LEHI CITY
Permit Number UTR090038

STORM WATER MANAGEMENT PROGRAM

For the permit period of May 12, 2021 to May 11, 2026

Submitted to:
State of Utah
Department of Environmental Quality
Division of Water Quality

Submitted by:
Lehi City
Public Works Department
2538 North 300 West
Lehi, Utah 84043
(385) 201-1700

Prepared by:
Shelbey Brewer

Submitted
May 9th, 2024

SIGNATORY PAGE

Governmental Entity Name: Lehi City **Permit Number:** UTR090038

Mailing Address: 153 North 100 East

City: Lehi **State:** Utah **Zip Code:** 84043

Storm Water Management Program Responsible Person(s):

Name: Dave Norman **Title:** Public Works Director

Telephone Number: 385-201-1700

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information., I certify that 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."

Print Name: Dave Norman

Signature:  **Date:** 6/12/2024

Title: Public Works Director

Duly Authorized Position(s):

"Letter already on file with the Division of Water Quality, Storm Water Section, identifying the Water Director as having the authority to sign this and future documents pertaining to the UPDES Permit Program."

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EXECUTIVE SUMMARY

The City of Lehi is permitted under the Utah Pollution Discharge Elimination System (UPDES) to discharge storm water from its boundaries to the waters of the United States under the Clean Water Act as amended by the Federal Water Pollution Control Act. Under the municipal separate storm sewer system (MS4) permit UTR090000, Lehi City is required to prepare, implement, and continue implementing a storm water management program (SWMP) with the goal of reducing storm water pollutants from the MS4 community. As required by the MS4 permit, the SWMP focuses on six minimum control measures (MCMs):

1. Public Education and Outreach on Storm Water Impacts,
2. Public Involvement/Participation,
3. Illicit Discharge Detection and Elimination (IDDE),
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.

Best management practices (BMPs) have been developed to meet the MCMs included in the permit over the last several years and updated for the 2023 submittal. Each BMP contains the following information: a brief description of the BMP; the permit reference satisfied by the BMP; the desired results of the BMP; the pollutants targeted by the BMP; the target audience of the BMP (if applicable); the agents in the City responsible for implementing the BMP; the measurable goals of the BMP, the measure of success for the BMP; and milestones for implementing the BMP.

Under the permit, compliance is mandatory for Lehi City. The permit requires the City to provide the manpower, funding, and equipment necessary (UTR090000 Section 4.1.2.2). Non-compliance with the permit includes the following possible penalties:

- Revocation of the permit and ability to discharge storm water without fines to the MS4.
- Agency fines on a per infraction/per day event.
- Individuals who violate permit implementing provisions are subject to fines not to exceed $10,000 per day of such violation (UTRC090000 Section 6.2).
- Any person willfully or negligently violating permit conditions or the Utah Water Quality Act, is subject to fines not to exceed $25,000 per day of violation. Any person convicted under UCA 19-5-115(2) a second time shall be punished by a fine not exceeding $50,000 per day (UTR090000 Section 6.2).

1.0 INTRODUCTION

Lehi City has prepared this Storm Water Management Program (SWMP) plan as required by UTR090000 published by the Utah Division of Water Quality (UDWQ), Department of Environmental Quality. This permit was issued to municipal separate storm sewer system (MS4) cities as required by the Utah Water Quality Act, Title 19, Chapter 5 of the Utah Code Annotated as amended and the rules and regulations made pursuant to those statutes. This SWMP is also compliant with the requirement of the Federal Water Pollution Control Act (33 U.S.C. §§ 1251 et. Seq. as amended to date).

Lehi City is the northernmost community in Utah County. The City is a Phase 2 community with a current population of approximately 75,907 as of the 2020 Census. It is part of the Greater Provo-Orem Metropolitan area neighboring Bluffdale, Highland, Cedar Hills, American Fork, and Saratoga Springs, with Utah Lake to the South and the Jordan River running through the West side of the City. Originally a farming community, the City is now a commercial and technological center for Utah County and is one of the fastest growing metropolitan areas in the State. The City population has grown by over 60% since the 2010 Census and averages over 3% annually. As a result, residential, industrial, and commercial development is occurring rapidly. When development occurs, there is an increase in impervious surfaces (surfaces that don't absorb or infiltrate water). This reduces the area where rainfall and snowmelt can infiltrate into the soil, which results in an increase in the amount of storm water runoff that Lehi City must manage.

This increased runoff has the potential to collect and convey contaminants such as sediment, fertilizer, organic matter, and oils. The dense vegetation typically associated with agricultural land acts as a natural filter to remove pollutants from storm water runoff. As these agricultural lands are replaced with asphalt, concrete, roof tops, and landscaping, many of these natural treatment capabilities have historically been replaced with direct discharge pipes leading to ditches, rivers, streams, wetlands, and lakes. In these systems there are no controls in place to treat polluted storm water runoff, and it can flow directly into local waterbodies. Polluted runoff degrades the quality of the receiving water, impacting aquatic life and dependent ecosystems.

Lehi City has updated and amended its SWMP with the goal of reducing stormwater pollution within the City as well as achieving better compliance with the requirements of UTR090000. This document has been organized to facilitate this effort and follows the numbering of the permit.

2.0 STORM WATER MANAGEMENT PROGRAM REQUIREMENTS

2.1 New Applicant [N/A]

This section is not applicable [N/A].

2.2 Notice of Intents [N/A]

This section is not applicable; Lehi City submitted a notice of intent (NOI) at least 180 days prior to the expiration date of the previous Permit.

2.3 Storm Water Management Program Plan Description for Renewal Permittees

- Lehi City's MS4 Permit Number is UTR090038.
- Lehi City is located in northern Utah County, north of Utah Lake. It is surrounded by Saratoga Springs, Bluffdale, Highland, Cedar Hills, and American Fork, and is bisected by Interstate-15, the major north/south highway in the State. A map of Lehi is shown in Figure 2-1
- Lehi City's storm water management program organization chart is shown in Figure 2-2.
- The previous SWMP Plan used a table to list how each section of the permit would be addressed. This updated SWMP Plan uses BMPs to address the permit requirements. Many of these BMPs describe existing practices, but a few describe new practices that will be implemented by Lehi City.
- Each BMP contains the following information:
    - A description of the BMP
    - The permit reference(s) satisfied by the BMP
    - The desired results of the BMP
    - The pollutants addressed by the BMP
    - The intended audience of the BMP (if applicable)
    - The agents in the City responsible for implementing the BMP
    - The measurable goal of the BMP
    - Description of how the success of the BMP will be measured
    - Milestones for meeting the goals of the BMP

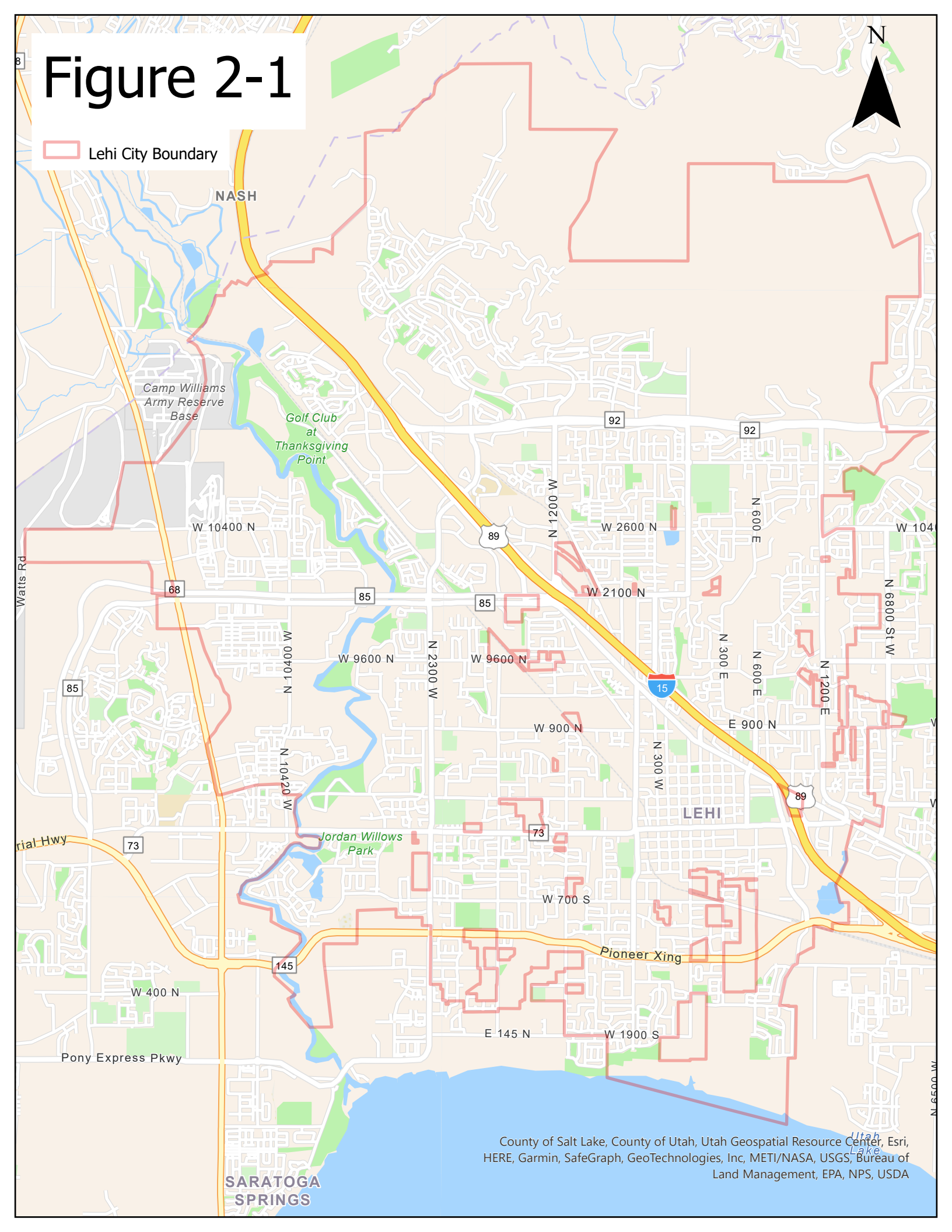
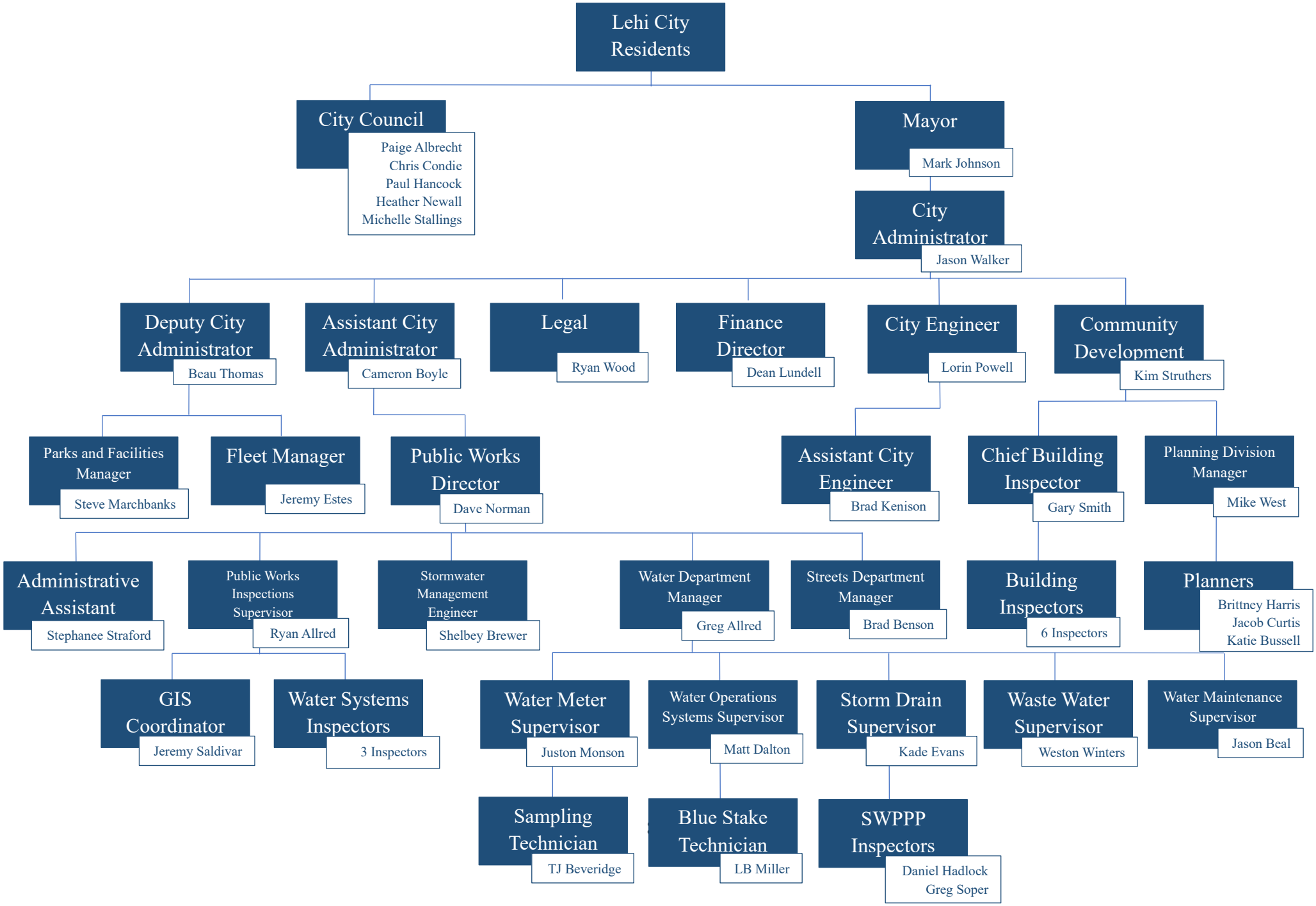


