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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. The EPA's Storm Water Phase II Rule establishes an MS4 Storm Water Management Program (SWMP) that is intended to improve the Nation's waterways. This reduces 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;
- ✓ Carelessly discarded trash, such as;
    - Cigarette butts;
    - Paper wrappers;
    - Plastic bottles.

When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways discouraging use of the resource, contaminating water supplies, and interfering with the habitat for fish, other aquatic organisms, and wildlife.

In 1990, the EPA published rules establishing Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program. The Phase I program for MS4s require 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. Utah State University (USU) has prepared this SWMP to meet the requirements of the UPDES Storm Water Discharge Permit for Small MS4s.

1.1 Storm Water Management Program

A SWMP should:

- ✓ Reduce the discharge of pollutants to the "maximum extent practicable" (MEP);
- ✓ Satisfy the appropriate water quality requirements of the Utah Water Quality Act.

A SWMP must include:

- ✓ Six minimum control measures;
    1. Public Education and Outreach on Storm Water Impacts
    2. Public Involvement / Participation
    3. Illicit Discharge Detection and Elimination (IDDE)
    4. Construction Site Storm Water Runoff Control
    5. Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)
    6. Pollution Prevention and Good Housekeeping for Municipal Operations
- ✓ Best Management Practices (BMPs) that will be implemented in each of the six minimum control measures to reduce pollutants to the MEP;
- ✓ Measurable goals for each minimum control measure that include, as appropriate, year in which actions will be undertaken, including interim milestones and frequency, and responsible party among other things.

1.2 Permit Application and Notice of Intent

Phase II 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.

Agencies required to permit under Phase II are allowed to cooperate and work together with neighboring permittees in the application process. The Permittee may join a Phase I agency or another Phase II agency 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.

1.3 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.

1.3.1 Reports

The permit requires that the permittee review the SWMP annually, report on activities and make any updates that might be required. The annual reports should use the standard form provided by the State and within the online Central Data Exchange (CDX) system. Generally, the annual report must include the following information:

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

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

1.3.2 Record Keeping

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

1.4 Permit Coverage

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

1.5 Penalties

The UPDES 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 UPDES 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.

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2 UTAH STATE UNIVERSITY CHARACTERISTICS

2.1 General Information

Utah State University (USU) is located in Logan, Utah. It is a land grant university with nine colleges and current student enrollment is over 28,000 students. The campus includes education and research buildings, student housing and facilities for operation and maintenance.

Enrollment:	28,118
Work Force:	2,464
Size:	400 Acres (Logan Campus)
Geographic Info:	Utah State University is located on the East bench of the Cache Valley at the mouth of Logan Canyon at an elevation of 4,778 feet.
Latitude:	41.7452*
Longitude:	111.8097*
Type of Community:	The campus is located in Logan, Utah (48,565) – the county seat of Cache County, UT (114,181).
Annual Precipitation:	19 inches
Receiving Waters:	Logan & Northern Canal, Twin Canals

Although USU has multiple campuses across the state, this SWMP will only cover the Logan Campus. An overall campus map of the area of coverage of this SWMP can be found on the following page for reference and is shown as a full-scale image in Appendix C.

