Cache County
1857

STORM WATER
MANAGEMENT PROGRAM

UPDES Permit Number 090072

Coverage Dates March 1, 2021 – February 28, 2026

June 2021

TABLE OF CONTENTS

TABLE OF TABLES

1 INTRODUCTION

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

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

In the State of Utah, the EPA has granted primacy to the State of Utah to oversee and manage the storm water program. The State has adopted the Utah Pollutant Discharge Elimination System (UPDES) for that purpose. Cache County has prepared this SWMP to meet the requirements of the UPDES Storm Water Discharge Permit for Small MS4s.

A. Storm Water Management Program (SWMP)

1. A SWMP should:
   a. Reduce the discharge of pollutants to the "maximum extent practicable";
   b. Satisfy the appropriate water quality requirements of the Utah Water Quality Act; and
2. The SWMP must include:
   a. Six minimum control measures;
      i. Public Education and Outreach on Storm Water Impacts
      ii. Public Participation/Involvement
      iii. Illicit Discharge Detection and Elimination (IDDE)
      iv. Construction Site Storm Water Runoff Control
      v. Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)
      vi. Pollution Prevention and Good Housekeeping for Municipal Operations
   b. BMPs will be implemented in each of the six minimum control measures to reduce pollutants to the maximum extent practicable;
   c. Measurable goals for each minimum control measure that include, as appropriate, the year in which actions will be undertaken, including interim milestones and frequency.

B. Permit Application and Notice of Intent

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

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

C. Permit Requirements

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

1. Reports

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

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

Reports for a permitting year of July 1 to June 30 are due the following October 1.

2. Record Keeping

Records required by the State must be kept for at least five years and be made accessible to the public within reasonable time during regular business hours. Records need not be submitted to the State unless the permittee is requested to do so.

D. Permit Coverage

Permit coverage is for the dates listed on the cover of the SWMP.

E. Penalties

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

2 CACHE COUNTY CHARACTERISTICS

A. General Information

The Cache County Storm Drain System falls under the Public Works Department for Cache County. The Director of Public Works can be contacted at the following address and phone number:

Matt Phillips
179 N Main, Suite 305
Logan, UT 84321
(435) 755-1639

Population:	133,154289 County Wide (2020) 7,178 Unincorporated County (2020)
Size:	1,173 sq. miles
Geographic Description:	Located between Box Elder County, Weber County, Rich County, and the Idaho border with elevations varying between 4,408 ft. to 9,980 ft.
Receiving Waters:	Cutler Reservoir
Annual Precipitation:	17.7 inches per year
Type of Community:	Rural County
Latitude:	41.69° N
Longitude:	111.75° W

B. Storm Drain System

The Cache County storm water system consists of mostly swales, ditches, canals and rivers. The majority of the storm water flows through swales and ditches which allow most of the water to infiltrate into the ground. Water that doesn't infiltrate eventually ends up in the Cutler Reservoir either directly or through canal outfalls. It should be noted that before entering the tributaries, much of the water must flow over fields. The canals and ditches have served as the recipient for storm water flows since the county establishment. Very few controls exist within the system. Most of the roads use swales and ditches to collect storm water runoff.

The Cache County storm drain system is integrated with other communities. The county boundaries are located between Box Elder County, Weber County, Rich County, and the Idaho border.

C. Sewer System

The county currently has very few homes connected to sanitary sewer service hookups. Most sewage is currently treated in septic tanks. Local Water Quality Concerns

The water quality within the Cache County is relatively good. Some of the streams or waterways in the county have been identified as protected under Section 303(d) of the Clean Water Act. The list includes Bear River, Clarkston Creek, Cub River, High Creek, Little Bear River (East Fork to Hyrum, Hyrum to Cutler), Logan River (West), Newton Creek, South Fork Little Bear (Headwaters), Spring Creek (College Ward, and Lewiston), Summit Creek (Lower), Cutler

Reservoir, Hyrum Reservoir, Newton Reservoir, and Tony Grove Lake. The hope and intent of this SWMP is to maintain that status and possibly even improve the current water quality.

As previously mentioned, the storm water in Cache County is transported in swales, ditches, canals, and rivers that allow for large amounts of infiltration. For the most part, the existing system has worked well. Continued growth is expected to put some pressure on canal, ditch and swale capacities. Cache County is currently controlling increased storm water runoff from development with localized retention facilities as a design standard.

Based upon Total Maximum Daily Loads (TMDL's) of Cutler Reservoir along with routine activities within Cache County, target pollutants for Cache County have been identified as the following:

Table 2.C.1: Target Pollutants

Priority	Target Pollutant
1	Total Phosphorus*
2	Total Suspended Solids (TSS)*
3	Total Dissolved Solids (TDS)
4	Nitrate as N
5	Total Nitrogen
6	BOD5
7	E. coli
8	Oil & Grease

*Source: Middle Bear River and Cutler Reservoir Final TMDL

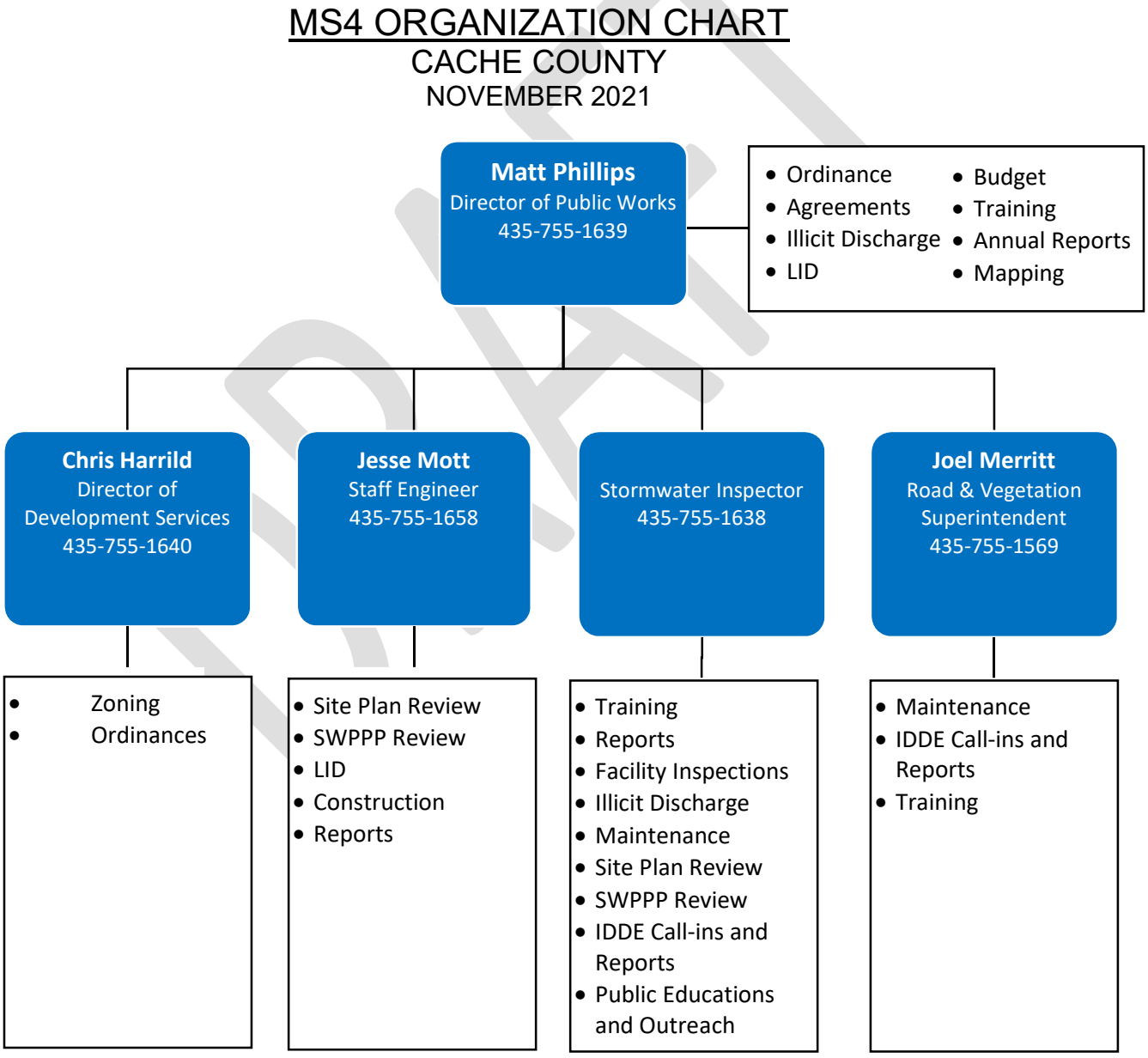
Cache County's SWMP has been geared toward small rural applications, targeting the pollutants mentioned. Agricultural runoff water and water off the undeveloped landscape is a vast majority of the storm water source in the county and is not specifically targeted within in this program. Runoff from development that is permitted under the MS4 is a much smaller percentage. The focus of this program is meeting the requirements of the Phase II Small MS4 Permit within the county, trying to stay in harmony with the rural nature and act within the existing budget structure.

D. Steering Committee

A "Storm Water Steering Committee" consisting of county members was formed in summer of 2014 and has taken an active role in selecting the BMPs and developing the SWMP for the county. A list of the Steering Committee members is found in Table 2.C.1.

Table 2.D.1: Cache County Storm Water Steering Committee

Name	Representing
Matt Phillips	Public Works
Chris Harrild	Development Services
Jesse Mott	Staff Engineer
	Stormwater Inspector
Joel Merritt	Road and Vegetation Superintendent
Jason Winn	Cache County Fire District



3 MINIMUM CONTROL MEASURES

A. MCM 1 – Public Education and Outreach on Storm Water Impacts: Permit Section – 4.2.1

1. Overview

The operator of a regulated small MS4 needs to implement a multimedia public education program to distribute educational materials to four main focus groups.

a. Residents
b. Businesses, Institutions and Commercial Facilities
c. Developers and Contractors
d. MS4-owned and Operate Facilities

2. Summary of Existing Efforts

a. Educational Materials

Focus Groups: Residents
Businesses, Institutions and Commercial Facilities
Developers and Contractors
MS4-owned and Operated Facilities

All cities in Cache County contract with Service Area #1 to provide garbage collection, waste services, and a recycling program. The Cache County Council serves as board for Service Area #1, which in turn contracts with Logan City Environmental Division to provide the services. There are educational materials online covering subjects of recycling, waste reduction, and proper disposal that are available at the local landfill.

b. Recycling Program

Focus Groups: Residents
Businesses, Institutions and Commercial Facilities
Developers and Contractors
MS4-owned and Operated Facilities

Along with the solid waste management for the valley, Logan City is the local leader in the valley recycling program. Curbside recycling of typical household items is available across the valley. A hazardous waste dump site is situated adjacent to the landfill where oils, solvents, paints, fuels, appliances and other harmful wastes can be disposed.

c. Green Waste Collection

Focus Groups: Residents
Businesses, Institutions and Commercial Facilities
MS4-owned and Operated Facilities. A curbside green waste collection program and regional containers exist across the County. The Logan Landfill has a green waste facility where green waste can be dropped off and it is either composted or made into wood chips or firewood.

d. Storm Water Fair

Focus Groups: Residents

Annually in the spring, the MS4 Permitted communities combine efforts to conduct a storm water fair for fourth to sixth graders across the valley. This has been a successful event annually and continues to grow in attendees and educational opportunities at the fair.

e. Contractor Training

Focus Groups: Developers and Contractors

Annually Logan City and Cache County conducts contractor training of standards and specifications of construction in the City. In addition to that training, contractors are educated on the MS4 Permit requirements and inspection requirements for contractors.

3. Best Management Practices

In order to help meet the goals and objectives of this SWMP, Cache County has chosen to adopt the following BMPs for use within our county as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. Only those BMPs listed below will be utilized by Cache County as part of their SWMP at the present time.

Table 3.A.1: BMPs for Public Education and Outreach on Storm Water Impacts

BMP
Public Education Materials
Classroom Education on Storm Water
Using Media
Employee Training

a. Rational for Public Education BMPs

i. Educational Materials: Many MS4 communities in Cache County utilize this BMP in their Public Education and Outreach Efforts. Some examples of these include brochures and information distributed at the storm water fair. Public education and participation allows citizens of the community to become knowledgeable through these many efforts.

ii. Classroom Education on Storm Water: This BMP was chosen based upon the success of the ongoing storm water fair. The storm water fair creates an outdoor classroom environment for students to learn from an interactive environment.

iii. Using Media: Using media has been selected due to the opportunity to partner with existing MS4 Communities in Cache Valley on media efforts.

iv. Employee Training: Employee training is provided to keep employees current on storm water permitting requirements, keep information fresh in their minds and allow for discussion of better implementation of the SWMP.

Cache County has a variety of employees. The frequency and content of the training depends on the position held by the employee. A training log will be kept to document the various employee training programs.

4. Measurable Goals

In order to more fully realize the benefit of the BMP the county has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Public Education and Outreach.

The following table includes the goals for MCM 1.

Table 3.A.2: MCM 1 – Public Education and Outreach on Storm Water Impacts

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
1.1	All pollutants	All Residents	**4.2.1.1** – Based on land uses and target audiences, educate on ways to avoid, minimize, and reduce/eliminate impacts of storm water discharge along with the associated actions	Continue storm water fair annually	Annually	Public Education Materials, Using Media, Classroom Education on Storm Water	Fair occurs annually	Ongoing
1.2	All pollutants	All Audiences	**4.2.1.2** – Provide and document information provided to target audience on prohibitions against illicit discharges and improper disposal of waste including, but not limited to: • maintenance of septic systems • effects of outdoor activities such as lawn care • benefits of on-site infiltration of storm water • effects of automotive work and car washing on water quality • proper disposal of swimming pool water • property management of pet waste	Include information on the website	Annually	Public Education Materials, Using Media	Information is current on website	Ongoing
1.3	All Pollutants	Businesses, Institutions and Commercial	**4.2.1.3** – Provide and document information provided to target audience on prohibitions against illicit discharges and improper disposal of waste including, but not limited to: • proper lawn maintenance • benefits of appropriate on-site infiltration of storm water • building and equipment maintenance • use of salt or other deicing materials • proper storage of materials • proper management of waste materials and dumpsters • proper management of parking lot surfaces	Include information on the website that is targeted to businesses and commercial activities	Annually	Public Education Materials, Using Media	Information is current on website	Ongoing
1.4	All Pollutants	Contractors & Developers	**4.2.1.4** – Provide and document information provided to target audience regarding reduction of adverse impacts from storm water runoff from development sites	Creation of Cache County Land Disturbance Permit	2022	Public Education Materials	Land Disturbance Permits are obtained by homeowners or contractors when needed	Ongoing
1.5	Illicit discharge and waste	MS4 Employees	**4.2.1.5** – Provide and document information and training provided to target audience on prohibitions against illicit discharges and improper disposal of waste including, but not limited to: • equipment inspection to ensure timely maintenance • proper storage of industrial materials • proper management of waste materials, dumpsters and disposal sites • minimization of use of salt or other deicing materials • benefits of appropriate on-site infiltration • proper maintenance of parking lot surfaces	Have annual training on illicit discharges.	Annually	Employee Training	Training occurs annually and recorded in training log.	Ongoing
1.6	All pollutants	MS4 Employees	**4.2.1.6** – Provide and document information and training provided to target audience to learn about: • Low Impact Development (LID) practices • green infrastructure practices • post construction control and associated Best Management Practices (BMPs)	Require an annual meeting with all development and plan review staff, and land use planners to review the county's LID goals. Discuss what has been done in the past year to meet the goals, and define the upcoming year's goals.	Annually	Employee Training	Annual meeting occurs	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
1.7	All pollutants	All Audiences	**4.2.1.7** – Evaluate the effectiveness of the public education and outreach program by evidence/demonstration that the defined goal has been achieved. Identify methods that will be used.	1. Research evaluation methods and select the best one. 2. Implement the selected evaluation method	1. Jan. 2022 2. Jan. 2023	Public Education Materials	Evaluation method	Ongoing
1.8	All pollutants	All Audiences	**4.2.1.8** – Provide written documentation or rationale why certain BMPs were chosen for public education program (over others)	Include an explanation in the SWMP.	2022	Public Education Materials	Documented rationale included in the SWMP.	Done
1.9	All Pollutants	All Audiences	Place storm water information signs at marina locations in the county.	1. Review options for placement of signs with agencies. 2. Explore costs. 3. Install signs if able.	2019	Public Education Materials	1. Signs placed throughout county. 2. Results in a reduced number of dumping occurrences.	Completed maintain signs as needed

B. MCM 2 – Public Participation / Involvement: Permit Section – 4.2.2

1. Overview

Involving the public is key to any successful SWMP. Representative from stakeholder groups need to have the ability to be involved and participated in the program through various means. Groups that may be involved include:

a. Residences
b. Commercial and Industrial Business
c. Trade Associations,
d. Environmental Groups
e. Homeowner Association
f. Education Organizations:

To involve these groups, Cache County currently follows the public notification process for public meetings. This allows members from each of the stakeholder groups to provide input into the SWMP. In addition to this notice, the County has made the SWMP available on the County website for public review and comment. Each year the County will review any comments that have been received and implement changes as needed. The updated SWMP will then go to the Cache County council for review and approval.

2. Summary of Existing Efforts

a. **Steering Committee:** A "Storm Water Steering Committee" consisting of county members was formed in summer of 2014 and has taken an active role in selecting the BMPs and developing the SWMP for the county. A list of the Steering Committee members is found in Section 2.4.

b. **Recycling Program:** All jurisdictions within Cache County contract with Service Area #1 for waste management services which include a recycling program. Logan City Environmental Division is contracted by Service Area #1 to provide services to the cities and county.

The program reduces solid waste by recycling and offers proper disposal options for hazardous wastes that can be difficult to dispose of, thereby preventing storm water contamination due to improper disposal of hazardous wastes and solids. The landfill accepts: cardboard, newspaper, aluminum cans, tin/steel cans, plastic pop bottles, plastic milk jugs, green waste, aluminum scrap, ferrous metals, tires, used oil, oil filters, antifreeze, carpet pad, batteries, wood pallets, and mixed paper for recycling. Drop-sites have also been set up throughout the county to facilitate recycling. The drop sites accept cardboard, newspaper, mixed paper, aluminum cans, tin/steel cans, plastic pop bottles, plastic milk jugs, and green waste.

c. **Green Waste Collection:** A curbside green waste collection program and regional containers exist across the County. The Logan Landfill has a green waste facility where green waste can be dropped off and it is either composted or made into wood chips or firewood.

3. Best Management Practices

In order to help meet the goals and objectives of this SWMP, Cache County has chosen to adopt the following BMPs for use within our county as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. Only those BMPs listed below will be utilized by Cache County as part of their SWMP at the present time.

Table 3.B.1: BMPs for Public Participation / Involvement

BMP
Community Hotline
Public Education Materials
Community Cleanup

4. Measurable Goals

In order to more fully realize the benefit of the BMP, the county has set specific goals. The goals set along with the existing efforts fulfill the requirements of the Storm Water Phase II Final Rule for Public Participation and Involvement.

The following table summarizes the goals for MCM 2.

Table 3.B.2: MCM 2 – Public Participation / Involvement

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
2.1	All pollutants	General public	**4.2.2.1** – Adoption of a program or policy to create opportunities for public input during the decision making process	Notify the public 30 days in advance of the county council meeting when the SWMP update will be reviewed.	Annually	Public Education Materials	The program or policy is in place	In place
2.2	All pollutants	General public	**4.2.2.2** – Make the SWMP document available to the public for review and comment.	Have a digital and online copy of the draft of the permit available.	Continually	Public Education Materials	SWMP document is available for public review a week before public hearing	In place
2.3	All pollutants	General public	**4.2.2.3** – Make available for public review the current SWMP document for the life of the permit. The current version shall be posted to the Permitee's website denoting a specific contact person and phone number or email address to allow public input	1. Post the SWMP on the county website. 2. Post updated SWMP annually with required contact information.	1. Continually 2. Annually	Public Education Materials	SWMP is updated and posted on the website annually with contact information.	In place
2.4	All Pollutants	All Audiences	Establish a community hotline for reporting storm water related incidents	Implement hotline.	Continually	Community Hotline	Established hotline	In place

C. MCM 3 – Illicit Discharge Detection and Elimination (IDDE): Permit Section – 4.2.3

1. Overview

Illicit discharges are non-storm water discharges that enter into natural water bodies through various methods and means. The Illicit Discharge Detection and Elimination (IDDE) control measure is intended to prevent illicit connections and discharges to natural drainages by monitoring outfalls, performing inspections of county owned facilities and maintaining inventories of storm water infrastructure.

2. Summary of Existing Efforts

a. **Ordinances**: An existing county ordinance exists that allows the county to charge the negligent party for the cost of cleanup when a hazardous spill occurs. "No Dumping" ordinances exist at this time.

b. **Hazardous Material Mapping**: Cache County has mapped existing hazardous materials across the county and placed them on the County's GIS System. This mapping system can be used to identify high priority areas for outfall inspections.

c. **Hazardous Spills:** Currently, reports of spills are handled through 911 Dispatch. When reported to dispatch, spill reports are logged and assessed and addressed by the Bear River Health Department, Cache County Fire Department and other local hazardous material response teams.

d. **Illicit Discharges**: The County has not generally experienced problems with individuals or businesses illicitly connecting their sanitary waste water piping to storm drains. More-common types of illicit discharges include septic tank overflows, spills from highway accidents, and concrete truck wash out water. Although it has not been documented, it is also suspected that some homeowners dump used oil, antifreeze and household chemicals into ditches.

e. **Used Oil Program**: Refer to the "Used Oil Recycling Program" page on the Utah Department of Environmental Quality Waste Management & Radiation Control page for information regarding the used oil program.

f. **Storm Water System Map**: See Appendix C.

3. Best Management Practices

In order to help meet the goals and objectives of this SWMP, Cache County has chosen to adopt the following BMPs for use within our county as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. Only those BMPs listed below will be utilized by Cache County as part of their SWMP at the present time.

Table 3.C.1:BMPs for Illicit Discharge Detection and Elimination (IDDE)

BMP
Ordinance Development
Illegal Dumping Controls
Identify Illicit Connection
Long-term Operation and Maintenance
Community Hotline
Public Education Materials
Employee Training
Used Oil Recycling
Hazardous Waste Management
Hazardous Materials Storage Mapping
Septic System Controls

4. Measurable Goals

   In order to more fully realize the benefit of the BMP the county has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for IDDE.

   The following table includes the goals for MCM 3.

Table 3.C.2: MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
3.1	N/A	MS4	**4.2.3.1** – Maintain a current storm water map that includes: • Outfall locations with names and location of all State waters that receive discharge from these outfalls • Storm drain pipe and other structures	Continue implementing policy. Have all map updates done annually.	Annually	Long-term Operation and Maintenance	Annual map review and update map as needed	Ongoing
3.2	All Pollutants	All Audiences	**4.2.3.2** – Effectively prohibit, through ordinance or other regulatory mechanism, non-SW discharges. The IDDE program must have adequate legal authority to detect, investigate, eliminate and enforce against non-SW discharges.	Review ordinance to meet the permit requirements	Sept. 2016	Ordinance Development	Ordinance updated by Sept. 2016	In place
3.3	All Pollutants	All Audiences	**4.2.3.3** – Implement a written plan to detect and address non-SW discharges. The plan shall include: • Priority areas likely to have illicit discharge (4.2.3.3.1) • Annual field inspections of areas considered a priority area as identified in Permit Part 4.2.3.3.1 (4.2.3.3.2) • Dry weather screening at least once during the 5-year Permit term verifying outfall locations (4.2.3.3.3) • If the Permittee discovers or suspects that a discharger may need a separate UPDES Permit, (i.e. Industrial Storm Water Permit, Construction Dewatering Permit) notify the *Director* within 30 days (4.2.3.3.4)	1. Complete annual priority area field inspections. 2. Complete dry weather screening for 20% of all outfalls each year. 3. Have SOP in place and training for Staff. 4. Report any businesses that need a UPDES permit to the *Division* (Utah Division of Water Quality).	Annually	Identify Illicit Connection	1. Successful if all screens are done. 2. Successful if completed by that date and staff is following SOP.	Ongoing
3.4	All Pollutants	All Audiences	**4.2.3.4** – Implement standard operating procedures (SOPs) for tracing the source of an illicit discharge	Follow SOPs for tracing illicit discharges	Continually	Identify Illicit Connection	Illicit Discharges are found and eliminated	Ongoing
3.5	All Pollutants	All Audiences	**4.2.3.5** – Implement SOPs for characterizing the nature of any illicit discharges found or reported to the Permittee by the hotline developed in 4.2.3.9. The Permittee must record the following in an inspection report: • The date the Permittee became aware of the non-SW discharge • The date the Permittee initiated an investigation of the discharge • The date the discharge was observed • The location of the discharge • Description of the discharge • Method of discovery • Date of removal, repair or enforcement action • Date and method of removal verification	1. Follow the Incidence Response Flow Chart and train personnel. 2. Review flow chart and SOP with staff and provide training annually.	Continually	Identify Illicit Connection, Community Hotline	1. Successful staff is following Flow Chart. 2. Successful if training is completed annually for all staff involved in incident reporting.	Ongoing
3.6	All Pollutants	All Audiences	**4.2.3.6** – Implement SOPs for ceasing the illicit discharge. All IDDE investigations must be thoroughly documented and may be requested at any time by the *Division*.	Follow the Incidence Response Flow Chart and train personnel	Continually	Illegal Dumping Controls	Successful if training is completed annually for all staff involved in incident reporting.	Ongoing
3.7	All Pollutants	All Audiences	**4.2.3.7** – Inform public employees, businesses and the general public of hazards associated with illicit discharges and improper disposal of waste	See MCM 1	See MCM 1	Public Education Materials, Employee Training	See MCM 1	Ongoing
3.8	Household Hazardous Waste	Residents	**4.2.3.8** – Promote or provide services for the collection of Household Hazardous Waste	Maintain the Household Hazardous Waste address and phone number on County website	Continually	Used Oil Recycling, Hazardous Waste Management	Information on the website	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
3.9	Household Hazardous Waste	Residents	**4.2.3.9** – Publicly list and publicize a hotline or other telephone number for public reporting of spills and other illicit discharges. A written record shall be kept. The Permittee must develop a written response procedure, and a flow chart even if it is a different entity that is responsible (4.2.3.9.1).	Maintain the community hotline Phone number on the County website	Continually	Community Hotline	Information on the website	Ongoing
3.10	All Pollutants	All Audiences	**4.2.3.10** – Adopt and implement procedures for program evaluation and assessment. Include a database for mapping, tracking of the spills or illicit discharges identified and inspections conducted	Utilize GIS for tracking and documenting illicit discharges	Continually	Identify Illicit Connection, Long-term Operation and Maintenance	Successful if spills are tracked and recorded	Ongoing
3.11	All Pollutants	Contractors & Developers, MS4	**4.2.3.11** – Receive minimum annual training in the IDDE program. Immediate training for new hires along with follow-up training as needed to address to changes. A summary of such training shall be included in the annual report.	Train employees on IDDE permit items and procedures	New Hires – Within 60 days of hire All Others – Annually	Employee Training	Summarize training in annual report	Ongoing

D. MCM 4 – Construction Site Storm Water Runoff Control: Permit Section – 4.2.4

1. Overview

Runoff from construction sites can be a large contributing factor to storm water pollution. By controlling construction site runoff through planning, design and construction best management practices, pollution to natural water bodies can be greatly reduced. Review of erosion control plans, Storm Water Pollution Prevention Plans and regular site inspection aid in implementation of this control measure to reduce non-storm water discharges.

2. Summary of Existing Efforts

a. Site Inspectors: The storm Water Inspector conducts at minimum monthly inspections of constructions sites in the unincorporated part of the county. When problems are discovered they work with eh contractor or homeowner to make the needed corrections.

3. Best Management Practices

In order to help meet the goals and objectives of this SWMP, Cache County has chosen to adopt the following BMPs for use within our county as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. Only those BMPs listed below will be utilized by Cache County as part of their SWMP at the present time.

Table 3.D.1: BMPs for Construction Site Storm Water Runoff Control

BMP
Erosion Control Plan
Contractor Certification and Inspector Training
Employee Training
Public Education Materials
Infrastructure & Land Use Planning
Ordinance Development
Zoning
Using Media

4. Measurable Goals

In order to more fully realize the benefit of the BMP, the county has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Storm Water Phase II Final Rule for Construction Site Storm Water Runoff Control.

The following table includes the goals for MCM 4.

Table 3.D.2: MCM 4 – Construction Site Storm Water Runoff Control

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
4.1	Sediment, Construction Site Debris, Oils and Grease	Contractors & Developers	**4.2.4.1** – Revise, as necessary, and enforce an ordinance or other regulatory mechanism that requires the use of erosion and sediment control at construction sites. Ordinance shall: • Be equivalent with most current UPDES Storm Water General Permits for Construction • Include sanctions • Require a Storm Water Pollution Prevention Plan (SWPPP) • Permittees shall ensure construction operators obtain and maintain coverage under the current UPDES Storm Water General Permit for Construction • Ordinance shall include a provision for access to inspect construction storm water BMPs on private properties	1. Research minimum lot size to require permit. 2. Require a SWPPP for every construction site over minimum amount. 3. Review contractor permit coverages throughout projects.	Jan. 2017	Ordinance Development, Public Education Materials	Successful if 100% of all required construction sites have a working SWPPP	In place
4.2	Sediment, Construction Site Debris, Oils and Grease	Contractors & Developers	**4.2.4.2** – Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism which shall include: • SOPs • Documentation and tracking of all enforcement actions	1. Draft ordinance to include escalating enforcement provisions. 2. Develop and begin using a construction site enforcement action log/database.	Jan 2017	Ordinance Development	1. Successful if completed by milestone date. 2. Successful if we have a log and are using it.	In place
4.3	Sediment, Construction Site Debris, Oils and Grease	Contractors & Developers	**4.2.4.3** – Develop and implement SOP's for pre-construction SWPPP review for construction sites	Continue using checklist and begin to do pre-construction reviews of SWPPP	Dec, 2016	Erosion Control Plan	Successful if we are conducting SWPPP reviews	In place
4.4	Sediment, Construction Site Debris, Oils and Grease	Contractors & Developers	**4.2.4.3.1** – Conduct a pre-construction SWPPP review which includes: • Review of the site design • Review of the planned operations at the construction site • Review planned BMPs during the construction phase • Review planned BMPs to be used to manage runoff created after development	Hold pre-construction meetings on all common plans of development and high priority construction sites	Dec. 2016	Public Education Materials (See MCM #1)	Successful if we are conducting Pre-con meetings	In place
4.5	Sediment, Construction Site Debris, Oils and Grease	Contractors & Developers	**4.2.4.3.2**– The Permittee must develop procedures for receiving and considering information and comment submitted by the public on proposed projects.	Provide the public with contact information related to proposed projects.	Dec 2016	Public Education Materials	Maintain a log of all comments	In place
4.6	Sediment, Construction Site Debris, Oils and Grease	Contractors & Developers	**4.2.4.3.3** – Identify priority construction sites considering the following factors at a minimum: • Soil erosion potential • Site slope • Project size and type • Sensitivity of and proximity to receiving waterbodies • Non-SW discharges and past record of non-compliance by the operators of the construction site	Review construction projects using SWPPP preconstruction review to determine if site is a priority.	Continually	Erosion Control Plan	When pre-construction is completed, documented the results.	Ongoing
4.7	Sediment, Construction Site Debris, Oils and Grease	Contractors & Developers	**4.2.4.4.1** – Perform inspections of all new construction sites at least monthly by qualified personnel using the Construction Storm Water Inspection Form	Conduct monthly inspections of required construction sites	Continually	Contractor Certification and Inspector Training	Successful if 100% of required construction sites are inspected monthly	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
4.8	Sediment and Construction Site Debris	Contractors & developers, MS4 staff	**4.2.4.4.2** – The Permittee must inspect all phases of construction and document in its SWMP the procedure for being notified by construction operators/owners of their completion of active construction so that verification of final stabilization and removal of all temporary control measures may be conducted.	1. Develop a written Notice of Termination (NOT) process for use within the county. 2. Train SWPPP inspectors and their supervisors on the NOT process.	1. July 2022 2. Dec 2022	Erosion Control Plan	Successful if 95% of all active construction sites are terminated appropriately	Ongoing
4.9	Sediment, Construction Site Debris, Oils and Grease	Contractors & developers, MS4 staff	**4.2.4.4.3** – Conduct biweekly inspections on priority construction sites defined in Part 7.36	Inspect high priority sites biweekly	Continually	Erosion Control Plan	Successful if all high priority sites are inspected bi-weekly	Ongoing
4.10	Sediment, Construction Site Debris	Contractors & developers, MS4 staff	**4.2.4.4.4** – Based on inspection findings, must take all necessary follow-up actions to ensure compliance	Follow escalating enforcement	Continually	Ordinance Development	If enforcement is following through	Ongoing
4.11	Sediment, Construction Site Debris	Contractors & developers, MS4 staff	**4.2.4.4.5** – Publicly provide and publicize a hotline or other local telephone number for reporting of storm water related issues on construction signage	Verify that website information is up to date at all times. Post hotline number at permitted construction sites.	Continually	Using Media	Successful if information is posted on web and onsite.	Ongoing
4.12	Sediment, Construction Site Debris	Contractors and developers, MS4 staff	**4.2.4.5** – Ensure that all staff whose primary job duties are related to implementing the construction storm water program are annually trained to conduct those activities	Develop a county policy to require all SWPPP inspectors to be a qualified inspectors per the Construction General Permit within 6 months	Continually	Contractor Certification and Inspector Training, Employee Training	Successful if inspector is qualified within 6 months of hire	Ongoing
4.13	Sediment, Construction Site Debris	MS4 staff	**4.2.4.6** – Maintain records of all projects. Records shall be kept for five years or until construction is completed, whichever is longer.	Establish a log of records	Continually	Erosion Control Plan	Successful if active construction sites are recorded in the log	Ongoing

E. MCM 5 – Long-term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management): Permit Section – 4.2.5

1. Overview

The intent of Long-term Storm Water Management is to maintain post construction runoff conditions to those of pre-construction runoff. This pertains to both quantity and quality. Techniques such as Low Impact Development (LID) are required to be used when designing for Long-term Storm Water Management.

Long-term Storm Water Management applies to sites over one acre in size and sites less than one acre when part of a common plan of development (CPoD). Applicability of this minimum control measure also pertains to private and public development sites including roads.

When redevelopment of an area occurs within the community, considerations to reduce storm water runoff and improve water quality must also be considered.

2. Summary of Existing Efforts

a. Site Inspectors: The storm Water Inspector conducts at minimum yearly inspections of constructions sites in the unincorporated part of the county. When problems are discovered they work with the property owner or HOA to make the needed corrections.

3. Best Management Practices

In order to help meet the goals and objectives of this SWMP, Cache County has chosen to adopt the following BMPs for use within our county as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. Only those BMPs listed below will be utilized by Cache County as part of their SWMP at the present time.

Table 3.E.1: BMPs for Long-term Storm Water Management in New Development and Redevelopment

BMP
Public Education Materials
Employee Training
Ordinance Development
Long-term Operation and Maintenance
Infrastructure & Land Use Planning
BMP Inspection and Maintenance

4. Measurable Goals

In order to more fully realize the benefit of the BMP, the county has set specific goals. The goals set, along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Post Construction Runoff Control.

The following table includes the goals for MCM 5.

Table 3.E.2: MCM 5 – Long-term Storm Water Management in New Development and Redevelopment

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
Post-construction Controls								
5.1	All Pollutants	All Audiences	4.2.5.1 New development/redevelopment program must have requirements or standards 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).	Review and update existing design standards to comply with permit requirements.	July 2022	Ordinance Development	Successful if standards are updated	
5.2	All Pollutants	MS4 Staff, Contractors and Developers	4.2.5.1.2 Each Permittee shall develop and define specific hydrologic method or methods for calculating runoff volumes and flow rates. The 80th percentile rain event is the minimum volume that must be retained on-site.	Review and update existing design standards to comply with permit requirements	July 2022	Ordinance Development	Successful if standards are updated	
5.3	All Pollutants	MS4 Staff, Contractors and Developers	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.	Review and update existing design standards to allow for LID and provide the minimum practices	July 2022	Ordinance Development	Successful if standards are updated	
Regulatory Mechanism								
5.4	All Pollutants	MS4 Staff, Contractors, Developers, and Design Professionals	4.2.5.2 Develop and adopt an ordinance that 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)	Draft updated ordinance to comply with permit requirements.	July 2022	Ordinance Development	Successful if standards are updated	
5.5	All Pollutants	MS4 Staff, Contractors, Develops, 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)	5.5.1 Complete inspection during installation.	Ongoing	BMP Inspection and Maintenance	Inspections being completed	
				5.5.2 Draft a Maintenance Agreement template.	July 2021	BMP Inspection and Maintenance	If draft is completed by the milestone date	
				5.5.3 Adopt a Maintenance Agreement template	July 2022	BMP Inspection and Maintenance	If template is adopted and being used by milestone date	
				5.5.4 Complete inspections every other year or once every five depending on property ownership.	Ongoing	BMP Inspection and Maintenance	If completed inspection reports are properly filed	

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
Plan Review								
5.6	All Pollutants	MS4 Staff	4.2.5.3 Perform site plan review to evaluate water quality impacts and to ensure that plans include long-term storm water management measures.	Review post-construction plans	Continually	BMP Inspection and Maintenance	If plans are regularly reviewed	Ongoing
Inventory								
5.7	All Pollutants	MS4 Staff	4.2.5.4 Maintain an inventory of post construction BMPs	Inventory log updated annually	Annually	BMP Inspection and Maintenance	If log is updated	Ongoing
Training								
5.8	All Pollutants	MS4 Staff	4.2.5.5 Provide adequate training for all staff involved in post-construction storm water management, planning and review, and inspections and enforcement.	Schedule and conduct training for appropriate personnel	Annually	BMP Inspection and Maintenance	If all appropriate personnel are trained	Ongoing

F. MCM 6 – Pollution Prevention / Good Housekeeping for Municipal Operations: Permit Section – 4.2.

1. Overview

The intent of the Pollution Prevention / Good Housekeeping control measure is to maintain and construct county owned facilities in such a way to prevent pollutants from entering into the storm water system. This is accomplished by developing and implementing an operation and maintenance program, outlining standard operating procedures (SOPs) and defining roles and responsibilities of staff overseeing the SWMP.

2. Summary of Existing Efforts

The County currently maintains the following items in its storm water system.

Table 3.F.1: Storm Water System Maintenance Items

Item	Maintenance
Catch Basins	As needed
Detention Basins	As needed
Parking Lot Sweeping	Periodically when refinished
Pipes and Culverts	As needed

a. Operational Procedures

Cache County currently operates with a limited amount of equipment. This equipment is primarily cleaned and fueled at the Public Works facility. This provides a controlled environment to help prevent chemicals or fuels from entering the storm water system.

The County stores equipment and materials at the Public Works facilities and other facilities throughout the County. Salt is stored in covered bays to reduce pollutants during rain events.

3. Best Management Practices

In order to help meet the goals and objectives of this SWMP, Cache County has chosen to adopt the following BMPs for use within our county as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. Only those BMPs listed below will be utilized by Cache County as part of their SWMP at the present time.

Table 3.F.2: BMPs for Pollution Prevention / Good Housekeeping for Municipal Operations

BMP
BMP Inspection and Maintenance
Long Term Operation and Maintenance
Parking Lot Cleaning
Catch Basin Cleaning
Employee Training
Building and Grounds Maintenance
Area Control Procedures
De-Icing Chemical Use and Storage
Material Use
Housekeeping Practices
Infrastructure & Land Use Planning
Animal Carcass Removal
Used Oil Recycling

4. Measurable Goals

In order to more fully realize the benefit of the BMP, the county has set specific goals. The goals set, along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Pollution Prevention/Good Housekeeping.

The following table includes the goals for MCM 6.

Table 3.F.3: MCM 6 – Pollution Prevention / Good Housekeeping for Municipal Operations

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
6.1	All Pollutants	MS4	**4.2.6** – All Permittees shall implement a program for Permittee-owned or operated facilities, operations and structural storm water controls that include: • SOPs • Pollution prevention BMPs • SWPPP • A training component that have the ultimate goal of prevention All components of the program shall be included in the SWMP and identify the department/staff responsible. The Permittee shall annually review this inventory.	Update Org chart and define specific responsibilities for all departments shown.	Annually	Housekeeping Practices, Employee Training	If org chart is complete and up to date by milestone date.	Ongoing
6.2	All Pollutants	MS4	**4.2.6.1** – Permittee shall develop and keep current a written inventory of Permittee-owned or operated facilities and storm water controls	Update listing of MS4 owned/operated facilities.	Annually	Housekeeping Practices	If list is completed by milestone date.	Ongoing
6.3	All Pollutants	MS4	**4.2.6.2** – All Permittees must assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1. for their potential to discharge to storm water the following typical urban pollutants: • Sediment • Nutrients • Metals • Hydrocarbons (e.g., benzene, toluene, ethylbenzene and xylene) • Pesticides • Chlorides • Trash • Other pollutants that may be associated with the facilities A description of the assessment process and findings must be included in the SWMP document	Update the list of facilities	Annually	Housekeeping Practices, BMP Inspection and Maintenance, Material Use	List is up to date and documented appropriately.	Ongoing
6.4	All Pollutants	MS4	**4.2.6.3** – The Permittee must identify "high-priority" facilities or operations based on the assessment in Part 4.2.6.2. The factors considered are: • Amount of urban pollutants stored at the site • The identification of improperly stored materials • Activities that must be performed outside • Proximity to waterbodies • Poor housekeeping practices • Discharge of pollutant(s) to impaired water(s)	Review facilities and update high priority facilities list.	Annually	Housekeeping Practices, Material Use	If completed and documentation recorded.	Ongoing
6.5	All Pollutants	MS4	**4.2.6.4** – The Permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for each "high-priority" Permittee-owned or operated facility. The SWPPP shall include a detailed site map and an inspection schedule of the facility.	1. Develop SWPPP's for each High Priority Facility. 2. Update SWPPPs as required for each facility.	1. July 2022 2. Continually	Housekeeping Practices, Long Term Operation and Maintenance, De-Icing Chemical Use and Storage	SWPPPs are created and up to date.	Ongoing
6.6	All Pollutants	MS4	**4.2.6.5** – The following inspections shall be conducted at "high-priority" Permittee-owned or operated facilities: 1. Visual: weekly to monthly **2.** Comprehensive: quarterly to 2x per year **3.** Visual observation: quarterly to annually	Conduct the required inspections	Continually	Housekeeping Practices, BMP Inspection and Maintenance	If 100% of inspections are completed	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)						
6.7	All Pollutants	MS4	**4.2.6.6** – SOPs shall be developed and implemented for the following types of facilities and/or activities: 1. Buildings and facilities (4.2.6.6.1) 2. Material storage areas, heavy equipment storage areas and maintenance areas (4.2.6.6.2) 3. Parks and open space (4.2.6.6.3) 4. Vehicle and equipment (4.2.6.6.4) 5. Roads, highways and parking lots (4.2.6.6.5) 6. Storm water collection and conveyance system (4.2.6.6.6) 7. Other facilities and operations (4.2.6.6.7)	SOP's are updated	Annually	Housekeeping Practices, Parking Lot Cleaning, Catch Basin Cleaning, Building and Grounds Maintenance, Removal, Used Oil Recycling, Area Control Procedures	SOP's are up to date and revised as needed	Ongoing
6.8	All Pollutants	MS4	**4.2.6.7** – If a Permittee contracts with a third-party to conduct municipal maintenance or allows private developments to conduct their own maintenance, the contractor shall be held to the same standards as the Permittee. This expectation must be defined through contracts.	Include contractual obligation to meet MS4 Permit Standards in agreements with Contractors	Continually	Employee Training	All Contractors are trained and following the MS4 requirements	Ongoing
6.9	All Pollutants	Developers & Contractors, MS4	**4.2.6.8** – The Permittee must develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the Permittee or that discharge to the MS4. A description of this process must be included in the SWMP document.	1. Draft a policy/process to assess water quality impacts on all new flood control projects. 2. Have policy approved.	1. July 2022 2. Dec. 2022	Infrastructure & Land Use Planning	1. If draft is prepared and ready for internal review process by milestone date. 2. If policy is approved and adopted by milestone date.	
6.10	All Pollutants	Developers & Contractors, MS4	**4.2.6.8.1** – Existing flood management structural controls must be assessed to determine whether changes or additions should be made to improve water quality. A description of this process must be included in the SWMP document.	See MCM 5 for goals (part of the retrofit program)	Continually	Infrastructure & Land Use Planning	Flood structures are assessed for water quality issues	Ongoing
6.11	All Pollutants	Developers & Contractors, MS4	**4.2.6.9** – Develop a plan to retrofit sites that are adversely impacting water quality.	Monitor existing facilities.	Continually	See MCM 4	Confirm they aren't impacting water quality.	Ongoing
6.12	All Pollutants	Developers & Contractors, MS4	**4.2.6.10** – The Permittee shall ensure that all employees, contracted staff and other responsible entities that have primary construction, operation or maintenance job functions that are likely to impact storm water quality receive annual training. These individuals shall receive training upon hire and annually thereafter.	All employees are trained as outlined in the permit	New Hires – 60 days of hire All Others-Annually	Employee Training	Employees are trained and recorded on log	Ongoing

APPENDIX A

BEST MANAGEMENT PRACTICES (BMPs)

TABLE OF CONTENTS

BMP SUMMARY

The following section includes a list of storm water Best Management Practices (BMPs) that can be implemented in various circumstances to improve the storm water quality in the county. If an individual would like to implement an Alternate BMP that has not been approved by the county, you must receive approval from the county prior to implementation.

Each BMP fact sheet indicates the level of effectiveness for removing targeted pollutants and implementation requirements.

BMP: Animal Carcass Removal

Description:

Removal and proper disposal of animal carcass' can improve storm water quality by reducing pollution or contamination.

Approach:

- Improper animal carcass disposal can have a negative impact upon water quality and can lead to pollution or contamination of water intended for domestic use. Carcasses should be disposed of within 24 hours and must not be disposed in water or on a publicly used road. Animal carcasses may be disposed of at the Logan Landfill (193 N 1400 W Logan, UT 84321) during regular business hours.

Limitations:

- Public awareness.
- Ability for the public to haul carcasses.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Area Control Procedures

Description:

Area control procedures involve practicing good housekeeping measures such as maintaining clean indoor/covered material storage and industrial processing areas. Keeping these locations clean reduces the risk of accumulating pollutant making contact with storm water.

Approach:

- Area control procedures can be used at any facility where materials may be tracked into areas where they can come in contact with storm water runoff including locations that store, process, or otherwise handle potentially polluting materials.

Effective practices include the following:

- Coveralls, foot mats, and other devices used to collect residual material should be cleaned regularly.
- Use coveralls, smocks, and other over garments in areas where exposure to material is of greatest concern.
- Materials storage areas and industrial processing areas should be checked regularly to ensure that good housekeeping measures are implemented.

Limitations:

- May not be effective in managing liquid pollutants
- May not be effective in areas with high vehicle traffic.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: BMP Inspection and Maintenance

Description:

Inspect and maintain all structural BMP's on a routine basis to remove pollutants from entering storm drain inlets. This includes the establishment of a schedule for inspections and maintenance.

Approach:

- Regular maintenance of all structural BMP's is necessary to ensure their proper functionality.
- Annual inspections.
- Prioritize maintenance to clean, maintain, and repair or replace structures in areas beginning with the highest pollutant loading.
- Clean structural BMP's in high pollutant areas just before the wet season to remove sediments and debris accumulated during the summer and fall.
- Keep accurate logs of what structures were maintained and when they were maintained.
- Record the amount of waste collected.

Limitations:

- Cost
- Availability of trained staff
- Private facilities may not have a proper understanding of the need and methods to complete the needed maintenance and inspections.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ■ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Buildings and Grounds Maintenance

Description:

Prevent or reduce the discharge of pollutants to storm water from buildings and grounds maintenance by washing and cleaning up with as little water as possible, preventing and cleaning up spills immediately, and maintaining the storm water collection system.

Approach:

- Preserve existing native vegetation to reduce water, fertilizer, and pesticide needs.
- Carefully use pesticides and fertilizers in landscaping.
- Take care in over-watering landscape sites to reduce the risk of discharge of water contaminated with nutrients and pesticides.
- Utilize integrated pest management where appropriate.
- Sweep paved surfaces.
- Clean the storm drainage system at appropriated intervals, includes marking storm drain inlets to minimize the dumping of inadvertent liquids.
- Properly dispose wash water, sweepings, and sediments.
- Clean all catch basins in parking lots whenever the sump is full.

Limitations:

- Alternative pest/weed controls may not be available, suitable or effective in every case.
- Older infrastructure may be lacking and/or limit the effectiveness of this BMP

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☒ Nutrients
- ☒ Heavy Metals
- ☒ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☒ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Catch Basin Cleaning

Description:

Maintain catch basin and storm water inlets on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, and restore the catch basins' sediment trapping capacity. A catch basin is distinguished from a storm water inlet by having at its base a sediment sump designed to catch and retain sediments below the overflow point.

Approach:

- Annual inspections.
- Prioritize maintenance to clean catch basins and inlets in areas with the highest pollutant loading or in high priority areas.
- Clean catch basins in high pollutant load in the late fall to remove sediments and debris accumulated during the summer prior to snow melt and spring rains.
- Keep accurate logs of the number of catch basins cleaned.
- Record the amount of waste collected.

Limitations:

- Staff time and or funding to complete cleaning.
- Ensuring that private catch basins are maintained and inspected.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☒ Nutrients
- ■ Heavy Metals
- ☐ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☒ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Classroom Education on Storm Water

Description:

Student education is an integral part of any storm water pollution outreach program. Providing storm water education through schools exposes the message not only to students but to their parents as well. Topics can include water conservation, proper lawn and garden care, and proper disposal of hazardous household wastes.