Figure 2-1
Lehi City Boundary
N
NASH
Camp Williams Army Reserve Base
Golf Club at Thanksgiving Point
W 10400 N
Watts Rd
68
85
89
92
W 2600 N
W 2100 N
N 1200 W
N 600 E
N 300 E
N 6800 St W
N 1200 E
W 9600 N
N 2300 W
N 10400 W
N 10420 W
W 900 N
E 900 N
N 300 W
15
LEHI
Jordan Willows Park
73
W 700 S
Pioneer Xing
145
W 400 N
E 145 N
W 1900 S
Pony Express Pkwy
SARATOGA SPRINGS
Utah Lake
County of Salt Lake, County of Utah, Utah Geospatial Resource Center, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

Figure 2-2: Lehi City Organizational Chart



3.0 SPECIAL CONDITIONS

3.1 Discharges to Water Quality Impaired Waters

Lehi City has a major drainage feature (Dry Creek) which collects runoff from upstream mountain watersheds and other municipalities and conveys it through the City. The City also discharges storm water runoff into several other drainage features within the City such as: Waste Ditch, Spring Creek, Cedar Hollow, Fox Ditch, Bull River Ditch, Dry Creek Reservoir, and Mill Pond which collect and convey runoff to both the Jordan River and Utah Lake. Existing City storm drainage facilities include open channels/ditches, detention facilities, and storm drain pipe systems. Lehi City's major drainage facilities are shown in Figure 3-1.

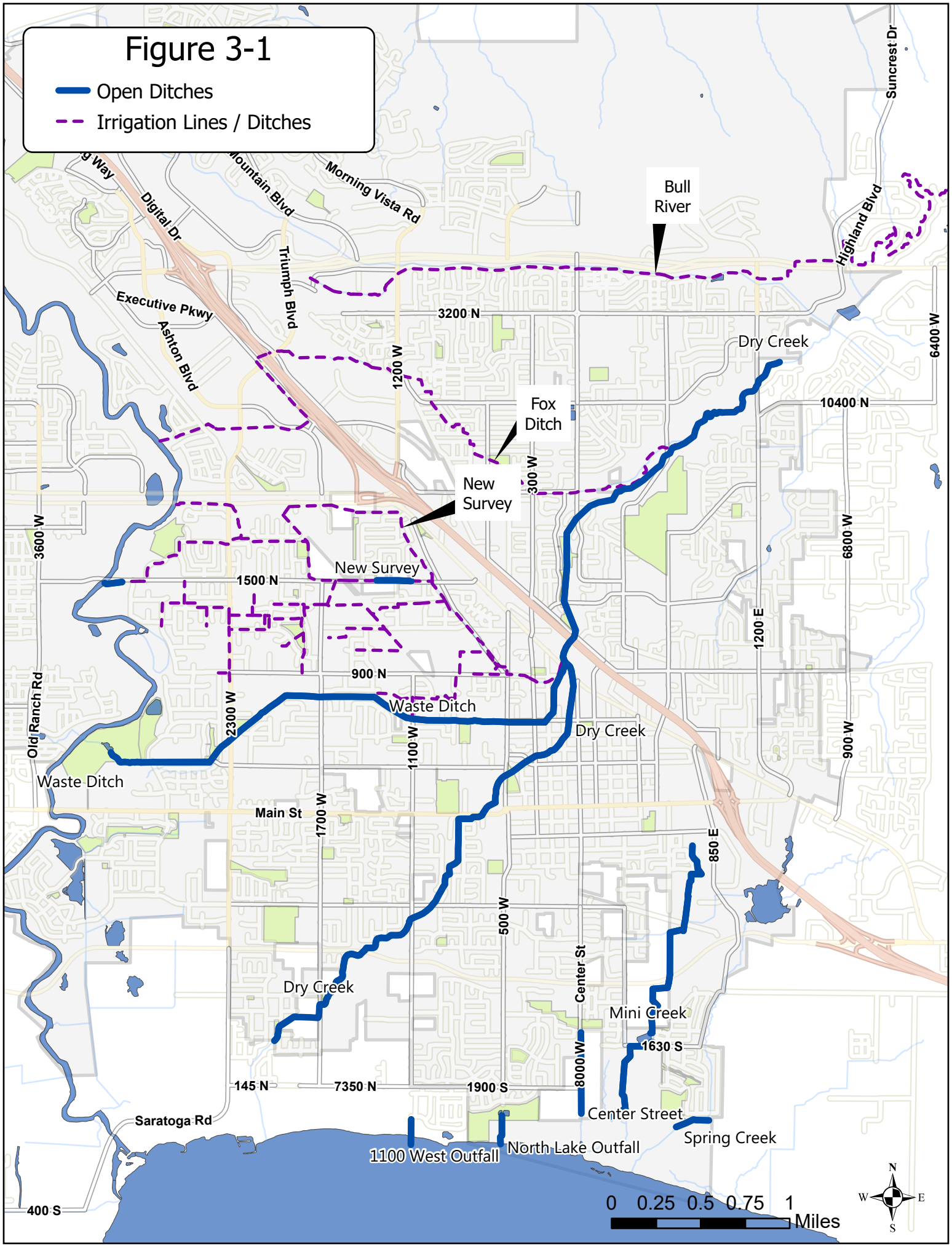


Figure 3-1
Open Ditches
Irrigation Lines / Ditches
Bull River
Fox Ditch
New Survey
New Survey
Dry Creek
Dry Creek
Dry Creek
Waste Ditch
Waste Ditch
Mini Creek
Center Street
Spring Creek
1100 West Outfall
North Lake Outfall
Digital Dr
Executive Pkwy
Ashton Blvd
Triumph Blvd
Morning Vista Rd
Highland Blvd
Suncrest Dr
Old Ranch Rd
Main St
Saratoga Rd
Center St
3200 N
1500 N
900 N
145 N
7350 N
1900 S
1630 S
400 S
1200 W
300 W
3600 W
2300 W
1100 W
1700 W
500 W
8000 W
6400 W
6800 W
900 W
1200 E
850 E
10400 N
0 0.25 0.5 0.75 1
Miles
N
W
E
S

An impaired water is any segment of surface water that has been identified by the UDEQ as failing to support one or more of its designated uses. Table 3-1 shows a summary of 303(d) listed waters of the state that receive storm water discharges from Lehi City.

Table 3-1: Summary of 303(d) Listed Waters of the State

Water Body	Assessment Unit ID	Assessment Unit Description	Pollutant
Jordan River	UT16020201-008_00	Jordan River from Narrows to Utah Lake	Arsenic
Jordan River	UT16020201-008_00	Jordan River from Narrows to Utah Lake	Total Dissolved Solids (TDS)
Spring Creek	UT16020201-009_00	Spring Creek and tributaries from Utah Lake near Lehi to headquarters	E. coli
Spring Creek	UT16020201-009_00	Spring Creek and tributaries from Utah Lake near Lehi to headquarters	Temperature
Spring Creek	UT16020201-009_00	Spring Creek and tributaries from Utah Lake near Lehi to headquarters	Dissolved Oxygen
Utah Lake	UT-L-16020201-004_01	Utah Lake other than Provo Bay	Eutrophication
Utah Lake	UT-L-16020201-004_01	Utah Lake other than Provo Bay	PCBs in Fish Tissue
Utah Lake	UT-L-16020201-004_01	Utah Lake other than Provo Bay	E. coli
Utah Lake	UT-L-16020201-004_01	Utah Lake other than Provo Bay	Harmful Algal Blooms
Utah Lake	UT-L-16020201-004_01	Utah Lake other than Provo Bay	Phosphorus
Utah Lake	UT-L-16020201-004_01	Utah Lake other than Provo Bay	Total Dissolved Solids (TDS)

The reduction of these pollutants is a priority in all BMPs, but they will be specifically addressed in the BMPs listed in MCM 1: Public Education and Outreach on Storm Water Impacts.

According to the UDEQ Beneficial Uses and Water Quality Assessment Map, there are no approved TMDLs for any of these water bodies. Lehi City will comply with any TMDLs that are developed and approved in the future.

3.2 Nitrogen and Phosphorus Reduction

The UDWQ has identified Utah Lake as impaired for both phosphorus and nitrogen. The lake commonly experiences harmful algal blooms and has been scrutinized for water quality for many years. As part of the Utah Lake Water Quality Management Plan, a detailed implementation plan is being established to reduce phosphorus and nitrogen in Utah Lake. As part of that plan, efforts to reduce discharges of both phosphorus and nitrogen from point sources and UPDES permit holders will be a focus. The reduction of nitrogen and phosphorus will be addressed in all BMPs, but a special focus will be given in the following BMPs:

BMP 04: Update and Distribute Storm Water Residential Newsletter
BMP 05: Educational Videos and Website Links
BMP 06: Long Term Inspection Educational Flyer
BMP 07: Utah County Storm Water Coalition (UCSWC) Outreach
BMP 08: Information to Contractors, Developers, Development Review Staff, and Land Use Planners

3.3 Co-Permittees

While UDOT has a UPDES Permit which includes state-owned right-of-way within the City boundaries, Lehi City is not filing for Co-Permittee status.

4.0 STORM WATER MANAGEMENT PROGRAM

Lehi City continues to implement their existing SWMP with the intent of reducing the discharge of pollutants from the MS4. Lehi City's SWMP includes BMPs for all six of the MCMs defined in the MS4 permit.

4.1 Requirements

Lehi City has compiled BMPs to address administrative requirements as well as the six MCMs listed in the permit. The following BMPs will be used to meet the administrative requirements:

BMP 01: Annual SWMP Plan Review
BMP 02: Submission of Annual Report
BMP 03: Maintain Documentation for 5 Years

4.2 Minimum Control Measures

MCM 1: Public Education and Outreach on Storm Water Impacts

The purpose of MCM #1 is to reduce negative impacts on water quality due to storm water discharges by utilizing public education and outreach to target the audiences and pollutants listed in Tables 4-1 through 4-4. BMPs will provide information to the four designated audiences on methods for avoiding, reducing, and/or eliminating the adverse impacts of storm water discharges from the pollutants related to each audience. Outreach methods will be prioritized to educate targeted sources that are likely to result in a reduction of nitrogen and phosphorus, as well as pollutants of concern in the 303(d) listed waters that Lehi City discharges to. The following BMPs will be used to implement Lehi City's Public Education and Outreach program:

BMP 04: Update and Distribute Storm Water Residential Newsletter
BMP 05: Educational Videos and Website Links
BMP 06: Long Term Inspection Educational Flyer
BMP 07: Utah County Storm Water Coalition (UCSWC) Outreach
BMP 08: Information to Contractors, Developers, Development Review Staff, and Land use Planners
BMP 09: Staff Training for Public Education and Outreach, IDDE, Construction Runoff, and MS4 Good Housekeeping

Table 4-1: Residents

Pollutant	Source

Nitrogen and Phosphorus	Pet wastes, fertilizers, organic wastes like lawn clippings and yard wastes
Pathogens, E. Coli, Total Coliforms	Pet wastes, septic tank maintenance or removal
Petroleum Products	Vehicle storage and maintenance
Toxins	Household hazardous wastes, pesticides, herbicides
Total Dissolved Solids	De-icing salts

Table 4-2: Institutions, Industrial, and Commercial Facilities

Pollutant	Source
Nitrogen and Phosphorus	Fertilizers, organic wastes like lawn clippings and yard wastes
Petroleum Products	Vehicle and equipment storage and maintenance
Toxins	Hazardous wastes storage and disposal, pesticides, herbicides
Total Dissolved Solids	De-icing salts

Table 4-3: Developers and Contractors (Construction)

Pollutant	Source
Nitrogen and Phosphorus	Fertilizers, organic wastes like lawn clippings and yard wastes
Petroleum Products	Refueling, vehicle and equipment storage and maintenance
Toxins	Hazardous waste storage and disposal, concrete washout, pesticides, herbicides
Total Dissolved Solids	De-icing salts
Total Suspended Solids, Sediments	Erosion, dust, vehicle tracking, scouring, etc.