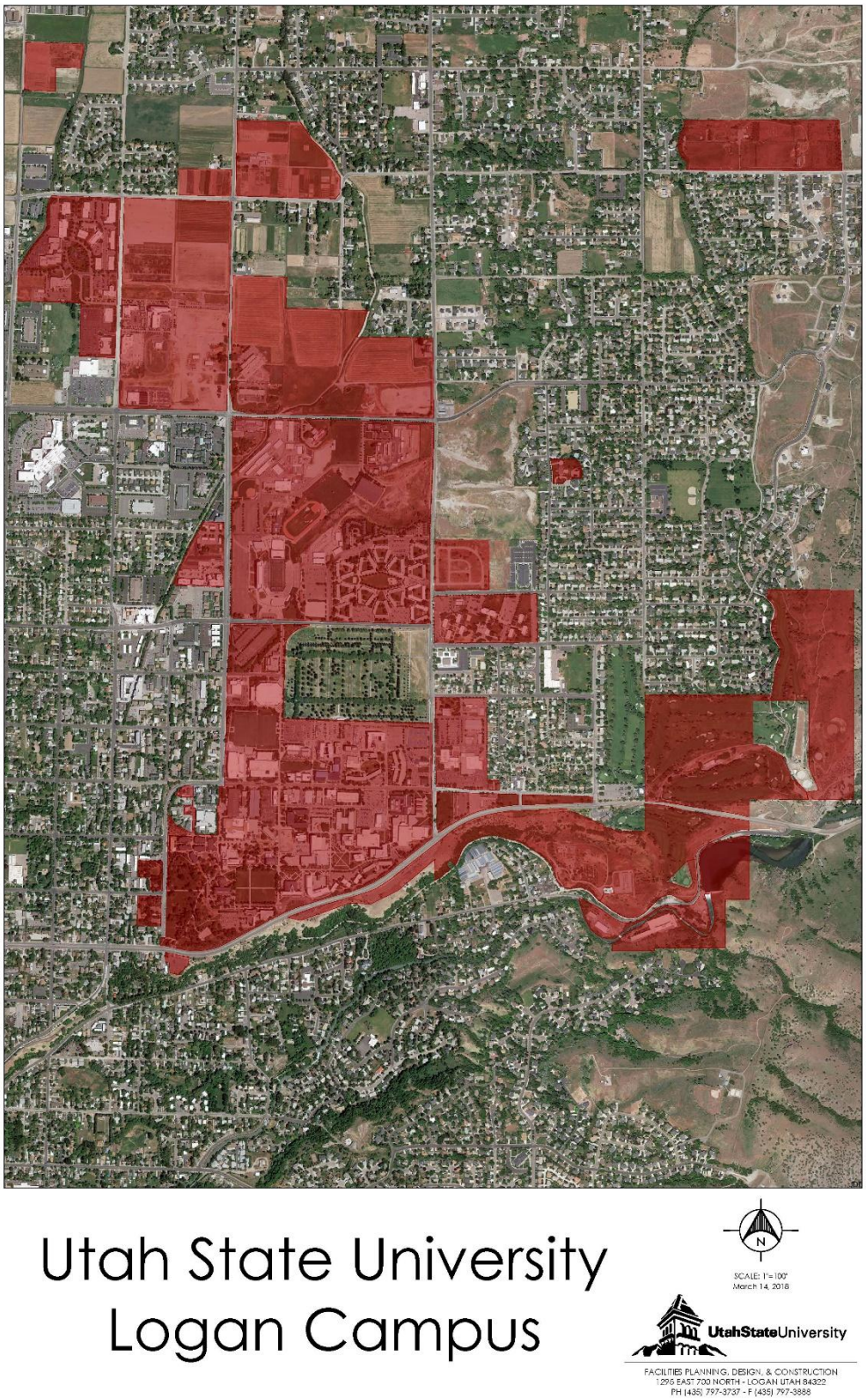


Figure 2-1: Utah State University Logan Campus Map

2.1.1 Historical Information

Originally founded in 1888 as the Agricultural College of Utah, Utah State University has evolved from a small-town college tucked away in the Northern Utah Mountains to a thriving research university respected around the world. Over the 120 years since its founding USU has had a great impact on Cache Valley and more specifically Logan City.

The growth of the University has seen the completion of structures like Romney Stadium (Maverick Stadium), The Spectrum (Dee Glen Smith Spectrum) and a multitude of other buildings that has had an effect on the storm water and natural resources of the valley. With a great history of research at labs such as the Space Dynamics Laboratory and Utah Water Research Laboratory, USU has a great opportunity to excel in the storm water field.

With that in mind, USU embraced the opportunity to become a designated MS4 within the state and become an active participant in bettering the water quality in the valley.

2.2 Existing Storm Water Management

2.2.1 Storm Drain System

The USU Storm Drain System falls under the USU Facilities Department and is overseen by the Utility Systems Supervisor. The Utility Systems Supervisor can be contacted at the following address and phone number:

Tyson Holden
6600 Old Main Hill
Logan, UT 84322
435-797-3729

The storm drain system on the USU campus consists of a variety of storm water controls. These controls include; sumps, curb and gutter with piped storm drain and swales/ditches. The sump system of campus generally consists of the area south of 1000 N to Highway 89. Within this area there are curb and gutter or piped storm drains that direct flow to gravel infiltration sumps. This allows for storm water infiltration/treatment and decreases the amount of surface water that is collected by tributaries and sent to Cutler Reservoir, an impaired waterbody.