Approach:

- Building a strong relationship with the school district is the most important step in getting storm water education into the schools.
- Educate students of the potential impacts of hazardous household materials on water quality; ways to properly store, handle, and dispose of the chemicals; water usage reduction strategies; usage of farm and landscape chemicals, etc.
- Targeted education programs to 4th grade students in the Logan and Cache County School Districts.

Limitations:

- Maintaining interest in the topic for students and teachers.

Minimum Control Measures

- ■ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ■ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ■ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Community Cleanup

Description:

Promote and encourage community members to clean up neighborhoods, city parks, streets, streams, or other properties. This effort involves the removal of litter and bulky waste as well as the removal of green waste, such as yard clippings, trees, branches, leaves, or other types of undesirable vegetation.

Approach:

- Provide localized green waste and recycling dumpsters throughout the valley and specified community locations.
- Provide roadside cleanup volunteers plastic bags for the collection and disposal of waste along county roads.

Limitations:

- The number of locations is limited based on cost to maintain the location or removal services.
- All trash waste must still be brought to the Logan Landfill.

Minimum Control Measures

- ☐ Public Education and Outreach
- ■ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☒ Sediment
- ☐ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☐ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Community Hotlines

Description:

Government authorities cannot monitor all water bodies all the time, so community hotlines provide an additional means for citizens and agencies to contact the appropriate authority to report water quality problems.

Approach:

- For emergencies where spills or discharges can pose an immediate threat to life, property, or the environment the public should be directed to call 911. Dispatch operators can then contact local authorities as needed, including the storm water inspector, to deal with the issue.
- Non-emergency storm water concerns can be emailed to stormwater@cachecounty.org or called in to (435)755-1640.
- All distributed materials should include pollution hotline numbers and information.
- An inspector should promptly respond to a hotline call/email and, in most cases, visits the complaint location(s).
- If a responsible party can be identified, the inspector will contact and informs the party of the problem, and instructs the party how to resolve the problem. Enforcement procedures as established in County code 15.32 shall be followed.

Limitations:

- The ability to properly inform the public about where to call and for what issues.
- No immediate staffing is available outside regular business hours for non-emergency spills.

Minimum Control Measures

- ☐ Public Education and Outreach
- ■ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☒ Sediment
- ☐ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☐ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Concrete Waste Management

Description:

Prevent or reduce the discharge of pollutants to storm water from concrete waste by either conducting washout off-site or performing on-site washout in a designated area.

Approach:

- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing or ordering excess amounts of fresh concrete or cement.
- Perform washout of concrete trucks off-site in appropriate locations or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water to a bermed or level area. (See Earth Berm Barrier information sheet.)
- Train employees and subcontractors in proper concrete waste management.
- Allow concrete waste to harden then haul to the Logan Landfill.

Limitations:

- Off-site washout of concrete wastes may not always be possible.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☒ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Contractor Certification & Inspector Training

Description:

One of the most important factors determining whether or not erosion and sediment controls will be properly installed and maintained on a construction site is the knowledge and experience of the contractor. By providing training opportunities, contractors will have a better understanding of required and recommended storm water techniques.

Approach:

- Training and certification will help to ensure that storm water plans are properly implemented and that best management practices are properly installed and maintained.
- Contractor certification can be accomplished through County/City sponsored training courses.
- The County will have mandatory pre-construction meetings and conduct regular and final inspection visits to provide information to contractors.

Limitations:

- Contractor certification and inspector training programs require a substantial amount of effort on the part of the County and private contractors.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☒ Nutrients
- ☒ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☒ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: De-icing Chemical Use and Storage

Description:

De-icing chemicals are used each winter on roads, parking lots, and sidewalks. Sodium chloride (salt) is the main chemical used. Proper use and storage of salt will reduce the chance of high chloride concentration in runoff that may damage the environment.

Approach:

- Store salt products in closed containers or covered locations. When not in active use, long term stockpiles should have a barrier placed to limit potential runoff from the storage location.
- De-icing equipment should be calibrated annually prior to the snow season to ensure proper application rates of the material.
- The County will utilize brine or mag chloride as a pre-storm treatment in areas that ice over or are difficult to plow to reduce the amount of salt required in these locations.
- Use only enough salt to break the ice/pavement bond, then remove the remaining slush by plowing.

Limitations:

- Public safety is of primary importance and de-icing materials will be used as needed to maintain safe roadways.
- Environmental conditions of each winter and each storm create a variable need for de-icing materials, sometimes requiring event by event readjustment of application rates.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☒ Nutrients
- ☒ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☒ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Dust Control

Description:

Dust control measures are used to stabilize soil from wind erosion and reduce dust by construction activities. This does not apply to gravel and dirt roads.

Approach:

- Water trucks are typically used for dust control on construction sites.
- Limit application of water to minimize runoff of site excavation.
- Depending on weather, water may need to be applied multiple times a day.
- Watch for possible sediment track out from construction site onto roadways.

Limitations:

- Topography may limit accessibility of water trucks.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Public Education Materials

Description:

Educational Materials to present information to the public on storm water issues and water quality awareness is important to helping the public and contractors understand the need and requirements of the program. Providing storm water education online and at the county offices exposes the message to a wide variety of people. Topics can include Water conservation, proper lawn and garden care, and proper disposal of hazardous household wastes.

Approach:

- Building a strong relationship with citizens is the most important step in providing storm water education.
- Educational materials can be tailored to all different age groups and technical background.
- The educational material should make people aware of:
  - The potential impacts of hazardous household materials on water quality.
  - Inform residents of ways to properly store, handle, and dispose of chemicals and other household wastes.
  - Methods to conserve water in residences.
  - Proper care of landscapes and the use and storage of chemicals and fertilizers.
- Dissemination of the materials should be handled in a manner that enables the broadest method of contact. Targeted groups (contractors) can be educated through the permit process, but additional methods to reach the public will need to be reviewed.

Limitations:

- Not everyone will actually read or incorporate the information into their lives.
- Because the County does not have a utility billing system, distribution of material other than online is nearly impossible.

Minimum Control Measures

- ■ Public Education and Outreach
- ■ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ■ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ■ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ■ Bacteria & Viruses
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Employee Training

Description:

Employee training is critical to operating an effective storm water program. Employees need to understand how storm water impacts their work activities and be able to inform contractors, businesses, and the public about storm water requirements.

Approach:

Employee training should be based on the following:

- Promote a clear identification and understanding of County and State storm water regulations, specific to each position and department's needs;
- Train employees on pertinent BMPs and Standard Operating Procedures (SOP);
- Integrate employee feedback into training and BMP and SOP implementation.
- Integrate training regarding storm water quality management with existing training programs that may be required for other regulations.

Limitations:

- Obtaining employee focus and acceptance on yet another requirement which may alter long held standard practices

Minimum Control Measures

- ■ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ■ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ■ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ■ Bacteria & Viruses
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Erosion Control Plan

Description:

In order for erosion control measures to be effective during a construction project, an Erosion Control Plan will be submitted and approved before work can begin. An Erosion Control Plan describes what erosion control BMPs will be implemented during the project.

Approach:

- The County may assist contractors in creating a list of possible erosion control BMPs that could be implemented in any given project.
- Require submittal of erosion & sediment control plans for projects that require it.
- Maintain comprehensive and easy to use checklists for County staff and contractors/builders so everyone is equally informed of requirements and expectations.

Limitations:

- Must be enforced to be affective.
- Sometimes site conditions are different than planned on and the plans have to be modified.
- The BMPs have to be installed early on in the project, maintained, and removed at the end of the project

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☒ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Establish/Compile Design Standards

Description:

Standard drawings show contractors and inspectors what is proper practice and provides a minimum requirement. This also includes compilation of storm water related drawings with other standard drawings.

Approach:

- Develop specifications that reduce water pollutants.
- Adopt standards that depict proper construction practices and acceptable designs and make available to the public and contractors.
- Require that the design standards be met on all projects.
- Train inspectors and other County personnel on all storm water related standards.

Limitations:

- Must be enforced to be affective.
- Sometimes site conditions are different than planned on and the plans have to be modified.
- The BMPs have to be installed early on in the project, maintained, and removed at the end of the project

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ■ Nutrients
- ☒ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☒ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Hazardous Materials Storage Mapping

Description:

Create maps of existing hazardous material storage locations to facilitate better housekeeping practices and emergency response.

Approach:

- Utilize GIS to create accurate maps of the hazardous materials storage, including the material stored, approximate quantities, storage address, and responsible party contact information.
- All County facilities should be inventoried and mapped.
- Private industrial or commercial facilities with large hazardous material storage areas should also be inventoried and mapped.

Limitations:

- It may be difficult to develop a complete and comprehensive list and location of all privately controlled hazardous materials.
- Maintaining accurate logs of the materials, quantities, and location may be difficult as those materials are used or new materials are ordered.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Hazardous Waste Management

Description:

Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use, waste disposal, and training of employees, the public, and contractors.

Many of the chemicals used on-site can be hazardous materials which become hazardous waste upon disposal. These wastes may include: Paints and solvents; petroleum products such as oils; fuels and greases; herbicides and pesticides; acids for cleaning masonry; and concrete curing compounds.

In addition, sites with existing structures may contain wastes which must be disposed of in accordance with federal, state and local regulations, including: Sandblasting grit mixed with lead, cadmium or chromium based paints, asbestos, and PCBs.

Approach:

The following steps will help reduce storm water pollution from hazardous wastes:

- Use all of the product before disposing of the container.
- Do not remove the original product label, it contains important safety and disposal information.
- Apply herbicides and pesticides only as needed and only in accordance with the requirements established on the label.
- Dispose of unused or construction related hazardous wastes at the Logan Landfill hazardous waste location.

Limitations:

- Educating the public and contractors about proper disposal of hazardous waste.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☒ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Housekeeping Practices

Description:

Promote efficient and safe housekeeping practices (storage, use, and cleanup) when handling potentially harmful materials such as fertilizers, pesticides, cleaning solutions, paint products, and automotive products.

Approach:

- Integrate this best management practice as much as possible with existing programs.
- For the general public: establish a public education program that provides information on such items as storm water pollution and beneficial effects of proper disposal on water quality; reading product labels; safer alternative products; safe storage, handling, and disposal of hazardous products; list of local agencies; emergency phone numbers, etc.
- County facilities should develop controls on the application of pesticides, herbicides, and fertilizers in public right-of-ways and at county facilities. Controls may include:
  - Product and application information for users.
  - Equipment use and maintenance procedures.
  - Record keeping and public notice procedures.

Limitations:

- It may be difficult finding the best medium to disseminate information to the public

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Identifying Illicit Connections

Description:

Identification and elimination of illegal or inappropriate connections of industrial, business, residential and agricultural wastewater sources to the storm drain system or natural waterways. It attempts to prevent contamination of ground and surface water supplies by regulation, inspection, and removal of these connections.

Approach:

The following methods are often used for identifying improper discharges to the storm drain system or natural waterways:

- Visual Inspection. A physical examination of piping connections or analysis by closed circuit camera is used to identify possible illicit connection sites.
- Piping Schematic Review. Architectural plans and plumbing details are examined for potential sites where improper connections have occurred.
- Dye Testing. Colored dye is added to the drain water in suspect piping. Dyed water appearing in the storm drain system indicates an illegal connection, possibly between the sanitary sewer system and the storm drain.
- Instituting building and plumbing codes to prevent connections of potentially hazardous pollutants to storm drains.
- Flow Monitoring. Monitoring increases in storm sewer flows during dry periods can also lead investigators to sources of infiltration due to improper connections.
- Inspection using video equipment

Limitations:

- Access to private property can create difficult in identifying location of inappropriate connections.
- Rain fall can hamper efforts to monitor flows and visual inspections.
- The large area of the County and dispersed development pattern can make visual inspection difficult.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ■ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ■ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Illegal Dumping Controls

Description:

Implement measures to detect, correct, and enforce against illegal dumping of pollutants on roads, into the storm drain system, on the ground, and into natural waterways. Illegally dumped substances includes: paints, used oil and other automotive fluids, construction debris, chemicals, fresh concrete, leaves, grass clippings, and pet wastes.

Approach:

- Increase the general public's awareness of the issue and help them identify the incident and correct it.
- Provide educational material to county staff and the public to recognize and report incidents.
- Establish system for tracking illegal dumping incidents which will identify location, date/time, type and quantity of material, method of dumping, and the responsible party if possible.
- Clean the illegally dumped materials up as possible.

Limitations:

- The elimination of illegal dumping is dependent on the availability, convenience, and cost of alternative means of disposal.
- Ability to enforce is limited because identifying the responsible party is difficult.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☒ Sediment
- ☐ Nutrients
- ☒ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ☒ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Infiltration

Description:

A series of systems in which the majority of the runoff from small storms is infiltrated into the ground rather than discharged to a surface water body. Infiltration systems include: vegetated areas, ponds, vaults, trenches, dry wells, porous pavement, and concrete grids.

Approach:

- Volume of the BMP should be sized to capture a particular amount of runoff from an event.
- Emergency overflow or bypass for larger storms is needed.
- The County's primary method of handling storm water is in open roadside swales that allow for filtration and infiltration.
- Infiltration surface must be protected during construction.
- Exposed earth needs vegetation or other stabilizing methods installed to prevent erosion.

Limitations:

- Loss of infiltrative capacity and high maintenance cost in fine soils.
- Low removal of dissolved pollutants in very coarse soils.
- May not be suitable on steep slopes.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☒ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ☒ Floatable Materials
- ■ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Infrastructure & Land Use Planning

Description:

Infrastructure planning makes wise decisions about where to locate public services—water, sewer, roads, schools, and emergency services. Land use mechanisms should protect sensitive lands, encourage appropriate development, and minimize impact on natural areas.

Approach:

- Focus development into municipalities that have a broader range of services.
- Limit development on substandard roads, limiting the expansion of road services. Locate new development on roads already receiving services.
- Enforce zoning mechanisms that protect sensitive lands in compliance with County code 17.18.

Limitations:

- Infrastructure planning is often done on a regional scale and requires a cooperative effort between all the communities within a given region in order to be successful.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ■ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☒ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Inlet Protection

Description:

Inlets at or near areas where construction activities will occur should be protected from sediments and other construction related pollutants and runoff.

Approach:

- Utilize an approved method to restrict sediment and other construction related pollutants from entering and inlets. The type, method, and installation of an inlet protection must be approved and inspected prior to commencement of construction activities.
- Inlet protection must be inspected periodically and after large storm events.
- Remove accumulated sediments on a regular basis to ensure proper functioning of the protection system.

Limitations:

- Excess flows may bypass the inlet requiring down gradient controls.
- Ponding may occur at inlet

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Long-term Operation and Maintenance

Description:

Establishment and implementation of a schedule for long term operation and maintenance procedures for the existing storm drain system.

Approach:

- Review existing maintenance schedule and/or efforts.
- Review the requirements necessary to maintain the existing storm drain system.
- Create a schedule for long term operation and maintenance of the storm drain system.
- Implement the maintenance schedule.

Limitations:

- Cost and availability of trained staff.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☒ Nutrients
- ■ Heavy Metals
- ☐ Toxic Materials
- ☒ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ■ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Material Use

Description:

Prevent or reduce the discharge of pollutants to storm water from material use by using alternative products, minimizing hazardous material use on-site, and training employees and subcontractors.

The following materials are commonly used on construction sites: Pesticides and herbicides, fertilizers, detergents, plaster and other products, petroleum products such as fuel, oil, grease, acids, lime, glues, paints, solvents, and curing compounds.

Approach:

- Use less hazardous, alternative materials as much as possible.
- Minimize use of hazardous materials on-site.
- Use only materials where and when needed to complete the construction activity.
- Follow manufacturer's instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals.
- Personnel who use hazardous materials should be trained in their use.
- Do not over apply fertilizers, herbicides, and pesticides. Prepare only the amount needed.
- Allow sufficient dry time between chemical application and potential rain.

Limitations:

- Alternative materials may not be available, suitable, or effective in every case.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Ordinance Development

Description:

Develop new and review existing ordinances and policies to prohibit non-storm water discharges into the Municipal Separate Storm Sewer System (MS4) and meet the requirements of the Utah General Construction Permit.

Approach:

- Draft storm water ordinances and infrastructure standards for consistency and compliance with state regulations.
- Ensure that new ordinances, the Storm Water Master Plan, Measurable Goals, BMPs, and Standard Operating Procedures comply and meet the minimum requirements of the State.
- Educate the public about the new ordinances and standards and ensure enforcement is fair and equitable.

Limitations:

- Because of the complicated and comprehensive nature of the requirements, ensure clear and non-overlapping requirements in the appropriate location (ordinance, standard, SWMP, supporting material) is difficult.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ■ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☒ Sediment
- ☒ Nutrients
- ☒ Heavy Metals
- ☒ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☒ Oil & Grease
- ☒ Floatable Materials
- ☒ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Portable Toilets

Description:

Temporary on-site sanitary facilities for construction personnel.

Approach:

- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Position portable toilets so that they are secure and will not be tipped or knocked over.
- Position at least 10 feet from any storm water conveyance, inlet, curb or gutter. Portable toilets should be maintained in good working order, which includes regular waste collection, by a licensed service with daily observation for leak detection.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

Limitations:

- No limitation.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ■ Floatable Materials
- ■ Bacteria & Viruses
- ☒ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Riprap

Description:

Riprap is a permanent, erosion-resistant protective layer made of rock. It is intended to protect soil from erosion in areas of concentrated runoff. Riprap may also be used to stabilize slopes that are unstable because of seepage problems.

Approach:

- Riprap is normally used at locations where erosive forces from water flow exceed the ability of the soil or vegetative cover to resist those forces.
- Riprap can be used for pipe outlet protection, channel lining, scour protection, etc.
- For slopes steeper than 2:1, consider using materials other than riprap for erosion protection.
- When working within streams, obtain any required State and Federal Permits and follow permit requirements.
- Riprap should be inspected annually and after major storms.
- If riprap has been damaged, repairs should be made promptly to prevent a progressive failure.
- In designing riprap consider the following:
  - Use durable rock, such as granite, and a variety of rock sizes.
  - The thickness of riprap layers should be at least 1.25 times the maximum stone diameter.
  - Filter material (smaller interlocking rocks) is recommended between riprap and the underlying soil surface.

Limitations:

- Riprap may be unstable on very steep slopes.
- If repairs are needed repeatedly at one location, the site should be evaluated to see if original design conditions have changed.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Rock Check Dams

Description:

A small dam constructed across a drainage ditch to reduce velocity of concentrated storm water flows, thereby reducing the erosion of the ditch. Rock check dams can be utilized in: Temporary drainage paths, Permanent drainage ways not yet stabilized, Existing drainage paths receiving increased flows due to construction, or in steep drainages that cannot be stabilized with only vegetation.

Approach:

- Construct dams in conformance with County infrastructure standards.

Limitations:

- Do not use in:
  - running stream
  - natural waterways

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Site Revegetation

Description:

Seeding of grass and plantings of trees, shrubs, vines and ground covers provide long-term stabilization of soil Grasses can be planted for temporary and long term stabilization. This BMP is the preferred method of site stabilization in the County.

Approach:

- Type of vegetation, site and seedbed preparation, planting time, fertilization and water requirements should be considered for each application.
- Use of native plant materials that require less water and maintenance are preferred. A series of vegetated layers is preferred to stabilize soil.
- Grass or ground covers for immediate and full ground coverage.
- Perennials, shrubs and trees for more extensive root stabilization of soils.
- Noxious or invasive weeds must be removed from a site and not replanted.

Limitations:

- Permanent and temporary vegetation may not be appropriate in dry periods without irrigation.
- Fertilizer and green waste may have potential to create storm water pollution.
- Grasses may need to be watered and mowed.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ■ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☒ Nutrients
- ☐ Heavy Metals
- ☒ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Septic Systems Controls

Description:

Locate failed septic systems, non-permitted systems, or systems that do not work appropriately.

Approach:

- If failed systems are located, refer them to the Bear River Health Department for correction or replacement.

Limitations:

- Septic systems are completely under the control of the State of Utah and the Bear River Health Department. The County has no jurisdiction over septic systems.
- Perhaps the biggest limitation to correcting failing septic systems is the lack of techniques for detecting individual failed systems.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Silt Fence

Description:

A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts which can be used in the following applications:

- Perimeter control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier at top of stream bank
- Inlet protection: place fence surrounding catch basins.

Approach:

- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- Backfill trench over filter fabric to anchor. Ensure that the fabric is buried at all points of the silt fence installation.
- Inspect periodically and after rainfall events to ensure effectiveness. Repair or replace damaged fence as needed.
- Remove accumulated sediment when it reaches ½ the height of the fence.
- Anchor silt fencing if needed on slopes.

Limitations:

- Recommended maximum drainage area of 0.5 acre per 100 feet of fence.
- Recommended maximum uphill grade of 2:1 (50%).
- Recommended maximum flow rate of 0.5 cfs.
- Ponding should not be allowed behind fence.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Sorbents

Description:

Sorbents are materials that are capable of cleaning up spills through the chemical processes of adsorption and absorption. Sorbents adsorb (an attraction to the outer surface of a material) or absorb (taken in by the material like a sponge) only when they come in contact with the sorbent materials. Sorbents are useful BMPs for facilities with liquid materials onsite.

Approach:

- Apply sorbents immediately to the spill area to adsorb and absorb the spilled material.
- Properly dispose the sorbent.

Limitations:

- Requires a knowledge of the chemical makeup of a spill (to choose the best sorbent).
- May be an expensive practice for large spills.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ☒ Heavy Metals
- ■ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☒ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Stabilized Construction Entrance

Description:

A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface.

Approach:

- Clear and grub area and grade to provide maximum slope of 2% away from the paved roadway.
- Compact subgrade and place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.
- Inspect adjacent roadway daily (more frequent if the site is wet or muddy) for sediment deposit and clean by sweeping or shoveling.
- Repair entrance and replace gravel as required to maintain control in good working condition.
- Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

Limitations:

- Requires periodic top dressing with additional stones.
- Should be used in conjunction with street sweeping on adjacent public right-of-way.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Straw Bale Barrier

Description:

Temporary sediment barrier consisting of a row of entrenched and anchored straw bales that can be used in the following types of applications:

- Perimeter Control: place barrier at downgradient limits of disturbance.
- Sediment barrier: place barrier at toe of slope or soil stockpile.
- Protection of existing waterways: place barrier at top of stream bank.
- Inlet Protection.

Approach:

- Excavate a 4-inch minimum deep trench along contour line, i.e. parallel to slope, removing all grass and other material that may allow underflow.
- Place bales in trench with ends tightly abutting, fill any gaps by wedging loose straw into openings.
- Anchor each bale with 2 stakes driven flush with the top of the bale.
- Backfill around bale and compact to prevent piping, backfill on uphill side to be built up 4-inches above ground at the barrier.
- Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- Look for runoff bypassing ends of barriers or undercutting barriers.
- Repair or replace damaged areas of the barrier and remove accumulated sediment.
- Realign bales as necessary to provide continuous barrier and fill gaps.
- Re-compact soil around barrier as necessary to prevent piping

Limitations:

- Recommended maximum area of 0.5 acre per 100 feet of barrier
- Recommended maximum uphill grade of 2:1 (50%)

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Temporary Drains and Swales

Description:

Temporary drains and swales are used to divert off-site runoff around the construction site, divert runoff from stabilized areas around disturbed areas, and direct runoff into sediment traps.

Approach:

- Temporary drainage swales will effectively convey runoff and avoid erosion if built properly.
- Permanent drainage channels must be designed by a professional engineer.
- At a minimum, the drain/swale should conform to predevelopment drainage patterns and capacities.
- Construct the drain/swale with an uninterrupted, positive grade to a stabilized outlet. Provide erosion protection or energy dissipation measures if the flow out of the drain or swale can reach an erosive velocity.
- Inspect weekly and after each rain. Repair any erosion immediately and remove any sediment build up.

Limitations:

- Temporary drains and swales must not adversely impact upstream or downstream properties.
- Temporary drains and swales must conform to local floodplain management requirements.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Used Oil Recycling

Description:

Used motor oil is a hazardous waste because it contains heavy metals picked up from the engine during use. Since it is toxic to humans, wildlife, and plants, it should be disposed of properly.

Approach:

- Used oil should be disposed of at a vehicle service center that accepts used oil, the Logan Landfill, or other businesses that accept or use used oil.

Limitations:

- If oil is mixed with other substances or if storage containers have residues of other substances, this can contaminate oil and make it a hazardous waste.
- It is often difficult to effectively educate the public and convince them of the importance of recycling oil.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ■ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ■ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Using the Media

Description:

The media can help in educating the public about storm water issues. Through the media, a program can educate targeted or mass audiences about problems and solutions, build support for remediation and retrofit projects, or generate awareness and interest in storm water management.

Approach:

- Newspapers. Newspapers are powerful vehicles for delivering educational information, policy analyses, public notices, and other messages. Depending on the message or event, the appropriate format might be a news release or a news advisory.
- Radio. Radio remains a strong media presence due to its affordable production costs and ability to reach targeted audiences.
- Internet Message. The Internet is a powerful means of communication and will be the primary method of information distribution used by the County.

Limitations:

- There can be costs associated with some forms of media presence.
- Media information can be just as damaging in terms of misrepresentation of information, disseminating unclear information, and sensationalizing otherwise trivial issues.

Minimum Control Measures

- ■ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ■ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ☐ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ■ Sediment
- ■ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ■ Bacteria & Viruses
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

BMP: Vehicle and Equipment Maintenance & Repair

Description:

Prevent or reduce the discharge of pollutants to storm water from vehicles and equipment maintenance and repair by running a dry shop.

Approach:

- Keep equipment clean, don't allow excessive build-up of oil and grease.
- Keep drip pans or containers under the areas that might drip.
- Do not change motor oil or perform equipment maintenance in non-appropriate areas. Field repairs shall take appropriate precautions to reduce the potential for fluid or contaminant spills.
- Inspect equipment for leaks on a regular basis.
- Segregate wastes.
- Make sure oil filters are completely drained and crushed before recycling or disposal.
- Make sure incoming vehicles are checked for leaking oil and fluids.
- Clean yard storm drain inlets regularly and especially after large storms.
- Do not pour materials down drains. Hose down work areas only after dry seeping and cleaning the surface as much as possible.
- Store idle equipment under cover.
- Drain all fluids from wrecked vehicles.
- Recycle greases, used oil or oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic, and transmission fluids.
- Switch to non-toxic chemicals for maintenance when possible and minimize use of solvents.
- Paint signs on storm drain inlets to indicate that they are not to receive liquid or solid wastes.

Limitations:

- Space and time limitations may preclude all work being conducted indoors.
- Dry floor cleaning methods may not be sufficient for some spills.

Minimum Control Measures

- ☐ Public Education and Outreach
- ☐ Public Participation/Involvement
- ☐ Illicit Discharge Detection and Elimination
- ☐ Construction Site Runoff Control
- ☐ Post-construction Runoff Control
- ■ Pollution Prevention/Good Housekeeping

■ Applicable ☐ Non-Applicable

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ■ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

APPENDIX B

STANDARD OPERATING PROCEDURES (SOPs)

STANDARD OPERATING PROCEDURES

Created: June 2016

TABLE OF CONTENTS

CONSTRUCTION: SWPPP & BMPs

Description:	This section contains information and guidelines for protecting and preparing a construction site with BMPs and a SWPPP.
Permit Section:	4.2.4.3.1
Key Requirement:	1. Require a SWPPP on construction sites per ordinances and permits. 2. Review applicable BMPs for each situation.
Procedure	
Preparation:	1. Conduct a pre-construction review of site and planned operations. 2. Responsible party to submit information required via permit process.
Process:	1. Plan which BMPs to implement during construction and post construction to manage runoff created from development activities. 2. Focus on BMPs that use low impact design (LID) and green infrastructure when opportunities exist. 3. Review any potential water quality impacts that construction activities will have and ensure that they are addressed within the SWPPP and selected BMPs
Clean Up:	None
Documentation:	Maintain records of all permits.

CONSTRUCTION: Site Inspection

Description:	This section contains information and guidelines for inspections of a construction site with BMPs and a SWPPP during and after the construction of a project.
Permit Section:	4.2.4.4.1, 4.2.4.4.2, 4.2.4.4.3
Key Requirement:	1. The permittee has the primary responsibility to inspect the site and ensure compliance with the SWPPP. 2. County to perform inspections to ensure compliance with storm water permit requirements.
Procedure	
Preparation:	Incorporate a SWPPP in any construction project containing more than 5,000 square feet in area, projects within a common plan of development, all new single family residences, and in high priority areas.
Process:	1. Inspect construction site and surrounding area for compliance with the SWPPP. a. Contractor to inspect the site as outlined in the Storm Water General Permits for Construction Activities until the site is stabilized and a NOT is filed. The primary responsibility for the SWPPP, on site BMPs, and the effectiveness of these items is the permittee (responsible party). b. County to inspect the site during construction monthly for standard sites, biweekly (every two weeks) for high priority areas. c. County to inspect the site monthly post construction until the site is stabilized and a NOT is filed. d. County to require the owner to inspect permanent BMPs annually and submit reports to the County where required by ordinance. 2. Follow SWPPP guidelines and checklists to verify that standards and permit requirements are met. 3. Stabilize site and file a NOT
Clean Up:	Remove on-site BMPs and clean up any residual waste or sediment
Documentation:	Keep a record of all county inspections with comments of alterations to BMPs, problems or violations that occur

ILLICIT DISCHARGE: Hotline Reporting

Description:	This section includes procedures for initiating spill response through the use of a hotline and collection of documentation for an illicit discharge.
Permit Section:	4.2.3.5
Key Requirement:	1. Have spill contact information readily available for staff and the public. 2. Understand how to categorize spills and the required response level.
Procedure	
Preparation:	1. Direct after hour calls to the Bear River Health 1-877-229-8825. 2. Include the spill information and emergency response numbers for the Health Department on the county website. 3. Provide county contact person to Bear River Health and Dispatch for contact when illicit discharges are reported.
Process:	1. Determine the nature of the spill. 2. If the spill is hazardous in nature or significant in size and near a water body where it could enter, report the spill immediately to 911. 3. For small spills requiring investigation by a professional during working hours call the Bear River Health Department at (435) 792-6500 to report the complaint. 4. For small spills requiring investigation after hours or if Health Department is not available call the “After Hours” hotline 1-877-229-8825 to report complaints.
Clean Up:	1. If the spill is significant or hazardous, cleanup crews will be dispatched immediately. 2. Bear River Health will contact the community representative when a complaint is issued so the community may provide assistance with the cleanup. 3. If spills are small or non-critical the county may conduct the cleanup effort.
Documentation:	1. Bear River Health Department will document incident reports received by their personnel when of a significant nature and the County compile incident reports for the SWMP.

ILLICIT DISCHARGE: Priority Area Classification

Description:	This section contains information and guidelines for the determination of Priority Areas which may have, or are more likely to have, illicit discharges.
Permit Section:	4.2.3.3.1, 4.2.3.3.2
Key Requirement:	1. Determine and maintain a list of all priority areas. 2. Complete inspections on 20% of priority areas annually. 3. Complete remediation or enforcement on IDDE issues as required.
Procedure	
Preparation:	1. Review the GIS data of Priority Areas. 2. Review 'Illicit Discharge Priority Area Classification Worksheet' and 'Priority Area Field Assessment Inspection Form'.
Process:	1. Initial determination of priority area(s). If priority area list exists, then skip to '2'. a. Using the worksheet, assess the County for the items of concern. Skip to '3'. 2. Review existing priority areas. Using the worksheet as a guide, assess whether conditions and/or activities changed that would necessitate a reduction or increase in the size of the priority areas. 3. Review all priority areas. 4. If new priority areas are found, add them to the GIS outfall map
Field Assessment:	1. Annual field assessment of 20% of the Priority Areas is required using 'Priority Area Field Assessment Inspection Report'. a. Each priority area must be inspected at least once every 5 years. 2. Report any illicit discharges or related activities and take appropriate remediation or enforcement measures
Documentation:	1. Fill in the worksheet(s) as appropriate for each priority area and insert updates into the SWMP. 2. Fill out field assessment inspection form(s) and file with the SWMP. 3. Document any illicit discharges and the corrective actions.

ILLICIT DISCHARGE: Outfall & High Priority Receiving Water Classification

Description:	This section contains information and guidelines for the verification of Outfall locations and detection of illicit discharges from Priority Areas. It also contains information on the Prioritization of the Receiving Waters.
Permit Section:	4.2.3.1, 4.2.3.3.3
Key Requirement:	1. Determine and maintain a list of all outfalls and high priority receiving waters. 2. Complete inspections on a minimum of 20% of outfalls and high priority receiving waters annually. 3. Complete remediation or enforcement on IDDE issues as required.
Procedure	
Preparation:	1. Review the GIS data of Outfalls and Receiving Water Bodies. 2. Review 'Dry Weather Screening and Visual Storm Water Discharge Examination Report', 'Receiving Waters Prioritization Worksheet', and 'High Priority Receiving Waters Field Assessment Report'.
Process:	**A. Outfall from Priority Area** 1. Initial determination of outfall(s) from priority area(s). If priority area list exists, then skip to '3'. 2. Review map of priority areas and determine the associated outfalls. Provide each outfall with a unique identifier and develop a map with the locations. 3. Review existing map of outfalls to determine whether conditions and/or activities changed that would necessitate elimination of the outfall. If an outfall is eliminated, generate a memo describing why it has been eliminated. 4. Review existing map of outfalls to determine whether conditions and/or activities changed that would necessitate an unscheduled inspection of the outfall. 5. Review High Priority Receiving Water map to assure that it includes water bodies receiving outfalls from priority area(s). 6. For all activities, adjust the GIS map accordingly and update the SWMP. **B. High Priority Receiving Water Identification** 1. Initial determination of High Priority Receiving Waters from Priority Area Outfall(s). If list exists, then skip to '3'. 2. Review GIS map of outfalls associated with the Priority Area(s). Provide a unique identifier for receiving water generate a map with the locations. Skip to '4'.

	3. Review existing list/map of High Priority Receiving Waters. For each water, determine whether conditions and/or activities changed that would necessitate elimination of the receiving water from the list. If a receiving water is eliminated, generate a memo describing why it has been eliminated, adjust map accordingly, file memo in SWMP. 4. Review existing map of High Priority Receiving Water. For each water, determine whether conditions and/or activities changed that would necessitate an unscheduled inspection of the receiving water(s). 5. Review Water Body map. Assure that receiving water map includes water bodies receiving Outfalls from all Priority Area(s). Update map as applicable and insert updates into SWMP file. 6. If changes are made to map, then utilize 'High Priority Receiving Waters Prioritization Work Sheet'.
Field Assessment:	**Priority Area Outfall Field Assessment** 1. Routine Field Assessment of the Priority Area Outfall(s) is required. 2. Using 'Dry Weather Screening and Visual Storm Water Discharge Examination Report' form, conduct field observation of outfalls. 3. Schedule shall be such that all outfalls from priority areas are inspected annually. If unable to do all outfalls, then a minimum of 20% shall be inspected per year. 4. Fill out inspection form, and file in SWMP file. 5. Report any illicit discharges or related activities and take appropriate remediation or enforcement measures **High Priority Receiving Water Field Assessment** 1. Annual Field Assessment of 20% of the High Priority Receiving Waters is required. 2. Using 'High Priority Receiving Water Field Assessment' form conduct field observation of 20% of the High Priority Receiving Waters as a percentage of the total priority area. Receiving Waters selected shall be different than those inspected in the last 5 years. 3. Based on field assessment and inspection, identify additional Receiving Waters. 4. Fill out inspection form, and file in SWMP file. 5. Report any illicit discharges or related activities found during inspection and take appropriate remediation or enforcement measures.
Documentation:	1. Where applicable, file memos from step A2 and B2. 2. File updates in in the GIS map and in the SWMP.

	3. File applicable inspections, forms and reports in SWMP. 4. Where applicable, file remediation/enforcement activity reports.

ILLIICIT DISCHARGE: Illicit Connections and Discharges

Description:	This section contains information and guidelines for stopping illicit discharges into the storm water system. This also includes characterizing the nature of and potential public/environmental threat posed by the illicit discharge.
Permit Section:	4.2.3.6
Key Requirement:	Locate and terminate illicit connections and discharges.
Procedure	
Preparation:	1. Follow IDDE inspection schedule to check for any illicit discharges in the community. 2. Log inspections on the IDDE inspection checklist
Process:	1. Locate illicit discharges. 2. Contact Bear River Health Department at 435-792-6500 during working hours, or 1-877-229-8825 after working hours for hazardous or unknown spills. 3. Notify violator of offending discharge and give direction to correct the problem. 4. Perform follow-up inspections and utilize enforcement methods as needed to correct the action.
Clean Up:	1. Ensure that all disturbed soils and surfaces are stabilized and that all debris, sediment or contaminated soil is hauled to an approved dumping site
Documentation:	1. Document all corrective actions and any cleanup items performed on site. 2. Document (including the area, material type, and amount) all illicit discharges.

ADMINISTRATION: Provide Training to Employees

Description:	Provide employees who are likely to work/impact storm water quality appropriate training.
Permit Section:	4.2.1.5, 4.2.3.11, 4.2.4.5, 4.2.5.6, 4.2.6.10
Key Requirement:	Train employees on storm water related topics
Procedure	
Preparation:	1. Establish an annual training schedule for employees. 2. Ensure access to and basic understanding of storm water mapping for all employees.
Process:	1. Train Employees on educational efforts to the public by using the established training program. 2. Train Employees on illicit discharge. Specifically what an illicit discharge is, how to classify it and how to report and document one if it occurs. 3. Train building inspectors on construction related storm water issues at building construction sites. 4. Train employees on how to reduce pollutant run off from County operated facilities and operations. 5. Train employees who have primary construction operation or maintenance job roles about standard operating procedures. 6. Keep an inventory of operated facilities and storm water controls. Train employees on the inspection process. 7. Provide annual follow-up training as needed to address procedure changes, and refreshers. 8. Train new staff on job related storm water activities immediately upon hire.
Clean Up:	None
Documentation:	Maintain a training log including participants and material covered.

ADMINSITRATION: Weekly and Quarterly Facility Inspections

Description:	Identifies the types of inspections that need to be done on a regular basis.
Permit Section:	4.2.6.5.1, 4.2.6.5.2, 4.2.6.5.3
Key Requirement:	Perform weekly visual and quarterly comprehensive inspections of County facilities
Procedure	
Preparation:	1. Identify "High Priority" facilities. 2. Map out the existing facility's storm water system.
Process:	1. Perform weekly visual inspections of identified public works related department facilities to minimize the potential for pollutants. Use necessary forms for inspections. 2. Perform quarterly comprehensive inspections of "high priority" facilities, including: storm water controls, waste storage areas, dumpsters, vehicle and equipment maintenances areas, and similar pollutant generating areas. Use necessary forms for inspection. 3. Perform quarterly visual observations of storm water discharge by looking for any possible contaminants to the storm drain system. 4. Look for evidence of spills and immediately clean them to prevent contact with run off. Identify the source of spills and correct activities to reduce future spill potential.
Clean Up:	1. Clean up spill immediately to prevent contact with precipitation or runoff. 2. Contact Illicit Discharge hotline if the spill cannot be contained and cleaned.
Documentation:	File inspection reports

ADMINISTRATION: Flood Control Structures

Description:	Assessing the water quality impacts in the design of new flood management structural controls.
Permit Section:	4.2.6.8, 4.2.6.8.1
Key Requirement:	1. Utilize storm water tools when assessing flood control projects.
Procedure	
Preparation:	1. Assess existing flood management devices to determine whether changes or additions should be made to improve water quality.
Process:	1. Incorporate in the SWPPP a set of procedures that will protect potential water quality impacts and opportunities for use of low impact design (LID) and green infrastructure. 2. Consider controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives.
Clean Up:	1. Keep log of actions performed including date and individuals involved. 2. Record the amount of materials removed or imported. 3. Use “before” and “after” photographs to document activities as applicable
Documentation:	Maintain log of actions performed.

ADMINISTRATION: Vehicle Maintenance and Repair

Description:	Protection of storm drain system from vehicles or equipment that may leak or drip petroleum products and that may also collect large amounts of dirt.
Permit Section:	4.2.6.6.2, 4.2.6.6.4
Key Requirement:	Store, clean, and maintain equipment properly.
Procedure	
Preparation:	1. Store vehicles indoors where possible and in an area with no floor drains that lead to storm water system. 2. Watch for leaking equipment and vehicles.
Process:	1. Where able, utilize private facilities to complete work on County vehicles. 2. Use drip pans or pads to collect leaking fluids from equipment or vehicles. 3. Repair leaking vehicles as soon as possible to reduce potential contamination.
Clean Up:	1. Properly clean any areas that have been polluted by leaking vehicles. 2. Wash vehicles only at approved locations. Discharge all wash water containing contaminates (degreasers, acids, and oil bases) to a treatment facility or sanitary sewer. 3. Do not store or wash vehicles over storm drain inlets.
Documentation:	N/A

BUILDING & GROUNDS: Mowing and Trimming

Description:	Information on mowing and trimming around drainage structures and the proper cleaning of mowing and trimming equipment.
Permit Section:	4.2.6.6.3
Key Requirement:	1. Mow in a manner to reduce cuttings from entering storm water system. 2. Properly clean and store equipment.
Procedure	
Preparation:	1. Review process with all building and grounds employees. 2. Locate all storm water collection structures and inlets on County property or adjacent rights-of-way.
Process:	1. Mow in a manner to minimize clippings blown toward collection structures inlets and water courses.
Clean Up:	1. Store equipment in an appropriate location away from storm water inlets. 2. Wipe off dirt, dust and fluids with disposable towel and use blower or compressed air to remove other debris. 3. Wash equipment in grass surrounded areas that drain away from natural water bodies or at commercial facilities.
Documentation:	N/A

ROADS: Right-of-Way Maintenance

Description:	This section contains information on the proper care of right-of-way areas and how to keep them clean and free of obstructions.
Permit Section:	4.2.6.6.5
Key Requirement:	Maintain clear and clean right-of-way
Procedure	
Preparation:	Locate all storm water collection structures and inlets in the right-of-way.
Process:	1. Remove downed trees or leaning trees to prevent obstruction in water courses. 2. Remove illicit dumping within the right-of-way to avoid hazardous material spills and obstructions in water courses.
Clean Up:	1. Wash equipment at appropriate locations.
Documentation:	Document where maintenance has occurred in the SWMP Log.

ROADS: Chemical Application Pesticides, Herbicides, Fertilizers

Description:	Information on the application of Pesticides, Herbicides and Fertilizers to county facilities and roads, including how to prepare, take care, and disposal of chemical products.
Permit Section:	4.2.6.6.5
Key Requirement:	Use chemicals in compliance with other permits and product labels.
Procedure	
Preparation:	Update UPDES – Pesticide General Permit as required for weed spraying activities.
Process:	1. Follow general pesticide permit for spraying. 2. Apply chemicals in compliance with the product label.
Clean Up:	Dispose of excess chemicals per general pesticide permit or at the Logan Landfill.
Documentation:	1. Keep copies of MSD sheets for all pesticides, fertilizers and other hazardous products used. 2. Maintain records and logs as required under general pesticide permit

ROADS: Catch Basins

Description:	Information on the cleaning of catch basins in the storm drain system including the disposal process of excess waste.
Permit Section:	4.2.6.6.6
Key Requirement:	Maintain clean catch basins and storm drains.
Procedure	
Preparation:	1. Locate all catch basins or storm drains. 2. Use traffic control devices as necessary.
Process:	1. Clean catch basin grate. 2. Removed loose material and haul to an approved location, dewater if necessary. 3. For mechanical cleaning, use a high powered vac truck to removed sediment. When sediment is removed, use a high pressure washer to clean any other sediment out of catch basin. 4. After catch basin is clean, have the vac truck clean the downstream pipe and pull back sediment.
Clean Up:	1. When vehicle is full of spoils take them to a contained area for drying. 2. After drying, put it into a dump truck and take it to the landfill or utilize as cover material in gravel pit.
Documentation:	Keep logs of structures cleaned including the amount and type of material removed.

ROADS: Culvert Pipe & Sump Cleaning

Description:	Information on the cleaning of storm drain culverts, sumps, injection wells, and other underground storm water detention structures. This also includes what methods to use to remove sediment and debris from the structure.
Permit Section:	4.2.6.6.6
Key Requirement:	Maintain clean culverts and underground storm water detention structures.
Procedure	
Preparation:	1. Clean sediment and trash off inlet to culvert/detention structure. 2. If possible do visual inspection of inside of culvert/detention structure to look for cracks, missing or broken pieces in the walls/sides of structure and to see what needs to be cleaned. 3. Use traffic control devices as necessary. 4. Review SOP with commercial vac truck operator.
Process:	1. Clean using a high powered vac truck, cleaning the sides of the structure and sucking out sediment on the bottom. 2. Send high powered hose down culvert and pull back any sediment. 3. Clean inlets and outlets. 4. Alternatively, remove culvert/detention structure from the ground, clear out sediment and replace the culvert/detention structure if possible, or install a new culvert.
Clean Up:	When vac truck is full of sediment take it to an approved facility to dump the sediment to dewater. Once dry, load material and take to the Logan landfill.
Documentation:	Keep logs of structures cleaned including the type and amount of material removed.

ROADS: Detention Ponds

Description:	This section contains information on the maintenance and cleaning of above ground storm drain detention ponds and structures. This also includes what methods to use to remove sediment and debris from the structure.
Permit Section:	4.2.5.5, 4.2.6.6.6
Key Requirement:	Maintain clean above ground detention structures.
Procedure	
Preparation:	1. Remove any sediment and trash from inlets, outlets, or the surface/surrounding of the pond. 2. Do a visual inspection to make sure grates are in good shape and everything is in good working order. 3. Pull grates, inspect inside of structures/boxes/pipes.
Process:	1. Provide outlet protection where feasible to minimize the amount of debris that might leave basin during cleaning process. 2. If necessary, clean basin by using backhoe to remove silt and sediment off the bottom 3. Place all sediment into a dump truck. 4. Clean structures as described for in SOP Roads: Catch Basins.
Clean Up:	Haul and dump sediment at the Logan landfill, dewatering if necessary.
Documentation:	Keep logs of structures cleaned including the type and amount of material removed.

ROADS: Creek Maintenance

Description:	Information on the maintenance and preservation of natural water courses. This also includes identifying what maintenance needs to be done and the method of how it will be accomplished.
Permit Section:	4.2.6.6.7
Key Requirement:	1. Maintain natural waterways where they impact roads and bridges. 2. Obtain required permits prior to maintenance efforts. 3. Maintenance and construction activities shall conform to permits and engineering specifications.
Procedure	
Preparation:	1. County's primary responsibility for natural waterways is where they impact or cross roads/bridges. The County will review potential maintenance in other areas based on life safety, future potential for public infrastructure failure, or the availability of grant funds. Most natural waterways are located on private land and are a private responsibility. 2. Maintain access to stream channels wherever possible. 3. Use traffic control devices as necessary. 4. Identify areas requiring maintenance and determine the method of maintenance that will be least damaging to the channel. 5. Obtain necessary permits as required by the Army Corp. of Engineers or State Engineers Office. 6. Identify access and easements to area requiring maintenance.
Process:	1. Follow requirements of permits as applicable. 2. Use techniques to minimize disruption to the stream bank or channel 3. Install clean materials free of pollutants and contaminants. 4. Place removed materials in a contained area to prevent them from re-entering the water channel.
Clean Up:	1. Stabilize all disturbed soils. 2. Haul all debris or sediment removed from area to approved dumping site. 3. Remove all tracking from paved surfaces near maintenance site, if applicable
Documentation:	1. Keep log of actions performed including the amount of materials removed or imported. 2. Use "before" and "after" photographs to document activities as applicable

ROADS: Borrow Ditch Maintenance

Description:	Information on the maintenance and preservation of borrow ditches. This also includes identifying what maintenance needs to be done and the method of how it will be accomplished.
Permit Section:	4.2.6.6.6
Key Requirement:	Identify and complete needed maintenance along borrow ditches.
Procedure	
Preparation:	1. Identify areas requiring maintenance. 2. Identify the source of potential water in the ditch (irrigation vs. runoff). 3. Use traffic control devices as necessary. 4. Identify areas that require vegetation control, reseeding, riprap, or culvert replacement. 5. Establish procedures for removal of material from ditch maintenance including stockpiling of material removed or hauling methods. 6. Determine what man power or equipment will be required.
Process:	1. Place removed materials in an area outside of roadway travel lanes. 2. Install needed riprap or culverts. Use only clean materials free of pollutants and contaminants.
Clean Up:	1. Stabilize all disturbed soils. 2. Haul all debris or sediment removed from area to approved dumping site. 3. Remove all tracking from paved surfaces near maintenance site, if applicable
Documentation:	1. Keep log of actions performed including the amount of materials removed or imported. 2. Use “before” and “after” photographs to document activities as applicable.

ROADS: Chip Seal

Description:	Information on the protection and maintenance of storm drain system while chip sealing roadways. This also includes guidelines for chip sealing and for the cleaning of roadways after a chip seal has been applied.
Permit Section:	4.2.6.6.5
Key Requirement:	Ensure proper application of materials and protection of storm water inlets.
Procedure	
Preparation:	1. Use traffic control devices as necessary. 2. Remove weeds from the roads and mow shoulders as needed. 3. Correct any areas with poor drainage if possible. (i.e. riling/rutting) 4. Sweep the road surface to clean any loose debris and ensure adhesion. 5. Ensure manholes and catch basins are covered to prevent oil and materials from getting inside the structures or system. 6. Calibrate spreader and chipper to minimize excess materials from being placed.
Process:	1. Apply emulsion at recommended rate. 2. Spread chips closely behind emulsion distributor. 3. Roll chips until firmly set.
Clean Up:	1. Sweep all excessive chips from road. 2. Remove covers from storm drain structures
Documentation:	Maintain records of chip seal on roads

ROADS: Fog Seal

Description:	Information on the protection and maintenance of storm drain system while applying fog seal to roadways.
Permit Section:	4.2.6.6.5
Key Requirement:	Ensure proper application of materials and protection of storm water inlets.
Procedure	
Preparation:	1. Use traffic control devices as necessary. 2. Remove weeds from the roads. 3. Sweep the road surface to clean any loose debris and ensure adhesion. 4. Correct any areas with poor drainage. (i.e. riling/rutting) 5. Cover/protect catch basins and manholes. 6. Calibrate spreader to minimize excess material from being placed.
Process:	1. Apply material in a smooth and uniform manner. 2. Allow proper amount of time for the emulsion to break and set before allow traffic back on the roadway. 3. Protect adjacent areas and storm drainage systems from emulsion during spreading.
Clean Up:	1. Remove covers/protection from catch basins and manholes. 2. Clean up any excess material that may have entered the storm drain. 3. Dispose of excess materials at an approved location
Documentation:	Maintain records of fog seal on roads.