Table 4-4: MS4-Owned or Operated Facilities

Pollutant	Source
Nitrogen and Phosphorus	Pet wastes, fertilizers, organic wastes like grass clippings
Pathogens, E. Coli, Total Coliforms	Pet wastes, sanitary system overflows, etc.
Petroleum Products	Refueling, vehicle and equipment storage and maintenance

Toxins	Hazardous wastes storage and disposal, concrete washout, pesticides, herbicides
Total Dissolved Solids	De-icing salts, road salt
Total Suspended Solids, Sediments	Erosion, dust, road dust, scouring, etc.

MCM 2: Public Involvement/Participation

The goal of MCM #2 is to involve the public in the development, implementation, and update of the SWMP document, including the development and adoption of all required ordinances and regulatory mechanisms. The following BMP will be used to implement Lehi City's Public Involvement/Participation program:

BMP 10: Public Review of SWMP

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

The goal of MCM #3 is to find and eliminate sources of non-stormwater discharges from Lehi City and implement defined procedures to prevent illicit connections and discharges. The following BMPs will be used to implement Lehi City's IDDE program:

BMP 05: Educational Videos and Website Links
BMP 09: Staff Training for Public Education and Outreach, IDDE, Construction Runoff, and MS4 Good Housekeeping
BMP 11: Storm Water System Mapping
BMP 12: Illicit Discharge Detection and Elimination Ordinance
BMP 13: Update Illicit Discharge Detection and Elimination Standard Operating Procedures
BMP 14: Assessment of High Priority Areas
BMP 15: High Priority Area Inspections
BMP 16: Dry Weather Screening of Outfalls
BMP 17: Mapping and Tracking Database of Spills and Illicit Discharges
BMP 18: Maintain 24-Hour Hotline and Update SOP of Call Response

MCM 4: Construction Site Storm Water Runoff Control

The goal of MCM #4 is to reduce pollutants in storm water runoff from construction sites within Lehi City. Lehi City will require construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre, to follow these requirements. This will be applied to public and private projects, including projects

proposed by Lehi City's own departments and agencies. The following BMPs will be used to implement Lehi City's Construction Site Storm Water Runoff Control program:

BMP 19: City Construction Site Ordinances
BMP 20: Update Approved Construction Site Storm Water BMPs and Design Standards
BMP 21: Enforcement Strategy
BMP 22: SWPPP Review Checklist and SOP
BMP 23: Update SOPs for Inspections
BMP 24: Maintain Documentation and Map of SWPPP Locations by Address
BMP 25: Pre-Construction SWPPP Meetings and Addressing Public Comments
BMP 26: Bi-Weekly Inspections of High Priority Sites and Monthly Inspections of All Sites
BMP 27: Maintain RSI and RSW/RSR Certification Training of all Storm Water Inspectors and Engineering SWPPP Writers/Reviewers

MCM 5: Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)

MCM #5 is intended to ensure that stormwater runoff from newly developed or redeveloped sites will continue to be managed once construction is completed. The following BMPs will be used to implement Lehi City's Long-Term Post-Construction Storm Water Management Program:

BMP 28: New Development/Redevelopment Storm Water Control Program
BMP 29: Long- Term Post-Construction Storm Water Control Ordinance and Enforcement
BMP 30: Post Installation Inspection of Permanent Structural BMPs
BMP 31: Inspection of Long-Term Post-Construction Storm Water Management Sites
BMP 32: Inventory of Long-Term Post-Construction Structural Storm Water Control Measures
BMP 33: Long-Term Post-Construction Inspector Training

MCM 6: Pollution Prevention and Good Housekeeping for Municipal Operations

The purpose of MCM #6 is to create a program that Lehi City can use to manage storm water runoff at their own facilities. The City will strive to set an example for others by complying with the same standards. The following BMPs will be used to implement Lehi City's Pollution Prevention and Good Housekeeping in Municipal Operations program:

BMP 34: City Owned Facility Inventory with Priority Identification and Possible Pollutants
BMP 35: Prepare and Maintain High Priority MS4 Facility SWPPPs
BMP 36: High Priority MS4 Facility Inspections – Monthly/Semi-Annually/Annually
BMP 37: Review and Update Existing MS4 Good Housekeeping SOPs
BMP 38: Sweeping and Catch Basin Cleaning Schedule

BMP 39: Vactor Truck Discharge and Vehicle Washing
BMP 40: Spill Prevention Plan
BMP 41: Floor Drain Inventory
BMP 42: Assessment of MS4 Flood Management Control Structures
BMP 43: Retrofit Existing City Owned or Operated Sites that Adversely Impact Storm Water Quality

BMP 01: ANNUAL SWMP PLAN REVIEW

New

Description: Lehi City will review the SWMP and related documents annually to evaluate the compliance of the SWMP with the Permit, the City's compliance with the SWMP, and the effectiveness of the BMPs and SOPs related to the SWMP.

Permit Reference: 4.1.2, 4.4.1

Desired Results: Provide a regular review process to refocus and allow Lehi City to best utilize its limited resources to accomplish the most good.

Pollutants: All pollutants with particular emphasis on nitrogen, phosphorus, and pollutants listed in Table 3-1.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, and Storm Water Supervisor.

Measurable Goal: Create a form to evaluate the SWMP and related documents and use the form to evaluate the SWMP and related documents annually and update as necessary.

Measures of Success: Success will be measured by the SWMP and related documents being reviewed annually and updated as necessary to ensure compliance with the Permit.

Milestones:

2024: Create a form for evaluating SWMP prior to submittal of annual report. Complete annual review of SWMP prior to submittal of annual report
2025: Complete annual review of SWMP prior to submittal of annual report
2026: Complete annual review of SWMP prior to submittal of annual report

BMP 02: SUBMISSION OF ANNUAL REPORT

Description: Lehi City will prepare and submit an annual report to the Utah Division of Water Quality (DWQ) and post it on the City website. As part of the annual report submission, the City will track the number of inspections performed, official enforcement actions taken, and the types of public education activities implemented, as well as track and evaluate the budget needed to meet the requirements of the permit.

Permit Reference: 4.1.2.1, 4.1.2.2, 5.5.1, 5.5.2, 5.5.3, 5.5.4

Desired Results: To comply with the permit and to document compliance and progress to the City staff, City Council, DWQ, and the general public.

Pollutants: All pollutants with particular emphasis on nitrogen, phosphorus, and pollutants listed in Table 3-1.

Audience: City Council, UDEQ, and the general public.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Storm Water Supervisor, and Storm Water Inspectors.

Measurable Goal: Prepare, review, and approve annual report, then submit to DWQ as required.

Measures of Success: Success will be measured by submittal of a completed annual report to DWQ prior to October 1 annually.

Milestones:

2024: Submit annual report by October 1, 2024, and upload it to the City website prior to December 2024.
2025: Submit annual report by October 1, 2025, and upload it to the City website prior to December 2025.
2026: Submit annual report by October 1, 2026, and upload it to the City website prior to December 2026.

BMP 03: MAINTAIN DOCUMENTATION FOR 5 YEARS

Description: Lehi City will retain all required plans, records of all programs, records of all monitoring information, copies of all reports required by the permit, and records of all other data required by or used to demonstrate compliance with the permit for at least 5 years as required by the permit.

Permit Reference: 5.4.1

Desired Results: Maintain and organize a digital storage system that allows for the convenient storage and relocation of information to facilitate the preparation of metrics, annual planning, annual reports, internal audits, and DWQ audits or other requests.

Pollutants: All pollutants with particular emphasis on nitrogen, phosphorus, and pollutants listed in Table 3-1.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Storm Water Director, and GIS Coordinator.

Measurable Goal: Maintain a file data structure on the server, place existing data on the server in the appropriate locations, continue to place new data in the appropriate locations.

Measures of Success: Success will be measured by documentation being organized and accessible when it is needed for the annual report.

Milestones:

2024: Information organized and accessible for submittal of annual report
2025: Information organized and accessible for submittal of annual report
2026: Information organized and accessible for submittal of annual report

BMP 04: UPDATE AND DISTRIBUTE STORM WATER RESIDENTIAL NEWSLETTER

Description: Lehi City will provide education to the general public through a flyer that will be included twice annually (Spring and Fall) in the City Newsletter and posted on the website blog. These fliers will address the impacts to water quality from the pollutants listed in Table 4-1 as well as septic system maintenance, lawn care, automotive work and car washing, swimming pool water disposal, pet waste management, onsite storm water infiltration, household hazardous waste disposal, and the City's prohibition on illicit discharges, as well as additional topics most relevant to the community. The Spring fliers will emphasize proper lawn care and maintenance, and the Fall fliers will be focused on fallen leaves and yard debris clean up and disposal.

Permit Reference: 3.2.1.3, 4.2.1, 4.2.1.1, 4.2.1.2, 4.2.1.7, 4.2.1.8, 4.2.3.7, 4.2.3.8

Desired Results: Implement education to the public on the effects of non-storm water discharges on water quality and promote the use of best management practices to reduce adverse effects on storm water quality.

Justification: Residents are most likely to discharge the pollutants listed in Table 4-1 which are related to septic systems, lawn car, automotive work and car washing, and pet waste management. These activities will be addressed in the educational flyers. All property owners that use Lehi City utilities receive the utility mailer. Including the flyer in the utility mailer is an effective method of reaching residents.

Pollutants: All pollutants listed in Table 4-1: Pathogens, E. coli, total coliforms, petroleum products, toxins, total dissolved solids, with particular emphasis on nitrogen and phosphorus as well as e. coli and total dissolved solids.

Audience: Primarily residents, but also businesses, institutions, contractors, developers, and employees of MS4-owned or operated facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Communications Department, and Billing Department.

Measurable Goal: Review and update existing flyers, include appropriate flyer in City Newsletter and post on website blog.

Measures of Success: Success will be measured by the flyers being updated, included in the City Newsletter, and posted on the website blog by the end of April and October every year.

Milestones:

2024: Review/update flyer and include in newsletter/post on blog, April/October 2024
2025: Review/update flyer and include in newsletter/post on blog, April/October 2025
2026: Review/update flyer and include in newsletter/post on blog, April/October 2026

BMP 05: EDUCATIONAL VIDEOS AND WEBSITE LINKS

Description: Lehi City will provide education to all target audiences through educational videos and links to educational articles posted on the City website. The videos and articles will address the impacts to water quality from septic system maintenance, lawn care, automotive maintenance and car washing, swimming pool water disposal, pet waste management, onsite storm water infiltration, building and equipment maintenance, deicing materials, material storage and disposal, parking lot management, household hazardous waste disposal, and the City's prohibition of illicit discharges, as well as additional topics most relevant to the community.

Permit Reference: 3.2.1.3, 4.2.1, 4.2.1.1, 4.2.1.2, 4.2.1.3, 4.2.1.4, 4.2.1.5, 4.2.1.6, 4.2.1.7, 4.2.1.8, 4.2.3.7, 4.2.3.8

Desired Results: Educate the general public on the effects of non-storm water discharge on water quality and promote the use of best management practices to reduce adverse effects on storm water quality.

Justification: Educational flyers can only contain a limited amount of information, and it is difficult to ensure that all members of the target audiences receive them. The city website makes it possible to make more educational content available to a broader audience.

Pollutants: All pollutants listed in MCM 1: Pathogens, E. coli, total coliforms, petroleum products, toxins, total dissolved solids, total suspended solids, sediments, with particular emphasis on nitrogen and phosphorus.

Audience: Residents; institutions, industrial, and commercial facilities; developers and contractors (construction); and Employees of MS4-owned or operated facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Storm Water Supervisor, and Communications Department.

Measurable Goal: Review educational material on City website and update or add content and educational material as necessary. When the website is updated, include a notification in the website blog.

Measures of Success: Success will be measured by the educational material being reviewed annually and updated as necessary.

Milestones:

2024: Review educational material and update as necessary prior to submittal of annual report
2025: Review educational material and update as necessary prior to submittal of annual report
2026: Review educational material and update as necessary prior to submittal of annual report

BMP 06: LONG TERM INSPECTION EDUCATIONAL FLYER

New

Description: Lehi City will provide education to institutions, industrial, and commercial facilities through a flier that will be distributed every five years following the City inspection of the storm drainage facilities mentioned in BMP 33. The flier will contain the results of the inspections as well as information on the impacts to water quality from lawn maintenance, onsite storm water infiltration, building and equipment maintenance, deicing materials, material storage and disposal, parking lot management, and the City's prohibition of illicit discharges, as well as additional topics most relevant to the community.

