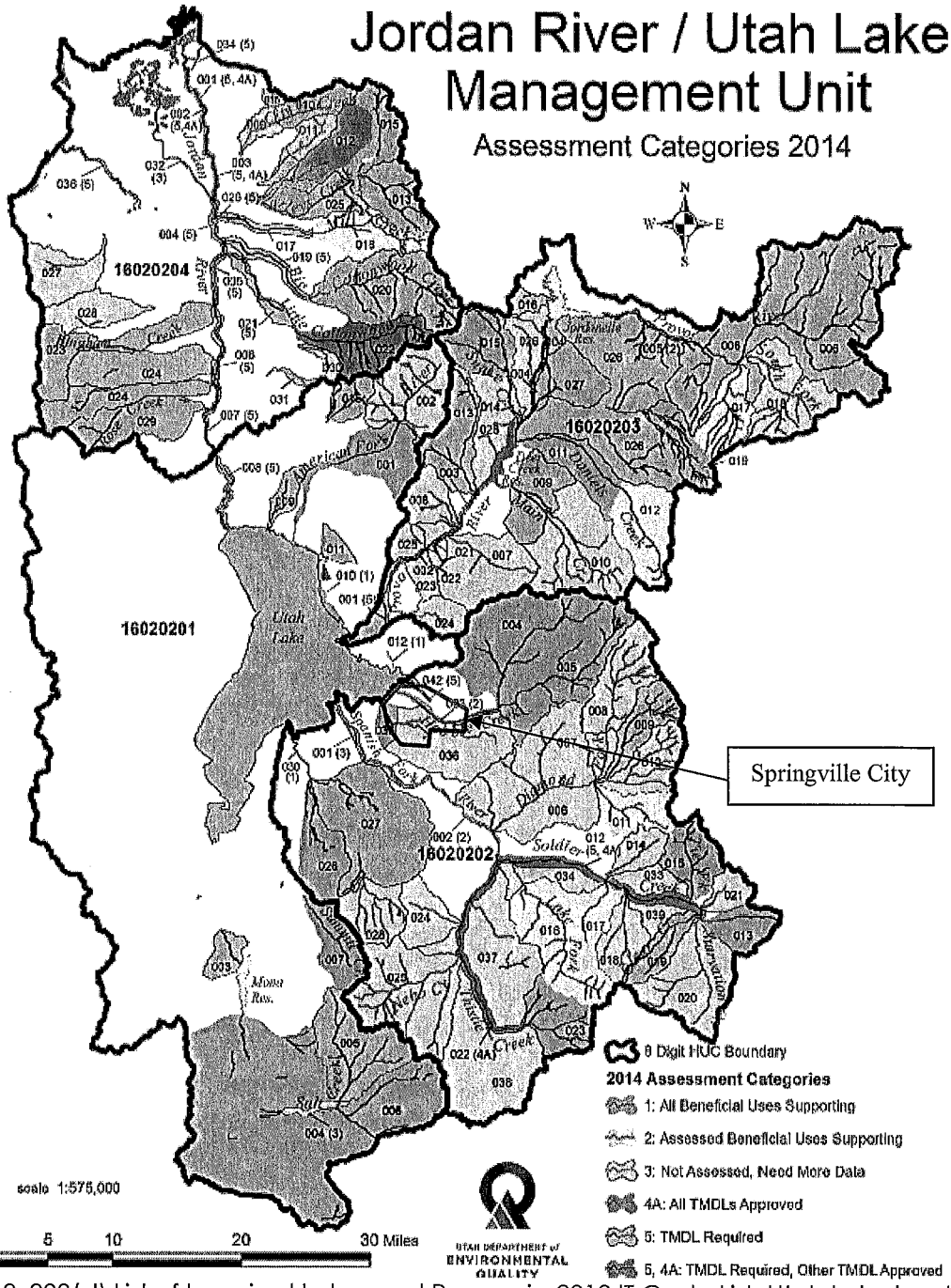
Title 4 Chapter 12 Storm Sewer Utility.

- Storm Sewer System Design and Management Standards- Makes reference to the Springville City Standards and Specifications.
- Created a Post Construction Storm Water Facilities Management section to address maintenance easements, responsibilities, arrangements and agreements; stabilization requirements; existing problem location requirements; inspection of existing facilities.
- Illicit Discharge- consolidated articles 12 and 13 to describe an illicit discharge, prohibited obstructions, prohibition of illicit connections.

Special Conditions

Discharges to Water Quality Impaired Waters

Permit Requirement 3.1.1.1 According to the Utah 2016 Integrated Report 303(d) List; Springville City discharge its storm water to 4 tributaries that end up in the Utah Lake, these tributaries are:
Spring Creek- Category 1
Hobble Creek- Category 1
Dry Creek- Category 1
Land Drain Basin- Category 1



On table 2. 303(d) List of Impaired Lakes and Reservoirs 2012 IT Cycle List, Utah Lake has the following description:

Table 2. 303(d) List of Impaired Lakes and Reservoirs 2012 IT Cycle List

AU ID	AU Name	Water Type	Size	Location Description
UT-L-16020201-004_00	Utah Lake	FRESHWATER LAKE	96900 ACRES	LL= 401145/1114733 5,6,7,8,9S 1W,1,2,3E USGS MAP AND DATE: PELICAN POINT,1975 WATERSHED: JORDAN RIVER
Cause	**Cycle First Listed**	**TMDL Status**	**Use**	**Source**
Total Dissolved Solids	2006	Medium Priority	Agricultural	☐ Highways, Roads, Bridges, Infrastructure (New Construction)
Phosphorus (Total)	1994	Medium Priority	Warm Water Aquatic Life	☐ Industrial Point Source Discharge ☐ Municipal Point Source Discharges
PCB in Fish Tissue	2010	Low Priority	Warm Water Aquatic Life	☐ Source Unknown ☐ Unspecified Urban Stormwater ☐ Animal Feeding Operations (NPS) ☐ Irrigated Crop Production ☐ Managed Pasture Grazing

Permit Requirement 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." Springville City has determined according to the information above that storm water runoff discharge is not entering directly to an impaired water body, however, through the 6 minimum control measures, we are targeting the sources that contribute to the Utah Lake TDMLs.

"**Permit Requirement 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."

"**Permit Requirement 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."

Nitrogen and Phosphorus Reduction- Springville City addresses the reduction of water quality impacts associated with nitrogen and phosphorus throughout the SWMP six minimum control measurements.

Permit Requirement 3.2.1.1. - In collaboration with the Utah County Storm Water Coalition Education and Outreach subcommittee will evaluate, identify, target and provide outreach that addresses sources within the boundaries of the cities affiliated with the organization.

CHAPTER ONE

PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

Permit Requirement 4.2.1 Public education and outreach program description

The Public Education and Outreach Program of the Storm Water Management Plan in partnership with the Utah County Storm Water Coalition will address increasing public and professional awareness of water quality concerns and Best Management Practices (BMPs) that may be implemented with respect to protection of storm water.

UTAH COUNTY STORMWATER COALITION

The Springville City Public Works Department will continue coordinating with and participating in the Utah County Stormwater Coalition for the purpose of providing further education and training for our targeted audience with regards to storm water quality.

The Utah County Stormwater Coalition is a coalition of local agencies whose purpose is to reduce the load of pollutants entering storm drains and receiving waters, through education. The Coalition meets to coordinate new educational materials and programs, further storm water program development and inform all members of new regulations or storm water workshops.

The Utah County Stormwater Coalition shall provide the following:

1. An educational booth will be available to be scheduled and manned by the participating cities for city festivities, the county fair, etc.
2. A countywide, quarterly storm water newsletter will be written and distributed by the participating cities. The newsletter will be published by the Utah County Stormwater Coalition.
3. Educational pamphlets will be created by the coalition regarding IDDE, yard waste management, automotive work and car wash, pet waste, and other topics that may be brought up in the future that impact the quality of storm water to be distributed by the participating municipalities in the storm water coalition to the targeted audiences mentioned above.
4. Fourth grade educational program.
    - The objective of this program is to provide students with educational materials, demonstrations and outreach activities regarding the impact of daily activities on storm water quality.
    - The Utah County Storm Water Educational Program is a storm water quality lesson taught by a teacher hired by the Utah County Storm Water Coalition. The lesson is interesting, easy to present and lasts approximately 25 minutes. The presentation begins with a container of clean water (tap water) that represents the rainwater that produces storm water runoff. Step by step different "contaminants" are added to the container, such as vegetable oil (oil), pet waste (dog food), dirt (sediment), twigs (floatables), and paper (litter). The presentation demonstrates the importance of preventing litter and keeping the storm drain system clean. The purpose of the presentation is to visually display the types of pollutants in storm water, the sources of each pollutant, and their impacts. The teacher asks questions about the rain cycle, where the rain water flows too, and how pollutants are picked up along the way. At

the end of the presentation an activity book and other educational materials regarding storm water are given to the students.

A budget for the educational program is to be established annually based upon the population of the participating members. The type of media and the distribution schedule are to be discussed by Utah County Stormwater Coalition members to more effectively target the public.
The Utah County Stormwater Coalition Current members are:

Alpine City
Cedar Hills City
Lehi City
Mapleton City
Payson City
Provo City
Spanish Fork City
Utah County
American Fork City
Highland City
Lindon City
Orem City
Pleasant Grove City
Salem City
Springville City

Lead Entity: Utah County Storm Water Coalition, Engineering Division- SWPPP Inspector, Storm Water Division- Superintendent

Year	Measurable goal action summary:	Document number of students taught
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

The educational program includes 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:

Permit Requirement 4.2.1.1 Pollutants targeted

The Engineering and Storm Water Divisions in conjunction with the Utah County Storm Water Coalition will continue to improve the educational program, the program will educate our audience about impacts from storm water discharge, methods to avoid, minimize, and reduce impact of storm water discharge and actions one can take to improve water quality. The pollutants we are most concerned with are sediments, pathogens, nutrients, fertilizers, pesticides, herbicides,

hydrocarbons, metals, road salts, detergents, chemicals, acid or base product, solid or liquid waste product, human or animal waste.

This program will integrate many other facets of the SWMP to provide information to our targeted audience which describe the potential impacts from storm water discharges, methods for avoiding, minimizing, reducing and/or eliminating pollutants from entering the MS4 and 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.

COMMUNITY OUTREACH PROGRAM

Permit Requirement 4.2.1.2. Information given to the general public

The Engineering Division will provide and document information given to the general public of City's prohibitions against illicit discharges and improper disposal of waste and the negative impacts associated with it. The main topics of education include: hazardous waste disposal 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.
Information publications will be produced in conjunction with the Utah County Storm Water Coalition.

City News Letter: Information regarding the impacts associated with illicit discharges and improper disposal of waste will be distributed 4 times a year on the City newsletter.

Targeted City Mailers: Send information regarding the proper disposal of swimming pool water to homes with pools in the City. And up to date inventory will be kept in digital form using the City's asset management software.

Building Permit Package: Include an informational sheet regarding the benefits of on-site infiltration of storm water with the building permit package given to residents at the time permits are obtained.

Information Booths: Information booths are to be held at various community events such as the county fair, and the Art City Days celebrations. The booth display includes a graphic panel illustrating the hydrologic cycle in an urban setting and is accompanied by a series of pamphlets or other educational materials that explain how the public can help reduce pollutants exposed to rainfall. The materials that are handed out at the booths primarily consist of the current information developed by the Utah County Stormwater Coalition.