ROADS: Overlays and Patching

Description:	Information on the protection and maintenance of storm drain system while the roadway is being overlaid or patched.
Permit Section:	4.2.6.6.5
Key Requirement:	Ensure proper application of materials and protection of storm water inlets.
Procedure	
Preparation:	1. Use traffic control devices as necessary. 2. Correct any areas with poor drainage. (i.e. rutting) 3. Fill pothole areas and soft spots. 4. Seal cracks in asphalt. 5. Cover/protect catch basins and manholes. 6. Sweep the road surface to clean any loose debris and ensure adhesion.
Process:	1. Apply tack coat uniformly at the required rate if needed. Do not over apply. 2. Protect area outside of work zone from overlay material. 3. Place removed material in a truck for removal from the job site. 4. Protect manholes and catch basins when raising covers as necessary.
Clean Up:	1. Remove covers from catch basins and manholes. 2. Remove excess materials and haul from site and dispose of at an appropriate location
Documentation:	Maintain records of overlays and patching on roads.

ROADS: Crack Seal

Description:	Information on the protection and maintenance of roadway and storm drain system while cracks are being sealed on roadway surface.
Permit Section:	4.2.6.6.5
Key Requirement:	Ensure proper application of materials and protection of storm water inlets.
Procedure	
Preparation:	1. Use traffic control devices as necessary. 2. Remove weeds from the cracks. 3. Remove sediments from crack to a specified depth. 4. Surface should be clean and dry.
Process:	1. Place material as specified. 2. Minimize material from spilling outside of crack and into storm drain systems. 3. Keep crack sealing equipment on asphalt surface to control any material spills.
Clean Up:	Remove excessive sealant or spills from roadway and dispose of at an appropriate location
Documentation:	Maintain records of crack sealing on roads.

ROADS: Shouldering

Description:	Information on the protection and maintenance of roadway and storm drain system while shouldering.
Permit Section:	4.2.6.6.5
Key Requirement:	Ensure proper application of materials and protection of storm water inlets.
Procedure	
Preparation:	1. Use traffic control devices as necessary. 2. Install protection for storm drain system from receiving shouldering material.
Process:	1. Place import material as needed and perform grading to achieve proper drainage. 2. Compact as placement of material occurs to minimize erosion.
Clean Up:	1. Sweep any loose material off asphalt. 2. Remove protection from the storm drain system. 3. Clean up any excess material, that has entered the storm drain system
Documentation:	Maintain records of road shouldering.

ROADS: Gravel Road Overlay

Description:	Information on gravel roadway overlays and the protection of the storm drain system.
Permit Section:	4.2.6.6.5
Key Requirement:	1. Maintain drainage structures. 2. Compact imported materials to minimize erosion.
Procedure	
Preparation:	1. Locate drainage features along length of road to be maintained 2. Protect drainage structures from material entering the system during maintenance activities 3. Use traffic control devices as necessary.
Process:	1. Grade road to promote drainage away from the roadway and to remove excess vegetation encroachment. 2. Place imported material as needed for roadway. 3. Water (if needed) and compact material to reduce potential for erosion. 4. Repair/revise drainage structures to collect runoff. 5. Stabilize shoulders after completing maintenance.
Clean Up:	1. Remove stockpiled material from work area. 2. Stabilize any loose material or disturbed areas. 3. Haul off overburden or material with vegetation and dispose of at an appropriate location
Documentation:	Maintain records of gravel road overlays.

ROADS: Snow Removal and De-icing

Description:	Information on proper storage and loading of de-icing material in order to prevent materials from entering into a storm drain system.
Permit Section:	4.2.6.4, 4.2.6.6.2
Key Requirement:	1. Minimize use of de-icing materials while keeping roadways safe for vehicles. 2. Store de-icing materials in a covered location.
Procedure	
Preparation:	1. Store de-icing material under a covered storage area. 2. Slope loading area away from storm drain inlets. 3. Design drainage from loading area to collect runoff before entering storm water system. 4. Calibrate spreaders to minimize amount of de-icing material used and still be effective. 5. Train employees in spill cleanup procedures and proper handling and storage of de-icing materials.
Process:	1. Load material into trucks minimizing spillage. 2. Scrape or shovel area periodically to reduce the amount of de-icing materials exposed to runoff. 3. Distribute the minimum amount of de-icing material to be effective on roads while ensuring the safety of the traveling public. 4. Do not allow spreaders to idle while distributing de-icing materials. 5. Park trucks with de-icing material inside when possible.
Clean Up:	1. Sweep up or shovel all spilled de-icing material around loading area. 2. Clean out trucks after snow removal duty in approved washout area
Documentation:	N/A

ROADS: Transporting Soil and Gravel

Description:	This section contains information for proper site preparation and maintenance while materials are being transported to or from a site.
Permit Section:	4.2.6.6.7
Key Requirement:	Removing or importing fill materials for a site.
Procedure	
Preparation:	1. Stabilize wet materials before transporting to prevent spillage on the roadway. 2. Spray down or cover dusty materials to keep from blowing. 3. Know and understand the SWPPP requirements for the site you will be working at if one exists.
Process:	1. Use a stabilized construction entrance to access or leave the site where materials are being transported to/from. 2. Do not overfill materials when loading trucks.
Clean Up:	Clean up any materials tracked out on the roads from site with street sweeper or by hand methods.
Documentation:	N/A

VEHICLES: Fueling

Description:	Information and guidelines for proper fueling of equipment and vehicles.
Permit Section:	4.2.6.6.4
Key Requirement:	Properly fuel vehicles and clean up any spills.
Procedure:	
Preparation:	1. Train employees on proper fueling methods and spill cleanup techniques. 2. Absorbent spill clean-up materials and spill kits should be available on mobile fueling vehicles.
Process:	1. Shut off the engine. 2. Fuel vehicle carefully to minimize drips to the ground, do not 'top off' tanks. 3. Mobile fueling should be minimized. Whenever practical, vehicles and equipment shall be transported to a designated fueling area. 4. When fueling small equipment from portable containers, fuel in an area away from storm drains and water bodies.
Clean Up:	1. Immediately clean up spills using dry absorbent, sweep up absorbent material and properly dispose of contaminated clean up materials. 2. Large spills shall be contained as best as possible and the HazMat team should be notified.
Documentation:	N/A

VEHICLES: Washing Vehicles and Equipment

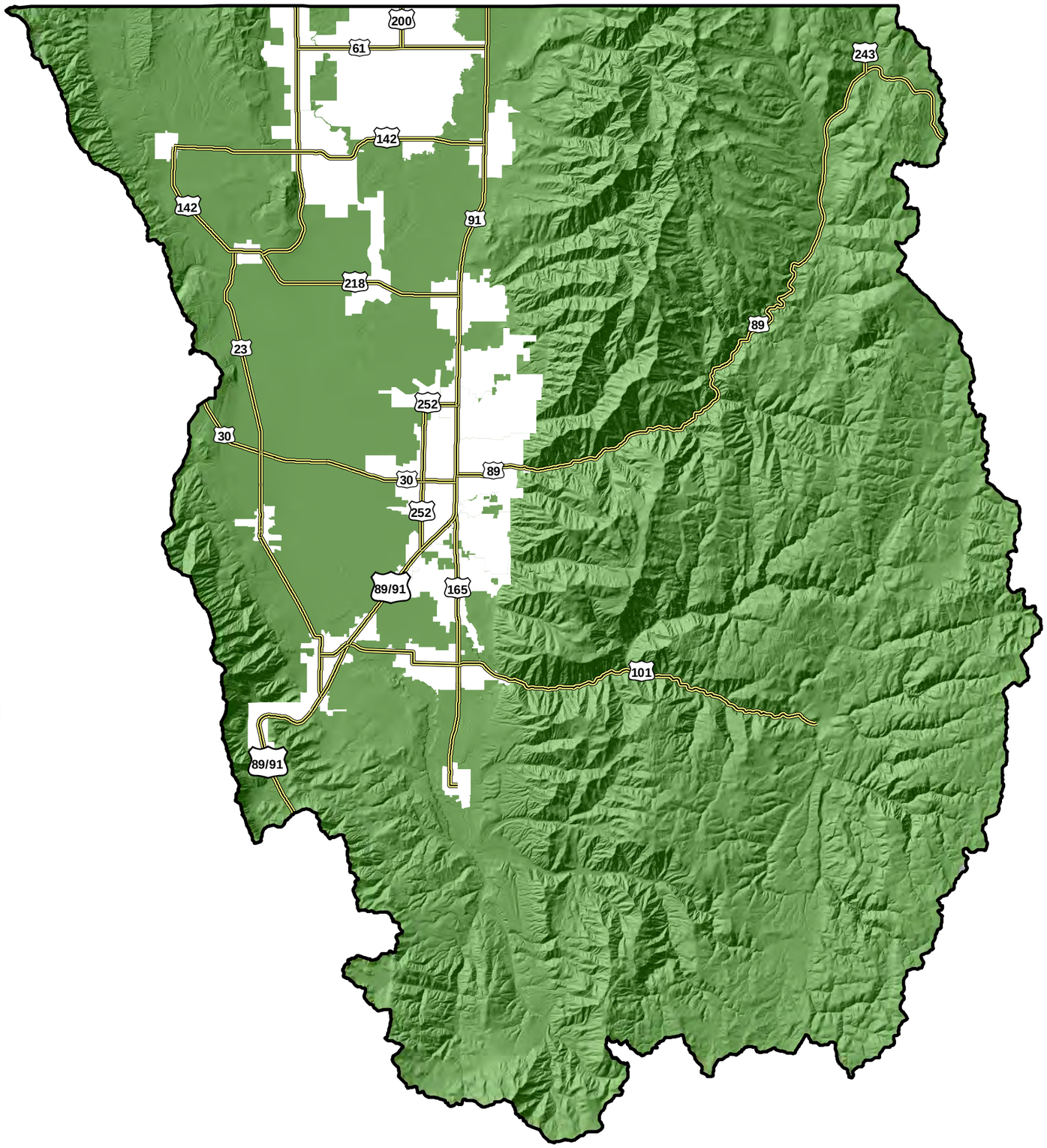
Description:	Information and guidelines for washing off equipment and vehicles.
Permit Section:	4.2.6.6.4
Key Requirement:	Wash vehicles and equipment in locations that do not drain to the storm water system.
Procedure	
Preparation:	1. Wash equipment in grassed surrounded area that drains away from natural water bodies. 2. Provide wash areas for large vehicles on an approved outside wash pad that has a drain system which is attached to the sanitary sewer system or use a commercial facility. 3. No vehicle washing will be done where the drain system is connected to the storm sewer system.
Process:	1. Use hoses with automatic shut off nozzles to minimize water usage. 2. When washing outside the building, it is the operators' responsibility to make sure all wash water is contained on the wash down area and does not have access to a storm drain. 3. Never wash vehicles over or near a storm drain.
Clean Up:	1. Sweep wash areas to collect solids to prevent them from washing down the drain system. 2. Clean solids from the settling pits as needed.
Documentation:	N/A

APPENDIX C

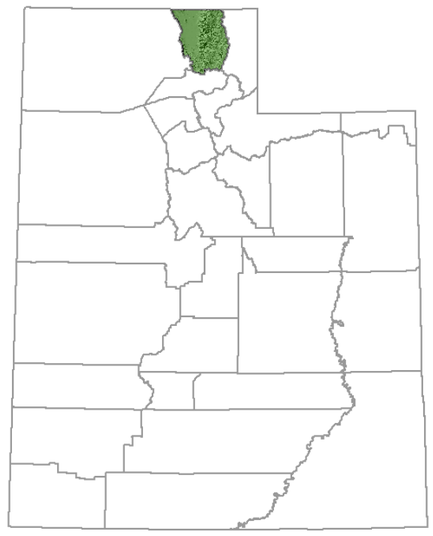
MAPS

High Priority County Owned Facilities				
County Owned Facilies	Potential Pollutants at Facility	Is the facility Close to a natural waterway?	Is the facility close to a drainage outfall?	High Priority Y/N
Road Shop	Salt and Sand Bay	No	No	Yes
Joel Merritt	Wash Bay			
	Shop and Storage Bays			
	Weed Shop			
	Oil, Used Oil			
	Solvents			
Fair Grounds	Oil and Used Oil	Yes - Canal	No	No
Bart Esplin	Chemical Storage			
	Fertilizer			
	Manure and organics			
	Grease Traps			
Admin Buildings	Household Cleaning Supplies	No	No	No
Dennis Gardner	Equipment Fuel, Oil			
	Lawn Mowing			
Senior Citizen Center	Household Cleaning Supplies	No	No	No
	Equipment Fuel, Oil			
	Grease Trap			
County Jail	Cleaning Supplies			
Jon Coulam	Equipment Fuel, Oil			
	Car Washing			
	Grease Trap			
	Lawn Mowing			
Gravel Pits				
Hyrum		High Groundwater		No
Nibley				No
Millville				No
Smithfield				No
Cove 1				No
Cove 2				No
Trenton				No
Clarkston				No
Newton				No

CACHE COUNTY



CACHE COUNTY LOCATIONAL MAP



Legend

Highways

Cache County Jurisdiction

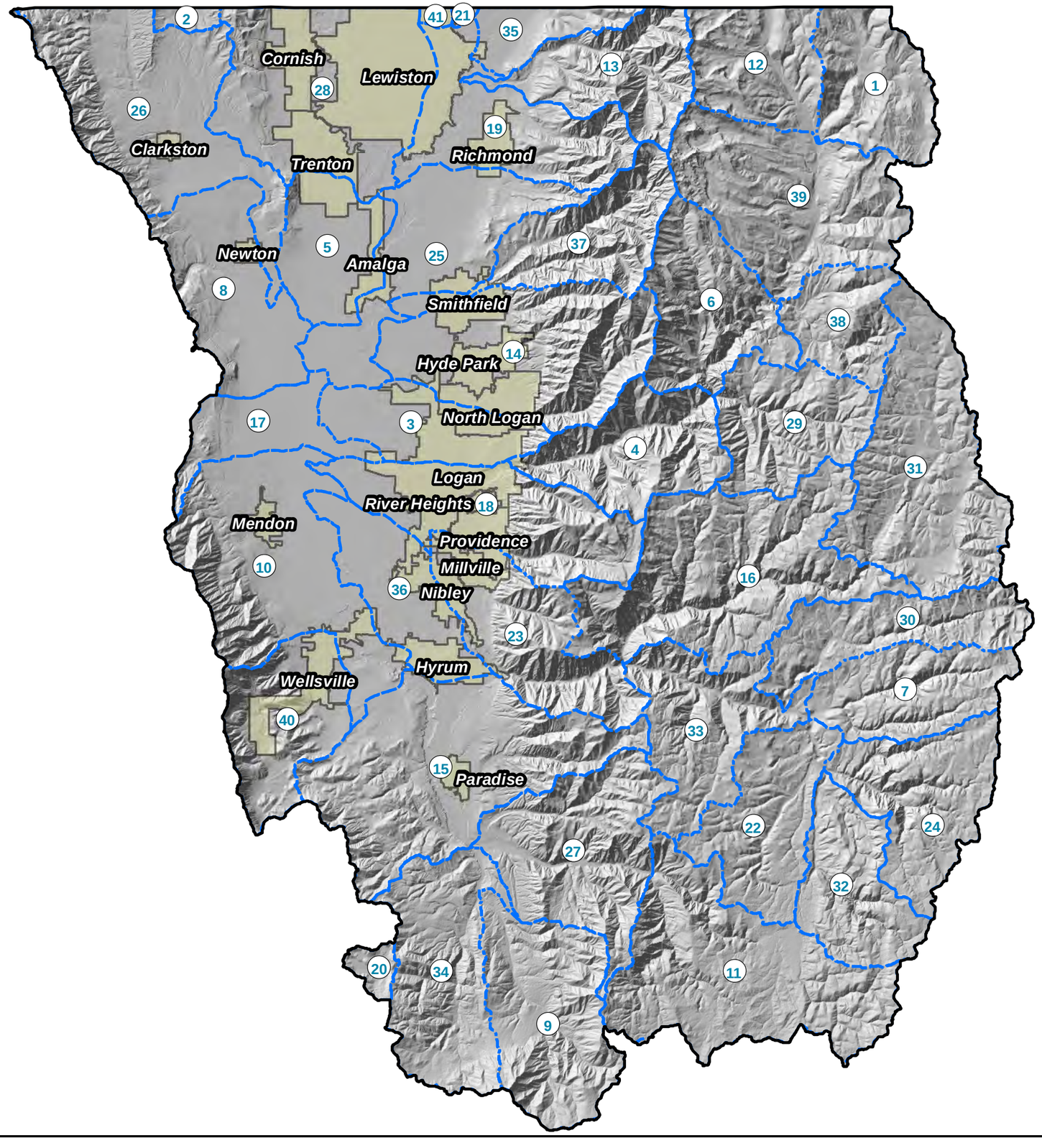
N

Feet

0 18,000 36,000

Cache County Development Services
1857

CACHE COUNTY



Legend

- 1, Beaver Creek
- 2, Black Canyon
- 3, Blue Spring Creek
- 4, Card Canyon-Logan River
- 5, Clay Slough
- 6, Cottonwood Canyon-Logan River
- 7, Curtis Creek
- 8, Cutler Reservoir-Bear River
- 9, Davenport Creek
- 10, Deep Canyon-Little Bear River
- 11, Headwaters East Fork Little Bear River Canyon
- 12, Hells Kitchen Canyon-Logan River
- 13, High Creek
- 14, Hopkins Slough
- 15, Hyrum Reservoir-Little Bear River
- 16, Left Hand Fork Blacksmith Fork Canyon
- 17, Little Bear River above Cutler Reservoir
- 18, Little Logan River-Logan River
- 19, Lower Cub River
- 20, Mantua Reservoir-Box Elder Creek
- 21, Middle Cub River
- 22, Mill Creek-Blacksmith Creek
- 23, Millville Canyon-Blacksmith Fork
- 24, Mollens Hollow-Blacksmith Creek
- 25, Nebo Creek-Bear River
- 26, Newton Creek
- 27, Outlet East Fork Little Bear River Canyon
- 28, Pullum Hollow-Bear River
- 29, Right Fork Logan Canyon
- 30, Rock Creek
- 31, Saddle Creek
- 32, Sheep Creek
- 33, South Cottonwood Canyon-Blacksmith Fork
- 34, South Fork Little Bear River
- 35, Spring Creek
- 36, Spring Creek
- 37, Summit Creek
- 38, Temple Fork
- 39, Tony Grove Creek
- 40, Wellsville Canyon
- 41, Worm Creek
- City Boundaries

CACHE COUNTY WATERSHED BOUNDARIES

N

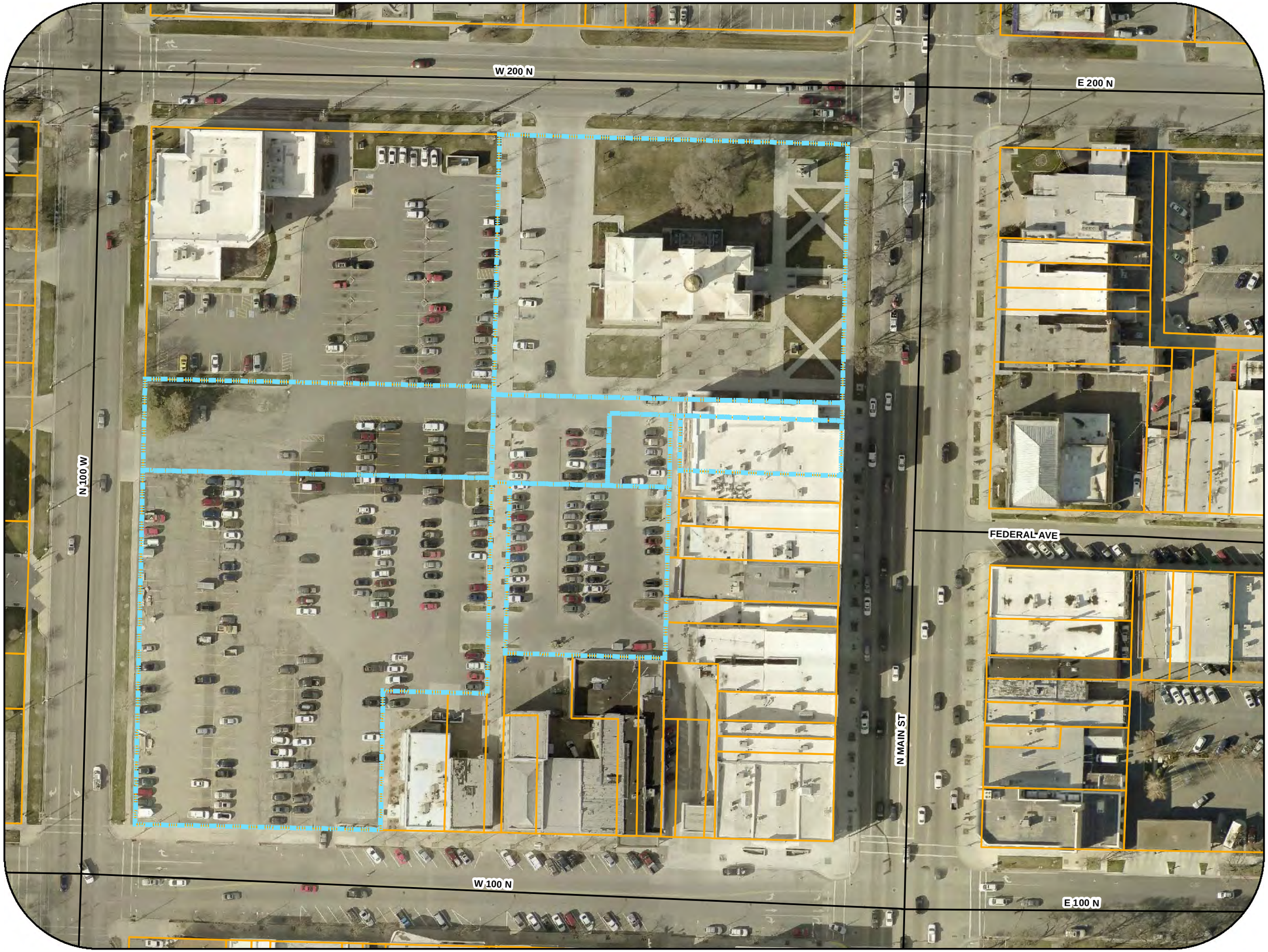
Feet

0 17,500 35,000

Cache County Development Services
1857

COUNTY COURT HOUSE & ADMINISTRATION BUILDINGS

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY



Legend

- Parcels
- Facilities

N

Feet

0 62.5 125

Cache County Development Services

CACHE COUNTY

CACHE COUNTY NATIONAL WETLANDS INVENTORY

Cornish
Lewiston
Clarkston
Trenton
Richmond
Newton
Amalga
Smithfield
Hyde Park
North Logan
Logan
River Heights
Mendon
Providence
Millville
Nibley
Hyrum
Wellsville
Paradise

Legend

National Wetlands Inventory

N

Feet

0 13,500 27,000

Cache County Development Services 1857

Wetlands Data obtained from:
National Wetlands Inventory..... http://www.fws.gov/wetlands/

ROAD SHOP

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

Parcels

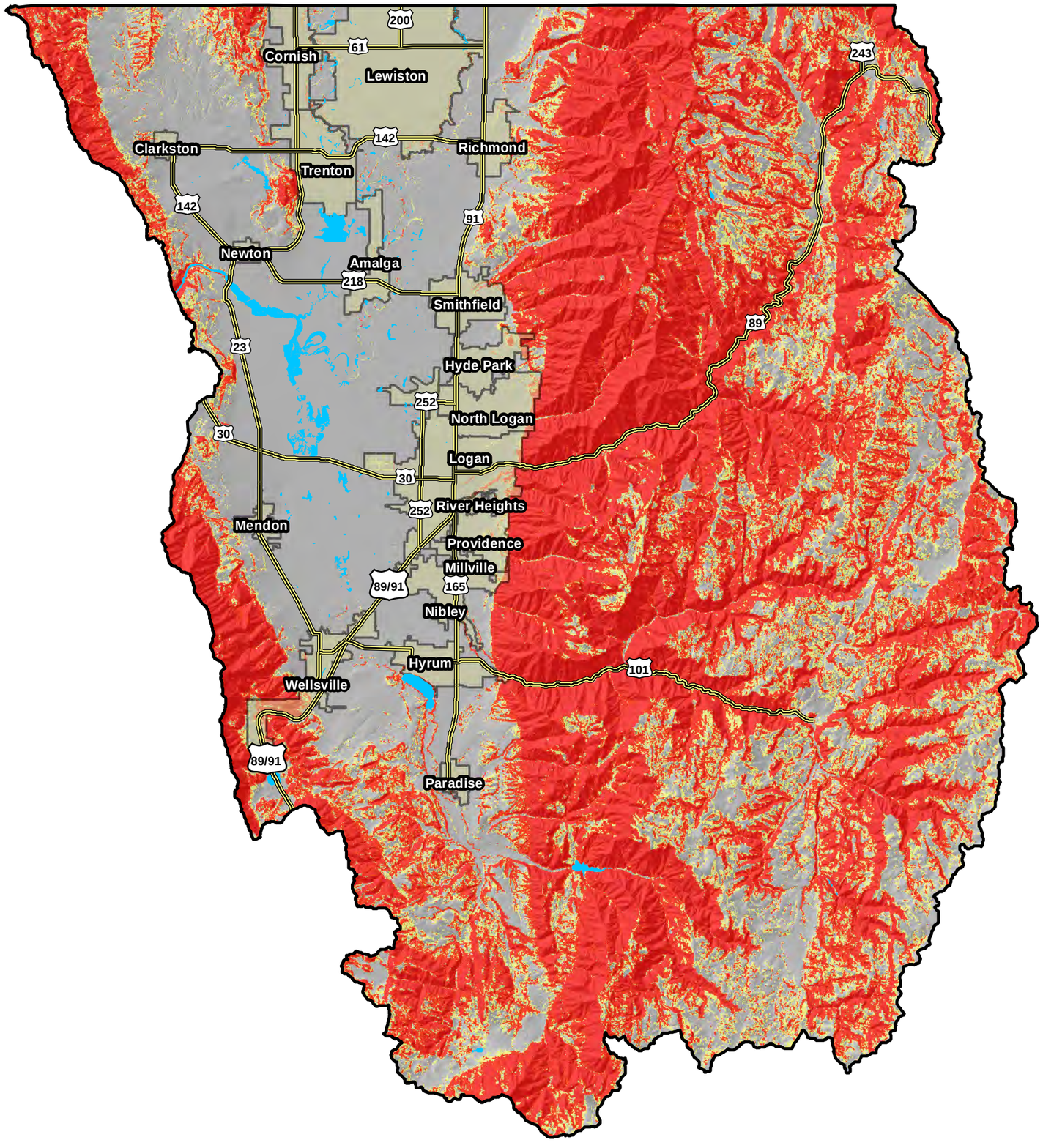
Facilities

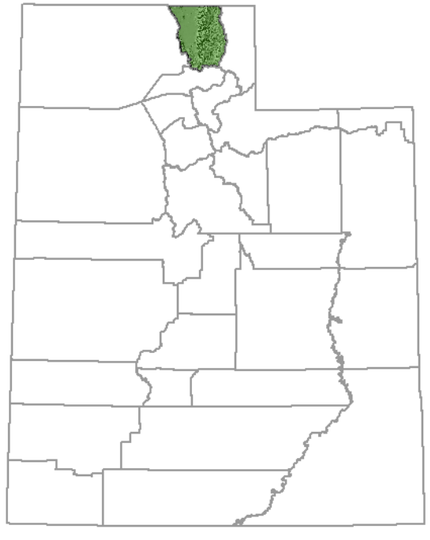
Feet

0 50 100

Cache County Development Services

CACHE COUNTY





CACHE COUNTY STEEP SLOPES

Legend

Slope
20% to 30%

Slope
> 30%

Highways

Waterbodies

N

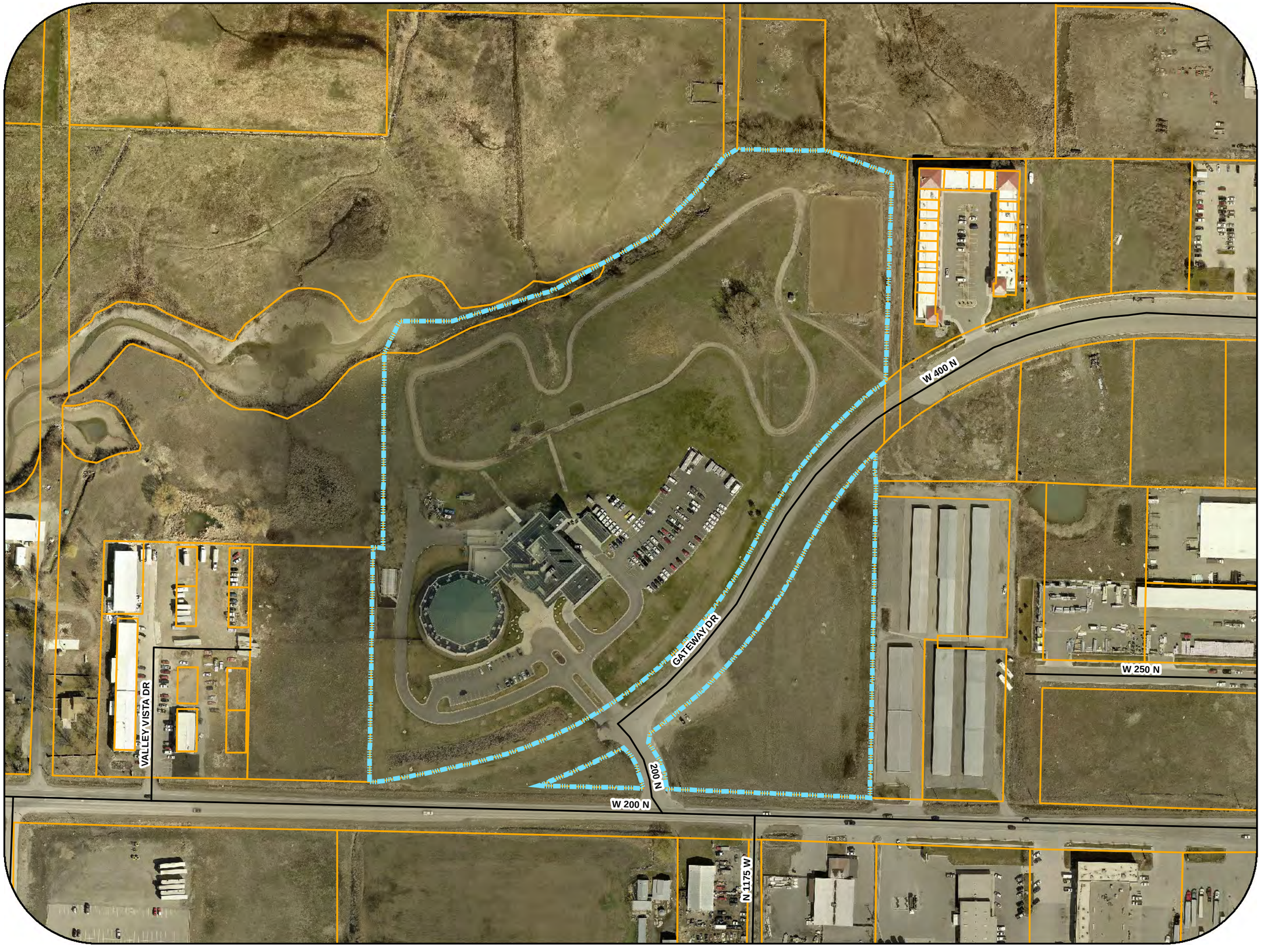
Feet

0 17,500 35,000

Cache County Development Services
1857

SHERIFF'S COMPLEX

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY



Legend

- Parcels
- Facilities

N

Feet

0 150 300

Cache County Development Services

CACHE - LOGAN AIRPORT

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

- Parcels
- Facilities

Feet

0 1,150 2,300

Cache County Development Services

W 4600 N
W 4500 N
W 1000 S
N 1200 W
N 800 W
N 400 W
N 200 W
S MAIN ST
N 250 E
N 300 E
E 4400 N
N 500 E
N 2400 W
W 4200 N
E 4200 N
N 2000 W
W 450 N
W 400 N
W 385 N
W 375 N
N 250 E
N 320 W
E 4000 N
W 300 N
W 260 N
N 100 W
N 200 W
N 75 W
W 3900 N
W 200 N
CEDAR RIDGE DR
N US 91
W 100 N
N 200 W
N MAIN ST
W 3700 N
W 3700 N
HYDE PARK LN
E 60 N
W CENTER ST
N 300 W
W 60 S
W 100 S
S MAIN ST
W 200 S
W 3400 N
S 200 W
W 300 S
W 350 S
W 355 S
S 350 W
W 400 S
W 3200 N
W 520 S
W 580 S
AIRPORT RD
W 3100 N
S 150 W
S 100 W
N 400 W
N 300 W
N 200 W
W 730 S
W 2850 N
E 2850 N
E 2780 N
S 50 E
E 2700 N
W 2600 N
MEADOW LN
N 370 E
N 400 E
E 2600 N
N 200 E
N MAIN ST
N 020 W
W 2500 N
E 2500 N
N 500 W
N 150 E
E 2475 N
N 225 E
E 2440 N
E 2400 N
N 1000 W
N 600 W
W 2400 N

CACHE SENIOR CENTER

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

- Parcels
- Facilities

N

Feet

0 35 70

Cache County Development Services

CACHE COUNTY PROVIDENCE LIBRARY

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

- Parcels
- Facilities

N

Feet

0 20 40

Cache County Development Services

FIRE WRECK YARD

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

N SR 23

W 5700 N

Legend

Parcels

Facilities

Feet

0 20 40

Cache County Development Services

CACHE COUNTY
CLARKSTON
GRAVEL PIT

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

DIRTY HEAD RD

Legend

- Parcels
- Facilities

Feet

0 225 450

Cache County Development Services

CACHE COUNTY COVE GRAVEL PITs

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

- Parcels
- Facilities

N

Feet

0 350 700

Cache County Development Services

CACHE COUNTY NIBLEY/HYRUM GRAVEL PITs

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

- Parcels
- Facilities

N

Feet

0 435 870

Cache County Development Services

CACHE COUNTY SMITHFIELD GRAVEL PIT

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

- Parcels
- Facilities

N

Feet

0 245 490

Cache County Development Services

CACHE COUNTY TRENTON GRAVEL PIT

PERMITTE - OWNED OR OPERATED FACILITIES INVENTORY

Legend

- Parcels
- Facilities

N

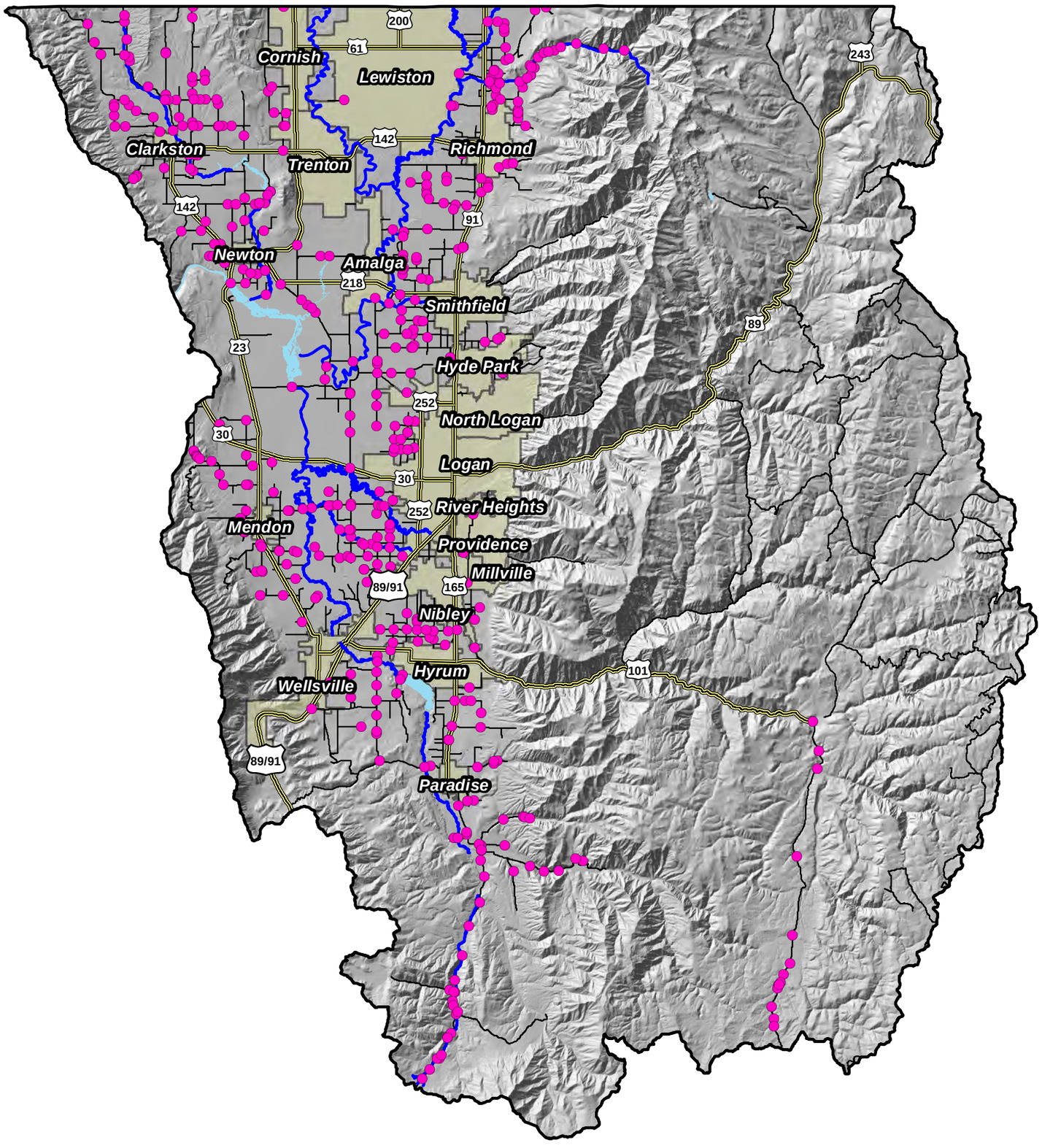
Feet

0 130 260

Cache County Development Services

CACHE COUNTY

CACHE COUNTY OUTFALL LOCATIONS



Legend

Outfalls

- Outfalls
- 303d Impaired Streams
- 303d Impaired Water Bodies
- Highways
- County Roads
- City Boundaries

N

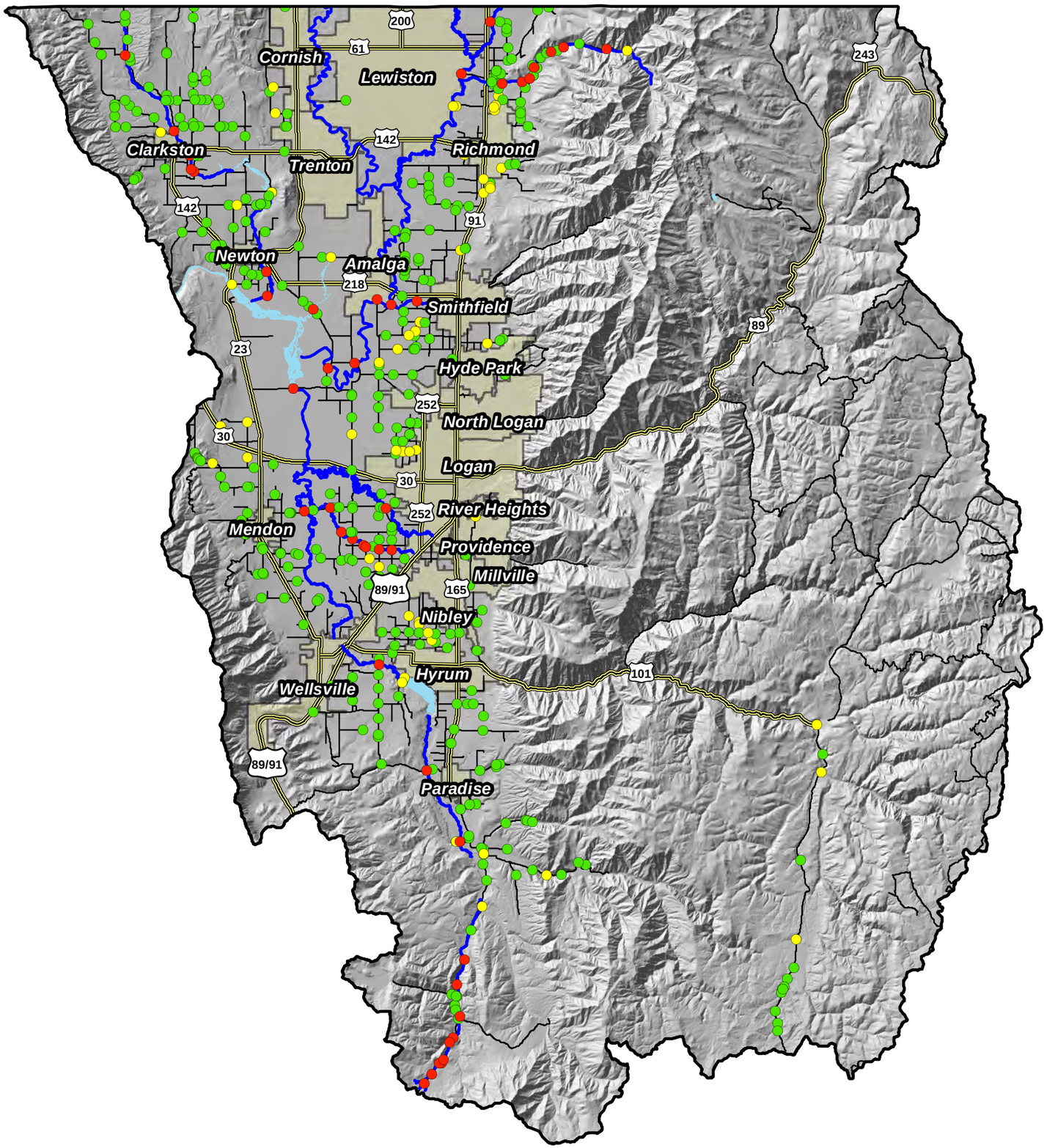
Feet

0 17,500 35,000

Cache County Development Services
1857

CACHE COUNTY

CACHE COUNTY OUTFALL LOCATIONS



Legend

Outfalls

Priority Rating

- HIGH
- MEDIUM
- LOW
- 303d Impaired Streams
- 303d Impaired Water Bodies
- Highways
- County Roads
- City Boundaries

N

Feet

0 17,500 35,000

Cache County Development Services
1857

APPENDIX D

FORMS

(Completed by Dec. 2016)

APPENDIX E

STATE PERMITS

.

STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

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

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

UPDES PERMIT NUMBER UTR090000

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

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

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

This Permit shall become effective May 12th, 2021.

This Permit and the authorization to discharge shall expire at midnight, May 11th, 2026, except as described in Part 6.3 of this Permit.

Signed this 11th of May, 2021.

John Mackey (May 12, 2021 06:59 MDT)

John K. Mackey, P.E.
Acting Director

DWQ-2021-008110

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

TABLE OF CONTENTS

1.0 Coverage Under this Permit

1.1. Authority to Discharge

This General Permit authorizes the discharge, to waters of the state of Utah, of storm water from a Small MS4 as defined in R317-8-1.6(15) and Part 7.0. of this Permit. This authorization is subject to all of the terms and conditions of this Permit. This General Permit does not authorize discharges prohibited under Part 1.4. of this Permit.

1.2. Permit Area and Eligibility

1.2.1. This Permit covers all areas of the State of Utah.

1.2.1.1. No operator of a Small MS4 as described in 40 CFR 122.32 may discharge from that system without authorization from the *Director*. (See Utah Administrative Code Section R317-8-11.3(1)(h), which sets forth the Permitting requirement, and R317-8-1.10(12), which incorporates 40 CFR 122.32 by reference.) Authorization to discharge under the terms and conditions of this Permit is granted if:

1.2.1.1.1 It applies to an operator of a Small MS4 within the State of Utah.

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

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

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

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

1.2.2. The following are types of authorized discharges:

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

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

- Water line flushing;
- Landscape irrigation;
- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration;
- Uncontaminated pumped ground water;

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

1.3. Local Agency Authority

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

1.4. Limitations on Coverage

This Permit does not authorize:

1.4.1. Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are in compliance with a separate UPDES Permit or are determined not to be a substantial contributor of pollutants to waters of the state.

1.4.2. Storm water discharges associated with industrial activity as defined in *Utah Administrative Code (UAC) R317-8-11.3(6)(c).*

1.4.3. Storm water discharges associated with construction activity as defined in *UAC R317-8-11.3(6)(e).*

1.4.4. Storm water discharges currently covered under another Permit.

1.4.5. Discharges that would cause or contribute to in-stream exceedances of water quality standards as contained in *UAC R317-2*.

1.4.6. Discharges of any pollutant into any waters of the state for which a Total Maximum Daily Load (TMDL) has been approved by EPA, unless the discharge is consistent with the TMDL. The discharge must be consistent with the TMDL at the time a Notice of Intent is submitted. If conditions change after coverage is issued, the coverage may remain active provided the conditions and requirements of Part 3.1. of this Permit are complied with.

2.0 Notice of Intent and Storm Water Management Program Requirements

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

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

2.1.3. Within **180 days** of notification from the *Director*, the operator of the MS4 shall submit a NOI form as provided by the Division at https://documents.deq.utah.gov/water-quality/permits/updes/DWQ-2018-001322.pdf. (The *Director* retains the right to grant permission for a later submission date when a good cause has been demonstrated). One original completed NOI shall be submitted, by mail or hand delivery to:

Attention: MS4 Coordinator
General Permitting Section
Department of Environmental Quality
Division of Water Quality
195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870

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

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

2.1.6. Implementation of the Permittee's SWMP must include the six minimum control measures, including development of Measurable Goals, as described in Part 4.2. Measurable Goals for each of the minimum control measures must include, at a minimum, the year by which the Permittee will undertake required actions, including: interim milestones and the frequency of the action (if applicable.)

2.1.7. Implementation of the Permittee's SWMP as described in the Permittee's application is required to begin within **30 days** after the completed application is submitted. The

Permittee must fully develop and implement the SWMP as discussed in Part 4.0 of the Permit by the end of the Permit term unless a more restrictive timeframe is indicated.

2.1.8. If an Operator is designated by the *Director* as requiring Permit coverage later than one year after the effective date of this General Permit, the *Director* may approve alternative deadlines that would allow the Permittee to have its program areas implemented.

2.2. Contents of the Notice of Intent

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

2.2.1. Name, address, and telephone number of the principal executive officer, ranking elected official or other duly authorized employee in charge of municipal resources used for implementation of the SWMP;

2.2.2. Name(s)/ identification of waters of the state as defined by UAC R317-1-1that receive discharges from the Permittee's MS4;

2.2.3. Name of the person responsible for overseeing implementation and coordination of the SWMP;

2.2.4. Summary description of the overall water quality concerns, priorities, and measurable goals specific to the Permittee that were considered in the development of the SWMP;

2.2.5. The SWMP document shall consist of, at a minimum, a description of the program elements that will be implemented (or already exist) for each of the SWMP minimum control measures. The plan must be detailed enough for the *Director* to determine the Permittee's general strategy for complying with the required items in each of the six minimum control measures in the SWMP document (see Part 4.2 of this Permit);

2.2.6. Information on the chosen Best Management Practices (BMPs) and the measurable goals for each of the storm water minimum control measures in Part 4.2 of this Permit and, as appropriate, the timeframe by which the Permittee will achieve required actions, including interim milestones;

2.2.7. Permittees which are applying as Co-Permittees shall each submit an NOI and individual SWMP document which will clearly identify the areas of the MS4 for which each of the Co-Permittees are responsible. Permittees which are relying on another entity (ies) to satisfy one or more of their Permit obligations shall include with the NOI, a summary of the Permit obligations that will be carried out by the other entity (ies). During the term of the Permit, Permittees may terminate or amend shared responsibility arrangements by notifying the *Director*, provided this does not alter implementation deadlines.

2.2.8. Certification and signature requirements in accordance with Part 6.8.

2.3. Storm Water Management Program Plan Description for Renewal Permittees

2.3.1. The requirements of this part apply only to **Renewal Permittees** that were previously covered under the last MS4 General Permit. New Applicants are not required to meet the requirements of this Part and must follow the requirements of Part 2.0.