Permit Reference: 4.2.1, 4.2.1.1, 4.2.1.3, 4.2.1.8, 4.2.3.7

Desired Results: Provide education to businesses and institutions on the effects of non-storm water discharge on water quality and promote the use of best management practices to reduce adverse effects to storm water quality.

Justification: The Storm Water Management Plan Engineer is already visiting and inspecting all privately owned storm drain facilities once every five years. Distributing an inspection form and educational flyer during this inspection is an effective way of educating the owners of private storm drain systems.

Pollutants: All pollutants listed in Table 4-2: petroleum products, toxins, total dissolved solids, with particular emphasis on nitrogen and phosphorus.

Audience: Institutions, industrial, and commercial facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, and Storm Water Supervisor.

Measurable Goal: Create educational flyer, adjust long term inspection form to document when flyers are distributed, distribute flyers after each long-term post-construction storm water management inspection, and post flyer on City website for reference.

Measures of Success: Success will be measured by the flyer being created and posted to the City website. Flyers will be distributed to all businesses on the long-term post-construction storm water management inspection list following Lehi City's inspection.

Milestones:

2023: Create flyer and post on City website by December 2023.
2023-2024: Review/update and distribute brochure to long term sites in Zone 2.
2024-2025: Review/update and distribute brochure to long term sites in Zone 3.
2025-2026: Review/update and distribute brochure to long term sites in Zone 4.

BMP 07: UTAH COUNTY STORM WATER COALITION (UCSWC) OUTREACH

Description: Lehi City is a member of the Utah County Storm Water Coalition (UCSWC), whose purpose is to enhance public knowledge and awareness of storm water pollution and provide information to individuals and households to prevent storm water pollution and protect water quality.

Permit Reference: 4.2.1, 4.2.1.1, 4.2.1.2, 4.2.1.3, 4.2.1.4, 4.2.1.5, 4.2.1.6, 4.2.1.7, 4.2.1.8, 4.2.3.7, 4.2.3.8

Desired Results: Provide education to the public on the effects of non-storm water discharge and water quality and promote the use of best management practices to reduce adverse effects on storm water quality.

Justification: UCSWC has greater resources and is capable of reaching a broader audience than Lehi City. By being a member of UCSWC, Lehi city enhances its ability to educate the public on storm water pollution.

Pollutants: All pollutants listed in MCM 1: Pathogens, E. coli, total coliforms, petroleum products, toxins, total dissolved solids, total suspended solids, sediments, with particular emphasis on nitrogen and phosphorus.

Audience: Residents; institutions, industrial, and commercial facilities; developers and contractors (construction); and Employees of MS4-owned or operated facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, and Storm Water Supervisor.

Measurable Goal: Lehi City will participate in UCSWC meetings, pay annual dues, support UCSWC educational efforts at K-12 schools, seek opportunities to partner with UCSWC for community events such as the Utah County Fair, and encourage UCSWC to update their website annually.

Measures of Success: Success will be measured by tracking attendance at UCSWC meetings, tracking presentations by UCSWC to schools in Lehi City, tracking participation at community events, and documenting requests to UCSWC to update their website.

Milestones:

2024: Annual UCSWC participation.

2025: Annual UCSWC participation.
2026: Annual UCSWC participation.

BMP 08: INFORMATION TO CONTRACTORS, DEVELOPERS, DEVELOPMENT REVIEW STAFF, AND LAND USE PLANNERS

New

Description: Lehi City will provide and document education and outreach given to engineers, construction contractors, developers, development review staff, land use planners, and other pertinent parties concerning the development of storm water pollution prevention plans (SWPPPs), long term storm water management plans (LTSWMPs), low impact development (LID) practices, green infrastructure practices, and the specific requirement for post-construction storm water controls and the associated BMPs chosen by the City.

Permit Reference: 4.2.1, 4.2.1.1, 4.2.1.4, 4.2.1.6, 4.2.1.8, 4.2.3.7

Desired Results: Educate contractors, developers, development review staff, and land use planners on the development of SWPPPs and LTSWMPs, LID and green infrastructure practices, the effects of non-storm water discharges on water quality and promote the use of best management practices to reduce adverse effects to storm water quality.

Justification: Providing developers and contractors with the state SWPPP template, Lehi City LTSWMP template, and Lehi City SWPPP and LTSWMP review process will make the City requirements and expectations clear, reduce confusion, and streamline the plan review process. Educating Lehi City development review staff and land use planners on the same will ensure that these requirements are explained early in the review process and that they are adequately enforced.

Pollutants: Pollutants listed in Tables 4.2 and 4.3 with specific emphasis on nitrogen and phosphorus.

Audience: Engineers, Contractors, Developers, Development Review Staff, and Land Use Planners.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Storm Water Supervisor, and Development Review Staff.

Measurable Goal: Provide information on SWPPPs, LTSWMPs, and BMPs. This will include at a minimum the state SWPPP templates, City LTSWMP template, City SWPPP and LTSWMP review process, and City approved LID and green infrastructure practices. Make information available to engineers, contractors, and developers. Post information on city website for

reference. Update Lehi City Design Standards to contain current permit requirements for SWPPPs and LTSWMPs, as well as BMPs that have been approved by Lehi City.

Measures of Success: Success will be measured by providing information on SWPPPs, LTSWMPs, and BMPs to engineers, contractors, and developers as well as providing it on the City website. It will also be measured by updating Lehi City Design standards to meet current permit requirements.

Milestones:

2024: Make information on SWPPPs, LTSWMPs, and BMPs available to engineers, contractors, and developers, as well as on the City website. Review information and update as necessary prior to submittal of annual report.
2025: Make information on SWPPPs, LTSWMPs, and BMPs available to engineers, contractors, and developers, as well as on the City website. Review information and update as necessary prior to submittal of annual report.
2026: Make information on SWPPPs, LTSWMPs, and BMPs available to engineers, contractors, and developers, as well as on the City website. Review information and update as necessary prior to submittal of annual report.

BMP 09: STAFF TRAINING FOR PUBLIC EDUCATION AND OUTREACH, IDDE, CONSTRUCTION RUNOFF, AND MS4 GOOD HOUSEKEEPING

Description: Lehi City will provide and document education and training given to employees of city-owned or operated facilities concerning the City's prohibition against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges. The City will, at a minimum, consider the following topics: equipment inspection to ensure timely maintenance; proper storage of industrial materials (emphasize pollution prevention); proper management and disposal of wastes; proper management of dumpsters; minimization of use of salt and other de-icing materials (cover/prevent runoff to MS4 and ground water contamination); benefits of appropriate onsite infiltration (areas with low exposure to industrial materials such as roofs or employee parking); and proper maintenance of parking lot surfaces (sweeping).

Lehi City will also provide and document training given to MS4 engineers, development review staff, land use planners, and other pertinent parties receive training on Low Impact Development (LID) practices, green infrastructure practices, and the specific requirements for post-construction control and the associated BMPs chosen within this SWMP.

Lehi City will require that all staff that might come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4, including office personnel who might receive initial reports of illicit discharges, receives annual training in the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections.

Lehi City will ensure that all staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement, receive and maintain RSI and/or RSW certification as required by their responsibilities.

Lehi City will also require that all employees, contracted staff, and other responsible entities that have primary operations, or maintenance job functions that are likely to impact storm water quality receive annual training. The annual training shall address the importance of protecting water quality, the requirements of the permit, O&M requirements, inspection procedures, ways to prevent or minimize impacts to water quality by how they perform their job activities, SOPs, and SWPPPs for the various Lehi City owned or operated facilities, as well as procedures for reporting water quality concerns, including potential illicit discharges.

Permit Reference: 4.2.1, 4.2.1.1, 4.2.1.5, 4.2.3.7, 4.2.3.11, 4.2.4.5, 4.2.6.10

Desired Results: Educate Lehi City staff on the effects of non-storm water discharges on water quality, illicit discharge detection and elimination procedures, and low impact development. Ensure that applicable City staff receive RSI, RSW, IDDE, and O&M training as necessary for their job responsibilities.

Pollutants: Pollutants listed in Tables 3-1 and 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: City Staff.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Sewer Supervisor, Storm Water Supervisor, and Streets Supervisor.

Measurable Goal:

1. Conduct annual training with city staff (such as: public works, parks, cemetery, fire, police, and construction SWPPP inspectors) on IDDE identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections.
2. Conduct annual training with city staff (such as: public works, parks, and cemetery) on pollution prevention methods in operations and maintenance relating to their job responsibilities.
3. Conduct annual training with city staff (such as: engineers, plan review, land use, and planners) on the benefits of LID and green infrastructure.
4. Ensure that construction site SWPPP inspectors receive and maintain RSI certification and SWPPP review staff receive and maintain RSR/RSW certification.

Measures of Success: Success will be measured by conducting annual staff training every March and ensuring that appropriate employees maintain RSI and RSR/RSW certification.

Milestones:

2024: Conduct various staff training annually. Require new hires to receive training within 60 days.
2025: Conduct various staff training annually. Require new hires to receive training within 60 days.
2026: Conduct various staff training annually. Require new hires to receive training within 60 days.

BMP 10: PUBLIC REVIEW OF SWMP

Description: Lehi City will post a copy of the completed SWMP on the city website and provide contact information for the Storm Water Management Plan Engineer who will receive public comment on the SWMP over the duration of the permit.

Permit Reference: 4.2.2, 4.2.2.1, 4.2.2.2, 4.2.2.3

Desired Results: Provide a regular process over the duration of the permit for public input and feedback on the SWMP document.

Pollutants: All pollutants with particular emphasis on nitrogen, phosphorus, and pollutants listed in Table 3-1.

Audience: General Public including Residents, Businesses, Institutions, Contractors, Developers, and City Staff.

Responsible Agents in City: Storm Water Management Plan Engineer and Public Works Director.

Measurable Goal: A current version of the SWMP document shall remain available on the city website for public review and input for the life of the Permit. A specific contact person shall be clearly identified on the city website and their phone number and/or email address shall be provided.

Measures of Success: Success will be measured by the SWMP being posted on the city website within 180 days from the effective date of the Permit, the contact information for the Storm Water Management Plan Engineer being reviewed annually and updated if necessary in conjunction with review of SWMP. If the SWMP is updated during the life of the permit, the updated SWMP document will be posted on the city website and notification will be given that it is available for review.

Milestones:

2024: Confirm and/or update contact information on City website prior to submittal of annual report. Post SWMP update on City website, if applicable.
2025: Confirm and/or update contact information on City website prior to submittal of annual report. Post SWMP update on City website, if applicable.
2026: Confirm and/or update contact information on City website prior to submittal of annual report. Post SWMP update on City website, if applicable.

BMP 11: STORM WATER SYSTEM MAPPING

Description: Maintain a current GIS-based map of the storm sewer system showing the locations of all outfalls to the waters of the U.S. with layers for inlets, pipes, channels, manholes, outfalls, detention ponds, treatment systems, rivers, and streams with their associated names, as well as associated information on ownership.

Permit Reference: 4.2.3, 4.2.3.1

Desired Results: Provide a GIS-based map and database that tracks the locations of all storm water infrastructure including outfalls, associated with supporting the Illicit Discharge Detection and Elimination (IDDE) program.

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: City Staff.

Responsible Agents in City: Storm Water Management Plan Engineer, City Engineers, Public Works Director, Storm Water Supervisor, and GIS Coordinator.

Measurable Goal: Continue to update the storm water GIS map by surveying new development and as-builts prior to final sign-off by infrastructure and verify and update the existing storm water mapping as part of storm water maintenance, cleaning, and regular inspections.

Measures of Success: Compliance with these goals will be measured by completing survey of all new development annually and documenting any updates in the GIS database.

Milestones:

2024: Audit survey and inspection work orders prior to submittal of annual report.
2025: Audit survey and inspection work orders prior to submittal of annual report.
2026: Audit survey and inspection work orders prior to submittal of annual report.

BMP 12: ILLICIT DISCHARGE DETECTION AND ELIMINATION ORDINANCE

Description: Lehi City has an existing ordinance to prohibit non-stormwater discharges including spills, illicit connections, illegal dumping, and sanitary sewer overflows into the storm water system. The ordinance provides legal authority to detect, investigate, eliminate, and enforce against non-stormwater discharges, including illegal dumping, into the Lehi City MS4. (Lehi City Code 9-3-6)

Permit Reference: 4.2.3, 4.2.3.2, 4.2.3.2.1,

Desired Results: To provide adequate legal authority to detect, investigate, eliminate, and enforce against non-storm water discharges, including illegal dumping., as well as provide a variety of enforcement options to apply and escalate enforcement procedures as necessary based on the severity of violation and/or the failure of the violator to address the violation(s).

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: City Staff, General Public (Residents, Businesses, Institutions, Contractors, and Developers.

Responsible Agents in City: Storm Water Management Plan Engineer, City Engineers, Public Works Director, Storm Water Supervisor, City SWPPP Inspectors, and City Attorney.

