

South Salt Lake City

STORM WATER

MANAGEMENT PROGRAM

Drafted by:

City of South Salt Lake Storm Water Division.

Main SWMP Book

- M-01 MS4 Permit Cover Sheet
- M-02 Delegation of Authority
- M-03 SWMP Main Document
- M-04 Organization Chart
- M-05 Organization Chart Responsibilities
- M-06 City of South Salt Lake E. Coli TMDL Compliance Plan

APPENDIX A

Supplemental Guide to Storm Water Management for Contractors

This appendix A is intended to be part of the SWMP yet removable for Contractors

- A-02 Hydrologic Methods and Considerations
- A-02-1 Design Methods and Standards - Texas
- A-03 Low Impact Development Techniques
- A-04 Standard Details
- General permit for discharges from construction activity

<https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits>

- UPDES Common Plan permit <https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits>

- SWPPP Guidance
- Common plan SWPPP Template <https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits>

- General SWPPP Template <https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits>

- Notice of Intent (NOI)
- Notice of Termination (NOT)
- Right of Way and Excavation Permit
- Inspector qualifications

APPENDIX B

Supplemental Guide to Storm Water Management for Public Works

This appendix B is intended to be part of the SWMP yet removable for PW Personnel

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- X-05 Water quality on City projects
- Storm Water System Maintenance plan

APPENDIX C

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- Standard Operating Procedures
- C-01 Dry Weather Screening Flow Chart
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APPENDIX D

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- SWMP Forms and Checklists
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APPENDIX F

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 - i. Includes ALL MS4 Facility Pollution Evaluations
- X-10 City Owned Facilities Inventory
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- Post Construction BMP Inventory
- Active Construction Sites Inventory
- Illicit Discharge Inspection Report Inventory
- Map Inventories Legends for MS4 Owned Facilities
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- Retrofitting Existing Infrastructure
- Collection System Map
- MS4 Owned Facilities Site Plan

APPENDIX H

Additional Information

- H-03 Effectiveness Triangle
- H-04 Glossary of Terms
- H-05 Problem with Pollutant and Source of Pollutant

Storm Water Management Plan

Permittee: South Salt Lake City

Permit Number: UTR090000

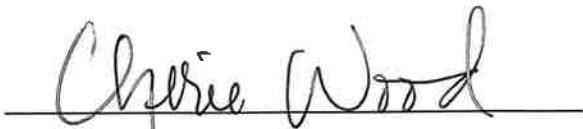
Location of MS4: Salt Lake County, UT

Submitted with this permit is the following:

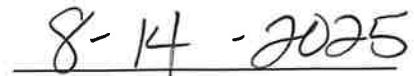
- A map of the MS4 location
- Information Regarding the overall quality concerns, priorities, and measureable goals specific to the Permittee that were considered in the development and/or revisions to the SWMP document
- A description of the program elements that will be implemented in each of the six minimum control measures
- A description of any modifications to ordinances or long-term/ongoing processes implemented in accordance with the previous MS4 general permit for each of the six minimum control measures
- A description of how the Permittee intends to meet the requirements permit as described in Part 4.0 by either referencing existing program areas that already meet the Permit requirements or a description and relevant measurable goals that include, as appropriate, the year by which the Permittee will achieve required actions, including interim milestones.
- If applicable indication of joint submittal of Co-Permittees and the associated responsibility in meeting requirements of the SWMP

Certification

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



Authorized Signature



Date

DELEGATION OF AUTHORITY

Utah Department of Environmental Quality
Division of Water Quality
195 North 1950 West
DEQ 3rd Floor
Salt Lake City, Utah 84116

Dear Executive Director:

As the principal executive officer (or ranking elected official) of South Salt Lake City, I hereby authorize Craig Giles acting as the Public Works Director to act on my behalf relative to documents, reports, notices or activities pertaining to our City's Small MS4 UPDES Storm Water Discharge Permit.

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

Respectfully Submitted,

Name: Cherie Wood
Signature: Cherie Wood
Title: Mayor
Date: August 21, 2024

JUSTIFICATION FOR CHANGES

Updating Storm Water Management Program: Updates to the Storm Water Management Program must be done in accordance with Section 4.4 of the MS4 Permit with the following information submitted to the State.

BMP Name: ***Storm Water Management Plan***

BMP Description:

Explanation of ineffectiveness or infeasibility: ***Updating plan to meet new permit requirements for Utah code 19-5-108.3***

Affected Goal: ***Document SWMP***

Replacement BMP Name: ***Storm Water Management Plan***

Replacement BMP Description:

Anticipated Effectiveness/feasibility: ***SOP Implementation as required by the change to Utah code 19-5-108.3***

Analysis of Replacement BMP:

See attachments:

Certification and Signature. (6.8.3) (by Principal Executive Officer or Ranking Elected Official)

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

City of South Salt
MS4 Name

Print name

Signature

Date

INTRODUCTION

Polluted storm water runoff is often transported to separate municipal storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. EPA's Storm Water Phase II Rule establishes an MS4 storm water management program that is intended to improve the Nation's waterways by reducing the quantity of pollutants that are introduced into storm sewer systems during storm events. Common pollutants include oil and grease from roadways, roadway salts and deicing materials, pesticides and fertilizers from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, thereby discouraging use of the resource, contaminating water supplies, and interfering with the habitat for fish, other aquatic organisms, and wildlife.

In 1990, the EPA promulgated rules establishing Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program. The Phase I program for MS4s requires operators of "medium" and "large" MS4s, that is, those that generally serve populations of 100,000 or greater, to implement a storm water management program to control polluted discharges from these MS4s. The Storm Water Phase II Rule extends coverage of the NPDES storm water program to certain "small" MS4s (population less than 100,000) but takes a slightly different approach to how the storm water management program is developed and implemented.

Phase II Storm Water Management Program

A Storm Water Management Program should:

- Reduce the discharge of pollutants to the "maximum extent practicable" (MEP).
- Protect water quality.
- Satisfy the appropriate water quality requirements of the Clean Water Act, and Utah water quality act.

Storm water management programs must include:

- Best Management Practices (BMPs) for each of the six minimum control measures (MCM).
 1. Public Education and Outreach
 2. Public Participation/Involvement
 3. Illicit Discharge Detection and Elimination
 4. Construction Site Runoff Control
 5. Post-Construction Runoff Control
 6. Pollution Prevention/Good Housekeeping
- Measurable goals for each minimum control measure (i.e., narrative, or numeric standards used to gauge program effectiveness).
- Estimated months and years in which actions to implement each measure will be undertaken, including interim milestones and frequency; and

Permit Application and Notice of Intent

Phase II Rule encourages the development of a storm water management program by requiring a Notice of Intent (NOI) describing the storm water management program to be submitted to the NPDES permitting authority. The Notice of Intent becomes the permit application.

Cities required to permit under Phase II are allowed to cooperate and work together with neighboring cities in the application process. The permittee may join a Phase I city or another Phase II city in applying for a permit. The individual MS4s may share responsibility for program development with neighboring communities and/or take advantage of existing local or state programs.

Permit Requirements

The chosen measurable goals, submitted in the Notice of Intent as a permit application, become the required storm water management program; however, the NPDES permitting authority can require changes in the mix of chosen BMPs and measurable goals if all or some of them are found to be inconsistent with the provisions of the Phase II Final Rule. Likewise, the permittee can change its mix of BMPs if it determines that the program is not effective as it could be.

Reports

The permit requires that the city review the SWMP annually, report on plan activities and make any updates that might be required. The annual reports should use the form provided by the State. Generally, the annual report should include the following information:

- The status of compliance with permit conditions, including an assessment of the appropriateness of the selected BMPs and progress toward achieving the selected measurable goals for each minimum measure.
- Results of any information collected and analyzed, including monitoring data if any.
- A summary of the storm water activities planned for the next reporting cycle.
- A change in any identified BMP or measurable goals for any minimum measure; and
- Notice of relying on another governmental entity to satisfy some of the permit obligations (if applicable).

Record Keeping

Records required by the NPDES permitting authority must be kept for at least 5 years and made accessible to the public at reasonable times during regular business hours. Records need not be submitted to the NPDES permitting authority unless the Permittee is requested to do so.

Deadlines

The following deadlines are included in this permit.

Date	Description
October 29, 2025	Update City Ordinance
September 30, 2025	Submit Revised SWMP document to the State

Penalties

The NPDES permit that the operator of a regulated small MS4 is required to obtain is federally enforceable, thus subjecting the Permittee to potential enforcement actions and penalties by the NPDES permitting authority if the permittee does not fully comply with application or permit requirements. This federal enforceability also includes the right for interested parties to sue under citizen suit provision (section 405) of CWA.

This document contains a description of the community-specific Storm Water Management Program for South Salt Lake City. The Program includes the following.

- Best Management Practices (BMPs) for each of the six minimum control measures.
 1. Public Education and Outreach
 2. Public Participation/Involvement
 3. Illicit Discharge Detection and Elimination
 4. Construction Site Runoff Control
 5. Post-Construction Runoff Control
 6. Pollution Prevention/Good Housekeeping
- Measurable goals for each minimum control measure (i.e., narrative, or numeric standards used to gauge program effectiveness).
- Estimated months and years in which actions to implement each measure will be undertaken, including interim milestones and frequency; and

This document also contains the following information and documentation in its appendices:

- Appendix A - Supplemental Guide to Storm Water Management for Contractors and Developers
- Appendix B - Storm Water Collection and Conveyance System Maintenance Plan
- Appendix C - Standard Operating Procedures and BMP's
- Appendix D - General program documentation including inspection forms, enforcement logs, training logs, annual reports, maintenance records, observation reports, and other general documentation.