2.3.2. Renewal Permittees must submit a **revised SWMP document** to the *Director* within **180 days** of the effective date of this Permit, which includes at a minimum, the following information:

2.3.2.1. Permit number;

2.3.2.2. MS4 location description and map;

2.3.2.3. Information regarding the overall water quality concerns, priorities, measurable goals, and interim milestones specific to the Permittee that were considered in the development and/or revisions to the SWMP document;

2.3.2.4. A description of the program elements that will be implemented (or are already being implemented) in each of the six minimum control measures (see Part 4.0);

2.3.2.5. A description of any modifications to ordinances or long-term/ongoing processes implemented in accordance with the previous MS4 General Permit for each of the six minimum control measures;

2.3.2.6. A description of how the Permittee intends to meet the requirements of the Permit as described in Part 4.0 by either referencing existing program areas that already meet the Permit requirements or a description and relevant measurable goals that include, as appropriate, the year by which the Permittee will achieve required actions, including interim milestones.

2.3.2.7. Indicate the joint submittal(s) of Co-Permittees (if applicable) and the associated responsibility (ies) in meeting requirements of the SWMP.

2.3.2.8. Certification and signature requirements in accordance with Part 6.8.

2.3.2.9. The revised SWMP document must contain specific details for complying with the required items in each of the six minimum control measures contained within the SWMP document (See Part 4.2.).

3.0 Special Conditions

3.1. Discharges to Water Quality Impaired Waters

3.1.1. Applicability:

3.1.1.1. Permittees must determine whether storm water discharge from any part of the MS4 contributes to a 303(d) listed (i.e., impaired) waterbody. A 303(d) list of impaired waterbodies is available at: https://enviro.deq.utah.gov/. Water quality impaired waters means any segment of surface waters that has been identified by the *Director* as failing to support one or more of its designated uses. If the Permittee has any discharges to an impaired waterbody, the Permittee must comply with Part 3.1.2. and if no discharges to impaired waterbodies exist, the remainder of this Part 3.1 does not apply.

3.1.1.2. If the Permittee has "303(d)" discharges described above, the Permittee must determine whether a Total Maximum Daily Load (TMDL) has been developed by the *Director* and approved by EPA for the listed waterbody. If there is an approved TMDL, the Permittee must comply with all requirements associated with the TMDL in addition to the requirements of Part 3.1.2. If no TMDL has been approved, the Permittee must comply with Part 3.1.2. and will be required to meet any TMDL requirements once it is developed and approved.

3.1.2. If the Permittee discharges to an impaired waterbody, the Permittee must include in its SWMP document a description of how the Permittee will control the discharge of all pollutants of concern. This description must identify the measures and BMPs that will collectively control the discharge of the pollutants of concern. The measures should be presented in the order of priority with respect to controlling the pollutants of concern.

3.1.3. Where a discharge is already authorized under this Permit and is later determined to cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard, the *Director* will notify the Permittee of such violation(s). The Permittee must take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document these actions as required by the *Director*. If violations remain or re-occur, coverage under this Permit may be terminated by the *Director* and an alternative General Permit or Individual Permit may be issued. Compliance with this requirement does not preclude the State from taking an enforcement action as provided by the Utah Water Quality Act for the underlying violation.

3.2. Nitrogen and Phosphorus Reduction

3.2.1. As part of the Permittee's Storm Water Management Program (SWMP), all Permittees must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges from the MS4.

3.2.1.1. The Permittee can meet the requirements of this section through contribution to a collaborative program (e.g. storm water coalitions) that evaluates, identifies, and targets sources, as well as provides outreach that addresses potential sources within the Permittee's watershed.

3.2.1.2. The Permittee must identify and target sources (e.g., residential, industrial, agricultural, or commercial) that are contributing, or have the potential to contribute, nitrogen and phosphorus to waters of the state, where the Permittee is authorized under this Permit to discharge.

3.2.1.3. The Permittee must prioritize targeted sources that are likely to result in a reduction of nitrogen and phosphorus in discharges through education and outreach. The Permittee must distribute educational materials or equivalent outreach to the prioritized targeted sources. Educational materials or equivalent outreach must describe storm water quality impacts associated with nitrogen and phosphorus in storm water runoff and illicit discharges, the behaviors of concern, and actions that the target source can take to reduce nitrogen and phosphorus. The Permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Permit Part 4.2.1.

3.3. Co-Permittees

3.3.1. Two or more operators of interrelated or neighboring Small MS4s may apply as Co-Permittees.

3.3.2. In order to be permitted as Co-Permittees, the MS4(s) must each submit an NOI which meets the requirements outlined in Permit Part 2.0. Each description of the MS4(s) Storm Water Management Program Plan(s) must clearly describe which Permittees are responsible for implementing each of the minimum control measures.

3.3.3. Each Co-Permittee is individually liable for:

3.3.3.1. Permit compliance for discharges from portions of the MS4 where it is the operator and for areas within its legal jurisdiction;

3.3.3.2. Ensuring that the six minimum control measures described in Part 4.2 are implemented for portions of the MS4 where it is the operator and in areas within its legal jurisdiction; and

3.3.3.3. If any Permit conditions are established for specific portions of the MS4, Co-Permittees need only comply with the Permit conditions relating to those portions of the MS4 for which they are the operator.

3.3.4. Each Co-Permittee is jointly liable for compliance with annual reporting requirements identified in Part 5.5, with the exception that a Co-Permittee is individually liable for any parts of the annual report that relate exclusively to portions of the MS4 where it is the operator.

3.3.5. Specific Co-Permittees are jointly liable for Permit compliance on portions of the MS4 as follows:

3.3.5.1. Where operational or SWMP implementation authority over portions of the MS4 has been transferred from one Co-Permittee to another in accordance with legally binding interagency agreements, both the owner and the operator may be jointly liable for Permit compliance on those portions of the MS4; and;

3.3.5.2. Where one or more Co-Permittees jointly owns or operates a portion of the MS4, each owner/operator is jointly liable for compliance with Permit conditions on the shared portion of the MS4.

4.0 Storm Water Management Program

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

4.1. Requirements

4.1.1. All Permittees must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants to the Maximum Extent Practicable from the MS4, protect water quality, and satisfy the appropriate water quality requirements of the *Utah Water Quality Act.* The SWMP must include the six minimum control measures described in Part 4.2 of this Permit.

4.1.1.1. The SWMP shall be developed and implemented in accordance with the schedules contained in Part 4.0. of this Permit.

4.1.2. Each Permittee shall have an ongoing documentation process for gathering, maintaining, and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate Permit compliance/non-compliance, and evaluate the effectiveness of the SWMP implementation.

4.1.2.1. Each Permittee shall track the number of inspections performed, official enforcement actions taken, and types of public education activities implemented as required for each SWMP component. This information shall be provided to the *Director* upon request and used by the *Director* to determine compliance with this Permit.

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

4.1.3. The SWMP document shall include BMPs that the Permittee or another entity will implement for each of the storm water minimum control measures.

4.1.3.1. The Measurable Goals for each of the BMPs shall include, at a minimum, the months and years in which the Permittee will undertake required actions including: interim milestones and the frequency of the actions (if applicable).

4.1.3.2. The SWMP document shall indicate the person(s) responsible for implementing or coordinating the BMPs contained within the SWMP document.

4.1.3.3. Within **180 days** of the effective date of the Permit, the Permittee shall revise the SWMP document to clearly identify the roles and responsibilities of all offices, departments, Directors, or sub-sections, and if necessary other responsible entities. It shall also include any necessary agreements, contracts, or memorandum of understanding (MOUs) between said entities that affect the implementation and operation of the SWMP. Necessary agreements, contracts, and MOUs shall deal with coordination or clarification of the responsibilities associated with the detection and elimination of improper connections or illicit discharges to the MS4, BMP coordination or other coordinated programs or sensitive issues of unclear or overlapping responsibility. Such agreements, contracts, and MOUs shall be retained by the Permittee as required by the SWMP document.

4.2. Minimum Control Measures

Permittees covered under the previous Small MS4 General UPDES Permit No. UTR090000 ("**Renewal Permittees")**, are expected to have fully implemented Storm Water Management Programs (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. This Permit does not extend the compliance deadlines set forth in the previous MS4 Permit or any corrective action plans and associated schedules unless specifically noted.

To achieve pollutant reductions to the Maximum Extent Practicable, Permittees shall include the following six minimum control measures in the SWMP:

4.2.1. Public Education and Outreach on Storm Water Impacts

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

The minimum performance measures which should be based on the land uses and target audiences found within the community include:

4.2.1.1. Target specific pollutants and pollutant sources determined by the Permittee to be impacting, or have the potential to impact, the beneficial uses of a receiving water. This includes providing information which describe the potential impacts from storm water discharges; methods for avoiding, minimizing, reducing and /or eliminating the adverse impacts of storm water discharges; and the actions individuals can take to

improve water quality, including encouraging participation in local environmental stewardship activities.

4.2.1.2. Provide and document education outreach given to the general public on the Permittee's prohibitions against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges. The Permittee must at a minimum consider the following topics: maintenance of septic systems; effects of outdoor activities such as lawn care (use of pesticides, herbicides, and fertilizers); benefits of onsite infiltration of storm water; effects of automotive work and car washing on water quality; proper disposal of swimming pool water; and proper management of pet waste. These topics are not inclusive and the Permittee must focus on those topics most relevant to the community.

4.2.1.3. Provide and document education and outreach given to institutions, industrial, and commercial facilities on an annual basis of the Permittee's prohibitions against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges. The Permittee must at a minimum consider the following topics: proper lawn maintenance (use of pesticides, herbicides and fertilizer); benefits of appropriate onsite infiltration of storm water; building and equipment maintenance (proper management of waste water); use of salt or other deicing materials (cover/prevent runoff to storm system and contamination to ground water); proper storage of materials (emphasize pollution prevention); proper management of waste materials and dumpsters (cover and pollution prevention); and proper management of parking lot surfaces (sweeping). These topics are not inclusive and the Permittee must focus on those topics most relevant to the community This education can also be a part of the Illicit Discharge Detection and Elimination measure detailed in Part 4.2.3.

4.2.1.4. Provide and document education and outreach given to engineers, construction contractors, developers, development review staff, and land use planners concerning the development of storm water pollution prevention plans (SWPPPs) and BMP use, to reduce adverse impacts from storm water runoff from development sites. This education can also be a part of the Construction Site Storm Water Runoff minimum control measure detailed in Part 4.2.4.

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

4.2.1.6. Provide and document education and training to MS4 engineers, development and plan review staff, land use planners, and other pertinent parties about Low Impact Development (LID) practices, green infrastructure practices, and the specific

requirements for post-construction control and the associated Best Management Practices (BMPs) chosen within the SWMP.

4.2.1.7. An effective program must show evidence of focused messages and audiences, as well as, demonstrate that the defined goal of the program has been achieved. The Permittee must identify specific messages for each targeted audience. The Permittee must also identify methods that will be used to evaluate the effectiveness of the educational messages and overall education program. Any methods used to evaluate the effectiveness of the program must be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge.

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

4.2.2. Public Involvement/Participation

The Permittee must implement a program that complies with applicable State and Local public notice requirements. The SWMP shall include ongoing opportunities for public involvement and participation, but at a minimum two (2) times annually. Permittees can meet this requirement through advisory panels, public hearings, watershed committees, stewardship programs, environmental activities, volunteer opportunities, or other similar activities. The Permittee should involve potentially affected stakeholder groups, including but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners' associations, and education organizations.

The minimum performance measures are:

4.2.2.1. Permittees shall adopt a program or policy directive to create opportunities for the public to provide input during the decision-making processes involving the development, implementation and update of the SWMP document, including development and adoption of all required ordinances or regulatory mechanisms.

4.2.2.2. **Renewal Permittees** shall make the revised SWMP document available to the public for review and input within **180** days from the effective date of this Permit. **New Applicants** shall make the SWMP document available to the public for review and input within **180** days of receiving notification from the *Director* of the requirement for Permit coverage.

4.2.2.3. A current version of the SWMP document shall remain available for public review and input for the life of the Permit. If the Permittee maintains a website, the latest version of the SWMP document shall be posted on the website within **180 days** from the effective date of this Permit and shall clearly identify a specific contact person and provide the phone number and/or email address to allow the public to review and provide input for the life of the Permit.

4.2.3. Illicit Discharge Detection and Elimination (IDDE)

All Permittees shall revise (as necessary), implement and enforce an Illicit Discharge and Elimination (IDDE) program to systematically find and eliminate sources of non-storm water discharges from the MS4 and to implement defined procedures to prevent

illicit connections and discharges according to the minimum performance measures listed below. The IDDE program must be described in writing, incorporated as part of the Permittee's SWMP document, and contain the elements detailed in this part of the Permit.

The minimum performance measures are:

4.2.3.1. Maintain a current storm sewer system map of the MS4, showing the location of all municipal storm sewer outfalls with the names and location of all State waters that receive discharges from those outfalls, storm drain pipes, and other storm water conveyance structures within the MS4.

4.2.3.2. Effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges to the MS4, including spills, illicit connections, illegal dumping and sanitary sewer overflows ("SSOs") into the storm sewer system. The IDDE program shall require removal of such discharges consistent with Part 4.2.3.6. of this Permit and implement appropriate enforcement procedures and actions. The Permittee must have a variety of enforcement options in order to apply and escalate enforcement procedures as necessary based on the severity of violation and/or the failure of the violator to address the violation(s). Discharges pursuant to a separate UPDES Permit (other than the UPDES Permit for discharges from the MS4) and non-storm water discharges listed in Part 1.2.2.2. are exempt.

4.2.3.2.1 The Permittee's IDDE program must have adequate legal authority to detect, investigate, eliminate, and enforce against non-storm water discharges, including illegal dumping, into the MS4. Adequate legal authority consists of an effective ordinance, by-law, or other regulatory mechanism. The documented IDDE program that is included in the Permittee's SWMP must include a reference or citation of the authority the Permittee will use to implement all aspects of the IDDE program.

4.2.3.3. Implement a written plan to detect and address non-storm water discharges to the MS4, including spills, illicit connections, sanitary sewer overflows and illegal dumping. The plan shall include:

4.2.3.3.1 Written systematic procedures for locating and listing the following priority areas likely to have illicit discharges (if applicable to the jurisdiction):

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

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

4.2.3.3.2 Field inspections of areas which are considered a priority area as identified in Permit Part 4.2.3.3.1. Compliance with this provision shall be achieved by inspecting each priority area annually at a minimum. All field assessment activities shall utilize an inspection form to document findings.

4.2.3.3.3 Dry weather screening (See Definitions in 7.0) activities for the purpose of verifying outfall locations and detecting illicit discharges within the Permittee's jurisdiction that discharge to a receiving water. All outfalls shall be inspected at least once during the 5-year Permit term. Dry weather screening activities shall utilize an inspection form to document findings.

4.2.3.3.4 If the Permittee discovers or suspects that a discharger may need a separate UPDES Permit (e.g., Industrial Storm Water Permit, Dewatering Permit), the Permittee shall notify the *Director* within **30 days**.

4.2.3.4. Implement standard operating procedures (SOPs) or similar types of documents for tracing the source of an illicit discharge. The document should include procedures such as: visual inspections, opening manholes when necessary, using mobile cameras, using field tests of selected chemical parameters as indicators of discharge sources, collecting and analyzing water samples for the purpose of determining sanctions or penalties, and/or other detailed inspection procedures.

4.2.3.5. Implement SOPs or similar types of documents for characterizing the nature of illicit discharges and the potential public or environmental threat posed by them when found by or reported to the Permittee by the hotline or other telephone number described in 4.2.3.9. These procedures shall include detailed instructions for evaluating how the discharge will be immediately contained and the steps to be taken to contain the discharge. Compliance with this provision will be achieved by initiating an investigation immediately upon being alerted of a potential illicit discharge.

4.2.3.5.1 When the source of an illicit non-storm water discharge is identified and confirmed, the Permittee must record the following information in an inspection report: the date the Permittee became aware of the non-storm water discharge, the date the Permittee initiated an investigation of the discharge, the date the discharge was observed, the location of the discharge, a description of the discharge, the method of discovery, date of removal, repair, or enforcement action; date and method of removal verification. Analytical monitoring may be necessary to aid in the identification of potential sources of an illicit discharge and to characterize the nature of the illicit discharge. The decision process for utilizing analytical monitoring must be fully documented in the inspection report.

4.2.3.6. Implement SOPs or similar types of documents for ceasing the illicit discharge, including notification of appropriate authorities; notification of the property owner; technical assistance for removing the source of the discharge or otherwise eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated. Illicit discharges to the MS4 are prohibited and any such discharges violate this Permit and remain in violation until they are eliminated.

4.2.3.6.1 Upon detection, the Permittee shall require immediate cessation of improper disposal practices upon confirmation of responsible parties in accordance with its enforceable legal authorities established pursuant to Part 4.2.3.2.1. of this Permit.

4.2.3.6.2 Although the Permittee is 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.

4.2.3.6.3 All IDDE investigations must be thoroughly documented and may be requested at any time by the *Director*. If a Permittee is unable to meet the minimum performance measures outlined in Parts 4.2.3.5. or 4.2.3.6., the Permittee must immediately submit to the *Director* written documentation or rationale describing the circumstances why compliance with the minimum performance measures was not possible. All IDDE documentation shall be retained by the Permittee as required by the SWMP document.

4.2.3.7. Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.

4.2.3.8. Permittees shall promote or provide services for the collection of household hazardous waste.

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

4.2.3.9.1 The Permittee must develop a written spill and improper disposal response SOP or similar type of document and a flow chart for internal use, that shows the procedures for responding to public referrals of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incident response, even if it is a different entity, other than the Permittee. The procedure and list must be incorporated as part of the IDDE program and incorporated into the Permittee's SWMP document. The list must be maintained and updated as changes occur.

4.2.3.10. Permittees shall implement procedures for program evaluation and assessment which includes maintaining a database for mapping, tracking of the number and type of spills or illicit discharges identified; and inspections conducted.

4.2.3.11. Permittees shall at a minimum, 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 receives annual training in the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections. Office personnel who might receive initial reports of illicit discharges, should also receive the annual training, All Permittees shall require that all new hires are trained within **60 days** of hire date and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods, or staffing. Training shall include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge. Training records must be kept and shall include dates,

activities or course descriptions, and names and positions of staff in attendance. The Permittee shall include a summary of such training in the annual report.

4.2.3.12. The *Director* reserves the right to request documentation or further investigation of a particular non-storm water discharge of concern, to determine a reasonable basis for allowing the non-storm water discharge and excluding the discharge from the Permittee's program or to require inclusion of the discharge in the Permittee's program, if water quality concerns cannot otherwise be reasonably satisfied.

4.2.4. Construction Site Storm Water Runoff Control

All Permittees shall revise (as necessary), implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one acre. This includes 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 according to the minimum performance measures listed below. Public and private projects, including projects proposed by the Permittee's own departments and agencies, shall comply with these requirements.

The minimum performance measures are:

4.2.4.1. Revise (as necessary) and enforce an ordinance or other regulatory mechanism that requires the use of erosion and sediment control practices at construction sites. The ordinance or other regulatory mechanism shall, at a minimum, be equivalent with the requirements set forth in the most current UPDES Storm Water General Permits for Construction activities which can be found at http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm. The ordinance or other regulatory mechanism shall include sanctions to ensure compliance. The ordinance or other regulatory mechanism shall apply, at a minimum, to construction projects disturbing greater than or equal to one acre, as well as, construction projects of 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. Existing local requirements to apply storm water controls at sites less than 1 acre or not part of a Common Plan of Development may be retained.

4.2.4.1.1 The ordinance or other regulatory mechanism shall, at a minimum, require construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs as necessary to protect water quality, reduce the discharge of pollutants, and control waste. This includes, but not limited to, discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. The SWPPP requirements must be, at a minimum, equivalent with the SWPPP requirement set forth in the most current UPDES Storm Water General Permits for Construction Activities, which can be found at: http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm.

4.2.4.1.2 Permittees shall require construction operators to obtain coverage under the current UPDES Storm Water General Permits for Construction Activities for the duration of the project. Coverage can be renewed; or obtained online by completing a NOI or renewal request at https://deq.utah.gov/water-quality/updes-ereporting#construction

4.2.4.1.3 The ordinance shall include a provision for access by qualified personnel to inspect construction storm water BMPs on private properties that discharge to the MS4.

4.2.4.2. Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism. The enforcement strategy shall include:

4.2.4.2.1 Standard operating procedures (SOPs) or similar types of documents that include specific processes and sanctions to minimize the occurrence of violations and obtain compliance from violators. The SOP or similar type of document shall include appropriate, escalating enforcement procedures and actions, including an appeals process that is published in a publicly accessible location.

4.2.4.2.2 Documentation and tracking of all enforcement actions.

4.2.4.3. Development and implementation of a checklist for pre-construction SWPPP review that is consistent with the requirements of the current UPDES Storm Water General Permits for Construction Activities. MS4s are required to keep records for, at a minimum, all construction sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre, to ensure plans are complete and in compliance with State regulations. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer.

Prior to construction, the Permittee shall:

4.2.4.3.1 Conduct a pre-construction SWPPP meeting which includes a review of the site design, planned operations at the construction site, planned BMPs during the construction phase, and planned BMPs to be used to manage runoff created after development.

4.2.4.3.2. The Permittee must develop procedures for receiving and considering information and comments submitted by the public on proposed projects.

4.2.4.3.2 Identify priority construction sites considering the following factors at a minimum:

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

4.2.4.4. All Permittees shall develop and implement SOPs or similar types of documents for construction site inspection and enforcement of construction storm water pollution control measures. The procedures must clearly identify who is responsible for site inspections, as well as, who has authority to implement enforcement procedures. An individual or entity who prepares a SWPPP for a construction project may not perform the construction site inspections required of Part 4.2.4.4.1 and 4.2.4.4.3 on behalf of the Permittee. The Permittee must have the authority to the extent authorized by law

to impose sanctions to ensure compliance with the local program. These procedures and regulatory authorities must be written and documented in the SWMP.

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

4.2.4.4.1 At a minimum, monthly 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 which collectively disturbs land greater than or equal to one acre are required. These inspections must be conducted by qualified personnel using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at https://deq.utah.gov/water-quality/municipal-separate-storm-sewer-system-ms4s-permits-updes-permits.

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

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

4.2.4.4.2 The Permittee must inspect all phases of construction, including prior to land disturbance, during active construction, and following active construction. The Permittee must document the procedure for being notified by construction operators/owners of their completion of active construction in its SWMP. Notification is required so that verification of final stabilization and removal of all temporary control measures may be conducted. This procedure must be provided to the construction operator/owner before active construction begins.

4.2.4.4.3 Inspections by the MS4 of priority construction sites, as defined in Part 7.0., must be conducted at least biweekly (every two weeks) using the Construction Storm Water Inspection Form (Checklist) found on the *Division's* website at https://deq.utah.gov/water-quality/municipal-separate-storm-sewer-system-ms4s-permits-updes-permits.

4.2.4.4.4 Permittees may utilize an electronic site inspection tool in place of up to one-half of on-site MS4 inspections at a construction site provided that the Permittee demonstrates to the Director that the tool meets the requirements of Part 4.2.4.

4.2.4.4.5 Based on site inspection findings, the Permittee must take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the Permittee's enforcement strategy. These follow-up and enforcement actions must be tracked and documented.

4.2.4.5 The Permittee must ensure that all staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement, are annually trained to conduct these activities. The training can be conducted by the MS4 or outside training can be attended. Such training must be extended to third-party inspectors and plan reviewers as well. The Permittee shall ensure that all new hires are trained within **60 days** of hire date and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods, or staffing. Training records must be kept and contain, at a minimum, dates, activities or course descriptions, and names and positions of staff in attendance.

4.2.4.6. All Permittees shall maintain records of all projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre. Permittees shall keep records which include but not limited to, site plan reviews, SWPPPs, inspections, and enforcement actions including verbal warnings, stop work orders, warning letters, notices of violation, and any other enforcement conducted. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer.

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

The Permittee shall revise (as necessary), implement, and enforce a program to address post-construction storm water runoff to the MS4 from private and public new development and redevelopment construction sites meeting the thresholds below. The water quality considerations of this minimum control measure do not replace or substitute for water quantity or flood management requirements implemented on the local level for new development or redevelopment sites. The water quality controls may be incorporated into the design of structures intended for flow control; or water quality control may be achieved with separate control measures. The program must apply to private and public development sites.

The minimum performance measures are:

4.2.5.1. Post-construction Controls. The Permittee's new development/redevelopment program must have requirements or standards to ensure that any storm water controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality. BMPs must be selected that address pollutants known to be discharged or have potential to be discharged from the site.

4.2.5.1.1. The Permittee's new development/redevelopment program should include non-structural BMPs. The Permittee should consider non-structural BMPs, including. requirements and standards to minimize development in areas susceptible to erosion and sediment loss; minimize the disturbance of native soils and vegetation; preserve areas that provide important water quality benefits; implement measures for flood control; and protect the integrity of natural resources and sensitive areas.

4.2.5.1.2. Retention Requirement. The Permittee must develop and define a specific hydrologic method or methods for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs in their jurisdiction and to facilitate plan review.

New development projects that disturb land 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 must manage rainfall on-site and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event or a predevelopment hydrologic condition, whichever is less. This objective must be accomplished by the use of practices that are designed, constructed, and maintained to infiltrate, have evapotranspiration, and/or harvest and reuse rainwater. 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.

Redevelopment projects that disturb greater than or equal to one acre, including projects less than an acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre must provide a site-specific and project-specific plan aimed at net gain to onsite retention or a reduction to impervious surface to provide similar water quality benefits. If a redevelopment project increases the impervious surface by greater than 10%, the project shall manage rainfall on-site and prevent the off-site discharge of the net increase in the volume associated with the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event. This objective must be accomplished by the use of practices that are designed, constructed, and maintained to infiltrate, have evapotranspiration, and/or harvest and reuse rainwater.

4.2.5.1.3. Low Impact Development Approach. The program shall include a process which ***requires*** the evaluation of a Low Impact Development (LID) approach for all projects subject to the requirements in 4.2.5.1.2. A LID approach promotes the implementation of BMPs that allow storm water to infiltrate, have evapotranspiration or harvest[1] and use storm water on site to reduce runoff from the site and protect water quality.

Guidance for implementing LID can be found in DWQ's LID controls which are appropriate for use in the State of Utah can be found in *A Guide to Low Impact Development within Utah* (the Guide), available on DWQ's website.

Permittees must allow for use of a minimum of five LID practices from the list in Appendix C of the Guide. If a Permittee has not adopted specific LID practices from Appendix C, any LID approach that meets 4.2.5.1.2 and is feasible may be used to meet this requirement.

4.2.5.1.4. Feasibility. If meeting the retention standards described in Part 4.2.5.1.2 is infeasible, a rationale shall be provided for the use of alternative design criteria. The new or redevelopment project must document and quantify that infiltration, evapotranspiration, and rainwater harvesting have been used to the maximum extent feasible and that full employment of these controls are infeasible due to constraints. LID infeasibility may be due to one or more of the following conditions: high groundwater, drinking water source protection areas, soil conditions, slopes, accessibility, excessive costs, or any other justifiable constraint.

Guidance for assessing and documenting site conditions can be found in DWQ's "A Guide to Low Impact Development within Utah" Appendix B "Storm Water Quality Report Template" located on the DWQ website at: https://documents.deq.utah.gov/water-quality/stormwater/updes/DWQ-2019-000161.pdf.

A MS Word version can be found on DWQ's website at: https://documents.deq.utah.gov/water-quality/stormwater/DWQ-2018-013750.docx.

4.2.5.2. Regulatory Mechanism. Develop and adopt an ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites. The ordinance or other regulatory mechanism shall apply, at a minimum, to new development and redevelopment sites that discharge to the MS4 that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre. The ordinance or other regulatory mechanism shall require BMP selection, design, installation, operation, and maintenance standards necessary to protect water quality and reduce the discharge of

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

The Permittee's ordinance or other regulatory mechanism must include an appeals process.

4.2.5.2.1 The Permittee must include enforcement provisions in the ordinance or other regulatory mechanism that must contain procedures for specific processes and sanctions to minimize the occurrences of violations and obtain compliance from chronic and recalcitrant violators. These processes and sanctions shall include appropriate, escalating enforcement procedures and actions.

4.2.5.2.2 The Permittee must maintain documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4.

Documentation shall include:

- How long-term storm water BMPs were selected;
- The pollutant removal performance expected from the selected BMPs; and
- The technical basis which supports the performance claims for the selected BMPs.

All Permittees shall adopt and implement SOPs or similar types of documents for site inspection and enforcement of post-construction storm water control measures. These procedures must ensure adequate ongoing long-term operation and maintenance of approved storm water control measures.

4.2.5.2.3 The ordinance or other regulatory mechanism shall include provisions for post-construction access for Permittees to inspect storm water control measures on private properties that discharge to the MS4 to ensure that adequate maintenance is being

performed. The ordinance or other regulatory mechanism may require private property owner/operators or qualified third parties to conduct maintenance and provide annual certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality, in lieu of the Permittee. If the Permittee requires a maintenance agreement addressing maintenance requirements for any control measures installed on site, the agreement must allow the Permittee to conduct oversight inspections of the storm water control measures and also account for transfer of responsibility in leases and/or deeds. The agreement must also allow the Permittee to perform necessary maintenance or corrective actions neglected by the property owner/operator and bill or recoup costs from the property owner/operator as needed.

4.2.5.2.4 Permanent structural BMPs shall be inspected at least once during installation by qualified personnel. Upon completion, the Permittee must verify that long-term BMPs were constructed as designed.

4.2.5.2.5 Inspections and any necessary maintenance must be conducted at least every other year or as necessary to maintain functionality of the control by either the Permittee, or, if applicable, the property owner/operator. On sites where the property owner/operator is conducting maintenance, the Permittee shall inspect those storm water control measures at least once every five years, or more frequently as determined by the Permittee, to verify and ensure that adequate maintenance is being performed. Following an inspection, if there is an observed failure of a facility to perform as designed, the Permittee must document its findings in an inspection report.
The inspection report must include the following:

- Inspection date;
- Name and signature of inspector;
- Project location;
- Current ownership information;
- A description of the condition of the storm water control measure including the quality of: vegetation and soils; inlet and outlet channels and structures; catch basins; spillways; weirs, and other control structures; and sediment and debris accumulation in storage as well as in and around inlet and outlet structures; and,
- Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and re-inspection dates.

4.2.5.3. Plan Review. The Permittee shall:

4.2.5.3.1 Adopt and implement procedures for site plan review which evaluates potential water quality impacts. The procedures shall apply through the life of the project from conceptual design to project closeout.

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

4.2.5.3.2 Review post-construction plans for, at a minimum, all new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre, to ensure that the plans include long-term storm water management measures meet the requirements of this minimum control measure.

4.2.5.4. Inventory. The Permittee must maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redeveloped sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre. This inventory must include both public and private sector sites located within the Permittee's service area that were developed since the Permittee obtained coverage by this permit or the date that post-construction requirements came into effect, whichever is later.

4.2.5.4.1 Each entry to the inventory must include basic information on each project, such as project's name, owner's name and contact information, location, start/end date, etc.

In addition, inventory entries must include the following for each project:

- Short description of each storm water control measure (type, number, design or performance specifications);
- Short description of maintenance requirements (frequency of required maintenance and inspections); and
- Inspection information (date, findings, follow up activities, prioritization of follow-up activities, compliance status).

4.2.5.4.2 Based on inspections conducted pursuant to Part 4.2.5.2.5, the Permittee must update the inventory when changes occur in property ownership or the specific control measures implemented at the site.

4.2.5.5. Training. Permittees shall ensure that all staff involved in post-construction storm water management, including those that conduct plan review, annual maintenance inspections, and enforcement, receive appropriate training. Training shall be provided or made available for staff in the fundamentals of long-term storm water management through the use of structural and non-structural control methods. Training records must be kept and include, at a minimum, dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall ensure that all new hires are trained within **60 days** of hire and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods, or staffing.

4.2.6. Pollution Prevention and Good Housekeeping for Municipal Operations

All Permittees must implement a program for Permittee-owned or operated facilities, operations and structural storm water controls that includes SOPs, pollution prevention BMPs, storm water pollution prevention plans or similar type of documents, and a training component that have the ultimate goal of preventing or reducing the runoff of pollutants to the MS4 and waters of the state. All components of the program shall be

included in the SWMP document and must identify the department responsible for performing each activity described in this section. The Permittee shall develop an inventory of all such Permittee-owned or operated facilities. The Permittee must review this inventory annually and update as necessary.

4.2.6.1. The Permittee shall develop and keep current a written inventory of all the below potential "high priority" facilities that are owned or operated by the Permittee and all the associated storm water controls, at a minimum. The *Director* maintains the authority to add additional facilities to the list, as needed.
The inventory should include, but not limited to, the following facilities:

- Composting facilities;
- Equipment storage and maintenance facilities;
- Fuel farms;
- Hazardous waste disposal facilities;
- Hazardous waste handling and transfer facilities;
- Incinerators;
- Landfills;
- Landscape maintenance facilities on municipal property;
- Materials storage yards;
- Pesticide storage facilities;
- Public buildings, including libraries, police stations, fire stations, municipal buildings, restrooms, and similar Permittee-owned or operated buildings;
- Public parking lots;
- Public golf course maintenance facilities;
- Public swimming pool maintenance facilities;
- Public works yards;
- Public Marinas and Boat Launches;
- Recycling facilities;
- Salt storage facilities and de-icing storage facilities;
- Solid waste handling and transfer facilities;
- Street repair and maintenance facilities and or shed sites;
- Vehicle storage and maintenance yards;
- Airports;
- Animal control facilities;
- Vehicle salvage yards;
- Chemical storage facilities; and
- Transportation hubs, including bus stations

4.2.6.2. All Permittees shall assess the written inventory of Permittee-owned or operated facilities, operations, and storm water controls identified in Part 4.2.6.1 and make a list of common pollutants that may originate from these facilities and how to prevent them from entering the storm water system. A description of the assessment process and findings must be included in the SWMP document.

4.2.6.3. Based on the assessment required in Part 4.2.6.2., the Permittee must identify as "high-priority" those facilities or operations that have:

- Pollutants stored at the site;

- Improperly stored materials;
- Potential pollutant-generating activities performed outside (e.g. changing automotive fluids)
- Close proximity to fresh water and water bodies, including but not limited, to streams, canals, rivers, ponds and lakes;
- Potential to discharge pollutant(s) of concern to impaired water(s).

The Permittee shall provide water quality control measures and BMPs at all high-priority sites designed to target the specific pollutants generated onsite, and/or the pollutants associated with the impaired waters. The Permittee shall monitor the control measures and BMPs regularly to verify that the BMPs are functioning. Control measures, BMPs, and monitoring schedules shall be specified in the Permittee's SWMP.

4.2.6.4 The Permittee shall update the SWMP to include a list of "high priority" facilities according to 4.2.6.3 and prepare a Storm Water Pollution Prevention Plan (SWPPP) for each facility within **180 days** from the effective date of this permit. Each "high priority" facility shall implement a SWPPP outlining measures to prevent pollutants from entering the storm drain system from each of these facilities and contain an inspection schedule of the facility.

The SWPPP shall include a site map showing the following information:

- Facility address;
- Staff/contact information for the facility;
- Property boundaries;
- Buildings and impervious surfaces;
- Directions of storm water flow (use arrows);
- Locations of structural control measures;
- Facility BMPs (non-structural);
- Location and name of the nearest defined drainage(s) which could receive runoff from the facility, whether it contains water or not;
- Locations of all storm water conveyances including ditches, pipes, basins, inlets, and swales;
- Locations where on-site activities may be exposed to storm water, including, but limited to the following:
  - -Fixed fueling operations;
  - -Vehicle and equipment maintenance and/or cleaning areas;
  - -Brine making areas;
  - -Loading/unloading areas;
  - -Waste storage or disposal areas;
  - -Liquid storage tanks;
  - -Process and equipment operating areas;
  - -Materials storage or disposal areas;
- Locations where significant spills or leaks have occurred;
- Locations of all visual storm water monitoring points;
- Locations of storm water inlets and outfalls, with a unique identification code for each outfall and an approximate outline of the areas draining to each outfall;

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

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

4.2.6.5.1 Monthly visual inspections: The Permittee must perform monthly visual inspections of "high priority" facilities and related storm water outfalls in accordance with the developed SOPs to verify the performance of the BMPs and all other systems designed and placed to eliminate pollutant discharges. The monthly inspections must be tracked in a log for every facility and records must be kept with the SWMP document. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

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

4.2.6.5.3 Annual visual observation of storm water discharges: At least once per year, the Permittee must visually observe the quality of the storm water discharges from the "high priority" facilities. Any observed problems (e.g., color, foam, sheen, turbidity) that can be associated with pollutant sources or controls must be remedied as soon as practicable, but at a minimum, before the next storm event. Remediation is required to prevent discharge to the storm drain system. Visual observations must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. The inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

4.2.6.6. Permittees shall develop and implement SOPs to protect water quality at each of the facilities owned or operated by the Permittee and/or activities conducted by the Permittee including, but not limited to, those listed below:

- Buildings and facilities;
- Material storage areas;
- Heavy equipment storage areas and maintenance areas;
- Parks and open space;
- Vehicle and Equipment;
- Roads, highways, and parking lots; and
- Storm water collection and conveyance system.

4.2.6.6.1 SOPs shall address the following practices to ensure they are protective of water quality:

- Use, storage and disposal of chemicals;
- Storage of salt, sand, gravel, landscaping materials, asphalt and other materials;

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

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

4.2.6.6.3 Permittees must ensure and document proper disposal methods of all waste and wastewater removed during cleaning and maintenance of the storm water conveyance system. These disposal methods apply to, but are not limited to, street sweeping and catch basin cleaning. Materials removed from the MS4 should be dewatered in a contained area and discharged to the local sanitary sewer (with approval of local authorities) where feasible. The solid material will need to be stored and disposed of properly to avoid discharge during a storm event. Any other treatment and disposal measures shall be reviewed and approved by the *Director*. Some materials removed from storm drains and open channels may require special handling and disposal, and

may not be authorized to be disposed of in a landfill. The solid material shall be stored and disposed of in accordance to federal, state and local laws.

4.2.6.6.4 Permittees must ensure that vehicle, equipment, and other wash waters are not discharged to the MS4 or waters of the state as these types of discharges are strictly prohibited under this Permit. Additionally, the Permittee must minimize discharges to waters of the state that are associated with snow disposal and melt.

4.2.6.6.5 The Permittee shall develop a spill prevention plan in coordination with the local fire department.

4.2.6.6.6 All Permittees must maintain an inventory of all floor drains inside all Permittee-owned or operated buildings and ensure that all floor drains discharge to appropriate locations. The inventory shall be updated as necessary to ensure accuracy.

4.2.6.7. The Permittee shall be responsible for ensuring, through contractually-required documentation and/or periodic site visits that contractors performing Operation and Maintenance (O&M) activities for the Permittee are using appropriate storm water controls and following the SOPs, storm water control measures, and good housekeeping practices of the Permittee.

4.2.6.8. The Permittee must develop and implement a process to assess the water quality impacts and the design of all new flood management structural controls that are associated with the Permittee or that discharge to the MS4. This process shall include consideration of controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives. A description of this process shall be included in the SWMP document.

4.2.6.8.1 Existing flood management structural controls shall be assessed to determine whether changes or additions should be made to improve water quality. A description of this process and any changes or additions made should be included in the SWMP document.

4.2.6.9. The Permittee must develop a plan to retrofit existing developed sites that the Permittee owns or operates that are adversely impacting water quality. The retrofit plan must be developed to emphasize controls that infiltrate, have evapotranspiration, or harvest and use storm water discharges.

The plan must include a ranking of retrofit sites based on the following criteria:

- Proximity to waterbody;
- Current assessment of waterbody with the goal to improve impaired waterbodies and protect unimpaired waterbodies;
- Hydrologic condition of the receiving waterbody;
- Proximity to sensitive ecosystem or protected area; and
- Any sites that could be further enhanced by retrofitting storm water controls.

4.2.6.10. The Permittee shall require that all employees, contracted staff, and other responsible entities that have primary operation, or maintenance job functions that are likely to impact storm water quality receive annual training. The annual training shall address the importance of protecting water quality, the requirements of this Permit, O&M requirements, inspection procedures, ways prevent or minimize impacts to water

quality by how they perform their job activities SOPs and SWPPPs for the various Permittee-owned or operated facilities, as well as, procedures for reporting water quality concerns, including potential illicit discharges. Training records must be kept and contain, at a minimum, dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall document and maintain records of the training provided and the staff in attendance. The Permittees must ensure that all new hires are trained within **60 days** of hire and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods, or staffing.

4.3. Sharing Responsibility

4.3.1. Implementation of one or more of the six minimum measures may be shared with another entity, or the entity may fully take over the measure. A Permittee may rely on another entity only if:

4.3.2. The other entity, in fact, implements the control measure;

4.3.3. The particular control measure, or component of that measure, is at least as stringent as the corresponding Permit requirement; and

4.3.4. The other entity agrees to implement the control measure through a written agreement. This obligation must be maintained as part of the description given in the Permittee's SWMP document. If the other entity agrees to report on the minimum control measure, the Permittee must supply the other entity with the reporting requirements contained in Part 5.5. of this Permit. If the other entity fails to implement the control measure, then the Permittee remains liable for any discharges due to any failure to implement the control measure.

4.3.5. The Permittee conducts training of the responsible entity on the Permit requirements and applicable standard operating procedures.

4.4. Reviewing and Updating Storm Water Management Programs

4.4.1. *Storm Water Management Program Review:* All Permittees must conduct, at a minimum, an annual review of the SWMP document in conjunction with preparation of the annual report required in Part 5.5.

4.4.2. *Storm Water Management Program Update:* A Permittee may change the SWMP document during the life of the Permit in accordance with the following procedures:

4.4.2.1. Changes adding components, controls, or requirements to the SWMP document may be made at any time upon written notification to the *Director*. Changes that reduce or replace any component, control, or requirement of the SWMP document is not authorized, unless it meets requirements outlined in Part 4.4.2.2.

4.4.2.2. Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP document with an alternate BMP may be adopted at any time, provided the analysis is clearly outlined and subsequently approved by the *Director*.

An analysis shall include:

4.4.2.2.1 An explanation of why the BMP is ineffective or infeasible;

4.4.2.2.2 Expectations or report on the effectiveness of the replacement BMP; and

4.4.2.2.3 An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced, or has achieved those goals.

4.4.3. Change requests or notifications must be made in writing and signed in accordance with Part 6.8.

4.4.4. Change requests or notifications will receive confirmation and approval or denial in writing from the *Director*.

4.4.5. Storm Water Management Program Updates required by the *Director:* The *Director* may require changes to the SWMP as needed to:

4.4.5.1. Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;

4.4.5.2. Include more stringent requirements necessary to comply with new Federal regulatory requirements; or

4.4.5.3. Include such other conditions deemed necessary by the *Director* to comply with the goals and requirements of the Clean Water Act.

5.0 Narrative Standard, Monitoring, Recordkeeping and Reporting

5.1. Narrative Standard

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

5.2. Analytical Monitoring

Permittees are not required to conduct analytical monitoring (see definition in Part 7.0) during the effective term of this Permit, with the following exceptions:

5.2.1. Water quality sampling may be required for compliance with TMDLs, pursuant to Part 3.1. of this Permit.

5.2.2. Sampling or testing may be required for characterizing illicit discharges pursuant to Parts 4.2.3.4., 4.2.3.5., and 4.2.3.5.1 of this Permit.

5.2.3. In the event that the Permittee elects to conduct analytical monitoring as part of its Storm Water Management Program, the Permittee is required to comply with Part 6.18. of this Permit.

5.3. Non-analytical Monitoring

5.3.1. Non-analytical monitoring (see definitions in Part 7.0) such as visual dry weather screening is required to comply with Part 4.2.3.3.2 of this Permit.

5.4. Record keeping

5.4.1. Permittees must keep all supplementary documents associated with this Permit (e.g., Storm Water Management Program (SWMP) document, SWMP Implementation Schedule) current and up to date to ensure the purpose and objectives of the required document are achieved.

5.4.2. All modifications to supplementary documents must be submitted to the *Director* in accordance with Parts 4.4 and 6.8.

5.4.3. The *Director* may at any time make a written determination that parts or all of the supplementary documents are not in compliance with this Permit. If such a determination is made the Permittee must make modifications to these parts within a time frame specified by the *Director*.

5.4.4. The Permittee shall retain all required plans, records of all programs, records of all monitoring information, copies of all reports required by this Permit, and records of all

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

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

5.5. Reporting

5.5.1. The Permittee must submit an annual report to the *Director* by October 1 for the reporting period of July 1 to June 30 of each year of the Permit term.

5.5.2. The report must be submitted using the report form provided on the *Division's* website at https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/docs/2009/07Jul/MS4_UT_09_annual_report_form.pdf

5.5.3. The Permittee shall sign and certify the annual report in accordance with Part 6.8.

5.5.4. Signed copies of the Annual Report and all other reports required herein, must be submitted directly to the DWQ electronic document system at: https://deq.utah.gov/water-quality/water-quality-electronic-submissions

6.0 Standard Permit Conditions

6.1. Duty to Comply

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

6.2. Penalties for Violations of Permit Conditions

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

6.3. Duty to Reapply

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

6.4. Need to Halt or Reduce Activity not a Defense

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

6.5. Duty to Mitigate

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

6.6. Duty to Provide Information

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

6.7. Other Information

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

6.8. Signatory Requirements

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

6.8.1. All Permit applications shall be signed by either a principal executive officer or ranking elected official.

6.8.2. All reports required by the Permit and other information requested by the *Director* shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

6.8.2.1. The authorization is made in writing by a person described above and submitted to the *Director*, and,

6.8.2.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

6.8.2.3. Changes to authorization. If an authorization under *Part 6.8.2.* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *Part 6.8.2.* must be submitted to the *Director* prior to or together with any reports, information, or applications to be signed by an authorized representative.

6.8.3. *Certification*. Any person signing documents under this Part shall make the following certification:

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

6.9 Availability of Reports

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

6.10. Penalties for Falsification of Reports

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

6.11. Penalties for Tampering

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

6.12. Property Rights

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

6.13. Severability

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

6.14. Requiring a Different Permit

The *Director* may require the Permittee authorized by this Permit to obtain an individual *UPDES* Permit. Any interested person may petition the *Director* to take action under this paragraph. The *Director* may require the Permittee authorized to discharge under this Permit to apply for an individual *UPDES* Permit only if the Permittee has been notified in writing that a Permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form (as necessary), a statement setting a deadline for the Permittee to file the application, and a statement that on the effective date of the municipal *UPDES* Permit, coverage under this Permit shall automatically terminate. Permit applications shall be submitted to the address of the *Division* shown in *Part 5.5.* of this Permit. The *Director* may grant additional time to submit the application upon request of the applicant. If the municipality fails to submit in a timely manner a municipal *UPDES* Permit application as required by the *Director*, then the applicability of this Permit to the Permittee is automatically terminated at the end of the day specified for application submittal.

6.15. State/Federal Laws

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by *UCA 19-5-117* and *Section 510* of the *Clean Water Act* or any applicable Federal or State transportation regulations.

6.16. Proper Operation and Maintenance

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

6.17. Monitoring and Records

6.17.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

6.17.2. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the *Director* at any time.

6.17.3. Records of monitoring information shall include:

6.17.3.1 The date, exact place, and time of sampling or measurements;

6.17.3.2 The name(s) of the individual(s) who performed the sampling or measurements;

6.17.3.3 The date(s) and time(s) analyses were performed;

6.173.4 The name(s) of the individual(s) who performed the analyses;

6.17.3.5 The analytical techniques or methods used; and

6.17.3.6 The results of such analyses.

6.18. Monitoring Procedures

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

6.19. Inspection and Entry

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

6.19.1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Permit;

6.19.2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this Permit;

6.19.3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment); and

6.19.4. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by law, any substances or parameters at any location.

6.20. Permit Actions

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

6.21. Storm Water-Reopener Provision

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

7.0 Definitions

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

"40 CFR" refers to Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal government.

"Act" means the *Utah Water Quality Act*.

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

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

"Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"CWA" means *The Clean Water Act of 1987*, formerly referred to as the Federal Water Pollution Control Act.

"Co-Permittee" means any operator of a regulated Small MS4 that is applying jointly with another applicant for coverage under this Permit. A Co-Permittee owns or operates a regulated Small MS4 located within or adjacent to another regulated MS4. A Co- Permittee is only responsible for complying with the conditions of this Permit relating to discharges from the MS4 the Co-Permittee owns or operates. See also 40 CFR 122.26(b)(1).

"Control Measure" refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the state.

"Common plan of development or sale" means one plan for development or sale, separate parts of which are related by any announcement, piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, plat, blueprint, contract, Permit application, zoning request, computer design, etc.), physical demarcation (including contracts) that identify the scope of the project. A plan may still be a common plan of development or sale even if it is taking place in separate stages or phases, is planned in combination with other construction activities, or is implemented by different owners or operators.

"Developed site" means a parcel or property that was previously in commercial, industrial, institutional, governmental, or residential use. A parcel that was previously in an agricultural use would not be considered to be a developed site.

"Director" means the director of the Utah Division of Water Quality, otherwise known as the Executive Secretary of the Utah Water Quality Board.

"Division" means the Utah Division of Water Quality.

"Discharge" for the purpose of this Permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4).

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

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

"Entity" means a governmental body or a public or private organization.

"EPA" means the United States Environmental Protection Agency.

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

"Ground water" means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.

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

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

"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a UPDES Permit (other than the UPDES Permit for discharges from the municipal separate storm sewer) to waters of the state.

"Impaired waters" means any segment of surface waters that has been identified by the *Director* as failing to support one or more of its designated uses. The *Director* periodically compiles a list of such waters known as the 303(d) List.

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

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

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

"Maximum Extent Practicable" (MEP) is the technology-based discharge standard for Municipal Separate Storm Sewer Systems established by paragraph 402(p)(3)(B)(iii) of the Federal Clean Water Act (CWA), which reads as follows: "Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants."

