

North Logan City, Utah
General Permit for Discharges from
Small Municipal Separate Storm Sewer Systems (MS4s)
2021 SWMP Outline

Revised March 26, 2021



- i. Cover Letter and Certification Statement
- ii. 2021 SWMP Update Outline

SWMP Book

- a. Main SWMP Book Table of Contents
- b. Executive Summary (including Priorities and Concerns)
- c. Minimum control measures 1-6
- d. Measurable Goals (Specific details)
- e. Statement of Basis
- f. Effectiveness Evaluation Criteria
- g. Controlling Regulated Pollutants (TMDLs)
- h. Storm Water Management Fund Budget
- i. Chart of Responsibilities (and Org Chart)
- j. Special Environmental Considerations
(Includes Threatened/Endangered Species, & Historic Properties)
- k. Glossary of Terms

APPENDIX A - Supplemental Guide to Storm Water Management for

Contractors *Appendix A is intended to be part of the SWMP yet removable for Contractors*

- a. Storm Water Design Standards (From NLC's DSTM)
- b. SWPPP Pre-Construction Review Checklist
- c. Threatened/Endangered Species
- d. Historic Properties Information
- e. BMPs Approved for Contractors/Developers
- f. Storm Water Control Standard Detail Drawings
- g. List of SOPs Recommended for Use by Contractors
- h. SWPPP Inspection Checklist (Blank Forms)
- i. SWPPP Template – Utah (Guide for Writing Standard SWPPP)
- j. Common Plan of Development SWPPP Template (Guide for Writing SWPPP Within a CPoFD)
- k. Notice of Termination (NOT) Process
- l. NLC Maintenance Agreement Standard Form

APPENDIX B - Supplemental Guide to Storm Water Management for Public Works

Appendix B is intended to be part of the SWMP yet removable for Public Works

Personnel a. List of Standard Operating Procedures (SOPs) for Public Works

- b. BMPs Approved for Public Works (Index)
 - Public Works BMPs (Fact Sheets)
- c. Public Works Inspection Forms (Blank Form)
- d. Assessment of city owned facilities (Blank Form)
- e. Maintenance Records and Logs (Blank Form)

- a. IDDE Dry Weather Screening SOP/Checklist
- b. IDDE Dry Weather Screening Flowchart
- c. Dry Weather Screening and Visual Water Discharge Examination Report (Blank Form)
- d. Incoming Phone Call Report Form and Hotline Flowchart
- e. Spill Response Standard Operating Procedure (SOP)
- f. Public Works IDDE Spill Report Form (Blank Form)
- g. IDDE Inspection and Incident Log (Blank Form)
- h. List of Other SOPs Applicable to IDDE

APPENDIX D – Documentation

- 1 - MCM 1 – Public Education and Outreach
 - a. Decision Making Process
 - b. Measurable Goal Summary Table
 - c. BMP Summary Table
 - d. Other Documentation Related to Public Education and Outreach
- 2 - MCM 2 – Public Involvement /Participation
 - a. Decision Making Process
 - b. Measurable Goal Summary Table
 - c. BMP Summary Table
 - d. Other Documentation Related to Public Involvement /Participation
- 3 - MCM 3 – Illicit Discharge Detection and Elimination (IDDE)
 - a. Decision Making Process
 - b. Measurable Goal Summary Table
 - c. BMP Summary Table
 - d. Dry Weather Screening and Visual Water Discharge Examination Report (Completed Forms)
 - e. Public Works IDDE Spill Report Form (Completed Forms)
 - f. IDDE Inspection and Incident Log (Completed Forms)
 - g. Other Documentation Related to Illicit Discharge Detection and Elimination (IDDE) 4
- MCM 4 – Construction Site Storm Water Runoff Control
 - a. Decision Making Process
 - b. Measurable Goal Summary Table
 - c. BMP Summary Table
 - d. SWPPP Inspection Forms (Completed Forms for Construction)
 - e. Other Documentation Related to Construction Site Storm Water Runoff Control
- 5 - MCM 5 – Long-Term Storm Water Management (Post-Construction)
 - a. Decision Making Process
 - b. Measurable Goal Summary Table
 - c. BMP Summary Table
 - d. Other Documentation Related to Long-Term Storm Water Management (Post-Construction)
- 6 - MCM 6 – Pollution Prevention and Good Housekeeping
 - a. Decision Making Process
 - b. Measurable Goal Summary Table
 - c. BMP Summary Table
 - d. Public Works Inspection Forms (Completed Forms)
 - e. Assessment of city owned facilities (Completed Forms)
 - f. Inventory of City Operated Facilities
 - g. Maintenance Records and Logs (Completed Forms)
 - h. Facilities Floor Drains (Documentation. Maps in Appendix G.e.)
 - i. Facilities Storm Drains (Documentation. Maps in Appendix G.f.)
 - j. Other Documentation Related to Pollution Prevention and Good Housekeeping
- 7 – Training Documentation
 - a. In-House Training Plan
 - b. Training Logs
- 8 – Other Documentation
 - a. Justification for Changes Forms

- b. Log of Enforcement Actions and Associated Documentation (Maps in Appendix G.h.)
- c. Minutes of North Logan City Storm Water Committee Meetings

APPENDIX E - City Ordinances

- a. Stormwater Control System Ordinance – General 13G
- b. Stormwater Control System Management Ordinance 13G-200
- c. Construction Activity Permits For Stormwater Control Ordinance 13G-300
- d. Violations, Penalties and Enforcement Stormwater Ordinance 13G-400
- e. Stormwater Utility Ordinance 13G-500

APPENDIX F – State/City Permits

- a. General Permit for Discharges from Small MS4s
- b. Stormwater General Permit for Construction Activities

APPENDIX G – Maps/Map Book

- a. Collection System (List and Map)
- b. Inventory of Post Construction BMPs (List and Map)
- c. Inventory of Outfalls (List and Map)
- d. Active Construction Sites (List and Map)
- e. Facilities Floor Drains (Maps only. See Appendix D – Part 6.h. for Documentation) f.
- Facility Storm Drains (Maps only. See Appendix D – Part 6.i. for Documentation) g.
- Spills (Map only. See Appendix D – Part 3. e. for Documentation)
- h. Enforcement Action (Map only. See Appendix D – Part 8 for Log and Related Documentation) i.
- Inventory of Monitoring Locations (List and Map)
- j. Inventory of Underground Injection Wells (List and Map)

APPENDIX H – SOP's and BMPs

- a. Comprehensive list of Standard Operating Procedures.
- b. Comprehensive list of Best Management Practices.

APPENDIX I – Low Impact Development/Design Booklet

- a. LID Booklet

Additional Information

Initial outline and document prepared by JUB Engineers.



North Logan City Storm Water Management Plan (SWMP)

Main SWMP Book

- a. Main SMWP Book Table of Contents
- b. Executive Summary (including Priorities and Concerns)
- c. Minimum control measures 1-6
- d. Measurable Goals (Specific details)
 - BMP Index for Measurable Goals
 - BMP Fact Sheets used in Measurable Goals
- e. Statement of Basis
- f. Effectiveness Evaluation Criteria
- g. Controlling regulated pollutants (TMDLs)
- h. Storm Water Management Fund Budget
- i. Chart of Responsibilities (and Org Chart)
- j. Special Environmental Considerations –
 - Threatened or Endangered Species
 - Historic Properties (none listed)
- k. Glossary of Terms

Other Items to File Here - When & If Applicable

Delegation of Authority - *Not Currently Applicable*

Shared Responsibilities - *Not Currently Applicable*



STORM WATER MANAGEMENT PLAN

NORTH LOGAN CITY

EXECUTIVE SUMMARY

INTRODUCTION

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

North Logan City, along with other cities in the Logan City metropolitan area is required to participate in the storm water management program in order to discharge storm water into the Nation's waterways. In the case of North Logan City, that means the Bear River. In 2021 a revised discharge permit necessitated the development of a revised plan to meet the additional requirements of the new permit. This updated SWMP is the plan intended to meet the requirements of the new discharge permit. Public involvement in developing and implementing this plan is more than merely desirable, it is an important, even required, part of the plan. The public is encouraged to review the plan and provide input, not only during the development phases of the plan but throughout the year. The plan is to be posted on the city's website at www.northlogancity.org and a hard copy of the plan is available at the North Logan City Offices at 2076 North 1200 East, North Logan, Utah.

PROGRAM PRIORITIES AND CONCERNS

Although the overarching general goals of the previous storm water management plan are basically no different from the general goals of this plan, the new permit under which the city operates is much more specific in what is required of the permittee. The new permit outlines many more *specific goals* which *must* be included in the plan. It is the intent of the municipality to comply with all aspects of the new permit; but doing so, in some cases, will require the city to prioritize the use of resources in order to achieve the ultimate goals of this plan. Some of the goals in the plan are beyond the immediate control of the municipality as they involve changing the behavior of the public. In many cases it is up to the individual citizen, the developers, business

STORM WATER MANAGEMENT PLAN – 2021

SWMP - EXECUTIVE SUMMARY 1

owners, and other land owners to minimize the adverse impact they have on the storm water environment in the city and how it impacts neighboring waterways. The following priorities and concerns are identified to help focus the city's resources towards achieving the goals in this plan:

- The city staff, elected officials, and citizens in general should increase their understanding of the city's storm water management plan and their responsibilities in that plan. This is done through increased public education and involvement, and increased city employee training.

- Those with direct involvement in implementing this plan need better tools to do so, including:
 - improved ordinances;
 - more useful standard operating procedures;
 - best management practices that work and are understood by those using them;
 - and, better ways to document the implementation of the goals in the plan.
- Resources including money, personnel, and political/public will are essential to implement the goals in this plan and must continue to be provided. The storm water utility and its associated fees were established under a different set of goals and permit requirements and are expected to meet the needs of this SWMP during this fiscal year. However, resources, particularly inspection manpower, might not cover all the needs of this new permit and this SWMP in the future without additional funds. When the level of new construction increases in an improving economy, higher levels of growth will require higher levels of inspections. This will very likely require the municipality to look at implementing new storm water inspection fees for new construction in the very near future.

WATER QUALITY PRIORITIES AND CONCERNS

The water quality within North Logan City is relatively good. The storm water in North Logan drains to a series of canals where it is eventually transported to the Bear River. For the most part, the existing system has worked well. Continued growth is expected to put some pressure on canal, ditch and swale capacities. In the future it is anticipated that some infrastructure improvements may need to be made to deal with capacity issues. It is likely that these improvements will be made on an “as-needed” basis. There are no flowing streams or lakes within the boundaries of North Logan; however, because the storm water from the city does eventually go to the Bear River, which has been identified as protected under Section 303(d) of the Clean Water Act, North Logan has a responsibility to minimize the adverse impacts it may have on the Bear River. The hope and intent of this Storm Water Management program (SWMP) is to maintain the good quality of the water flowing out of North Logan and possibly even improve the current water quality.