Door to Door Information: City personnel distributes pamphlets designed to inform the community of the impacts of polluted storm water discharges on local water bodies door to door when citizens are caught in the action of violating the storm water City Codes. Documentation for this item will be recorded section 4.2.3.6.1 IDDE investigation documentation of this SWMP.

Lead Entity: Utah County Storm Water Coalition, Engineering Division- SWPPP Inspector, Storm Water Division- Superintendent,
Distribution of BMPs will be done in multiple ways that will involve the Business Licensing Department, Code Enforcement Agent, Storm Water SWPPP Inspector, Storm Water Superintendent.
Documentation will be kept in digital form using the City's asset management software.

Residents- BMPs Include: Newsletter, door to door code enforcement, information booths at City celebrations, swimming pool maintenance, HPF use, automotive work/car care, pet waste, and good property upkeep and landscaping practices.

Measurable goal action summary: Residents Outreach

Year	1. Document number of door to door code enforcement notices 2. Document date and location for information booth, number of people reached and information given 3. Create inventory of homes with pools and document number of Pool Water Mailers sent out. 4. Document dates when mailers are sent out to residents regarding HPF use, automotive work/car care, pet waste, and good property upkeep/good landscaping practices.
7/1/2020 - 6/30/2021	
7/1/2021 - 6/30/2022	
7/1/2022 - 6/30/2023	
7/1/2023 - 6/30/2024	
7/1/2024 - 6/30/2025	

Permit Requirement 4.2.1.3. Information given to businesses and institutions

The Engineering and Business License Division will provide and document information regarding the impacts associated with illicit discharges and improper disposal of waste to established businesses and institutions once a year and to new entities applying for a license or a building permit that will impact the storm water quality. The main topics of education include: 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 and Industrial MSGP); proper management of waste materials and dumpsters (cover and pollution prevention); and proper management of parking lot surfaces (sweeping). Information publications will be produced in conjunction with the Utah County Storm Water Coalition.

- Pesticide, Herbicide, and Fertilizer Educational Program: Information along with educational materials is to be presented to businesses and industries regarding the potential impact to receiving waters due to the over-application and misapplication of pesticides, herbicides, and fertilizers. General information regarding pesticide, herbicide, and fertilizer application will be distributed via brochures, information booths, mailed to commercial sprayers and industrial training events.

- Pollution Prevention and the UPDES Multi Sector General Permit (MSGP): Federal and State Regulations and educational materials will be distributed to inform specific institutions, businesses and industries located in our City of the causes and effects of polluted storm water due to exposure of industrial activities will be distributed by various City Departments.

Building Permit Package: Include an informational sheet regarding the benefits of on-site infiltration of storm water with the building permit package given to business owners at the time permits are obtained.

Lead Entity: Utah County Storm Water Coalition, Engineering Division- SWPPP Inspector, Storm Water Division- Superintendent, Business Licensing Official- Building Division Secretary

Institutions, industrial and commercial facilities- BMPs include: Business Licensing check list, Storm water maintenance agreement, inventory of sites, and annual outreach to facilities manager to discuss HPF management, good housekeeping and landscaping practices. Documentation will be kept on electronic form using the City's asset management software.

Measurable goal action summary: Institutions, Industrial and Commercial Facilities Outreach

Year	1. Create and inventory list of facilities that have a Storm Water Maintenance Agreement. 2. Document number of meetings with facilities manager.
7/1/2020 - 6/30/2021	
7/1/2021 - 6/30/2022	
7/1/2022 - 6/30/2023	
7/1/2023 - 6/30/2024	
7/1/2024 - 6/30/2025	

Permit Requirement 4.2.1.4. Information given to engineers, construction contractors, developers, development review staff, and land use planners

The Engineering Division has adopted the Utah/EPA SWPPP template for construction activities and a Common Plan of Development SWPPP template created by the City from information previously supplied with the development SWPPP as the standard documents to submit along with the City Land Disturbance Permit (LDP) to help reduce the adverse impacts from storm water runoff from development sites. A pre-application meeting is held between Engineering Division SWPPP Inspector and the developer to go over the LDP requirements, SWPPP template or CPoD SWPPP template, erosion controls, sediment controls, good housekeeping controls and post-construction controls. (This item will be described at more length on section 4.2.4).
The Engineering Division has included a list of possible BMP's that can be used with the Standard Specifications and Drawing Manual.

- Training sessions regarding UPDES regulations; SWPPP development, review and management, BMP selection and maintenance; SWPPP Inspections and other topics will be offered through the Utah County Storm Water Coalition once a year.
- Training on the BMP's and use of them is provided to planners and DRC staff annually.
- The Engineering Division will document the number of pre-application meetings held with engineers, construction contactors, and land developers regarding Storm Water Pollution Prevention Plans (SWPPPs).

Lead Entity: Utah County Storm Water Coalition, Engineering Division,

Engineers, development review staff, developers and contractors (construction) - BMPs include: Annual training offered by the UCSWC regarding SWPPP, construction pre-application meeting to include LID BMPs, pre-construction meeting, SWPPP review, SWPPP inspections. Documents will be kept in electronic form.

Measurable goal action summary: Engineers, Construction Contractors, Developers, Development Review Staff, and Land Use Planners Outreach

Year	1. Document number of Developers and Contractors that attended the annual training offered by the UCSWC. 2. Document training dates for staff and include sign in sheet.
7/1/2020 - 6/30/2021	
7/1/2021 - 6/30/2022	
7/1/2022 - 6/30/2023	
7/1/2023 - 6/30/2024	
7/1/2024 - 6/30/2025	

Permit Requirement 4.2.1.5. Information and training given to city employees

The Engineering Division in conjunction with each Division or Department will provide and document Information and training regarding the impacts associated with illicit discharges and improper disposal of waste once a year, to City employees that as part of their every day activities can impact the water quality in the storm drain system. The topics that will be covered during this training include: 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). (This item will be document and described at more length on section 4.2.6)

MS4-owned or operated facilities- BMPs include: Annual training, review and updates to O&M manuals.

Measurable goal action summary: MS4 Personnel Outreach

Year	1. Document date of training and review of O&M manuals
7/1/2020 - 6/30/2021	
7/1/2021 - 6/30/2022	
7/1/2022 - 6/30/2023	
7/1/2023 - 6/30/2024	
7/1/2024 - 6/30/2025	

Permit Requirement 4.2.1.6 Information given to MS4 engineers, development land planners and plan review staff regarding Low Impact Development (LID) practices

The Engineering Division will explore what kind of LID post-construction BMP's can be adopted by the City to work with the kind of soil and terrain that we have with in our city. Training opportunities will be sought with in the next 12 months to help develop this program, once the program is established, annual training of the staff will be done by either Engineering Division staff or a private consultant. (This item will be described at more length on section 4.2.5.)

Lead Entity: Engineering Division

Year	Measurable goal action summary:	1. Adopt LID post-construction BMPs by September 1, 2016. Continue to explore and evaluate new LID options. 2. Document training date, attendance and course description
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.1.7. Program Evaluation

Public Survey: The Utah County Stormwater Coalition will administer public surveys. The initial survey will determine what type of information should be conveyed to the public. The follow-up survey will question the public about their actions, rather than just their knowledge. The purpose of the survey will be to give the Utah County Stormwater Coalition an idea as to how effectively the education program is working. Examples of questions are: what do you do with your grass clippings; where do you dispose of your household hazardous wastes, etc. The survey will be developed and implemented with the assistance of a survey consultant.

Permit Requirement 4.2.1.8. Rationale as to why particular BMPs were chosen for this section.

Springville City is a member of the Utah County Storm Water Coalition and it was agreed that the Coalition would cover the Public Education and Outreach Program requirements of the permit for all of the participating communities. The BMP's selected were discussed and selected based on their compliance with the permit requirements, effectiveness in. Each participating City approved the selection of each applicable BMP.
The BMP chosen are:

- 4th Grade Education
- Booth at Art City Days
- Door to Door Information – as violations are identified
- Building Permit Informational Sheet (Storm Water Infiltration)
- Residential Outreach. Educational article in News Letter (x5 per year)
- Industrial Outreach
- Training for Developers/Contractors – pre-app
- Training for Staff

CHAPTER TWO

PUBLIC INVOLVEMENT/PARTICIPATION PROGRAM

Permit Requirement 4.2.2 Program description

The Public Involvement/Participation Program section of this SWMP addresses the requirements of applicable State and Local public notice requirements. Community participation provides for broader public support, shorter implementation schedules, a broader base of expertise, and the development of important relationships with other community and government programs. The sections described in this chapter include opportunities for the public to play an active role in the development and implementation of the storm water management program. Such opportunities will include: advisory panels, and public hearings. Efforts to reach out and engage with potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowner associations, and education organizations regarding the implementation of new stormwater rules and regulations to foster public input.
The already formed Springville City Water Advisory Board and the Public Works Department will review the SWMP once a year.

Lead Entity: Public Works Department- Public Works Director, Engineering Division, Storm Water Superintendent

Year	**Measurable goal action summary:**	Water advisory board will be the primary advisory panel, document meetings dates and outcome.
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.2.1. Comment opportunities

The Engineering Division will provide opportunities for public involvement in the constant development, updates and implementation of the storm water management program, including development and adoption ordinances through the development of a web based system to accept public comments about the Storm water Program.

Permit Requirement 4.2.2.2. and 4.2.2.3. SWMP Document available for public review

The Public Works Department Engineering Division, as administrator of the Storm Water Management Program, will make the 2021-2026 SWMP documents available to the public for review and input by January 1st of 2021.
The SWMP document will remain available for public review and input for the life of the permit on the City web site and will allow the public to review and provide input.

Lead Entity: Engineering Division-

Year	Measurable goal action summary:	Document number of comments received and answer given
7/1/2020 - 6/30/2021	January 1, 2021- SWMP available on line for public review and educate	
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.2.4. State and local public notice compliance

The City will comply with State and Local public notice requirements as part of the implementation of the public involvement/participation program.

Public Notice: Public notice requirements shall be conducted in accordance with the State Administrative Procedures Act. Public notices shall be published and public comments received. Appropriate responses will be documented.

CHAPTER THREE

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Requirement 4.2.3. Development and Implementation of the IDDE program

The Illicit Discharge Detection and Elimination Program section of this SWMP addresses non-storm water flows that are discharged to receiving waters through storm water conveyance systems. The program will implement BMPs to assist in the identification of illicit discharges detection and elimination of these discharges from the system. This program will also focus on prevention of new illicit discharges to the storm water system by means of education, regulations, and a spill prevention and response program.

This program will also be integrated with the Public Education and Outreach program to promote awareness of the importance of protecting the storm water system from illicit discharges and their impact to receiving waters. The following BMPs describe implementation tasks and assessment tasks to be completed by the City for the Illicit Discharges and Improper Disposal Program.

The Cities' IDDE program description and procedures are included in Appendix A of the SWMP (in the Storm Water and Sewer O&M Manual)

STORM DRAIN SYSTEM MAP

Permit Requirement: 4.2.3.1. Map

The Storm Water Division and GIS Department will maintain and update a storm drain system map showing the location of all municipal storm sewer outfalls with the names and location of all the waters of the State that receive discharges from the MS4 storm water conveyance system. This information is also available using the Springville City asset management software.