Measurable Goal: Regularly review and update the IDDE Ordinance as part of the annual SWMP review. When there are suggestions for improvements, necessary modifications will be completed in time for the annual report.

Measures of Success: Compliance with these goals will be measured by ordinances being reviewed annually as part of SWMP review and any suggested modifications being made in time for submission of the annual report.

Milestones:

2024: Review IDDE ordinances and update as necessary prior to submittal of annual report.
2025: Review IDDE ordinances and update as necessary prior to submittal of annual report.
2026: Review IDDE ordinances and update as necessary prior to submittal of annual report.

BMP 13: UPDATE ILLICIT DISCHARGE DETECTION AND ELIMINATION STANDARD OPERATING PRODECURES

Description: Lehi City will prepare and update the standard operating procedures (SOPs) for:

- Locating and listing priority areas likely to have illicit discharges;
- Tracing the source of an illicit discharge using visual inspections, opening manholes, mobile cameras, field tests, collecting and analyzing water samples for the purpose of determining sanctions or penalties, and/or other detailed inspection procedures;
- Characterizing the nature of illicit discharges and the potential risk to the public or environment with the appropriate notification and documentation procedures;
- Eliminating illicit or illegal non-storm water discharges, including notifying appropriate authorities and the property owners, technical assistance for removing the source of the discharge or otherwise eliminating the discharge, follow up inspections, and escalating enforcement and legal actions if the discharge is not eliminated;
- Documenting illicit discharges; and,
- Notifying the Director if the City suspects that a discharger may need a separate UPDES Permit.

Permit Reference: 4.2.3, 4.2.3.3, 4.2.3.3.1, 4.2.3.3.4, 4.2.3.4, 4.2.3.5, 4.2.3.5.1, 4.2.3.6, 4.2.3.6.1, 4.2.3.6.3

Desired Results: Standardize IDDE procedures between staff for efficiency and safety.

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: Storm Water Management Plan Engineer, City SWPPP Inspectors, Storm Water Supervisor, Public Works Director, City Engineer, Facilities Manager, Fire Department, and Public Works Administrative Staff.

Responsible Agents in City: Storm Water Management Plan Engineer, Storm Water Supervisor, City SWPPP Inspectors, Fire Marshall, City Engineer, and Public Works Director.

Measurable Goal: Review and update SOPs annually as part of the SWMP review process.

Measures of Success: Compliance with these goals will be measured by SOPs being reviewed for effectiveness annually and updated as necessary.

Milestones:

2024: Review SOPs and update as necessary prior to submittal of annual report.

2025: Review SOPs and update as necessary prior to submittal of annual report.
2026: Review SOPs and update as necessary prior to submittal of annual report.

BMP 14: ASSESSMENT OF HIGH PRIORITY AREAS

New

Description: Create written standard operating procedures (SOPs) and mapping for locating and listing priority areas likely to have illicit discharges based on:

- Areas with older infrastructure and increased potential for illicit connections,
- Industrial, commercial, or mixed-use areas,
- Areas with a history of illicit discharges,
- Areas with a history of illicit dumping,
- Areas with onsite sewage disposal systems,
- Areas with older sewer lines or history of overflows or cross connections,
- Areas upstream of sensitive waterbodies, and
- Other areas Lehi City determines to have increased potential for illicit discharges.

Permit Reference: 4.2.3, 4.2.3.3.1

Desired Results: Focus inspection efforts to the locations most likely to provide the greatest reductions in illicit, illegal, and non-stormwater discharges based on historical and available knowledge.

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: Storm Water Management Plan Engineer, City SWPPP Inspectors, Storm Water Supervisor, and GIS Coordinator.

Responsible Agents in City: Storm Water Management Plan Engineer, City SWPPP Inspectors, Storm Water Supervisor, and Public Works Director.

Measurable Goal: Create assessment of high priority areas with a written prioritization methodology and a GIS map of high priority areas.

Measures of Success: Compliance with these goals will be measured by creating SOPs for prioritization methodology and creating a GIS map of high priority areas then reviewing them annually and updating as necessary.

Milestones:

> **2024:** Create SOPs, prioritization, and map. Review and update prioritization based upon previous years inspections as necessary prior to submittal of annual report.

2025: Review and update prioritization based upon previous years inspections as necessary prior to submittal of annual report.
2026: Review and update prioritization based upon previous years inspections as necessary prior to submittal of annual report.

BMP 15: HIGH PRIORITY AREA INSPECTIONS

New

Description: Lehi City will begin to conduct high priority area inspections based on the high priority mapping and the SOPs in BMP 14.

Permit Reference: 4.2.3, 4.2.3.3.2

Desired Results: Inspect all high priority areas and eliminate any illicit or illegal non-storm water discharges or dumping.

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: Storm Water Management Plan Engineer, City SWPPP Inspectors, and Storm Water Supervisor.

Responsible Agents in City: Storm Water Management Plan Engineer, City SWPPP Inspectors, Storm Water Supervisor, and Public Works Director.

Measurable Goal: Complete annual inspections of all high priority areas in Lehi City.

Measures of Success: Compliance with these goals will be measured by the inspection of 100% of all high priority areas annually.

Milestones:

2024: Begin conducting high priority area inspections, review the work orders, GIS mapping of inspections, and completed inspection reports prior to submittal of annual report.
2025: Review the work orders, GIS mapping of inspections, and completed inspection reports prior to submittal of annual report.
2026: Review the work orders, GIS mapping of inspections, and completed inspection reports prior to submittal of annual report.

BMP 16: DRY WEATHER SCREENING OF OUTFALLS

Description: Lehi City will implement dry weather screening activities for the purpose of verifying outfall locations and detecting illicit discharges within the City's jurisdiction that discharge to a receiving water. All outfalls will be inspected at least once during the 5-year Permit term using a standard inspection form created by Lehi City.

Permit Reference: 4.2.3, 4.2.3.3.3

Desired Results: Identify any continuous or semi-regular discharges that are illicit or illegal non-storm water discharges, trace them back to the source, and eliminate them.

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: Storm Water Management Plan Engineer, Storm Water Inspectors, and Storm Water Supervisor.

Responsible Agents in City: Storm Water Management Plan Engineer, Storm Water Inspectors, and Storm Water Supervisor

Measurable Goal: Lehi City has a goal of inspecting 20% of all outfalls annually and 100% of all outfalls every 5 years.

Measures of Success: Compliance with these goals will be measured by annual review of the completed dry weather screening inspections and work orders.

Milestones:

2024: Review the work orders, GIS mapping of inspections, and completed inspection reports prior to the submittal of the annual report.
2025: Review the work orders, GIS mapping of inspections, and completed inspection reports prior to the submittal of the annual report.
2026: Review the work orders, GIS mapping of inspections, and completed inspection reports prior to the submittal of the annual report.

BMP 17: MAPPING AND TRACKING DATABASE OF SPILLS AND ILLICIT DISCHARGES

Description: Lehi City will use ComplianceGo to map and track the number and type of spills or illicit discharges identified as well as the actions taken to resolve them. The effectiveness of the program will be evaluated annually.

Permit Reference: 4.2.3, 4.2.3.5.1, 4.2.3.6.3, 4.2.3.10

Desired Results: Track and monitor the location of spills and illicit discharges and provide information that will be used to update the priority areas, SOPs, training, and mapping.

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: Storm Water Management Plan Engineer, Public Works Director, Storm Water Supervisor, and City SWPPP Inspectors.

Responsible Agents in City: Storm Water Management Plan Engineer, Storm Water Supervisor, City SWPPP Inspectors, and Fire Marshall.

Measurable Goal: Record the location, actions taken, and resolution for each spill or illicit discharge. For illicit discharges, an Illicit Discharge Hotline Incident Tracking Sheet will be filled out and saved. Review effectiveness prior to submission of annual report.

Measures of Success: Compliance with these goals will be measured by keeping a record of all spills and illicit discharges that Lehi City becomes aware of.

Milestones:

2024: Review effectiveness of previous years IDDE tracking prior to submittal of annual report.
2025: Review effectiveness of previous years IDDE tracking prior to submittal of annual report.
2026: Review effectiveness of previous years IDDE tracking prior to submittal of annual report.

BMP 18: MAINTAIN 24-HOUR HOTLINE AND UPDATE SOP FOR CALL RESPONSE

Description: Lehi City will maintain a 24-hour hotline and develop and use call response procedures

Permit Reference: 4.2.3, 4.2.3.9, 4.2.3.9.1

Desired Results: Provide a method for the community to act as additional eyes and ears to report illegal or illicit non-storm water discharges and to act as a functional extension of the City's resources. Use internal call response procedures to streamline IDDE response.

Pollutants: Non-storm water discharges associated with illegal and illicit discharges.

Audience: City Staff, General Public (Residents, Businesses, Institutions, Contractors, and Developers.

Responsible Agents in City: Storm Water Supervisor, City SWPPP Inspectors, Public Works Director, and City Reception Staff.

Measurable Goal: Keep 24-hour hotline number posted on City website, create and follow spill response flow chart, and keep a report log.

Measures of Success: Compliance with these goals will be measured by the creation of a spill response flow chart before December 2023, and the documentation of completed report forms and completed work orders.

Milestones:

2024: Create spill response flow chart; post hotline number on website; and review completed report forms, work orders created and completed, and hotline effectiveness prior to submittal of annual report.
2025: Review completed report forms, work orders created and completed, and hotline effectiveness prior to submittal of annual report.
2026: Review completed report forms, work orders created and completed, and hotline effectiveness prior to submittal of annual report.

BMP 19: CITY CONSTRUCTION SITE ORDINANCES

Description: Lehi City has developed ordinances that require construction operators to obtain and maintain coverage under the UPDES general permit, prepare a SWPPP, and use erosion and sediment control BMPs on construction sites. (Lehi City Code 9-3-4, 9-3-6) Lehi City will annually review the city ordinances and regulations to ensure they meet the requirements of the current Construction General Permit and update them as necessary.

Permit Reference: 4.2.4, 4.2.4.1, 4.2.4.1.1, 4.2.4.1.2, 4.2.4.1.3

Desired Results: Provide Lehi City the legal authority to direct and enforce the requirements of the General Construction Permit.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: City Engineering Staff, Sewer and Storm Water Staff, Contractors, Developers, Development Engineers, and Architects.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Sewer and Storm Water Supervisors, City Engineer, and City Attorney.

Measurable Goal: Review City ordinances prior to submittal of annual report and verify that they are equivalent with the requirements set forth in the current UPDES Construction General Storm Water Permit. Update ordinances as necessary.

Measures of Success: Compliance with these goals will be measured by City ordinances being reviewed annually and updated as necessary to ensure compliance with current CGP.

Milestones:

2024: Review City construction site ordinances and update as necessary prior to submittal of annual report.
2025: Review City construction site ordinances and update as necessary prior to submittal of annual report.
2026: Review City construction site ordinances and update as necessary prior to submittal of annual report.

BMP 20: UPDATE APPROVED CONSTRUCTION SITE STORM WATER BMPS AND DESIGN STANDARDS

Description: Lehi City will create a list of approved construction site storm water BMPs and include references on the engineering and storm water websites. Lehi City will update the engineering design standards and details to meet current permit requirements.

Permit Reference: 4.2.1.1, 4.2.1.4, 4.2.4, 4.2.4.1, 4.2.4.1.1

Desired Results: Standardize the design and review process, simplify design and construction efforts, and standardize the infrastructure that is maintained by the City.

Pollutants: All pollutants listed in Tables 4-2 and 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: Developers, Contractors, City Engineers, Storm Water Supervisor, and Storm Water Management Plan Engineer.

Responsible Agents in City: Storm Water Management Plan Engineer, City Engineers, Storm Water Supervisor, and Public Works Director.

Measurable Goal: Review the list of approved construction site storm water BMPs annually, update the list as necessary, and make the list and references to it available on the City website. Review the engineering design standards annually and update as necessary to meet the current UPDES permit requirements.

Measures of Success: Compliance with these goals will be measured by reviewing the construction site storm water BMPs and engineering design standards annually prior to submittal of the annual report, updating them as necessary, and making the updated documents available on the City website.

Milestones:

2024: Review BMP list and engineering design standards and update as necessary prior to submittal of annual report.
2025: Review BMP list and engineering design standards and update as necessary prior to submittal of annual report.
2026: Review BMP list and engineering design standards and update as necessary prior to submittal of annual report.

BMP 21: ENFORCEMENT STRATEGY

Description: Lehi City will review its written standard operation procedures (SOPs) for enforcement to ensure they appropriately address escalating enforcement procedures and actions, including appeals. SOPs will be updated as necessary and published on the City website per the permit. Implementation of enforcement strategy will be documented through work orders.