STORM WATER MANAGEMENT PLAN – 2021

SWMP - EXECUTIVE SUMMARY 2

Like most communities in the valley, the biggest water quality concerns involve:

- sediment loads coming from disturbed sites and streets,
- fertilizers and pesticides coming from lawns and farmlands,
- oils and grease coming from the roadways,
- animal waste coming from dairies with runoff and when flushed out.

North Logan’s SWMP has been geared toward small city applications, targeting the pollutants mentioned. The focus of this plan is to do what we can within the community, trying to stay in harmony with the rural nature of the community and within the existing budget structure.

CONTACT INFORMATION

The North Logan City Storm Water System falls under the jurisdiction of the Public Works

Director for the City. The Public Works Director can be contacted at the following address and phone number:

Mr. Jordan Oldham
2076 North 1200 East
North Logan, Utah 84341
(435) 752-1310

STORM WATER MANAGEMENT PLAN – 2021

SWMP - EXECUTIVE SUMMARY 3

NORTH LOGAN CITY STORM WATER - AT A

GLANCE Population: Estimated 11,000 ---- 2018

Size: 6.97 sq. miles

Geographic Description: Located on the East side of Cache Valley on the North border of Logan City, with elevations varying between 4500 ft. to 4900 ft. This community lies just 2 miles north of Logan at the mouth of Green Canyon.

Receiving Waters: The storm water in North Logan currently drains into the Logan & Northern Canal; the Hyde Park Irrigation Canal; the Logan, Hyde Park, Smithfield Canal; and the Logan North Field Canal. All of these canals ultimately drain into the Bear River which is considered the receiving water for North Logan's storm water system.

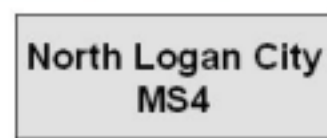
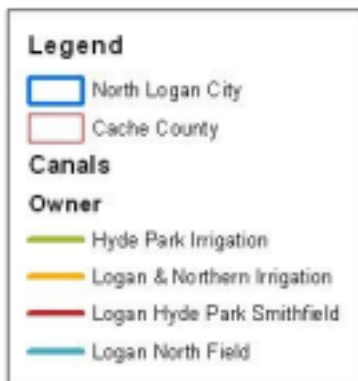
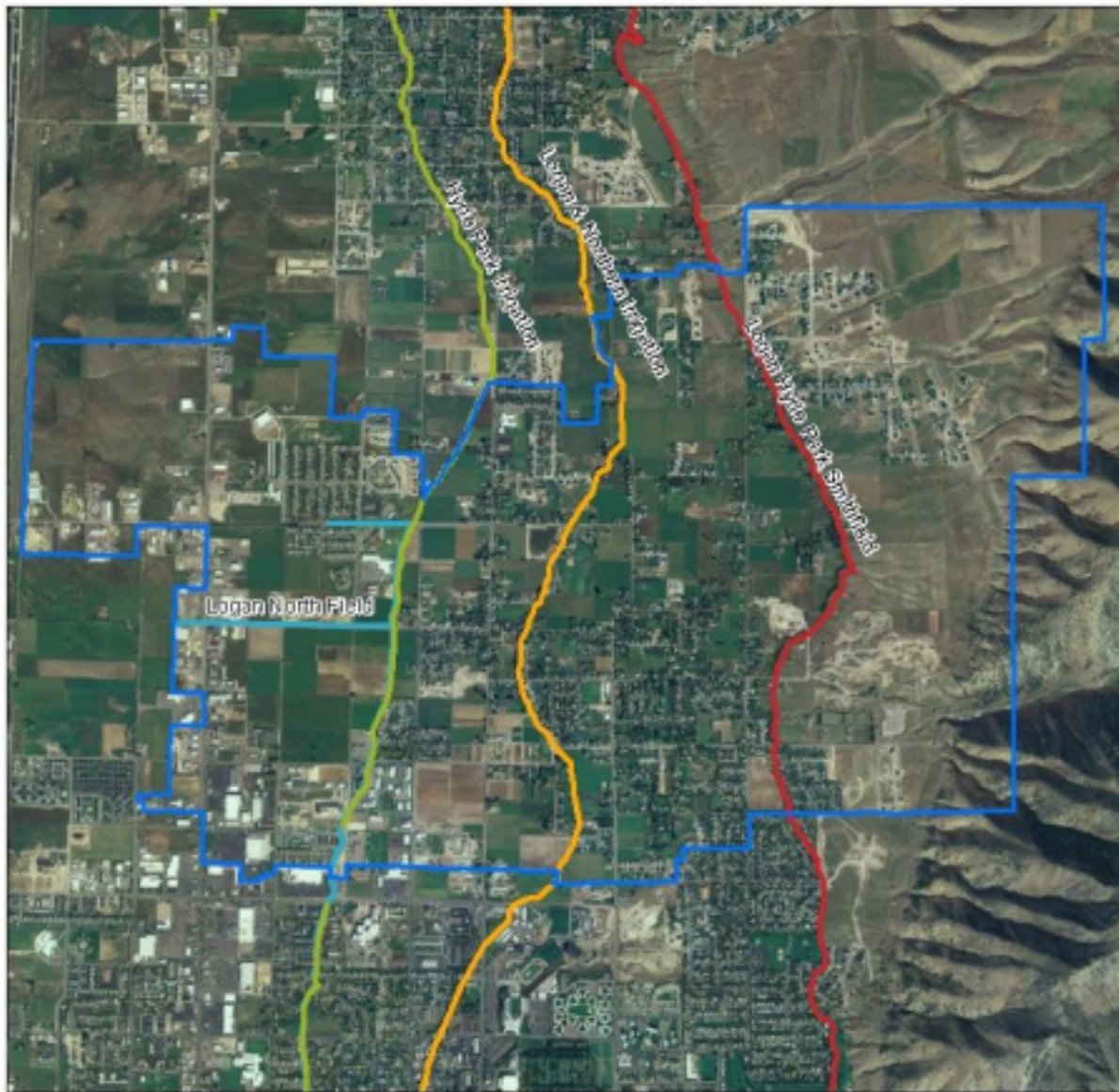
Annual Precipitation: 17.36 inches per year

Type of Community: A small rural city with moderate rates of residential growth that are expected to continue for many years.

Latitude: 41.77° N

Longitude: 111.83° W

Storm Drain System The North Logan storm water system consists of curb and gutters, culverts, a few typical piped sections, swales and canals. The majority of the storm water facilities continue to drain into one of two irrigation canals. These two canals are the Logan & Northern Canal which flows north through Smithfield and eventually drains into the Bear River, and the Hyde Park Irrigation Canal which flows north to the northern end of Hyde Park and then west out to the Bear River. The other two canals (the Logan, Hyde Park, Smithfield Canal; and the Logan North Field Canal) receive some storm water but not as much as the first two. The canals have served as the recipient for storm water flows since the city's establishment. Very few controls exist within the system. Most of the streets use drainage swales and ditches with the remaining ones using curb and gutter to collect storm water runoff.



STORM WATER MANAGEMENT PLAN – 2021

SWMP - EXECUTIVE SUMMARY5

Six Minimum Control Measures

A description of the six minimum control measures (MCMs) and the program elements that will be implemented in each are as follows. The numbers in front of each MCM and program element are references to the paragraphs in Small Municipal Separate Storm Sewer Systems (MS4) General UPDES Permit where the specific requirement is found. The six minimum control elements are:

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
6. Pollution Prevention and Good Housekeeping for Municipal Operations

4.2.1 Public Education and Outreach on Storm Water Impacts

- 4.2.1 Target Audience
 - Residents
 - Businesses, Institutions, and Commercial Facilities
 - Developers and Contractors
 - MS4 Industrial Facilities
- 4.2.1.1 Target specific pollutants and pollutant sources determined to be impacting, or having the potential to impact, the beneficial uses of receiving water.
 - Educate Audience about:
 - impacts from storm water discharge
 - nutrient runoff and effects
 - methods to avoid, minimize, reduce impact of storm water discharge
 - Actions one can take to improve water quality
- 4.2.1.2 Provide and document information given to the General Public of prohibitions against and water quality impacts associated with Illicit Discharge and improper disposal of waste. •
 - Must consider the following topics:
 - maintenance of septic systems
 - effects of outdoor activities
 - benefits of on-site infiltration of storm water
 - effects of automotive work
 - proper disposal of swimming pool water
 - proper management of pet waste
 - effects of lawn maintenance
- 4.2.1.3 Provide and document information given to Businesses and Institutions of prohibitions against and water quality impacts associated with Illicit Discharge and improper disposal of waste.

STORM WATER MANAGEMENT PLAN – 2021
SWMP – MINIMUM CONTROL MEASURES

Page 1

- Must consider the following topics:
 - proper lawn maintenance
 - benefits of appropriate on-site infiltration of storm water
 - building and equipment maintenance
 - use of salt or other de-icing materials
 - proper management of waste materials and dumpsters
 - proper management of parking lot surfaces
- 4.2.1.4 Provide and document information given to Engineers, Construction Contractors, Developers, Development Review Staff, and Land Use Planners concerning the development of SWPPP's and BMP's

- 4.2.1.5 Provide and document information and training given to employees of City owned or operated facilities concerning prohibitions against and water quality impacts associated with Illicit Discharge and improper disposal of waste.
 - Must consider the following topics:
 - equipment inspection
 - proper storage of industrial materials
 - proper management and disposal of waste
 - proper management of dumpsters
 - minimizing the use of salt or other de-icing materials
 - benefits of on-site infiltration
 - proper maintenance of parking lot surfaces
- 4.2.1.6 Provide and document information and training given to MS4 engineers, development and plan review staff, land use planners on the following topics:
 - Low Impact Development (LID)
 - Green Infrastructure
 - specific requirements for post-construction control with associated BMP's
- 4.2.1.7 Implement an effective program to show evidence of focused messages and audiences as well as demonstration that the defined goal of the program has been achieved.
 - Define specific messages for each audience
 - identify methods used to evaluate effectiveness of educational messages
 - methods used to evaluate the program must be tied to the defined goals
- 4.2.1.8 Include written documentation as to why BMP's were chosen for its public education program

4.2.2 Public Involvement/Participation

- 4.2.2.1 Adopt a program or policy directive to create opportunities for the public to provide input

STORM WATER MANAGEMENT PLAN – 2021
 SWMP – MINIMUM CONTROL MEASURES
 Page 2

- 4.2.2.2 Make the revised SWMP document available to the public for review within 120 days from the effective date of permit
- 4.2.2.3 Make the current version of the SWMP available for public review for the life of the permit
- 4.2.2.4 Must comply with State and Local public notice requirements when implementing a public involvement/participation program.