Lead Entity: Storm Water Division Lead Man in coordination with the GIS Department

Year	Measurable goal action summary:	Document number of storm water infrastructure, facilities and outfalls mapped
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

ORDINANCE

Permit Requirement: 4.2.3.2. Ordinance to prohibit illicit discharge

- Title 4 Chapter 13 Illicit Discharge: The City has implemented a storm drainage ordinance that prohibits discharges to the storm drain system that may degrade the water quality. It includes: prohibited discharges, prohibited obstructions, illicit connections and illicit discharges or spills. Sanitary over flows will be covered on the permit requirement section 4.2.3.6. of this chapter.
- Title 4 Chapter 12 Storm Water Utility: The City has adopted a variety of enforcement options in order to apply escalating enforcement procedures as necessary for the severity of violation. **Pursuant to permit requirement 4.2.3.2.1**, this section of the ordinance gives the City the right of entry to any facility subject to this ordinance.

The Engineering Division, Legal Department and Storm Water Division will continue to update the Storm Water Ordinance to effectively prohibit illicit discharges, spills, illicit connections, illegal dumping and sanitary sewer overflows; any changes will be documented on table below.

Lead Entity: Legal Department- City Attorney, Engineering Division- City Engineer, Storm Water Division - Superintendent

Year	Measurable goal action summary:	Document updates to the ordinance
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement: 4.2.3.3. Development and implementation of the dry weather screening program

The City Storm Water Division as part of their Operation and Maintenance (O&M) Manual has developed and adopted 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:

Permit Requirement 4.2.3.3.1 Program procedures for locating priority areas

The Engineering and Storm Water Divisions will create written systematic procedures for locating areas likely to have illicit discharges by January 2021, the criteria for selecting these areas will include:

- Areas with older infrastructure that are more likely to have illicit connections;
- Industrial, commercial, or mixed used 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; and
- Areas upstream of sensitive water bodies.

The Engineering and Storm Water Divisions will create a list of priority areas identified in the system based on the type of industrial use and water consumption for the industrial operation and CCTV inspections of the storm drain system. The list will be updated once a year to reflect changing priorities by the Storm Water/Sewer Collections Department and will be kept on the department's O&M Manual electronic file.

Permit Requirement 4.2.3.3.2 Priority Area Outfalls Inspections

The Storm Water Division will conduct field assessment 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. Field assessment activities will be documented on an inspection form.

Lead Entity: Storm Water Division

Year	Measurable goal action summary:	Document number of priority area out falls inspected
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.3.3.3 Dry Weather Outfalls inspections

The Storm Water Division will conduct field assessment activities for the purpose of verifying outfall locations and detecting illicit discharges during the month of November until weather permitting. Visual inspections of at least 20 percent of all known outfalls will be inspected annually and all outfalls should be inspected at least once during the 5 year permit term. Field assessment activities will be documented on an inspection form.

Lead Entity: Storm Water Division

Year	Measurable goal action summary:	Document number of out falls inspected
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		

Year	Measurable goal action summary:	Document number of out falls inspected
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.3.3.4 Industrial Storm Water Permit

If Springville City discovers or suspects that a discharger may need a separate UPDES Permit (e.g., Industrial Storm Water Permit, Dewatering Permit), Springville City shall notify the Division. Springville City will use the State Division of Water Quality web site to determine if a particular business already has an industrial permit.

Lead Entity: Storm Water Division

Year	Measurable goal action summary:	Document number of industries reported to the DWQ Industrial Activities Program
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.3.4. Tracing a source of an illicit discharge

The Storm Water Division will update and implement standard operating procedures on its O&M Manual for tracing the source of an illicit discharge or connections; the procedures will include: visual inspections and closed circuit camera inspections, and when necessary collecting and analyzing water samples.

Permit Requirement 4.2.3.5. Responding to an illicit discharge

The Storm Water Division will update and implement procedures on its O&M Manual for characterizing the nature of, and the potential environmental threat posed by an illicit discharge found by or reported by the public through the Police Department's dispatch phone number or advertized illicit discharge phone number. These procedures will include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be

taken for containment of the discharge. The department will investigate the source and will involve other parties if necessary.

Permit Requirement 4.2.3.5.1 IDDE Inspection Report

After the source of a non-storm water discharge is identified and confirmed, the Storm Water Division will record the following information on an inspection report that will contain:

- The date the City became aware of the non-storm water discharge,
- The date the City initiated the investigation of the discharge;
- The date the discharge was observed,
- The location of the discharge;
- The description of the discharge;
- The method of discovery;
- The date of removal or repair or enforcement action;
- The method of removal
- The method of removal verification
- The decision process for utilizing analytical monitoring/sampling to aid in the identification of the potential source of an illicit discharge and to characterize the nature of an illicit discharge will be documented in the inspection report.

Lead Entity: Storm Water Division Personnel

Year	Measurable goal action summary:	Document number of out falls inspected
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.3.6. Ceasing of illicit discharges

Upon detection on an illicit discharge the Storm Sewer Collections Department or its appointees will require the immediate cessation of improper disposal practices upon confirmation of the responsible parties.
The Storm water/Sewer Collections Department will develop and implement standard operating procedures on its O&M Manual for ceasing illicit discharges that will include:

- Notification of appropriate authorities;
- Notification of the property owners;
- Technical assistance for removing/eliminating the source of the discharge;
- Follow-up inspections; and
- Enforcement and legal actions if the discharge is not eliminated.

Permit Requirement 4.2.3.6.1 IDDE investigation documentation

The Storm Water Division or its appointees will thoroughly investigate and document all illicit discharges. All of the investigation documentation will be kept on the Storm Water Division O&M manual and the SWMP electronic files.

Lead Entity: Storm Water Division Personnel.

Year	Measurable goal action summary:	Document number of cases found or responded to.
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

IDDE EDUCATION AND PUBLIC OUTREACH

Permit Requirement 4.2.3.7. Improper disposal of waste information

Chapter One Public Education and Outreach Program cover this requirement.

Permit Requirement 4.2.3.8. Household hazardous waste collection

Chapter One Public Education and Outreach Program cover this requirement.

Permit Requirement 4.2.3.9. Reporting Hotline or other local telephone number

The Public Works Department phone number (801-491-2780) is the one listed and advertized to the public for the reporting of spills and other illicit discharges. The public may also call the Police or Fire Departments to report any of these activities. The Public Works Administration Division and Storm water Division will document the number of calls received and follow-up actions taken, and any feedback received from public education efforts.

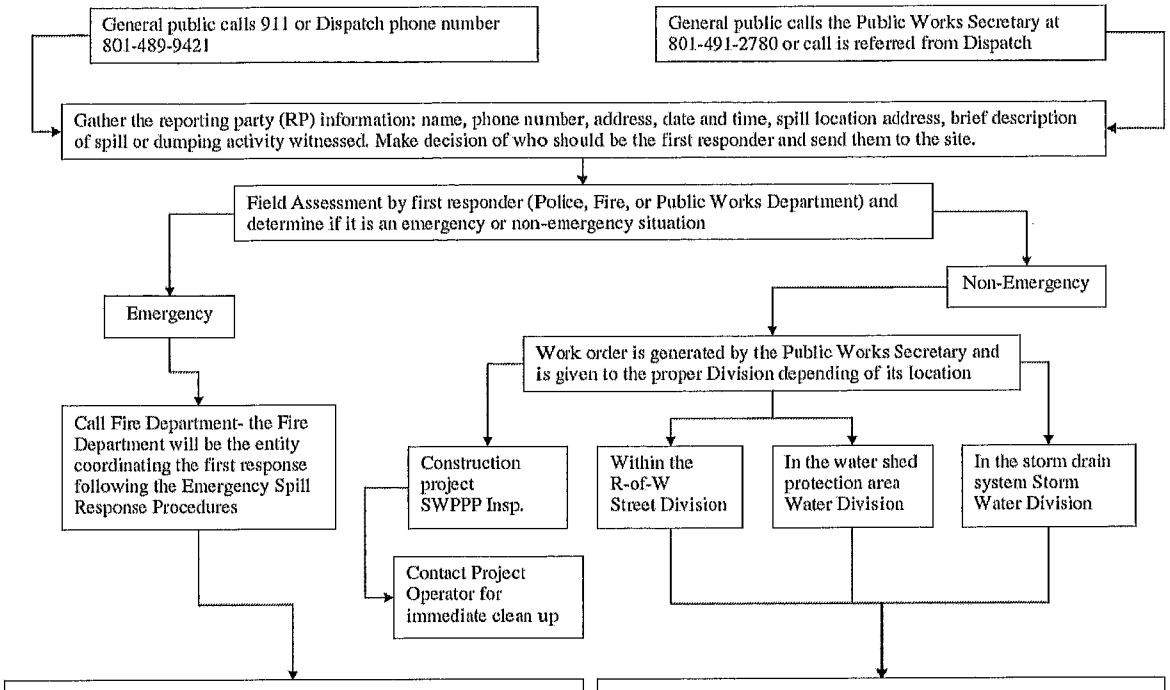
Lead Entity: Public Works Administration, Storm Water Division Superintendent.

Year	Measurable goal action summary:	Document number of calls received.
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.3.9.1 Spill response procedures

The Engineering Division as administrator of the SWMP in conjunction with the Storm Water Division, Fire and Police Departments have developed a written spill/dumping response procedure (Spill response flow chart was created on 11/15/10) and flow chart for internal use, that shows the procedures for responding to illicit discharges/spills, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response. The procedure and list will be incorporated as part of the IDDE program and incorporated as part of each department's O&M Manual IDDE program. This plan will be updated as changes occur.

Springville City Spill/Dumping Response Plan



Emergency Spill Response Procedures

1st Priority: Protect all people
2nd Priority: Protect equipment and property
3rd Priority: Protect the environment

1. Make sure the spill area is safe (identify, isolate, deny).
2. Stop the spill source if possible (use defensive operations only).
3. Check for hazards (flammable material, noxious fumes, cause of spill) – if flammable liquid, turn off engines and nearby electrical equipment. If serious hazards are present leave area and have Springville City Fire Department follow Hazmat control procedures.
4. Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers.
5. If possible, stop spill from entering drains (use absorbent or other material as necessary).
6. Stop spill from spreading (use absorbent or other material).
7. If spilled material has entered a storm sewer; contact the City Storm Water Department..
8. Notify other Local, State and Federal Agencies if needed.

Emergency Numbers

Utah Department of Environmental Quality	
24 hr Emergency Reporting	801-536-4123
Provo Hazmat Response Team Dispatch	801-852-6210
Springville City Fire Department	801-491-5600
Springville City Police Department	801-489-9421
Springville City Storm Water Collections	801-489-2745
Springville City SWPPP Inspector	801-420-1272

Spill Response Procedures for P.W. Divisions

1st Priority: Protect all people
2nd Priority: Protect equipment and property
3rd Priority: Protect the environment

1. Make sure the spill area is safe to enter and that it does not pose an immediate threat to health or safety of any person.
2. Stop the spill source if possible,
3. Check for hazards (flammable material, noxious fumes, cause of spill) – if flammable liquid, turn off engines and nearby electrical equipment. If serious hazards are present leave area and call 911. LARGE SPILLS ARE LIKELY TO PRESENT A HAZARD.
4. Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers
5. If possible, stop spill from entering drains (use absorbent or other material as necessary)
6. Stop spill from spreading (use absorbent or other material)
7. If spilled material has entered a storm sewer; contact the City Storm Water Department.
8. Clean up spilled material according to manufacturer specifications, for liquid spills use absorbent materials and do not flush area with water.
9. Properly dispose of cleaning materials and used absorbent material according to manufacturer specifications.