"Medium MS4" *Medium municipal separate storm sewer system* means all municipal separate storm sewers that are located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the1990 Decennial Census by the Bureau of the Census

"Monitoring" refers to tracking or measuring activities, progress, results, etc.;

"Municipal separate storm sewer system" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) pursuant to paragraphs R317-8-1.6(4), (8), & (15), or designated under UAC R317-8-11.3(6)(a) and UAC R317-8-11.3(6)(b):

- that is owned or operated by a state, city, town, county, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the state;

- that is designed or used for collecting or conveying storm water;

- which is not a combined sewer; and

- which is not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR 122.2.

"NOI" is an acronym for "Notice of Intent" to be covered by this Permit and is the mechanism used to "register" for coverage under a General Permit.

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

"Operator" is the person or entity responsible for the operation and maintenance of the MS4.

"Outfall" means a point source as defined by UAC R317-8-1.5(34) at the point where a municipal separate storm sewer discharges to waters of the state and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the state and are used to convey waters of the state.

"Phase II areas" means areas regulated under UPDES storm water regulations encompassed by Small MS4's (see definition 7.39.).

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

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

"Runoff" is water that travels across the land surface, or laterally through the ground near the land surface, and discharges to water bodies either directly or through a collection and conveyance system. Runoff includes storm water and water from other sources that travels across the land surface.

"SWMP" is an acronym for storm water management program. The SWMP document is the written plan that is used to describe the various control measures and activities the Permittee will undertake to implement the storm water management plan.

"SWPPP" is an acronym for storm water pollution prevention plan.

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

- This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

"SOP" is an acronym for standard operating procedure which is a set of written instructions that document a routine or repetitive activity. For the purpose of this Permit, SOPs should emphasize pollution control measures to protect water quality.

"Storm water" means storm water runoff, snowmelt runoff, and surface runoff and drainage.

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

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

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

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

General Permit for Storm Water Discharges from Construction Activities
STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY,
DIVISION OF WATER QUALITY

General Storm Water Permit for Construction Activity
Connected with Single Lot Housing Projects
Utah Pollution Discharge Elimination System Permit No. UTRH00000
(Common Plan Permit)

This Permit is issued in compliance with the provisions of the Utah Water Quality Act (Utah Code Annotated 19-5, as amended) the federal Water Pollution Control Act (33 United States 1251 et. seq., as amended by the Water Quality Act of 1987, Public Law 100-4), and the rules and Regulations made pursuant to those statutes.

This permit applies to "construction activity" for a single lot disturbing a total of one acre or less and for construction activities related to residential dwellings. A single lot covered by this permit is part of a common plan of development or sale (see definitions in Part 6).

Issuance of this permit does not authorize any permittee to violate water quality standards. The permittee shall develop best management practices (BMPs) and engage in activities that will protect water quality during the construction project.

This permit shall become effective on February 1, 2021.

This permit and the authorization to discharge expire at midnight on January 31, 2026.

Signed this 29th day of January, 2021

Erica Brown Gaddis, PhD
Director

DWQ-2021-001314

TABLE OF CONTENTS

1. COVERAGE UNDER THIS PERMIT. Conditions for coverage under this permit.

1.1. Coverage Limitations. A project site (see definition of a project site in Part 6) is eligible for this permit if it meets the following requirements:

1.1.1. It is found within the State of Utah but is not in Indian Country,

1.1.2. The construction activity is related to residential building on an individual lot or parcel.

1.1.3. It disturbs a total of one acre or less over the duration of the construction project,

1.1.4. *Multiple site coverage*:

1.1.4.a. This permit may apply to multiple lots with the contingency that each lot be covered under a different permit number (separate permit coverage for each lot). Lots do not necessarily need to be located within the same sub-division.

1.1.4.b. If multiple lot coverage is desired under one permit, it may be obtained under the General Permit for Discharges from UPDES Permit No. UTRC00000 (CGP). Multiple lots may be covered under one number (one permit coverage) provided that UTRC00000 is the controlling permit, and all lots covered under that tracking number are within the same sub-division.

1.1.5. *High Risk Sites*: If the project is located within the jurisdiction of, or discharges into, a Municipal Separate Storm Sewer System (MS4), the MS4 may require the permittee to utilize coverage under the CGP instead of using this permit if;

1.1.5.a. the project site is located within 50 feet of a perennial surface water, or;

1.1.5.b. the project site has a steep slope (70% or 35 degrees or more) with an elevation change from the slope of 10 feet or more (at any point during the time of construction – not including stockpiles).

1.1.6. *Common Plan of Development Limitations:* If the purpose of the project lot within common plan of development has been completed, the lot is no longer eligible for coverage under the Common Plan Permit. The purpose is considered complete as lots or separated sections of the development are completed, the lot or section is stabilized, and the plan purposes are fulfilled for that area, lot, or section.

1.2. Discharges Allowed. This permit allows discharges of storm water from construction activity at a project site, provided the storm water discharge meets the requirements within this permit.

1.3. Non-Storm Water Discharges. Other non-storm water discharges that are allowed are:

1.3.1. Flushings from potable or irrigation water sources where they have not been used for a washing or cleaning activity;

1.3.2. Water used for dust control;

1.3.3. Spring water and groundwater that have not been soiled with sediment or other pollutants from construction activity;

1.3.4. Emergency fire-fighting activities, and;

1.3.5. Footing drains that have not been soiled from construction activity.

1.4. How to Obtain Permit Coverage. The permit may be obtained online at the Utah Department of Environmental Quality (DEQ) UPDES Permits website at https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits. Click on the "UPDES NeT Apply Online" button. Create an account, or if an account has already been created, proceed with providing the information requested. **The notice of intent (NOI) for this permit is the same NOI that is used for the CGP, UTRC00000.** To complete the application process the permittee must pay a permit fee. The NOI may be filled out electronically using the online permit application system. The NOI can also be submitted using a downloadable pdf version of the NOI obtained from the same website cited above along with the permit fee. The form and fee can either be hand delivered to Utah Division of Water Quality [DWQ], 195 North 1950 West, Salt Lake City, Utah, 3rd floor in the MASOB building, or mailed to DWQ, P.O. Box 144870, Salt Lake City, Utah 84114-4870. When a party receives coverage under the permit, they will receive a permit number, and the opportunity to download a copy the NOI and Authorization to Discharge Letter for "proof of coverage." A copy of this permit may be downloaded from the Online Permits Database.

1.4.1. Signature on the NOI. The owner and the general contractor, which in some cases could be the same party, must sign the downloadable pdf version of the NOI (see 5.16.1.a) and place it in the storm water pollution prevention plan (SWPPP) along with the Authorization to Discharge Letter. (see 4.2.8). In the online permits database, if technical limitations prevent the signature of both owner and operator, either the owner or operator is acceptable, but the owner's signature is preferred.

1.5. Permit Renewal. This permit must be renewed yearly on the anniversary date of the original permit application. This is done by logging onto the account created at the time of NOI application, refreshing the information on the NOI, and paying the yearly permit fee.

1.6. Start and end of Permit Coverage. Permit coverage begins immediately upon completion and submission of an NOI and the permit fee. If the NOI is submitted electronically on-line permit coverage begins on that day, upon the receipt of the Authorization to Discharge Letter. If the NOI is submitted by mail permit coverage begins when the NOI is received and entered into the on-line data base by DWQ staff, and an Authorization to Discharge Letter is generated with coverage dates, for the permittee. For projects within the jurisdiction of a regulated MS4 (see definitions in Part 6; the list of regulated MS4s is found on https://deq.utah.gov/water-quality/municipal-separate-storm-sewer-system-ms4s-permits-updes-permits), the permittee must also notify and receive approval for the project from the regulated MS4 having jurisdiction before the project may commence (see 4.2.11.). The permit fee is an annual fee that must be paid yearly on the anniversary date of permit issuance. The permit will remain effective until or unless any of the following occurs:

1.6.1. The permittee completes the notice of termination (NOT) process, as outlined in section 1.7,

1.6.2. The permittee fails to submit the yearly permit fee,

1.6.3. Aside from permit coverage, which may be renewed annually by the permittee, as needed, this general permit expires every 5 years and normally is renewed through a public notice process by DWQ. In the event that the permit nears the end of its 5 year cycle, and the year of permit coverage for a construction site extends beyond the expiration date for the permit, the permittee must request continuing coverage through the permit renewal process. Otherwise permit coverage for a construction site will terminate when the general permit expires. Renewal of permit coverage can be done in the online electronic storm water data base up to 12 months prior to the expiration of the permit, or by letter

received by DWQ before the expiration date of the specific permit coverage in question where concurrently all entries in the NOI can be updated as needed.

1.6.3.a. If a renewal permit has been issued and is in place at the expiration date of this permit, this permit will terminate and coverage under the renewed permit will begin on the expiration date unless 1.7.1 has been invoked by the permittee.

1.6.3.b. If a renewal permit has not been issued, this permit will be administratively extended until a renewal permit is issued or it is determined that this permit will not be continued. If a renewal permit is issued, and the permittee indicated a desire for continuing coverage under the new permit, coverage will continue for the permittee under the new permit coverage unless 1.7.1 is invoked. If the permit is discontinued, the permittee must continue coverage under another general permit or an individual permit.

1.6.4. Coverage under this permit is rescinded or revoked for administrative reasons. In this case, the permittee will be notified in writing from the Director and will be required to apply for coverage under a different general or individual UPDES permit. This permit is terminated on the day coverage under another permit begins.

1.7. Notice of Termination. The permittee must terminate the permit by submitting an NOT when the project is completed. The NOT must be filed and retained for 3 years after the permit has been terminated (see 3.7). To terminate the permit, the permittee must comply with either 1.8.1 or 1.8.2, outlined below, and must comply with 1.8.3 if the project is within the jurisdiction of a regulated MS4 (see http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm for regulated MS4s):

1.7.1. The landscaping is completed and the site meets "final stabilization" requirements (see part 6, definitions, for final stabilization).

1.7.2. When a project (residential building) is completed but 'final stabilization' is not established, the building must be in process of being sold and ready for homeowners to take possession. If built by the homeowners, they must be in the process of moving in or already have moved in the house. The lot must have perimeter controls on downslope boundaries and surface stabilization controls on all surfaces that are 20% (1 to 5 slope, or 11.3 degrees) or greater to prevent erosion and soil migration offsite;

1.7.3. The permittee must submit a downloadable pdf copy of a NOT form to the MS4 of jurisdiction and schedule a final inspection (with the MS4). Termination is complete upon approval of the final inspection from the local MS4, or from DWQ if outside the jurisdiction of a regulated MS4.

1.8. Water Quality: Through the design of appropriate BMPs, it is expected that the permittee will achieve compliance with water-quality standards. If additional information becomes available indicating a project site is causing or is contributing to a violation of water quality standards or an existing total maximum daily load (TMDL), coverage under this permit may be revoked or rescinded, and the permittee may be required to get coverage under an individual UPDES permit or another UPDES general permit. If this occurs, the owner and the general contractor will be notified in writing by the Director and given instructions on how they must proceed.

1.9. Requirement to Post a Notice of Permit Coverage. The permittee must post a sign at the project

site that includes the UPDES Permit tracking number, owner or general contractor contact name, a phone number for the owner or general contractor (must be available during business hours), an email address for the owner or general contractor (must be checked and responded to within 24 hours on week days), and in the case of an electronic SWPPP, a web address or information on how to access the electronic SWPPP. The notice must be posted with lettering large enough to be readable from a public right-of-way.

2. POLLUTION PREVENTION REQUIREMENTS

2.1. Structural Controls. Minimize sediment transport off the site as follows:

2.1.1. *Stockpiled Material*. Stockpiled material must not be stored on an impervious surface, except a material that will not be transported with precipitation, such as two-inch graded and washed gravel, unless it will be permanently and immediately placed and the holding area will be swept clean the same day it is dropped. If stored for more than a day, it must be placed as far as feasibly possible from roads or other impervious surfaces, storm water inlets, or water bodies, and with stockpile perimeter runoff controls utilized.

2.1.2. *Perimeter Controls.* Perimeter controls such as silt fences, straw wattles, other filter berms, cut back curbs, vegetative buffers, etc., must be properly placed on the downslope sides of the project to prevent sediment from leaving the site during a storm event. As perimeter controls become loaded to 1/3 of capacity, they must be cleaned.

2.1.3. *Inlet Protection*. Storm-drain inlets on the project site and on adjacent roads immediately down gradient from the site must be protected if they receive drainage from the active construction site. Protection may be, but is not limited to, rock wattles, gravel bags, or proprietary or other devices. Rock wattles and sand or gravel bags are not advised for use in winter because they can be destroyed or removed by snow plows.

2.2. Protection of Critical or Sensitive Areas: Critical or sensitive areas such as preservation of the drip line around trees, wetlands, buffer zones by water bodies, etc., must be separated and isolated by clearly marking the areas with environmental fencing.

2.3. Managing the Site to Minimize Sediment Transport Offsite.

This may be accomplished using experience, estimates, and good judgment; unless unusual or extraordinary site conditions present a potential for excessive erosion, hillside/impoundment collapse, environmental/safety hazards, or other site problems; for which a professional engineer must be consulted.

2.3.1. The total area of soil disturbance at any one time must be minimized by disturbing only the area necessary to complete that stage of construction in the construction process.

2.3.2. Soil disturbances on steep slopes must be minimized. For purposes of this permit a steep slope is 70% (or 1 to 1.66, or 35 degrees), or greater. This means avoiding a disturbance of soils on steep slopes or if disturbing the soil surface is necessary providing a robust surface stabilizing cover (such as geomats, environmental blankets, or other robust slope stabilizing control) to prevent erosion.

2.3.3. Storm water volume and velocity must be controlled to minimize soil erosion and sediment transport by methods such as allowing or not obstructing infiltration and using velocity-control devices to reduce energy in runoff flowing on slopes.

2.3.4. Storm water discharges leaving the site, including both peak flowrates and total storm water volume, must be controlled to minimize channel and stream-bank erosion and scour in the immediate vicinity of discharge points.

2.3.5. *Fifty-Foot Vegetative Buffer*. If a waterbody is adjacent to, within 50 feet from, or passing through the project boundaries, a 50-foot natural buffer between the waterbody and construction activity must be provided. If a 50-foot natural buffer cannot be provided, a substitute control measure equivalent to the 50-foot buffer must be provided, or the SWPPP must contain an explanation why neither is feasible. If it is not feasible to maintain a 50-foot natural buffer, as much natural buffer as is possible must be preserved and coupled with placement of additional erosion and sediment controls designed, implemented, and maintained to substitute and be equivalent to the 50-foot natural buffer.

The requirement for a natural buffer or substitute controls does not apply to any area outside of the project boundaries, but if a waterbody is within, for example, 20 feet from the project boundary, there must be 30 feet of natural vegetative buffer or substitute controls.

2.3.5.a. Substitution for a natural buffer should be calculated with models such as USDA's RUSLE2 or WEPP, or by using SEDCAD, SEDIMOT, or other similar models. In lieu of using a model for calculation of a substitution buffer, the permittee shall deploy the following:

2.3.5.a.i. For every full 9 feet of natural buffer that is not provided on slopes up to 10 percent, one row of an effective perimeter control, such as a silt fence, staked straw wattle, proprietary or other filter berm, or other perimeter control, must be properly placed. For example, if only 15 feet of natural buffer can be provided, the permittee will substitute one row of a perimeter control in addition to the 15 feet of natural buffer to make up for the 15 feet of buffer that could not be preserved.

2.3.5.a.ii. In addition to the requirements above for substitutions in place of the 50-foot natural buffer, on slopes between 10 percent and 30 percent, five feet of surface stabilization must be placed down gradient of and between each perimeter control substituted. For slopes steeper than 30 percent, 6 feet of surface stabilization must be placed downgradient of and between each perimeter control substituted, such as mulch, hydromulch, wood chips, bark, compost, erosion mat, etc., but excluding tackifiers.

2.4. Good Housekeeping Measures. The permittee must address the following:

2.4.1. *Track Out*. Track-out pads (see definitions) and or rumble strips (see definitions) must be used to prevent dirt/mud tracked on streets as vehicles leave the site. If traffic onto and off the site is not frequent, a site operator may impose a blanket prohibition of vehicle traffic onto the site, allowing for the occasions to deliver and unload, but afterwards providing sweeping and/or cleaning of tracked out dirt (keep in mind that vehicles leaving a muddy site with no track out protection can track mud for several blocks – the operator is liable for all track out from the site except for a dirt stain after sweeping -- see note after 3.2.2.). Dirt or mud tracked out on the street must not be washed or hosed into a storm drain. Tracked out mud or dirt on the street must be swept and/or scraped up as needed every day (see 3.2.2).

2.4.2. *Curb Ramps*: This permit prohibits the intentional placement of dirt and/or mud on paved streets or sidewalks. Curb ramps may be crushed rock, wood or steel ramps, or another material that does not wash away with storm water.

2.4.3. *Waste and Debris*. The site must be cleaned of waste and debris daily (see daily self-inspection 3.2.2). Waste and debris must be contained and secured adequately to prevent scattering from wind until it is removed from the site and disposed of properly.

2.4.4. *Portable Toilet*. Portable toilets must be tied down, staked down, or secured using other measures to prevent turn over, and they must be placed away from a road gutter, storm water inlet, or waterbody.

2.4.5. *Washing of Concrete, Stucco, and Paint Equipment*. A lined, leak-proof pit or a rigid, leak-proof container must be provided for washout of equipment used for concrete, stucco, and water-based paint. After completion of concrete, stucco, and paint tasks, the permittee must dispose of the waste by drying and sending solids to a landfill. Oil-based paint cleanout must be done in containers, taken off-site, and disposed of separately.

2.5. Soil Compaction/Top Soil. Topsoil must be preserved and placed on areas to be landscaped or areas planned for receiving vegetative cover, unless infeasible. Soil compaction must be minimized on areas that will not be used for support of structural elements such as roads, parking areas, structures, etc., unless infeasible. Note in the SWPPP and locations where it is infeasible and document the reason for infeasibility.

2.6. Stabilization Requirement. Stabilization requirements are as follows:

2.6.1. *Stabilization requirements for areas that receive 20 inches of rainfall annually or greater*: Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site or have temporarily ceased on any portion of the site for greater than 14 calendar days. Stabilization can be sodding, planting, application of mulch (wood chips, rock, gravel, bark, compost, cat tracking on straw, hydromulch, etc.), application of geotextiles or erosion blankets, application of a tackifier, seeding (including preparation for germination and growth), a combination of these methods, or other method.

2.6.2. *Stabilization or equivalent requirements for arid and semi-arid areas (areas receiving less than 20 inches of rainfall annually)*: Stabilization for visually flat areas is not required (roughly up to 5 percent, 1 to 20 slope, or 2.3 degrees slope). Areas with slopes up to roughly 20 percent (1 to 5 slope or 11.3 degrees) must have, at minimum, velocity-control devices in every area where storm water collects and flows, spaced close enough across the flow to stop erosion (see also 2.3.3). Soil surface stabilization such as sodding, planting, hydromulch, compost, bark, cat tracking on straw, gravel, geotextiles, erosion blankets, or other stabilization methods is required on all other sloped areas, increasing the robust nature of stabilizing cover commensurately with increasingly steeper slopes.

2.6.3. Permanent Stabilization for Arid areas.

2.6.3.a. In addition to requirements above (see 2.6.2), permanent stabilization requires seeding with a seed mix of plants indigenous to the area or tolerant to the local

climatic conditions that does not include invasive species on all areas that are not covered with permanent stabilization elements or structural elements such as building structure or pavement, or that are engineered or intended for structural purposes like graveled parking or dirt roads.

2.6.3.b. Disturbed areas on projects located outside of populated and developed areas and where no irrigation water is available and where future periodic landscaping maintenance is not planned must be reclaimed with a seed mix of plants indigenous to the area or tolerant to the local climatic conditions that does not include invasive species. Velocity-control devices may be permanent or temporary. If velocity-control devices are intended for temporary use, they must be biodegradable and designed durable enough to withstand extreme weather.

2.7. Construction Dewatering. Construction dewatering can occur onsite without an additional UPDES permit if it is infiltrated or contained onsite and is not discharged offsite. Otherwise, construction dewatering discharges must be permitted under the General Permit for Construction Dewatering and Hydrostatic Testing UPDES Permit UTG070000, which can be obtained online through submittal of an NOI at https://secure.utah.gov/waterquality.

2.8. Pollution Prevention Measures. The permittee must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must address the following:

2.8.1. *Vehicle, Wheel, and Other Washing*. Minimize the discharge of pollutants from equipment and vehicle washing, wheel-wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge

2.8.2. *Exposure to Pollutants*. Minimize the exposure of building materials, building products, construction wastes, trash (see 2.4.3), landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste (see 2.4.4), and other materials present on the site to precipitation and to storm water. Minimization of exposure is not required in cases where the exposure to precipitation and to storm water will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of storm water contamination (e.g., final products and materials intended for outdoor use).

2.8.3. *Leaks and Spills*. Minimize the discharge of pollutants from spills and leaks and implement procedures for preventing and responding to chemical leaks and spills.

2.9. Prohibited Discharges. The following discharges are prohibited:

2.9.1. Wastewater from washout or cutting of concrete (see 2.4.5),

2.9.2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials (see 2.4.5),

2.9.3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance,

2.9.4. Soaps or solvents used in vehicle and equipment washing.

2.10. Impaired Waters If the first receiving water the site discharges to a sediment or nutrient-impaired water the site must implement Best Management Practices to minimize and prevent the discharge

of the respective pollutants.

2.10.1. The NOI process requires that you determine if the watershed that you discharge into is impaired or if it is considered high quality. Only the first surface water you discharge to is used when determining if your discharge enters an impaired or high quality waterbody. For discharges that enter a storm water system prior to discharge, the first water of the state to which you discharge is the waterbody that receives the storm water discharge from the storm sewer system. Please refer to water quality information at http://mapserv.utah.gov/surfacewaterquality/

3. SELF-INSPECTION REQUIREMENTS.

3.1. Inspector Qualifications. Weekly inspections (see 3.2.1 below) must be done by a qualified person. A qualified person means a person knowledgeable in the principles and practices of erosion and sediment control that possesses the skills to:

3.1.1. Assess conditions at the construction site that could impact storm water quality,

3.1.2. Assess the effectiveness of a storm water control measure selected to control the quality of storm water discharges from the construction activity.

3.2. Self-Inspections.

3.2.1. *Weekly Self Inspections*: Self-inspections must occur every 7 days. A written report is required (see 3.4).

3.2.2. *Daily Site Check*: Each day of construction activity, the site must be inspected for dirt in the street and trash on the site. Streets must be swept clean (see note below), if soiled. Dirt must be removed off the street (not swept or washed into the storm drain system). Trash on the site must be picked up and disposed of into trash containers (see 2.4.3.) or disposed of off-site (e.g., municipal/private garbage collection service or construction waste landfill). Sub-contractors must be held responsible by the permit holder to perform these duties in accordance with this paragraph for the activities they are contracted to perform. A written report is not required, however the operator will keep a daily log (for the active construction days) listing the initials of the person doing the site check.

3.2.2.a. If the site discharges to a water body impaired for either sediment or nutrients, the daily site check must also include any additional areas where potential sediment or nutrient discharges may occur.

Note: Swept clean means sweeping and scraping. Scraping if there is dirt left behind that is crusted and that sweeping will not pick up. This does not mean removing the microscopic layer of dust or the minute amounts of dirt in the cracks and crevices of the surface left behind staining the pavement.

3.3. Weekly Self-Inspection Requirements.

3.3.1. Areas to check include the following:

3.3.1.a. Areas that have been cleared, graded, or excavated that are not stabilized,

3.3.1.b. All storm water control measures, including perimeter controls,

3.3.1.c. Material piles, waste-disposal containers, sanitary facilities, loose trash, litter, washout areas, portable toilets, track out pad, egress points (if any), etc.,

3.3.1.d. Storm water conveyances through the site, treatment areas, and drainages,

3.3.1.e. All storm water discharge points, street gutters, storm water inlets,

3.3.1.f. Areas that have been temporarily stabilized,

3.3.1.g. Areas that have been permanently stabilized and are completed do not need further inspections.

3.3.2. *Items to check include the following*:

3.3.2.a. All erosion and sediment controls and other pollution prevention controls

have been installed, are operational, and are working as intended to minimize pollutant discharges. Determine if any controls need to be replaced, repaired, or maintained.

3.3.2.b. Identify any locations where new or modified storm water controls are necessary.

3.3.2.c. Signs of visible erosion and sedimentation (i.e., sediment deposits) that have occurred and are attributable to discharges from your site,

3.4. Weekly Inspection Reports. The weekly self-inspection report must be written within 24 hours of inspection and must include:

3.4.1. The initials of the person doing the inspection,

3.4.2. The date of the inspection,

3.4.3. The weather during the inspection,

3.4.4. The problems that were found needing correction (as they pertain to 3.3.1 and 3.3.2 above),

3.4.5. The date when corrective action is completed,

3.4.6. All self-inspection reports must be filed with other permit records regarding the permit. Inspection reports must be available during an oversight inspection.

3.5. Corrective Action Due Dates: Corrective action must be completed before the next weekly inspection is due.

3.5.1. Corrective actions stemming from an inspection by an oversight authority may be given at the discretion of the inspector, but must be completed prior to the next rain event or 7 days, whichever is sooner.

3.6. Conditions Triggering Corrective Action: You must take corrective action to address any of the following conditions at your site:

3.6.1. A storm water control needs repair or replacement from any inspection.

3.6.2. A storm water control necessary to comply with the terms of this permit was not installed, or installed incorrectly

3.6.3. Your discharges are either prohibited, or are causing an exceedance of water quality standards

3.7. Inspections by an Oversight Authority. A copy of an oversight inspection report must be filed and be available for review during other oversight inspections.

3.8. Record Keeping. Records regarding this permit, the Authorization to Discharge, the NOT, the SWPPP, inspection reports, other related information and documents must be preserved for 3 years after the submission of the NOT (see 5.10).

4. STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

4.1. SWPPP Requirement. The permittee must prepare a SWPPP before the NOI for the project is submitted. The SWPPP must address all the applicable requirements in Part 2.

4.1.1. *SWPPP Site Design*. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation; the nature of resulting storm water runoff; and soil characteristics, including the range of soil particle sizes expected to be present onsite. These may be accomplished using experience, estimates, and good judgement, unless unusual or extraordinary site conditions create hazards for which a professional engineer must be consulted.

4.1.2. *Surface Outlets*: When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

4.2. Contents of a SWPPP. A SWPPP must contain the following:

4.2.1. *Contacts*. The contacts for the site with contact information (name, address, telephone, email) including owner, general contractor, and any other party that significantly affects the implementation of the SWPPP or has responsibilities over the SWPPP.

4.2.2. *Sequence and Estimated Dates of Construction Activities.* Listed in the sequence with estimated dates including the following:

4.2.2.a. Start and end of excavation activities, initial excavation, backfill excavation and final grading,

4.2.2.b. Any temporary or permanent cessation of earth-disturbing activities,

4.2.2.c. Start and end of landscaping if this is done as part of the construction activity before the home is sold.

4.2.3. *Site Map or Chart*. A site map may be hand drawn (as close to scale as possible) or may be a copy of an architect drawing including the following information:

4.2.3.a. Boundaries of the property,

4.2.3.b. Boundaries of soil surface disturbances, including any outside the boundaries of the property,

4.2.3.c. Slopes, including areas of steep slopes,

4.2.3.d. Locations of stockpiles of soils, storage of construction materials, portable toilets, trash containers, concrete washout pits or containers, egress points, and track out pads,

4.2.3.e. Waterbodies, wetlands, and natural buffer areas,

4.2.3.f. Locations and types of BMPs or storm water control measures for the control and/or treatment of storm water flowing onto, through, and/or offsite,

4.2.3.g. Locations of storm water inlets, storm water discharge points going off site,

4.2.3.h. Areas that will be temporarily or permanently stabilized during the construction period.

4.2.4. *Fifty-Foot Natural Buffer*. The SWPPP must show the dimensions and placement of the 50-foot natural buffer, the substitute control measures, or a detailed explanation of why a natural buffer or substitute control measure could not be applied.

4.2.5. *Receiving Water*: The SWPPP must identify the first receiving water that the site discharges into, whether the water is impaired, and if so, what the impairment is for. Information about the receiving waters and impairments can be found at http://mapserv.utah.gov/surfacewaterquality/

4.2.6. *Pollutants*. A list of construction site pollutants including the pollutant-generating activity, and an inventory of pollutants for each pollutant generating activity (e.g., paints, solvents, form oil, fuels, and other chemicals; applications, materials, and liquids that if released could pollute storm water).

4.2.7. *Waste Management*. Waste management procedures including soil removal, clearing debris removal, demolition removal, trash disposal, construction-waste disposal, and sanitary-waste disposal.

4.2.8. *Training*. The permittee will ensure that each subcontractor or utility provider is aware of their responsibilities for keeping soil on the site and preventing pollution. The permittee must keep in mind that they are responsible for and may be issued fines for poor performances by their subcontractors and utility providers. Consideration will be given if the permittee can document when and what instructions were given to the subordinate party.

4.2.9. *Authorization to Discharge Documentation*. The SWPPP must contain a copy of this permit and a copy of the Authorization to Discharge Letter for the project.

4.2.10. *SWPPP Signature and Certification.* The SWPPP must be signed and certified by both the Owner and the General Contractor in accordance with 5.16.1.a.

4.2.11. *MS4 Approval of Project*. For areas where projects are within a regulated MS4's jurisdiction (see definitions in Part 6; the list of regulated MS4's is found onhttps://deq.utah.gov/water-quality/municipal-separate-storm-sewer-system-ms4s-permits-updes-permits), the SWPPP must contain the signature and date of the MS4 reviewer who has approved the proposed project for construction (see 1.7.).

4.2.12. *Availability of the SWPPP*. The SWPPP must be available at the construction site covered under this permit during onsite construction activity, unless the SWPPP is available online. If the SWPPP is available online there must be a sign (see 1.10) that describes where the SWPPP can be accessed online. The SWPPP is a plan for the site, and workers must be able to refer to the SWPPP and update it as needed to manage the site (including SWPPPs found on the internet). The SWPPP is not required to be on the site when construction workers leave for the day or when there is no activity occurring on the site, but at all times there must be posted contact information where the SWPPP can be obtained (see Part 1.10). The SWPPP must be made available within 24 hours to DWQ representatives or other oversight inspectors, e.g., U.S. Environmental Protection Agency [EPA] or a local MS4, on request, or immediately during an inspection on the site when

there are workers and activity at the site.

4.2.13. *Required Modifications of the SWPPP*. The SWPPP must be modified as follows:

4.2.13.a. During inspections when it is determined from observations of site conditions that storm water control measures are:

4.2.13.a.i. Not adequate or not shown in the SWPPP, or

4.2.13.a.ii. Changes in the SWPPP are necessary for compliance with this permit.

4.2.13.b. When an oversight authority determines that the SWPPP is not adequate based on missing a required SWPPP or permit item, not addressing pollutants properly, not being up to date and reflecting current site conditions, or not being clear, thorough, and understandable.

4.2.14. *SWPPP Modifications Deadline*. Modifications to the SWPPP from inspections or oversight authority direction must occur before or during the next weekly inspection.

5. STANDARD PERMIT CONDITIONS.

5.1. Duty to Comply.

5.1.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Utah Water Quality Act (the Act) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

5.1.2. Penalties for Violations of Permit Conditions

5.1.2.a. *Violations*. The Act provides that any person who violates the Act, Utah wastewater or storm water rules, or conditions of a permit issued under the Act, is subject to a fine of up to $10,000 per day.

5.1.2.b. *Willful or Gross Negligence*. The Act provides that any person who discharges a pollutant to waters of the State as a result of criminal negligence or who intentionally discharges is criminally liable and is subject to imprisonment and a fine of up to $50,000 per day (Utah Code Annotated 19-5-115).

5.1.2.c. *False Statements*. The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act, the rules, or this permit, or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for 6 months, or by both (Utah Code Annotated 19-5-115(4)).

5.2. Duty to Reapply. If a permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit except as provided in 1.6 and 1.7 of this permit.

5.3. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5.4. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

5.5. Duty to Provide Information. The permittee shall furnish to the Director or an authorized representative, within a reasonable time, any information that is requested to determine compliance with this permit. The permittee must also furnish to the Director or an authorized representative copies of records to be kept by this permit.

5.6. Other Information. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Director, he or she shall promptly submit such facts or information.

5.7. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Act.

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

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

5.10. Record Retention. The permittee shall retain copies of SWPPPs and all reports required by this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the permit for the site is terminated (see 3.7). This period may be extended by request of the Director at any time.

5.11. Addresses. All written correspondence under this permit shall be directed to the DWQ at the following address:

Department of Environmental Quality
Division of Water Quality
195 North 1950 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

5.12. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Utah Code Annotated 19-5-117.

5.12.1. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

5.13. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of SWPPPs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the condition of the permit.

5.14. Inspection and Entry. The permittee shall allow, upon presentation of credentials, the Director or an authorized representative to:

5.14.1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

5.14.2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit.

5.14.3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

5.14.4. Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by law, any substances or parameters at any location.

5.15. Reopener Clause.

5.15.1. *Reopener Due to Water Quality Impacts*. If there is evidence indicating that the storm water discharges authorized by this permit cause, have the reasonable potential to cause, or contribute to a violation of a water-quality standard, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with 1.7.4 of this permit or the permit may be modified to include different limitations and/or requirements.

5.15.2. *Reopener Guidelines*. Permit modification or revocation will be conducted according to Utah Administrative Code R317-8-5.6 and UAC R317-8-6.2.

5.15.3. *Permit Actions*. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification revocation and reissuance, termination, a modification of planned changes or anticipated noncompliance does not stay any permit condition.

5.16. Signatory Requirements.

5.16.1. All NOIs, SWPPPs, reports, certifications or information submitted to the Director, or that this permit requires be maintained by the permittee, shall be signed as follows:

5.16.1.a. All NOIs shall be signed by either the operator or owner, and SWPPPs shall be signed by both the owner or lessee of the project/property and the general contractor.

5.16.1.b. All reports required by the permit and other information requested by the Director or by an authorized representative of the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.16.1.b.i. The authorization is made in writing by a person described above and submitted to the Director; and

5.16.1.b.ii. The authorization specifies either an individual or a position having such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may therefore be either a named individual or any individual occupying a named position.

5.16.1.c. *Certification*. Any person signing documents under 5.16 shall make the

following certification:

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

5.16.2. If a document is to be signed electronically, the Division's rules regarding electronic transactions govern, if applicable.

6. DEFINITIONS

Arid Areas: Areas with an average annual rainfall of 10 inches or less.

Authorization to Discharge Letter: The receipt generated when a Notice of Intent (NOI) is successfully entered and payment is processed by DWQ. The receipt demonstrates that the permittee has coverage under the appropriate Storm Water Permit. Authorization to Discharge Letters contain the dates of the permittee's coverage under the Construction General Permit (CGP).

Common Plan of Development (or sale): A plan to subdivide a parcel of land into separate parts for separate sale. This can be for a residential, commercial, or industrial development. The plan originates as a single parcel that is separated into parts. This usually goes through an approval process by a local governmental unit, but in some cases, it may not require that process. The original plan is considered the "common plan of development or sale" whether phased or completed in steps.

Additional information related to *Common Plan of Development for Permit Purposes*:

For UPDES storm water permit purposes, a common plan must have been initiated after October, 1992. A common plan of development or sale remains so until each lot or section of the development has fulfilled its planned purposes (e.g. in a residential development as homes are completed, stabilized, and sold or occupied). As lots or separated sections of the development are completed, the lot or section is stabilized, and the plan purposes are fulfilled for that area, lot, or section, it is no longer part of the common plan of development or sale (e.g. if a home is sold in a development and the owner decides to add a garage somewhere on the lot, that garage project is not part of the common plan of development or sale.

In this process a common plan of development or sale may become reduced in size and/or separated by completed areas which are no longer part of the common plan of development or sale, but all unfinished lots remain part of the same common plan development or sale until they are completed, stabilized, and fulfilled according to the purposes of the plan.

Construction Activity: Earth-disturbing activities, such as the clearing, grading, and excavation of land.

Construction Waste: Discarded material such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and Styrofoam.

Corrective Action: For the purposes of the permit, any action taken to 1) repair, modify, or replace any storm water control used at the site; 2) clean up and dispose of spills, releases, or other deposits found on the site; and 3) remedy a permit violation.

Dewatering: The act of draining rainwater and/or groundwater from building foundations, vaults, and trenches (Note: if dewatering is occurring on a construction site and it causes a discharge to waters of the State, it must be permitted separately under the General Permit for Construction Dewatering and Hydrostatic Testing , UPDES Permit UTG070000).

Director: The director of the Division of Water Quality.

Discharge Point: For the purposes of this permit, the location where collected and concentrated storm

water flows are discharged from the construction site.

Final Stabilization: All disturbed areas must be covered by permanent structures such as pavement, concrete slab, building, etc., or for areas not covered by permanent structures but that are receiving 20 inches or more of average annual precipitation, vegetation has been established with a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover equivalent to 70 percent of the natural background vegetative cover. In the case of areas that are not covered by permanent structures, but that are receiving less than 20 inches of average annual precipitation (arid areas, 0-10 inches; semi-arid areas, 10-20 inches), final stabilization is equivalent to the requirements of 2.6.3 of this permit, including the provisions for permanent stabilization.

Impervious Surface: For the purpose of this permit, any land surface with a low or no capacity for water infiltration including, but not limited to, pavement, sidewalks, parking areas, driveways, or rooftops.

Indian Country: Defined at 40 CFR §122.2 as follows:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;

2. All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof; and

3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

Infeasible: Infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. DWQ notes that it is not intentional for permit storm water control efforts required in the permit to conflict with State water rights law.In the case of conflict, State water rights law supersedes.

Install or Installation: When used in connection with storm water controls, to connect or set in position storm water controls to make them operational.

Municipal Separate Storm Sewer System or MS4: A storm-sewer system owned and operated by a state, city, town, county, district, association, or other public body created by or pursuant to State law having jurisdiction over disposal of storm water that discharges to waters of the State (e.g., Sandy City owns and operates the MS4 within the jurisdiction of Sandy City, or essentially Sandy City is the MS4).

Natural Buffer: For the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists before earth-disturbing activities begin.

Oversight Authority: Oversight authorities for storm water permits are agents from the EPA, DWQ or the Municipality of jurisdiction, when they are addressing compliance of storm water permits.

Owner: For the purpose of this permit an owner has ownership of a property on which construction activity is taking place, but it also includes ownership of a project for which construction activity is

occurring on property that is leased. An owner is the party that has ultimate control over construction plans and specifications, including the ability at the highest level to make modifications to those plans and specifications. “Owner” in this context is the party that has ultimate control over the destiny of a project.

Permittee: The owner and/or the general contractor (those that signed on the NOI), for the project.

Pollutant-Generating Activities: At construction sites, for the purposes of this permit, those activities that lead to or could lead to the generation of pollutants, either as a result of earth-disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are as follows:

- Sediment
- Nutrients
- Heavy metals
- Pesticides and herbicides
- Oil and grease
- Bacteria and viruses
- Trash, debris, and solids
- Treatment polymers
- Any other toxic chemicals

Pollution Prevention Measures: Storm water controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

Project Site: A project site is not necessarily contained within the property boundaries designated for the final construction objective, or property owned by the owner of the project. The project site includes all areas affected by the construction process where disturbances, storage, or other construction activity occurs. If an area outside of property boundaries is used for the construction process, DWQ assumes the permittee has the right to access and use that area and the permittee must also meet permit requirements in that area.

Receiving Water: A “Water(s) of the State” is as defined in UAC R317-1-1, into which the regulated storm water discharges (see waters of the State listed below).

Rumble Strip: A rigid ramp/track (often made of steel) that vehicles drive over that causes tires to flex and shake for the removal of dirt.

Semi-Arid Areas: Areas with an average annual rainfall of between 10 and 20 inches.

Stabilization: The use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas of disturbed soil exposed from the construction process.

Storm water: Means storm water runoff, snowmelt runoff, and surface runoff and drainage.

Storm Water Control Measures: Refers to any storm water control, BMP, or other method used to prevent or reduce the discharge of pollutants to waters of the state.

Storm Water Inlet: An entrance or opening to a storm water conveyance system, generally placed below grade so as to receive storm water drainage from the surrounding area.

Storm Event: A precipitation event that results in a measurable amount of precipitation.

Track Out Pad: A track out pad is a pad normally made up of 4 to 6 inches of up to 6 inch cobble rocks or gravel of various size (the size is sometimes specified by a local MS4). Sometimes it is underlain with a fabric to keep dirt and mud separated from rock or gravel. It is wide enough to underlay the tires of any/all traffic leaving a construction site as vehicles exit the site. Its function is to flex and shake the tires to dislodge mud and dirt from the tires of vehicles leaving the construction site. Track out pads must be stirred or worked periodically so that mud or dirt collected is moved to the bottom and the rock/gravel on the pad is clean and effective dislodging more mud/dirt.

Waters of the State: All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, that are contained within, flow through, or border upon this state or any portion thereof, except that bodies of water confined to and retained within the limits of private property, and that do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife, shall not be considered to be "Waters of the State" under this definition (see Utah Code Annotated, 19-5-102(23)(a) &(b), and UAC R317-1-1).

STATE OF UTAH

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF WATER QUALITY

Utah Pollutant Discharge Elimination System

General Permit for Storm Water Discharges from Construction Activities

UPDES Permit No. UTRC00000

This Permit is issued in compliance with the provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code, as amended (the "Act") under delegated authority according to Title 33 U.S. Code Section 1342 with federal oversight from the Environmental Protection Agency under the Federal Clean Water Act, Title 33 U.S. Code Section 1251, *et. seq.,* as amended, and the rules and Regulations made pursuant to those statutes. This permit authorizes "owners/operators" of construction activities (defined in Part 1.1. l and Part 10) that meet the requirements of Part 1. of this Utah Pollutant Discharge Elimination System (UPDES) general permit, to discharge pollutants in accordance with the effluent limitations and conditions set forth herein. Permit coverage is required from the "commencement of earth-disturbing activities" (see Part l 0) until "final stabilization" (see Part 2.2.14).

This MODIFIED permit becomes effective on July 8, 2020.

This MODIFIED permit and the authorization to discharge expire at midnight on June 30, 2024.

Signed this eighth day of July, 2020.

Erica Brown Gaddis, PhD
Director

Table of Contents

Appendix A – BUFFER REQUIREMENTS

1. COVERAGE UNDER THIS PERMIT

To be covered under this permit you must meet the eligibility conditions and follow the requirements for applying for permit coverage in this Part.

1.1. ELIGIBILITY CONDITIONS

1.1.1. **All "operators"** of a construction site must sign on the notice of intent or NOI (see part 1.4 for NOI). Owners (or lessee's) and general contractors are both considered "operators" for the purposes of this permit (see definition of "operator" in Part 10). Except for areas listed in part 1.2.2, this permit does not cover area that is not legally owned or leased by the operator defined in Part 10, that has operational control over construction plans and specifications.

1.1.2. **The Project**:

a. A project covered by this permit will **disturb 1 or more acres** of land, or will disturb less than 1 acre of land but be part of a common plan of development or sale[1] that will ultimately disturb 1 or more acres of land; or

b. A project's **discharges have been designated** by the Director as needing a permit under UAC 317-8-3.9(1)(a)5. or UAC 317-8-3.9(6)(e)2.

c. **Single lot residential projects** that disturb **less than 1 acre** of land and are part of a common plan of development or sale may be covered under the Common Plan Permit (UTRH00000) in lieu of this permit. Information on this permit can be found on the DWQ construction storm water web site at https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/storm-water-general-construction.htm.

d. Projects **less than five acres** with a **rainfall erosivity factor** ("R" in the revised universal soil loss equation, or RUSLE) value of **less than five** during the period of construction activity may waiver the requirements of this permit by submitting an **Erosivity Waiver Certification.** Information on the Erosivity Waiver can be found on the DWQ construction storm water web site at https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/storm-water-general-construction.htm.

1.1.3. **A project is located** within the state of Utah, except for Indian Country (Storm water permits for Indian Country within the State must be acquired through EPA Region VIII, except for facilities on the Navajo Reservation or on the Goshute Reservation which must acquire storm water permits through EPA Region IX).

1.1.4. **Discharges from a project cannot**;

a. **already have coverage** under the UPDES CGP or any other UPDES permit for a storm water discharge associated with construction activity (UPDES wastewater and industrial permit coverage for separate discharges associated with the site is allowed) or,

[1] See definition for common plan of development or sale in Part 10

b. **be in the process of receiving coverage** under a different UPDES permit for a storm water discharge from construction activities that has been denied, terminated, or revoked[2],

c. **be treated with "cationic treatment chemicals"** (see Definitions) unless and until you notify DWQ in advance of receiving permit coverage and have received written approval. To be able to use "cationic treatment chemicals" you must demonstrate to DWQ that appropriate controls and implementation procedures are used to ensure that your use of cationic treatment chemicals will not lead to discharges that cause an exceedance of water quality standards or harm fish populations.

1.1.5. Eligibility for Emergency-Related Construction Activities. If you are conducting earth-disturbing activities in response to a public emergency (e.g., natural disaster, widespread disruption in essential public services), and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish public services, your requirements are:

a. If the emergency related activity is accomplished within 30-days you are waived from the normal requirements to submit an NOI and prepare a SWPPP, but you must submit a report to DWQ within 45-days and show:

(1) the nature of the emergency work performed,

(2) a description of earth disturbances that occurred,

(3) the proximity of the work to waters of the State, and what was done to protect water quality during the emergency work, and

(4) the occurrence of the public emergency must be substantiated.

b. If the emergency activity continues longer than 30-days you are authorized to discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing earth-disturbing activities establishing that you are eligible under this permit. You are also required to provide emergency documentation in your SWPPP to substantiate the occurrence of the public emergency.

1.1.6. Water Quality Standards – Eligibility for New Sources. If you are a "new source" (as defined in Part 10), you are not eligible for coverage under this permit for discharges that have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where DWQ makes such a determination, operators must make adjustments to storm water controls to bring the discharge into compliance with water quality standards immediately or permit coverage will be rescinded. DWQ expects that compliance with the storm water control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

[2] Projects having been denied, terminated, or revoked must resolve the problem causing the ineligibility before the same or other coverage will be restored.

1.1.7. Discharging to Waters with High Water Quality – Eligibility for New Sources. If you are a "new source" (as defined in Part 10), you are eligible to discharge to a Category 1 water if your discharge is temporary and limited and where best management practices will be employed to minimize pollution effects, to a Category 2 water only if your discharge will not lower the water quality of the applicable water body. In the absence of information demonstrating otherwise, DWQ expects that compliance with the storm water control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not lower the water quality of the applicable water.

Your project will be considered to discharge to a Category 1 or 2 water if the first surface water to which you discharge is identified by the state as a Category 1 or 2 water. For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the water body that receives the storm water discharge from the storm sewer system. Please refer to water quality information at http://mapserv.utah.gov/surfacewaterquality/

1.2. DISCHARGES AUTHORIZED UNDER THIS PERMIT. The following is a list of discharges that are allowed under this permit provided that appropriate storm water controls are designed, installed, and maintained:

1.2.1. Storm water discharges, including **storm water, snowmelt, and surface water runoff and drainage**, associated with construction activity under UAC R317-8-3.9(6)(d)10. or UAC R317-8-3.9(6)(e)1.;

1.2.2. Storm water discharges from **construction support activities** (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:

a. The support **activity is directly related to the construction site** required to have permit coverage for storm water discharges;

b. The support activity **does not serve multiple unrelated construction projects**;

c. The support activity **does not continue to operate beyond the completion of the construction** activity at the project it supports; and

d. Storm water controls are implemented in accordance with Part 2 and, if applicable, Part 3, for discharges from the support activity areas.

1.2.3. The following non-storm water discharges from your construction activity are allowed under this permit, provided that you comply with all applicable requirements for these discharges in Part 2:

a. Discharges from emergency fire-fighting activities;

b. Fire hydrant flushings;

c. Properly managed landscape irrigation;

d. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;

e. Water used to control dust;

f. Potable water including uncontaminated water line flushings;

g. External building washdown, provided soaps, solvents, and detergents are not used, and external surfaces do not contain hazardous substances;

h. Pavement wash waters, provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents (including biodegradable soy bean oils and biodegradable detergents) are not used. You are prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or storm water conveyance unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control for the pollutants present. Per 2.2.5.d., hosing of accumulated sediments on pavement into any storm water conveyance is prohibited;

i. Uncontaminated air conditioning or compressor condensate;

j. Uncontaminated, non-turbid discharges of ground water (from natural sources) or spring water; and,

k. Foundation or footing drains where flows are not contaminated with process materials such as solvents, contaminated ground water, or sediment from construction activity.

1.2.4. Comingling of the non-storm water discharges above with other permitted discharges is also authorized.

1.2.5. **Discharging of construction dewatering** (groundwater that intersects with excavation) must be permitted under UTG070000 (Construction Dewatering and Hydrostatic Test Permit), and the Municipal Separate Storm Sewer System (MS4) (of jurisdiction) notified of the discharge. Permitting is not required under UTG070000 if the construction dewatering does not leave the site (it is percolated into the ground on site).

1.3. PROHIBITED DISCHARGES.

1.3.1. Wastewater from washing tools and vehicles after pouring, prepping, or finishing concrete.

1.3.2. Wastewater from washing and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials;

1.3.3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;

1.3.4. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown; and

1.3.5. Toxic or hazardous substances from a spill or other release.

To prevent the above-listed prohibited non-storm water discharges, operators must comply with the applicable pollution prevention requirements in Part 2.3.

1.4. NOTICE OF INTENT (NOI). To be covered under this permit, you must develop a SWPPP (see part 7.1), submit a complete and accurate NOI, remit the permit fee, and receive an Authorization to Discharge Letter. The permit fee covers a year of permit coverage. If a project extends more than a year the permit must be renewed and the permit fee must be remitted again.