4.2.3 Illicit Discharge Detection and Elimination (IDDE)

- 4.2.3 Develop, implement and enforce an IDDE program
- 4.2.3.1 Maintain a current storm sewer system map of the MS4
 - Show the following:
 - All municipal storm sewer outfalls with names of State waters that receive discharges from those outfalls

- Storm drain pipe
- other storm water conveyance structures within the MS4
- 4.2.3.2 Prohibit, through ordinance or other regulatory mechanism, non-storm water discharges to the MS4
 - Include the following:
 - spills
 - illicit connections
 - illegal dumping
 - sanitary sewer overflows
 - Require removal of such discharges consistent with 4.2.3.6
 - Implement appropriate enforcement procedures and actions
 - include a variety of enforcement options to apply escalating enforcement procedures
 - All SSO's must be reported to the Division of Water Quality and the local wastewater treatment plant
 - The IDDE program must have adequate legal authority to detect, investigate, eliminate and enforce against non-storm water discharges
 - The IDDE program included in the SWMP must include a reference or citation of the authority used to implement all aspects of the IDDE program.
- 4.2.3.3 Develop, implement, and prepare in writing a plan to detect and address non-storm water discharges
- 4.2.3.4 Develop and implement standard operating procedures for tracing the source of illicit discharge

STORM WATER MANAGEMENT PLAN – 2021
SWMP – MINIMUM CONTROL MEASURES

3

- 4.2.3.5 Develop and implement standard operating procedures for characterizing the nature of any illicit discharges found or reported to the Permittee by the hotline developed in 4.2.3.9
- 4.2.3.6 Develop and implement standard operating procedures for ceasing the illicit discharge
- 4.2.3.7 Inform public employees, businesses, and general public of hazards associated with illicit discharges and improper disposal of waste
- 4.2.3.8 Promote or provide services for the collection of household hazardous waste
- 4.2.3.9 Publicly list and publicize a hotline or other telephone number for public reporting of spills and other illicit discharges
- 4.2.3.10 Adopt and implement procedures for program evaluation and assessment
 - Include a database for mapping, tracking of the spills or illicit discharges identified and inspections conducted
- 4.2.3.11 Must annually train employees about the IDDE program

4.2.4 Construction Site Storm Water Runoff Control

- 4.2.4 Develop, implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development
 - 4.2.4.1 Develop and adopt an ordinance or other regulatory mechanism that requires the use of erosion and sediment control practices at construction sites that is equivalent to the UPDES Storm Water General Permit for Construction Activities, UTR300000
 - Require construction operators to prepare a SWPPP
 - Apply sediment and erosion BMPs
 - Allows access to inspect BMPs
 - 4.2.4.2 Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism
 - SOP to include processes and sanctions to minimize occurrence of violators and gain compliance, including escalating enforcement
 - Documentation and tracking of all enforcement actions
 - 4.2.4.3 Develop and implement SOP's for pre-construction SWPPP review for construction sites •
 - Conduct a pre-construction SWPPP review
 - Incorporate procedures to consider potential water quality impacts
 - Incorporate procedures for pre-construction review with the use of a checklist
 - Procedures to evaluate opportunities for LID uses
 - Identify priority construction sites

STORM WATER MANAGEMENT PLAN – 2021
SWMP – MINIMUM CONTROL MEASURES

4

- 4.2.4.4 Develop and implement SOP's for construction site inspection and enforcement of construction storm water pollution control measures
- 4.2.4.5 Ensure proper training to staff whose duties relate to the construction storm water program with proper training records kept
- 4.2.4.6 Implement procedures to maintain records of all projects disturbing one acre, including projects less than one acre that are a part of a larger common plan
 - Records kept should include:
 - site plan reviews
 - SWPPPs
 - inspections and enforcement actions
 - stop work orders, warning letters, notices of violation

4.2.5 Long-Term Storm Water Management in New Development and Redevelopment • 4.2.5

Develop, implement and enforce a program to address post-construction storm water runoff to the MS4 from new and redevelopment construction sites.

- 4.2.5.1 Develop and adopt an ordinance that requires long term post-construction storm water controls at new development and redevelopment sites.
 - must be equivalent with the technical requirements in the UPDES storm water general permit for construction activities
 - Require BMP selection to protect water quality

- 4.2.5.2 Develop an enforcement strategy and implement the enforcement provisions of the ordinance
- 4.2.5.3 Post-construction program must have requirements to ensure that any storm water controls or management practices will prevent or minimize impacts to water quality • include non-structural BMPs
 - encourage LID practices
 - retrofit existing developed sites that are adversely impacting water quality, retrofit plan should include:
 - proximity to waterbody
 - status of waterbody to improve impaired waterbodies and protect unimpaired water bodies
 - Hydrologic condition of the receiving waterbody
 - proximity to sensitive ecosystem or protected area
 - any upcoming sites that could be further enhanced by retrofitting storm water controls
 - Define specific hydrologic methods for calculating runoff

STORM WATER MANAGEMENT PLAN – 2021
SWMP – MINIMUM CONTROL MEASURES

5

- 4.2.5.4 Adopt and implement procedures for site plan review which incorporate consideration of water quality impacts.
- 4.2.5.5 Adopt and implement SOPs for site inspection and enforcement of post-construction storm water control measures. Procedures must ensure adequate ongoing long-term operation and maintenance of approved storm water control measures.
- 4.2.5.6 Provide all staff involved in post-construction program proper training
- 4.2.5.7 Maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redeveloped sites

4.2.6 Pollution Prevention and Good Housekeeping for Municipal Operations • 4.2.6 Develop and implement an operations and maintenance program for Permittee-owned or operated facilities, operations and structural storm water controls that includes SOPs and a training component that have the goal of preventing pollutant runoff

- 4.2.6.1 Shall develop and keep current a written inventory of Permittee-owned or operated facilities and storm water controls
- 4.2.6.2 Must initially assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls for their potential to discharge to storm water the following pollutants:
 - sediment
 - nutrients
 - metals
 - hydrocarbons
 - pesticides
 - chlorides

- trash
 - additional pollutants associated with permittee facilities
- 4.2.6.3 Identify "High Priority" facilities that have a high potential to generate storm water pollutants
- 4.2.6.4 Develop facility specific SOPs for each "high priority" facility which include BMPs and LID
 - SOP shall also include pollution prevention for all of the following:
 - Buildings and facilities
 - Material storage areas, heavy equipment storage areas and maintenance areas
 - Parks and open space
 - Vehicle and Equipment
 - Roads, highways, parking lots

STORM WATER MANAGEMENT PLAN – 2021
SWMP – MINIMUM CONTROL MEASURES

6

- Storm water collection and conveyance systems
 - Other facilities and operations
- 4.2.6.5 If a third party conducts municipal maintenance or if private developments are allowed to conduct their own maintenance, the contractor shall be held to the same standards as the permittee
- 4.2.6.6 An O & M program for city owned facilities shall include the following inspections:
 - Monthly visual inspections of "high priority" facilities
 - Semi-Annual comprehensive inspections
 - Annual visual observation of storm water discharges
- 4.2.6.7 Develop and implement a process to assess water quality impacts in the design of all new flood management structural controls.
- 4.2.6.8 Public construction projects shall comply with the requirements applied to private projects
- 4.2.6.9 Provide training to all employees who have primary construction, operation, or maintenance job functions likely to impact storm water quality

STORM WATER MANAGEMENT PLAN – 2021
 SWMP – MINIMUM CONTROL MEASURES
 7
 North Logan City Measurable Goals Updated 3/28/2021

General Permit for Discharges from Small Municipal
 Separate Storm Sewer Systems (MS4s)
 Measurable Goals - MCM 1 Public Education and Outreach

Target

MCM

Pollutant(s) Audience(s) Permit Reference/Desired Result Measurable Goal Milestone Date Associated BMPs Measure of Success (Effectiveness)

1.1
 All pollutants in general with
 emphasis on
 suspended solids
 Residents and Businesses

Residents (3rd and
 4.2.1.1 To educate audiences about impacts from storm water discharge actions and individuals can take to improve water quality

4.2.1.1 To educate audiences on ways to avoid,
 1.1.1.1 Continue to increase awareness of residents and businesses with regular articles in the city's
 newsletter regarding storm water pollution prevention.

1.1.2 Continue to support the Storm
 Ongoing PEP and UM
 Considered successful if 10 out of 12 months' newsletters in the year include storm water related articles.

this year due to covid 19 as cache coalition
 and phosphates See list in

5th graders)
 minimize, and reduce impacts of storm water discharge

4.2.1.2 Information is provided to the general public on prohibitions against illicit discharges and

Water Fair sponsored by Logan City Annually PEP and CESW

1.2 Include specific information on
 the city's website and/or the city
 newsletter at least once each fiscal
 we will be doing a commercial over the radio and possibly over TV.

Consider successful if information about each of the following pollutants/processes are included in a newsletter article or on the city's website once
 during each fiscal year:

- maintenance of septic systems

1.2 1.3

"Measure of Success" column

See list in
"Measure of Success" column
General Public

Businesses,
Institutions, and commercial
facilities
improper disposal of waste in regard to the specific pollutants/processes listed under "Measure of Success" column.

4.2.1.3 Information is provided to businesses, institutions, commercial facilities on prohibitions against illicit discharges and improper disposal of waste in regard to the specific pollutants/processes listed under "Measure of Success" column.
year for the specific pollutants/processes listed under "Measure of Success" column.

1.3 Include specific information on the city's website and/or the city newsletter at least once each fiscal year for the specific pollutants/processes listed under "Measure of Success" column.
Ongoing PEP and UM Ongoing PEP and UM

- effects of lawn care
- benefits of on-site infiltration of storm water
- effects of automotive work and car washing on water quality
- proper disposal of swimming pool water • proper management of pet wastes

Consider successful if information about each of the following pollutants/processes are included in a newsletter article or on the city's website once during each fiscal year:

- Proper lawn maintenance
- Benefits of appropriate on-site infiltration of storm water
- Building and equipment maintenance • Use of salt or other deicing materials • Proper storage of materials
- Proper management of waste materials and dumpsters
- Proper management of parking lot surfaces.

North Logan City Measurable Goals Updated 3/28/2021

General Permit for Discharges from Small Municipal

Separate Storm Sewer Systems (MS4s)

Measurable Goals - MCM 1 Public Education and Outreach

Target

MCM

Pollutant(s) Audience(s) Permit Reference/Desired Result Measurable Goal Milestone Date Associated BMPs Measure of Success (Effectiveness) 1.4

Conduct training for city staff who

1.4

Illicit discharge and improper disposal of waste

Illicit discharge

Engineers,

Construction Contractors, Developers, and applicable city staff

4.2.1.4 Reduce adverse impacts from development sites

4.2.1.5 Information is provided to all city review or inspect development based on SWPPPs.

- Assemble packets of information on how to put together SWPPP documents and select BMPs.
 - Develop a form whereby the contractor / developer can confirm their receipt of the packet.
- ongoing EM Ongoing. Annual

Consider successful if 90% of all new developments for the year can be shown to have received the information packets.

Consider successful if 90% of all Public Works Employees, as recorded in the training log, have completed training which includes the following: • Equipment inspection to ensure timely maintenance

- Benefits of appropriate on-site infiltration

1.5

and improper disposal of waste

City Engineer, all city staff directly employees on the city's prohibitions against illicit discharges and improper disposal of waste.
1.5 Conduct annual training for all City Employees.