Emergency Numbers

Springville City Fire Department	801-491-5600
Springville City Police Department	801-489-9421
Springville City Storm Water Collections	801-489-2745
Springville City SWPPP Inspector	801-420-1272

Investigate the cause of the incident and try to identify who the responsible party is and assess liability.
Fill out proper documentation and terminate incident report with all the municipal parties involved.
Submit a copy of the closed report to the Engineering Division SWPPP Inspector.

Permit Requirement 4.2.3.10 IDDE Program evaluation

The Storm Water Division and Engineering Department have adopted procedures for the IDDE program evaluation and assessment that include a database for mapping, tracking of the number and type of spills or illicit discharges and inspections conducted. This information is kept on electronic form using the City's asset management software.

Permit Requirement 4.2.3.11 IDDE employee training

The Engineering and Storm Water Divisions will develop an IDDE training that shall at a minimum, ensure that all staff, contracted staff and all new hires are trained immediately upon hire, 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. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing. The City shall also 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 City 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 City will include a summary of such training in the annual report. (This item will be document and described at more length on section 4.2.6.10)

Permit Requirement 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 can not otherwise be reasonably satisfied."

CHAPTER FOUR

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM

Permit Requirement 4.2.4. Program description

The City has developed and implemented a Construction Site Storm Water Runoff Control Program since 2007 to reduce pollutants in any storm water runoff to the MS4 from sites with a land disturbance 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. Public and private projects, including projects proposed by the City's own departments and agencies will comply with these requirements.

Permit Requirement 4.2.4.1 Ordinance

The City has developed and adopted an ordinance that requires the use of erosion and sediment control practices on any site that conducts land disturbance activities, and are proposing changes to better address the new MS4 permit. The ordinance requires compliance will all the terms of the UPDES Storm Water General Permits for Construction Activities. The current and proposed ordinances include sanctions to ensure compliance. The ordinance applies to any kind of land disturbance activities that disturb an area 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 ordinance also requires storm water pollution prevention controls on sites that do not meet the description mentioned above.

Permit Requirement 4.2.4.1.1 SWPPP requirements

The City Ordinance Title 10 Chapter 9 Land Disturbance Permit requires the construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs 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 proposed ordinance "10-9-204 Plans and Specifications (1)(b)(i)" Requires that the SWPPP documents must be submitted using the latest version of the SWPPP template posted on the Utah Department of Environmental Quality Division of Water Quality web site.

Permit Requirement 4.2.4.1.3 Inspection access to private properties

The proposed City Ordinance "10-9-210 Right of Entry" includes provisions for City personnel to access permitted sites for the purpose to ensure compliance with the City Ordinance 10-9.

Ordinance Enforcement

Permit Requirement 4.2.4.2 Enforcement mechanism

The proposed City Ordinance "10-9-4 Enforcement, Violations and Penalties" provides the mechanism for the Engineering Division SWPPP Inspector and/or Code Enforcement Agent to get compliance from operators of land disturbance activity sites.

Permit Requirement 4.2.4.2.1 Enforcement procedures plan

An enforcement procedures plan will be developed to include specific processes and sanctions to minimize the occurrence of violations, and obtain compliance from violators. The proposed City Ordinance "10-9-403 Remedies and Enforcement Actions" include the available sanctions for the enforcement. The plan will include appropriate, escalating enforcement procedures and actions.

The Engineering Division standard operating procedures to get compliance from operators of land disturbance activity sites plan is described as follows:

- After a site inspection or upon a violation to the LDP requirements is found:
  - A verbal warning with specific amount of time is given to the operator to correct deficiency, if not corrected;
  - An NOV is issued describing the violation to be corrected and additional time is given to correct the deficiency with the threat to stop work, issue a citation or both, if not corrected with in time frame given;
  - A stop work order is issued, this can be verbal or in writing, all work must be stopped except for the activity needed to repair deficiency, at this point, a citation could be issued depending on the severity or recurrence of the problem;
  - A citation is issued to appear in court to face possible fines even after the deficiency is corrected, if problem persists;
  - LDP permit revocation; and
  - Call of bond to repair deficiency.
  - Standard Operating Procedures (SOP's) or similar type of ducuments 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 including am appeals process that is published in a publicly accessible location.

Permit Requirement 4.2.4.2.2 Tracking enforcement actions

The Engineering Division SWPPP Inspector has been documenting and tracking all of the enforcement actions, the tracking system mechanism include the use of an electronic spread sheets and GIS mapping.

Lead Entity: Engineering Division

Year	Measurable goal action summary:	Document Number of enforcement actions
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		

Year	Measurable goal action summary:	Document Number of enforcement actions
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

SWPPP Pre-construction review

Permit Requirement 4.2.4.3. SWPPP review procedures

The Engineering Division will develop and implement procedures for pre-construction Storm Water Pollution Prevention Plan (SWPPP) review and keep records for all sites that obtain a land disturbance permit to ensure plans are complete and in compliance with State and Local regulations. Records of these projects will be kept on file for five years or until construction is completed, whichever is longer.

SWPPP review procedures:

- After the Land Disturbance Permit pre-application meeting, the Engineering Division, requests that the SWPPP template be submitted electronically on "Word" format;
- The Engineering Division creates an electronic file for the project being reviewed;
- The Engineering Division creates an entry on the spread sheet used to track land disturbance sites;
- The Engineering Division enters the site location on a GIS map;
- The Engineering Division uses a SWPPP check list to check the SWPPP template and chosen BMPs for completeness;
    - Correct information on the SWPPP is marked on the check list as "Yes" and information is copied on to the check list as written on the "Description" column;
    - Missing information on the SWPPP is marked on the check list as "No" and a request is made to address the missing information, an explanation of what is missing is written on the "Description" column of the check list;
    - Incomplete information on the SWPPP is marked on the check list as "Revise" and an explanation of what is missing is written on the "Description" column of the check list"
- Red line comments are also written on the SWPPP template;
- SWPPP drawings are reviewed and comments are also made on them; and
- The revised SWPPP template and check list are sent back to the applicant for corrections to be made and then re-submit SWPPP.

The Land Disturbance Permit will not be issued until every item on the SWPPP check list is correct.

Permit Requirement 4.2.4.3.1 SWPPP Pre-construction review meeting

The Engineering Division will conduct a SWPPP pre-construction review meeting 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 post-construction BMPs to manage runoff created after development.

The SWPPP pre-construction meeting between the Engineering Division SWPPP Inspector and site operator will review the following items:

- Critical parts of the SWPPP including:
    - Sensitive areas to be protected;

  - Receiving waters;
  - Potential sources of pollution;
  - Erosion and sediment controls BMPs;
  - Good housekeeping BMPs;
  - Post-construction BMPs;
  - Inspection schedule;
  - SWPPP amendment log;
  - Inspection reports.
- City enforcement procedures; and
- NOT procedures.

Permit Requirement 4.2.4.3.2 SWPPP review check list

The Engineering Division reviews each SWPPP considering the potential water quality impacts; the procedures for the SWPPP review include a check list to ensure that all the proper SWPPP BMPs and documentation is included on this document before the land disturbance permit is issued.

Identify priority construction sites considering the following factors at a minimum.

- Soil erosion potential;
- Site slope;
- Project size and type;
- Sensitivity of receiving waterbodies (impaired or high quality waters);
- Proximity to receiving waterbodies; and,
- Non-storm water discharges and past record of non-compliance by the operators of the construction site.

SWPPP Checklist

Subdivision and operator name
Date

SWPPP Information		
Location	Correct Y=Yes N=No R=Revise	Description
1.1 Owner(s), Operator, Contractors		
Owner	Y	
Operator (GC, Project Manager)	Y	
Site Supervisonr	Y	
SWPPP Contact	Y	
SWPPP Prepared by:	Y	
Emergency 24 hr. contact	Y	
1.2 Storm Water Team		
Oversite	Y	
Modifications	Y	
Compliance	Y	
Installations	Y	
Maintenance	Y	
Inspections	Y	
Corrective Actions	Y	
2.1 Project Site Information		
Site Name	Y	
Adress	Y	
UPDES Tracking Number	Y	
2.2 Nature of Construction Activities	Y	
2.3 Construction Site Estimates		
Total project area	Y	
Area to Be Disturbed	Y	
Runoff coefficients before and after construction	Y	
2.4 Soils, Slopes, Vegetation, and Current Drainage Paterns		
Soil Type	Y	
Slopes	Y	
Drainage Patterns	Y	
Vegetation	Y	
2.5 Emergency Related Project ?	Y	
2.6 Phase/Sequence of Construction Activity	Y	
2.7 Site Features and Sensitive Areas to be Protected	Y	
2.8 Maps	Y	
Section 3 Pollution Prevention Standards		
3.1 Potential Sources of Pollution	Y	
3.2 Non-Storm Water Discharges	Y	
3.3 Natural Buffers of Equivalent Sediment Controls	Y	
Section 4 Erosion and Sediment Controls		
4.1 Minimize Disturbed Area Protect Natural Features and	Y	
4.2 Establish Perimeter Controls and Sediment Barriers	Y	
4.3 Retain Sediment On-Site	Y	
4.4 Establish Stabilized Construction Exits	Y	
4.5 Protect Slopes	Y	
4.6 Stockpiled Sediment or Soil	Y	
4.7 Minimize Dust	Y	
4.8 Topsoil	Y	
4.9 Soil Compaction	Y	
4.10 High Altitude/Heavy Snows	Y	
4.11 Linear Activities	Y	
4.12 Chemical Treatment	Y	
4.13 Stablize Soils	Y	
4.14 Final Stabilization	Y	
Section 5: Pollution Prevention		
5.1 Spill Prevention and Response	Y	
5.2 Construction and Domestic Waste	Y	
5.3 Washing of Applicators and Containers Used for	Y	
5.4 Establish Proper Building Material Staging Areas	Y	
5.5 Establish Proper Equipment/Vehicle Fueling and	Y	
5.6 Control Equipment/Vehicle Washing	Y	
5.7 Pesticides, Herbicides, Insecticides, Fertilizers, and	Y	
5.8 Other Pollution Prevention Practices (Street	Y	
Section 6: Inspections and Corrective Actions		
6.1 Inspections		
6.1.1 Personnel	Y	
6.1.2 Inspection Schedule	Y	
6.2 Corrective Actions	Y	
6.3 Delegation of Authority	Y	
Section 7: Training and Recordkeeping		
7.1 Training	Y	
7.2 Recordkeeping	Y	
Section 8: Water Quality		
8.1 UIC Class 5 Injection Wells	Y	
8.2 Discharge Information	Y	
8.3 Receiving Waters	Y	
8.4 Impaired Waters	Y	
8.5 High Water Quality	Y	
8.6 Dewatering Practices	Y	
8.7 Control Storm Water Flowing Onto and Through the	Y	
8.8 Protect Storm Drain Inlets	Y	
Section 9: Post-Construction BMPs	Y	
Section 10: Certification	Y	
Appendix A General Location Map	Y	
Appendix B Site Maps	Y	
Appendix C BMP Specifications	Y	
Appendix D CGP	Y	
Appendix E NOI	Y	
Appendix F Additional Information (i.e. Documentation; other permits such as dewatering, stream alteration, wetland; and out the date SWPPP documents, local permit)	Y	
Appendix G Delegation of authority	Y	
Appendix H Subcontractor certifications/agreements	Y	
Appendix I Training log	Y	
Appendix J Grading and stabilization activities log	Y	
Appendix K SWPPP Amendment log	Y	
Appendix L Corrective action log	Y	
Appendix M Inspection reports	Y	

Permit Requirement 4.2.4.3.3 Priority construction sites

The Engineering Division will identify and document priority construction sites. Sites will be evaluated and identified as priority construction sites based on the following factors as 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.