- Appendix E - Copies of the most current city ordinances applicable to stormwater
- Appendix F - Copies of State permits and documents regulating the city storm water program.
- Appendix G - System maps and inventories
- Appendix H - Additional Information

SOUTH SALT LAKE CITY CHARACTERISTICS

General Information

The South Salt Lake City Storm Drain System falls under the Public Works Director for the City. The City Public Works Director can be contacted at the following address and phone number:

Craig Giles
 Public Works Director
 195 W Oakland Ave
 S. Salt Lake City, Utah
 84115 (801) 412-3235

Some general information for South Salt Lake City follows:

Population:	26,666
Size:	7 Sq. miles
Geographic Description:	Center of Salt Lake Valley
Receiving Waters:	Jordan River Mill Creek
Annual Precipitation:	18.76"
Type of Community:	Urban
Latitude:	40° 42' 59.63" N
Longitude:	111° 53' 46.70" W

History

The historical development of South Salt Lake City was directly linked to water. In 1938 the city was incorporated as a city. Many residents and commercial businesses have chosen to make South Salt Lake City a place to raise their families and do business.

Local Water Quality Concerns

The water quality within South Salt Lake City is relatively good. Some of the streams or waterways have been identified as protected under Section 303(d) of the Clean Water Act. The 303(d) list of impaired water bodies can be found at the following address: <http://www.waterquality.utah.gov/TMDL/index.htm>. The goal of this Storm Water Management Program (SWMP) is to improve the current water quality.

Storm water is collected and conveyed in the city drains into creeks and river channels, which in turn empty into the Great Salt Lake. At present the City hasn't encountered any major problems related to the storm drain system capacity, however, there has been periodic localized flooding during major isolated precipitation events. Water retention in the drainage system is typically brief in duration.

Like most communities along the Wasatch Front, some of the biggest concerns involve sediment loads (coming primarily from disturbed sites), fertilizers and pesticides coming from lawns, oils and grease coming from the roadways, and improper disposal of household chemicals and waste materials. South Salt Lake City has several businesses that have large impervious areas that can generate significant runoff and potentially larger than normal amounts of oil and/or grease. The residential areas have been well established for many years and contain many mature trees. Leaves coming from the trees create a minor problem during the fall each year.

Ongoing Documentation Process

With this revised SWMP the program has been restructured. The SWMP itself has been reorganized to make it more of a working document with multiple appendices to help the city do a better job in record keeping and documenting program activities. Much of the documentation is or will be included in Appendix D. As part of this update, the Public Works Department has reviewed existing SOPs and measurable goals and assessed them for their effectiveness and contribution in helping us achieve the desired results. SSLC will try to build off the positive things that have been accomplished and renew commitments to improve in areas where the program has been lacking. As a result, the revised program will be more focused.

The plan is to document activities and keep better track of what is happening within the community. This updated SWMP includes many new forms and reports to help in these documentation efforts. Report forms are in Appendix D.

PUBLIC EDUCATION AND OUTREACH

Permit Requirements

The permit requirements for Public Education and Outreach on Storm Water Impacts can be found in Section 4.2.1 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements.

1. The MS4 must promote behavior change by the public to reduce water quality impacts associated with pollutants in storm water runoff and illicit discharges. This is a multimedia approach targeted to specific audiences. The four audiences are:

1. (1) residents, (2), institutions, industrial and commercial facilities, (3) developers and contractors (construction) and (4) MS4owned or operated facilities.
2. Target pollutants and pollutant sources and their potential impacts relating to storm water quality.
3. Provide and document information given to the four focus audiences on an annual basis regarding the avoidance of water quality impacts from illicit discharges and improper disposal of waste.
4. Provide documentation or rationale as to why particular BMPs were chosen for its public education and outreach program.

Summary of Existing Efforts

Educational Materials

1. "We All Live Downstream" campaign through the Storm Water Coalition
2. Mailers promoting better storm water management through a utility fee.
3. City newsletter promoting storm water management aspects.
4. Storm water management model depiction

South Salt Lake City has a website that is located at www.sslc.gov. Website includes:

1. Storm water "Hotline"
2. Storm Water Management Program
3. Storm Water Pollution Prevention Plan
4. Household Hazardous Waste
5. Question and answer portal (using an email address)

Plan and Implementation Measures

To help meet the goals and objectives of this SWMP South Salt Lake City has chosen to adopt the following BMPs. Each BMP is cross referenced alphabetically by code in the indicated appendix to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness. Only those BMPs listed below will be utilized by South Salt Lake City as part of their SWMP at the present time.

BMP	Code	Appendix	
Classroom Education on Storm Water	CESW	C	
Storm Water Educational Materials	SWEM	C	
Employee Training	ET	C	
Public Education/ Participation	PEP	C	
Using Media	UM	C	

Goals

To realize the benefit of the BMP, The City has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Education and Outreach.

The following table includes the goals for MCM 1.

MCM	Target		Desired Result	Measurable Goal			Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Milestone Date	Associated BMPs	
1	NH4,TDS,E.Coli, N, P	Residents and Businesses	4.2.1.1 To educate audiences about impacts from storm water discharge	Continue supporting TV ads	Ongoing	PEP and UM	Survey every five (5) years to monitor trends
1	NH4,TDS,E.Coli, N, P	Residents (4th graders)	4.2.1.1 To educate audiences on ways to avoid, minimize, and reduce and/or eliminating impacts of storm water discharge	Continue storm water fair annually	Annually	PEP and CESW	Fair occurs annually
1	NH4,TDS,E.Coli, N, P	Residents and Businesses	4.2.1.1 To educate audiences on actions individuals can take to improve water quality	Continue supporting TV ads	Ongoing	PEP and UM	Survey every five (5) years to monitor trends
1	NH4,TDS,E.Coli, N, P	General Public	4.2.1.2 Information is provided to target audience on prohibitions against illicit discharges and improper disposal of waste including: maintenance of septic systems; effects of outdoor activities, such as lawn care; 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 wastes.	Include information on the website and include city newsletter.	Ongoing	PEP and UM	Information is current on website and city newsletter.

MCM	Target		Desired Result	Measurable Goal				Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Milestone Date	Associated BMPs		
1	NH4,TDS,E.Coli, N, P	Institutions, Industrial Commercial Facilities and	4.2.1.3 Information is provided to target audience on prohibitions against illicit discharges and improper disposal of waste including: Proper lawn maintenance; Benefits of appropriate on-site infiltration of storm water; Building and equipment maintenance; Use of salt or other deicing materials; Proper storage of materials; Proper management of waste materials and dumpsters; Proper management of parking lot surfaces.	Include information on the website and produce and distribute a brochure that is targeted to specific types of businesses.	Annually	PEP and UM		Information is current on website and brochures are distributed.
1	Based on SWPPP Review	Engineers, Contractors, Developers, Development Review Staff, and Land Use Planners	4.2.1.4 Reduce adverse impacts from development sites through the development of SWPPP and associated BMPs	Update the Contractors guide on City website, provide and document information given to audience concerning development of SWPPPs and BMPs	Ongoing	SWEM		If complete by August 31, 2020
1	All pollutants	Permittee engineers, development and plan review staff, land use planners	4.2.1.6 Provide and document information and training given to MS4 engineers, development and plan review staff, land use planners, and other parties as applicable to learn about Low Impact Development (LID) practices, green infrastructure practices, and to communicate the specific requirements for post-construction control and the associated Best Management Practices (BMPs) chosen within the SWMP.	Train appropriate Public Works employees Train 1 other employees as required Encourage LID practices at Pre Development meeting and make LID awareness and implementation a part of the SWPPP review. Provide and document the information and training given to this audience	Annually. Training by June 30? and concurrent with pre-development activities and SWPPP reviews	ET		Pre-development meeting minutes and documented SWPPP reviews
1	All pollutants	Public	4.2.1.7 Develop an effective program to show evidence of focused messages and audiences as well as demonstration that the defined goal of the program has been achieved. Define the specific messages for each audience. Identify methods that will be used to evaluate the effectiveness of the educational messages and the overall education program. Any methods used to evaluate the effectiveness of the program shall be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge.	Hot Line usage. IDDE frequency	Ongoing	PEP		Apply effectiveness measure to all 4.2.1 requirements as indicated. Reduced IDDE and hotline usage

MCM			Desired Result	Measurable Goal			Measure of Success (Effectiveness)
	Target	Pollutant(s)			Milestone Date	Associated BMPs	
1	All pollutants		4.2.1.8 The Permittee shall include written documentation or rationale as to why particular BMPs were chosen for its public education and outreach program.	Establish a rationale	Ongoing	SWEM	Documented rationale

PUBLIC PARTICIPATION / INVOLVEMENT

Permit Requirements

The permit requirements for Public Participation and Involvement on Storm Water Impacts can be found in Section 4.2.2 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements.

1. Comply with applicable State, and local public notice requirements to involve interest groups and stakeholders for their input on the SWMP.
2. Make available to the public a current version of the SWMP document for review and input for the life of the permit. This should be posted on the City's website. Contact for public review and input is the Storm Water Division Manager at 801483-6045.

Summary of Existing Efforts

Used Oil Recycling

There are several locations within the city boundaries where used oils can be brought for recycling.

Green Waste Collection

The city offers bulky waste cleanup to single family dwellings twice per year. Also have dump trailers that can be rented for a minimal fee that can be utilized for green waste as well offered year-round.

Plan and Implementation Measures

To help meet the goals and objectives of this SWMP South Salt Lake City has chosen to adopt the following BMPs for use within the city as applicable. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness in the indicated appendix.

BMP	Code	Appendix
Public Education/ Participation	PEP	C

Goals

To realize the benefit of the BMP, The City has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Public Involvement and Participation.

The following table summarizes the goals for MCM 2.