Permit Reference: 4.2.4, 4.2.4.2, 4.2.4.2.1, 4.2.4.2.2, 4.2.4.4.5

Desired Results: Clearly document the enforcement strategy to make it clear and provide information to contractors and the public on the City website. Verify that documentation of implementation is compliance with permit requirements.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: City Engineering Staff, Sewer and Storm Water Staff, Contractors, Developers, Development Engineers, and Architects.

Responsible Agents in City: City SWPPP Inspectors, Storm Water Management Plan Engineer, Public Works Director, and Storm Water Supervisor.

Measurable Goal: Review enforcement SOPs and written strategy annually and update as necessary. Publish strategy and procedures on the City website, and track enforcement through the documentation of work orders.

Measures of Success: Compliance with these goals will be measured by reviewing the SOP annually to ensure compliance with current CGP, updating as necessary, and compiling documented enforcement for annual report.

Milestones:

2024: Review SOPs and written strategy, update if necessary, and compile enforcement documentation prior to submittal of annual report.
2025: Review SOPs and written strategy, update if necessary, and compile enforcement documentation prior to submittal of annual report.
2026: Review SOPs and written strategy, update if necessary, and compile enforcement documentation prior to submittal of annual report.

BMP 22: SWPPP REVIEW CHECKLIST AND SOP

Description: Lehi City uses a written SWPPP review checklist and SOP to ensure that SWPPP regulations are met, and documentation is kept. The checklist and SOP will be reviewed annually and updated as needed.

Permit Reference: 4.2.4, 4.2.4.3

Desired Results: Ensure that contractors, development engineers, and review staff follow the same procedures, have the same expectations in implementing storm water BMPs, and understand the requirements of the UPDES GCP.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: City Development Review Staff, Storm Water Management Plan Engineer, City SWPPP Inspectors, Development Engineers, and Contractors.

Responsible Agents in City: Storm Water Management Plant Engineer, and Public Works Director.

Measurable Goal: Review SWPPP checklist and SOP annually to verify compliance with current CGP and update as necessary.

Measures of Success: Compliance with these goals will be measured by reviewing the SWPPP checklist and SOP annually prior to submission of annual report and updating as necessary.

Milestones:

2024: Review SWPPP review checklist and SOP and revise as necessary prior to submittal of annual report.
2025: Review SWPPP review checklist and SOP and revise as necessary prior to submittal of annual report.
2026: Review SWPPP review checklist and SOP and revise as necessary prior to submittal of annual report.

BMP 23: UPDATE SOPS FOR INSPECTIONS

Description: Lehi City will review its SOPs for site storm water inspections annually and update them as needed. Construction inspection SOPs will require:

- Monthly inspection of all construction sites with a land disturbance of greater than or equal to one acre, including projects less than once acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to once acre.
- Bi-weekly inspection of all construction sites determined to be high-priority due to soil erosion potential, site slope, project size and type, sensitivity of receiving waterbodies, and a past record of non-compliance by the operators of the site.
- Inspection of all phases of construction, including prior to land disturbance, during active construction, and following active construction. Documentation of the procedure for being notified by construction operators/owners of their completion of active construction will be provided.
- RSI or equivalent training for MS4 staff who will be responsible for inspecting construction sites.
- Effective January 1, 2025, these inspections will be completed using an electronic site inspection tool unless there is a documented reason justifying an on-site construction site inspection.

Permit Reference: 4.2.4, 4.2.4.1, 4.2.4.2, 4.2.4.4, 4.2.4.4.1, 4.2.4.4.2, 4.2.4.4.3, 4.2.4.5

Desired Results: Regularly update construction storm water inspection SOPs to ensure compliance of all construction sites with all General Construction and Common Plan Storm Water Permits.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: City SWPPP Inspectors.

Responsible Agents in City: Storm Water Management Plan Engineer, and Public Works. Director.

Measurable Goal: Review SOPs annually based on staff input and updates in the permits. Update SOPs as necessary.

Measures of Success: Compliance with these goals will be measured by reviewing the SOPs annually prior to the submittal of the annual report.

Milestones:

2024: Review SOPs and revise as necessary prior to submittal of the annual report.
2025: Review SOPs and revise as necessary prior to submittal of the annual report.
2026: Review SOPs and revise as necessary prior to submittal of the annual report.

BMP 24: MAINTAIN DOCUMENTATION AND MAP OF SWPPP LOCATIONS BY ADDRESS

Description: Lehi City will document and map all SWPPPs by address, including the corresponding permit, SWPPP, inspections, and corrective actions.

Permit Reference: 4.2.4, 4.2.4.3, 4.2.4.6

Desired Results: Log and track all SWPPPs by address to support documentation compliance and to verify that no construction sites are missed.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Responsible Agents in City: City SWPPP Inspectors, Storm Water Management Plan Engineer, and Public Works Director.

Measurable Goal: Track all SWPPPs by address and record all associated inspections and corrective actions.

Measures of Success: Compliance with these goals will be measured by collecting the metrics of all SWPPPS and the associated inspections and corrective actions prior to the submittal of the annual report.

Milestones:

2024: Collect metrics prior to submittal of annual report
2025: Collect metrics prior to submittal of annual report
2026: Collect metrics prior to submittal of annual report

BMP 25: PRE-CONSTRUCTION SWPPP MEETINGS AND ADDRESSING PUBLIC COMMENTS

Description: Lehi City will hold pre-construction SWPPP meetings to review the site design, planned operations, planned BMPs during construction, and long term BMPS to manage runoff after construction. The City will receive public comments through the established process associated with the planning commission.

Permit Reference: 4.2.4, 4.2.4.3.1, 4.2.4.3.2

Desired Results: Allow the City to review public comments that must be addressed during construction, verify the contact information listed on the SWPPP, and discuss any priority issues associated with the BMPs related to the construction site.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: City SWPPP Inspectors, Storm Water Management Plan Engineer, Developers, and Contractors.

Responsible Agents in City: City SWPPP Inspectors, Storm Water Management Plan Engineer, and Public Works Director.

Measurable Goal: Hold and keep record of pre-construction meetings for every project meeting the requirement under the UPDES CGP and CPP.

Measures of Success: Compliance with these goals will be measured by records being kept of all pre-construction meetings.

Milestones:

2024: Reviewing pre-construction meeting reports prior to submittal of annual report.
2025: Reviewing pre-construction meeting reports prior to submittal of annual report.
2026: Reviewing pre-construction meeting reports prior to submittal of annual report.

BMP 26: BI-WEEKLY INSPECTIONS OF HIGH PRIORITY SITES AND MONTHLY INSPECTIONS OF ALL SITES

Description: Lehi City will determine if construction sites are high priority based on soil erosion potential, site slope, project size and type, sensitivity of receiving waterbodies, non-storm water discharges, and a past record of non-compliance by the operators of the construction site. High priority sites will be inspected bi-weekly (once every two weeks). All other sites will be inspected monthly. Any non-compliant sites will be reinspected within 7 days.

Permit Reference: 4.2.4, 4.2.4.3.2, 4.2.4.4.1, 4.2.4.4.3

Desired Results: Prioritize and focus inspection efforts where the greatest benefits will be achieved while ensuring that all sites are inspected regularly.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: City SWPPP Inspectors.

Responsible Agents in City: Storm Water Management Plan Engineer, City SWPPP Inspectors, and Public Works Director.

Measurable Goal: All high priority sites will be inspected bi-weekly (once every two weeks), all other sites will be inspected once a month. Any non-compliant sites will be reinspected within 7 days.

Measures of Success: Compliance with these goals will be measured by SWPPP inspection reports and work orders documenting completion of all inspections.

Milestones:

2024: Review SWPPP inspection records prior to submittal of annual report.
2025: Review SWPPP inspection records prior to submittal of annual report.
2026: Review SWPPP inspection records prior to submittal of annual report.

BMP 27: MAINTAIN RSI AND RSW/RSR CERTIFICATION TRAINING OF ALL STORM WATER INSPECTORS AND ENGINEERING SWPPP WRITERS/REVIEWERS

Description: All storm water and public works staff that are involved with SWPPP inspections will obtain RSI certification within 1 year of employment and maintain that certification as necessary. All storm water and engineering staff involved in writing and reviewing SWPPP plans will obtain RSR or RSW certification within 1 year of employment and maintain that certification as necessary.

Permit Reference: 4.2.4, 4.2.4.4.1, 4.2.4.5

Desired Results: All City staff associated with review and inspection of storm water facilities will maintain the training and knowledge base required by the State of Utah.

Pollutants: All pollutants listed in Table 4-3 with specific emphasis on nitrogen and phosphorus.

Audience: City SWPPP Inspectors and Storm Water Management Plan Engineer.

Responsible Agents in City: Public Works Director, Storm Water Supervisor, Storm Water Management Plan Engineer, and City SWPPP Inspectors.

Measurable Goal: Compliance with these goals will be measured by maintaining all RSI, RSW, and RSR certifications, and ensuring all appropriate new staff obtain the necessary certifications within 1 year of employment. Record all training and renewals in certification log.

Measures of Success: Compliance with these goals will be measured by recording all training and renewals in the certification log.

Milestones:

2024: Update log of certified staff prior to submittal of annual report.
2025: Update log of certified staff prior to submittal of annual report.
2026: Update log of certified staff prior to submittal of annual report.

BMP 28: NEW DEVELOPMENT/REDEVELOPMENT STORM WATER CONTROL PROGRAM

Description: Lehi City will implement a new development/redevelopment storm water control program. This program will involve:

- Ensuring that any storm water controls or management practices for new development and redevelopment prevent or minimize impacts to water quality.
- Minimizing development in areas susceptible to erosion and sediment loss; minimize the disturbance of native soils and vegetation; preserve areas that provide important water quality benefits; implement measures for flood control; and protect the integrity of natural resources and sensitive area.
- Requiring development and redevelopment projects to evaluate a low impact development approach and retain the 80th percentile storm onsite. Design standards will include a minimum of five LID practices that are permitted in the City.
- Providing a procedure for developers to provide rational for the use of alternative design criteria if it is not feasible to meet the 80th percentile retention requirement.

Lehi City will develop a specific hydrologic method for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs and to facilitate plan review based on the 80th percentile storm.

Permit Reference: 4.2.5, 4.2.5.1, 4.2.5.1.1, 4.2.5.1.2, 4.2.5.1.3, 4.2.5.1.4

Desired Results: Prevent or minimize impacts to water quality by protecting sensitive areas.

Pollutants: All pollutants, with specific emphasis on nitrogen, phosphorus, and pollutants listed in Table 3-1.

Audience: City Staff, Contractors, and Developers

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, City Engineer, Development Review Committee.

Measurable Goal: Update storm drain design standards to define the 80th percentile rainfall event, require the onsite retention of the 80th percentile rainfall event, and require the evaluation of a low impact development approach.

Measures of Success:
Success will be measured by reviewing the storm drain design manual annually prior to submittal of annual report and updating as necessary.

Milestones:

2024: Review storm drain design manual and update as necessary prior to submittal of annual report.
2025: Review storm drain design manual and update as necessary prior to submittal of annual report.
2026: Review storm drain design manual and update as necessary prior to submittal of annual report.

BMP 29: LONG-TERM POST-CONSTRUCTION STORM WATER CONTROL ORDINANCE AND ENFORCEMENT

Description: Lehi City will review the city ordinance that requires long-term post-construction storm water controls at new development and redevelopment sites to ensure it requires BMP selection, design, installation, operation, and maintenance standards necessary to protect water quality and reduce the discharge of pollutants to the MS4. It will also include an enforcement strategy and appeals process to minimize the occurrence of violations and obtain compliance from chronic and recalcitrant violators. It will also give the City authority to require and enforce the inspection of private storm water facilities that discharge to the Lehi City MS4 at least once every year and give the City authority to inspect and require maintenance of private storm water facilities at least once every 5 years. Lehi City will update the ordinance as necessary to ensure compliance with the Permit.

As part of this ordinance, Lehi City will require all new development and redevelopment sites with private storm drain facilities to prepare a long-term storm water management plan (LTSWMP) or equivalent and sign a maintenance agreement for their storm drainage facilities. The City will use a review checklist and require LTSWMPs to contain:

- Project name and address
- Owner's name, address, telephone number, and email address
- Maintenance contact's name, address, telephone number, and email address
- Proposed development area and total number of lots
- Signed maintenance agreement
- List of potential pollutants
- BMPs to address pollutants
- Spill response plan
- Site map showing BMPs
- Inspection log with recommended frequency,
- Statement that an inspection report will be sent to City annually
- List of training and frequency

Lehi City has created a template for developers to use in creating their LTSWMP.

Permit Reference: 4.2.5, 4.2.5.1, 4.2.5.1.1, 4.2.5.2, 4.2.5.2.1, 4.2.5.2.2, 4.2.5.2.3, 4.2.5.3.1, 4.2.5.3.2

Desired Results: Require development and redevelopment sites to use appropriate BMPs and standards during design, installation, operation, and maintenance to protect water quality and reduce the discharge of pollutants to the MS4. Require the owners and operators of development

and redevelopment sites to inspect their storm drain facilities at least once every year, give the city authority to inspect private storm drain facilities at least once every five years, and give the City authority to require owners and operators to perform necessary maintenance on private storm drain facilities.