Construction Site Inspections

Permit Requirement 4.2.4.4 SOPs for site inspections and enforcement

The Engineering Division SWPPP Inspector is the person responsible for site inspections that disturb an area greater than one acre, he may assign common plan of development inspections to the building department inspectors as needed. Enforcement procedures will be initiated by the SWPPP Inspector and may require assistance from the Code Enforcement Officer when all efforts to gain voluntary compliance have been exhausted, the Code Enforcement Officer will then issue a citation based on the proposed City Ordinance 10-9-4.
Revised – All permittees shall develop and implement SOP's or similar type of documents for construction site inspection and enforcement of construction stormwater pollution control measures. The procedures must clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. An individual or entity who prepares a SWPPP for a construction project may not perform the construction site inspections required of Part 4.2.4.4.1 and 4.2.4.4.3 on behalf of the permittee. 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.

Procedures for an inspections and enforcement are as follows:
Inspection procedures:

1. The SWPPP inspector will open an electronic file for each SWPPP inspection that will eventually contain a copy of the SWPPP Compliance Inspection Form, pictures, maps, and any other information gathered.
2. The SWPPP inspector will pre-fill the known fields of the SWPPP compliance inspection form using the latest version of the State approved inspection form.
3. The SWPPP inspector shall familiarize himself/herself with the SWPPP and identify all BMPs prior to inspecting the site.
4. At the time of inspection, the SWPPP inspector shall introduce himself/herself to the site operator representative and review the SWPPP template and fill the fields of the SWPPP compliance inspection form that have to do with record keeping (questions 1, 3-5);
5. Proceed to do a field inspection and fill the fields of the SWPPP compliance inspection form that have to do with erosion, sediment and good house keeping controls (questions 2, 6-14) document site conditions with photos and narrative descriptions of deficiencies;

- Collects information by observing and asking questions to obtain new information about: management practices, construction techniques or a piece of equipment;
- The inspector should evaluate actual implementation and maintenance of BMPs practices on-site compared to how implementation and maintenance is detailed in the SWPPP. At a minimum, the inspector should observe all areas of active construction. Observing equipment and materials storage areas, recently stabilized areas, and evaluate the effectiveness of BMPs.
- Evidence of poor BMP maintenance, installation or practices should be documented with digital photographs. Those photographs should be logged date stamped and stored on media that cannot be edited. Photos should also be appended to the site inspector's report. It is also beneficial to take photographs of good practices for educational reasons.
- Do not recommend solutions or endorse products. The solution to a compliance problem may appear obvious based on the inspector's experience. However, the responsibility should be placed on the site owner/responsible person to implement a workable solution to a compliance problem that meets UPDES standards. Key advice must be offered carefully. The way inspectors present themselves is important to the effectiveness of the inspection. An inspector cannot be overly familiar, but will be more effective if able to establish a minimum level of communication.

6. If possible, have the SWPPP project manager go along for the entire inspection;
7. Review data gathered and finish the written comments and corrective actions part of the inspection form;
8. Meet with the site operator representative to review SWPPP compliance inspection form and time frame to have deficiencies repaired;
    - Clearly communicate expectations and consequences;
    - Give a reasonable time frame (e.g. 24 hours, 48 hours, one week, two weeks, etc.) to correct the deficiencies identified depending on the level of risk to water quality.
    - The inspector should make clear that Springville City reserves rights to future enforcement actions. If the inspector's supervisor or enforcement coordinator determines additional enforcement actions are necessary.
9. Have the site operator representative sign the SWPPP compliance inspection form; and
10. Print inspection form, pictures, maps, etc. and give it to the site operator representative.
11. Upon returning to the office, the SWPPP compliance inspection report and photographs shall be recorded in the appropriate computer database.

Enforcement Procedures:

After a deficiency is observed and noted during a SWPPP compliance inspection or during any other site visit, and a request for repair or maintenance of a BMP is made either through the SWPPP compliance report or verbally is not taken care off within the time frame allowed, the SWPPP inspector will initiate enforcement procedures that include the following actions (City Ordinance 10-9-4):

1. Verbal Warning- additional 24 hours are given before a Notice of Violation (NOV) is issued;
2. NOV- additional time is given before a stop work order, citation or both are issued;
3. Stop Work Order- all work will be stopped except the work necessary to repair SWPPP deficiencies;
4. Citations- The SWPPP inspector will solicit the help of the Code Enforcement Agent to give out the citation.

5. Suspension or Revocation of Land Disturbance Permit- the City Engineer will contact the holder of the LDP to inform him of his decision.
6. Other remedies:
   - Withholding of permits, certificates, etc.;
   - The City makes the necessary corrections and bills the responsible party;
   - Call on bond.

Documentation is critical to effective enforcement. It is the responsibility of the SWPPP inspector to maintain time limits, timely follow-up inspection is critical.

The construction site storm water runoff control inspection program will provide:

Permit Requirement 4.2.4.4.1 Inspections for all 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#forms.

A "qualified person" is a person of knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at effectiveness of any stormwater controls selected and installed to meet the requirements of this permit, such as but not limited to the following:

- Utah Registered Stormwater Inspector (RSI)
- Certified Professional in Erosion and Sediment Control (CPESC)
- Certified Professional in Stormwater Quality (CPSWQ)
- Certified Erosion, Sediment and STormwaterInspector (CESSWI)
- Certified Inspector of Sediment and Erosion Control (CISEC)
- National Institute for Certification in Engineering Technologies, Erosion and Sediment Control, level 3 (NICET)
- Utah Department of Transportation Erosion Control Supervisor (ECS) (applicable road/street projects only)

Permit Requirement 4.2.4.4.2 The Engineering Division SWPPP Inspector will inspect all phases of construction until the termination of the project. Procedures for termination notification by operator of a permitted site to verify the final stabilization and removal of all temporary control measures are as follows:

1. Construction operators/owners will contact the SWPPP Inspector and request a final inspection of the construction site to terminate their LDP.
2. The SWPPP Inspector will conduct a final inspection to confirm that the site is clean, has been stabilized, all temporary BMPs have been removed, and all structural BMPs have been installed according to the approved plans and are functioning properly;
3. The SWPPP Inspector will fill out the NOT section of the SWPPP Compliance Inspection Form and give a copy to operator representative;
4. The Operator will then submit the Springville City Land Disturbance Permit NOT to the Engineering Division with the following information as requested by the City Engineer:

- As-built plans and written certification by a registered professional engineer licensed to practice in the State of Utah that the structural post-construction BMPs have been installed in accordance with the approved plan;
- Terminate the coverage by closing out the permit on the State website; and
- Operation and maintenance agreement describing the maintenance schedule of the post-construction BMPs as required on the Springville City Code 4-12-302 (3) Maintenance

This procedure will be provided to the construction operator/owner at the pre-construction meeting (as detailed in Section 4.2.4.3.1) before active construction begins.

Permit Requirement 4.2.4.4.3 The Engineering Division SWPPP Inspector will inspect sites with the priority designation as identified per the requirements of section 4.2.4.3.3 and listed on the Springville City Land Disturbance Permit at least bi-weekly 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#forms.

Permit Requirement 4.2.4.4.4 Based on site inspection findings, The Engineering Division SWPPP Inspector will take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the proposed City Ordinance 10-9-4. Enforcement actions will be tracked and documented on a spreadsheet and GIS mapping.

Permittees may utilize an electronic site inspection tool in place of up to one-half of onsite MS4 inspections at a construction site provided that the permittee demonstrates to the director that the tool meets the requirements of part 4.2.4

Permit Requirement 4.2.4.4.5 A hotline telephone number has been established and listed on the City website (Springville.org) and is required on SWPPP signage at all construction sites that will allow the general public to report storm water related issues on construction sites, such as tracking onto streets, etc. The Engineering Division will track and document records of violations, enforcement actions and corrective actions taken in a spreadsheet and GIS mapping.

City Personnel Training

Permit Requirement 4.2.4.5 The Engineering Division will train staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement on an annual basis.
The training will be conducted by the Engineering Division personnel or a third party. Third party training events for inspectors and plan reviewer will be conducted through the Utah County Storm Water Coalition.
The permittee must ensure that all staff whose primary job are related to implementing the construction stormwater 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 within 60 days of hire date and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods of staffing. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

Lead Entity: Engineering Division

Year	Measurable goal action summary:	Document annual training dates, attendance and course description
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Record Keeping of Permitted Sites

Permit Requirement 4.2.4.6 The Engineering Division SWPPP Inspector is currently using procedures to maintain records of all projects disturbing an area 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 records include: site plan reviews, SWPPPs, inspections and enforcement actions including verbal warnings, stop work orders, warning letters, notices of violation, and other enforcement records. Records of these projects will be kept for five years or until construction is completed, whichever is longer.

Lead Entity: Engineering Division

CHAPTER FIVE

LONG-TERM STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT (POST-CONSTRUCTION STORM WATER MANAGEMENT)

Program Description

Permit Requirement 4.2.5. Post-construction Storm Water Management Program Update

The Engineering Division will update, implement and enforce the post-construction storm water management program to address runoff from new development and redevelopment construction sites disturbing an area 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 the MS4, according to the minimum performance measures listed below.
The objective of this program 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 will apply to private and public development sites, including roads.

Post-construction Storm Water Management Program Minimum Performance Measures

Permit Requirement 4.2.5.1. The Engineering Division will update the post-construction ordinance to address storm water controls at new development and redevelopment sites. The proposed City Ordinance "10-9-3 Post Construction" will 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.
The Engineering Division has evaluated various structural post-construction BMP's and created a list of approved options in the Springville Standard Specifications and Drawing Manual. The structural post-construction BMP selection, design, installation, operation and maintenance standards proposed for each site will be reviewed to make sure it will perform adequately in the soil and terrain conditions for the particular site before approval; the Engineering Division will constantly search for post-construction BMPs to minimize impacts from development runoff to the MS4. Existing local requirements to apply storm water controls at smaller sites shall be retained as established in the Springville Standard Specifications and Drawing Manual.

Maintenance of post-construction facilities are addressed on the proposed City Ordinance "10-9-302 Maintenance Arrangements"

Permit Requirement 4.2.5.2. Enforcement responsibilities

Enforcement procedures will be initiated by the SWPPP Inspector and may require assistance from the Code Enforcement Officer when all efforts to gain voluntary compliance have been exhausted, the Code Enforcement Officer will then issue a citation based on proposed City Ordinance "4-12-5 Enforcement, Violations and Penalties". Enforcement actions will be documented electronically using the City asset management software.