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
2	All pollutants	General public	4.2.2.1 Have a program or policy in place that allows for the public to provide input	Stormwater email on the City web site for comments and questions	Ongoing	PEP	Use of the Q&A via email
2	All pollutants	General public	4.2.2.2 Have SWMP document available for public review	Have a hard copy of the plan available at the public works office, also on the City web site	Ongoing	PEP	SWMP document is available for public review
2	All pollutants	General public	4.2.2.3 Have SWMP document available to the public at all times	Post the SWMP on the website including a contact person	Update Annually	PEP	SWMP is posted and updated on the website

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Permit Requirements

The permit requirements for Illicit Discharge Detection and Elimination on Storm Water Impacts can be found in Section 4.2.3 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements.

1. Maintain a storm sewer system map of the MS4, showing the location of all outfalls and the names and location of all State waters that receive discharges from those outfalls.
2. Through an ordinance, or other regulatory mechanism, a prohibition (to the extent allowable under State, or local law) on non-storm water discharges into the MS4, and appropriate enforcement procedures and actions.
3. Develop and implement a plan to detect and address non-storm water discharges, including spills, illicit connections, and illegal dumping to the MS4.
4. Develop and implement standard operating procedures (SOPs) for:
 - a. Tracing the source of an illicit discharge.
 - b. Characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges found or reported.
 - c. Ceasing the illicit discharge, including notification of appropriate authorities, property owners, and technical assistance for removing the source and follow-up inspections.
5. Inform public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste.
6. Promote or provide services for the collection of household hazardous waste.
7. Publicly list and publicize a hotline or other local number for public reporting of spills and other illicit discharges.
8. Develop a written spill/dumping response procedure, and a flowchart for internal use, including various responsible agencies and their contacts.
9. Adopt and implement procedures for program evaluation and assessment.
10. Train selected employees, at a minimum, annually on the IDDE program.
11. Perform annual inspection of Priority Areas and Dry Weather Screening within the 5-year permit period.
12. Notify DWQ upon discovery of separate activities that require a UPDES permit such as dewatering.

Summary of Existing Efforts

Ordinances

Chapter 13.80 - ILLICIT DISCHARGES AND CONNECTIONS

Illicit Spills

Spills are reported to Public Works Dept. with follow up utilizing the SLVHD, Fire Dept., Code Enforcement, and Police Dept. as necessary, working in conjunction with any of the stated departments.

Illicit Connections

The City has not generally experienced problems with individuals or businesses illicitly connecting their sanitary waste water piping to storm drains. More-common types of illicit discharges include natural runoff from sites where former industrial businesses once stood, spills from highway accidents, concrete truck wash out water, residential yard waste and debris being washed into the gutters, and carpet cleaner waste. There

are several refineries and other industrial businesses in city limits that are regulated directly by the State. These businesses are a concern.

Mapping

The city has a comprehensive, GPS based, storm drain map showing the storm drain system points of discharge and locations of illicit discharge incidents. A copy of this map is included in Appendix G.

Plan and Implementation Measures

To help meet the goals and objectives of this SWMP South Salt Lake City has chosen to adopt the following BMPs for use within the city as applicable. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness in the indicated appendix.

BMP	Code	Appendix
Community Hotline	CH	C
Employee Training	ET	C
Hazardous Waste Management	HWM	C
Illegal Dumping Control	IDC	C
Identify Illicit Connections	IIC	C
Illegal Solids Dumping Controls	ISDC	C
Map Storm Water Drains	MSWD	C
Non-Storm Water Discharge to Drains	NSWD	C
Ordinance Development	OD	C
Public Education/ Participation	PEP	C
Used Oil Recycling	UOR	C
Priority Areas Inspections	PAI/SOP	C
Dry weather screening	DWS/SOP	C
Investigating and Reporting Illicit Discharge	IRID/SOP	C
Removing Illicit Discharges	RID/SOP	C

Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
Pollutant(s)	Audience(s)					
All Pollutants	Contractors, Developers, City Council	4.2.3 Enforcement ability for storm water rules	Review and update the ordinance to conform with new permit	Ongoing	OD	If ordinance is in place and meets the permit requirements
N/A	Public Works	4.2.3.1 Maintain Storm Water Map	Map development is complete with ongoing revisions.	Ongoing	MSWD	Mapping implemented on Utilisync
All Pollutants	All Audiences	4.2.3.2. Prohibit, through ordinance or other regulatory mechanism, non-storm water discharges to the MS4, including spills, illicit connections, illegal dumping and Sanitary sewer overflows ("SSOs") into the storm sewer system, require removal of such discharges consistent with Part 4.2.3.6 of the Permit, and implement appropriate enforcement procedures and actions.	Ensure ordinance prohibits non-storm water discharges	Ongoing	OD	Updated Ordinance
		4.2.3.2.1 Reference or citation of the authority the permittee will use to implement all aspects of the IDDE program				
All Pollutants	All Audiences	4.2.3.3.1 A written plan to detect and address non-storm water discharges needs to include systematic procedures for locating and listing priority areas likely to have illicit discharges (if applicable to the jurisdiction). Document the basis for its selection of each priority area and create a list of all priority areas identified in the system. This priority area list shall be updated annually to reflect changing priorities.	Develop priority area plan	Ongoing	PAI/SOP	Final plan for implementation.
All Pollutants	All Audiences	4.2.3.3.2 Field inspections of areas which are determined to be a priority area as identified in Permit Part 4.2.3.3.1 must be conducted annually at a minimum. Priority area inspection activities shall utilize an inspection form to document findings.	Complete priority area inspections annually	Annually Dec. 31	PAI/SOP	Inspection completion
All Pollutants	All Audiences	4.2.3.3.3 Dry weather screening (see Definition 7.0) for the purpose of verifying outfall	Perform dry weather screening of all outfalls every 5 years	Feb 25, 2030	NSWD DWS/SOP	Successful if all screens are done

Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
Pollutant(s)	Audience(s)					
		locations and detecting illicit discharges that discharge within the Permittee's jurisdiction receiving water. All outfalls shall be inspected at least once during the 5-year Permit term. Dry weather screening activities shall utilize an inspection form to document findings.				
All Pollutants	All Audiences	4.2.3.3.4. If the Permittee discovers or suspects that a discharger may need a separate UPDES permit (e.g., Industrial Storm Water Permit, Dewatering Permit), the Permittee shall notify the Director.	The City will notify the Director if it discovers or suspects that a discharger may need a separate UPDES permit.	As required	NSWD	Notification to agency
All Pollutants	All Audiences	4.2.3.4 Develop and implement standard operating procedures for tracing the source of illicit discharge	Establish reporting, tracing and removing procedures. Purchased a portable unit for pH, DO, Conductivity, & Temp. for finding Illicit Discharges.	Update Annually	IIC	Procedures in place. Equipment purchased and available.
All Pollutants	All Audiences	4.2.3.5 Develop and implement standard operating procedures for characterizing the nature of any illicit discharges found or reported to the Permittee by the hotline developed in 4.2.3.9	Incident Response Flow Chart and SOP complete including an initial report form and investigation report. Train personnel	Update Annually	IIC, CH	Procedure including flow chart completed and implemented.
All Pollutants	All Audiences	4.2.3.5.1 Permittee shall record the following information in an inspection report: the date the Permittee became aware of the non-storm water discharge, the date the Permittee initiated an investigation of the discharge, the date the discharge was observed, the location of the discharge, a description of the discharge, the method of discovery, date of removal, repair, or enforcement action; date, and method of removal verification.	Incorporate additional information into the procedure and investigation report form.	Update Annually	NSWD IRID SOP	Revised procedure and report form.
All Pollutants	All Audiences	4.2.3.6 Develop and implement standard operating procedures for ceasing the illicit discharge	SOP completed	Update Annually	IDC, ISDC RID	

Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
Pollutant(s)	Audience(s)					
		4.2.3.6.1 Permittee shall take actions to require immediate cessation of the illicit discharge pursuant to part 4.2.3.2.1				
		4.2.3.6.3 All IDDE investigations shall be thoroughly documented and available upon request by the Director				
All Pollutants	Public Employees, Businesses and Residents	4.2.3.7 Inform public employees, businesses, and general public of hazards associated with illicit discharges and improper disposal of waste	See MCM 1		PEP, ET	See MCM 1
Household Hazardous Waste	Residents	4.2.3.8 Promote or provide services for the collection of household hazardous waste	Put the HHW Address and Phone number on City Web Site. Completed. http://www.southsaltlakecity.com/department-listings/public-works/storm-water	Review Annually	UOR, HWM	
Household Hazardous Waste	Residents	4.2.3.9 Publicly list and publicize a hotline or other telephone number for public reporting of spills and other illicit discharges (A written record must be kept of all calls received, follow-up actions taken, and any feedback received)	Spill notification web address and Phone number on City Web Site. Completed. https://sslc.gov/273/Stormwater . Develop Incoming Call form	Confirm Annually	CH	Website established including hotline phone number. Call-in documentation maintained in Cartegraph
All Pollutants	All Audiences	4.2.3.10 Adopt and implement procedures for program evaluation and assessment. Include a database for mapping, tracking of the spills or illicit discharges identified and inspections conducted	Utilize Cartegraph for tracking and reporting Illicit Discharges	Ongoing	IIC, MSWD	Successful if Cartegraph is being used.

Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
Pollutant(s)	Audience(s)					
All Pollutants	Staff, contracted staff, other responsible entities that as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection, including office personnel	4.2.3.11 Receive annual training in the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections. Require all new hires are trained within 60 days of hire date and annually thereafter	Complete training by June 30 annually, train new hires within 60 days of hire. Maintain training records that include dates, activities or course descriptions, and names and positions of staff in attendance. Include summary of training in annual report.	Ongoing	ET	Completed training on schedule, maintained appropriate records, included summary of training in annual report.