1.6 Require all audience members to document continuing education that includes one or more of the following:
• Low Impact Development (LID)
training should be completed by 1 June each year.

Ongoing. Annual continuing
ET
of storm water
• Minimization of use of salt or other deicing materials
• Proper storage of industrial materials • Proper management of waste materials and dumpsters
• Proper management of parking lot surfaces

Consider successful if 90% of all applicable city employees, as recorded in the training log, have completed some training in LID,

1.6 All pollutants involved in development and plan review, and land use planners
4.2.1.6 Training on LID, Green Infrastructure, and post construction BMPs practices.
• Green infrastructure construction practices
• Post-construction storm water control practices (BMPs).
• LID or Green Best Management Practices (BMPs)
education training should be completed by 1 June each year.

ET
green development, or post-construction storm water control practices within the fiscal year.

North Logan City Measurable Goals Updated 3/28/2021

**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals - MCM 1 Public Education and Outreach**

Target

MCM

Pollutant(s) Audience(s) Permit Reference/Desired Result Measurable Goal Milestone Date Associated BMPs Measure of Success (Effectiveness)

4.2.1.7 Evaluate the effectiveness of the public

1.7 All pollutants All
education and outreach program by
evidence/demonstration that the defined goal has been achieved. Identify methods that will be used.
1.7 Research evaluation methods and select the best one. Implement the selected evaluation method.

July 2021

January 2022 PEP Evaluation method chosen (2021) and implemented (2022)

1.8 All pollutants All

4.2.1.8 Include written documentation or rationale as to why particular BMPs were chosen for the program.

SWMP. Annually PEP Documented rationale included in the

1.8 Include an explanation in the

SWMP.

North Logan City Measurable Goals Updated 3/28/2021

General Permit for Discharges from Small Municipal

Separate Storm Sewer Systems (MS4s)

Measurable Goals - MCM 2 Public Participation / Involvement

Target

Measure of Success

MCM

Pollutant(s) Audience(s) Milestone Date Associated BMPs (Effectiveness) Permit Reference/Desired Result Measurable Goal

2.1 Notify the public through

2.1 All pollutants General public

4.2.2.1 Have a program or policy in place that allows for the public to provide input regarding the draft SWMP prior to its adoption.

notice in the city's website when the Draft SWMP update is available for review. Provide a method whereby the public can send comments/input to the city.

2.2 Have a hard copy of the draft

By May 1 each year for

annual updates. PEP

Success, the public can come to city council meetings in which SWMP is discussed, reviewed, and revised.

2.2 All pollutants General public 4.2.2.2 Have SWMP document available for public review before it's submitted to the state

4.2.2.3 Have the most current version of the

of the SWMP available at the city offices and an electronic copy posted on the city's website prior to certifying the SWMP

One Week before the planned date for certifying the SWMP.

Post most recent SWMP by April 1 and within 30 days

PEP Success, the SWMP is posted on city website

SWMP is updated and posted on

2.3 All pollutants General public

adopted SWMP document available to the public at all times

2.3 Post the SWMP on the website

after certifying any revised/updated SWMP thereafter.

PEP

the website by the milestone date

2.4 All pollutants General public 4.2.2.4 Ensure Compliance with State and Local public notice requirements

2.4 Research what the State and Local public notice requirements are. Set goals to comply with them.

By February 1, 2021 be in total compliance with state and local regulations.

PEP

Understand what the state and local public notice requirements are.

North Logan City Measurable Goals Updated 3/28/2021

General Permit for Discharges from Small Municipal

Separate Storm Sewer Systems (MS4s)

Measurable Goals - MCM 3 Illicit Discharge Detection and Elimination

Target**MCM****Pollutant(s) Audience(s) Permit Reference/Desired Result Measurable Goal Milestone Date Associated BMPs Measure of Success (Effectiveness)**

3.1 All Pollutants

Contractors, Developers, City Council

4.2.3 Establish enforcement ability for storm water rules

3.1 Review and update the city's ordinance to conform with new permit

3.2.1 Input into GIS System the data

Review, update and maintain full enforcement by March 1, 2021

OD If ordinance is in place and meets the permit requirements

3.2 N/A Public Works and

GIS Manager 4.2.3.1 Maintain Storm Water System Map in GIS

produced by the county identifying SW structures in all canals which have been documented by the county to date

3.2.2 Establish an internal program by which the SW System Map on all new developments can be kept current and updated with changes within 6 months of development

3.2.3 Implement program and have

Ongoing MSWD If SWMP submitted on December 1 includes the SW Map.

Ongoing MSWD If program is in place and meets the permit requirements

Evaluate and

all SW map updates done within 12 months of final approval (meaning completion) of a development.

3.2.4 Maintain program and have

update map semiannually

Annually after

MSWD Successful if 90% are input within 12 months

3.3 All Pollutants All Audiences

4.2.3.2 Effectively prohibit, through ordinance, non-storm water discharges. The IDDE program must have a variety of enforcement options in order to apply escalating enforcement procedures.

all map updates done annually.

3.3 Regularly review and update the ordinance to meet most recent permit requirements.

July 1 MSWD Successful if 90% are input. Annually OD Current ordinance

3.4 All Pollutants All Audiences

4.2.3.3 Implement a written plan to detect and address non-SW discharges. This plan shall include:

Priority areas likely to have illicit discharge (4.2.3.3.1)

Annual field inspections of priority areas

3.4.1 Complete a priority area list. Complete by April

1NSWD Completed

3.4.2 Complete annual priority area

inspections. Annually NSWD Completed 3.4.3 Perform dry weather

(4.2.3.3.2)

Dry weather screenings (4.2.3.3.3)

If a separate UPDES Permit is needed, contact the *Director* (4.2.3.3.4)

screening on 20% of all outfalls each year.

3.4.4 Report separate UPDES

Annually NSWD Completed

Permits as needed. Ongoing NSWD Completed

North Logan City Measurable Goals Updated 3/28/2021

General Permit for Discharges from Small Municipal

Separate Storm Sewer Systems (MS4s)

Measurable Goals - MCM 3 Illicit Discharge Detection and Elimination

Target

MCM

Pollutant(s) Audience(s) Permit Reference/Desired Result Measurable Goal Milestone Date Associated BMPs Measure of Success (Effectiveness)

3.5 All Pollutants All Audiences 4.2.3.4 Implement standard operating procedures for tracing the source of illicit discharge.

to Staff Ongoing IIC Successful if staff is trained and SOP's are

3.5 Have SOP in place and training

being updated and revised as needed.

3.6 All Pollutants All Audiences 3.7 All Pollutants All Audiences

4.2.3.5 Implement standard operating procedures for characterizing the nature of any illicit discharges found or reported to the Permittee by the hotline developed in 4.2.3.9.

When the source of the non-storm water discharge is identified and confirmed, complete an inspection report (4.2.3.5.1).

4.2.3.6 Implement SOPs for ceasing the illicit discharge. All IDDE investigations must be

3.6.1 Create the Incidence Response Flow Chart and train personnel

3.6.2 Review flow chart and SOP with staff and provide training annually.

3.7 Train personnel on the

IIC, CH, IDC Successful if completed by that date and staff is following Flow Chart

Ongoing IIC, CH Successful if training is completed annually for all staff involved in incident reporting.

3.8 All Pollutants 3.9 Household

City Employees, Businesses and Residents
thoroughly documented and may be requested at any time by the *Director*.

4.2.3.7 Inform public employees, businesses, and general public of hazards associated with illicit discharges and improper disposal of waste.

Incidence Response Flow Chart. Annually IDC, ISDC Successful if training is completed. See MCM 1 Ongoing PEP, ET See MCM 1

Hazardous Waste Residents 4.2.3.8 Promote or provide services for the collection of household hazardous waste.

4.2.3.9 Publicly list and publicize a hotline or
3.9 Put the HHW Address and

Phone number on City Web Site Ongoing UOR, HWM Successful if complete 3.10 Put the Illicit Discharge

3.10 All Pollutants Residents
other telephone number for public reporting of spills and other illicit discharges.
Reporting hotline phone number on City Web Site.

3.11.1 Create a spreadsheet or GIS
Ongoing CH Successful if complete Updated

3.11

All Pollutants All Audiences 4.2.3.10 Adopt and implement procedures for program evaluation and assessment. Include a
database for mapping, tracking of the spills or
illicit discharges identified and inspections
data base for tracking Illicit Discharges

3.11.2 Create a spreadsheet or GIS

semiannually IIC, MSWD Successful if complete

All Pollutants All Audiences
conducted
data base for tracking inspections conducted including dry weather screening.
Update

semiannually MSWD Successful if complete
North Logan City Measurable Goals Updated 3/28/2021

**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals - MCM 3 Illicit Discharge Detection and Elimination**

Target

MCM

Pollutant(s) Audience(s) Permit Reference/Desired Result Measurable Goal Milestone Date Associated BMPs Measure of Success (Effectiveness)

4.2.3.11 Annually train employees about the IDDE

3.12 All Pollutants City Employees
program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit
connections.

3.12 Review IDDE program and SOP with staff and provide training annually.
Ongoing IIC, CH, ET
Successful if training is completed annually for 90% of staff involved in the IDDE program.

North Logan City Measurable Goals Updated 3/28/2021

**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals - MCM 4 Construction Site Runoff Control**

Target

Milestone Assoc.

MCM

Pollutant(s) Audience(s) Date BMP Measure of Success (Effectiveness) Permit Reference/Desired Result Measurable Goal

4.1

Sediment,
Construction Site Debris,
Hydrocarbons

Contractors and Developers, City Council, Plan Reviewers

4.2.4.1 Develop and adopt an ordinance or other regulatory mechanism that:

- requires the use of erosion and sediment control practices at construction sites as set forth in the most current UPDES Storm Water General Permits for Construction Activities
- requires construction operators to prepare a SWPPP (4.2.4.1.1)

4.1.1.1 Require a SWPPP for every construction site over one acre, or if part of a common plan of development.

4.1.2 Draft updated ordinance

Ongoing OD Successful if 95% of all active construction sites have a working SWPPP

Sediment,

Contractors and

- includes a provision for access by qualified personnel to inspection BMPs on private properties that discharge to the MS4

4.2.4.2 Develop a written enforcement strategy

to include required provisions July 2021 OD Successful if completed by milestone 4.2 Use database as a

4.2 4.3

Construction Site Debris,
Hydrocarbons

Sediment,

Construction Site Debris,

Hydrocarbons

Developers, City Council, Plan Reviewers

Contractors and Developers

which includes SOPs that obtain compliance. Document and track all enforcement actions.

4.2.4.3 Develop and implementation of a checklist for pre-construction SWPPP review for construction sites that includes at least the following:

- a pre-construction SWPPP meeting (4.2.4.3.1.) • A identify priority construction sites, including at a minimum those construction sites discharging directly into or immediately upstream of irrigation canals or wet lands. (4.2.4.3.2)
- mechanism of documentation and enforcement actions. (city inspect)

4.3.1 Develop SOP/checklist and begin to do pre construction reviews of SWPPPs

4.3.2 Develop a "sensitive area" map showing areas within the city where "additional" protection may be desired and where priority sites may be located
Ongoing OD Successful if we have a log and are using it

Ongoing ECP Successful if we are conducting SWPPP reviews using the SOP/checklist on 90% of new developments.