Procedures for enforcement of BMPs include:

Permit Requirement 4.2.5.2.1 Enforcement procedures and actions

The procedures and actions to gain compliance from violators will vary from case to case, the enforcement options are detailed on the proposed City Ordinance "4-12-3 Post-construction Agreement and Management of Storm Water Facilities" and proposed City Ordinance "4-12-5 Enforcement, Violations and Penalties".
The Engineering Division and Storm Water Division will take the following actions to gain compliance from site operators:

- BMP Inspection prior to accepting the site improvements;
- Maintenance easements must be properly recorded in the land record;
- Maintenance arrangements with third parties will be arranged through appropriate legal means;
- Periodic inspections of private and City owned or operated post-construction BMPs by the Storm Water Division personnel or SWPPP Inspector;
- If a third party property is not maintained or repaired with in the time allowed by the City, the City will perform the maintenance and repairs at its expense, and bill the same to the property owner;
- Notification to owners of a problem location, specifying time of compliance;
- Other actions include: notice of violation, stop work orders, cease and desist orders, and citations.

Permit Requirement 4.2.5.2.2 Documentation for post-construction BMP requirements

The Engineering Division will document how the requirements of post-construction BMPs will protect water quality and reduce the discharge of pollutants to the MS4. Documentation will 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.

Springville has a list of approved BMP's included in the "Springville Standard Specifications and Drawings Manual". Each BMP was reviewed and approved by the Engineering division during the creation of the manual and by the City Council at the adoption of it. Each BMP is individually listed on a separate sheet detailing the following information:

- Description of the BMP
- Application/Approach
- Installation Criteria
- Limitations of the BMP
- Maintenance required for the BMP.

The selection process included what the intended objective of the BMP was; the targeted pollutants the BMP would help control, how effective this BMP is considered to be and the requirements for implementing this BMP (i.e. – costs, maintenance, training, etc.) All of the above described criteria are summarized on the right hand side of each BMP sheet. An example sheet is included below. The Standards manual is located online at www.springville.org.

Lead Entity: Engineering Division

Permit Requirement 4.2.5.2.4

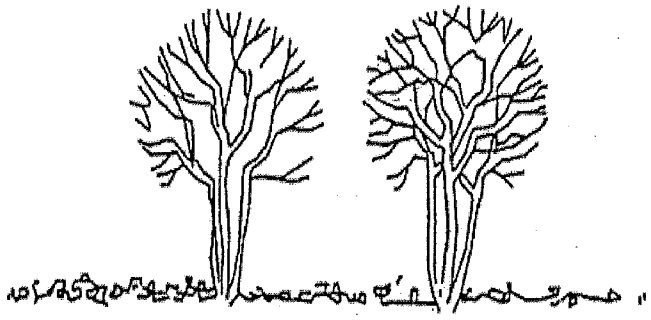
The Engineering Division will insure that all permanent structural BMP's be inspected to ensure the BMP's were constructed as designed prior to closing out a construction project, at a minimum of every other year or as necessary to maintain functionality of the control

Permit Requirement 4.2.5.6

All staff involved in Post Construction storm water management, planning and review, and inspections and enforcement be trained on an annual basis. New hires must be trained within 60 days of hire.

BMP: Preservation of Existing Vegetation

PEV



GENERAL DESCRIPTION:
Carefully planned preservation of existing vegetation minimizes the potential of removing or injuring existing trees, vines, shrubs and/or grasses that serve as erosion controls.

APPLICATIONS:
This technique is applicable to all types of sites. Areas where preserving vegetation can be particularly beneficial are floodplains, wetlands, stream banks, steep slopes, and other areas where erosion controls would be difficult to establish, install, or maintain.

INSTALLATION/APPLICATION CRITERIA:
- Clearly mark, flag or fence vegetation or areas where vegetation should be preserved.
- Prepare landscaping plans which include as much existing vegetation as possible and state proper care during and after construction.
- Define and protect with berms, fencing, signs, etc. a setback area from vegetation to be preserved.
- Propose landscaping plans which do not include plant species that compete with the existing vegetation.
- Do not locate construction traffic routes, spoil piles, etc. where significant adverse impact on existing vegetation may occur.

LIMITATIONS:
- Requires forward planning by the owner/developer, contractor and design staff.
- For sites with diverse topography, it is often difficult and expensive to save existing trees while grading the site satisfactorily for the planned development.
- May not be cost effective with high land costs.

MAINTENANCE:
- Inspection and maintenance requirements for protection of vegetation are low.
- Maintenance of native trees or vegetation should conform to landscape plan specifications.

OBJECTIVES

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

Springville

Springville City Corporation
Public Works Department
Engineering Division
110 South Main Street
Springville, Utah 84663
801-491-2780

TARGETED POLLUTANTS

- ■ High Impact
- • Medium Impact
- • Low or Unknown Impact

- ■ Sediment
- • Nutrients
- • Toxic Materials
- • Oil & Grease
- • Floatable Materials
- • Other Waste

IMPLEMENTATION REQUIREMENTS

- • Capital Costs
- • O&M Costs
- • Maintenance
- • Training

■ High • Medium • Low

Materials Adapted from Salt Lake County Engineering Division Guidance Document

Stormwater Discharge Management from Construction Activities 2002

Post-construction Storm Water Controls Standards for Development and Redevelopment Projects

Permit Requirement 4.2.5.3 The Engineering Division will create requirements and standards to ensure that any storm water controls or management practices for development and redevelopment projects will prevent or minimize impacts to water quality. These standards will be included in the "Springville Standard Specifications and Drawings Manual".

Permit Requirement 4.2.5.3.1 The post-construction storm water controls requirements and standards will include non-structural BMPs such as:

- Minimize development in areas susceptible to erosion and sediment loss;
- Minimize disturbance of native soils and vegetation;
- Preserve areas in the city that provide important water quality benefits;
- Implement measures for flood control; and
- Protect the integrity of natural resources and sensitive areas.

Springville City will include non-structural BMP's in their approved list of BMP's contained in the "Springville Standard Specifications and Drawings Manual". The Standards manual is located online at www.springville.org.

Springville City currently has ordinance language (Title 11-5-301–Hillside Overlay Regulations) that minimizes development in areas because of topography, slope, soil conditions and other natural features that are considered to be environmentally fragile. Development of wetlands or areas adjacent to wetlands is regulated through the US Army Corp of Engineers and requires delineation and approval prior to any City approvals.

Additionally the update to the Springville City General Plan includes a policy (Section 10, sub-section 10.8, Objective 1) that allows for the consideration of a density bonus program to protect environmentally sensitive areas as open space. The General Plan was adopted in early 2011. A copy of the General Plan is available to review at City Hall or in the Springville Public Library.
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.

Permit Requirement 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 Engineering Division will develop a process that requires the evaluation of Low Impact Development (LID) approach which requires the implementation of structural BMPs, where feasible, 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 City will 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.
Permittee will review all post construction plans to ensure long term controls are implemented which meet the permit requirements.

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

The Engineering Division will evaluate various LID approaches and create a list of approved options that will be included in the *Springville Standard Specifications and Drawings Manual*. The selection of LID post-construction controls will take into consideration clogging or obstruction issues, freeze-thaw problems, effect on slope stability and groundwater, and the ability to effectively maintain the control.

It is worth noting that the remaining areas open for development in Springville, known as the Westfield's, have unique constraints that need to be addressed and considered when looking at utilizing LID practices. The area has very high ground water, clayey soils and soils with high liquefaction potential which make infiltration and other LID practices problematic and almost impossible.

When LID practices are proposed to be used on a site, the Engineering Division will review and evaluate the proposal to make sure it will perform adequately in the soil and terrain conditions for the particular site before considering approval. If an LID approach cannot be utilized, the City will 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.

Permit Requirement 4.2.5.3.3 The Engineering Division and Storm Water Division will develop a plan, to retrofit existing developed sites that are adversely impacting water quality. The retrofit plan will be developed to emphasize controls that infiltrate, evapotranspire or harvest and use storm water discharges. The plan will 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 Engineering and Storm Water Divisions will include the following when developing the criteria for the retrofit plan:

- Proximity to water body;
- Status of water body to improve impaired water bodies and protect unimpaired water bodies;
- Hydrologic condition of the receiving water body;
- Proximity to sensitive ecosystem or protected area; and
- Any upcoming sites that could be further enhanced by retrofitting storm water controls.

Lead Entity: Engineering Division, Storm Water Division

Year	Measurable goal action summary:	1. Document number of sites retrofitted.
7/1/2016 - 6/30/2017		
7/1/2017 - 6/30/2018		
7/1/2018 - 6/30/2019		
7/1/2019 - 6/30/2020		
7/1/2020 - 6/30/2021		

Permit Requirement 4.2.5.3.4 The Engineering Division 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. The plan will be developed and adopted for use by December 1, 2016. From this time forward, all new development or redevelopment projects submitted for review to the City that will disturb an area 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. The Engineering Division has determined that the 90th percentile rainfall event will be defined as 0.6 inches of rainfall for the Springville area. 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. If the use is deemed infeasible the City will utilize a regional storm detention pond system to control run off and direct it to approved receiving water bodies. The City will have the applicant focus on storm water quality/treatment prior to release form the site.

The hydrologic method for calculating runoff volume and flow rates will be included in the *Springville Standard Specifications and Drawings Manual, Chapter 3 – Design Criteria for Public Improvements.* The Manual is available online at www.springville.org.

Site Plan Review of Post-construction Storm Water Controls

Permit Requirement 4.2.5.4 The Engineering Division has procedures in place for reviewing the proposed post-construction BMPs to address water quality impacts. Prior to site plan approval the Engineering Division shall:

Permit Requirement 4.2.5.4.1 Prior to site plan approval, the Engineering Division reviews the Storm Water Pollution Prevention Plans (SWPPPs) for all new development and redevelopment sites that disturb an area greater 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 plans include long-term storm water management measures that meet City requirements.

Permit Requirement 4.2.5.4.3 The Engineering Division will keep a representative copy of information that is provided to design professionals. The City does not plan on mailing information to a large number of design professionals; instead, design professionals will be directed to the City website where they can download pertinent information. Training seminars may be offered through the Utah County Stormwater Coalition; if so, attendance and material presented will be documented.

Lead Entity: Engineering Division

Standard Operating Procedures for Inspections and Enforcement of Post-construction Storm Water Control Measures

Permit Requirement 4.2.5.5. The Engineering and Storm Water Divisions will adopt and implement SOPs for site inspection and enforcement of post-construction storm water control measures. These procedures will ensure adequate ongoing long-term operation and maintenance of approved private and city owned or operated storm water control measures.

The SOPs to get compliance from operators of post-construction BMPs through inspections and enforcement are described as follows:

- Post construction BMPs owner information, location, maintenance schedule and other information are entered on the Post-construction facilities data base;
- Inspections are scheduled according to the importance of the Post-construction BMP or according to the maintenance agreements;
- Inspections are conducted by City Personnel using the Post-Construction Facility Inspection Report;
- After a site inspection or upon a violation to the post-construction BMP maintenance requirements is found:
    - A specific amount of time is given to the operator to correct the deficiency either on the written report or verbally, if not corrected;
    - An NOV is issued describing the violation to be corrected and additional time is given to correct the deficiency with the threat to issue a citation, if not corrected with in time frame given;
    - A citation is issued to appear in court to face possible fines even after the deficiency is corrected, if problem persists;
    - The City will repair the deficiency and will back charge the operator or place a lean on the property for the cost of the repairs made.

Lead Entity: Engineering Division, Storm Water Division

Year	Measurable goal action summary:	1. Annual review of the inspection and enforcement SPOs 2. Number of sites inspected.
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.5.5.1 The procedures to gain access to a private site that discharges to the MS4 and inspect storm water control measures to ensure that adequate maintenance is being performed are detailed on the proposed City Ordinance "4-12-2 Post-construction Agreement and Management of Storm Water Facilities" and proposed City Ordinance "4-12-5 Enforcement, Violations and Penalties".
The proposed Ordinance section "4-13-202(3) Maintenance Agreement" allows the facility owner/operator or qualified third parties ,through a legal agreement, 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.