CONSTRUCTION SITE RUNOFF CONTROL

Permit Requirements

The permit requirements for Construction Site Runoff Control on Storm Water Impacts can be found in Section 4.2.4 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements

1. Have an ordinance or other regulatory mechanism requiring the implementation of proper erosion and sediment control practices on construction sites. This will include a requirement for a Storm Water Pollution Prevention Plan (SWPPP) and enforcement provisions with an appeals process.
2. Develop and implement Standard Operating Procedures (SOPs) for:
 - a. Pre-construction meeting for SWPPP reviews to ensure plans are complete and in compliance with State and Local regulations.
 - b. Construction site inspection and enforcement of construction storm water pollution control measures.
3. Train staff to implement the construction storm water program, including permitting, plan review, construction site inspections, and enforcement.
4. Establish procedures to maintain records of all projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development.
5. Identify priority construction areas using permit criteria.
6. SWPPP inspections are to be performed by a qualified person as listed in the permit. Persons who prepare a site SWPPP cannot perform inspections at the same location.

Summary of Plan

Ordinance

Chapter 13.78 - POLLUTANT DISCHARGES FROM CONSTRUCTION SITES

Site Plan Review Process

The city currently has a procedure requiring the submittal of construction drawings prior to approving a new development. A SWPPP is required to address specifically water quality impacts.

Inspections

There is currently a Public Works inspector who oversees construction of new developments. There is also a storm water inspector to review and inspect the implementation of the SWPPP. Inspection forms and checklists are provided to the contractors and used by City personnel. BMPs are to be installed and maintained before, during and after construction.

Training

Inspectors and plan reviewers will be trained in the proper planning and installation of BMPs. They will also be trained in proper documentation and enforcement activities.

Records

Each applicable construction site will have its own storm water file maintained by the Public Works Department. There will be electronic files stored for five (5) years per the General Permit requirements.

Best Management Practices (BMPs)

To help meet the goals and objectives of this SWMP South Salt Lake City has chosen to adopt the following BMPs for use within the city as applicable. Each BMP is cross referenced by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness and can be found in the indicated appendix.

BMP	Code	Appendix
Classroom Education on Storm Water	CESW	C
Erosion Control Plan	ECP	C
Housekeeping Practice	HP	C
Landscape and Irrigation	LIP	C
Ordinance Development	OD	C
Zoning	ZO	C
Education Materials	EM	C
Pre-construction SWPPP Review	PCSR/SOP	C
Construction Site Inspection	CSI/SOP	C

Goals

To realize the benefit of the BMP, The City has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Construction Site Runoff Control.

The following table includes the goals for MCM 4.

MCM	Target	Pollutant(s)	Audience(s)	Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
						Date		
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	Contractors and Developers	4.2.4.1 Revise as necessary and enforce an ordinance or other regulatory mechanism that requires the use of erosion and sediment control practices at construction sites. Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism.	Review and if necessary revise current ordinance.	August 2020	OD	Current ordinance implemented.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	Contractors and Developers	4.2.4.1.1. The ordinance or other regulatory mechanism shall require construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs.	Review and if necessary revise current ordinance.	Ongoing	OD	Current ordinance implemented.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	Contractors and Developers	4.2.4.1.3. The ordinance or other regulatory mechanism shall include a provision for access by qualified personnel to inspect construction sites as well as storm water BMPs on private properties that discharge to the MS4.	Review and if necessary revise current ordinance.	Ongoing	OD	Current ordinance implemented.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	Contractors and Developers	4.2.4.1.2 Permittees shall require construction sites with a land disturbance of greater than or equal to one acre, including projects that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre, to obtain coverage under the current UPDES Storm Water General Permits for Construction Activities.	Conduct Pre-construction meetings and SWPPP review for each construction project with a land disturbance of greater than or equal to one acre, including projects that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre.	Ongoing	PCSR/SOP	Meeting minutes and review documented in City Works.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	Contractors and Developers	4.2.4.2 Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism	Ordinance in place and includes escalating enforcement provisions	Ongoing	OD	Ordinance includes enforcement requirement.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	Contractors and Developers	4.2.4.4 Permittees shall utilize an electronic site inspection to conduct MS4 oversight inspections at construction sites. The oversight inspection shall meet the requirements of Part 4.2.4.	Review and if necessary revise current ordinance.	Ongoing	CSI/SOP	Current ordinance implemented, appeals process published in publicly accessible location.

MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.2.2 Documentation and tracking of all enforcement actions	Using City Works and Citation Notebook to document enforcement	Review Annually	OD	Successful using City works and Citation Notebook
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.3 Develop and implement SOP's for pre-construction SWPPP review for construction sites that disturb greater than or equal to one acre, including projects that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre	Developed SOP and form for preconstruction reviews of SWPPP and keep records of these projects for five years or until construction is completed, whichever is longer.	Ongoing	ECP PCSR/SOP	Successful if conducting pre-construction SWPPP reviews. Using SOP and Preconstruction form
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.3.1 Conduct a pre-construction meeting	Hold Pre-construction meetings on all sites greater than 1 acre or as part of common plan of development	Ongoing	PCSR/SOP	Successful if we are conducting Pre-construction meetings. Using SOP and City works SWPPP Review form
			4.2.4.3.2 The permittee must develop procedures for receiving and considering information and comments submitted by the public on proposed projects				
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.3.3 Identify priority construction sites using permit criteria.	Develop a form to consider priority construction sites	Ongoing	CSI/SOP	Successful if we have used the criteria to determine priority construction sites.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.4. Develop and implement SOPs or similar type of documents for construction site inspection and enforcement of construction storm water pollution control measures.	Develop SOPs that clearly define who is responsible for site inspections and who has authority to implement enforcement procedures and City works reporting. Prohibit individuals or entities that prepared the SWPPP for a construction project from performing the construction site inspections for the City.	Ongoing	CSI/SOP	SOP implemented and City Works used to report inspections

MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date		
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.4.1 Inspections of all new construction sites ... at least monthly by qualified personnel (as defined as a "qualified person" using the permit criteria)	Conduct inspections of all construction sites - Emphasize self-inspections -	Ongoing	CCIT	Successful if 90% of all active construction sites are inspected monthly.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors, developers and MS4 staff	4.2.4.4.2 ...The Permittee must include in its SWMP document a procedure for being notified by construction operators/owners of their completion of active construction so that verification of final stabilization and removal of all temporary control measures may be conducted.	Using monthly SWPPP inspection reports to determine status of construction including construction termination. Also accessing the EPA Central Data Exchange to determine permit status. Using SWPPP NOT Inspection form to document removal of temporary BMPs and final project stabilization.	Ongoing	ECP	Successful if 95% of all active construction sites are terminated appropriately
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors, developers and MS4 staff	4.2.4.4.3 Priority construction sites shall be conducted at least every two weeks.	Priority construction sites to be inspected twice monthly.	Ongoing	CCIT	Monthly/priority inspections being conducted and documented in Utilisync.
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors, developers and MS4 staff	4.2.4.4.5 Take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the Permittee's enforcement strategy. These follow-up and enforcement actions shall be tracked and documented.	Incorporate follow-up reporting into the inspection procedure and report form.	Ongoing	CSI/SOP	SWPPP inspection forms contain follow-up sections
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors, developers and MS4 staff	4.2.4.5 Provide training to city staff and 3rd party designers	Develop a city policy to require all SWPPP inspectors to be RSI inspectors within 6 months	Ongoing	CCIT	Successful if completed by milestone
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors, developers and MS4 staff	4.2.4.6 Maintain a log of active construction sites	Using City Works to document construction sites	Ongoing	ECP	Successful if active construction sites are recorded in City Works.

POST-CONSTRUCTION RUNOFF CONTROL

Permit Requirements

The permit requirements for Post-Construction Runoff Control on Storm Water Impacts can be found in Section 4.2.5 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements

1. Have an ordinance or other regulatory mechanism requiring the implementation of long-term post-construction storm water controls at new and redevelopment sites with a land disturbance of greater than or equal to one acre, including projects that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre.
2. Develop an enforcement strategy and implement enforcement provisions of the Ordinance.
3. Develop requirements or standards for new development and redevelopment projects to include storm water controls or management practices that will prevent or minimize impacts to water quality.
4. Define specific hydrologic method for calculating runoff and flow rates to be used to size structural BMPs and facilitate plan review.
5. Adopt and implement procedures for site plan review which incorporate consideration of water quality impacts.
6. Develop, adopt and implement Standard Operating Procedures (SOPs) for site inspection and enforcement of post-construction storm water control measures.
7. Provide adequate training for staff concerning post-construction storm water management, plan review, inspections and enforcement.
8. Maintain an inventory of all post-construction structural storm water control measures. This includes public and private facilities.

Summary of Plan

Ordinance

The city has an ordinance allowing a maximum storm water discharge rate for new development. No other ordinances currently address runoff from construction sites or new development.

Landscaping Plans

Developers are required to present a plan outlining landscaping plans to the city for commercial or business sites. Open spaces or parks typically will also have landscaping plans submitted and are required to be landscaped before final approval.

Design Storm

South Salt Lake City has defined their design storm to be a 100-year, 24-hour storm, using the Farmer-Fletcher distribution. Detailed information is found in Appendix A.

Site Plan Review Process

The city currently has a procedure requiring the submittal of construction drawings prior to approving a new development. Water quality measures will be considered and assessed through the review process.

Training

Inspectors and plan reviewers will be trained on the proper planning and installation of post-construction BMPs and the procedures in the SOPs.

Inventory

The city has a comprehensive, GPS based, storm drain map showing the storm drain system and its points of discharge. A copy of this map is included in Appendix G.

The private storm drain control measures may or may not be included at this time. The city plans to make an effort to continue to collect data per the requirements of this permit.

Best Management Practices (BMPs)

To help meet the goals and objectives of this SWMP South Salt Lake City has chosen to adopt the following BMPs for use within the city as applicable. Each BMP is cross referenced by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness and can be found in the indicated appendix.

BMP	Code	Appendix
BMP Inspection and Maintenance	BMPIM	C
Educational Materials	EM	C
Landscape and Irrigation	LIP	C
Ordinance Development	OD	C
Pre-construction SWPPP Review	PCSR/SOP	C
Post Construction Site Plan Review	PCSPR/SOP	C
Permanent BMP inspection	PBMPI/SOP	C

Goals

To realize the benefit of the BMP, The City has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final. Storm Water Phase II Rule for Post Construction Runoff Control.