Storm water from the remaining portion of main campus from approximately 1000 N to 1400 N is collected through curb and gutter and piped storm drains that either empty into nearby canals or travel into the Logan City MS4 storm drain system. From there, they travel to Cutler Reservoir through various open and closed channels.

Across 1400 N within the Innovation Campus area, storm water is collected by curb and gutter and piped storm drains which then discharge into either the Twin Canals or the Logan & Northern Canal (L&N).

The major outfalls to open channel canals on the USU campus are at the following locations:

- ✓ 1800 North/400 East (multiple) – Twin Canals (Logan North Field and Hyde Park Canal)
- ✓ 1400 North – L&N
- ✓ Motor Pool/Public Safety Area – L&N
- ✓ 1200 North (Blue Square) – L&N

Storm drain piping that connects to the Logan City MS4 are at the following approximate locations:

- ✓ 1000 North/800 East
- ✓ 700 North/700 East
- ✓ 600 North/700 East

These outlets discharge into Logan City, which is also an MS4. An overall storm drain system map can be found in Appendix C.

2.2.2 Water Quality Concerns

The storm water quality within the University boundaries is relatively good. None of the streams or waterways that travel through or near the campus have been identified as protected under Section 303(d) of the Clean Water Act. However, portions of the existing storm drain system do outlet into Logan City. Logan City has specified discharge allocations that are established by the Cutler Total Maximum Daily Load (TMDL). Therefore, the hope and intent of this SWMP is to limit the amount of pollutants discharged through the various outfalls and outlets on campus and improve the current storm water quality.

Based upon TMDL's into Cutler Reservoir along with routine activities within USU, target pollutants for Utah State University have been identified as the following:

Table 2-1: Target Pollutants

Priority	Target Pollutant	Source Examples
1	Total Phosphorus*	Fertilizers, Animal Waste
2	Total Suspended Solids (TSS)*	Sediments
3	Nitrate as N	Fertilizers
4	Total Nitrogen (TN)	Fertilizers
5	Total Dissolved Solids (TDS)	Small Sediments
6	BOD_5	Leaves, Clippings
7	E. Coli	Septic Systems
8	Oil & Grease	Parking Lots (Vehicles)

*Source: Middle Bear River and Cutler Reservoir Final TMDL

The focus of this plan is to meet the requirements of the Phase II Small MS4 Permit within the University community and within the existing budget structure.

2.3 Steering Committee

A steering committee (Table 2-2) was formed in conjunction with the implementation of this program. The purpose of this committee is to address the above-mentioned water quality items and consider options to continue to develop an effective and sustainable Storm Water Management Program.

The steering committee includes members from the University community including:

Table 2-2: USU Storm Water Steering Committee

Name	Department Representation	Focus Area
Zac Cook	Utility Systems-Water Systems	General Oversight
Tyson Holden	Facilities Operations	MS4 Program Coordinator
TBD	Sustainability	MCM 1 & 2
Dale Elwood	Environmental Health & Safety	MCM 3
David Anderson	Faculty-LAEP/Extension	MCM 1 & 5
Ryan DuPont	Faculty-Civil Engineering	MCM 1 & 5
Ben Berrett	Assoc. VP for Facilities	Policy Development
Ken Carrillo	Planning, Design & Construction	MCM 4
Jordy Guth	Planning, Design & Construction	MCM 5
TBD	LOAM	MCM 5 & 6