The agreement also allows the City to conduct oversight inspections of the storm water control measures and also account to transfer of responsibility in deeds.
The agreement also allows the City 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.

Lead Entity: Engineering Division, City Attorney

Permit Requirement 4.2.5.5.2 BMP inspections during installation
The Engineering Division will inspect and document structural BMPs at least once during installation by the Engineering Division Public Works Inspectors and/or SWPPP Inspector.

Permit Requirement 4.2.5.5.3 The Storm Water Division will inspect and maintain structural BMPs owned or operated by the City annually using the attached form.
Facilities that are owned/operated by a private entity will also be inspected and maintained by the owner/operator as specified in the maintenance agreement with the City, The Engineering Division SWPPP Inspector will inspect those storm water controls at least once every five years, or as specified in the maintenance agreement, inspections will be documented on the SWPPP GIS map.
The Divisions will document their findings on an inspection report that will include the following information:

- 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;
    - Other control structures; and
    - Debris accumulation.
    - Project location;
- Specific maintenance issues or violations found that need to be corrected by the owner/operator along with deadlines and re-inspection dates.

Lead Entity: Engineering Division, Storm Water Division

Permit Requirement 4.2.5.6. City Personnel Training

The Engineering, Storm Water and Street Divisions will provide adequate training for all staff involved in post-construction storm water management, planning, review, inspections and enforcement on an annual basis. New Hires must be trained within 60 days of hire.
The training will provide the fundamentals of long-term storm water management through the use of structural and non-structural control methods. Training will include: reviewing of the proposed City Ordinance: Post-construction maintenance and inspections section 4-12-302.

The training records will include the training date, course description, and names and positions of staff in attendance. Records of this training will be kept in each individual departments O and M Manuals.
The City 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.

Permit Requirement 4.2.5.7. Inventory of Post Construction Structural BMPs

The Engineering Division GIS Department in conjunction with the Street and Storm Water Divisions will maintain an inventory of all post-construction structural storm water control BMPs through out the City. This inventory will include both public and private sites located with in the City boundaries and service areas.

Permit Requirement 4.2.5.7.1 Each inventory entry will include basic information such as:

- Project Name;
- Owner's name and contact information;
- Location;
- BMP description
    - Storm water control measure(type, number, design or performance specifications);
    - Maintenance requirements (frequency of inspections and maintenance)
- Installation date; and
- Inspection history.

Permit Requirement 4.2.5.7.2 Based on inspections conducted, the Divisions and Departments involved will update the inventory as needed when changes occur in property ownership or changes to the control structural post-construction BMPs.

Lead Entity: Storm Water Division, Engineering Division and Individual Divisions

CHAPTER SIX

POLLUTION PREVENTION and GOOD HOUSEKEEPING PROGRAM FOR MUNICIPAL OPERATIONS

Operation and Maintenance Program Description

Permit Requirement 4.2.6 Operation and Maintenance Program

The Pollution Prevention and Good Housekeeping Program of this SWMP addresses routine activities in the operation and maintenance of City owned facilities, drainage systems, roadways, parks and open spaces, and other municipal operations to reduce pollutants entering the storm drain system.
Various City Departments and Divisions have prepared an operations and maintenance manual (O&M Manual) for the City owned facilities and City activities with specific standard operating procedures for the maintenance and proper operation of structural storm water controls and a training component that have the ultimate goal of preventing or reducing pollutant runoff from the City owned facilities and operations. All of the components of the O&M program will be included in this document, it will identify the department and the staff responsible for performing each activity described on this section.

City Owned Facilities Inventory

Permit Requirement 4.2.6.1 Inventory of city owned or operated facilities.

The Engineering Division in conjunction with City Divisions and Departments has created an inventory of city owned facilities, this list will be reviewed annually and updated as necessary, the care and maintenance of each facility has been assigned to a Division or Department for its care and maintenance. The list include but is not limited to:

- Composting facilities
- Equipment storage and maintenance facilities
- 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
- Street repair and maintenance sites
- Vehicle storage and maintenance yards
- Permittee-owned and/or maintained structural storm water controls Facilities covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities do not need to develop an O&M program but must

instead maintain the Storm Water Pollution Prevention Plan (SWPPP) required by that permit

Inventory of City Owned Facilities

Buildings and Grounds Department

Office, Vehicle &Supplies Storage Yard 909 East 400 South

Buildings

• Springville City Hall	110 South Main Street
• Springville City New Library	45 South Main Street
• Springville Museum of Art	126 East 400 South
• Springville Senior Center	73 East 200 South
• Carnegie Library-DUP Museum	175 South Main Street
• Springville swimming pool	1015 East 900 South
• Community Services Building	443 South 200 East
• Rodeo Grounds	1600 South 700 West
• Fire Station 41	75 West Center Street
• Fire Station 42	442 South Canyon Road

Parks

• Art Wing Park	150 North 950 West
• Arts Park	700 South 1300 East
• Bartholomew Park	2900 East 1100 South
• Big Hollow Park	350 East Evergreen Drive
• Bird Park	1100 East 900 South
• Child Park	200 South 1300 East
• Clyde Park	1200 East 1200 South
• Community Park	700 North 950 West
• Conover Park	600 East 1000 South
• Freedom Park	650 North 250 West
• Hendrickson Park	1500 North 300 East
• Heritage Park	1100 North Main
• Hobble Creek Park	1250 South 2200 East
• Holdaway Park	550 East 400 North
• Kelvin Grove	1500 South 1400 West
• Kolob Park	600 South 700 East
• Memorial Park	200 South 600 East
• Spring Creek Park	700 North 800 East

Canyon Parks

• Kelly's Grove	Hobble creek canyon road
• Jolley's Ranch	Right Hand Fork
• Rotary Park	Left Hand Fork

Cemeteries

• Springville City cemetery	351 West 400 South
• Springville Evergreen Cemetery	1997 South 400 East

Power Department

Hydro electric plants

• Upper Bartholomew	Bartholomew Canyon left fork
• Lower Bartholomew	Bartholomew Canyon left fork
• Hobble Creek	Below Hobble Creek Golf Course
• Spring Creek	East end of 400 South

Power Plant

• Whitehead Power Plant	450 West 600 North

Electric Sub-stations

• Baxter Sub-station	300 E Evergreen Rd.
• Knight Sub-station	300 West 500 South
• Nestles Plant Sub-station	450 W Raymond Klauck Parkway
• 900 N 300 W Sub-station	900 North 300 West
• Compound Substation	909 East 400 South
• Hobble Creek Substation	1500 West 1000 North

Waste Water Division

• Waste Water Treatment Plant	700 North 500 West
• Compost Facility	700 North 700 West

Sewer Lift Stations

• Valtek	1380 North Mountain Springs Parkway
• West Fields	1150 North 1800 West
• Hobble Creek	1000 North 1500 West
• Oakbrook	405 West 1200 North
• East	550 North 600 East
• South	1200 South Main
• Spring Haven	2591 West 700 South
• Thirty Oaks	2800 East Canyon Road
• 1415 North	1415 North 100 West
• East Bay	1940 West 1400 North
• City Hall	110 South Main
• 900 S Compound	909 East 400 South
• Arts Park	650 South 1350 East

Storm Water and Sewer Collections Division

• Equipment and Material Storage Yards	700 North 500 West

Detention Ponds

• D.I. Detention Pond	660 South 1750 West
• Cherrington Detention Pond	400 South 1800 East
• 950 W 100 N Pond	950 West 100 North

- The Rivers Subdivision Pond — 1100 South Whitney Lane

Street Division

Equipment and Material Storage Yards

- 400 South compound — 909 East 400 South
- Material storage compound — 2200 South 700 West

Water Division

Equipment and Material Storage Yard — 909 East 400 South

Water Tanks

- Spring Creek — 2400 East Spring Creek Canyon
- Hobble Creek — 2000 East Canyon Road
- Rotary — Rotary Park, Hobble Creek Canyon
- Jurgs — Kelly's Grove Park, Hobble Creek Canyon
- Jolly's — Jolly's Park, Hobble Creek Canyon
- Bartholomew Canyon — Bartholomew Canyon, Hobble Creek

Springs

- Bartholomew Canyon
- Spring Creek Canyon
- Jolly's — Jolly's Park, Hobble Creek Canyon
- Power House — 700 South 2300 East
- Burt Springs — 1900 East Canyon Road

Wells

- 909 East 400 South
- 900 South 1000 East
- 1000 South 600 East
- 1850 South 400 East
- 200 North 750 East
- 1700 East Canyon Road
- 1900 East Canyon Road
- 325 West 850 North

Pressure Reducing Valves (PRVs)

- 650 West 1600 South
- 650 West 400 South
- 650 West Center
- 380 West 400 North
- 20 West 900 North
- 700 East 1400 North
- 1850 East 450 South
- 650 South 2080 East
- 1700 East Center
- 450 South 2080 East
- 600 East 1000 South
- 800 East 900 South
- 1150 East 50 North
- 810 East 1125 North
- 405 North 880 East
- 2600 East Canyon Road
- Strong Regulator NE Fire Break Rd

Fleet Department

City Vehicle Maintenance Compound — 909 East 400 South

Fire Department

Springville Fire Station 41 — 75 West Center Street
Springville Fire Station 42 — 442 South Canyon Road

Golf Course

Hobble Creek Golf Course	5984 East hobble Creek Canyon Road

Permit Requirement 4.2.6.2 Pollutant discharge potential assessment

The Engineering Division in conjunction with City Departments and Divisions will assess the City owned facilities and operations annually, for their potential to discharge to storm water systems the following typical urban pollutants: sediment, nutrients, metals, hydrocarbons (e.g. benzene, toluene, ethylbenzene and xylene), pesticides, herbicides and fertilizer, chlorine, road salts, detergents, chemicals, acid or base product, trash, bacteria, organic mater, and additional pollutants associated with its facilities that could be found in storm water discharges. A description of the assessment process and findings will be included on each O&M Manual which are included with this SWMP document.

Lead Entity: Engineering Division

HIGH PRIORITY FACILITIES AND ACTIVITIES

Permit Requirement 4.2.6.3 -High priority City-Owned or Operated Facilities Identification

The Engineering Division in conjunction with City Divisions and Departments has identified as "high priority" based on the pollutant discharge potential assessment of each facility or operations that have a high potential to generate storm water pollutants. The factors that were considered in giving a facility a high priority ranking was the amount of urban pollutants stored at the site, the potential for improperly stored materials, activities that must be performed outside, proximity to water bodies, the potential for poor housekeeping practices, and the potential to discharge of pollutants to water ways are:

- Power Department - Whitehead Power Plant, 450 West 600 North
- Buildings and Grounds Department - Vehicle and Supplies Storage, 909 East 400 South
- Street Division - Equipment and Material Storage Yard, 909 East 400 South
- Water Division - Equipment and Material Storage Yard, 909 East 400 South
- Fleet Department - City Vehicle Maintenance Compound 909 East 400 South
- Golf Course - Hobble Creek Golf Course, 5984 East hobble Creek Canyon Road

Permit Requirement 4.2.6.4 – High Priority City-Owned or Operated Facilities SWPPP's

Each City Department or Division in charge of a "high priority" facility or "high priority" operation; has developed or will update the maintenance and activity operation specific standard operating procedures (SOPs). The SOPs will include storm water pollution prevention and good housekeeping BMPs that, when applied to the municipal operation or facility will protect water quality and reduce the discharge of pollutants to the MS4. Low impact development (LID) techniques will be considered when creating and reviewing the O&M manual SOPs.
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.