The following table includes the goals for MCM 5.

MCM	Target	Permit Reference/Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)	
	Pollutant(s)			Date	BMP		
5	All Pollutants	All Audiences	4.2.5.1.2 Develop and define a 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.	Develop hydrological method for calculating runoff.	Ongoing	PCSR/SOP	Completion of hydrological model.
5	All Pollutants	All Audiences	4.2.5.1.2 New development projects must manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event or a predevelopment hydrologic condition, whichever is less.	SWPPP to provide a plan to manage rain fall onsite as required by using practices designed, constructed, and maintained to infiltrate, evapotranspire, and/or harvest and reuse rainwater.	Ongoing	PCSR/SOP	Implementation of SWPPP that meets this retention requirement.
5	All Pollutants	All Audiences	4.2.5.1.2 Redevelopment projects must provide a site-specific and project-specific plan aimed at net gain to onsite retention or a reduction to impervious surface to provide similar water quality benefits. If a redevelopment project increases the impervious surface by greater than 10%, the project shall manage rainfall on-site, and prevent the off-site discharge of the net increase in the volume associated with the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event.	SWPPP to provide a plan to manage rain fall onsite as required by using practices designed, constructed, and maintained to infiltrate, evapotranspire, and/or harvest and reuse rainwater.	Ongoing	PCSW/SOP	Implementation of SWPPP that meets the retention requirement.

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
5	All Pollutants	All Audiences	4.2.5.1.3 Post-construction storm water management program shall include a process which requires the evaluation of a Low Impact Development (LID) approach for all projects subject to the requirements in 4.2.5.1.2. Must allow for use of a minimum of five LID practices from the list in Appendix C of the <i>Guide to Low Impact Development within Utah</i> . If MS4 has not adopted specific LID practices from Appendix C, any LID approach that meets 4.2.5.1.2 and is feasible may be used to meet this requirement.	SWPPP to provide a plan to address LID requirements and allow for at least five LID practices from the list in Appendix C of the <i>Guide to Low Impact Development within Utah</i> .	Ongoing	PCSW/SOP	Implementation of SWPPP that includes a LID approach.
5	All Pollutants	All Audiences	4.2.5.2 Develop and adopt an ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites and includes enforcement provisions and an appeals process.	Review existing ordinance to determine if it meets requirements of new permit	Ongoing	OD	If review is complete and ordinance satisfies permit requirements.
5	All Pollutants	All Audiences	4.2.5.2.2 Documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4. Documentation to include: <ul style="list-style-type: none"> • 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. 	SWPPP Review form used to document post-construction BMPs	Ongoing	PCSW/SOP	If draft is completed by the milestone date
5	All Pollutants	All Audiences	4.2.5.2.3 The ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites will require inspections by the MS4, owner/operator or qualified third party at private properties.	Review existing ordinance to determine if it meets requirements of new permit	Ongoing	OD	If review is complete

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
5	All Pollutants	All Audiences	4.2.5.2.4. Permanent structural BMPs shall be inspected at least once during installation by qualified personnel. Prior to closing out a construction permit, the Permittee shall verify that long-term BMPs were constructed as designed.	Inspect the construction of BMP.	Ongoing	BMPIM	Inspection report
5	All Pollutants	All Audiences	4.2.5.2.5 Inspection and maintenance must be conducted at least every other year or as necessary. On sites where the property owner/operator is conducting maintenance, the Permittee shall inspect those storm control measures at least once every five years, or more frequently to verify and ensure that adequate maintenance is being performed.	Inspect the operating/functional aspects of the BMP	Biennially or every 5 years if owner/operator maintains the system.	BMPIM	Inspection report
5	All Pollutants	MS4 Staff, Contractors and Developers	4.2.5.3.1. Adopt and implement procedures for site plan review which incorporate consideration of water quality impacts. The procedures shall apply through the life of the project from conceptual design to project closeout.	Develop and implement procedure to consider water quality impacts	Ongoing	PCSW/SOP	Procedure implemented
5	All Pollutants	MS4 Staff, Contractors and Developers	4.2.5.3.2. Review post-construction plans for, at a minimum, all new development and redevelopment sites to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure.	Review post-construction plans	Ongoing	PCSPR/SOP	Plans reviewed
5	All Pollutants	MS4 Staff	4.2.5.4 Maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redevelopment sites.	Using Post Construction inspection form in Cartegraph	Ongoing	PBMPI/SOP	Inventory documented in Cartegraph

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
5	All Pollutants	MS4 Staff	4.2.5.4.1. Each entry to the inventory must include basic information on each project, such as project's name, owner's name and contact information, location, start/end date, etc. In addition, inventory entries shall include the following for each project: <ul style="list-style-type: none"> • Short description of each storm water control measure (type, number, design or performance specifications); • Short description of maintenance requirements (frequency of required maintenance and inspections); and • Inspection information (date, findings, follow up activities, prioritization of follow-up activities, compliance status). 	Using Post Construction inspection form in Cartograph	Ongoing	PBMPI/SOP	Inventory documented in Cartograph
5	All Pollutants	MS4 Staff	4.2.5.5. Permittees shall provide adequate training for all staff involved in post-construction storm water management, including those that conduct plan review, annual maintenance inspections and enforcement.	Schedule and conduct training for appropriate personnel, train new hires within 60 days of hire. Provide follow up training as needed to address changes in procedures, methods, of staffing.	Annually	BMPIM EM	If all appropriate personnel are trained

POLLUTION PREVENTION / GOOD HOUSEKEEPING

Permit Requirements

The permit requirements for Pollution Prevention and Good Housekeeping on Storm Water Impacts can be found in Section 4.2.6 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements

1. Develop and implement an operation and maintenance program for City-owned or operated facilities.
2. Maintain an inventory of City-owned or operated facilities and storm water controls. Assess said list for their potential to discharge typical urban pollutants to the storm water system.
3. Identify 'high priority' facilities or operations that have a high potential to generate storm water pollutants. Included with a SWPPP specific to municipal operations. The SWPPP shall include appropriate pollution prevention and good housekeeping procedures for all the following types of facilities and/or activities listed below:
 - a. Property boundaries
 - b. Buildings and impervious surfaces.
 - c. Directions of storm water flow (use arrows).
 - d. Locations of structural control measures.
 - e. Location and name of the nearest defined drainage(s) which could
 - f. receive runoff from the facility, whether it contains water or not.
 - g. Locations of all storm water conveyances including ditches, pipes,
 - h. basins, inlets, and swales.
 - i. 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.
 - Materials or waste storage or disposal areas.
 - Liquid storage tanks.
 - Process and equipment operating areas.
 - j. Locations where significant spills or leaks have occurred.
 - k. Locations of all visual storm water monitoring points.
 - l. 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
 - m. Locations of all non-storm water discharges.
 - n. Locations of sources of run-on to your site from adjacent property.
4. If a third party is to conduct municipal maintenance or private developments conduct their own maintenance, the contractor shall be held to the same standard as the City. This should be outlined and defined in contracts.
5. Develop SOP, schedules, and logs for periodic inspections.

6. Develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the MS4.
7. City construction projects shall comply with the requirements applied to private projects.
8. Develop plans for retrofitting existing developed sites that are impacting water quality.
9. Include employee training on how to incorporate pollution prevention and good housekeeping techniques into municipal operations, including SOPs.

Summary of Plan

Inventory

The city has a comprehensive, GPS based, storm drain map showing the storm drain system and its points of discharge. A copy of this map is included in Appendix G.

The city-owned and operated facilities are also identified in the GIS. Detail maps of the facilities are included in Appendix G.

Storm Drain Maintenance Program

The city currently maintains inlet boxes and other MS4 improvements systematically as well as on an as-needed basis. Streets are also swept systematically and as needed.

Records and schedules will be documented routinely. Standard Operating Procedures (SOPs) for said maintenance procedures are in Appendix C. If a third-party plans to maintain a facility, an operation and maintenance agreement will be executed.

A copy of said agreement will be developed and then made part of this SWMP in Appendix F.

Inspections

The storm water inspector will inspect and review priority sites with proper checklists following the developed SOP. Documentation will accompany said inspections.

Public Construction Projects

Storm water control measures and BMPs will be implemented on MS4 projects per the General Permit requirements and guidelines. Proper documentation and inspections will be recorded for public construction projects.

Best Management Practices (BMPs)

To help meet the goals and objectives of this SWMP South Salt Lake City has chosen to adopt the following BMPs for use within the city as applicable. Each BMP is cross referenced by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness and can be found in the indicated appendix.

BMP	Code	Appendix
Employee Training	ET	C
Housekeeping Practices	HP	C
Infrastructure Planning	IPL	C
Semiannual Inspect	SI	C
Inspections	SWPPP	C

Goals

To realize the benefit of the BMP, The City has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Pollution Prevention/Good Housekeeping.

The following table includes the goals for MCM 6.