Pollutants: All pollutants listed in Table 3-1 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer, Land Use Planners, Engineers, Developers, and City SWPPP Inspectors.

Responsible Agents in City: Storm Water Management Plan Engineer, City Engineers, and Public Works Director.

Measurable Goal: Review long-term post-construction storm water control ordinance and update as necessary. Implement enforcement strategy.

Measures of Success: Review long-term post-construction storm water control ordinance prior to submittal of annual report and update as necessary. Enforcement strategy will be implemented through BMP 31 and BMP 33. Require all new development and redevelopment sites with privately owned storm drainage facilities to sign a maintenance agreement and prepare a LTSWMP to aid in inspecting and maintaining their infrastructure.

Milestones:

2024: Review long-term post-construction storm water ordinance and update as necessary prior to submittal of annual report. Keep records of all LTSWMPs and maintenance agreements. Review LTSWMP template and review checklist and update as necessary prior to submittal of annual report.
2025: Review long-term post-construction storm water ordinance and update as necessary prior to submittal of annual report. Keep records of all LTSWMPs and maintenance agreements. Review LTSWMP template and review checklist and update as necessary prior to submittal of annual report.
2026: Review long-term post-construction storm water ordinance and update as necessary prior to submittal of annual report. Keep records of all LTSWMPs and maintenance agreements. Review LTSWMP template and review checklist and update as necessary prior to submittal of annual report.

BMP 30: POST INSTALLATION INSPECTION OF PERMANENT STRUCTURAL BMPS

Description: Lehi City will have qualified personnel inspect permanent structural storm water control BMPs at least once during installation to verify that they were constructed as designed.

Permit Reference: 4.2.5, 4.2.5.2.4

Desired Results: Ensure that permanent storm water controls are constructed according to the approved plans.

Pollutants: All pollutants listed in Table 3-1 with specific emphasis on nitrogen and phosphorus.

Audience: Land Use Planners, Engineers, Developers, and Public Works Inspectors

Responsible Agents in City: Public Works Inspectors

Measurable Goal: Inspect all structural BMPs within the City at least once during construction and again prior to final approval to confirm they are built to submitted plans. Public Works Inspectors verify with the manufacturer that structural BMPs were installed according to specifications.

Measures of Success: Success will be measured by record being kept of all structural BMP inspections.

Milestones:

2024: Review inspection logs prior to submittal of annual report to ensure inspections are being performed.
2025: Review inspection logs prior to submittal of annual report to ensure inspections are being performed.
2026: Review inspection logs prior to submittal of annual report to ensure inspections are being performed.

BMP 31: INSPECTIONS OF LONG-TERM POST-CONSTRUCTION STORM WATER MANAGEMENT SITES

Description: Lehi City has a program in place to inspect all sites in the long-term post-construction storm water controls in the inventory mentioned in BMP 32 at least once every five years and to require the owners of these controls to inspect them every year to ensure proper operation and maintenance is being conducted. Sites with controls that were constructed prior to the implementation of these requirements currently have no maintenance agreements with the City and are not conducting annual inspections. These sites are to be required to develop Stormwater System Operation & Maintenance Plans and to sign a maintenance agreement with Lehi City. Following each inspection, the owner or operator will be given the inspection form and educational flyer mentioned in BMP 06.

Permit Reference: 4.2.5, 4.2.5.2.5

Desired Results: Ensure that property owners and operators maintain the functionality of their existing storm water controls.

Pollutants: All pollutants listed in Table 3-1 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer, Storm Water Supervisor, City SWPPP Inspectors, Businesses, Landowners, and Developers.

Responsible Agents in City: Storm Water Management Plan Engineer, Storm Water Supervisor, City SWPPP Inspectors, and Public Works Director.

Measurable Goal: Lehi City will inspect City owned storm water control facilities at least once every year and perform any needed maintenance on these facilities, inspect non-city owned storm water control facilities at least once every five years and require the owners and operators to perform any needed maintenance, and require sites that were developed after these requirements took effect to inspect their facilities at least once every year and perform any needed maintenance. Following each inspection of non-city owned storm water control facilities, the owner or operator will be given the inspection form and educational flyer mentioned in BMP 06.

Measures of Success: Compliance with these goals will be measured by annual inspection of City owned facilities, once every five-year inspection of non-City owned facilities, and distribution of educational flyers. Record will be kept of all inspections, flyer distribution, and maintenance.

Milestones:

2024: Conduct 100% of city owned facility inspections and at least 20% of non-city owned facility inspections prior to submittal of annual report.
2025: Conduct 100% of city owned facility inspections and at least 20% of non-city owned facility inspections prior to submittal of annual report.
2026: Conduct 100% of city owned facility inspections and at least 20% of non-city owned facility inspections prior to submittal of annual report.

BMP 32: INVENTORY OF LONG-TERM POST-CONSTRUCTION STRUCTURAL STORM WATER CONTROL MEASURES

Description: Lehi City maintains an inventory of all post-construction structural storm water controls measured installed and implemented in new development and redevelopment sites that disturb greater than or equal to 1 acre, including projects less than 1 acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to 1 acre. This inventory contains the address, owner contact information, maintenance contact information, and Long-Term Storm Water Management or Stormwater System Operation & Maintenance plan for each site. The inventory includes both public and private sector sites located within Lehi City that have been developed since the date that post-construction requirements came into effect. Lehi City's database also includes many sites that were developed prior to when these requirements came into effect; however, there is limited information for these sites and there is no inspection or maintenance agreements in place between these sites and the City. These sites are to be required to develop Stormwater System Operation & Maintenance Plans or equivalent and to sign a maintenance agreement with Lehi City. Lehi City will update this inventory when changes occur in property ownership or the specific control measures implemented at the site.

Permit Reference: 4.2.5, 4.2.5.4, 4.2.5.4.1, 4.2.5.4.2

Desired Results: Maintain and update a map and database of pertinent information related to long-term post-construction storm water control measures.

Pollutants: All pollutants listed in Table 3-1 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer, City SWPPP Inspectors, and Storm Water Supervisor.

Responsible Agents in City: Storm Water Management Plan Engineer, and Public Works Director.

Measurable Goal: Maintain map and database that includes basic information on each project including project name, owner name and contact information, maintenance name and contact information, location, short description of each storm water control measure, short description of maintenance requirements, and inspection information. Update the map and database as new structural BMPs are implemented, as the existing controls are inspected and as ownership information changes.

Measures of Success: Compliance with these goals will be measured by the updated inventory with all new development, redevelopment, and retrofit storm water infrastructure.

Milestones:

2023: Continue updating and verifying mapping of all long-term post-construction storm water control infrastructure.

2024: Continue updating and verifying mapping of all long-term post-construction storm water control infrastructure.

2025: Continue updating and verifying mapping of all long-term post-construction storm water control infrastructure.

2026: Continue updating and verifying mapping of all long-term post-construction storm water control infrastructure.

BMP 33: LONG-TERM POST-CONSTRUCTION INSPECTOR TRAINING

Description: Lehi City will provide training to all staff and third-party reviewers or contractors whose job duties are related to implementing the long-term post-construction storm water control program. These duties include permitting, plan review, post-construction site inspections, and enforcement. These duties are primarily performed by the Storm Water Management Plan Engineer who is required to maintain RSI and RSW/RSR certification as per BMP 09.

Permit Reference: 4.2.5, 4.2.5.5

Desired Results: Provide training to all City staff associated with implementing the long-term post-construction storm water program to ensure that they are informed of proper industry methods, procedures, SOPs, and standards.

Pollutants: All pollutants listed in Table 3-1 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer.

Responsible Agents in City: Storm Water Management Plan Engineer and Public Works Director.

Measurable Goal: Storm Water Management Plan Engineer will maintain RSI and RSW/RSR certification as well as knowledge of City ordinances and SOPs regarding the long-term post-construction storm water control program.

Measures of Success: Compliance with these goals will be measured by the log of RSI and RSW/RSR training as well as the annual review of City ordinances and SOPs prior to submittal of the annual report.

Milestones:

> **2024:** Maintain log of RSI and RSW/RSR training. SWMP Engineer will review City ordinances and SOPs related to long-term post-construction storm water controls annually to ensure they are being enforced properly.
> **2025:** Maintain log of RSI and RSW/RSR training. Review City ordinances and SOPs related to long-term post-construction storm water controls annually to ensure they are being enforced properly.
> **2026:** Maintain log of RSI and RSW/RSR training. Review City ordinances and SOPs related to long-term post-construction storm water controls annually to ensure they are being enforced properly.

BMP 34: CITY OWNED FACILITY INVENTORY WITH PRIORITY IDENTIFICATION AND POSSIBLE POLLUTANTS

Description: Lehi City will create an inventory of facilities owned by the City with a summary of the possible pollutants those facilities could produce and how to prevent them from entering the storm drain system. High priority facilities will be identified based on the requirements of permit section 4.2.6.3.

Permit Reference: 4.2.6, 4.2.6.1, 4.2.6.2, 4.2.6.3

Desired Results: Maintain an assessment of City owned facilities to ensure that pollutant risks are contained and appropriate BMPs are in place.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer, City SWPPP Inspectors, Storm Water Supervisor, Facility Managers, and Public Works Director.

Responsible Agents in City: Storm Water Management Plan Engineer, GIS Coordinator, and Public Works Director.

Measurable Goal: Create list of City owned facilities and identify possible pollutants. Use list to identify high priority facilities. Review list annually prior to submittal of annual report and update as necessary.

Measures of Success: Compliance with these goals will be measured by the creation of list of City owned facilities, that list being reviewed and updated as necessary prior to submittal of annual report.

Milestones:

2024: Create inventory of facilities and potential pollutants. Review inventory of City owned facilities and update as necessary prior to submittal of annual report.
2025: Review inventory of City owned facilities and update as necessary prior to submittal of annual report.
2026: Review inventory of City owned facilities and update as necessary prior to submittal of annual report.

BMP 35: PRERPARE AND MAINTAIN HIGH PRIORITY MS4 FACILITY SWPPPS

Description: Lehi City will prepare and implement SWPPPs for all of the high-priority MS4 facilities identified in BMP 36. These SWPPPs will be based on the industrial SWPPP template available on the UDEQ website. SWPPP will reference MS4 good housekeeping SOPs.

Permit Reference: 4.2.6, 4.2.6.4

Desired Results: Implement a SWPPP for each high-priority MS4 facility, review the SWPPPs annually, and update as necessary.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer and City operations and maintenance staff associated with the high-priority facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, and Public Works Director.

Measurable Goal: Create a SWPPP for each high priority facility, review the SWPPPs annually, and update as necessary.

Measures of Success: Compliance with these goals will be measured by creation of SWPPPs, reviewing SWPPPs annually prior to submittal of annual report, and updating SWPPPs as necessary.

Milestones:

> **2024:** Create a SWPPP for each high-priority MS4 facility. Review each SWPPP annually and update as necessary prior to submittal of annual report.
> **2025:** Review each SWPPP annually and update as necessary prior to submittal of annual report.
> **2026:** Review each SWPPP annually and update as necessary prior to submittal of annual report.

BMP 36: HIGH PRIORITY MS4 FACILITY INSPECTIONS – MONTHLY/SEMI-ANNUALLY/ANNUALLY

Description: Lehi City will perform monthly visual inspections, semi-annual comprehensive inspections, and annual visual observation of storm water discharges as described in the Permit at all high-priority facilities identified by BMP 36 using SOPs and standard inspection logs created as part of BMP 38. Records will be maintained in the SWPPPs created as part of BMP 37.

Permit Reference: 4.2.6, 4.2.6.5.1, 4.2.6.5.2, 4.2.6.5.3

Desired Results: Inspect high-priority City facilities regularly to identify and eliminate any pollution discharges.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer and City operations and maintenance staff associated with the high-priority facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, City SWPPP Inspectors, and Public Works Director.

Measurable Goal: Complete and document monthly visual inspections, semi-annual comprehensive inspections, and annual visual observation of storm water discharges in accordance with SOPs and the Permit requirements to verify the performance of BMPs and all other systems designed and placed to eliminate pollutant discharges.

Measures of Success: Compliance with these goals will be measured by completion of all monthly inspections by the last weekday of each month, completion of semi-annual comprehensive inspections by December 31st and June 30th of each year, and completion of annual visual observations of storm water discharges by June 30th of each year, weather permitting.

Milestones:

2024: Review documentation of various inspections prior to submittal of annual report.
2025: Review documentation of various inspections prior to submittal of annual report.
2026: Review documentation of various inspections prior to submittal of annual report.