There is a 60-day grace period after the permit expiration date where projects may be completed or the permit renewed.

All NOI application packages, including Authorization to Discharge letters and storm water pollution prevention plans (SWPPP) must also be submitted to regulated MS4s (see the list of municipalities on the DWQ municipal storm water web site https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/storm-water-municipal.htm). Not all municipalities are regulated MS4s (see definitions Part 10).

1.4.1. How to Submit Your NOI. NOIs and permit fees may be submitted online at https://cdxnodengn.epa.gov/net-cgp/action/login. A paper copy of the NOI form may be downloaded from the DWQ construction storm water web site at https://documents.deq.utah.gov/water-quality/stormwater/DWQ-2017-004363.pdf, filled out and mailed, with permit fee, to:

Division of Water
Quality PO Box
144870
Salt Lake City, Utah 84114-4870

1.4.2. Start and End of Permit Coverage and Deadlines. Coverage under a permit must be obtained before soil disturbing activities begin. The permit is effective immediately after the Authorization to Discharge Letter has been received. Active coverage may be affected by the following conditions:

a. a notice of termination (NOT) is submitted at: https://cdx.epa.gov/cdx/.

b. the yearly permit fee is kept current and renewed year by year for the period of construction activity,

c. when this general permit (UTRC00000) expires, if no arrangement has been made for continuing coverage, NOIs may need to be submitted for continuing coverage under a new or reissued replacement permit,

d. coverage under the CGP is rescinded or revoked for the project site for administrative reasons for which the permittee will be notified in writing, or

e. if all storm water discharges for the site are permitted under a different general or individual UPDES permit, this permit is terminated on the day the other permit coverage begins.

1.4.3. Continuation of Coverage After this Permit Expires. If this permit is not reissued or replaced by the expiration date, it will be administratively extended by the Director and remain in force and effect until issuance of a comparable CGP. Permit coverage will continue under this permit until the earliest of:

a. authorization of, and an application process, is provided for coverage under a reissued or replacement version of this permit; or

b. the permittee's submittal of a Notice of Termination, submitted at: https://cdx.epa.gov/cdx/; or

c. the issuance of an individual permit or denial of coverage (see part 1.4.4 below) for the project's discharges.

DWQ reserves the right to modify or revoke and reissue this permit under UAC317-8-5.6, in which case you will be notified of any relevant changes to which you may be subject.

1.4.4. Procedures for Denial of Coverage. Following a submittal of a complete and accurate NOI, you may be notified in writing by DWQ that you are not covered, and that you must either apply for and/or obtain coverage under an individual UPDES permit or an alternate general UPDES permit. This notification will include a brief statement of the reasons for this decision and will provide application information. Any interested person may request that DWQ consider requiring an individual permit under this paragraph.

If you are already a permittee with coverage under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual UPDES permit or alternate general UPDES permit, as it applies to you, coverage under this general permit will terminate. DWQ may grant additional time to submit the application if requested. If you are covered under this permit and fail to submit an individual UPDES permit application or an NOI for an alternate general UPDES permit as required by DWQ, then the applicability of this permit to your site is terminated at the end of the day specified by DWQ as the deadline for application submittal. DWQ may take appropriate enforcement action for any unpermitted discharge. If you submit a timely permit application, then when an individual UPDES permit is issued to you or you are provided with coverage under an alternate general UPDES permit, your coverage under this permit is terminated on the effective date of the individual permit or date of coverage under the alternate general permit.

1.5. REQUIREMENT TO POST A NOTICE OF YOUR PERMIT COVERAGE All permitted sites must have a sign posted in a conspicuous, safe, publically accessible place and near the entrance to the project. The font on the sign must large enough for normal corrected vision to easily read the sign contents from a public right-of-way. At a minimum, the notice must include:

1.5.1. the UPDES Permit tracking number,

1.5.2. the name of a contact person for questions, SWPPP requests, or information about the project,

a. the contact phone number (must be available during business hours) or

b. an email address (must be checked and responded to within 24-hours on week days).,

2. TECHNOLOGY-BASED EFFLUENT LIMITATIONS. You must comply with the following technology-based effluent limitations in this Part.

2.1. GENERAL STORM WATER CONTROL DESIGN, INSTALLATION, AND MAINTENANCE REQUIREMENTS. You must design, install, and maintain storm water controls required in Parts 2.2 and 2.3 to minimize the discharge of pollutants in storm water from construction activities. To meet this requirement, you must:

2.1.1. Account for the following factors in designing your storm water controls:

a. The expected amount, frequency, intensity, and duration of precipitation;

b. The nature of storm water runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. You must design storm water controls to control storm water volume, velocity, and peak flow rates to minimize discharges of pollutants in storm water and to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points; and

c. The soil type and range of soil particle sizes expected to be present on the site.

2.1.2. Design and install all storm water controls in accordance with good engineering practices, including applicable design specifications (see manufacturer specifications and/or applicable erosion and sediment control manuals or ordinances – departures from such specifications must reflect good engineering practices and must be explained in your SWPPP).

2.1.3. Complete installation of storm water controls by the time each phase of construction activities has begun.

a. Before construction activity in any given portion of the site begins, install and make operational any downgradient sediment controls (e.g., buffers, perimeter controls, exit point controls, storm drain inlet protection).

b. Following the installation of storm water controls for the initial construction activities (e.g., clearing, grading, excavating), adjust storm water control and management strategies throughout the project to meet and match the needs for each phase of construction, if applicable, as the project progresses towards completion.

2.1.4. Ensure that all storm water controls are maintained, remain in effective operating condition during permit coverage, and are protected from activities that would reduce their effectiveness.

a. Comply with any specific maintenance requirements for the storm water controls listed in this permit. Regular maintenance is expected and is not limited to response actions from inspections or identified problems.

b. Follow maintenance recommendations from the manufacturer or utilize good engineering practices based on site conditions and document deviations from manufacture recommendations.

c. Any time maintenance issues are discovered in storm water controls, make repairs immediately if practical, prior to weather or activities utilizing the control, or within seven business days, whichever comes first.

d. Any time you find that a storm water control needs to be installed (where none had previously been), replaced, or removed, you must record the corrective action as required in Part 5.

2.2. EROSION AND SEDIMENT CONTROL REQUIREMENTS. You must implement erosion and sediment controls in accordance with the following requirements to minimize the discharge of pollutants in storm water from construction activities.

2.2.1. Provide and maintain natural buffers and/or equivalent erosion and sediment controls when a water of the state is located within 50 feet of the site's earth disturbances. Additional guidance for buffers is provided in Appendix A.

a. Compliance Alternatives. For any discharges to waters of the State located within 50 feet of your site's earth disturbances, you must comply with one of the following alternatives:

(1) Provide and maintain a 50-foot undisturbed natural buffer; or

(2) Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or

(3) If infeasible to provide and maintain an undisturbed natural buffer of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

b. See Appendix A, Part A.2.2. for exceptions to the compliance alternatives.

2.2.2. Preserve naturally vegetated areas where possible and, if feasible, direct storm water to these areas to maximize storm water infiltration and filtering to reduce pollutant discharges.

2.2.3. Install sediment controls along any perimeter areas of the site that will receive pollutant discharges.

a. Remove sediment before it has accumulated to the point where the control has become ineffective. Often that is one-half of the above-ground height of any perimeter control.

b. **Exception.** For areas at "linear construction sites" (as defined in Part 10) where perimeter controls are infeasible (e.g., due to a limited or restricted right-of-way), implement other practices as necessary to minimize pollutant discharges to perimeter areas of the site.

2.2.4. Minimize sediment track-out.

a. **Restrict vehicle use to properly designated exit points**;

b. Use appropriate stabilization techniques at all points that exit onto paved roads[3].

(1) **Exception**: Stabilization is not required for exit points at linear utility construction sites that are used only episodically and for very short durations over the life of the project, provided other exit point controls[4] are implemented to minimize sediment track-out;

[3] An example of appropriate stabilization techniques is the use of aggregate stone with an underlying geotextile or non-woven filter fabric, and turf mats.

c. Implement additional track-out controls[5] as necessary to ensure that sediment removal occurs prior to vehicle exit; and

d. Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, you must remove deposited sediment before it accumulates significantly and is tracked beyond the immediate vicinity of the project. Frequency of removal is dependent on site conditions, whatever is necessary to control off site tracking. . Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any storm water conveyance, storm drain inlet, or water of the state[6].

2.2.5. Manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil:

a. Locate the piles outside of any natural buffers established under Part 2.2.1 and away from any storm water conveyances, drain inlets, and areas where storm water flow is concentrated;

b. Install a sediment barrier along all downgradient perimeter areas;[7]

c. For piles that will be unused for 14 or more days and are stored in areas that are being inspected at a reduced frequency due to temporary stabilization or frozen conditions (Part 4.4.1. and 4.4.3.), provide cover[8] or appropriate temporary stabilization (consistent with Part 2.2.14);

d. You are prohibited from hosing down or sweeping soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance, storm drain inlet, or water of the state.

e. Where practicable, contain and securely protect from wind.

2.2.6. Minimize dust. On areas of exposed soil, minimize the generation of dust through the appropriate application of water or other dust suppression techniques.

2.2.7. Minimize steep slope disturbances. Minimize the disturbance of "steep slopes" (as defined in Part 10).

2.2.8. Preserve native topsoil,[9] unless infeasible.

---

[4] Examples of other exit point controls include preventing the use of exit points during wet periods; minimizing exit point use by keeping vehicles on site to the extent possible; limiting exit point size to the width needed for vehicle and equipment usage; using scarifying and compaction techniques on the soil; and avoiding establishing exit points in environmentally sensitive areas (e.g., karst areas; steep slopes).

[5] Examples of additional track-out controls include the use of wheel washing, rumble strips, and rattle plates.

[6] Fine grains that remain visible (i.e., staining) on the surfaces of off-site streets, other paved areas, and sidewalks after you have implemented sediment removal practices are not a violation of Part 2.2.4.

[7] Examples of sediment barriers include berms, dikes, fiber rolls, silt fences, sandbags, gravel bags, or straw bale.

[8] Examples of cover include tarps, blown straw and hydromulching.

[9] Stockpiling topsoil at off-site locations, or transferring topsoil to other locations, is an example of a practice that is consistent with the requirements in Part 2.2.8. Preserving native topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed. For example, some sites may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain, or may not have space to stockpile native topsoil on site for later use, in which case, it may not be feasible to preserve topsoil.

2.2.9. Minimize soil compaction[10] in areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed:

a. Restrict vehicle and equipment use in these locations to avoid soil compaction; and

b. Before seeding or planting areas of exposed soil that have been compacted, use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.

2.2.10. Protect storm drain inlets.

a. Install inlet protection measures that remove sediment from discharges prior to entry into any storm drain inlet that carries storm water flow from your site to a surface water of the state, provided you have authority to access the storm drain inlet;[11] and

b. Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found.

2.2.11. Minimize erosion of storm water conveyance channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters. Use erosion controls and velocity dissipation devices[12] within and along the length of any storm water conveyance channel and at any outlet to slow down runoff to minimize erosion.

2.2.12. If you install a sediment basin or similar impoundment:

a. Situate the basin or impoundment outside of any water of the state and any natural buffers established under Part 2.2.1;

b. Design the basin or impoundment to avoid collecting water from wetlands;

c. Design the basin or impoundment to provide storage for either:

(1) The calculated volume of runoff from a 2-year, 24-hour storm; or

(2) 3,600 cubic feet per acre drained.

d. Utilize outlet structures that withdraw water from near the surface of the sediment basin or similar impoundment, unless infeasible;[13]

e. Use erosion controls and velocity dissipation devices to prevent erosion at inlets and outlets; and

f. Remove accumulated sediment to maintain at least one-half of the design capacity and conduct all other appropriate maintenance to ensure the basin or impoundment remains in effective operating condition.

---

[10] Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

[11] Inlet protection measures can be removed in the event of flood conditions or to prevent erosion

[12] Examples of velocity dissipation devices include check dams, sediment traps, riprap, and grouted riprap at outlets.

[13] The circumstances in which it is infeasible to design outlet structures in this manner are rare. A possible exception is dealing with or treating for temperature, but there may be other reasons. If you determine that it is infeasible to meet this requirement, you must provide documentation in your SWPPP to support your determination, including the specific conditions or time periods when this exception will apply.

2.2.13. If using treatment chemicals (e.g., polymers, flocculants, coagulants):

a. **Use conventional erosion and sediment controls before and after the application of treatment chemicals**. Chemicals may only be applied where treated storm water is directed to a sediment control (e.g., sediment basin, perimeter control) before discharge.

b. **Select appropriate treatment chemicals**. Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated (i.e., the expected turbidity, pH, and flow rate of storm water flowing into the chemical treatment system or area).

c. **Minimize discharge risk from stored chemicals**. Store all treatment chemicals in leak- proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), or provide equivalent measures designed and maintained to minimize the potential discharge of treatment chemicals in storm water or by any other means (e.g., storing chemicals in a covered area, having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill).

d. **Comply with state/local requirements**. Comply with applicable state and local requirements regarding the use of treatment chemicals.

e. **Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier**. Use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document in your SWPPP specific departures from these specifications and how they reflect good engineering practice. Consider changing site conditions that may affect dosing levels such as temperature.

f. **Ensure proper training**. Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

g. **Perform additional measures specified by DWQ for the authorized use of cationic chemicals**. If you have been authorized to use cationic chemicals at your site pursuant to Part 1.1.4.c, you must perform all additional measures as conditioned by your authorization to ensure that the use of such chemicals will not cause an exceedance of water quality standards or harm fish populations.

2.2.14. Stabilize exposed portions of the site. Implement and maintain stabilization measures (e.g., seeding protected by erosion controls until vegetation is established, sodding, mulching, erosion control blankets, hydromulch, gravel) that minimize erosion from exposed portions of the site in accordance with Parts 2.2.14.a and 2.2.14.b.

a. **Stabilization Deadlines**:

(1) Initiate the installation of stabilization measures in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days as soon as possible and prior to the end of the 14th day of inactivity; and

(2) Complete the installation of stabilization measures as soon as practicable, but no later than 14 calendar days after stabilization has been initiated.[14]

(3) **Exceptions**:

(i) Arid, semi-arid, and drought-stricken areas[15] (as defined in Part 10). Where a project is an arid, semi-arid, or a seasonally dry period or a period in which drought is occurring, and vegetative stabilization measures are being used:

(1) Initiate as soon as practicable and, within 14 calendar days of a temporary or permanent cessation of work in any portion of your site, complete the installation of temporary non-vegetative stabilization measures to the extent necessary to prevent erosion;[16]

(2) As soon as practicable, given conditions or circumstances on the site, complete all activities necessary to seed or plant the area to be stabilized; and

(3) If construction is occurring during the seasonally dry period[17], indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions. Also include the schedule you will follow for initiating and completing vegetative stabilization.

(ii) **Discharges to a sediment- or nutrient-impaired water** (a water having a TMDL identifying sediment or nutrients as the cause of impairment) or to a water that is high quality for antidegradation purposes (see part 3). Complete stabilization as soon as practicable, but no later than seven (7) calendar days after stabilization has been initiated.

b. **Final Stabilization Criteria** (for any areas not covered by permanent structures):

(i) Establish uniform, perennial vegetation (i.e., evenly distributed, without large bare areas) that provides 70 percent or more of the vegetative cover that was provided by vegetation prior to commencing earth-disturbing activities; and/or

(ii) Implement permanent non-vegetative stabilization measures[18] to provide effective cover.

(iii) **Exceptions**:

(1) **Arid, semi-arid, and drought-stricken areas** (as defined in Part 10). Final stabilization is met if the area has been seeded or planted in a manner that vegetation is expected to be

[14] If vegetative stabilization measures are being implemented, stabilization is considered "installed" when all activities necessary to seed or plant the area are completed. If non-vegetative stabilization measures are being implemented, stabilization is considered "installed" when all such measures are implemented or applied.
[15] If you are in an area receiving more than 20 inches of average annual precipitation that is in a drought (as determined by the NOAA drought predictor http://www.cpc.ncep.noaa.gov/products/Drought/) and a seasonal dry period, to comply with drought conditions you must identify the normal seasonal dry period in the SWPPP.
[16] The extent necessary to prevent erosion in arid and semi-arid areas means for visually flat areas, stabilization is not required (roughly from 0 percent up to 5 percent) unless an erosion concern exists. Areas with slopes roughly 5 percent to 20 percent must have, at minimum, controls to reduce storm water velocities to a point that erosion is controlled. Over a 20 percent slope requires soil surface stabilization. The amount of stabilization provided must increase commensurately with increasingly steeper slopes.
[17] The lower elevations of the Wasatch Front are semi-arid, the seasonal dry period for the Wasatch Front is June, July, and August.
[18] Examples of permanent non-vegetative stabilization measures include riprap, gravel, gabions, and geotextiles.

established within three (3) years which provides 70 percent or more of the cover that was provided by vegetation prior to commencing earth disturbing activities and, to the extent necessary to prevent erosion on the seeded or planted area, non-vegetative erosion controls meet standards in footnote 16.

(2) Disturbed areas on agricultural land that are restored to their preconstruction agricultural use. The Part 2.2.14b final stabilization criteria does not apply.

(3) Areas that need to remain disturbed. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed, and only the minimum area needed remains disturbed (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, materials).

2.3. POLLUTION PREVENTION REQUIREMENTS: Implement pollution prevention controls in accordance with the following requirements to minimize the discharge of pollutants in storm water and to prevent the discharge of pollutants from spilled or leaked materials from construction activities.

2.3.1. For equipment and vehicle fueling and maintenance:

a. Provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, from these activities;[19]

b. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR part 112 and Section 311 of the CWA;

c. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;

d. Use drip pans and absorbents under or around leaky vehicles;

e. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements; and

f. Clean up spills or contaminated surfaces immediately, using dry clean up measures (do not clean contaminated surfaces by hosing the area down), and eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

2.3.2. For equipment and vehicle washing:

a. Provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash waters;[20]

[19] Examples of effective means include:
- Locating activities away from waters of the state and storm water inlets or conveyances so that storm water coming into contact with these activities cannot reach waters of the state;
- Providing secondary containment (e.g., spill berms, decks, spill containment pallets) and cover where appropriate; and
- Having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill.

b. Ensure there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water; and

c. For storage of soaps, detergents, or solvents, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these detergents to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas.

2.3.3. For storage, handling, and disposal of building products and materials:

a. For building materials and building products[21] that have the potential to mobilize or release pollutants, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these products to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas.

b. **For pesticides, herbicides, insecticides, fertilizers, and landscape materials**:

(1) In storage areas, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these chemicals to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas; and

(2) Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label (see also Part 2.3.5).

c. **For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals**:

(1) Store chemicals in water-tight containers, and provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these containers to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas (e.g., having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill), or provide secondary containment (e.g., spill berms, decks, spill containment pallets); and

(2) Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. You are prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

d. **For hazardous or toxic wastes**:[22]

(1) Separate hazardous or toxic waste from construction and domestic waste;

(2) Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource

[20] Examples of effective means include locating activities away from waters of the state and storm water inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.

[21] Examples of building materials and building products typically present at construction sites include asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures, and gravel and mulch stockpiles.

[22] Examples of hazardous or toxic waste that may be present at construction sites include paints, caulks, sealants, fluorescent light ballasts, solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids.

Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;

(3) Store all outside containers within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in a covered area, having a spill kit available on site);

(4) Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements;

(5) Clean up spills immediately, using dry clean-up methods, and dispose of used materials properly. You are prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and

(6) Follow all other federal, state, tribal, and local requirements regarding hazardous or toxic waste.

e. **For construction and domestic wastes**:[23]

(1) Provide waste containers (e.g., dumpster, trash receptacle) of sufficient size and number to contain construction and domestic wastes;

(2) Provide containment or cover for waste that is blowable or that can leach nutrients, metals, pesticides, herbicides, oil, grease, bacteria, or other pollutants;

(3) On business days, clean up and dispose of waste in designated waste containers; and

(4) Clean up immediately if containers overflow.

f. **For sanitary waste**, position portable toilets so that they are secure and will not be tipped or knocked over. Locate them away from waters of the state and, when possible, at least 10 feet from any storm water conveyance, inlet, curb and gutter, or conduit to a waterway. If it is not possible to maintain at least 10 feet of separation, evaluate the need for additional controls such as secondary containment, additional surface preparation, or berms and implement as appropriate.

2.3.4. For washing applicators and containers used for stucco, paint, concrete, form release oils, curing compounds, or other materials:

a. Direct wash water into a leak-proof container or leak-proof and lined pit designed so that no overflows can occur due to inadequate sizing or precipitation;

b. Handle washout or cleanout wastes as follows:

(1) Do not dump liquid wastes in storm sewers or waters of the state;

(2) Dispose of liquid wastes properly[24]; and

[23] Examples of construction and domestic waste include packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, demolition debris; and other trash or building materials.

(3) Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part 2.3.3; and

c. Locate any washout or cleanout activities as far away as possible from waters of the state and storm water inlets or conveyances, and, to the extent feasible, determine areas to be used for these activities and conduct such activities only in these areas.

2.3.5. For the application of fertilizers:

a. Apply at a rate and in amounts consistent with manufacturer's specifications, or document in the SWPPP departures from the manufacturer specifications where appropriate in accordance with Part 7.3.5.b.(5)(ix);

b. Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;

c. Avoid applying before heavy rains that could cause excess nutrients to be discharged;

d. Never apply to frozen ground;

e. Never apply to storm water conveyance channels; and

f. Follow all other federal, state, tribal, and local requirements regarding fertilizer application.

2.3.6. Emergency Spill Notification Requirements: Discharges of toxic or hazardous substances from a spill or other release are prohibited (see Part 1.3). Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 as soon as you have knowledge of the release. You must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

2.3.7. Construction Dewatering Requirements: Water or accumulated storm water that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation must be permitted by UPDES permit UTG070000 (UPDES Construction Dewatering and Hydrostatic Test Permit) in accordance with Part 1.2.5., unless it can be managed on site. An option for on site management is percolation of the water back into the ground (assuming it is uncontaminated).

[24] Proper disposal of liquid waste: 1) evaporate the waste and dispose of the residual solids with other solid waste, 2) have a liquid waste hauler for wash water haul it off and dispose of it, 3) settle it and pretreat it if necessary with arrangements to discharge the liquid waste to a treatment plant that has the ability to treat it and dispose of it.

3. WATER QUALITY-BASED EFFLUENT LIMITATIONS.

3.1. GENERAL EFFLUENT LIMITATION TO MEET APPLICABLE WATER QUALITY STANDARDS.

Discharges must be controlled as necessary to meet applicable water quality standards. DWQ expects that compliance with the conditions in this permit will result in storm water discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, or DWQ determines, that discharges are not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Parts 5.1 and 5.2, and document the corrective actions as required in Part 5.4.

DWQ may insist that you install additional controls on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA-established or approved TMDL.

The NOI process requires that you determine if the watershed that you discharge into is impaired or if it is considered high quality. Only the first surface water you discharge to is used when determining if your discharge enters an impaired or high quality waterbody. For discharges that enter a storm water system prior to discharge, the first water of the state to which you discharge is the waterbody that receives the storm water discharge from the storm sewer system. Please refer to water quality information at http://mapserv.utah.gov/surfacewaterquality/

Each of these cases, impaired or high quality, may require an extra effort to maintain water quality standards. An impaired water body can have an approved TMDL (see Part 10 for definitions) or it can be on the list waiting a TMDL study. An EPA-approved TMDL is a water quality standard. If your project is in an area covered by an EPA-approved TMDL that has sediment or nutrients (particularly phosphorus) identified as the pollutant(s) of concern, you must provide an extra effort to prevent sediment from leaving the site. Nutrients are a component in topsoil from natural biotic systems. Nitrogen (a nutrient) is infused into the soil from biotic systems but also at times from the atmosphere during certain weather conditions. Some soils have phosphorus (a nutrient) from geologic formations in addition to biotic sources. Special efforts including site controls and management efforts must be employed for impaired or high quality waters, but especially for areas with TMDLs identifying sediment or nutrients as the pollutants of concern. Your SWPPP must show the special efforts you are taking for sensitive water bodies.

3.2. DISCHARGE LIMITATIONS FOR SITES DISCHARGING TO SENSITIVE WATERS[25]

For any portion of the site that discharges to a sediment or nutrient-impaired water or to a water that is identified as impaired or high quality you must comply with the inspection frequency specified in 4.3 and you must comply with the stabilization deadline specified in Part 2.2.14.[26]

[25] Your construction site will be considered to discharge to an impaired or high quality water if the first water to which you discharge is an impaired or high quality water for the pollutants contained in the discharge from your site. For discharges that enter a storm sewer system prior to discharge, the first water to which you discharge is the waterbody that receives the storm water discharge from the storm sewer system.

If you discharge to a water that is impaired for a parameter other than sediment or nutrients, you must address that parameter in your SWPPP if that pollutant has a presence in the construction process for your site. If the impaired parameter is naturally occurring in soils, it is assumed that the erosion control BMPs required by this permit will address the concern and it does not need to be addressed in the SWPPP as a pollutant source. You must deploy whatever control mechanisms that's needed to limit the discharge of that pollutant to meet water quality standards. This includes, if requested by DWQ, comparing the load discharged from the site for that pollutant to ensure it does not exceed a wasteload allocation for that pollutant in the applicable TMDL for the watershed.

[26] If you qualify for any of the reduced inspection frequencies in Part 4.4, you may conduct inspections in accordance with Part 4.4 for any portion of your site that discharges to a sensitive water.

4. SITE INSPECTION REQUIREMENTS.

4.1. PERSON(S) RESPONSIBLE FOR INSPECTING THE SITE. The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a "qualified person" and currently certified.

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

(1) Utah Registered Storm Water Inspector (RSI)

(2) Certified Professional in Erosion and Sediment Control (CPESC)

(3) Certified Professional in Storm Water Quality (CPSWQ)

(4) Certified Erosion, Sediment, and Storm Water Inspector (CESSWI)

(5) Certified Inspector of Sediment and Erosion Control (CISEC)

(6) National Institute for Certification in Engineering Technologies, Erosion and Sediment Control, Level 3 (NICET)

(7) Utah Department of Transportation Environmental Control Supervisor (ECS)

4.2. FREQUENCY OF INSPECTIONS.[27] At a minimum, you must conduct a site inspection in accordance with one of the two schedules listed below, unless you are subject to the Part 4.3 site inspection frequency for discharges to sensitive waters or qualify for a Part 4.4 reduction in the inspection frequency:

4.2.1. At least once every seven (7) calendar days; or

4.2.2. Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.50 inches or greater, or the occurrence of runoff from snowmelt sufficient to cause a discharge.[28] To determine if a storm event of 0.50 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.50 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.7.1.d.

4.3. INCREASE IN INSPECTION FREQUENCY FOR SITES DISCHARGING TO SENSITIVE WATERS. For any portion of the site that discharges to a sediment or nutrient-

[27] Inspections are only required during the site's normal working hours.

[28] "Within 24 hours of the occurrence of a storm event" means that you must conduct an inspection within 24 hours once a storm event has produced 0.50 inches within a 24-hour period, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in accordance with Part 4.2.2 and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.50 inches or more of rain, you must conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

impaired water or to a high quality water (see Part 3), instead of the inspection frequency specified in Part 4.2, you must conduct inspections in accordance with the following inspection frequencies:

Once every seven (7) calendar days and within 24 hours of the occurrence of a storm event of 0.50 inches or greater, or the occurrence of runoff from snowmelt sufficient to cause a discharge. To determine if a storm event of 0.50 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.50 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.7.1d.

4.4. REDUCTIONS IN INSPECTION FREQUENCY.

4.4.1. STABILIZED AREAS.

a. **Temporarily Stabilized Areas**. You may reduce the frequency of inspections to twice per month for the first month, no more than 14 calendar days apart, then once per month in any area of your site where the stabilization steps in part 2.2.14.a. have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to that required in Parts 4.2 and 4.3, as applicable. You must document the beginning and ending dates of this period in your SWPPP.

b. **Permanently Stabilized Areas.** Inspections requirements are suspended.

c. **Exception For "Linear Construction Sites"** (as defined in Part 10) where disturbed portions have undergone final stabilization at the same time active construction continues on others, you may reduce the frequency of inspections to twice per month for the first month, no more than 14 calendar days apart, in any area of your site where the stabilization steps in 2.2.14.a have been completed. After the first month, inspect once more within 24 hours of the occurrence of a storm event of 0.50 inches or greater. If there are no issues or evidence of stabilization problems, you may suspend further inspections. If "wash-out" of stabilization materials and/or sediment is observed, following re-stabilization, inspections must resume at the inspection frequency required in Part 4.4.1.a. Inspections must continue until final stabilization is visually confirmed following a storm event of 0.50 inches or greater.

4.4.2. ARID, SEMI-ARID (as defined in Part 10). For inspection frequencies (shown below) where it is required to inspect after a storm event, to determine if a storm event of 0.50 inches or greater has occurred on your site you must either keep a properly maintained rain gauge on your site or obtain the storm event information from a weather station that is representative of your location.

a. **Arid Areas:** Inspections are required once a month and within 24 hours of the occurrence of a storm event of 0.50 inches or greater.

b. **Semi-Arid Areas:** Inspections are the same as in parts 4.2.1 and 4.2.2 except for the seasonally dry times of the year where they go to once a month and within 24 hours of the occurrence of a

storm event of 0.50 inches or greater.[29] Where the inspection frequency changes to once a month the SWPPP must show the reference for the seasonally dry time period.

4.4.3. Frozen conditions

a. If you are suspending construction activities due to frozen conditions, you may temporarily suspend inspections on your site until thawing conditions (as defined in Part 10) begin to occur if:

(1) Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least three (3) months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.2 and 4.3, as applicable;

(2) Land disturbances have been suspended; and

(3) Disturbed areas of the site have been stabilized, where possible, in accordance with Part 2.2.14.a.

b. If you are still conducting construction activities during frozen conditions, you may reduce your inspection frequency to once per month if:

(1) Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least three (3) months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.2 and 4.3, as applicable; and

(2) Except for areas in which you are actively conducting construction activities, disturbed areas of the site have been stabilized in accordance with Part 2.2.14.a.

You must document the beginning and ending dates of this period in your SWPPP.

4.5. AREAS THAT MUST BE INSPECTED: During your site inspection, you must at a minimum inspect the following areas of your site:

4.5.1. All areas that have been cleared, graded, or excavated and that have not yet completed stabilization consistent with Part 2.2.14.a;

4.5.2. All storm water controls (including pollution prevention controls) installed at the site to comply with this permit;[30]

4.5.3. Material, waste, borrow, and equipment storage and maintenance areas that are covered by this permit;

4.5.4. All areas where storm water typically flows within the site, including drainage ways designed to divert, convey, and/or treat storm water;

[29] The Seasonally dry period for the semi-arid areas on the Wasatch Front is June, July, and August. For other areas there are a few internet sites where it is possible to look up the annual rainfall for an area.

[30] This includes the requirement to inspect for sediment that has been tracked out from the site onto paved roads, sidewalks, or other paved areas consistent with Part 2.2.4.

4.5.5. All points of discharge from the site; and

4.5.6. All locations where stabilization measures have been implemented.

4.5.7. You are not required to inspect areas that, at the time of the inspection, are considered unsafe to your inspection personnel.

4.6. REQUIREMENTS FOR INSPECTIONS; During your site inspection, you must at a minimum:

4.6.1. Check whether all storm water controls (i.e., erosion and sediment controls and pollution prevention controls) are properly installed, appear to be operational, and are working as intended to minimize pollutant discharges. Consider what has caused a BMP's failure if it is not operational;

4.6.2. Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;

4.6.3. Identify any locations where new or modified storm water controls are necessary to meet the requirements of Parts 2 and/or 3;

4.6.4. Check for signs of visible erosion and sedimentation (i.e., sediment deposits) that have occurred and are attributable to your discharge at points of discharge and, if applicable, the banks of any waters of the state flowing within or immediately adjacent to the site;

4.6.5. Identify any incidents of noncompliance observed;

4.6.6. If a discharge is occurring during your inspection:

a. Identify all discharge points at the site; and

b. Observe and document the visual quality of the discharge, and take note of the characteristics of the storm water discharge, including color; odor; floating, settled, or suspended solids; foam; oil sheen; and other indicators of storm water pollutants.

4.6.7. Based on the results of your inspection, complete any necessary maintenance under Part 2.1.4 and corrective action under Part 5.

4.7. INSPECTION REPORT[31]

4.7.1. You must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:

a. The inspection date;

b. The UPDES CGP permit tracking number;

c. Names and titles of personnel making the inspection;

d. A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part 4.6, including any necessary maintenance or corrective actions;

e. If you are inspecting your site at the frequency specified in Part 4.2.2, Part 4.3, Part 4.4.1.c, Part 4.4.2.a, or Part 4.4.2.b and you conducted an inspection because of rainfall measuring 0.50

[31] See DWQ construction storm water web page for ideas and examples of self-inspection forms.

inches or greater, you must include the applicable rain gauge or weather station readings that triggered the inspection; and

f. If you determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations to which this condition applies.

4.7.2. Each inspection report must be signed in accordance with 9.16(1)b. of this permit.

4.7.3. You must keep a copy, in paper or electronic form, of all inspection reports at the site or at an easily accessible location, so that it can be made available at the time of an on-site inspection or upon request by DWQ, a local municipality of jurisdiction, or by the EPA.

4.7.4. You must retain all inspection reports completed for this Part for at least three (3) years from the date that your permit coverage expires or is terminated.

4.8. INSPECTIONS BY DWQ MS4 OR EPA: You must allow an authorized representative of DWQ, the MS4 of jurisdiction or the EPA to conduct the following activities at reasonable times. To the extent that you are utilizing shared controls that are not on site to comply with this permit, you must make arrangements for DWQ to have access at all reasonable times to those areas where the shared controls are located.

4.8.1. Enter onto all areas of the site, including any construction support activity areas covered by this permit, any off-site areas where shared controls are utilized to comply with this permit, discharge locations, adjoining waterbodies, and locations where records are kept under the conditions of this permit;

4.8.2. Access and copy any records that must be kept under the conditions of this permit;

4.8.3. Inspect your construction site, including any construction support activity areas covered by this permit (see Part 1.2.2), any storm water controls installed and maintained at the site, and any off-site shared controls utilized to comply with this permit; and

4.8.4. Sample or monitor for the purpose of ensuring compliance.

5. CORRECTIVE ACTIONS

5.1. CONDITIONS TRIGGERING CORRECTIVE ACTION: You must take corrective action to address any of the following conditions identified at your site:

5.1.1. A storm water control needs repair or replacement (beyond routine maintenance required under Part 2.1.4); or

5.1.2. A storm water control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or

5.1.3. Your discharges are causing an exceedance of applicable water quality standards; or

5.1.4. A prohibited discharge has occurred (see Part 1.3).

5.2. CORRECTIVE ACTION DEADLINES: For any corrective action triggering conditions in Part 5.1, you must:

5.2.1. When site conditions warrant immediate attention, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution for the problem is installed and made operational;

5.2.2. When the problem does not require a new or replacement control or significant repair, the corrective action must be completed by the close of the next business day;

5.2.3. When the problem requires a new or replacement control or significant repair, the corrective action must be completed no later than seven (7) calendar days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) calendar days (e.g., due to availability of materials, excessive costs to expedite shipping or activities, or lengthy installation times) you must document in your records why it is infeasible and provide a reasonable correction schedule.

5.3. CORRECTIVE ACTION REQUIRED BY DWQ: You must comply with any corrective actions required by DWQ as a result of permit violations found during an inspection carried out under Part 4.8.

5.4. CORRECTIVE ACTION REPORT: For each corrective action taken in accordance with this Part, you must complete a report in accordance with the following:

5.4.1. Within 24 hours of identifying the corrective action condition, document the specific condition and the date and time it was identified.

5.4.2. Within 24 hours of the observed completion of a corrective action and in accordance with the deadlines in Part 5.2, document the actions taken to address the condition, including the date and whether any SWPPP modifications are required.

5.4.3. Where these actions result in changes to any of the storm water controls or procedures documented in your SWPPP, you must modify your SWPPP (and SWPPP map) accordingly within seven (7) calendar days of completing this work.

5.4.4. You must keep a copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an on-site inspection or upon request by

DWQ. Corrective action reports may be maintained and made available in paper or electronically.

5.4.5. You must retain all corrective action reports completed for this Part for at least three (3) years from the date that your permit coverage expires or is terminated.

6. STAFF TRAINING REQUIREMENTS

Each operator, or group of multiple operators, must assemble a "storm water team" to carry out compliance activities associated with the requirements in this permit.

6.1. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, you must ensure that the following personnel[32] on the storm water team understand the requirements of this permit and their specific responsibilities with respect to those requirements:

6.1.1. Personnel who are responsible for the design, installation, maintenance, and/or repair of storm water controls (including pollution prevention controls);

6.1.2. Personnel responsible for the application and storage of treatment chemicals (if applicable);

6.1.3. Personnel who are responsible for conducting inspections as required in Part 4.1; and

6.1.4. Personnel who are responsible for taking corrective actions as required in Part 5.

6.2. YOU ARE RESPONSIBLE FOR ENSURING THAT ALL ACTIVITIES ON THE SITE COMPLY with the requirements of this permit. You are not required to provide formal training for subcontractors or other outside service providers, but you must ensure that such personnel understand any requirements of this permit that may be affected by the work they are subcontracted to perform. You should document that you have explained or have given subcontractors information about how to perform their work in compliance with the SWPPP.

6.3. AT A MINIMUM, MEMBERS OF THE STORM WATER TEAM MUST BE TRAINED to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

6.3.1. The permit deadlines associated with installation, maintenance, and removal of storm water controls and with stabilization;

6.3.2. The location of all storm water controls on the site required by this permit and how they are to be maintained;

6.3.3. The proper procedures to follow with respect to the permit's pollution prevention requirements; and

6.3.4. When and how to conduct inspections, record applicable findings, and take corrective actions.

6.4. EACH MEMBER OF THE STORM WATER TEAM MUST HAVE EASY ACCESS TO AN ELECTRONIC OR PAPER COPY of applicable portions of this permit, the most updated copy of your SWPPP, and other relevant documents or information that must be kept with the SWPPP.

[32] If the person requiring training is a new employee who starts after you commence construction activities, you must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit.

7. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

7.1. GENERAL REQUIREMENTS

All operators associated with a construction site under this permit must develop a SWPPP consistent with the requirements in Part 7 prior to their submittal of the NOI.[33] The SWPPP must be kept up-to-date throughout coverage under this permit.

If a SWPPP was prepared under a previous version of this permit, the operator must review and update the SWPPP to ensure that this permit's requirements are addressed prior to submitting an NOI for coverage under this permit.

7.2. SWPPP WRITER/REVIEWER CERTIFICATION REQUIREMENT Beginning January 1, 2021, a "qualified" SWPPP writer must write or certify SWPPPs for all projects disturbing greater than 5 acres, including small construction projects (1 to 5 acres) that have a perennial surface water within 50 feet of the project, or having a steep slope (70% or 35 degrees or more) with an elevation change from the slope of 10 feet or more (at any point during the time of construction – not including stock piles). A "qualified" SWPPP writer is knowledgeable in the principles and practices that must be considered in the development of a SWPPP. Acceptable qualifications include but are not limited to:

a. Utah Registered SWPPP Writer (RSW)

b. Licensed Professional Engineer (PE) in a related field or Professional Geologist (PG)

c. Certified Professional in Erosion and Sediment Control (CPESC)

d. Certified Professional in Storm Water Quality (CPSWQ)

e. National Institute for Certification in Engineering Technologies, Erosion and Sediment Control, Level 3 (NICET)

7.3. SWPPP CONTENTS. At a minimum, the SWPPP must include the information specified in this Part and as specified in other parts of this permit.

7.3.1. Storm Water Team. Identify the personnel (by name or position) that are part of the storm water team, as well as their individual responsibilities, including which members are responsible for conducting inspections.

7.3.2. Nature of Construction Activities.[34] Include the following:

a. A description of the nature of your construction activities, including the age or dates of past renovations for structures that are undergoing demolition;

b. The size of the property (in acres or length in miles if a linear construction site);

[33] The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts 2 and 3.

[34] If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant to "lock in" the operator to meeting these dates. When departures from initial projections are necessary, this should be documented in the SWPPP itself, or in associated records, as appropriate.

c. The total area expected to be disturbed by the construction activities including on-site and off-site construction support activity areas (to the nearest quarter acre or nearest quarter mile if a linear construction site);

d. A description of any on-site and off-site construction support activity areas covered by this permit (see Part 1.2.2);

e. A description and projected schedule for the following:

(1) Commencement of construction activities in each portion of the site, including clearing and grubbing, mass grading, demolition activities, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;

(2) Temporary or permanent cessation of construction activities in each portion of the site;

(3) Temporary or final stabilization of exposed areas for each portion of the site; and

(4) Removal of temporary storm water controls and construction equipment or vehicles, and the cessation of construction-related pollutant-generating activities.

f. A list and description of all pollutant-generating activities[35] on the site. For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers, pesticides, paints, caulks, sealants, fluorescent light ballasts, contaminated substrates, solvents, fuels) associated with that activity, which could be discharged in storm water from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to storm water discharges, and any known hazardous or toxic substances, such as PCBs and asbestos, that will be disturbed or removed during construction;

g. Business days and hours for the project;

7.3.3. Site Map. Include a legible map, or series of maps, showing the following features of the site:

a. Boundaries of the property;

b. Locations where construction activities will occur, including:

(1) Locations where earth-disturbing activities will occur (note any phasing), including any demolition activities;

(2) Approximate slopes before and after major grading activities (note any steep slopes (as defined in Part 10));

(3) Locations where sediment, soil, or other construction materials will be stockpiled;

(4) Any water of the state crossings;

(5) Designated points where vehicles will exit onto paved roads;

(6) Locations of structures and other impervious surfaces upon completion of construction; and

(7) Locations of on-site and off-site construction support activity areas covered by this permit (see Part 1.2.2).

[35] Examples of pollutant-generating activities include paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations

c. Locations of all waters of the state within one mile downstream of the site's discharge point. Also identify if any are listed as impaired or high quality water;

d. Type and extent of pre-construction cover on the site (e.g., vegetative cover, forest, pasture, pavement, structures);

e. Drainage patterns of storm water and authorized non-storm water before and after major grading activities;

f. Storm water and authorized non-storm water discharge locations, including:

(1) Locations where storm water and/or authorized non-storm water will be discharged to storm drain inlets;[36] and

(2) Locations where storm water or authorized non-storm water will be discharged directly to waters of the state.

g. Locations of all potential pollutant-generating activities identified in Part 7.3.2.g;

h. Locations of storm water controls, including natural buffer areas and any shared controls utilized to comply with this permit; and

i. Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

7.3.4. Non-Storm water Discharges. Identify all authorized non-storm water discharges in Part 1.2.3 that will or may occur.

7.3.5. Description of Storm water Controls.

a. For each of the Part 2.2 erosion and sediment control effluent limits, Part 2.3 pollution prevention effluent limits as applicable to your site, you must include the following:

(1) A description of the specific control(s) to be implemented to meet the effluent limit;

(2) Any applicable storm water control design specifications (including references to any manufacturer specifications and/or erosion and sediment control manuals/ordinances relied upon);[37]

(3) Routine storm water control maintenance specifications; and

(4) The projected schedule for storm water control installation/implementation.

b. You must also include any of the following additional information as applicable.

(1) **Natural buffers** and/or equivalent sediment controls (see Part 2.2.1 and Part 10). You must include the following:

(i) The compliance alternative to be implemented;

[36] The requirement to show storm drain inlets in the immediate vicinity of the site on your site map only applies to those inlets that are easily identifiable from your site or from a publicly accessible area immediately adjacent to your site.

[37] Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or ordinances. Any departures from such specifications must reflect good engineering practice and must be explained in the SWPPP.

(ii) If complying with alternative 2, the width of natural buffer retained;

(iii) If complying with alternative 2 or 3, the erosion and sediment control(s) you will use to achieve an equivalent sediment reduction, and any information you relied upon to demonstrate the equivalency;

(iv) If complying with alternative 3, a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size;

(v) For "linear construction sites" where it is infeasible to implement compliance alternative 1, 2, or 3, a rationale for this determination, and a description of any buffer width retained and/or supplemental erosion and sediment controls installed; and

(vi) A description of any disturbances that are exempt under Part 2.2.1 that occur within 50 feet of a water of the state.

(2) **Perimeter controls for a "linear construction site**" (see Part 2.2.3). For areas where perimeter controls are not feasible, include documentation to support this determination and a description of the other practices that will be implemented to minimize discharges of pollutants in storm water associated with construction activities.

Note: Routine maintenance specifications for perimeter controls documented in the SWPPP must include the Part 2.2.3.a requirement that sediment be removed before it has accumulated to one-half of the above-ground height of any perimeter control.

(3) **Sediment track-out controls** (see Parts 2.2.4.b and 2.2.4.c). Document the specific stabilization techniques and/or controls that will be implemented to remove sediment prior to vehicle exit.

(4) **Sediment basins** (see Part 2.2.12). In circumstances where it is infeasible to utilize outlet structures that withdraw water from the surface, include documentation to support this determination, including the specific conditions or time periods when this exception will apply.

(5) **Treatment chemicals** (see Part 2.2.13), you must include the following:

(i) A listing of the soil types that are expected to be exposed during construction in areas of the project that will drain to chemical treatment systems. Also include a listing of soil types expected to be found in fill material to be used in these same areas, to the extent you have this information prior to construction;

(ii) A listing of all treatment chemicals to be used at the site and why the selection of these chemicals is suited to the soil characteristics of your site;

(iii) If DWQ authorized you to use cationic treatment chemicals for sediment control, include the specific controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to an exceedance of water quality standards, or harm to aquatic life;

(iv) The dosage of all treatment chemicals to be used at the site or the methodology to be used to determine dosage;

(v) Information from any applicable Safety Data Sheet (SDS);

(vi) Schematic drawings of any chemically enhanced storm water controls or chemical treatment systems to be used for application of the treatment chemicals;

(vii) A description of how chemicals will be stored consistent with Part 2.2.13.c;

(viii) References to applicable local requirements affecting the use of treatment chemicals, and copies of applicable manufacturer's specifications regarding the use of your specific treatment chemicals and/or chemical treatment systems; and

(ix) A description of the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to use of the treatment chemicals at your site.

(6) **Stabilization measures** (see Part 2.2.14). You must include the following:

(i) The specific vegetative and/or non-vegetative practices that will be used;

(ii) The stabilization deadline that will be met in accordance with Part 2.2.14.a(1)-(2);

(iii) It is important to meet the deadlines during the wet times of the year (if the area has a wet time of the year). During the dry times of the year the significance of stabilization deadlines is less important.

(7) **Spill prevention and response procedures** (see Part 1.3.5 and Part 2.3). You must include the following:

(i) Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and

(ii) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.6 and established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available to all employees.

(iii) You may also reference the existence of Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an UPDES permit for the construction activity, provided that you keep a copy of that other plan on site or electronically available.[38]

(8) **Waste management procedures** (see Part 2.3.3). Describe the procedures you will follow for handling, storing and disposing of all wastes generated at your site consistent with state and local requirements, including clearing and demolition debris, removal of spoil (excess dirt) from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

[38] Even if you already have an SPCC or other spill prevention plan in existence, your plans will only be considered adequate if they meet all of the requirements of this Part, either as part of your existing plan or supplemented as part of the SWPPP

(9) **Application of fertilizers** (see Part 2.3.5). Document any departures from the manufacturer specifications where appropriate.

7.3.6. Procedures for Inspection, Maintenance, and Corrective Action. Describe the procedures you will follow for maintaining your storm water controls, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part 2.1.4, Part 4, and Part 5 of this permit. Also include:

a. Personnel responsible for conducting inspections;

b. The inspection schedule you will follow, which is based on whether your site is subject to Part 4.2 or Part 4.3, or whether your site qualifies for any of the reduced inspection frequencies in Part 4.4;

c. If you will be conducting inspections in accordance with the inspection schedule in Part 4.2.2, or Part 4.3, the location of the rain gauge or the address of the weather station you will be using to obtain rainfall data;

d. If you will be reducing your inspection frequency in accordance with Part 4.4.3, the beginning and ending dates of frozen conditions on your site; and

e. Any maintenance or inspection checklists or other forms that will be used.

7.3.7. Staff Training. Include documentation that the required personnel were, or will be, trained in accordance with Part 6.

7.3.8. Compliance with Other Requirements.

a. **Utah Water Quality Act Underground Injection Control (UIC) Program Requirements for Certain Subsurface Storm Water Controls**. If you are using any of the following storm water controls at your site, as they are described below, you must document any contact you have had with DWQ for implementing the requirements for underground injection wells in the Safe Drinking Water Act and DEQ's implementing regulations at UAC R317-7. In addition there may be local requirements related to such structures. Such controls (below) would generally be considered Class V UIC wells and all Class V UIC wells must be reported to DWQ for an inventory:

b. Infiltration trenches (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);

c. Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate storm water flow; and

d. Drywells, seepage pits, or improved sinkholes (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

7.3.9. SWPPP Certification. You must sign and date your SWPPP in accordance with 9.16(1)a.

7.3.10. Post-Authorization Additions to the SWPPP. Once you are authorized for coverage under this permit, you must include the following documents as part of your SWPPP:

a. A copy of your NOI submitted to DWQ, the Authorization to Discharge Letter, along with any correspondence exchanged between you and DWQ related to coverage under this permit;

b. A copy of this permit (an electronic copy easily available to the storm water team is also acceptable).

7.4. ON-SITE AVAILABILITY OF YOUR SWPPP

7.4.1. You must keep a current copy of your SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by DWQ, the EPA, or an MS4. The SWPPP can be stored electronically as long as personnel on-site can access it and make it available for inspector review.