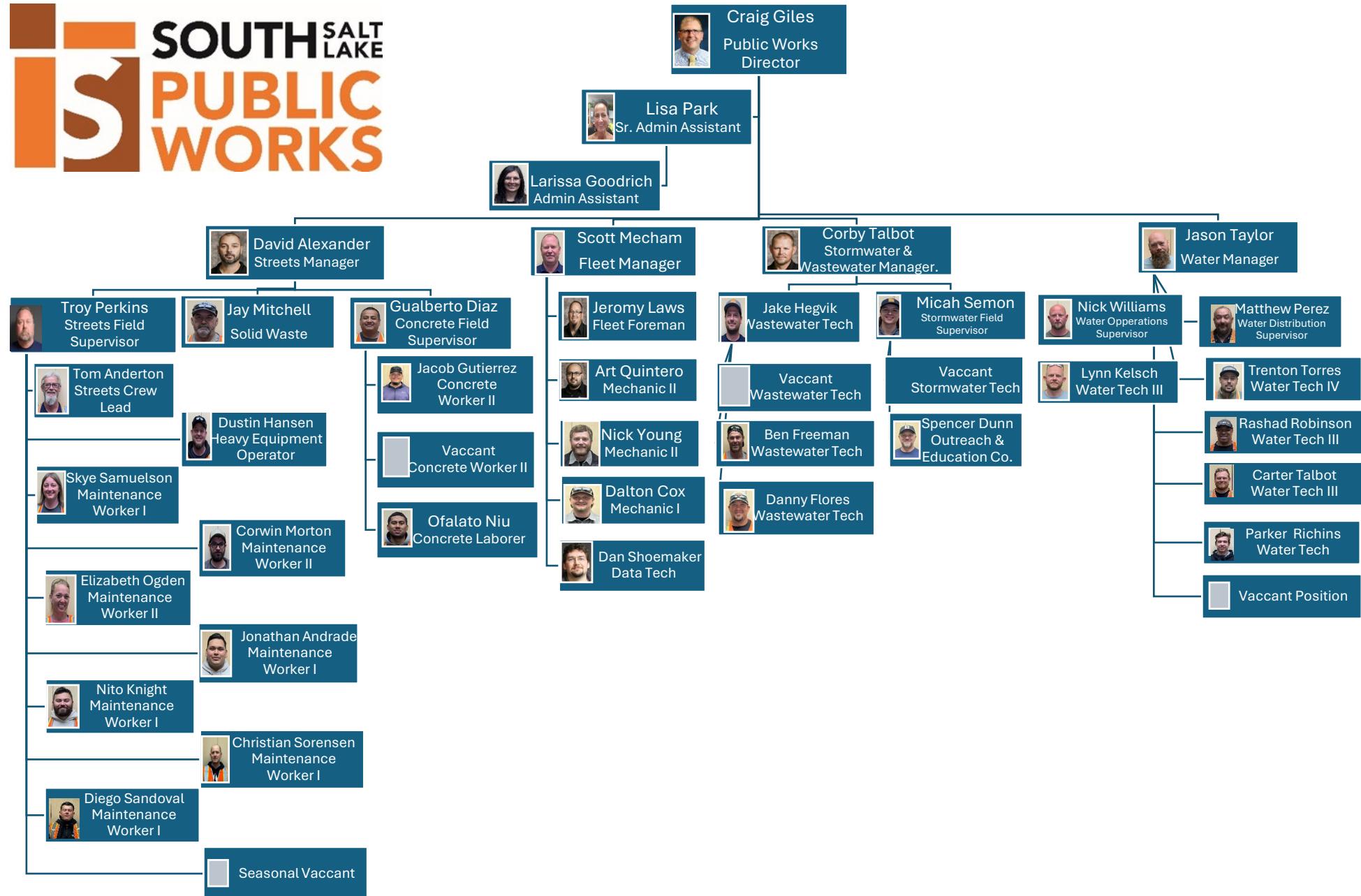
MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
6	All pollutants	MS4 staff	4.2.6 ...All components of the pollution prevention/good housekeeping program shall be included in the SWMP document and must identify the department (and where appropriate, the specific staff) responsible for performing each activity described in this section. Develop an inventory of all such city-owned or operated facilities. Review this inventory annually and update as necessary.	Complete Org chart and define responsibilities for all departments shown Maintain inventory of city-owned or operated facilities.	Ongoing		If org chart is complete and up to date by milestone date Inventory is documented in Cartograph.
6	All pollutants	MS4 staff	4.2.6.1. Develop and keep current a written inventory of potential "high priority" facilities that are owned or operated by the Permittee and all the storm water controls that may include but is not limited to those controls listed in the permit.	Complete listing of MS4 owned/operated facilities on City GIS map	Ongoing		If list is completed by milestone date Inventory is documented in Cartograph.
6	All pollutants	MS4 staff	4.2.6.2. All Permittees must initially assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1. for their potential to discharge to storm water the following typical urban pollutants:	Complete assessments and identify "high priority" facilities	Ongoing	HP	If assessments are completed and documentation recorded in SWMP and Cartograph
6	All pollutants	MS4 staff	4.2.6.3. Based on the assessment required in Part 4.2.6.2., the Permittee shall identify as "high-priority" those facilities or operations that have: 1. Pollutants stored at the site, 2. The identification of improperly stored materials, 3. Potential pollutant-generating activities performed outside (e.g. changing automotive fluids) 4. Close proximity upstream to fresh water and water bodies, including but not limited to streams, canals, rivers, ponds and lakes, 5. Potential discharge of pollutant(s) of concern to impaired water(s).	Use criteria to identify high-priority facilities and list them in SWMP. Establish and monitor BMPs	Ongoing		Records of high priority facilities BMP monitoring records in Cartograph.

MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
6	All pollutants	MS4 staff	4.2.6.4. The Permittee shall update the SWMP to include a list of "high priority" facilities according to 4.2.6.3 and prepare a Storm Water Pollution Prevention Plan (SWPPP) for each facility	SWPPP and forms developed for "high priority" facilities.	Ongoing	SWPPP	If SWPPP is updated and current by milestone date
6	All pollutants	MS4 staff	4.2.6.5.1 Monthly visual inspections: The Permittee must perform monthly visual inspections of "high priority" facilities in accordance with the developed SOPs to minimize the potential for pollutant discharge.	Developed a monthly inspection form.	Ongoing (once per month for each high priority facility)	HP	Completed inspection form and log
6	All pollutants	MS4 staff	4.2.6.5.2 Semi-annual comprehensive inspections: At least twice per year, a comprehensive inspection of "high priority" facilities, including all storm water controls, must be performed in accordance with the developed SOP.	Develop semi-annual inspection form(s) and log	Ongoing (at least twice per year for each high priority facility)	SI/SOP	Completed inspection form and log
6	All pollutants	MS4 staff	4.2.6.5.3 Annual visual observation of storm water discharges: At least once per year, the Permittee must visually observe the quality of the storm water discharges from the "high priority" facilities during the first half hour of a measurable storm (unless climate conditions preclude doing so, in which case the Permittee shall attempt to evaluate the discharges once during the wet season) in accordance with the developed SOP.	Conduct annual visual observations of storm water discharges at high priority facilities	Ongoing (annually for each high priority facility)		If at annual review all visual monitoring is completed and logged and reports completed
6	All pollutants	MS4 staff	4.2.6.6 Develop and implement SOPs to protect water quality at each of the facilities owned or operated by the Permittee and/or activities conducted by the Permittee including but not limited to those listed below: <ul style="list-style-type: none"> • Buildings and facilities; • Material storage areas, heavy equipment storage areas and maintenance areas; • Parks and open space; • Vehicle and Equipment; • Roads, highways, and parking lots; and • Storm water collection and conveyance system. 	Develop SOP to meet permit requirements	Ongoing	See Appendix C in SWMP	SOPs Implemented
6	All pollutants	MS4 staff	4.2.6.6.1 SOPs shall address practices in accordance with this section of the permit to ensure they are protective of water quality	Develop SOP to meet permit requirements	Ongoing	See Appendix C in SWMP	Implemented SOP
6	All pollutants	MS4 staff	4.2.6.6.2. SOPs must include a schedule for Permittee owned road and parking lot sweeping and storm drain system maintenance including regular inspection, cleaning, and repair of catch basins, storm water conveyance pipes, ditches and irrigation canals, culverts, structural storm water controls, and structural runoff	Develop SOP to meet permit requirements	Ongoing	See Appendix C in SWMP	Implemented SOP

MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
			treatment and/or flow control facilities. Must prioritize sweeping and storm sewer system maintenance.				
6	All pollutants	MS4 staff	4.2.6.6.3. Ensure and document proper disposal methods of all waste and wastewater removed during cleaning and maintenance of the storm water conveyance system. These disposal methods apply to, but are not limited to, street sweeping and catch basin cleaning.	Develop SOP to meet permit requirements	Ongoing	See Appendix C in SWMP	Implemented SOP
6	All pollutants	MS4 staff	4.2.6.6.4. Ensure that vehicle, equipment and other wash waters are not discharged to the MS4 or waters of the state. The Permit strictly prohibits such discharges. Minimize discharges to waters of the state that are associated with snow disposal and melt.	Develop SOP to meet permit requirements	Ongoing	See Appendix C in SWMP	Implemented SOP
6	All pollutants	MS4 staff	4.2.6.6.5. Develop a spill prevention plan in coordination with the local fire department.	Up to date Spill prevention plan	Ongoing	See Appendix C in SWMP	Implemented plan
6	All pollutants	MS4 staff	4.2.6.6.6. Maintain an inventory of all floor drains inside all Permittee-owned or operated buildings. The inventory shall be kept current. Ensure that all floor drains discharge to appropriate locations.	Develop SOP to meet permit requirements	Ongoing	See Appendix C in SWMP	Implemented SOP
6	All pollutants	MS4 staff	4.2.6.7. Ensuring that contractors performing O&M activities for the Permittee are using appropriate storm water controls and following the standard operating procedures, storm water control measures, and good housekeeping practices of the Permittee.	Develop SOP to meet permit requirements	Ongoing	See Appendix C in SWMP	Implemented SOP
6	All pollutants	MS4 Staff, Contractors and Developers	4.2.6.8. The Permittee must develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the Permittee or that discharge to the MS4.	Draft a policy/process to assess water quality impacts on all new flood control projects	Ongoing		If draft is prepared and ready for internal review process by milestone date
6	All pollutants	MS4 Staff, Contractors and Developers	4.2.6.9. The Permittee must develop a plan to retrofit existing developed sites that the Permittee owns or operates that are adversely impacting water quality. The retrofit plan must be developed to emphasize controls that infiltrate evapotranspire or harvest and use storm water discharges. The plan shall include a ranking of retrofit sites based on the following criteria: <ul style="list-style-type: none"> • Proximity to waterbody • Status of waterbody to improve impaired water bodies and protect unimpaired water bodies 	Develop and implement a retrofit plan for existing developed sites.	Ongoing	See Appendix C in SWMP	Implemented plan

MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
			<ul style="list-style-type: none"> • Hydrologic condition of the receiving waterbody • Proximity to sensitive ecosystem or protected area • Any upcoming sites that could be further enhanced by retrofitting storm water controls 				
6	All pollutants	MS4 Staff, Contractors and Developers	4.2.6.10. Permittees shall require that all employees, contracted staff, and other responsible entities that have primary operation, or maintenance job functions that are likely to impact storm water quality receive annual training that shall address the importance of protecting water quality, the requirements of this Permit, operation and maintenance requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, SOPs and SWPPPs for the various Permittee-owned or operated facilities and procedures for reporting water quality concerns, including potential illicit discharges. Train new hires within 60 days of hire.	See individual training goals within other MCMs	Annually	ET	
6	All pollutants	MS4 Staff, Contractors and Developers	"	Develop a training schedule	Ongoing	ET, HP	If schedule is complete by milestone date
6	All pollutants	MS4 Staff, Contractors and Developers	"	Conduct ongoing training according to schedule	Ongoing	ET, HP	If training is completed and documented according to schedule at annual evaluation

Target Pollutants 2018 SWMP				
Total Ammonium (NH4)	Medium	Ammonium - Soluble Salts	Breaks down into ammonia	Waste Product from animals
BOD 5	Medium	Biochemical Oxygen Demand - Amount of dissolved Oxygen Needed by aerobic biological organisms	Not a problem by itself - an indicator of how much dissolved oxygen needed	WWTP-Human waste & food residue, Food processing, Ag runoff-animal droppings, crop residues
Total Dissolved Solids (TDS)	Medium	Measure of combined content of all inorganic and organic substances contained in a liquid - to fine to be removed by sieve	By itself is not necessarily harmful but is an indicator of possible chemical contaminants	Salts - Deicing agents for roads in winter, industries; WWTP - industry, pesticides, herbicides
Total Suspended Solids (TSS)	Medium	Measure of combined content of all inorganic and organic substances contained in a liquid - Large particles	By itself is not necessarily harmful but is an indicator of possible chemical contaminants	Mining, Logging, Construction activity
Escherichia Coli form (E.coli)	Medium	Bacteria	Is used as an indicator of pathogens	Animals and people
Phosphorus	High	Phosphorus is a nutrient necessary for growth of plants and animals	Cause algae growth, which when they die exert a high BOD demand	WWTP--phosphorus based detergents, agricultural-fertilizer--runoff, food processing waste
Organics	High	Plant Matter	Consumes O ₂ (Oxygen) as it decomposes	Leaves, Grass, Weeds
Nitrogen	High	Nitrogen is a Nutrient that promotes plant growth	Consumes O ₂	Fertilizers, decomposing organic matter



South Salt Lake Department Responsibilities

Mayor

- Liaison with City Council
- Coordination with all City Department Heads

Public Works Director and City Engineer

- Liaison with Administration and City Council
- General oversight of Storm Water Management Program (SWMP)
- Development plan review and approval process
- Development review and City fees

Public Works Administrative Assistant

- Assist in implementation and management of Storm Water Management Program (SWMP)
- Assist in maintaining and updating SWMP (documentation)
- Assist in compiling the annual report
- Assist in coordination with Department Heads

Stormwater & Wastewater Manager

- Stormwater
 - SWMP implementation including inspections, enforcement, and documentation
 - Keep inlets clean and operating
 - Maintain drainage areas in the Public Works facility
 - Maintain public parking lots
 - Maintain BMP's (Detention Basins, Catch Basins, etc.)
 - Assist in compiling the annual report
 - Assist in maintaining and updating SWMP

Wastewater

- Wastewater Division work areas
- Training Wastewater personnel
- Oversees the maintenance of Collection system and lift stations
- Wastewater equipment maintenance

Water Superintendent

Water

- Water Department maintenance work area
- Training Water Department personnel

- Chemical storage in work area
- Water Department equipment operation
- Equipment maintenance for Water Department equipment

Streets Division Manager

- Streets Department maintenance work area
- Streets Department equipment operation
- Equipment maintenance for Streets Department
- Training Streets Department personnel
- Chemicals storage in work area
- Snow plowing program
- Street Sweeping program

Fleet Division Manager

- Fleet Department maintenance work area
- Training Fleet Department personnel
- Chemicals, fluids, and oils in the work area
- Metal fabrication area

Community Development Director

- Oversight of Building and Community Development Departments
- Training Building and Community Development Department personnel
- Development plan review and approval process
- Development review and City fees

Parks/Recreation Department Head

- Parks/Recreation Department maintenance work area
- Pesticide, Herbicide, and Fertilizer (PHF) program
- Training Parks/Recreation Department personnel
- Chemical storage in work area

CITY OF SOUTH SALT LAKE E. COLI TMDL COMPLIANCE PLAN

1.0. Introduction

The Federal Clean Water Act requires that storm water discharges from certain types of facilities be authorized under stormwater discharge Permits. (See 40 CFR 122.26.) The goal of the stormwater Permits program is to reduce the amount of pollutants entering streams, lakes and rivers as a result of runoff from residential, commercial and industrial areas. The original 1990 regulation (Phase I) covered municipal (i.e., publicly-owned) storm sewer systems for municipalities over 100,000 population. The regulation was expanded in 1999 to include smaller municipalities as well. This expansion of the program to include small MS4s is referred to as Phase II. The State of Utah was granted primacy in the National Pollutant Discharge Elimination System (NPDES) program by USEPA in 1987. In Utah, stormwater discharge permits are issued by the "Director". Utah's program is known as the Utah Pollutant Discharge Elimination System (UPDES) Program. The requirements of this Permit are intended to reduce the discharge of pollutants to the maximum extent practicable (MEP) and meet water quality standards through the development and implementation of a Storm Water Management Program (SWMP). This Permit serves as a modification and replacement of the previous Jordan Valley Municipalities Permit UTS000001, issued February 26, 2020. According to EPA guidance, each Permittee's original designation of Small or Medium-sized MS4 will remain the same for the renewed Permit and associated permit cycle regardless of any increase or decrease in population. This Permit covers new or existing discharges composed entirely of stormwater from both Phase I and Phase II Permittees within Salt Lake County.

2.0. Background

Both Phase I and Phase II Permittees are required to develop and implement a SWMP which includes of a variety of Best Management Practices (BMPs) to reduce the discharge of pollutants from the MS4. MEP is the standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve through implementation of BMPs included in their SWMPs. There are no numeric effluent limitations included in this Permit. SWMP requirements are the controls used in place of numeric limits to achieve a reduction of pollutants in the stormwater discharge from small MS4s. A SWMP is comprised of six minimum control measures which include:

- 1) Public Education and Outreach
- 2) Public Involvement/Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Storm Water Runoff Control
- 5) Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)
- 6) Pollution Prevention and Good Housekeeping for Municipal Operations

The Permittees must develop a SWMP that meets the requirements of the six minimum measures and protects state waters from pollution, contamination, and/or degradation. The Permit allows the MS4 flexibility to determine appropriate BMPs to satisfy each of the six minimum control measures. The BMPs employed to reduce pollutants to the MEP may be different for each small MS4 given the unique local concerns that may exist and the different possible pollutant control strategies. The Division may evaluate the Permittees' proposed stormwater BMPs to determine if they meet the requirements of this Permit and if an improvement to the MEP can be achieved. Evaluation of the effectiveness of a SWMP and application of the MEP standard should be an iterative process. The standard of MEP and the necessary modifications to the SWMP should continually adapt to current conditions and BMP effectiveness. The Permittees must continually assess the effectiveness of the current BMPs and expand or better tailor the BMPs to comply with this Permit and protect water quality, and to satisfy the appropriate water quality requirements of the Utah Water Quality Act.

3.0 Notable Changes Made Since the Last Permit Renewal

Permit part 3.2.2. requires that the TMDL Compliance Plan, designed to reduce the discharge of E. coli, be based on the six (6) minimum control measures found in Section 4.2. of this permit. Source control BMPs must be developed, funded, and implemented to reduce the discharge of E. coli within the permittee's jurisdiction.

A dedicated Education and Outreach Coordinator has been hired to direct and implement all phases of the TMDL Compliance Plan. Additionally, in 2022, the Stormwater Utility Fund was created and implemented. Located in the M-04 Organizational Chart.

Permit part 3.2.2.1. requires the permittee identifies sources of E. coli within the jurisdiction. Once sources of E. coli are identified, specific audiences potentially contributing to the E. coli sources must be targeted. Target audiences must be educated on the impacts to water quality and the BMPs that can be implemented to reduce/eliminate E. coli discharges. Education and outreach efforts must be documented within the TMDL Compliance Plan contained within the MS4's SWMP document.

Currently working on inventory sources of E. coli using Cartograph. The audiences of these sources will receive education and outreach (materials/in-person visits, public events, mailed materials, social media) regarding the impacts E. coli has on water quality and various ways to prevent it. All efforts will be documented.

This will be completed by April 30, 2024.

Permit part 3.2.2.1.1. allows for collaborative programs (e.g., Stormwater Coalition) to assist providing outreach materials that evaluate, identify, and target sources for E. coli. Education and outreach efforts must be documented within the TMDL Compliance Plan contained within the MS4's SWMP document.

We have memberships with the Salt Lake County Stormwater Coalition and Adopt-a-Drain via Hamline University. They both provide education and outreach materials and media to further

our efforts in education and, ultimately, reducing E. coli contamination within the SSL stormwater system. Our Stormwater Education Plan will be updated to reflect these new items.