July 2021 LIP Successful if map is updated and reviewed by milestone date
North Logan City Measurable Goals Updated 3/28/2021

**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals - MCM 4 Construction Site Runoff Control**

**Target
Milestone Assoc.
MCM**

Pollutant(s) Audience(s) Date BMP Measure of Success (Effectiveness) Permit Reference/Desired Result Measurable Goal

4.4
Sediment,
Construction Site Debris,
Hydrocarbons
Contractors, developers and MS4 staff

4.2.4.4 Develop and implement SOP's for inspection of construction sites that includes at least the following:

- Inspections of all new construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale at least monthly by qualified personnel using the Construction Storm Water Inspection Form (Checklist) found on the Division's website (4.2.4.4.1.)
- Inspection of all phases of construction (4.2.4.4.2.)
- Incorporates the frequency of inspections as

4.4.1 Develop SOP/checklist and begin to do construction inspections for developments with SWPPPs

4.4.2 Perform all construction site inspections with a
"qualified person"

4.4.3 Implement the use of the SOP/checklist for construction inspections

Ongoing ECP Successful if SOP/checklist is used and operational at least once a month

Ongoing CCIT Successful if regular inspectors are qualified

Ongoing ECP Successful if we are conducting SWPPP inspections using the SOP/checklist on 90% of new developments.

As soon as
required by the permit (4.2.4.4.3.)
• A method to ensure the permittee takes all necessary follow-up actions. (4.2.4.4.4)

4.2.4.5 Ensure that all staff whose primary job
4.4.4 Develop a written Notice of Termination process for use within the city.

4.5 Train SWPPP inspectors,
were
registered on state website

ECP Successful if 95% of all active construction sites are terminated appropriately

4.5 All pollutants MS4 staff duties are related to such are trained in implementing the construction storm water program their supervisors, and any personnel who grant final occupancy permits on the SWMP process.

Ongoing ET Successful if all SWPPP inspectors are trained on the SWMP process and training is logged.

4.6
Sediment,
Construction Site Debris,
Hydrocarbons
Contractors, developers and MS4 staff

4.2.4.6 Maintain a log of active construction sites 4.6 Establish a log of active construction sites. Ongoing ECP Successful if active construction sites are recorded in the log on permit status sheet

North Logan City Measurable Goals Updated 3/28/2021

**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals - MCM 5 Post Construction Runoff Control**

**Target
Milestone Assoc.
MCM
Pollutant(s) Audience(s) Date BMP Measure of Success (Effectiveness)
Permit Reference/Desired Result Measurable Goal**

Post-construction Controls

4.2.5.1 New development/redevelopment program must have requirements or standards

5.1 All Pollutants All Audiences MS4 Staff,

which will prevent or minimize impacts to water quality.

- This should include non-structural BMPs which minimize erosion, sediment loss, disturbance of native soils and sensitive areas (4.2.5.1.1).

4.2.5.1.2 Each Permittee shall develop and define specific hydrologic method or methods for

5.1 Review and update existing design standards to comply with permit requirements.

5.2 Review and update existing
July 2021 OD, IPL Successful if standards are updated

5.2 All Pollutants 5.3 All Pollutants

Contractors and Developers

MS4 Staff,
Contractors and Developers
calculating runoff volumes and flow rates. The 80th percentile rain event is the minimum volume that must be retained on-site.

4.2.5.1.3 A Low Impact Development (LID) approach is required for all projects. *A Guide to Low Impact Development within Utah* may be utilized when implementing LID. Permittees must allow for a minimum of five LID practices from the Guide. design standards to comply with permit requirements

5.3 Review and update existing design standards to allow for LID and provide the minimum practices
July 2021 IPL Successful if standards are updated July 2021 IPL Successful if standards are updated

4.2.5.2 Develop and adopt an ordinance that
Regulatory Mechanism

5.4 All Pollutants
MS4 Staff,
Contractors, Developers, and Design
Professionals
requires long-term post-construction storm water controls at new development and redevelopment sites.
• Must include enforcement provisions (4.2.5.2.1) • Maintain documentation related to the selection process of BMPs (4.2.5.2.2)
• Include provisions for post construction access for Permittees to inspect and ensure adequate maintenance is performed (4.2.5.2.3)
5.4 Draft updated ordinance to comply with permit
requirements.
July 2021 OD Successful if ordinance updated
North Logan City Measurable Goals Updated 3/28/2021

**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals - MCM 5 Post Construction Runoff Control**

**Target
Milestone Assoc.
MCM
Pollutant(s) Audience(s) Date BMP Measure of Success (Effectiveness) Permit Reference/Desired Result Measurable Goal**

5.5.1 Complete inspection
during installation. Ongoing BMPIM Inspections being completed

5.5 All Pollutants
MS4 Staff,
Contractors, Developers, and Design
Professionals
4.2.5.2.4 BMPs should be inspected at least once during installation by qualified personnel. • Inspections/Maintenance must be conducted at least every other
year by Permittee or property owner. If completed by property owner, Permittee will inspect once every five years. (4.2.5.2.5)
5.5.2 Draft a Maintenance
Agreement template. July 2021 BMPIM If draft is completed by the milestone date

Agreement template August 2021 BMPIM If template is adopted and being used by milestone
5.5.3 Adopt a Maintenance
date

5.5.4 Complete inspections

4.2.5.3 Perform site plan review to evaluate water
every other year or once every five depending on property ownership.

Plan Review

5.6 Review post-construction
Ongoing BMPIM If completed inspection reports are properly filed

5.6 All Pollutants MS4 Staff

quality impacts and to ensure that plans include long-term storm water management measures.

plans Ongoing IPL If plans are regularly reviewed **Inventory**

5.7 All Pollutants MS4 staff 4.2.5.4 Maintian an inventory of post construction BMPs

4.2.5.5 Provide adequate training for all staff

5.7 Inventory log updated

annually Ongoing BMPIM If log is updated **Training**

5.8 Schedule and conduct

5.8 All Pollutants MS4 staff

involved in post-construction storm water management, planning and review, and inspections and enforcement.

training for appropriate personnel

Annually BMPIM If all appropriate personnel are trained

North Logan City Measurable Goals Updated 3/28/2021

General Permit for Discharges from Small Municipal

Separate Storm Sewer Systems (MS4s)

Measurable Goals - MCM 6 Pollution Prevention and Good Housekeeping

Target

Milestone Assoc.

MCM

Pollutant(s) Audience(s) Date BMP Measure of Success (Effectiveness) Permit Reference/Desired Result Measurable Goal

4.2.6 ...All components of an O & M program shall

6.1 All pollutants MS4 staff

be included in the SWMP document and must identify the department (and where appropriate, the specific staff) responsible for performing each activity described in this section...

6.1 Complete Org chart and define specific responsibilities for all departments shown

May-21 HP If org chart is complete and up to date by milestone date

6.2 All pollutants MS4 staff 4.2.6.1 Develop and keep current a written inventory of City-owned or operated facilities

4.2.6.2 Assess the written inventory of city-owned

6.2 Complete listing of city

owned/operated facilities May-21 HP If list is completed by milestone date

6.3 All pollutants MS4 staff

or operated facilities, operations and storm water controls identified in Part 4.2.6.1 for their potential to discharge to the storm water system. 4.2.6.3 Identify "high-priority" facilities.

6.3 Complete assessments and identify "high-priority" city facilities and document findings.

May-21 HP If assessments are completed and documentation recorded in SWMP

6.4 All pollutants MS4 staff 4.2.6.4 Develop a SWPPP for each "high-priority" facility identified in Part 4.2.6.3.

4.2.6.5 Perform the following "high-priority" inspections:

- Monthly Visual Inspections (4.2.6.5.1)

6.4 Complete SWPPPs for each

"high-priority" facility July 2021 HP If SWPPPs are updated and maintained 6.5 Conduct required

- Semi-Annual Comprehensive Inspections (4.2.6.5.2)
- Annual Visual Observation of storm water discharges (4.2.6.5.3)

4.2.6.6 Develop and implement SOPs for each of the facilities owned or operated by Permittee including but not limited to:

- Buildings and facilities
- Material storage areas
- Parks and open space
- Vehicle and equipment
- Roads, highways and parking lots
- Storm water collection and conveyance

inspectionsOngoing HP If all annual review all required inspections are logged and reports completed

6.6 Update and complete the

applicable SOP documents. July 2021 IPL Once SOPs are updated and current
North Logan City Measurable Goals Updated 3/28/2021

**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals - MCM 6 Pollution Prevention and Good Housekeeping**

**Target
Milestone Assoc.**

MCM

Pollutant(s) Audience(s) Date BMP Measure of Success (Effectiveness) Permit Reference/Desired Result Measurable Goal

6.7 All pollutants MS4 Staff 4.2.6.6.6 Maintain an inventory of all floor drains inside all Permitte-owned or operated buildings.

6.7 Complete mapping of

interior floor drains. July 2021 HP Completed mapping 6.8 Include documentation or

6.8 All pollutants 6.9 All pollutants

MS4 Staff,
Contractors and Developers

MS4 Staff,
Contractors and

4.2.6.7 Require that third-party contractors are following the same SOP and other practices that the Permittee follows.

4.2.6.8 Develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that language that contractually obligates third-party contractors to maintain same requirements as the Permittee.

6.9.1 Draft a policy/process to assess water quality impacts on all new flood control projects
Ongoing HP If contracts are maintained and enforced.

IPL If draft is prepared and ready for internal
review process by milestone date

Developers

6.10 All pollutants MS4 staff
are associated with the city or that discharge to the MS4.

4.2.6.9 Develop a retro fit plan for Permittee owned or operated facilities that adversely impact water quality. Include an assessment
of existing flood management structural controls to determine whether changes or additions should be made to improve water
quality.

4.2.6.10 Permittees shall provide training for all

6.9.2 Get policy approved IPL If policy is approved and adopted by milestone date

6.10 See MCM 5 for goals (part
of the retrofit program)

6.11 Schedule and conduct
6.11 All pollutants MS4 staff
employees who have primary construction, operation, or maintenance job functions that are likely to impact storm water quality.
training for appropriate personnel

Ongoing EM, HP If training is completed and documented according to schedule at annual evaluation

FACT SHEET STATEMENT OF BASIS

GENERAL PERMIT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

UPDES PERMIT NUMBER UTR090000

PERMIT MODIFICATION

1.0. Introduction and Background

The Federal Clean Water Act requires that storm water discharges from certain types of facilities be authorized under storm water discharge Permits. (See 40 CFR 122.26.) The goal of the storm water Permits program is to reduce the amount of pollutants entering streams, lakes and rivers as a result of runoff from residential, commercial and industrial areas. The original 1990 regulation (Phase I) covered municipal (i.e., publicly-owned) storm sewer systems for municipalities over 100,000 population. The regulation was expanded in 1999 to include smaller municipalities as well. This expansion of the program to include small MS4s is referred to as Phase II. This Permit covers new or existing discharges composed entirely of storm water from Phase II, or Small Municipal Separate Storm Sewer Systems (MS4) Permittees statewide, of which there are 77 at the time of this Permit modification.