BMP 37: REVIEW AND UPDATE EXISTING MS4 GOOD HOUSEKEEPING SOPS

Description: Lehi City will review and update the SOPs used at city owned and operated facilities to protect water quality. These SOPs shall address:

- Use, storage, and disposal of chemicals;
- Storage of salt, sand, gravel, landscaping materials, asphalt, and other materials;
- Waste and trash management
- Cleaning, washing, painting, and maintenance activities including: cleaning of maintenance equipment, building exteriors, and trash containers;
- Sweeping roads and parking lots;
- Proper application, storage, and disposal of fertilizer, pesticides, and herbicides and minimizing their use;
- Lawn maintenance and landscaping activities including: proper disposal of lawn clippings and vegetation;
- Green waste deposited in the street;
- Proper disposal of pet wastes;
- Vehicle maintenance and repair activities including: use of drip pans and absorbents under or around leaky vehicles and equipment.
- Vehicle/equipment storage including storing indoors where feasible;
- Vehicle fueling including placing fueling areas under cover in order to minimize exposure where feasible;
- Road and parking lot maintenance, including: pothole repair, pavement marking, sealing, and repaving;
- Cold weather operations, including: plowing, sanding, application of deicing compounds, and maintenance of snow disposal areas;
- Right-of-way maintenance, including: mowing, herbicide and pesticide application;
- Municipally-sponsored events such as large outdoor festivals, parades, or street fairs and the clean-up following these events;
- Regular inspection, cleaning, and repair of storm water conveyance and structural storm water controls;
- Graffiti removal; and
- Any activities or operations not listed above that would reasonable be expected to discharge contaminated runoff.

Permit Reference: 4.2.6, 4.2.6.6, 4.2.6.6.1

Desired Results: Update standard operating procedures to ensure they are protecting water quality and being appropriately implemented.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: City operations and maintenance staff associated with the high-priority facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Water Department Manager, Streets Department Manager, Storm Water Supervisor, and Waste Water Supervisor.

Measurable Goal: Review SOPs with the appropriate department heads prior to submittal of the annual report and update as necessary based on changes in UPDES CGP, operations and maintenance at facilities, or changes in industry standards.

Measures of Success: Compliance with these goals will be measured by reviewing and updating all SOPs annually.

Milestones:

2024: Review SOPs for each facility and update as necessary prior to submittal of annual report.
2025: Review SOPs for each facility and update as necessary prior to submittal of annual report.
2026: Review SOPs for each facility and update as necessary prior to submittal of annual report.

BMP 38: SWEEPING AND CATCH BASIN CLEANING SCHEDULE

Description: Lehi City will create a schedule for City owned road and parking lot sweeping and storm drain system maintenance. This will include regular inspection, cleaning, and repair of catch basins, storm water conveyance pipes, ditches and irrigation canals, culverts, structural storm water controls, and structural runoff treatment and/or flow control facilities. Sweeping and storm sewer system maintenance will be prioritized with the highest priority areas being maintained at the greatest frequency. Priorities will be driven by water quality concerns, most recent assessment of the receiving water, the amount and type of material that typically accumulates in an area, and other location-specific factors.

Permit Reference: 4.2.6, 4.2.6.6.2

Desired Results: Ensure that roads, parking lots, and catch basins are maintained properly according to their maintenance priority.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Drain Supervisor, Storm Drain Maintenance Staff

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Water Department Manager, Storm Drain Supervisor

Measurable Goal: Update and follow a schedule for road and parking lot sweeping and storm drain maintenance.

Measures of Success: Success will be measured by records of work orders for road and parking lot sweeping and storm drain maintenance.

Milestones:

2024: Follow schedule for road and parking lot sweeping and storm drain maintenance. Review schedule and update as necessary prior to submittal of annual report.
2025: Follow schedule for road and parking lot sweeping and storm drain maintenance. Review schedule and update as necessary prior to submittal of annual report.
2026: Follow schedule for road and parking lot sweeping and storm drain maintenance. Review schedule and update as necessary prior to submittal of annual report.

BMP 39: VACTOR TRUCK DISCHARGE AND VEHICLE WASHING

Description: Lehi City will ensure and document proper disposal methods of all waste and wastewater removed during cleaning and maintenance of the storm water conveyance system. Materials removed from the MS4 will be disposed of in the vehicle wash station. Solids from the vehicle wash station are disposed of in drying beds, and liquids are disposed of in the sanitary sewer.

Lehi City will ensure that vehicle, equipment, and other wash waters are not discharged to the MS4 or waters of the state by using vehicle wash stations that discharge to the sanitary sewer.

Permit Reference: 4.2.6, 4.2.6.6.3, 4.2.6.6.4

Desired Results: Ensure all vactor truck discharge as well as vehicle, equipment, and other wash waters are discharged to the proper locations.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Drain Supervisor, Storm Drain Maintenance Staff

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Water Department Manager, Storm Drain Supervisor, Streets Department Supervisor.

Measurable Goal: Maintain drying beds and vehicle wash stations. Document disposal methods of all waste and wastewater removed during cleaning and maintenance of the storm water conveyance system.

Measures of Success: Success will be measured by records of work orders documenting the disposal methods of removed materials as well as maintenance records for vehicle wash stations.

Milestones:

2024: Review work orders to ensure disposal is being properly documented and update SOPs as necessary prior to submittal of annual report.
2025: Review work orders to ensure disposal is being properly documented and update SOPs as necessary prior to submittal of annual report.
2026: Review work orders to ensure disposal is being properly documented and update SOPs as necessary prior to submittal of annual report.

BMP 40: SPILL PREVENTION PLAN

Description: Lehi City will develop a spill prevention plan in coordination with the local fire department

Permit Reference: 4.2.6, 4.2.6.6.5

Desired Results: Prevent spills and illicit discharges from City owned and operated facilities through a spill prevention plan.

Pollutants: Non-storm water discharges associated will illegal and illicit discharges as well as all pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: City operations and maintenance staff associated with the high-priority facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, Fire Department

Measurable Goal: Develop and follow a written spill prevention plan in coordination with the Lehi Fire Department. Review the plan annually and update it as necessary.

Measures of Success: Compliance with this goal will be measured by the development of a written spill prevention plan.

Milestones:

2024: Develop written spill prevention plan and teach it to applicable staff. Review spill prevention plan and update as necessary prior to submittal of annual report.
2025: Review spill prevention plan and update as necessary prior to submittal of annual report.
2026: Review spill prevention plan and update as necessary prior to submittal of annual report.

BMP 41: FLOOR DRAIN INVENTORY

Description: Update inventory and mapping of all floor drains in all city-owned and operated facilities and ensure that all floor drains discharge to appropriate locations.

Permit Reference: 4.2.6, 4.2.6.6.6

Desired Results: Verify that all floor drains discharge to appropriate locations and do not create an illicit discharge.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: Storm Water Management Plan Engineer and City operations and maintenance staff associated with the high-priority facilities.

Responsible Agents in City: Storm Water Management Plan Engineer, and GIS Coordinator.

Measurable Goal: Update inventory and mapping of floor drains and the associated discharges.

Measures of Success: Compliance with these goals will be measured by updated maps of the floor drains and identification of where they discharge.

Milestones:

2024: Review existing floor drain maps and update as necessary prior to submittal of annual report.
2025: Review existing floor drain maps and update as necessary prior to submittal of annual report.
2026: Review existing floor drain maps and update as necessary prior to submittal of annual report.

BMP 42: ASSESSMENT OF MS4 FLOOD MANAGEMENT CONTROL STRUCTURES

Description: Lehi City will develop and implement a process to assess the water quality impacts and the design of all new flood management structural controls within the City to consider controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives. Lehi City will also develop and implement a process to evaluate existing structures to determine if any modifications should be made to improve water quality. These processes will be included in the SWMP Appendix.

Permit Reference: 4.2.6, 4.2.6.8, 4.2.6.8.1

Desired Results: Provide a method for eliminating pollution caused by flood control structures, particularly total suspended solids from erosion, in the city storm water system.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: City Engineering, Waste Water, and Storm Water Staff.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, City Engineer, and Waste Water and Storm Water Supervisors.

Measurable Goal: Document process for evaluating water quality and hydrology protection of flood control structures and complete an assessment of existing flood control structures to determine the need for modification to protect water quality or hydrology.

Measures of Success: Compliance with these goals will be measured by documenting a procedure for evaluating water quality and hydrology protection of both structural and non-structural controls and documentation of the results of the assessment of existing flood control structures and their effects on water quality and hydrology.

Milestones:

2024: Document procedure for evaluating water quality and hydrology protection for flood control structures and evaluate existing flood control structures prior to submittal of annual report.
2025: Review design standards for flood control structures and update as necessary prior to submittal of annual report.
2026: Review design standards for flood control structures and update as necessary prior to submittal of annual report.

BMP 43: RETROFIT EXISTING CITY OWNED OR OPERATED SITES THAT ADVERSELY IMPACT STORM WATER QUALITY

Description: Lehi City will develop and implement a retrofit plan to address existing sites owned and operated by the City that adversely affect water quality. The retrofit plan will emphasize infiltration, evapotranspiration, or harvest and reuse of storm water. Sites needing retrofit will be mapped in GIS and prioritized based on the proximity to impaired waterbodies, hydrologic condition of the receiving waterbody, proximity to sensitive ecosystems or protected areas, and any site that could be enhanced by improving the storm water system.

Permit Reference: 4.2.6.9

Desired Results: Reduce Lehi City's impact on the water quality of receiving water by retrofitting existing sites.

Pollutants: All pollutants listed in Table 4-4 with specific emphasis on nitrogen and phosphorus.

Audience: City Engineering, Waste Water, and Storm Water Staff.

Responsible Agents in City: Storm Water Management Plan Engineer, Public Works Director, City Engineer, and Waste Water and Storm Water Supervisors.

Measurable Goal: Assess existing Lehi City facilities and determine if there is a need for modification to protect water quality and hydrology, prioritize and prepare concepts for any retrofits that are needed, budget necessary retrofits over multiple years, and design and construct necessary retrofits.

Measures of Success: Assess Lehi City facilities every 5 years and make a list of any facilities that need to be modified to protect water quality. Facilities that require modifications will be prioritized with other City projects for retrofit.

Milestones:

2024: Assess Lehi City owner/operated facilities and make a list of facilities that need retrofit. Prioritize facilities needing modifications for retrofit.
2025: Prioritize facilities needing modifications for retrofit.
2026: Prioritize facilities needing modifications for retrofit.

4.3 Sharing Responsibility

Within the Lehi City MS4 boundary, the Utah Department of Transportation (UDOT) is responsible for the following roads:

- I-15
- US-89 (State Street)
- SR-68 (Redwood Road)
- SR-92 (Timpanogos Highway)
- SR-145 (Pioneer Crossing)
- SR-194 (2100 North)

4.4 Reviewing and Updating Storm Water Management Programs

Lehi City will review the SWMP annually and update it as necessary as described in BMP 01: Annual Planning, Review Progress, Evaluate Compliance/non-Compliance of the SWMP, and Evaluate Effectiveness to fulfill the requirements described in part 4.1.2 of the Permit.

5.0 NARRATIVE STANDARD, MONITORING, RECORDKEEPING, AND REPORTING

5.1 Narrative Standard

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

5.2 Analytical Monitoring

Lehi City will conduct analytical monitoring should it become necessary according to the requirements of the permit. This will most likely be the result of consultation with the Utah Couty Health Department upon the discovery of illicit discharges resulting from dry or wet weather inspections or IDDE calls.

5.3 Non-analytical Monitoring

Lehi City will conduct non-analytical monitoring according to the requirements of the permit. This includes BMP 15 Dry Weather Screening of Outfalls to comply with part 4.2.3.3.2 of the Permit.

5.4 Recordkeeping

Lehi City will keep the SWMP and related documents up to date and ensure all modifications to these documents are submitted to the *Director* as described in BMP 01: Annual Planning, Review Progress, Evaluate Compliance/non-Compliance of the SWMP, and Evaluate Effectiveness as required by part 4.1.2 of the Permit. Lehi city will retain all required plans, records of all programs, records of all monitoring information, copies of all reports required by the permit, and records of all other data required by or used to demonstrate compliance with the permit for at least five years as described in BMP 03: Maintain Documentation for 5 Years is required by part 5.4 of the Permit. The NOI and SWMP will be available to the public on the Lehi City website.

5.5 Reporting

Lehi City will sign and certify the annual report in accordance with part 6.8 of the Permit and submit the annual report to the *Director* by October 1 for the reporting period of July 1 to June 30 of each year of the Permit term as described in BMP 02: Submission of Annual Report to comply with part 5.5.1 of the Permit.

6.0 STANDARD PERMIT CONDITIONS

Lehi City acknowledges the standard permit conditions outlined in Section 6.0 of the Permit. Appropriate documents are signed, dated, and certified according to signatory requirements. The certification of the SWMP plan is provided at the front of this document.