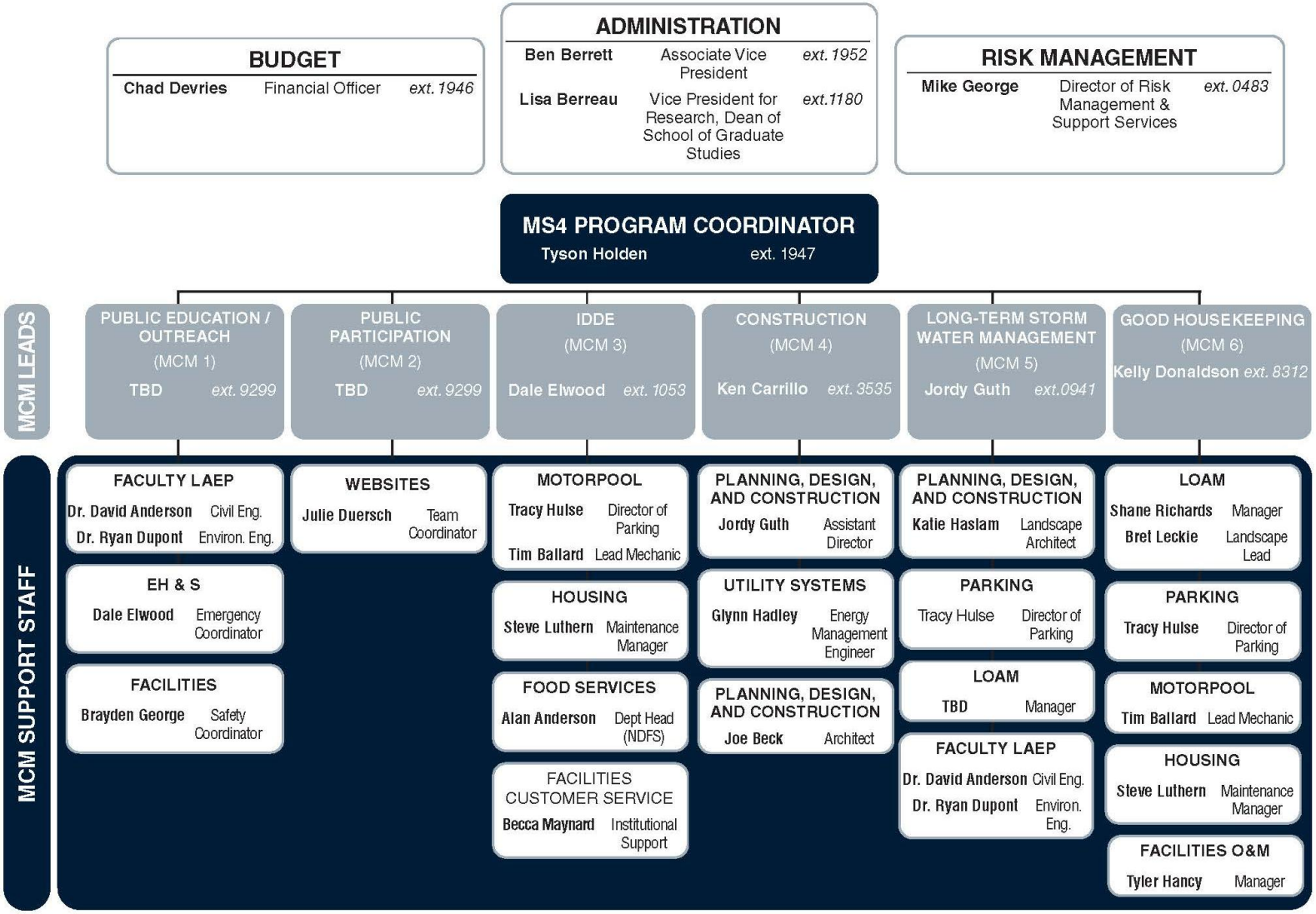
Along with the steering committee an organizational chart (Figure 2-2) has been created in order to implement the SWMP. The organizational chart lists the responsible parties for each minimum control measure and the support groups that can help with each of them. For reference, the minimum control measures are described as follows:

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

2.4 Mission Statement

As was stated earlier, water quality within the University boundaries is relatively good and needs to be maintained. As a leader in innovation and research, USU plans to promote a higher awareness of the storm water quality first, within Cache Valley and second, the overall State of Utah. The implementation of this SWMP is the first step in this awareness process and further research and opportunities will be pursued in the future

Figure 2-2 - Organizational Chart



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3 MINIMUM CONTROL MEASURES (MCM)

3.1 MCM 1: Public Education and Outreach on Storm Water Impacts

3.1.1 Overview

> *"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." (MS4 General Permit §4.2.1, pg. 14)*

This program will be expected to reduce water quality impacts from the public and should be targeted and presented to four specific audiences (Table 3-1).

Table 3-1: Focus Group Descriptions

Focus Group	Abbreviation
General Public	RES
Institutions, Industrial and Commercial Facilities	BUS
Engineers, construction contractors, developers, development review staff, and land use planners	DEV

3.1.2 Summary of Existing Efforts

3.1.2.1 Recycling Program

Focus Groups: RES, BUS, DEV

The USU Recycling Center has promoted recycling since 1990. USU recycles all grades of paper products, cardboard, glass bottles, aluminum and steel cans, plastic containers, wood pallets, batteries and scrap metal. Recycling locations are at each campus building and housing dorms, along with convenient drop-off centers. The location for all things related to recycling on the USU campus is the website, https://www.usu.edu/recycle/.