This Permit serves as a *modification* of the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), UTR090000, which was renewed and issued by the Division of Water Quality (Division) on December 1, 2016. The December 1, 2016 renewed permit included more specific requirements than the previous permit for on-site retention of storm water and the use of a Low Impact Development (LID) approach which implements Best Management Practices (BMPs) that infiltrate, evapotranspire and harvest and reuse storm water. The Permit was modified (effective date April 25, 2019) moving the retention and LID implementation date from September 1, 2019 to March 1, 2020.

The Division issued a Public Notice Draft of the renewal of another MS4 permit, the Jordan Valley Municipalities (JVM) Permit UTS000001, on July 25, 2018. DWQ received significant comments on the July 25, 2018 Jordan Valley Municipalities MS4 Draft Permit. In early 2019, the Division entered into stakeholder collaboration with a subcommittee of the Land Use Task Force facilitated by the Utah League of Cities and Towns (ULCT). The committee included members of the Division, ULCT, the Utah Home Builders Association and MS4 representatives among others who worked together to refine the Permit language. The Jordan Valley Municipalities Permit renewal was public noticed on December 21, 2019. This modification of the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), UTR090000 includes similar changes in an effort to promote consistency among the MS4 permits statewide.

2.0. Modifications to the General Permit for Discharges from Small MS4s

Significant changes and clarifications to the Permit are listed below:

The Term “Division” referring the Division of Water Quality has been replaced with “Director” referring to the Director of the Division of Water quality throughout the permit.

Small MS4 General Permit

Modification

UTR090000

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Fact Sheet Statement of Basis

Page 2 of 8

Application and Storm Water Management Program

The date for submittal of a revised SWMP document for renewal permittees has been changed from 120 days to **180 days** from the effective date of the Permit (Permit Part 2.3).

This Permit serves as both a modified Permit for those covered under the existing Permit as well as provides coverage for New Applicants. Renewal Permittees should have fully implemented SWMPs that reflect the permit requirements of the previous permit cycle. A Renewal Permittee shall continue to implement its SWMP as described in the application and submittals provided in accordance with the previous Small MS4 General Permit, while updating its SWMP document pursuant to this renewal Permit to achieve pollutant reductions to the Maximum Extent Practicable from the MS4, as specified in Part 4.1. An exception to this is given for Permittees that were designated during the previous Permit term who have 5 years from the date of their submitted NOI to develop, fully implement and enforce their SWMP. New applicants are given the full Permit term to implement a SWMP except where specific deadlines are indicated.

Public Involvement/Participation

If a Permittee maintains a website, a current version of the SWMP document must be posted on the website within 180 days (increased from 120 days) from the effective date of this Permit (Permit Part 4.2.2.2.).

Illicit Discharge Detection and Elimination

Based on a comment received regarding Permittee responsibility for third-party discharges, Permit Part 4.2.3.6.2 was added: “Although Permittees are required to prohibit illicit discharges within their

boundaries and to take appropriate action to detect and address any violations, this Permit does not impose strict liability on the Permittee.”

Permit Part 4.2.3.1 includes the wording “Permittees shall...require that all staff, contracted staff, or other responsible entities, that as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4 including office personnel who might receive initial reports of illicit discharges, receives annual training in the IDDE program...”. The wording has changed to clarify which MS4 staff should be trained. Permittees must ensure through tracking of attendance that appropriate staff has received annual training. If some staff were unable to attend the yearly training that was offered, it is the Permittee’s responsibility to offer another form of training to meet this Permit requirement. Although online training and certification is not specifically mentioned in this Permit, this is one option to ensure that all appropriate staff receives the necessary training that is required throughout this Permit. A requirement to ensure that new hires are trained within 60 days of hire date has also been added to Permit Part 4.2.3.11.

Construction Site Storm Water Runoff Control

The threshold for construction site storm water runoff control has been clarified to “construction sites with a land disturbance of greater than or equal to one acre, including projects that are part of a larger common plan of development or sale *which collectively disturbs land greater than or equal to one acre...*”

The requirement that MS4s ensure operators “maintain coverage under the Construction General Permits has been removed from Permit Part 4.2.4.1.2.

Permit Part 4.2.4.2.1 has added an appeals process as part of the procedures to ensure compliance to be posted in a publicly available location. An appeals process will allow a construction operator to appeal an enforcement option.

Permit Part 4.2.4.3.1 has changed the pre-construction SWPPP *review* requirement to a pre-construction meeting requirement.

Permit Part 4.2.4.3.2 has clarified the factors for determining a priority construction site.

Permit Part 4.2.4.4. prohibits an individual or entity who prepares a SWPPP for a construction project from performing construction site inspections on behalf of a Permittee on that site.

Permit Part 4.2.4.4.1 has added the requirements for qualified Permittee storm water inspectors.

Permit Part 4.2.4.4.4 allows for the use of an electronic inspection tool by the Permittees in place of in person, on-site inspections for up to one-half of inspections at a construction site.

Permit Part 4.2.4.5. has added language that requires the Permittee to ensure annual training of staff as well as the training of new hires within 60 days of hire.

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

Modified Post-Construction Retention Standard

Permit Part 4.2.5.2.1 **requires** by **July 1, 2020** all new development projects meeting the applicable threshold, to manage rainfall on-site, and prevent the off-site discharge of runoff associated with precipitation less than or equal to the 80th percentile rainfall event. The 80th percentile rainfall event is the event whose precipitation total is greater than or equal to 80 percent of all storm events over a given period of record. If not feasible, a rationale must be provided for the use of alternative design criteria. This water quality volume-based methodology will reduce the runoff from a site from the small frequently occurring storms which have a strong negative cumulative impact on receiving water quality.

By **July 1, 2020**, redevelopment projects meeting the applicable threshold that increase the impervious surface by greater than 10%, shall manage rainfall on-site, and prevent the off-site discharge of the net increase in the volume associated with the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event.

Guidance related to these requirements is available on the Division's website.

Basis for Permit Modification

This permit modification changes the required retention volume from the 90th percentile storm to the 80th percentile storm. The permit modification falls under 40 CFR.62(a)(2), which allows states to modify a permit when the Director receives new information. The first post-construction retention standard, 90th

percentile storm, was selected following the EPA's October 2015 NPDES Permit Quality Review (PQR) Utah. The PQR included a critical finding that Utah's post-construction storm water management requirements were insufficient to meet maximum extent practicable (MEP) and could include a specific numeric design standard in order to be sufficient. As a result, the Division promptly included a numeric standard, which it originally set at 90th percentile, in the April 2016 version of the permit.

Later, the 2016 NPDES MS4 General Permit Remand Rule (December 2016 regulations) at 81 Fed. Reg. 89320 clarified the requirement that states incorporate clear, specific, and measurable permit requirements to meet each of the 6 minimum control measures in 40 CFR 122, 34, one of which is post-construction storm water management in new development and redevelopment sites. The guidance issued concurrently with the December 2016 regulations still did not define specific numeric post-construction standards, relying on states to determine how to best meet the control measure to the maximum extent practicable, and prompting the Division to revisit its numeric standard with the newly acquired knowledge that the EPA had declined to adopt a national standard. Thus, the circumstances and information on which the 90th percentile retention standard was based changed materially and substantially since the permit was originally issued.

Rationale for Post-Construction Retention Standard

The Division has determined that the retention standards outlined in Section 4.2.5, meet the intent of the maximum extent practicable (MEP) standard to prevent or minimize water quality impacts from new and redevelopment post-construction storm water management through clear, specific, and measurable requirements.

In reviewing literature, evaluation of the diversity of site conditions and climates around the state, and consulting with practicing design engineers, the Division determined that the 80th percentile event

represents the MEP for retention across the state. While a higher level of retention may be practicable in some areas of the state, it is not practicable for many communities found in Utah's valleys with collapsible soils, high ground water, and poor infiltration rates. In addition, the Division has made this standard identical to the standard used in the renewal of Permit UTS000001 which is applicable to municipal separate storm sewer systems (MS4s) in the Jordan Valley.

In developing this standard, the Division reviewed literature and design guidelines for storm water quality management throughout the intermountain west. The purpose of the post-construction retention standard is to maintain or restore stable hydrology in receiving waters and protect water quality by reducing the effect of first-flush events on receiving waters. The Division recognizes the cascading water quality effects of development to include increases in pollutant sources, storm water runoff, and the erosional impacts of storm events. These effects are associated with increased impervious cover and activities associated with developed lands.

The Division reviewed the following studies related to storm water runoff and water quality volume: Guo and Urbonas, 1996 and Urbonas, Roesner, and Guo, 1996. These studies formed the basis of a recommendation by the Water Environment Federation and American Society of Civil Engineers (1998) that stormwater quality treatment facilities (i.e., post-construction BMPs) be based on the capture and treatment of runoff from storms ranging in size from "mean" to "maximized" storms (70th to 90th percentile storm). The Division selected the 80th percentile as a mid-range target, based in part on this recommendation. The Division determined that retention of the "maximized" storm was impractical for Utah.

Further, the Division determined that the Urban Storm Drainage Criteria Manual developed for the State of Colorado is applicable to Utah's climate and topography. The USDCM states that "capturing and properly treating this volume [80th percentile storm] should remove between 80 and 90% of the annual total suspended solids (TSS) load, while doubling the capture volume was estimated to increase the removal rate by only 1 to 2%." Based on this analysis, the 90th percentile storm, as included in the previous Permit, would result in a negligible improvement in water quality. Upon further study, the Division could not demonstrate a technical rationale to require Utah's communities to retain storm water to achieve water quality goals that is greater than other similarly situated states in the intermountain west, such as Montana (0.5") and Colorado (80th percentile storm).

Although the previously modified Permit included a retention requirement equivalent to the water quality volume associated with the 90th percentile storm event for new and redevelopment, this permit requirement was never put into effect due to concerns raised from Utah's engineering, planning, and building communities. This resulted in an additional stakeholder process that took place in 2019 in partnership with the Utah League of Cities and Towns Land Use Task Force. This stakeholder process and review of other states' retention standards revealed greatly increased cost associated with achieving 90th percentile retention standard versus the 80th percentile, but not greatly increased water quality benefits such that the Division determined that the 90th percentile was no longer practicable and the 80th percentile represents MEP.

This permit modification also clarifies that implementation of the post-construction retention standard applies only if impervious surface area increases by greater than 10%. The Division never intended to require any redevelopment project, no matter the size, to remove existing impervious surfaces that would not otherwise need to be redeveloped in order to meet the retention standard. It would be impractical to require that an entire redevelopment site meet the new retention standard because redevelopment projects

that do not increase surface area by greater than 10% would often not be able to meet the standard without removing existing impervious surfaces. Further, the change allows cities to work within the context of existing storm water master plans and proceed with retrofits of existing facilities through requirements identified in section 4.2.5.3.3 of the permit.