Permit part 3.2.2.2. requires that potential sources of E. coli within the MS4 are inventoried (either written or mapped). Areas to consider for this inventory include areas with septic, dense waterfowl areas, dog parks, etc. Inventoried areas must be documented within the TMDL Compliance Plan contained within the MS4's SWMP document.

Currently working on inventory sources of E. coli using Cartograph for mapping. The audiences of these sources will receive education and outreach (materials/in-person visits, public events, mailed materials, social media) regarding the impacts E. coli has on water quality and various ways to prevent it. All efforts will be documented and inserted in the MS4 SWMP document. E.coli sources are written and completed by April 30, 2024 SEE APPENDIX D. COMPLETED

Permit part 3.2.2.2.1. requires that the inventoried areas identified in permit part 3.2.2.2. have a plan created to prioritize E. coli reduction activities for those areas. The plan must include structural and non-structural BMPs to be implemented over the permit term.

Structural BMP's that can be found in the Stormwater Design Manual to comply with this new request. SSL ordinances are the non-structural BMP's in place to address violations and will include an Education Plan regarding its use. Once inventory and audience are identified, a plan to prioritize reduction. Will is completed by June 30, 2024. COMPLETED

Permit part 3.2.2.2.2. requires that the inventoried areas identified in permit part 3.2.2.2. are added to the list of areas considered a priority area likely to have an illicit discharge (see permit part 4.2.3.3.1.). Any additional priority areas identified by the inventory must be inspected using an inspection form, annually at a minimum.

A priority area map was developed in August 2020 (see permit 4.2.3.3.1). This is ongoing. Update Priority Area Inspection Form to include E. coli sources and effective use of BMP's. This was completed by June 30, 2024. COMPLETED.

Permit part 3.2.2.2.3. requires that the inventoried areas identified in permit part 3.2.2.2. are considered a priority area for street sweeping and storm sewer system maintenance. Any road, parking lot, sweeping, and storm drain system maintenance SOPs created by the permittee should identify all priority areas (including E. coli sources) and the schedule of maintenance.

Street sweeping in priority area 4 will occur 10 times per year per Collection System Maintenance Plan. Stormwater Technicians regularly check grates, inspect inlets and record severe violations/conditions using Collection System Inspection Report. All will be documented in Cartograph.

Permit part 3.2.2.3. requires that the current "high priority" permittee owned and/or operated facilities be evaluated to identify sites that have potential sources of E. coli. Permittee owned and/or operated dog parks, parks with open water, sites with septic, or properties that are known potential sources of E. coli must be added to the inventory criteria for "high priority" sites (see Permit Part 4.2.6.1.). Any sites identified with potential sources of E. coli must implement structural or nonstructural BMPs.

All SSL dog parks and parks with open water that are a potential source of E. coli have been added to the inventory criteria for “high priority” sites and structural or nonstructural BMP’s will be implemented. Our City owned and operated facilities have been reevaluated with a new form and continue to see Public Works to be our high priority facility. See Appendix G in SWMP for evaluation form. **COMPLETED**

Permit part 3.2.2.4. requires that preexisting SOPs be evaluated and updated to include considerations for the reduction of E. coli. The following activities must be evaluated to ensure that the current SOPs target reduction of E. coli discharge: Surface cleaning and controlling litter; Lake and lagoon maintenance; Mowing/Trimming/Planting; Inspection and Cleaning of Stormwater Conveyance Structures, Controlling Illicit Connections and Discharges, Controlling Illegal Dumping to stormwater collection and conveyance structures; Solid Waste Collection, Controlling Litter, Controlling Illegal Dumping of solid waste; Water line Maintenance, Sanitary Sewer Maintenance, Spill/Leak/Overflow Control, Response, and Containment. If current SOPs do not encompass these activities, new SOPs should be created to target the reduction of E. coli discharge if the activities are applicable to the MS4.

Structural and nonstructural BMP’s are in place to address all of the aforementioned. Preexisting SOP’s have been reevaluated and updated to include considerations for the reduction of E. coli. SOP’s have been updated and new SOP’s have been added to reduce E. coli discharge. SOP’s will be added for dog park and poop bag stations. Updated list of SOP’s can be found in Appendix C of SWMP. SOP’s will be updated by May 31, 2024. **COMPLETED**

Permit part 3.2.2.5. requires that Low Impact Development (LID) controls, identified within the Guide to Low Impact Development within Utah, Appendix C, where E. coli (listed as a bacteria) has a medium or high pollutant removal effectiveness be promoted. The Guide to Low Impact Development within Utah, Appendix C is available on the division’s website:

<https://documents.deq.utah.gov/water-quality/stormwater/updes/DWQ-2019-000161.pdf>.

See Appendix A in the Stormwater Design Manual.

Permit part 3.2.2.6. requires that when ranking retrofit plans for the MS4, potential E. coli reduction be considered as a criterion (see Permit part 4.2.6.9.).

Update retrofit evaluation and ranking form to include E. coli and complete for all City owned facilities. Will be completed by June 30, 2024. **COMPLETED SEE APPENDIX G.**

Permit part 3.2.3. requires that TMDL compliance be reported annually by October 1 with the annual report form. The TMDL Compliance Report will be a component of the annual report form. The first TMDL Compliance Report will be due to DWQ by October 1, 2024. The TMDL Compliance Report includes identification of problem areas where E. coli source control BMPs were developed, the cost, and the anticipated pollutant reduction.

This required reporting will be completed by October 1, 2025.

Basis for Permit Modification

This permit modification updates the permit to reflect the Jordan River watershed E. coli Total Maximum Daily Load (TMDL) approved in February of 2023. Permit part 3.1.1.2. requires MS4 permittees to comply with all requirements associated with any approved TMDLs on stormwater discharge locations upstream of an impaired waterbody. The modification adds a permit section (Permit part 3.2.) that identifies the requirements of the Jordan River Watershed Wide E. coli TMDL.

A TMDL analysis was completed by the Utah Division of Water Quality (DWQ) to address E. coli exceedances throughout the Jordan River watershed. A TMDL analysis determines the amount of an identified pollutant that a waterbody can receive and still support its beneficial uses and meet state water quality standards. Once the location and magnitude of exceedances, as well as all potential sources, are identified, controls are implemented to reduce pollutant loading until the waterbody is brought back into compliance with water quality standards.

Surface waters are monitored as part of Utah's bacteriological monitoring program for pathogens that originate from fecal pollution from human and animal waste. It is not feasible to monitor for all pathogens in water, but by analyzing for certain indicator organisms, it is possible to assess potential health risks. Utah samples for E. coli concentrations in surface waters using USEPA guidelines (EPA, 2012). Common sources of E. coli include failing septic systems, leaking sewer lines, grazed pastures, confined feedlots, wildlife, and dog parks (Benham, 2006). Bacteria from these sources, some of which may be pathogenic or disease causing, are washed into surface waters during rainfall or snowmelt or are deposited directly in the water. These pathogenic bacteria pose a threat to human health usually through ingestion.

The potential sources of E. coli that may be contributing to the water quality impairments in a watershed are characterized as either point or nonpoint sources. Point sources are spatially discrete and regulated under UPDES permits. Nonpoint sources are spatially distributed. Stormwater discharges can be either nonpoint source or point source, and they are regulated under multiple permit programs.

Stormwater is a significant contributor to E. coli loading to surface waters in the Jordan River watershed. MS4 individual and general permits will serve as a regulatory mechanism for working toward the goals of the TMDL. Permittees that discharge to the Jordan River and its tributaries are required to implement permit requirements in Section 3.2. Permittees that discharge to the Jordan River and its tributaries are required to implement SWMP changes under Section 3.2. and TMDL requirements.

Storm Water Management Program

4.2.2. Public Involvement/Participation

Permit Part 4.2.2. was updated to provide specific requirements for Permittees to meet this minimum control measure. The part was updated to indicate that opportunities for public involvement and participation must occur two (2) times a year at a minimum. This change provides clarity on what is needed to meet permit requirements.

Adopt-a-Drain is a citywide program which engages residents and companies throughout the entire year.

Permit Part 4.2.2.2. was updated from 120 days to 180 days for the requirement for renewal CoPermittees to make the revised SWMP document available to the public for review and input. This is consistent with the requirement for New Permittees in this section.

The SWMP will be available online for review on 8/18/25.

Permit Part 4.2.2.4. was removed because it was duplicative of Permit Part 4.2.2.

Permit Part 4.2.3.6.1. was updated to improve clarity and readability. The reference to Permit part 4.2.3.6. was included to direct any potential enforcement actions to the established SOPs developed by the permittee for situations involving illicit discharges.

SOP completed. COMPLETED

Permit Part 4.2.4.1. was updated to remove the language, "Existing local requirements to apply stormwater controls at sites less than 1 acre or not part of a Common Plan of Development may be retained." Removing this language doesn't affect the authority of municipalities from implementing local guidelines and requirements. It clarifies that DWQ isn't placing any restrictions on local requirements.

Current ordinance implemented. COMPLETED

Permit Part 4.2.4.3.2. was added to meet the requirements of 40 CFR 122.34 (4) (i) (E). This part requires the Permittee to develop procedures for receiving and considering information and comments submitted by the public on proposed projects.

Will be asking for public comments in the monthly SSL newsletter. The Planning Division within The Community Development Department will assess and forward to Stormwater, if applicable.

Permit Part 4.2.4.4.1. was updated to reflect new trainings that satisfy the definition of a "qualified person." Updates included adding Certified Stormwater Inspector Construction (CSI-Construction), Qualified Compliance Inspector of Stormwater (QCIS), and EPA NPDES Construction General Permit Inspector Training. The Utah Department of Transportation Environmental Control Supervisor (ECS) training was removed as it was determined to be insufficient as a stand-alone training. This update is consistent with an upcoming Construction General Permit (CGP) update.

Will add/remove from inspector qualification form. COMPLETED