7.5. SWPPP MODIFICATIONS.

7.5.1. You must modify your SWPPP, including the site map(s), within seven (7) days of any of the following conditions:

a. Whenever you make changes to your construction plans, storm water controls, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.3.2.f change during the course of construction;

b. To reflect areas on your site map where operational control has been transferred (e.g., new general contractor or owner),note the change and the date of transfer since initiating permit coverage;

c. If inspections or investigations by DWQ or its authorized representatives determine that SWPPP modifications are necessary for compliance with this permit;

d. Where DWQ determines it is necessary to install and/or implement additional controls at your site in order to meet the requirements of this permit, the following must be included in your SWPPP:

(1) A copy of any correspondence describing such measures and requirements; and

(2) A description of the controls that will be used to meet such requirements.

e. To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the storm water controls implemented at the site; and

f. If applicable, if a change in chemical treatment systems or chemically enhanced storm water control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

7.5.2. You must maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part 7.5.1 above) and a brief summary of all changes.

7.5.3. All modifications made to the SWPPP consistent with Part 7.5 must be authorized by a person identified in 9.16.(1)b.

7.5.4. Upon determining that a modification to your SWPPP is required, you must notify any persons or subcontractors that may be impacted by the change to the SWPPP.

8. HOW TO TERMINATE COVERAGE. Until you terminate coverage under this permit, you must comply with all conditions and effluent limitations in the permit. To terminate permit coverage, you must submit to DWQ a complete and accurate Notice of Termination (NOT, the NOT can be done online in the same account that the NOI was taken out in), which certifies that you have met the requirements for terminating in Part 8.

8.1. MINIMUM INFORMATION REQUIRED IN NOT.

8.1.1. UPDES ID (i.e., permit tracking number) provided by DWQ when you received coverage under this permit;

8.1.2. Basis for submission of the NOT (see Part 8.2);

8.1.3. Operator contact information;

8.1.4. Name of site and address (or a description of location if no street address is available); and

8.1.5. NOT certification.

8.2. CONDITIONS FOR TERMINATING CGP COVERAGE. You must terminate CGP coverage only if one or more of the following conditions has occurred:

8.2.1. You have completed all construction activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.2.2.c), and you have met the following requirements:

a. You have met the requirements for final vegetative or non-vegetative stabilization in Part 2.2.14.b for any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities.;

b. You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;

c. You have removed all storm water controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and

d. You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or

8.2.2. You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted a new NOI and obtained coverage under this permit. This only applies if the new operator obtains a new NOI. Termination is not required if a transfer form has been signed by both the previous operator and the new one to move the existing coverage; or

8.2.3. Coverage under an individual or alternative general UPDES permit has been obtained.

8.2.4. Completed homes that are occupied by home owners where at least temporary sediment and erosion controls are in place are allowed to be terminated without final stabilization. If a home owner buys a newly completed house the permit can be terminated while the property is being transferred to the home owner. The home owner should not be involved in the permit process. If

a home owner builds his/her house, they must terminate when the house is approved for occupancy where temporary storm water controls are in place on the site.

8.3. HOW TO SUBMIT YOUR NOT.

8.3.1. It is preferred that the DWQ "on-line" NOI system be used to submit an electronic NOT.

Access to the DWQ online storm water database found at the DWQ webpage at https://cdxnodengn.epa.gov/net-cgp/action/login. You must logon to the account created when the NOI was submitted and find the "Terminate" (or NOT) button for the permit tracking number when you wish to terminate a coverage. In the case where the permittee does not have access to the account for which the NOI was submitted the permittee must either contact DWQ and request account access or fill out and submit to DWQ a paper copy of the NOT form, which can be downloaded from the same DWQ website.

8.4. DEADLINE FOR SUBMITTING THE NOT. You must submit your NOT within 30 calendar days after any one of the conditions in Part 8.2 occurs.

8.5. PARTIAL NOT REQUIREMENTS. A partial NOT must be filed if a portion of the permitted site is sold to a new owner prior to completion of construction. You must notify the new owner of the requirement to obtain a storm water permit unless the new owner is the home owner. Prior to releasing a residential lot to a home owner the site must be temporarily stabilized as required in 8.2.4. You must notify DWQ of the change in ownership and provide the name, address, and telephone number of the new owner.

8.6. EFFECTIVE DATE OF TERMINATION OF COVERAGE. Your authorization to discharge under this permit terminates at midnight of the calendar day that a complete NOT is submitted to DWQ.

9. STANDARD PERMIT CONDITIONS.

9.1. DUTY TO COMPLY.

(1) The permittee must comply with all conditions of the UPDES permit. Any permit noncompliance is a violation of the Utah Water Quality Act, as amended and is grounds for enforcement action; permit termination, revocation and reissuance or modification; or denial of a permit renewal application.

(2) Penalties for Violations of Permit Conditions. The Utah Water Quality Act, in 19-5-115, provides that any person who violates the Act, or any permit, rule, or order adopted under it is subject to a civil penalty not to exceed $10,000 per day of such violation.

(3) Willful Non-Compliance or Negligence. Any person who willfully or with gross negligence violates the Act, or any permit, rule or order adopted under it is subject to a fine of not more than $25,000 per day of violation. Any person convicted under 19-5-115 a second time shall be punished by a fine not exceeding $50,000 per day.

(4) False Statements. The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act, the rules, or this Permit, or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for 6 months, or by both. Utah Code Ann. § 19-5-115(4).

9.2. DUTY TO REAPPLY. If the permittee wishes to continue an activity regulated by this permit after the expiration date of the permit, the permittee shall apply for and obtain a new permit as required in R317-8-3.1

9.3. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Upon reduction, loss, or failure of the treatment facility, the permittee, to the extent necessary to maintain compliance with the permit, shall control production of all discharges until the facility is restored or an alternative method of treatment is provided.)

9.4. DUTY TO MITIGATE. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the UPDES permit which has a reasonable likelihood of adversely affecting human health or the environment.

9.5. DUTY TO PROVIDE INFORMATION. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by the permit.

9.6. OTHER INFOMRATION. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Director, he or she shall promptly submit such facts or information.

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

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

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

9.10. RECORDS RETENTION.

(1) The Permittee shall retain copies of SWPPPs, Authorization to Discharge Letters, and all reports required by this Permit, and records of all data used to complete the Notice of Intent to be covered by this Permit, for a period of at least three years from the date that the site is finally stabilized. This period may be extended by request of the Director at any time.

(2) After final stabilization of the construction site is complete, the SWPPP is no longer required to be maintained on site, but may be maintained by the Permittee(s) at its primary headquarters. However, you must continue to allow DWQ access to the SWPPP as described in paragraph B.10(1) (above).

9.11. ADDRESSES. All written correspondence under this permit shall be directed to the Division of Water Quality at the following address:

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

9.12. STATE LAWS.

(1) Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Utah Code Ann. § 19-5-117.

(2) No condition of this Permit shall release the Permittee from any responsibility or requirements under other environmental statutes or regulations.

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

facilities or similar systems, installed by a Permittee only when necessary to achieve compliance with the conditions of the Permit.

9.14. INSPECTION AND ENTRY. The Permittee shall allow, upon presentation of credentials, the Director or an authorized representative:

(1) To enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

(2) Have access to and copy at reasonable times, any records that must be kept under the conditions of this Permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by law, any substances or parameters at any location.

9.15. REOPENER CLAUSE.

(1) Reopener Due to Water Quality Impacts. If there is evidence indicating that the storm water discharges authorized by this Permit cause, have the reasonable potential to cause or contribute to, a violation of a water quality standard, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part 1.4.4 of this Permit or the Permit may be modified to include different limitations and/or requirements.

(2) Reopener Guidelines. Permit modification or revocation will be conducted according to UAC R317-8-5.6 and UAC R317-8-6.2.

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

9.16. SIGNATORY REQUIREMENTS.

(1) All Notices of Intent, SWPPPs, reports, certifications or information submitted to the Director, or that this Permit requires to be maintained by the Permittee, shall be signed as follows:

a. All notice of intent (NOIs), notices of termination (NOTs), and SWPPPs shall be signed as follows:

i. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

ii. For a partnership of sole proprietorship: by a general partner or the proprietor, respectively; or

iii. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).

b. All reports required by the Permit and other information requested by the Director or by an authorized representative of the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

i. The authorization is made in writing by a person described above and kept with the SWPPP; and

ii. The authorization specifies either an individual or a position having responsibility for overall operation of the regulated site, facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

c. Certification. Any person signing documents under this Part B.16 shall make the following certification:

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

10. DEFINITIONS AND ACRONYMS

"Act" – is a reference to the Utah Water Quality Act, or Utah Code Annotated Title 19, Chapter 5.

"Agricultural Land" - cropland, grassland, rangeland, pasture, and other agricultural land, on which agricultural and forest-related products or livestock are produced and resource concerns may be addressed. Agricultural lands include cropped woodland, marshes, incidental areas included in the agricultural operation, and other types of agricultural land used for the production of livestock.

"Antidegradation Policy" or "Antidegradation Requirements" - the water quality standards regulation that requires maintenance of water quality:

Waters whose existing quality is better than the established standards for the designated uses will be maintained at high quality unless it is determined by the Board, after appropriate intergovernmental coordination and public participation in concert with the Utah continuing planning process, allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. However, existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses.

In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Federal Clean Water Act.

Category 1 Waters: Waters which have been determined by the Board to be of exceptional recreational or ecological significance or have been determined to be a State or National resource requiring protection, shall be maintained at existing high quality through designation, by the Board after public hearing, as Category 1 Waters. New point source discharges of wastewater, treated or otherwise, are prohibited in such segments after the effective date of designation. Protection of such segments from pathogens in diffuse, underground sources is covered in R317-5 and R317-7 and the Regulations for Individual Wastewater Disposal Systems (R317-501 through R317-515). Other diffuse sources (nonpoint sources) of wastes shall be controlled to the extent feasible through implementation of best management practices or regulatory programs.

Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in R317-2-3.5.b.4., and where best management practices will be employed to minimize pollution effects.

Waters of the state designated as Category 1 Waters are listed in UAC R317-2-12.1.

Category 2 Waters: Category 2 Waters are designated surface water segments which are treated as Category 1 Waters except that a point source discharge may be permitted provided that the discharge does not degrade existing water quality. Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in UAC R317-2-3.5.b.4., and where best management practices will be employed to minimize

pollution effects. Waters of the state designated as Category 2 Waters are listed in UAC R317-2-12.2.

Category 3 Waters: For all other waters of the state, point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in in the paragraph below (Antidegradation Review).

Antidegradation Review (ADR): An antidegradation review will determine whether the proposed activity complies with the applicable antidegradation requirements for receiving waters that may be affected.

An antidegradation review (ADR) may consist of two parts or levels. A Level I review is conducted to insure that existing uses will be maintained and protected.

Both Level I and Level II reviews will be conducted on a parameter-by-parameter basis. A decision to move to a Level II review for one parameter does not require a Level II review for other parameters. Discussion of parameters of concern is those expected to be affected by the proposed activity.

Antidegradation reviews shall include opportunities for public participation, as described in UAC R317-2-3.5e.

"Arid Areas" – areas with an average annual rainfall of 0 to 10 inches.

"Authorization to Discharge Letter" – The receipt generated when a Notice of Intent (NOI) is successfully entered and payment is processed by DWQ. The receipt demonstrates that the permittee has coverage under the appropriate Storm Water Permit. Authorization to Discharge Letters contain the dates of the permittee's coverage under the Construction General Permit (CGP).

"Bank" (e.g., stream bank or river bank) – the rising ground bordering the channel of a water of the State of Utah.

"Best Management Practices (BMPs) – schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce pollution of waters of the State. BMPs include treatment requirements, operating procedures, and practices to control storm water associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Bluff" – a steep headland, promontory, riverbank, or cliff.

"Borrow Areas" – the areas where materials are dug for use as fill, either onsite or off-site.

"Category 1, 2, and/or 3 Waters" – see "Antidegradation Policy" or "Antidegradation Requirements".

"Cationic Treatment Chemical" – polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in storm water discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.

"Commencement of Earth-Disturbing Activities" - the initial disturbance of soils (or 'breaking ground') associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material).

"Commencement of Pollutant-Generating Activities" – at construction sites (for the purposes of this permit) occurs in any of the following circumstances:

• Clearing, grubbing, grading, and excavation has begun;

• Raw materials related to your construction activity, such as building materials or products, landscape materials, fertilizers, pesticides, herbicides, detergents, fuels, oils, or other chemicals have been placed at your site;

• Use of authorized non-storm water for washout activities, or dewatering activities, have begun; or

• Any other activity has begun that causes the generation of or the potential generation of pollutants.

"Common Plan of Development or Sale" –is a plan to subdivide a parcel of land into separate parts for separate sale. This can be for a residential, commercial, or industrial development. The plan originates as a single parcel that is separated into parts. This usually goes through an approval process by a local governmental unit, but in some cases, it may not require that process. The original plan is considered the "common plan of development or sale" whether phased or completed in steps.

Additional information related to Common Plan of Development for Permit Purposes:

For UPDES storm water permit purposes, a common plan must have been initiated after October, 1992. A common plan of development or sale remains so until each lot or section of the development has fulfilled its planned purposes (e.g. in a residential development as homes are completed, stabilized, and sold or occupied). As lots or separated sections of the development are completed, the lot or section is stabilized, and the plan purposes are fulfilled for that area, lot, or section, it is no longer part of the common plan of development or sale (e.g. if a home is sold in a development and the owner decides to add a garage somewhere on the lot, that garage project is not part of the common plan of development or sale. In this process a common plan of development or sale may become reduced in size and/or separated by completed areas which are no longer part of the common plan of development or sale, but all unfinished lots remain part of the same common plan of development or sale until they are completed, stabilized, and fulfilled according to the purposes of the plan.

"Construction Activities" – earth-disturbing activities, such as the clearing, grading, and excavation of land.

"Construction and Development Point Source Category" (C&D Rule) – as published in 40 CFR § 450 is the regulation requiring effluent limitations guidelines (ELG's) and new source performance standards (NSPS) for controlling the discharge of pollutants from construction sites.

"Construction Site" – the land or water area where construction activities will occur and where storm water controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether. The construction site is often a smaller subset of the lot or parcel within which the project is taking place.

"Construction Support Activities" – a construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own. This can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.

"Construction Waste" – discarded material (such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and styrofoam).

"Conveyance Channel" – a temporary or permanent waterway designed and installed to safely convey storm water flow within and out of a construction site.

"Corrective Action" – for the purposes of the permit, any action taken to (1) repair, modify, or replace any storm water control used at the site; (2) clean up and dispose of spills, releases, or other deposits found on the site; and (3) remedy a permit violation.

"CWA" – the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.

"Dewatering" – the act of draining rainwater and/or groundwater from building foundations, vaults, and trenches.

"Director" – the director of the Division of Water Quality, otherwise known as the Executive Secretary of the Utah Water Quality Board.

"Discharge" –discharge of storm water or "discharge of a pollutant."

"Discharge of a Pollutant" – the addition of any "pollutant" or combination of pollutants to "waters of the State" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the State. This includes additions of pollutants into waters of the State from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

"Discharge Point" – for the purposes of this permit, the location where collected and concentrated storm water flows are discharged from the construction site.

"Discharge-Related Activity" – activities that cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction, and operation of storm water controls to control, reduce, or prevent pollutants from being discharged.

"Discharge to an Impaired Water" – for the purposes of this permit, a discharge to an impaired water occurs if the first water of the State to which you discharge is identified by DWQ or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting an applicable water

quality standard, or is included in an EPA-approved or DWQ established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the water of the State to which you discharge is the first water of the State that receives the storm water discharge from the storm sewer system.

"Domestic Waste" – for the purposes of this permit, typical household trash, garbage or rubbish items generated by construction activities.

"Drought-Stricken Area" – for the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

"Earth-Disturbing Activity" or "Land-Disturbing Activity" – actions taken to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, cutting, and filling), soil compaction, and movement and stockpiling of top soils.

"Effective Operating Condition" – for the purposes of this permit, a storm water control is kept in effective operating condition if it has been implemented and maintained in such a manner that it is working as designed to minimize pollutant discharges.

"Effluent Limitations" – for the purposes of this permit, any of the Part 2 or Part 3 requirements.

"Electronic Notice of Intent" – DWQ's online system for submitting electronic Construction General Permit forms. Can be accessed at https://secure.utah.gov/stormwater.

"Emergency-Related Project" – a project initiated in response to a public emergency (e.g., natural disaster, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services.

"Excursion" – a violation of a standard or limit.

"Existing Project" – a construction project that commenced construction activities prior to the issuance date of this permit.

"Existing Permit Coverage" – means that the permittee had permit coverage under a previous permit prior to the issuance of this permit.

"Exit Points" – any points of egress from the construction site to be used by vehicles and equipment during construction activities.

"Exposed Soils" – for the purposes of this permit, soils that as a result of earth-disturbing activities are disturbed and exposed to the elements of weather.

"Final Stabilization" – All disturbed areas must be covered by permanent structures such as pavement, concrete slab, building, etc., or for areas not covered by permanent structures but that are receiving 20 inches or more of average annual precipitation, vegetation has been established with a uniform (e.g., evenly distributed, without large bare areas) perennial

vegetative cover equivalent to 70 percent of the natural background vegetative cover. In the case of areas that are not covered by permanent structures, but that are receiving less than 20 inches of average annual precipitation (arid areas, 0-10 inches; semi-arid areas, 10-20 inches), final stabilization is equivalent to the requirements of 2.2.2.b of this permit, including the provisions for permanent stabilization.

"Groundwater" – water in the voids and interstitial spaces around soil particles beneath the surface of the ground, even if it is only temporary.

"Hazardous Materials" or "Hazardous Substances" or "Hazardous or Toxic Waste" – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

"Impaired Water" or "Water Quality Impaired Water" or "Water Quality Limited Segment" – for the purposes of this permit, waters identified as impaired on the CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first water of the state to which you discharge is identified by DWQ pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or DWQ established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the state to which you discharge is the water body that receives the storm water discharge from the storm sewer system.

"Impervious Surface" – for the purpose of this permit, any land surface with a low or no capacity for soil infiltration including, but not limited to, pavement, sidewalks, parking areas and driveways, packed gravel or soil, or rooftops.

"Indian Country" or "Indian Country Lands" – defined at 40 CFR §122.2 as:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of way running through the reservation;

2. All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof; and

3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

"Infeasible" – for the purpose of this permit, infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. DWQ notes that it does not intend for any permit requirement to conflict with state water rights law.

"Install" or "Installation" – when used in connection with storm water controls, to connect or set in position storm water controls to make them operational.

"Intermittent (or Seasonal) Stream" – one which flows at certain times of the year when ground water provides water for stream flow, or during and immediately after some precipitation events or snowmelt.

"Landward" – positioned or located away from a water body, and towards the land.

"Level Spreader" – a temporary storm water control used to spread storm water flow uniformly over the ground surface as sheet flow to prevent concentrated, erosive flows from occurring.

"Linear Construction Project" – includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

"Minimize" – to reduce and/or eliminate to the extent achievable using storm water controls that are technologically available and economically practicable and achievable in light of best industry practices.

"Municipal Separate Storm Sewer System" or "MS4" – defined at 40 CFR §122.26(b)(8) as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the State;

2. Designed or used for collecting or conveying storm water;

3. Which is not a combined sewer; and

4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

"Native Topsoil" – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

"Native Vegetation" – the species of plants that have developed for a particular region or ecosystem and are considered endemic to that area.

"Natural Buffer" – for the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

"Natural Vegetation" – vegetation that occurs spontaneously without regular management, maintenance or species introductions, removals, and that generally has a strong component of native species.

"New Operator of a New or Existing Project" – an operator that through transfer and/or operation replaces the operator of an already permitted construction project.

"New Project" – a construction project that commenced construction activities on or the issuance date of this permit.

"New Source" – for the purpose of this permit, a construction project that commenced construction activities on or after the issuance date of this permit.

"New Source Performance Standards (NSPS)" – for the purposes of this permit, NSPS are technology-based standards that apply to construction sites that are new sources under 40 CFR 450.24.

"Non-Storm Water Discharges" – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, noncontact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

"Non-Turbid" – is a term used in this permit to describe water that appears visually clear and there appears to be no evidence of silt or sediment present in the water.

"Notice of Intent" (NOI) – the form (electronic or paper) required for authorization of coverage under the Construction General Permit.

"Notice of Termination" (NOT) – the form (electronic or paper) required for terminating coverage under the Construction General Permit.

"Operational" – for the purpose of this permit, storm water controls are made "operational" when they have been installed and implemented, are functioning as designed, and are properly maintained.

"Operator" – for the purposes of this permit and in the context of storm water discharges associated with construction activity, any party associated with a construction project that meets either of the following two criteria:

1. The party which has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g. in most cases this is the owner of the site, sometimes it is a lessor); or

2. The party which has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit; in most cases this is the general contractor of the project).

"Ordinary High Water Mark" – the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris.

"Outfall" – see "Discharge Point."

"Owner" – for the purpose of this permit an owner has legal ownership of property on which construction activity is taking place. Except in the case of leased property, an owner is the party that has ultimate control over the destiny of a project. This is the lessor in the case of leased property.

"Permittee" – is the owner and/or operator named in the NOI for the project.

"Point(s) of Discharge" – see "Discharge Point."

"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, landfill leachate collection system, or vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Pollutant" – defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

"Pollutant-Generating Activities" – at construction sites (for the purposes of this permit), those activities that lead to or could lead to the generation of pollutants, either as a result of earth disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are:

- sediment;
- nutrients;
- heavy metals;
- pesticides and herbicides;
- oil and grease;
- bacteria and viruses;
- trash, debris, and solids;
- treatment polymers; and
- any other toxic chemicals.

"Pollution Prevention Measures" – storm water controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

"Polymers" – for the purposes of this permit, coagulants and flocculants used to control erosion on soil or to enhance the sediment removal capabilities of sediment traps or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum.

"Prohibited Discharges" – discharges that are not allowed under this permit, including:

1. Wastewater from washout of concrete;

2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;

4. Soaps or solvents used in vehicle and equipment washing;

5. Toxic or hazardous substances from a spill or other release; and

6. Waste, garbage, floatable debris, construction debris, and sanitary waste from pollutant generating activities.

"Provisionally Covered Under this Permit" – for the purposes of this permit, DWQ provides temporary coverage under this permit for emergency-related projects prior to receipt of a complete and accurate NOI. Discharges from earth-disturbing activities associated with the emergency-related projects are subject to the terms and conditions of the permit during the period of temporary coverage.

"Receiving Water" – a "Water of the State into which the regulated storm water discharges. If the discharge is to a storm sewer system, the receiving water is the waterbody to which the storm system discharges.

"Regulatory Authority" – as it pertains to this permit means EPA, DWQ, or a local MS4 that oversights construction activity.

"Run-On" – sources of storm water that drain from land located upslope or upstream from the regulated site in question.

"Semi-Arid Areas" – areas with an average annual rainfall of over 10 to 20 inches.

"Site" – for construction activities, the land or water area where earth-disturbing activities take place, including construction support activities.

"Small Construction Activity" – defined at Utah Administrative Code R317-8-3.9(6)(e)1. and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

"Small Residential Lot" – for the purpose of this permit, a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

"Snowmelt" – the conversion of snow into overland storm water and groundwater flow as a result of warmer temperatures.

"Spill" – for the purpose of this permit, the release of a hazardous or toxic substance from its container or containment.

"Stabilization" – the use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas of disturbed soil exposed from the construction process.

"Steep Slopes" –for this permit steep slopes are defined as those that are 70 percent or greater in grade.

"Storm Event" – a precipitation event that results in a measurable amount of precipitation.

"Storm Sewer" – a system of pipes (separate from sanitary sewers) that carries storm water runoff from buildings and land surfaces.

"Storm Sewer System" – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying storm water.

"Storm Water" – storm water runoff from precipitation, snow melt runoff, and surface runoff and drainage.

"Storm Water Control Measure" - refers to any storm water control, BMP, or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the state.

"Storm Water Controls" – see "Storm Water Control measure."

"Storm Water Discharge Associated with Construction Activity" – as used in this permit, a discharge of pollutants in storm water to waters of the state from areas where land disturbing activities (e.g., clearing, grading, or excavation) occur, or where construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute wash down, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants), are located.

"Storm Water Inlet" or "Storm Drain Inlet" – an entrance or opening to a storm water conveyance system, generally placed below grade so as to receive storm water drainage from the surrounding area.

"Storm Water Team" – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the "Storm water Team" must be identified in the SWPPP.

"Subcontractor" – for the purposes of this permit, an individual or company that takes a portion of a contract from the general contractor or from another subcontractor.

"Surface Water" – for this permit a surface water is defined all open water bodies, streams, lakes, ponds, marshes, wetlands, watercourses, waterways, springs, drainage systems, and all other bodies or accumulations of water on the surface only. Surface water is visible water, standing or flowing, above the surface of the ground.

"SWPPP" (Storm Water Pollution Prevention Plan) – a site-specific, written document that, among other things: (1) identifies potential sources of storm water pollution at the construction site; (2) describes storm water control measures to reduce or eliminate pollutants in storm water discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

"Temporary Stabilization" – a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

"Thawing Conditions" – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32˚F. This date can be determined by looking at historical weather data. The estimation of thawing

conditions is for planning purposes only. During construction the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

"Total Maximum Daily Load" or "TMDL" – the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

"Toxic Waste" – see "Hazardous Materials."

"Turbidity" – when the term is used in a narrative it means a condition of water quality characterized by the presence of cloudiness usually caused by suspended solids and/or organic material. It refers to the visual clarity in water and is measured in a test passing light through a sample of water and quantifying the amount of light passing. The measurement is not directly proportional to the quantity of sediment in the water sample it is directly related to the quantity of light that passes through the sample. Particulate size and other factors can affect the amount of light that passes through the sample. This measurement is called nephelometric turbidity units or ntu.

"Uncontaminated Discharge" – a discharge that does not cause or contribute to an exceedance of applicable water quality standards.

"Upland" - the dry land area above and 'landward' of the ordinary high water mark.

"Utah Pollutant Discharge Elimination System (UPDES)" – The State of Utah's program for issuing, modifying, revoking and resissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 102, 318, and 405 of the Clean water Act (CWA) for the "discharge" of "pollutants" to "Waters of the State". This program is specifically designed to be compatible with the federal National Pollutant Discharge Elimination System (NPDES) program established and administered by the EPA.

"Water-Dependent Structures" – structures or facilities that are required to be located directly adjacent to a waterbody or wetland, such as a marina, pier, boat ramp, etc.

"Water Quality Standards" –are provisions of State law which consist of a designated use or uses for the waters of the United States, water quality criteria for such waters based upon such uses, and an antidegradation policy to protect high quality waters. Water quality standards protect the public health or welfare, enhance the quality of water and serve the purposes of the Utah Water Quality Act.

"Waters of the State" – means all streams, lakes, ponds, marshes, water-courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof, except that bodies of

water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife, shall not be considered to be "waters of the state" under this definition (Section 19-5-102).

"Wetland" – those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. On-site evaluations are typically required to confirm the presence and boundaries of wetlands.

"Work day" – for the purposes of this permit, a work day is a calendar day on which construction activities will take place.

Acronyms
C&D – Construction & Development
CGP – Construction General Permit
CFR – Code of Federal Regulations
CPoD – Common Plan of Development or Sale
CWA – Clean Water Act
DEQ – Department of Environmental Quality
DDW – Division of Drinking Water
DWQ – Division of Water Quality
EPA – United States Environmental Protection Agency
MS4 – Municipal Separate Storm Sewer System
NMFS – United States National Marine Fisheries Service
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
NRC – National Response Center
NRCS – National Resources Conservation Service
POTW – Publicly Owned Treatment Works
SPCC – Spill Prevention Control and Countermeasure
SW – Storm Water
SWMP – Storm Water Management Plan
SWPPP – Storm Water Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UAC – Utah Administrative Code
UCA – Utah Code Annotated
UPDES – Utah Pollution Discharge Elimination System
UWQA – Utah Water Quality Act
WQS – Water Quality Standard

Appendix A

Buffer Requirements

The purpose of this appendix is to assist you in complying with the requirements in Part 2.2.1 of the permit regarding the establishment of natural buffers and/or equivalent sediment controls. This appendix is organized as follows:

A.1 SITES THAT ARE REQUIRED TO PROVIDE AND MAINTAIN NATURAL BUFFERS AND/OR EQUIVALENT EROSION AND SEDIMENT CONTROLS

The requirement in Part 2.2.1 to provide and maintain natural buffers and/or equivalent erosion and sediment controls applies for any discharges to waters of the state located within 50 feet of your site's earth disturbances. If the water of the state is not located within 50 feet of earth-disturbing activities, Part 2.2.1 does not apply. See Figure A-1.

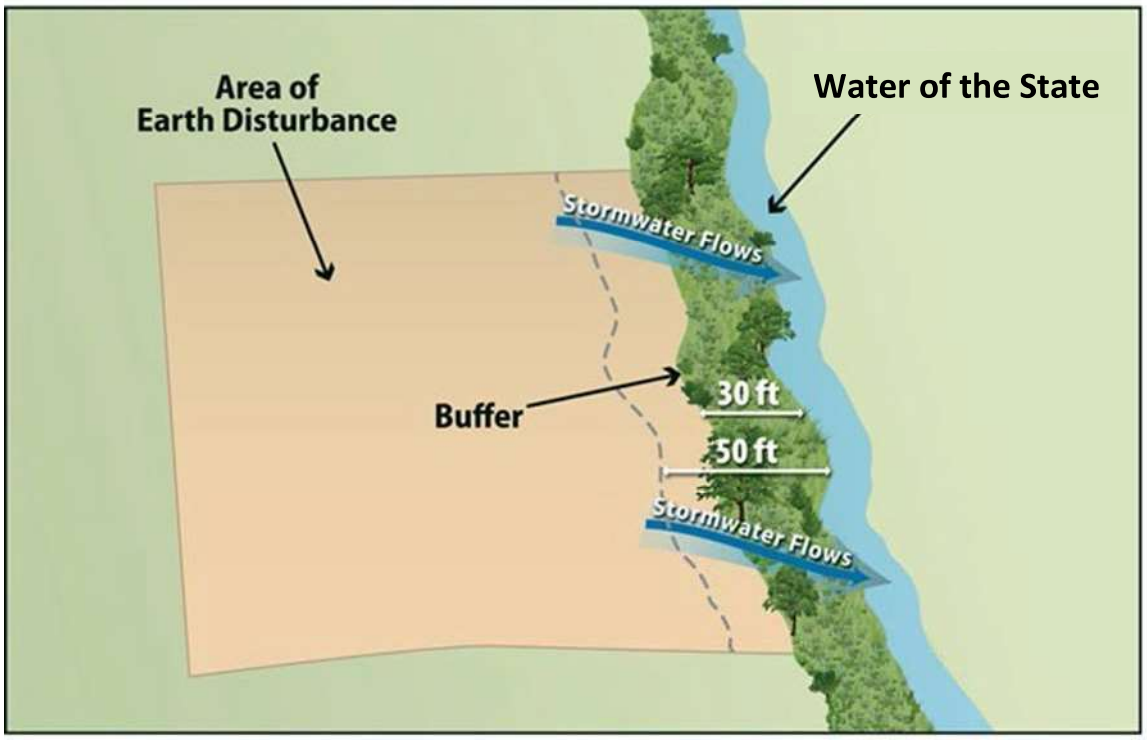


Figure A-1 Example of earth-disturbing activities within 50 feet of a water of the state.

A.2 COMPLIANCE ALTERNATIVES AND EXCEPTIONS

A.2.1. Compliance Alternatives

If Part 2.2.1 applies to your site, you have three compliance alternatives from which you can choose, unless you qualify for any of the exceptions (see below and Part 2.2.1.a):

1. Provide and maintain a 50-foot undisturbed natural buffer; or
2. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or
3. If infeasible to provide and maintain an undisturbed natural buffer of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

The compliance alternative selected must be maintained throughout the duration of permit coverage.

See Part A.2.2 below for exceptions to the compliance alternatives.

See Part A.2.3 for requirements applicable to providing and maintaining natural buffers under compliance alternatives 1 and 2 above.

See Part A.2.4 for requirements applicable to providing erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer under compliance alternatives 2 and 3 above.

A.2.2. Exceptions to the Compliance Alternatives

The following exceptions apply to the requirement to implement one of the Part 2.2.1.a compliance alternatives (see also Part 2.2.1.b):

- The following disturbances within 50 feet of a water of the state are exempt from the requirements Part 2.2.1 and this Appendix:
  - Construction approved under a CWA Section 404 permit; or
  - Construction of a water-dependent structure or water access areas (e.g., pier, boat ramp, trail).
- If there is no discharge of storm water to waters of the state through the area between the disturbed portions of the site and any waters of the state located within 50 feet of your site, you are not required to comply with the requirements in Part 2.2.1 and this Appendix. This includes situations where you have implemented controls measures, such as a berm or other barrier that will prevent such discharges.
- Where no natural buffer exists due to preexisting development disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in Part 2.2.1 and this Appendix.

  Where some natural buffer exists but portions of the area within 50 feet of the water of the state are occupied by preexisting development disturbances, you are required to comply with the requirements in Part 2.2.1 and this Appendix. For the purposes of calculating the sediment load reduction for either compliance alternative 2 or 3, you are not expected to compensate for the reduction in buffer function that would have resulted from the area covered by these preexisting disturbances. Clarity about how to implement the compliance alternatives for these situations is provided in A.2.3 and A.2.4 below.

  If during your project, you will disturb any portion of these preexisting disturbances, the area removed will be deducted from the area treated as a "natural buffer."
- For "linear construction sites" (see Definitions), you are not required to comply with this requirement if site constraints (e.g., limited right-of-way) make it infeasible to implement one of the Part 2.2.1.a compliance alternatives, provided that, to the extent feasible, you limit disturbances within 50 feet of any waters of the state and/or you provide supplemental erosion and sediment controls to treat storm water discharges from earth

disturbances within 50 feet of the water of the state. You must also document in your SWPPP your rationale for why it is infeasible for you to implement one of the Part 2.2.1.a compliance alternatives, and describe any buffer width retained and supplemental erosion and sediment controls installed.

- For "small residential lot" construction (i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre), you have the option of complying with one of the "small residential lot" compliance alternatives in Part A.3 of this appendix.

  Note that you must document in your SWPPP if any disturbances related to any of the above exceptions occurs within the buffer area on your site.

A.2.3. Requirements for Providing and Maintaining Natural Buffers

This part applies to you if you choose compliance alternative 1 (50-foot buffer), compliance alternative 2 (a buffer of < 50 feet supplemented by additional erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), or if you are providing a buffer in compliance with one of the "small residential lot" compliance alternatives in Part A.3.

Buffer Width Measurement

Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:

4. The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
5. The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

Refer to Figure A-2 and Figure A-3. You may find that specifically measuring these points is challenging if the flow path of the water of the state changes frequently, thereby causing the measurement line for the buffer to fluctuate continuously along the path of the waterbody. Where this is the case, DWQ suggests that rather than measuring each change or deviation along the water's edge, it may be easier to select regular intervals from which to conduct your measurement. For instance, you may elect to conduct your buffer measurement every 5 to 10 feet along the length of the water.

Additionally, note that if earth-disturbing activities will take place on both sides of a water of the state that flows through your site, to the extent that you are establishing a buffer around this water, it must be established on both sides. For example, if you choose compliance alternative 1, and your project calls for disturbances on both sides of a small stream, you would need to retain the full 50 feet of buffer on both sides of the water. However, if your construction activities will only occur on one side of the stream, you would only need to retain the 50-foot buffer on the side of the stream where the earth- disturbance will occur.

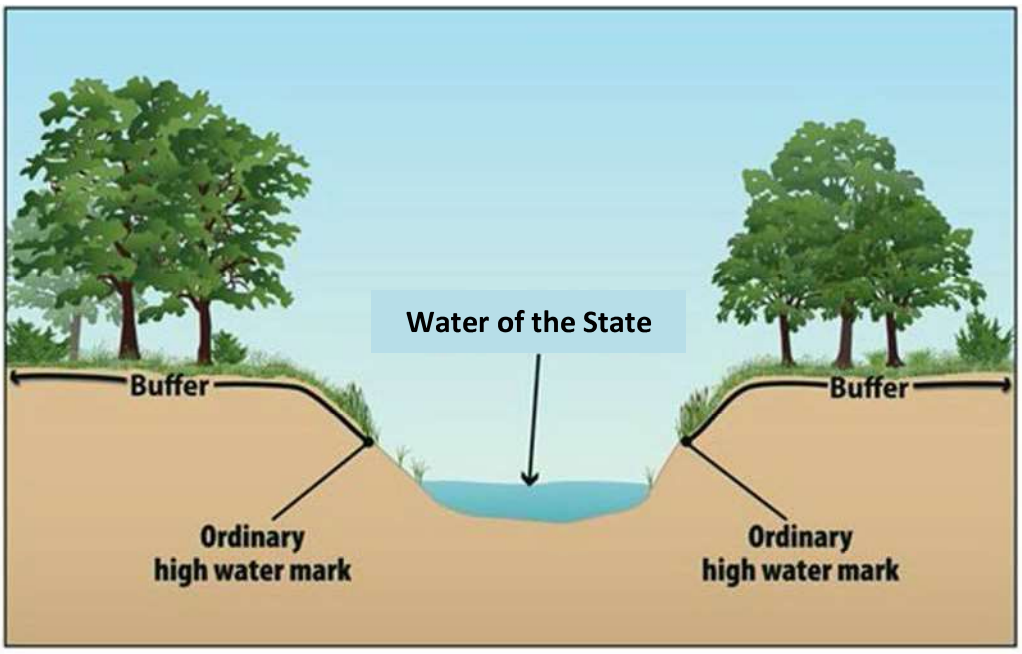


Figure A-2 Buffer measurement from the ordinary high water mark of the water body, as indicated by a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter/debris.

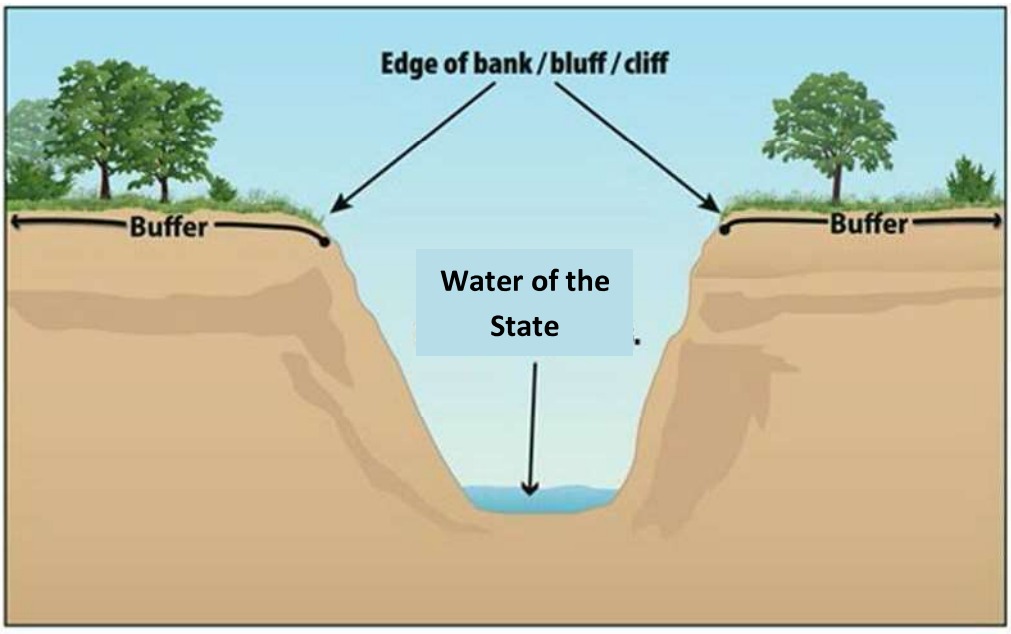


Figure A-3 Buffer measurement from the edge of the bank, bluff, or cliff, whichever is applicable.

Limits to Disturbance Within the Buffer

You are considered to be in compliance with the requirement to provide and maintain a natural buffer if you retain and protect from construction activities the natural buffer that existed prior to the commencement of construction. If the buffer area contains no vegetation prior to the

commencement of construction (e.g., sand or rocky surface), you are not required to plant vegetation. As noted above, any preexisting structures or impervious surfaces may occur in the natural buffer provided you retain and protect from disturbance the buffer areas outside of the preexisting disturbance.

To ensure that the water quality protection benefits of the buffer are retained during construction, you are prohibited from conducting any earth-disturbing activities within the buffer during permit coverage. In furtherance of this requirement, **prior to commencing earth-disturbing activities on your site, you must delineate, and clearly mark off, with flags, tape, or a similar marking device, the buffer area on your site.** The purpose of this requirement is to make the buffer area clearly visible to the people working on your site so that unintended disturbances are avoided.

While you are not required to enhance the quality of the vegetation that already exists within the buffer, you are encouraged to do so where such improvements will enhance the water quality protection benefits of the buffer. (Note that any disturbances within the buffer related to buffer enhancement are permitted and do not constitute construction disturbances.) For instance, you may want to target plantings where limited vegetation exists, or replace existing vegetation where invasive or noxious plant species (see http://plants.usda.gov/java/noxiousDriver) have taken over. In the case of invasive or noxious species, you may want to remove and replace them with a diversity of native trees, shrubs, and herbaceous plants that are well-adapted to the climatic, soil, and hydrologic conditions on the site. You are also encouraged to limit the removal of naturally deposited leaf litter, woody debris, and other biomass, as this material contributes to the ability of the buffer to retain water and filter pollutants.

If a portion of the buffer area adjacent to the water of the state is owned by another party and is not under your control, you are only required to retain and protect from construction activities the portion of the buffer area that is under your control. For example, if you comply with compliance alternative 1 (provide and maintain a 50-foot buffer), but 10 feet of land immediately adjacent to the water of the U.S. is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you must only retain and protect from construction activities the 40-foot buffer area that occurs adjacent to the property on which your construction activities are taking place. DWQ would consider you to be in compliance with this requirement regardless of the activities that are taking place in the 10-foot area that is owned by a different party than the land on which your construction activities are taking place that you have no control over.

Discharges to the Buffer

You must ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls (for example, you must comply with the Part 2.2.3 requirement to install sediment controls along any perimeter areas of the site that will receive pollutant discharges), **and if necessary to prevent erosion caused by storm water flows within the buffer, you must use velocity dissipation devices.** The purpose of this requirement is to decrease the rate of storm water flow and encourage infiltration so that the pollutant filtering functions of the buffer will be achieved. To comply with this requirement,

construction operators typically will use devices that physically dissipate storm water flows so that the discharge entering the buffer is spread out and slowed down.

SWPPP Documentation

You are required to document in your SWPPP the natural buffer width that is retained. For example, if you are complying with alternative 1, you must specify in your SWPPP that you are providing a 50-foot buffer. Or, if you will be complying with alternative 2, you must document the reduced width of the buffer you will be retaining (and you must also describe the erosion and sediment controls you will use to achieve an equivalent sediment reduction, as required in Part A.2.4 below). Note that you must also show any buffers on your site map in your SWPPP consistent with Part 7.3.3.h. Additionally, if any disturbances related to the exceptions in Part A.2.2 occur within the buffer area, you must document this in the SWPPP.

A.2.4 Guidance for Providing the Equivalent Sediment Reduction as a 50-foot Buffer

This part applies to you if you choose compliance alternative 2 (provide and maintain a buffer that is less than 50 feet that is supplemented by erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot buffer) or compliance alternative 3 (implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot buffer).

Determine Whether it is Feasible to Provide a Reduced Buffer

EPA recognizes that there will be a number of situations in which it will be infeasible to provide and maintain a buffer of any width. While some of these situations may exempt you from the buffer requirement entirely (see A.2.2), if you do not qualify for one of these exemptions, there still may be conditions or circumstances at your site that make it infeasible to provide a natural buffer. For example, there may be sites where a significant portion of the property on which the earth-disturbing activities will occur is located within the buffer area, thereby precluding the retention of natural buffer areas.

Therefore, you should choose compliance alternative 2 if it is feasible for you to retain some natural buffer on your site. (Note: For any buffer width retained, you are required to comply with the requirements in Part A.2.3, above, concerning the retention of vegetation and restricting earth disturbances.) Similarly, if you determine that it is infeasible to provide a natural buffer of any size during construction, you should choose alternative 3.

Design Controls That Provide Equivalent Sediment Reduction as 50-foot Buffer

You must next determine what additional controls must be implemented on your site that, alone or in combination with any retained natural buffer, achieve a reduction in sediment equivalent to that achieved by a 50-foot buffer.

Note that if only a portion of the natural buffer is less than 50 feet, you are only required to implement erosion and sediment controls that achieve the sediment load reduction equivalent to the 50-foot buffer for discharges through that area. You would not be required to provide additional treatment of storm water discharges that flow through 50 feet or more of natural buffer. See Figure A-4.

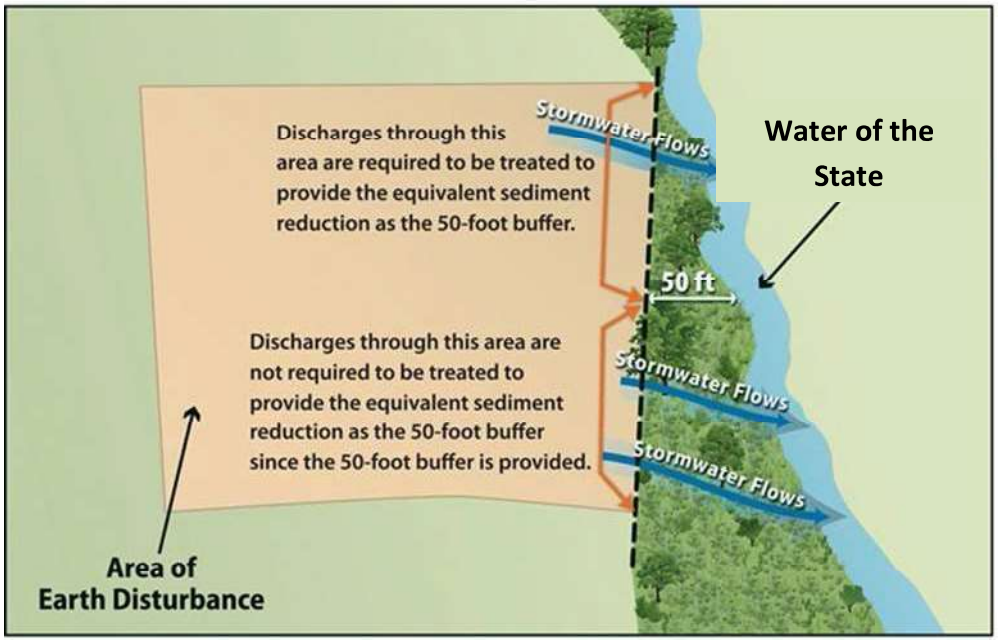


Figure A-4 Example of how to comply with the requirement to provide the equivalent sediment reduction when only a portion of your earth-disturbances discharge to a buffer of less than 50- feet.

Steps to help you meet compliance alternative 2 and 3 requirements are provided below.

Step 1 - Estimate the Sediment Reduction from the 50-foot Buffer

In order to design controls that match the sediment removal efficiency of a 50-foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of erosion and sediment controls used to reduce the discharge of sediment prior to the buffer. EPA has simplified this calculation by developing buffer performance tables covering a range of vegetation and soil types for the areas covered by the CGP. See Attachment 1 of this Appendix, Tables A-8 and A-9. Note: buffer performance values in Tables A-8 and A-9 represent the percent of sediment captured through the use of perimeter controls (e.g., silt fences) and 50-foot buffers at disturbed sites of fixed proportions and slopes.[39] The number of tables has been reduced since many were irrelevant and

[39] EPA used the following when developing the buffer performance tables:

- The sediment removal efficiencies are based on the U.S. Department of Agriculture's RUSLE2 ("Revised Universal Soil Loss Equation 2") model for slope profiles using a 100-foot long denuded slopes.
- Sediment removal was defined as the annual sediment delivered at the downstream end of the 50-foot natural buffer (tons/yr/acre) divided by the annual yield from denuded area (tons/yr/acre).
- As perimeter controls are also required by the CGP, sediment removal is in part a function of the reduction due to a perimeter control (i.e., silt fence) located between the disturbed portion of the site and the upstream edge of the natural buffer and flow traveling through a 50-foot buffer of undisturbed natural vegetation.
- It was assumed that construction sites have a relatively uniform slope without topographic features that accelerate the concentration for erosive flows. (footnote continues on next page)

Table A-8 for Idaho most closely represents northern Utah, and Table A-9 for New Mexico most closely represents southern Utah.

Using Table A-8 for northern Utah or A-9 for southern Utah (see Attachment 1 of this Appendix), you can determine the sediment removal efficiency of a 50-foot buffer for your geographic area by matching the vegetative cover type that best describes your buffer area and the type of soils that predominate at your site. For example, if your site is located in Idaho (northern Utah --Table A-8), and your buffer vegetation corresponds most closely with that of tall fescue grass, and the soil type at your site is best typified as sand, your site's sediment removal efficiency would be 44 percent.

In this step, you should choose the vegetation type in the tables that most closely matches the vegetation that would exist naturally in the buffer area on your site regardless of the condition of the buffer. However, because you are not required to plant any additional vegetation in the buffer area, in determining what controls are necessary to meet this sediment removal equivalency in Step 2 below, you will be able to take credit for this area as a fully vegetated "natural buffer."

Similarly, if a portion of the buffer area adjacent to the water of the state is owned by another party and is not under your control, you can treat the area of land not under your control as having the equivalent vegetative cover and soil type that predominates on the portion of the property on which your construction activities are occurring.