Modified Low Impact Development Requirements

The Permit requires that the post-construction retention standard be accomplished through the use of a combination of practices: site design (including reduction in impervious cover), structural and non structural controls Low Impact Development practices that are designed, constructed, and maintained to infiltrate, evapotranspire and/or harvest and reuse rainwater. This requirement is described in Permit Part 4.2.5.1.3.

Permittees must allow for use of a minimum of five LID practices from the list in Appendix C of “A Guide to Low Impact Development within Utah” (the Guide). If a Permittee has not adopted specific LID guidelines, any LID approach that is described in the Guide and feasible may be used to meet this requirement.

If an LID approach cannot be utilized, the Permittee must document an explanation of the reasons preventing this approach and the rationale for alternative criteria per Permit Part 4.2.5.1.5.

The definition of LID infeasibility has been expanded to include high groundwater, drinking water source protection areas, soil conditions, slopes, accessibility, excessive costs, or others.

Other Changes to Section 4.2.5

The threshold for long-term storm water management has been clarified to “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...*”

Permit Part 4.2.5.3.1 requires procedures for site plan review that evaluate water quality impacts and that are applied though the life of the project from conceptual design to project closeout.

Permit Part 4.2.5.3.2 requires Permittees to review post construction plans to ensure long-term controls are implemented which meet the permit requirements.

Permit Part 4.2.5.2.4 requires that permanent structural BMPs be inspected to ensure the BMPs were constructed as designed prior to closing out a construction project.

Permanent structural BMP inspection requirements have been reduced from a minimum or annually to at least every other year or as necessary to maintain functionality of the control (Permit Part 4.2.5.2.5).

Previous Permit Part 4.2.5.3.3 requiring a retrofit plan has been moved to Permit Part 4.2.6 Pollution Prevention and Good Housekeeping for Municipal Operations.

Permit 4.2.5.6. requires that all staff involved in post-construction storm water management, planning and

review, and inspections and enforcement be trained on an annual basis. New hires must be trained within 60 days of hire.

Previous Permit Part 4.2.5.4.2 has been removed.

Pollution Prevention and Good Housekeeping for Municipal Operations

This minimum control measure has been reorganized to more clearly outline the requirements for “high priority” municipal facilities and overall SOP development and implementation for all facilities and municipal operations. Guidance for evaluating “high priority” municipal facilities and preparing SOPs will be developed as separate Fact Sheets by the Division.

Permit Part 4.2.6.4. requires Permittees to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for each “high-priority” Permittee-owned or operated facility within 180 days from the effective date of this Permit. The SWPPP must identify potential sources of pollution, describe and ensure implementation of practices that are to be used to reduce pollutants in storm water discharges associated with activity at the facility and must include a site map showing the information required in Permit Part 4.2.6.4. The previous Permit required SOPs to address many of these requirements and these SOPs, provided that they meet the Permit requirements, may be used as part of this SWPPP document. SOPs must be tailored to the specific Permittee, facility, or operational procedure and must not contain generic descriptions of municipal activities.

6

Small MS4 General Permit

Modification
UTR09000

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Fact Sheet Statement of Basis

Page 7 of 8

In Permit Part 4.2.6.5.1, visual inspection frequency has been reduced from weekly to monthly.

In Permit Part 4.2.6.5.2, comprehensive inspection frequency has been reduced from quarterly to semi annually.

In Permit Part 4.2.6.5.3, visual observation frequency has been reduced from quarterly to annually.

Previous Long-Term Storm Water Management in New Development and Redevelopment Permit Part 4.2.5.3.3 requiring a retrofit plan has been moved to Permit Part 4.2.6.9.

Permit Part 4.2.6.10. requires that all employees, contracted staff, and other responsible entities involved in construction, operation, or maintenance job functions that are likely to impact storm water quality be trained on an annual basis. New hires must be trained within 60 days of hire.

Reporting

All Permittees must submit an annual report to the Division by October 1 following each year of the Permit term. As stated in Permit Part 5.5, signed copies of the annual report and all other reports required by this permit must be submitted directly to the DWQ electronic document system at: <https://deq.utah.gov/water-quality/water-quality-electronic-submissions>.

Standard Permit Conditions

Permit Part 6.12 Oil and Hazardous Substance Liability has been removed as this section is redundant.

Definitions

A definition of “Developed site” was added. The definition of “Indian Country” was removed.

4.0. Permit Duration

The original effective date of reissuance of the permit was March 1, 2016, with an expiration date of February 28, 2021. It was modified on December 1, 2016 and again on April 25, 2019, both with expiration dates of February 28, 2021. As stated in *UAC R317-8-5.1(1)*, UPDES permits shall be effective for a fixed term not to exceed five (5) years. Therefore, this modified permit will be set to expire at midnight on February 28, 2021, five years after the effective date of reissuance.

5.0. Public Notice

The public notice was published in the Salt Lake Tribune and Desert News newspapers on December 24, 2019. The Permit was also announced on the Utah Division of Water Quality’s Public Notice website at <https://deq.utah.gov/public-notices-archive/water-quality-public-notices>. The 30-day public notice began on December 24, 2019 and ends on January 23, 2020.

Please refer to the Utah Division of Water Quality’s website at <http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm> for the response to comments received.

This Permit and Fact Sheet were drafted by Jeanne Riley Storm Water Section Manager, Utah Division of Water Quality on December 23, 2019. For questions or comments contact Ms. Riley at jriley@utah.gov or 801-536-4369.

STORM WATER MANAGEMENT PLAN

NORTH LOGAN CITY

EFFECTIVENESS



EVALUATION

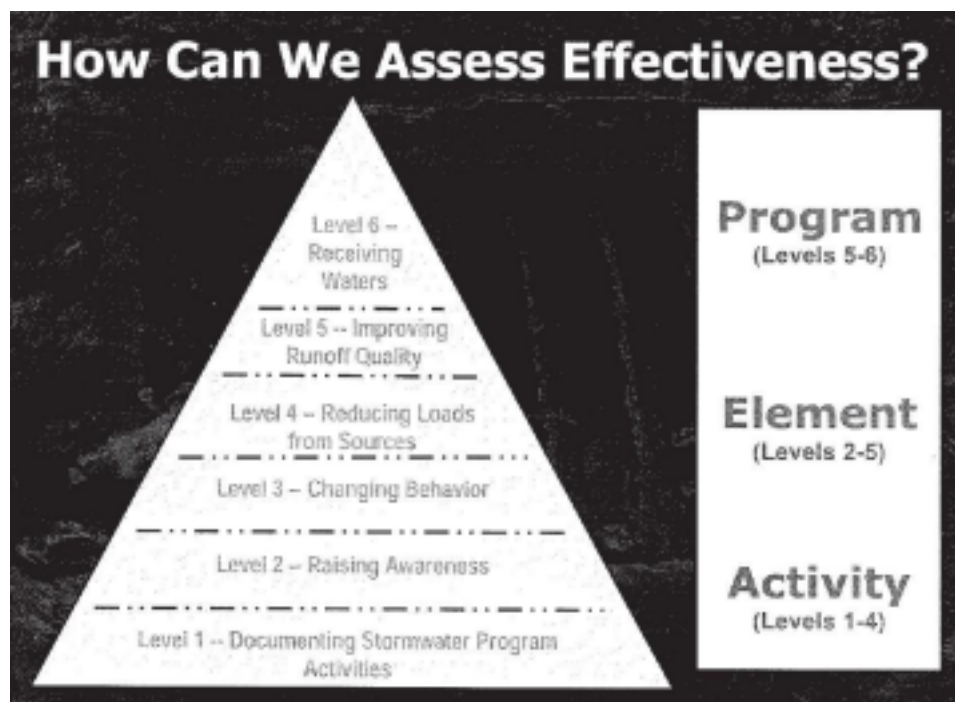
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There are a number of levels upon which the city staff can evaluate the effective municipality's storm water management program. The ultimate goal is to effect an improvement in the quality of the storm water entering the Bear River and the groundwater throughout the region. That is a long term, high level goal for all the municipalities in the entire watershed area. The effectiveness triangle shown below helps us understand and categorize interim goals along the way to achieving the higher level goals of improving the quality of the water leaving the city and ultimately improving the quality of the receiving waters – the Bear River.

Essentially all the measurable goals in this SWMP are in the lower, activity level of the effectiveness triangle. Therefore, the best criteria for evaluating the effectiveness of this plan, during the first year under this new permit, will be to determine if the ongoing documentation called for in the measurable goals is being done. If appropriate documentation is being accomplished, it will help the MS4 staff discover if the other goals are being met.



Controlling Regulated Pollutants (TMDLs)



Discharges to Water Quality Impaired Water Body

Permit Reference : The permittee “must determine whether storm water discharge from any part of the MS4 contributes to a 303(d) listed (i.e. impaired) water body.” (Small MS4 General UPDES Permit 3.1.1.1). In addition, and in accordance with the CGP, North Logan City places special interest in controlling and eliminating nutrient loading.

The 303(d) list of impaired water bodies is found at:

<http://www.waterquality.utah.gov/TMDL/index.htm>

<http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/index.cfm>

Listings related to North Logan City:

All of the irrigation canals in North Logan City eventually drain to the Bear River and are therefore contributory to the Bear River Watershed Management Unit which is a 303(d) listed impaired water body. The following information is provided relative to this listing:

List ID – UT-16010202-004

Water Body Name – Bear River-5

Water Body Description – Bear River from Malad River Confluence to Cutler Reservoir

TMDL Establishment Date – Feb 23, 2010

TMDL Pollutant Description - Phosphorus



**North Logan City Organization Chart Department Responsibilities
Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)**

General

City Administrator

- Liaison with administration and City Council
- Manage Storm Water budget
- General coordination of the Storm Water Management Program (SWMP)

Storm Water Program Manager

- General coordination of the Storm Water Management Program (SWMP)
- Oversee SWPP program specifics and work with department heads
- Oversee housekeeping of facilities city-wide and coordinate compliance on general work areas with applicable department head
- Track maintenance of storm water control and pollution protection structures and facilities - Annual report
- Updating SWMP
- Coordination with Other Departments

GIS Manager - now operated through Cache County

Protective Inspection and Engineering Department Head

- Maintaining lists of acceptable BMPs
- Conducting storm water protection site inspections of all construction activities - Receiving, approving, and tracking SWPPPs, NOIs, NOTs
- Tracking and documentation of construction activities including subdivisions, new development - Engineering support
- Help with all reporting

Facilities and Parks Department Head

- Parks dept. maintenance work area
- Pesticide, Herbicide, and Fertilizer (PHF) program
- Training parks and facilities personnel
- Chemical and fertilizer storage in work areas
- Parks department equipment operation
- Equipment maintenance for parks dept. equipment
- Mowing program
 - Chemicals, fluids, oils, and waste oils/fluids in work areas of departments not represented on the Storm Water Committee (Fire Department, Police Department, Library, and Office Staff)

CHART)

Utilities Department Head

- Utilities dept. maintenance work area
- Training utilities dept. personnel
- Chemical storage in work area
- Utilities dept. equipment operation
- Equipment maintenance for utilities dept. equipment

Streets Department Head

- Streets dept. maintenance work area
- Streets dept. equipment operation
- Equipment maintenance for streets dept.
- Training streets dept. personnel
- Chemicals storage in work area
- Snow plowing program
- Street sweeping program
- Salt and materials storage stockpile areas
- Maintain the following common use facilities: ○
 - Equipment wash area
 - Fueling station

MAIN SWMP DOCUMENT – (WITH ORG
CHART)

MS4 ORGANIZATION CHART
North Logan City
Jan. 2021



Also - Storm Water Committee

Will Morris
Storm Water Program Specialist
(O) 435-752-1310

Ryan Campbell
Park Department.
435-752-1310

STORM WATER MANAGEMENT PLAN - 2010
APPENDIX D

Special Environmental Considerations Threatened or Endangered Species

Where applicable, compliance efforts to this law shall be reflected in the SWMP document. (Small MS4 General UPDES Permit 3.2) The following web sites are helpful in determining the status of any species of interest.