INSPECTIONS OF HIGH PRIORITY CITY-OWNED/OPERATED FACILITIES

Permit Requirement 4.2.6.5 - Inspections of City-Owned/Operated High Priority Facilities

The following inspections shall be conducted at "high priority" City-owned or operated facilities:

- **Permit Requirement 4.2.6.5.1 - Weekly visual inspections:**
  Each Department or Division will perform weekly visual inspections of "high priority" facilities in accordance with their O&M Manual to minimize the potential for pollutant discharge; spills must be documented and cleaned up immediately to prevent contact with precipitation or runoff.
  The weekly inspections will be tracked in a log by each Department or Division and records kept in their O&M Manual reporting section. The inspection log will include the date of an identified deficiency and the date corrective actions were taken to remedy the deficiency.
  Copies of these logs will be loaded annually to an electronic file for each department.

- **Permit Requirement 4.2.6.5.2 - Quarterly comprehensive inspections:**
  Each Department or Division will perform, at least once per quarter, a comprehensive inspection of the "high priority" facilities identified on the O&M Manual.
  "High Priority" facility inspections will focus specific attention to:
    - Waste storage areas;
    - Dumpsters;
    - Vehicle and equipment maintenance areas;
    - Fueling areas;

- Material handling areas; and
- Similar pollutant-generating areas.

The quarterly inspection will be documented and records kept with the O&M Manual, the report will include identified deficiencies and the corrective actions taken to remedy the deficiencies; the inspections will be done in accordance to the O&M Manual SOPs. Copies of these inspection reports will be loaded annually to an electronic file for each department.

Lead Entity: Engineering Division

Year	Measurable goal action summary:	The Engineering Division will make sure that all of the inspections are being performed and data gathered in the correct electronic files. Document dates of department file review.
7/1/2020 - 6/30/2021	Continue to update all Operations and maintenance manuals for all departments	
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

- **Permit Requirement 4.2.6.5.3 - Quarterly visual observation of storm water discharges:**
The Engineering Division SWPPP Inspector will visually observe the quality of the storm water discharges from the "high priority" facilities. Any observed problems such as: color, foam, sheen, turbidity, that can be associated with pollutant sources or controls will be remedied to prevent discharge to the storm drain system; remedies that will require modification to structural controls will be presented to decision makers with in the City to approve such changes, temporary remedies will be implemented during that period of time. Visual observations will be documented and records kept with the SWMP document.
SOPs for the inspection are as follows:
  - Use of the official Discharge Monitoring Report Form (located on the Storm Water MS4 electronic file);
  - Locate monitoring discharge point;
  - Collect sample on a glass container;
  - Document with pictures: water sample, runoff flow patterns, observed sheen flows, etc.;
  - Identify deficiencies and report to the parties responsible for the deficiencies;
  - Responsible party will then report back to the SWPPP Inspector of the corrective actions taken.
  - SWPPP Inspector conducts a follow up inspection to verify correction and finish report.

Permit Requirement 4.2.6.6. SOPs for Facilities and/or Activities

SOP's shall be developed and implemented for the following types of facilities and/or activities listed below:

- **Permit Requirement 4.2.6.6.1 - Buildings and facilities O&M Program and SOPs**
    - The O&M program will include: City owned or operated offices, police and fire stations, swimming pool, parking lots, etc. Each Department or Division that has an impact on storm water discharging to the municipal separate storm sewer system (MS4), will create or update their O&M Manuals and SOPs to include the following items:
    - 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 SOPs.
    - All City owned or operated facilities must develop and ensure that spill prevention plans are in place.
    - The SOPs will address dumpsters and other waste management which includes, but is not limited to cleaning, washing, painting and other maintenance activities.
    - The O&M program will include schedules and SOPs for sweeping parking lots and keeping the area surrounding the facilities clean to minimize runoff of pollutants.
    -
        - Inventory will be kept current.
        - Each department or division will ensure that all floor drains discharge to appropriate locations
        - Each City Divisions and Departments must ensure that only storm water is allowed into these drains and that the appropriate BMPs are in place to minimize pollutants from entering the MS4.

Lead Entity: Engineering Division, All Departments and Divisions

Year	Measurable goal action summary:	1. Continue to update O&M Manual SOPs
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

Permit Requirement 4.2.6.6.2 - Material storage areas, heavy equipment storage areas and maintenance areas

Each Department or Division will update and implement SOPs to protect water quality at each of the facilities owned or operated by the City Departments or Divisions not covered under the General Permit for Storm Water Discharges Associated with Industrial Activities.

Permit Requirement 4.2.6.6.3 - Parks and open space

The Parks Division and Golf Course will update their O&M Manual SOPs to address:

- Fertilizer, pesticides, and herbicides proper application, storage and disposal, including minimizing the use of these products and using only in accordance with manufacturers instruction;
- Sediment and erosion control;
- Lawn maintenance and landscaping activities- evaluate practices to ensure protection of water quality such as, proper disposal of lawn clippings and vegetation, and use alternative landscaping materials such as drought tolerant plants;
- Management of trash containers at parks and other open spaces- (include scheduled garbage pick up, number of containers, and signage in areas concerning proper disposal of pet wastes);
- Cleaning of maintenance equipment, building exterior, trash containers and the disposal of the associated waste water.

The Parks Division and Golf Course will implement pollution prevention and good housekeeping practices at their facilities.

Permit Requirement 4.2.6.6.4 - Vehicle and equipment maintenance activities

All Divisions and Departments will update their O&M Manual SOPs to address vehicle maintenance and repair needs.
The Golf Course, Fleet Department, Parks, and Street Divisions maintain vehicles at their facilities; they will include BMPs such as drip pans and absorbents under or around leaky vehicles and equipment or storing indoors where feasible.
The Fueling area operated by the City is located at the Waste Water Reclamation Plant; it is constantly monitored and evaluated according to the requirements of their MSGP SWPPP.
Vehicle wash procedures will be addressed by all Departments and Divisions to ensure that wash waters are not discharged to the MS4 or surface waters.

Permit Requirement ~~4.2.6.4.5~~ 4.2.6.6.5 - Roads, highways and parking lots

The Street Division O&M Manual will be reviewed annually and updated, if necessary, to describe in writing standard operating procedures for:

- Sweeping streets and other BMPs designed to reduce road debris and other pollutants from entering the MS4 including schedules;
    - Include disposal methods of waste removed.
- Pothole repairs;
- Pavement marking;
- Sealing and repaving;
- Plowing, sanding and application of deicing compounds, and maintenance of snow disposal areas;
- Right of way maintenance including mowing and herbicide application; and
- Municipal sponsored events (parade and street fair clean up)

The Buildings and Grounds Department, Parks Division and Golf Course O&M Manuals will be updated to describe in writing standard operating procedures for:

- Sweeping of parking lots and any other BMPs designed to reduce parking lot debris and other pollutants from entering the MS4; and
- Snow removal, sanding or application of deicing compounds.

Permit Requirement 4.2.6.6.6 - Storm water collections and conveyance system

The Storm Water Division O&M Manual will be updated to describe in writing, standard operating procedures and schedules for the maintenance, inspection, cleaning, and repair of:

- Detention/retention ponds;
- Catch basins;
- Storm water conveyance pipes;
- Ditches and irrigation canals;
- Culverts;
- Structural storm water controls;
- Structural runoff treatment; and
- Flow control facilities.

The Storm Water Division will create storm sewer system maintenance map and schedule to document inspections; this data will be used to designate priority areas that will be maintained more frequently.
Also the Storm Water Division O&M Manual SOPs will include proper documentation procedures and disposal methods of all waste and waste water removed from the storm water conveyance system.

Permit Requirement 4.2.6.6.7 - Other facilities and operations

Each Department or Division that has an impact on storm water discharging to the municipal separate storm sewer system (MS4), will create or update their O&M Manuals SOPs to include facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff.

Lead Entity: Engineering Division

Year	Measurable goal action summary:	The Engineering Division will meet with each department annually to help create, review or make changes to the O&M Manual SOPs and BMPs. Document meeting dates and outcome of the meeting.
7/1/2020 - 6/30/2021		
7/1/2021 - 6/30/2022		
7/1/2022 - 6/30/2023		
7/1/2023 - 6/30/2024		
7/1/2024 - 6/30/2025		

THIRD PARTY MAINTENANCE OF STORM WATER FACILITIES

Permit Requirement 4.2.6.7 The Engineering Division will allow private developments to conduct their own maintenance and inspections of storm water BMPs and will be held to the same standards the city follows. These expectations will be defined through the proposed City Ordinance "4-12-302 Maintenance (3) Maintenance Arrangements" to insure through contractually-required documentation or periodic site visits, that the owner of such storm water BMPs is following SOP to maintain such controls.
This permit requirement will also be covered in section 4.2.5 of this plan.

FLOOD MANAGEMENT STRUCTURAL CONTROLS

Permit Requirement 4.2.6.8 Flood management controls design

The Engineering Division will 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 discharges to the MS4. The process will include consideration of controls that can be used to minimize impacts to site water quality and hydrology while still meeting project objectives. Description of this process is as follows:

- Developer submits proposed flood management structural control method (i.e. detention pond w/ pretreatment)
- Developer submits technical literature from manufacturer of selected pre-treatment control listing the pollutant removal capabilities of said pre-treatment control (i.e. remove floatables, sediment, and hydrocarbons)
- City Engineer reviews submitted technical literature and determines if the selected control's pollutant removal capabilities are acceptable

Permit Requirement 4.2.6.8.1 Existing flood management

Existing flood management structural controls will be assessed by the Engineering Division to determine whether changes or additions should be made to improve water quality.

The City presently has several detention basins that were constructed with individual subdivisions or commercial site plans to address flood management. As part of the City's adopted storm water master plan the City is moving toward regionalized detention rather localized detention. As these regional basins are constructed, existing local basins may be removed.

The existing flood management structural controls will be assessed following the process listed below:

- Routine site visits (as described in Section 4.2.5.5.3)
- Condition assessment (as described in Section 4.2.5.5.3)
    - Bring concerns to City Engineer's attention
    - Engineering Division under direction of the City Engineer determines proper remediation or corrective action

CONSTRUCTION PROJECTS

Permit Requirement 4.2.6.9 Public construction projects

"Construction Projects. 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 are required to be covered under the General UPDES Permit for Storm Water Discharges Associated with Construction Activities. All public projects approve after the effective date of this Permit shall include construction and post-construction controls selected and implemented pursuant to the requirements in Parts 4.2.4. and 4.2.5."

TRAINING

Permit Requirement 4.2.6.10 Training for employees

The Engineering Division in conjunction with Departments and Divisions will provide training annually for all employees who have primary construction, operations, or maintenance job functions that are likely to impact storm water quality.
Training will address the importance of protecting water quality, the requirements of the Small MS4 General UPDES UTR090000 Permit addressed on this document, operation and maintenance requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, SOPs for the various City owned or operated facilities and procedures for reporting water quality concerns, including potential illicit discharges.

Training records will be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance. Follow-up training will be provided as needed to address changes in procedures, methods or staffing.