> *For example, if your earth-disturbances occur within 50 feet of a water of the state, but the 10 feet of land immediately adjacent to the water of the state is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10 foot area adjacent to the stream as having the equivalent soil and vegetation type that predominates in the 40 foot area under your control. You would then make the same assumption in Step 2 for purposes of determining the equivalent sediment removal (which would be 44% in this case).*

Alternatively, you may do your own calculation of the effectiveness of the 50-foot buffer based upon your site-specific conditions, and may use this number as your sediment removal equivalency standard to meet instead of using Tables A-8 and A-9. This calculation must be documented in your SWPPP.

Step 2 - Design Controls That Match the Sediment Removal Efficiency of the 50-foot Buffer

---

- It was assumed that vegetation has been removed from the disturbed portion of the site and a combination of cuts and fills have resulted in a smooth soil surface with limited retention of near-surface root mass.

To represent the influence of soil, EPA analyzed 11 general soil texture classifications in its evaluation of buffer performance. To represent different types of buffer vegetation, EPA evaluated 4 or more common vegetative types for each state/territory covered under the permit. For each vegetation type evaluated, EPA considered only permanent, non-grazed, and non-harvested vegetation, on the assumption that a natural buffer adjacent to the water of the U.S. will typically be undisturbed. EPA also evaluated slope steepness and found that sediment removal efficiencies present in Tables A-8 and A-9 are achievable for slopes that are less than nine percent.

Once you determine the estimated sediment removal efficiency of a 50-foot buffer for your site in Step 1, you must next select storm water controls that will provide an equivalent sediment load reduction. These controls can include the installation of a single control, such as a sediment pond or additional perimeter controls, or a combination of storm water controls. Whichever control(s) you select, you must demonstrate in your SWPPP that the controls will provide at a minimum the same sediment removal capabilities as a 50-foot natural buffer (Step 1). You may take credit for the removal efficiencies of your required perimeter controls in your calculation of equivalency, because these were included in calculating the buffer removal efficiencies in Tables C-8 through C-9. (Note: You are reminded that the controls must be kept in effective operating condition until you complete final stabilization on the disturbed portions of the site discharging to the water of the state)

To make the determination that your controls and/or buffer area achieve an equivalent sediment load reduction as a 50-foot buffer, you should use a model or other type of calculation. As mentioned above, there are a variety of models available that can be used to support your calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other models. An example is provided in Attachment 3 to help illustrate how this determination could be made.

If you retain a buffer of less than 50 feet, you may take credit for the removal that will occur from the reduced buffer and only need to provide additional controls to make up the difference between the removal efficiency of a 50 foot buffer and the removal efficiency of the narrower buffer. For example, if you retain a 30 foot buffer, you can account for the sediment removal provided by the 30 foot buffer retained, and you will only need to design controls to make up for the additional removal provided by the 20 feet of buffer that is not being provided. To do this, you would plug the width of the buffer that is retained into RUSLE or another model, along with other storm water controls that will together achieve a sediment reduction equivalent to a natural 50-foot buffer.

As described in Step 1 above, you can take credit for the area you retained as a "natural buffer" as being fully vegetated, regardless of the condition of the buffer area.

> *For example, if your earth-disturbances occur 30 feet from a water of the state, but the 10 feet of land immediately adjacent to the water of the U.S. is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area as a natural buffer, regardless of the activities that are taking place in the area. Therefore, you can assume (for purposes of your equivalency calculation) that your site is providing the sediment removal equivalent of a 30-foot buffer, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided.*

Step 3 - Document How Site-Specific Controls Will Achieve the Sediment Removal Efficiency of the 50-foot Buffer

In Steps 1 and 2, you determined both the expected sediment removal efficiency of a 50-foot buffer at your site, and you used this number as a performance standard to design controls to be installed at your site, which alone or in combination with any retained natural buffer, achieves

the expected sediment removal efficiency of a 50-foot buffer at your site. The final step is to document in your SWPPP the information you relied on to calculate the equivalent sediment reduction as an undisturbed natural buffer.

DWQ will consider your documentation to be sufficient if it generally meets the following:

- For Step 1, refer to the table in Attachment 1 that you used to derive your estimated 50-foot buffer sediment removal efficiency performance. Include information about the buffer vegetation and soil type that predominate at your site, which you used to select the sediment load reduction value in Tables A-8 and A-9. Or, if you conducted a site-specific calculation for sediment removal efficiency, provide the specific removal efficiency, and the information you relied on to make your site-specific calculation.
- For Step 2, (1) Specify the model you used to estimate sediment load reductions from your site; and (2) the results of calculations showing how your controls will meet or exceed the sediment removal efficiency from Step 1.

If you choose compliance alternative 3, you must also include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

A.3 SMALL RESIDENTIAL LOT COMPLIANCE ALTERNATIVES

EPA has developed two additional compliance alternatives applicable only to "small residential lots" that are unable to provide and maintain a 50 foot buffer.

> A small residential lot (Common Plan Lot) is a lot or grouping of lots being developed for residential purposes that will disturb less than 1 acre of land, but that is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

The following steps describe how a small residential lot operator would achieve compliance with one these 2 alternatives.

A.3.1 Small Residential Lot Compliance Alternative Eligibility

In order to be eligible for the small residential lot compliance alternatives, the following conditions must be met:

6. The lot or grouping of lots meets the definition of "small residential lot"; and
7. The operator must follow the guidance for providing and maintaining a natural buffer in Part A.2.3 of this Appendix, including:
   - Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by storm water within the buffer;
   - Document in the SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and

- Delineate, and clearly mark off, with flags, tape, or other similar marking device, all natural buffer areas.

A.3.2. Small Residential Lot Compliance Alternatives

You must next choose from one of two small residential lot compliance alternatives and implement the storm water control practices associated with that alternative.

Note: The compliance alternatives provided below are not mandatory. Operators of small residential lots can alternatively choose to comply with the any of the options that are available to other sites in Part 2.2.1.a and A.2.1 of this Appendix.

Small Residential Lot Compliance Alternative 1

Alternative 1 is a straightforward tiered-technology approach that specifies the controls that a small residential lot must implement based on the buffer width retained. To meet the requirements of small residential lot compliance alternative 1, you must implement the controls specified in Table A-1 based on the buffer width to be retained. See footnote 40, below, for a description of the controls you must implement.

For example, if you are an operator of a small residential lot that will be retaining a 35-foot buffer and you choose Small Residential Lot Compliance Alternative 1, you must implement double perimeter controls between earth disturbances and the water of the state.

In addition to implementing the applicable control, you must also document in your SWPPP how you will comply with small residential lot compliance alternative 1.

Table A-1 Alternative 1 Requirements[40]

Retain 50 foot Buffer	Retain <50 and >30 Buffer	Retain ≤30 foot Buffer
No Additional Requirements	Double Perimeter Controls	Double Perimeter Controls and 7-Day Site Stabilization

Small Residential Lot Compliance Alternative 2

Alternative 2 specifies the controls that a builder of a small residential lot must implement based on both the buffer width retained and the site's sediment discharge risk. By incorporating the

[40]Description of Additional Controls Applicable to Small Residential Lot Compliance Alternatives 1 and 2:
•I No Additional Requirements: If you implement a buffer of 50 feet or greater, then you are not subject to any additional requirements. Note that you are required to install perimeter controls between the disturbed portions of your site and the buffer in accordance with Part 2.2.3.
•I Double Perimeter Control: In addition to the reduced buffer width retained on your site, you must provide a double row of perimeter controls between the disturbed portion of your site and the water of the U.S. spaced a minimum of 5 feet apart.
•I Double Perimeter Control and 7-Day Site Stabilization: In addition to the reduced buffer width retained on your site and the perimeter control implemented in accordance with Part 2.2.3, you must provide a double row of perimeter controls between the disturbed portion of your site and the water of the U.S. spaced a minimum of 5 feet apart, and you are required to complete the stabilization activities specified in Parts 2.2.14 within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities.

sediment risk, this approach may result in the implementation of controls that are more appropriate for the site's specific conditions.

Step 1 – Determine Your Site's Sediment Risk Level

To meet the requirements of Alternative 2, you must first determine your site's sediment discharge "risk level" based on the site's slope, location, and soil type. To help you to determine your site's sediment risk level, EPA developed five different tables for different slope conditions. You should select the table that most closely corresponds to your site's average slope.

> *For example, if your site's average slope is 7 percent, you should use Table C-4 to determine your site's sediment risk.*

After you determine which table applies to your site, you must then use the table to determine the "risk level" (e.g., "low", "moderate", or "high") that corresponds to your site's location and predominant soil type.[41]

> *For example, based on Table C-3, a site located in Northern Utah with a 4 percent average slope and with predominately sandy clay loam soils would fall into the "low" risk level.*

Table A-2 Risk Levels for Sites with Average Slopes of ≤ 3 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Low	Low	Low	Low

Table A-3 Risk Levels for Sites with Average Slopes of > 3 Percent and ≤ 6 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay- Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Low	Low	Low	Moderate

[41] One source for determining your site's predominant soil type is the USDA's Web Soil Survey located at http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

Table A-4 Risk Levels for Sites with Average Slopes of > 6 Percent and ≤ 9 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay- Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Low	Low	Low	Moderate

Table A-5 Risk Levels for Sites with Average Slopes of > 9 Percent and ≤ 15 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay- Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Moderate	Low	Moderate	Moderate

Table A-6 Risk Levels for Sites with Average Slopes of > 15 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay- Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Moderate
New Mexico (Southern Utah)	Moderate	Moderate	Moderate	Moderate	High

Step 2 – Determine Which Additional Controls Apply

Once you determine your site's "risk level", you must next determine the additional controls you need to implement on your site, based on the width of buffer you plan to retain. Table A-7

specifies the requirements that apply based on the "risk level" and buffer width retained. See footnote 40, above, for a description of the additional controls that are required.

For example, if you are the operator of a small residential lot that falls into the "moderate" risk level, and you decide to retain a 20-foot buffer, using Table A-7 you would determine that you need to implement double perimeter controls to achieve compliance with small residential lot compliance alternative 2.

You must also document in your SWPPP your compliance with small residential lot compliance alternative 2.

Table A-7. Alternative 2 Requirements

Risk Level Based on Estimated Soil Erosion	Retain ≥ 50' Buffer	Retain <50' and >30' Buffer	Retain ≤30' and >10' Buffer	Retain ≤ 10' Buffer
Low Risk	No Additional Requirements	No Additional Requirements	Double Perimeter Control	Double Perimeter Control
Moderate Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization
High Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization	Double Perimeter Control and 7-Day Site Stabilization

ATTACHMENT 1

Sediment Removal Efficiency Tables[42]

EPA recognizes that very high removal efficiencies, even where theoretically achievable by a 50-foot buffer, may be very difficult to achieve in practice using alternative controls. Therefore in the tables below, EPA has limited the removal efficiencies to a maximum of 90%. Efficiencies that were calculated at greater than 90% are shown as 90%, and this is the minimum percent removal that must be achieved by alternative controls.

For the Utah CGP only the tables for Idaho and New Mexico are shown. The table for Idaho substitutes for northern Utah and the table for New Mexico substitutes for southern Utah.

Table A-8 Estimated 50-foot Buffer Performance in Idaho* (Northern Utah)

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue Grass	42	52	44	48	85
Medium-density Weeds	28	30	28	26	60
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	25	26	24	24	55
Northern Mixed Prairie Grass	28	30	28	26	50
Northern Range Cold Desert Shrubs	28	28	24	26	50

* Applicable for sites with less than nine percent slope

** Characterization focuses on the under-story vegetation

Table A-9 Estimated 50-foot Buffer Performance in New Mexico* (Southern Utah)

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue grass	71	85	80	86	90

[42] The buffer performances were calculated based on a denuded slope upgradient of a 50-foot buffer and a perimeter controls, as perimeter controls are a standard requirement (see Part 2.2.3).

Medium-density Weeds	56	73	55	66	78
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	53	70	51	62	67
Southern Mixed Prairie Grass	53	71	52	63	50
Southern Range Cold Desert Shrubs	56	73	55	65	53

* Applicable for sites with less than nine percent slope

** Characterization focuses on the under-story vegetation

ATTACHMENT 2

Using the Sediment Removal Efficiency Tables – Questions and Answers

– **What if my specific buffer vegetation is not represented in Tables A-8 and A-9?** Tables A-8 and A-9 provide a range of factors affecting buffer performance; however, there are likely instances where the specific buffer vegetation type on your site is not listed. If you do not see a description of the type of vegetation present at your site, you should choose the vegetation type that most closely matches the vegetation type on your site. You can contact your local Cooperative Extension Service Office (http://nifa.usda.gov/partners-and-extension-map) for assistance in determining the vegetation type in Tables C-8 through C-9 that most closely matches your site-specific vegetation.

– **What if there is high variability in local soils?** EPA recognizes that there may be a number of different soil type(s) on any given construction site. General soil information can be obtained from USDA soil survey reports (http://websoilsurvey.nrcs.usda.gov) or from individual site assessments performed by a certified soil expert. Tables A-8 and A-9 present eleven generic soil texture classes, grouping individual textures where EPA has determined that performance is similar. If your site contains different soil texture classes, you should use the soil type that best approximates the predominant soil type at your site.

– **What if my site slope is greater than 9 percent after final grade is reached?** As indicated in the buffer performance tables, the estimated sediment removal efficiencies are associated with disturbed slopes of up to 9 percent grade. Where your graded site has an average slope of greater than 9 percent, you should calculate a site-specific buffer performance.

– **How do I calculate my own estimates for sediment reduction at my specific site?** If you determine that it is necessary to calculate your own sediment removal efficiency using site- specific conditions (e.g., slopes at your site are greater than 9 percent), you can use a range of available models that are available to facilitate this calculation, including USDA's RUSLE- series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other equivalent models.

– **What is my estimated buffer performance if my site location is not represented by Tables Tables A-8 and A-9?** If your site is located in an area not represented by Tables A-8 and A-9, you should use the table that most closely approximates conditions at your site (Table A-8 generally represents northern Utah, Table A-9 generally represents southern Utah). You may instead choose to conduct a site-specific calculation of the buffer performance.

– **What if only a portion of my site drains to the buffer area?** If only a portion of your site drains to a water of the State, where that water is within 50 feet of your earth disturbances, you are only required to meet the equivalency requirement for the storm water flows corresponding to those portions of the site. See Attachment 3 for an example of how this is expected to work.

ATTACHMENT 3

Example of How to Use the Sediment Removal Efficiency Tables

Arid Location With Pre-existing Disturbances in the Natural Buffer (6.5 acre site located in southern Utah)

An operator of a site in southern Utah determines that it is not feasible to provide a 50-foot buffer, but a 28-foot buffer can be provided. Because the operator will provide a buffer that is less than 50 feet, the operator must determine which controls, in combination with the 28-foot buffer, achieve a sediment load reduction equivalent to the 50-foot buffer. In this example, the project will disturb 6.5 acres of land, but only 1.5 acres of the total disturbed area drains to the buffer area. Within the 28-foot buffer area is a preexisting concrete walkway. The equivalence analysis starts with Step 1 in Part A.2.4 of this Appendix with a review of the southern Utah buffer performance (Table A-9). The operator determines that the predominate vegetation type in the buffer area is prairie grass, the soil type is similar to silt, and the site is of a uniform, shallow slope (e.g., 3 percent grade). Although the operator will take credit for the disturbance caused by the concrete walkway as a natural buffer in Step 2, here the operator can treat the entire buffer area as being naturally vegetated with prairie grass. Based on this information, the operator refers to Table A-9 to estimate that the 50-foot buffer would retain 50 percent of eroded soil.

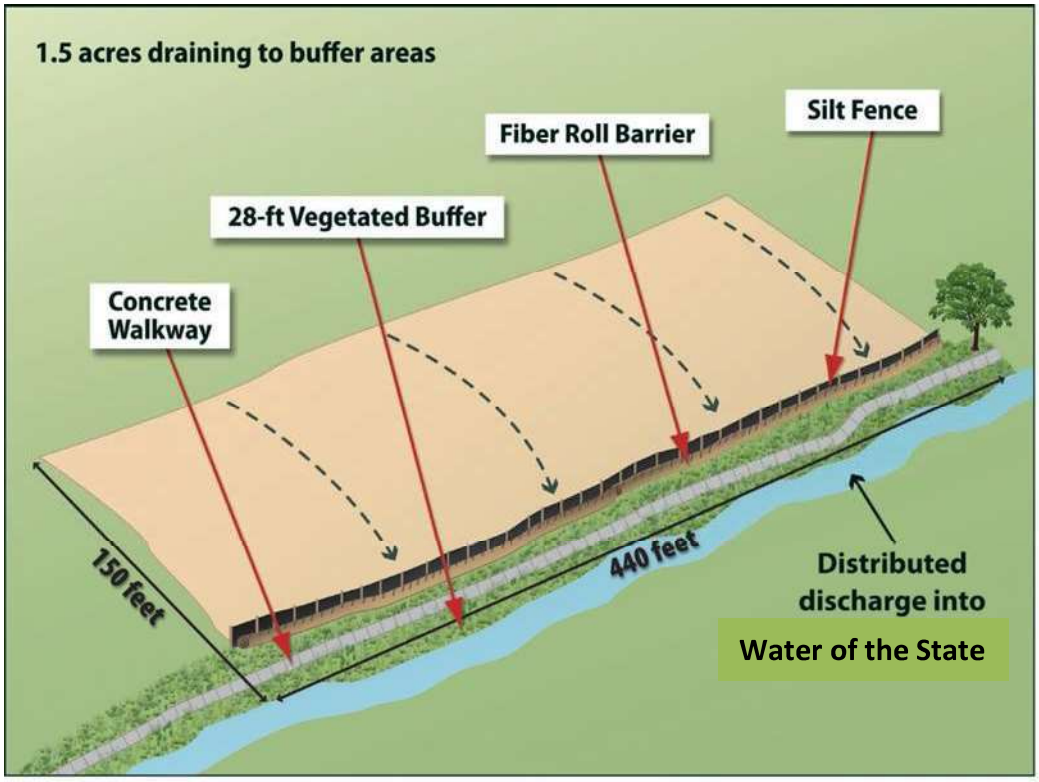


Figure A-5 Example – Equivalent Sediment Load Reductions at a 6.5 ac Site in Southern Utah.

The second step is to determine, based on the 50 percent sediment removal efficiency found in Table A-9, what sediment controls, in combination with the 28-foot buffer area, can be implemented to reduce

sediment loads by 50 percent or more. The operator does not have to account the reduction in buffer function caused by the preexisting walkway, and can take credit for the entire 28-foot buffer being fully vegetated in the analysis. For this example, using the RUSLE2 profile model, the operator determined that installing a fiber roll barrier between the silt fence (already required by Part 2.2.3) and the 28-foot buffer will achieve an estimated 84 percent sediment removal efficiency. See Figure A-5. Note that this operator is subject to the requirement in Part A.2.3 of this Appendix to ensure that discharges through the silt fence, fiber roll barrier, and 28-foot buffer do not cause erosion within the buffer. The estimated sediment reduction is greater than the required 50 percent; therefore the operator will have met the buffer alternative requirement.

APPENDIX F

COUNTY PERMITS & AGREEMENTS

CHAPTER 15.32

STORMWATER REGULATIONS

SECTION:

15.32.010: PURPOSE AND AUTHORITY:

A. Purpose: It is the purpose of this chapter to protect the public health, safety and the general welfare of the citizens of the county, by controlling discharges of pollutants to the county's stormwater system and to maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the county.

B. Authority: County director of development services (director), or designee, is authorized to administer the provisions of this chapter.

C. Responsibility: Nothing in this chapter relieves any person from responsibility for damage to other persons or property, nor impose upon Cache County, its officers, agents or employees, any liability for damage to other persons or property. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.020: DEFINITIONS:

A. Words used in the singular also include the plural, and the plural also includes the singular; words used in the present tense also include the future tense. Some words within this chapter are defined by either state or federal departments that regulate or permit stormwater or drainage systems. Words not defined in this section are construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

B. For the purpose of this chapter, the adopted stormwater management program, and the adopted county infrastructure standards the following definitions apply:

APPLICANT: The "person", as defined in this section, applying for a permit.

AS BUILT PLANS: Drawings depicting conditions as they were actually constructed.

BEST MANAGEMENT PRACTICES (BMPs): Physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of water, which have been approved by Cache County.

CHANNEL: A natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.

CLEAN WATER ACT (CWA): Federal water pollution control act (33 USC section 1251 et seq.), and any subsequent amendments thereto.

CONSTRUCTION ACTIVITY: Activities subject to NPDES or Utah stormwater general permits for construction activities. These include construction projects resulting in land disturbances of five thousand (5,000) square feet or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating, and demolition.

CONTAMINANT: Any physical, chemical, biological, or radiological substance or matter in water that is not naturally occurring.

CONVEYANCE SYSTEM: Any channel or pipe for collecting and directing stormwater.

COUNTY STORMWATER SYSTEM: Conveyance system that receives runoff from public right of way or developed areas. This does not include water coming off of natural areas or agricultural lands.

DESIGN STORM EVENT: A hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a stormwater facility.

DISCHARGE: To dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter onto the ground, into a waterway, or other stormwater facility or conveyance.

EROSION AND SEDIMENT CONTROL PLAN: A written plan (including drawings or other graphic representations) that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

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

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

HAZARDOUS WASTE: Products that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four (4) 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 including, but not limited to, cadmium, chromium, cobalt, copper, lead, mercury, nickel, and zinc.

ILLICIT CONNECTION: Any physical connection to a publicly maintained stormwater system or natural waterway allowing discharge of nonstormwater which has not been permitted by the authorizing entity.

ILLICIT DISCHARGE: Any discharge to the stormwater systems or natural waterways that is not composed entirely of stormwater and not specifically exempted under this chapter or within the UPDES permit.

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 stormwater.

IRRIGATION DITCHES: An artificial channel used to move water, either by gravity or pressurized system for irrigation purposes.

LAND DISTURBANCE PERMIT: Cache County land disturbance permit as adopted by the county.

LAND DISTURBING ACTIVITY: Any activity, unless specifically exempted by this title, on property that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, and excavation.

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.

MAINTENANCE: Any activity that is necessary to keep a stormwater facility in good working order so as to function as designed including, but not limited to, storm channel cleaning, weed control, detention/retention pond dredging, complete reconstruction of a stormwater facility if reconstruction is needed in order to restore the facility to its original operational design parameters, and the correction of any problem on the site property that may directly impair the functions of the stormwater facility.

MAINTENANCE AGREEMENT: A recorded document that acts as a property deed restriction, and which provides for long term maintenance of stormwater management practices.

MINIMUM CONTROL MEASURE (MCM): The EPA has identified six (6) 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 (6) 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 stormwater control.
5. Postconstruction stormwater control.
6. Pollution prevention and good housekeeping.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4): The conveyances owned or operated by the county for the collection and transportation of stormwater, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, manmade channels, and storm drains.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT: A permit issued pursuant to 33 USC 1342.

NOTICE OF VIOLATION (NOV): A written notice of violation to the responsible person or property owner when a violation of this chapter occurs.

OFF SITE FACILITY: A structural BMP located outside the subject property boundary described in the permit application for land development activity.

ON SITE FACILITY: A structural BMP located within the subject property boundary described in the permit application for land development activity.

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.

PEAK FLOW: The maximum instantaneous rate of flow of water at a particular point resulting from a storm event.

PERSON: Any and all persons, including any individual, firm or association and any municipal or private corporation organized or existing under the laws of this or any other state or country.

POLLUTANT: Generally, any substance introduced into the environment that adversely affects the usefulness of a resource including, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; nonhazardous 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.

PREEXISTING CONDITIONS: Conditions of property in its native state or changed under approval by the county or changed property that is grandfathered.

PRIORITY AREA: An area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater, or an area located in close proximity to a natural water body or other environmentally sensitive natural feature.

PROPERTY OWNER: Fee title owner of property within the boundaries of Cache County.

RECEIVING WATERS: Bodies of water or surface water systems receiving water from upstream natural or constructed systems.

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

RUNOFF: That portion of the precipitation on a drainage area that is discharged from the area into the MS4.

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

SOILS REPORT: A study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils report must be prepared by a qualified soils engineer.

STABILIZATION: To provide adequate measures, vegetative and/or structural, that will prevent erosion from occurring.

STANDARD OPERATING PROCEDURE (SOP): A written description of the standard method of performing a given task that can include a step by step description. SOPs are developed in an effort to bring consistency to a program and to clearly define the expectations of that program.

STORMWATER: Precipitation runoff including, but not limited to, rain and snow/ice melt runoff from roads and other developed lands. Does not include runoff from agricultural or other natural lands.

STORMWATER DESIGN STANDARDS AND REGULATIONS: Current Cache County stormwater standards and regulations as adopted by the county.

STORMWATER GENERAL PERMITS FOR CONSTRUCTION ACTIVITIES: Permit required by the Utah department of environmental quality, division of water quality.

STORMWATER MANAGEMENT FACILITIES: Drainage structures, conduits, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated or disposed of.

STORMWATER 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 stormwater, stormwater conveyance systems, and/or receiving waters.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): A document which describes the general plan for addressing stormwater pollutants at a given site. The plan characterizes the nature of the potential pollutants, describes methods and concepts for controlling those pollutants short term and long term and identifies those responsible for the plan.

STRUCTURAL BMPs: Devices that are constructed to provide control of stormwater.

SURFACE WATER: Includes waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other watercourses, lakes and reservoirs.

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.

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES): The State of Utah's program to control the discharge of pollutants to waters of the United States. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.030: LAND DISTURBANCE PERMITS:

A. Requirements For Permit: The following activities are required to obtain a land disturbance permit:

1. Land disturbing activity generally disturbing five thousand (5,000) square feet of land or more.

2. Land disturbing activity of less than five thousand (5,000) square feet of land if such activity is part of a larger common plan of development (see Utah stormwater general permits for construction activities) that affects one (1) or more acre of land.

3. Land disturbing activity of less than five thousand (5,000) square feet of land, if in the discretion of the director such activity poses a unique threat to water, public health or public safety.

4. Development of a single-family home.

5. Development of commercial buildings.

6. Processing of earthen materials including, but not limited to, uses defined within section 17.07.030 of this Code, use 6400

mineral extraction.

7. Construction of parking areas greater than five thousand (5,000) square feet.

B. Drainage Channels, Natural Or Constructed Waterways, And Sensitive Areas:

1. Property owners must not alter or restrict natural channels and waterways without required Federal, State and County permits. Basic maintenance is allowed without permitting as long as it does not create a modification that would require a permit from Federal, State or the County.

2. Modifications of sensitive areas are subject to and governed by title 17,chapter 17.18 of this Code. Modifications to moderate and steep slopes, "floodplain", floodway, manmade water conveyance systems, and "wetlands" as defined within title 17 of this Code require a land disturbance permit.

3. Property owners proposing to redirect runoff, surface and/or pipe flow to properties or facilities outside Cache County boundaries must receive written approval from the State, County, municipality, service districts, or their agents.

4. Property owners are responsible for the protection of canals adjacent to or within their property. Discharges to or modifications of a canal requires written approval from the canal owners and applicable governing agencies and may require a land disturbance permit in compliance with subsection A3 of this section.

C. Issuance Of Building Permit: No building permit will be issued until the applicant has obtained a land disturbance permit where the same is required by this chapter.

D. Exemptions: The following activities are exempt from the requirement of a land disturbance permit:

1. Any emergency activity that is immediately necessary for the protection of life, property, or natural resources. A permit must be obtained as soon as is reasonable to ensure compliance with this chapter and any other County, State, and Federal permit regulations.

2. Existing nursery and agricultural operations conducted as a permitted use.

3. Any agricultural activity that is consistent with an approved farm conservation plan or a management plan prepared or approved by the appropriate County, Federal, or State agency.

4. Additions or modifications to existing single-family structures as long as the total land disturbance does not exceed five thousand (5,000) square feet.

E. Permit Application:

1. A complete application for a land disturbance permit must be submitted to the development services office of Cache County. Incomplete applications will not be accepted.

2. The applicant must complete a stormwater pollution prevention plan for the construction activity that outlines the activities required to be permitted under this chapter and stormwater general permit(s) for construction activities and must meet the requirements of that permit.

3. The applicant must obtain from any other state or federal agency any other required permits, proof of which must be provided to the county. However, the inclusion of those permits in the application does not limit the director from imposing additional development requirements and conditions based on county codes and policy.

4. The applicant is responsible for all costs related to the construction and inspection of all permitted facilities. The county will not perform construction work on stormwater facilities that are the responsibility of a permittee.

F. Review Of Permit Application:

1. Each application for a land disturbance permit will be reviewed to determine its conformance with the provisions of this chapter and other applicable requirements. The director will provide one of the following responses in writing to a complete application:

a. Approval of the permit;

b. Approval of the permit subject to such reasonable conditions as may be necessary to secure substantially the requirements of this chapter or other county ordinances and policies; or

c. Denial of the permit indicating the reason(s) for the denial.

2. If conditional approval of the permit is issued, the applicant must submit a revised plan that conforms to the established conditions.

3. Land disturbing activities are not permitted until a land disturbance permit has been approved and conditions, if any are imposed, have been met.

G. Permit Duration:

1. Every land disturbance permit expires and becomes void if substantial work authorized by such permit has not commenced within one hundred eighty (180) calendar days of issuance, or is not complete within eighteen (18) months from the date of the commencement of construction. If either of these conditions occur, a new permit must be applied for.

H. Notice Of Construction And Inspection:

1. After obtaining a permit, the applicant must notify the development services office two (2) working days in advance of the

commencement of construction.

2. Regular inspections of permitted facilities must be conducted by both the party responsible for the work and the county.

3. The property owner must allow access to the county to inspect all facilities that discharge to the MS4. The inspection shall review the control measures in place, the maintenance plan, and the need for additional measures to completely address the erosion and sediment control for the project.

4. With the issuance of a permit, the county is permitted to enter and inspect, including testing and investigation, facilities subject to this chapter at all reasonable times and as often as necessary to determine compliance for the duration of the project or stormwater facility. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.040: STANDARDS ADOPTED:

A. Cache County adopts the following, which are incorporated by reference in this chapter:

1. Road and infrastructure standards.

2. Stormwater management program.

B. Whenever there is a conflict between any standard contained in this chapter and in the adopted standards, the strictest standard will prevail. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.050: WAIVERS:

A. The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicant, provided that at least one of the following conditions applies and is approved:

1. It can be demonstrated that the proposed development is not likely to impair attainment of the objectives or requirements of this chapter or adopted standards.

2. Alternative minimum requirements for on site management of stormwater discharges have been established by the applicant.

B. In order to receive a waiver, the applicant must demonstrate that the waiver will not lead to any of the following conditions downstream:

1. Deterioration of existing culverts, bridges, dams, and other structures;

2. Degradation of biological functions or habitat;

3. Accelerated stream bank or streambed erosion or siltation;

4. Increased threat of flood damage to public health, life or property.

C. No land disturbance permit will be issued where a waiver has been requested until the waiver is granted. If no waiver is granted, the application must comply with the entirety of the permit, ordinance, and adopted standards. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.060: EXISTING LOCATIONS AND DEVELOPMENTS:

A. Changes to approved stormwater systems including, but not limited to, swales, ditches and ponds are prohibited unless designed and constructed in conformance with this section and applicable county standards and all required permits are obtained.

B. The following requirements apply to all locations and development at which land disturbing activities have occurred previous to the enactment of this chapter:

1. Activities required to be permitted under this chapter and stormwater general permit(s) for construction activities must meet the requirements of that permit.

2. Denuded areas should be vegetated or covered under the standards and guidelines specified in the plan and on a schedule acceptable to the director.

3. Cuts and fills should be properly covered with appropriate vegetation and/or retaining walls constructed.

4. Drainageways should be properly covered in vegetation or secured with riprap, channel lining, etc., to prevent erosion.

5. Trash, junk, rubbish, etc., should be cleared from drainageways as it is discovered. Trash along roadways should be cleared as possible by county crews. Property owners are responsible for debris on personal property.

6. Stormwater runoff should be controlled to the extent reasonable to prevent pollution of local waters. Such control measures may include, but are not limited to, the following:

a. Detention pond.

b. Alternative storage measures.

c. Constructed wetlands.

d. Filter and buffer strips.

e. Open channel swale.

f. Other infiltration systems.

C. The county will notify owners of existing locations and developments of specific drainage, erosion or sediment problems that

affect property, natural and constructed drainages, or other public facilities. The notice must include items required to be corrected and specify a reasonable time for compliance.

1. The county may establish inspection programs to verify that all stormwater facilities, including facilities existing at the time of the passage of this chapter, are functioning within design limits. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.070: ILLICIT DISCHARGES:

A. Prohibited Discharges: No person may introduce or cause to be introduced into the MS4 any discharge that is not composed entirely of stormwater.

1. The prohibition does not apply to any nonstormwater discharge permitted under a UPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the state of Utah division of water quality, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

B. Prohibition Of Illicit Connections:

1. The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.

2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

C. Responsibility Of Discharges: Any person responsible for a property or premises, which is or may be, the source of an illicit discharge, will be required to implement, at the person's expense, the BMPs necessary to prevent the further discharge of pollutants to the MS4. Compliance with all terms and conditions of a valid NPDES or UPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, will be deemed compliant with the provisions of this section.

D. Notification Of Spills:

1. Notwithstanding other requirements of law, as soon as any person has information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into stormwater, the person must take all necessary steps to ensure the discovery, containment, and cleanup of such release.

a. In the event of such a release of hazardous materials the person must immediately notify emergency response agencies of the occurrence via emergency dispatch services.

b. In the event of a release of nonhazardous materials, the person must notify the development services department no later than the next business day.

c. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment must also retain an on site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least five (5) years. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.080: STORMWATER SYSTEM MAINTENANCE:

A. The owner of property that contains a portion of a long term stormwater system component such as, but not limited to, a pond, clarifier, infiltration area, must execute a maintenance agreement that operates as a deed restriction binding on the current property owner and all subsequent property owners. The maintenance agreement must:

1. Assign responsibility for the maintenance and repair of the stormwater facility to the owner of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.

2. For commercial and industrial uses, provide for inspection of the stormwater system components by the property owner in accordance with the county's stormwater permits issued by the state.

3. For residential uses, inspections of the stormwater system components will be performed by the county in accordance with the county's stormwater permits issued by the state.

4. Provide the minimum maintenance and repair needs.

5. Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the director.

a. Provide that if the property is not maintained or repaired within the prescribed schedule, the county will perform the maintenance and repair at its expense, and bill the same to the property owner.

B. Property owners and irrigation companies are responsible for maintaining, cleaning and replacing their private driveway culverts, irrigation ditches and culverts, and other private water conveyance infrastructure in accordance with this stormwater standard, county ordinances and permits.

1. If private water conveyance system creates a hazard to the traveling public, the county may cause repair work to be completed and bill the cost to the associated private entity. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.090: ENFORCEMENT:

A. Authority: The director has the authority to issue notices of violation, stop work orders, citations, and to impose the civil penalties provided in this section.

1. Failure to comply with the terms of this chapter may result in punitive actions by Cache County, Bear River health department, the state of Utah, the environmental protection agency, or by other means identified in permits, ordinances, or state or federal requirements.

B. Notification Of Violation:

1. If a person discharges stormwater in violation of this chapter or a permit, the director may serve upon such person written notice of the violation.

a. Within five (5) business days of this notice, the person in violation must submit an explanation of the violation and a plan for the satisfactory correction and prevention thereof.

b. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

2. After notice of the violation, the county may establish an agreement with the person responsible for the violation. Such agreement must include specific action to be taken by the person in violation to correct the noncompliance within a set time period which may include the requirement to obtain proper permitting.

a. A person in violation of this chapter or a permit may provide to the county documentation that shows why a proposed enforcement action should not be taken.

3. If a person in violation of this chapter or a permit fails to comply after proper notice of the violation, the county will issue an order directing correction of the violation which may include, but is not limited to, adequate permitting, structures, devices, self-monitoring, management practices, or that other procedures be implemented to correct the violation.

4. If a person continues to violate this chapter or a permit after the time period of the order directing correction of the issue, the county will issue an order to cease and desist all such violations or work activities and terminate the discharge.

5. If the type of violation is deemed by the director to be egregious or cause imminent harm to life, property, or the natural environment, the director may issue a cease and desist order immediately without the other required steps of notice and progressive enforcement. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.100: PENALTIES:

A. Violation of any of the provisions of this chapter is punishable as a class B misdemeanor as set forth within section1.24.010, "General Penalty", of this code. In addition, the provisions of this chapter may also be enforced by injunctions, mandamus, abatement, civil penalties, or any other remedies provided by law.

B. In addition to any civil penalties the county may recover:

1. All damages proximately caused by the violator to the county, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with this chapter or a permit, or any other actual damages caused by the violation.

2. The costs of the county's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.

3. Violation penalties assessed to the county from a federal or state agency as a result of the violator's actions.

C. The county may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, is not a defense to any such actions.

D. The remedies set forth in this section are cumulative, not exclusive, and it is not a defense to any action, civil or criminal, that one or more of the remedies set forth herein has been sought or granted. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

15.32.110: APPEALS:

A. Any person aggrieved by the imposition of a penalty or damage assessment as provided by this chapter may appeal said penalty or damage assessment to the hearings examiner as appointed by the county executive and confirmed by the county council as provided within section 2.08.060 of this code.

B. The appeal must be in writing and filed with the development services office within ten (10) business days after the civil penalty and/or damage assessment is served.

C. Upon receipt of an appeal, the issue will be heard within thirty (30) business days. The decision of the hearings examiner is final.

D. Further appeal of a decision by the hearings examiner to district court is subject to the provisions of Utah code 17-27a part 8. (Ord. 2016-10, 8-9-2016, eff. 8-24-2016)

4.1 General

A. Post-development peak runoff rates, including sheet flow, shall not exceed pre-development peak rates. County approved storm drainage and detention facilities will be required to meet this Standard.
B. No drainage facility may be directed to or flow into County rights-of-way, easements, or property.
C. All storm water facilities must adequately handle run-off from the site development, as well as all upstream contributing flows for specified storm events.
D. A drainage system shall be designed to:
    1. Accept all natural drainage patterns and channels and create no adverse impact on downstream properties.
    2. Accommodate all off-site storm water flows that enter the development site under the influence of natural drainage patterns.
    3. Convey discharge surface waters to the flow line of an existing watercourse or an adequate existing underground or above-ground conveyance system with appropriate permits as required
    4. If an existing irrigation system is used as part of a storm water collection system or outfall system, obtain permission and concurrence from the irrigation system operators/owners for such use.
    5. Control storm water discharge rates not to exceed the pre-development flow rate.
    6. Accommodate the design flows created by a 10-year return intensity storm event.
    7. Base storm water flows on the appropriate small area or larger area run-off calculation technology.
    8. Comply with the County Storm Water Management Program as applicable.
    9. Comply with Clean Water Act requirements for allowable pollutant levels in discharge flows.
    10. Comply with the Cache County Water Master Plan.
E. Storm drainage design shall consider the provision of drainage easements for off-site contributory run-off through the site, and allow future improvements of adjacent developments.
F. A new discharge of concentrated storm water from a pipe, culvert, channel, or other drainage structure shall not be created through lands of another property without first obtaining a permanent storm drainage easement and constructing a channel to guarantee continuity of an outfall from the point of discharge to the nearest natural or man-made watercourse with appropriate permits as required.

G. If off-site downstream construction and easements are required to construct an adequate channel outfall, no plans shall be approved until such storm drainage easements have been obtained and recorded. Conditional approval may be granted upon review of the plans prior to the securing the easements or rights-of-way.
H. If the installation of a storm water system requires publicly owned easements, the developer shall convey such easements by deed to Cache County.
I. Storm water design and construction methods must adequately address potential problems which may arise during construction or by design so as not to pollute, erode, or deposit sediment or cause any other degradation to existing natural conditions. Oil and grease separation devices shall be used in conformance with requirements of the Clean Water Act. A feasible plan for device maintenance shall be provided.

4.2 Road Drainage

A. Roads shall be designed for a minimum storm frequency of a ten (10) year return period.
B. The design spread for a ten (10) year event shall be limited so that all traffic lanes in each travel direction shall be kept free of flooding.
C. No concentrated flow greater than one (1) cubic foot per second shall cross a pedestrian pathway or sidewalk.
D. Roadway facilities that cross streams or other flowing water shall be designed to handle a storm frequency of a one-hundred (100) year return period within the road right-of-way or easement to reduce flooding of adjacent properties and to maintain channel integrity on either side of the roadway.

4.3 Storm Sewers

A. Storm sewer trunk lines and laterals shall be designed to adequately handle run-off from a ten (10) year storm.
B. The hydraulic gradient of storm sewers for the post-development shall be lower than the grate inlet top elevation at all points.
C. If easements are necessary for the installation and maintenance of public storm sewer systems such easements shall be a minimum of 20 feet in width with the storm sewer line centered within the easement. No buildings, utilities or structures shall be erected or constructed within such easements as to interfere with the activities necessary to properly access and maintain or replace such lines or storm sewer structures.
D. Allowable storm sewer pipe material is as follows:
    1. Concrete (reinforced or non-reinforced)
    2. High Density Poly Ethylene (HDPE)
    3. Corrugated Metal Pipe (CMP)
E. Storm water inlets shall be industry standard approved.
F. Pipe size shall be determined by required capacity but in no instance shall the minimum mainline size be less than 15" diameter.
G. Cover over storm drain facilities shall be sufficient to adequately protect such facilities from potential loadings either during construction or final finished surface.

H. Minimum clearance between storm drain facilities and other buried utilities shall be at least 18 inches.
I. Test pits will be required and shall be shown on the plans for all storm drain crossings which involve gas lines, water mains 12 inches in diameter and larger, sanitary sewer crossings, and all fiber optic telephone service lines.
J. Storm drain lines shall be installed with no horizontal or vertical deflection, unless authorized by the County.
K. Storm Sewer manhole spacing shall be 350 feet maximum.
L. Storm Sewer manholes shall be four (4) feet in diameter for in-line manholes where grade changes occur. Five (5) foot diameter manholes are required when deflection angle is greater than or equal to 45 degrees, when the manhole is a junction manhole of three or more lines, for sewers whose inside diameter is 15" or greater, or when the cover above invert elevations is 14 feet or greater. All manholes shall be constructed with steps for maintenance access.
M. All storm sewer taps, either public or private, into existing storm sewer piping shall be limited to 4" and 6" and shall be constructed by the contractor and inspected by the County. All connections greater than 6" shall require a storm drain manhole to be constructed.

4.4 Subsurface Drainage and Drainage Swales

A. When connected to the storm sewer allowable Sub-Drain pipe materials are as follows:
    1. Concrete (reinforced or non-reinforced)
    2. HDPE (High Density Polyethylene) for service laterals only
    3. Corrugated Metal Pipe (CMP)
B. When connected to the storm sewer install magnetic locator tape 12 inches below finished grade centered along the subsurface drainage pipe alignment.
C. If drains are used around building foundations, a typical section and layout of the peripheral drain shall be shown on the development plan and on individual grading plans. The upper end invert shall be a minimum of six inches (6") below the finished grade of the basement floor and laid at a minimum grade of two percent (2%).
D. Subsurface drainage lateral material shall be HDPE and shall be clearly marked with identifiable tape or other approved methods in order to avoid confusion with other drainage systems. Connections to the mainline shall be accomplished via adapters provided by the manufacturer.
E. Subsurface drainage manholes shall be 4' diameter for in-line manholes where grade changes occur. Five foot (5') diameter manholes are required when deflection angle is greater than or equal to 45 degrees, when the manhole is a junction manhole of three or more lines, for sewers whose inside diameter is 18 inches or greater, or when the cover above invert elevations is 14 feet or greater. All manholes shall be constructed with steps for maintenance access.
F. Sumps and drainage swales designed as part of the development's detention systems shall only be allowed when approved by the County and only when no available outlet exists and the soil conditions are such that they will adequately permit the water to infiltrate properly. In areas within a well or spring protection zone, sumps and drainage swales will be allowed only when found to be acceptable under the

current Drinking Water Source Protection Plan, or the owner of the water source being protected agrees that the storm water disposal facilities can be accommodated in the next updating of the Drinking Water Source Protection Plan.

G. The capacity of sumps and drainage swales can only include the cross sectional area in calculating the required storage volume available. Percolation tests submitted by the developer must demonstrate that sumps and drainage swales can adequately dissipate the generated storm run-off in a reasonable time period.
H. Drainage swales may be utilized on County roadways. Drainage swales shall meet the following guidelines:
    1. Meet the same design criteria as retention basins
    2. Side slopes do not exceed 3:1 in steepness
    3. Swales do not exceed 18" in total depth
    4. Swales do not extend below the natural water table
    5. Swales will not support wetland vegetation under normal conditions
    6. Vegetation in the swale shall be maintained by the adjacent property owner.

4.5 Channels and Culverts

A. Channels and culverts shall be designed to adequately handle run-off from a 50-year storm.
B. Culverts and Channels shall be designed in accordance with UDOT's Roadway Drainage Manual of Instruction.
C. The sides of all conveyance channels shall be extended until a minimum of six inches of free board (distance from water surface to top of bank) is provided above the 50-year event water surface elevation within the conveyance channel.
D. Conveyance channels with side slopes steeper than 3:1 (Horizontal/Vertical) shall be stabilized by paving, riprap, gabions, or other approved measures.
E. The minimum conduit diameter for culverts shall be 18 inches.
F. Culverts shall be designed and installed to account for ultimate right-of-way and road widths.
G. Culvert design calculations shall include exit velocities.
H. Culvert exit velocity shall be consistent with the maximum velocity in the natural channel or shall be mitigated by using energy dissipation devices and / or channel stabilization in accordance with UDOT's Roadway Drainage Manual of Instruction.
I. Flared end sections shall be installed at the open ends of all drainage pipes.

4.6 Detention / Retention Facilities

A. Detention basins shall be designed to detain post development condition run-off to precondition run-off during a 10-year storm and to safely pass a 100-year storm while maintaining at least one foot (1') of freeboard.
B. Basin outflow shall be limited to the maximum rate which maintains the adequacy of the channel and shall not exceed the pre-development rate of flow to the specific point of concentrated discharge, not the pre-developed flow from the entire drainage area. Under no circumstances shall an outlet flow exceed 0.2 cfs/acre for a 10-year storm event. If a channel does not exist at the point of discharge, then a channel shall be constructed to convey the drainage to a stable outlet.

C. Detention and Retention basins shall be designed with an emergency overflow for events greater than the 100-year storm event that safely conveys flood waters to an acceptable facility.
D. Hand or computer generated routing calculations are required along with inflow and outflow hydrographs.
E. The use of pumps to drain detention facilities shall not be allowed.
F. Minimum conduit diameter for basin outlets shall be 18 inches. Lesser orifice sizes for flow control shall be provided with a manhole or other acceptable structure fitted with the required orifice.
G. Safety measures shall be incorporated into the design of all storm water detention facilities. These may include, but are not limited to safety ledges, fencing, warning signs, anti vortex devices, stadia rod indicating depth at the lowest point, and outlet structures designed to limit public access.
H. All detention facilities must comply with current Clean Water Act requirements.
I. Detention basins may be designed to provide the following:
    1. Side slopes of 3:1 maximum.
    2. All weather vehicular maintenance access around the entire basin (min. ten foot (10') widths).
    3. Lot shall provide normal frontage requirements.
    4. Flow through design which eliminates "wet basin".
    5. Cross slope within basin shall provide adequate drainage. Under no circumstances shall the slope be less than 1% across any portion of the basin.
    6. All detention lots or easements shall be properly surveyed and corners permanently marked prior to acceptance of improvements.
J. Detention facilities shall be constructed on a parcel that will not be maintained by Cache County. Easements and provisions allowing access to the inlet and outlet structures by the County shall be required. The decision to accept a detention lot as County property shall be made by the County Council.
K. Retention (infiltration) systems will be considered for review only if a Soils and Geo-Technical Report is provided which discusses soil permeability, potential effects on ground water, and potential effects on underlying geologic strata. A percolation test will be required to determine the capacity of retention basins. Basin capacity must be based on the infiltration rate, drainage area, and a 50-year storm event. In areas within a well or spring protection zone, sumps, and drainage swales will be allowed only when found to be acceptable under the current Drinking Water Source Protection Plan or the owner of the water source being protected agrees that the storm water disposal facilities can be accommodated in the next updating of the Drinking Water Source Protection Plan.

5.1 General

Access to County roadways from adjoining properties is managed according to the following regulations to maintain the safety and operational characteristics of the County roadway system.

5. 2 Minimum Access Spacing

To maintain safe and effective transportation corridors, Cache County limits the access of roads (private or public), homes, and businesses to all roadways. Table 5.1 designates the spacing requirements for all County roads. Road Access refers to any public or private road, either a full or partial movement intersection. Commercial Access is access to any commercial or industrial business, excluding a home based business as defined in Title 17 of the Cache County Code. Residential/Farm Access refers to any home, farm structure, cabin, or other accessory structure. Minimum spacing includes all access points and road intersections on both sides of the roadway.

Table 5.1 - Cache County Access Management Standards

Roadway Categories		Minimum Spacing Standard (Feet)		
		Road Access	Commercial Access	Residential/Farm Access
A	Arterial	660	350	350
C	Collectors	350	200	200
ML	Major Local	300	150	10[1]
L	Minor Local	300	Not Permitted	10[1]
SR	Seasonal/Recreation	300	Not Permitted	10[1]
AG	Agricultural Access	300	Not Permitted	10[1]
U	Unimproved	300	Not Permitted	10[1]

[1] Minimum spacing from an intersection shall be 80 feet.

5.3 Criteria for Granting Access

A. The number and location/spacing of access points allowed is based on the Category of Roadway, the minimum spacing standards set forth in Table 5.1, and the following:
   1. Unless otherwise approved by the Director, access shall be limited to one driveway for each legal lot/parcel.