<http://wildlife.utah.gov/habitat/pdf/endgspec.pdf> <http://www.fws.gov/endangered/>

Listings related to North Logan City:

The following are Cache County (and by extension North Logan City's) Lists of Federally Listed

Threatened (T), Endangered (E), and Candidate (C) Species:

Common Name	Scientific Name	Status
Maguire Primrose	<i>Primula maguirei</i>	T
Ute Ladies' Tresses	<i>Spiranthes diluvialis</i>	LT
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T
Extirpated Canada Lynx	<i>Lynx canadensis</i>	T

Historic Properties

Where applicable, compliance efforts to this law shall be reflected in the SWMP document. (Small MS4 General UPDES Permit 3.2) Web sites include the following along with possible county and city listings:

http://history.utah.gov/historic_buildings/index.html

Listings related to North Logan City:

There are no currently listed historical sites within North Logan City.

STORM WATER MANAGEMENT PLAN -
2021 Main SWMP BOOK

GLOSSARY OF TERMS

Authorized Enforcement Agency: Employees or designees of the director of the municipal agency designated to enforce this ordinance.

Berm: An earthen mound used to direct the flow of runoff around or through a structure.

Best Management Practices (BMPs): Includes schedules of activities, prohibitions of practices, maintenance procedures, design standards, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly into the waters of the United States. BMPs also include treatment requirements, operating procedures, educational activities, and practices to control plant site runoff spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BOD5: A measure of the amount of oxygen that is consumed by bacteria as it breaks down organic matter in a sample during a five-day period under standardized conditions. It is generally considered to be a measure of organic material in the water.

CIP (Capital Improvement Plan): A plan developed by municipalities to identify and prioritize improvements that need to be made in upcoming years.

Clean Water Act (CWA): The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Construction Activity: Activities subject to NPDES Construction Permits. These include

construction projects resulting in land disturbance of one acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Conveyance System: Any channel or pipe for collecting and directing the stormwater. **Culvert:** A covered channel or large diameter pipe that directs water flow below the ground surface.

Degradation: (Biological or chemical) The breakdown of chemical compounds into simpler substances, usually less harmful than the original compound, as with the degradation of a persistent pesticide. (Geological) Wearing down by erosion. (Water) The lowering of the water quality of a watercourse by an increase in the amount of pollutant(s).

Dike: An embankment to confine or control water, often built along the banks of a river to prevent overflow of lowlands; a levee.

Directly Connected Impervious Areas (DCIA): Impervious surfaces that are directly connected to the storm drainage conveyance system. Directly connected means that there is no chance for infiltration or evapotranspiration before entering the conveyance system.

Discharge: The release of stormwater or other substance from a conveyance system or storage container.

Drainage: Refers to the collection, conveyance, containment, and/or discharge of surface and stormwater runoff.

Erosion: The wearing away of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land-clearing practices related to farming, residential or industrial development, road building, or timber-cutting.

Fill: A deposit of earth material placed by artificial means.

STORM WATER MANAGEMENT PLAN – 2021

First Flush: The delivery of a disproportionately large load of pollutants during the early part of storms due to the rapid runoff of accumulated pollutants.

General Permit: A permit issued under the NPDES program to cover a class or category of stormwater discharges.

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

Hazardous Waste: By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (flammable, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

Heavy Metals: Metals of high specific gravity, present in municipal and industrial wastes, that pose long-term environmental hazards. Such metals include cadmium, chromium, cobalt, copper, lead, mercury, nickel, and zinc.

Illicit Connection: Any physical connection to a publicly maintained storm drain system allowing discharge of non-storm water which has not been permitted by the public entity responsible for the operation and maintenance of the system.

Illicit Discharge: Any direct or indirect non-storm water discharge to the storm drain system, except discharges from fire fighting activities and other discharges exempted in this ordinance.

Illicit Discharge Detection and Elimination (IDDE): A program that each municipality develops to identify and eliminate any illicit discharges they might have within their collection system.

Impervious Surface: A surface which prevents or retards the penetration of water into the ground including, but not limited to roofs, sidewalks, patios, driveways, parking lots, concrete and asphalt paving, gravel, compacted native surfaces and earthen materials, and oiled, macadam, or other surfaces which similarly impede the natural infiltration of storm water.

Individual Permit: A permit issued under the NPDES program for a specific facility, whereby the unique characteristics of that facility may be addressed through the imposition of special

conditions or requirements.

Infiltration: The downward movement of water from the surface to the subsoil. The infiltration capacity is expressed in terms of inches/hour.

Ingress/Egress: The points of access to and from a property.

Inlet: An entrance into a ditch, storm sewer, or other waterway.

Low Impact Development (LID): This term is used to describe means and methods that can be utilized to reduce the impact of development on the environment.

Minimum Control Measure (MCM): The EPA has identified six areas of focus for MS4s in developing a program to minimize the potential for pollutants to leave a jurisdiction and to enter the waters of the United States. These six areas of focus are called minimum control measures and they include:

- 1) Public Education and Outreach
- 2) Public Involvement
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Storm Water Control
- 5) Post Construction Storm Water Control

STORM WATER MANAGEMENT PLAN – 2021

- 6) Pollution Prevention and Good Housekeeping

Municipal Separate Storm Sewer System (MS4): A municipally owned and operated storm water collection system that may consist of any or all of the following: curb & gutter, drainage swales, piping, ditches, canals, detention basins, inlet boxes, or any other system used to convey storm water that discharges into canals, ditches, streams, rivers, or lakes not owned and operated by that municipality.

Mulch: A natural or artificial layer of plant residue or other materials covering the land surface which conserves moisture, holds soil in place, aids in establishing plant cover, and minimizes temperature fluctuations.

Nonpoint Source: Pollution caused by diffuse sources (not a single location such as a pipe) such as agricultural or urban runoff.

NPDES (National Pollutant Discharge Elimination System): EPA's program to control the discharge of pollutants to waters of the United States.

NPDES Permit: An authorization, or license, or equivalent control document issued by EPA or an approved state agency to implement the requirements of the NPDES program.

Off-site: Any area lying upstream of the site that drains onto the site and any area lying downstream of the site to which the site drains.

On-site: The entire property that includes the proposed development.

Outfall: The point, location, or structure where wastewater or drainage discharges from a sewer pipe, ditch, or other conveyance to a receiving body of water.

Point Source: Any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

Plat: A map or representation of a subdivision showing the division of a tract or parcel of land into lots, blocks, streets, or other divisions and dedications.

Pollutant: Generally, any substance introduced into the environment that adversely affects the usefulness of a resource. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, and accumulations, so

that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Receiving Waters: Bodies of water or surface water systems receiving water from upstream constructed (or natural) systems.

Retention: The holding of runoff in a basin without release except by means of evaporation, infiltration, or emergency bypass.

Riparian: A relatively narrow strip of land that borders a stream or river.

STORM WATER MANAGEMENT PLAN – 2021

Riprap: A combination of large stone, cobbles and boulders used to line channels, stabilize banks, reduce runoff velocities, or filter out sediment.

Runon: Stormwater surface flow or other surface flow which enters property other than that where it originated.

Runoff: That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface water. It can carry pollutants from the air and land into the receiving waters.

Sedimentation: The process of depositing soil particles, clays, sands, or other sediments that were picked up by runoff.

Sheet Flow: Runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel.

Source Control: A practice or structural measure to prevent pollutants from entering stormwater runoff or other environmental media.

Stabilization: The proper placing, grading and/or covering of soil, rock, or earth to ensure its resistance to erosion, sliding, or other movement.

Standard Operating Procedure (SOP): A written description of the standard method of performing a given task. Can include a step by step description. SOP's are developed in an effort to bring consistency to a program and to clearly define the expectations of that program. They should be the basis of training programs for municipal employees.

Storm Drain: A slotted opening leading to an underground pipe or open ditch for carrying surface runoff.

Stormwater: Rainfall runoff, snow melt runoff, and drainage. It excludes infiltration.

Storm Water Management Program (SWMP): A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to storm water, storm water conveyance systems, and/or receiving waters.

Storm Water Pollution Prevention Plan (SWPPP): A document which describes the general plan for addressing storm water pollutants at a given site. The plan characterizes the nature of the potential pollutants, describes methods and concepts for controlling those pollutants and identifies those responsible for the plan.

Swale: An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water. Swales direct stormwater flows into primarily drainage channels and allow some of the stormwater to infiltrate into the ground surface.

TMDL (Total Maximum Daily Load): An acronym for and in this Permit refers to a study that:
1) quantifies the amount of a pollutant in a stream;

- 2) identifies the sources of the pollutant; and
- 3) recommends regulatory or other actions that may need to be taken in order for the impaired waterbody to meet water quality standards.

Total Suspended Solids (TSS): An analytical measure of the amount of sediment suspended in water. TSS is typically comprised of larger sediment particles and does not include fine clays and silts that might be dissolved.

STORM WATER MANAGEMENT PLAN – 2021

Treatment Control BMP: A BMP that is intended to remove pollutants from stormwater.

Underground Injection Wells (UIW): A hole receiving storm water whose top dimension is narrower than the depth.

UPDES (Utah Pollutant Discharge Elimination System): The State of Utah's program to control the discharge of pollutants to waters of the United States.

Waters of the State: Surface waters and ground waters within the boundaries of the State of Utah and subject to its jurisdiction.

Waters of the United States: Surface watercourses and water bodies as defined in 40 CFR § 122.2. including all natural waterways and definite channels and depressions in the earth that may carry water, even though such waterways may only carry water during rains and storms and may not carry storm water at and during all times and seasons.

Wetlands: An area that is regularly saturated by surface or ground water and subsequently characterized by a prevalence of vegetation that is adapted for life in saturated soil conditions. Examples include: swamps, bogs, marshes, and estuaries.