Green waste is also a component to the recycling program. Compost and wood chips are created from scrap lumber and grass and shrub clippings. This is then reused around the campus by university landscapers in various applications.

3.1.2.2 Hazardous Waste Management

Focus Groups: RES, BUS, DEV

The Office of Environmental Health and Safety (EH&S) oversees the hazardous waste disposal program. This program allows for a safe disposal of a variety of chemicals that are

used within labs and other areas of the campus. The details of the programs that EH&S offer can be found at http://rgs.usu.edu/ehs/.

3.1.2.3 Radio Ads

Focus Groups: RES

Annually in the spring and fall, the MS4 Permittees within the Cache Storm Water Coalition combine efforts to complete a radio ad that is broadcast across the valley. This has been very successful, continues to grow in listeners, and provides educational opportunities for many.

3.1.2.4 Contractor Training

Focus Groups: DEV

Annually Logan City conducts contractor training of standards and specifications of construction that occurs within Logan City. Many of the contractors also do work within the University. In addition to this training, contractors are educated on the MS4 Permit and inspection requirements for contractors.

3.1.3 Best Management Practices (BMPs)

In order to help meet the goals and objectives of this SWMP, USU has chosen to adopt the following BMPs for use within the MS4 boundaries as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. The BMPs listed below will be utilized by USU as part of the implementation of this MCM. If BMPs are replaced, subtracted or modified, permit section 4.4 will be followed and documented by USU.

Table 3-2: BMPs for MCM 1 – Public Education and Outreach on Storm Water Impacts

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

3.1.3.1 Rationale for MCM 1 BMPs

3.1.3.1.1 Educational Materials

This BMP was selected because of its applicability in many of the existing efforts USU utilizes for education of various groups on the campus. Some examples of these efforts include newsletters, brochures or flyers.

3.1.3.1.2 Classroom Education on Storm Water

This BMP was chosen based upon the success of the ongoing fourth grade storm water fair. USU participates in this event, which creates an outdoor classroom environment for students to learn from an interactive environment. USU also provides regular training through various departments that educate the staff and students.

3.1.3.1.3 Using Media

Using media is key to any public education and outreach program. Media such as paper and internet can be used to distribute information effectively under USU's current operations. The University has a current website that can provide education and distributes a newspaper and other paper media on a regular basis.

3.1.3.1.4 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.

Within the University setting, there are various type of employees. The frequency and content of the trainings will depend on the employees involved. For example, those that have the potential to leave a significant impact on storm water such as Heavy Equipment, LOAM, Carpenters, Painters, EH & S, Parking, Motor Pool or Housing may be trained more frequently and more in-depth. A training log will be kept to document the various employee training programs.

3.1.4 Measurable Goals

Measurable goals have been set by the University to meet this minimum control measure. These goals, along with the existing efforts of USU, fulfill the requirements of the Storm Water Phase II Final Rule for Public Education and Outreach.

The following table, Table 3-3, includes the goals for MCM 1.

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Table 3-3: MCM 1 – Public Education and Outreach on Storm Water Impacts

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
1	All pollutants	All	**4.2.1** – 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.	Research and implement the preferred evaluation method	Sustainability	June 2027	EM	Evaluation method implemented and used.	Ongoing
1	All pollutants	All	**4.2.1** – Provide written documentation or rationale why certain BMPs were chosen for public education program.	Include an explanation in the SWMP.	Facilities	November 2026	EM	Documented rationale included in the SWMP.	Complete
1	All Pollutants	RES	**4.2.1.1** – Based on target audiences provide information which describe the potential impacts from storm water discharges; methods for avoiding, minimizing, reducing/eliminating the adverse impacts of storm water discharges and the actions individuals can take.	1. Participate in annual radio ads through the local coalition. 2. Provide flyers/posters to distribute through various channels. 3. Provide lecturer(s) in classes once per year.	Sustainability, Housing, Facilities	1. Annually 2. Ongoing 3. Ongoing	PEP, UM, CESW	1. Annual radio ad runs. 2. Flyers produced. 3. Lectures completed.	Ongoing
1	All Pollutants	RES	**4.2.1.2** – Provide and document information given to the target audience on prohibitions against illicit discharges and improper disposal of waste. Minimum consideration must be given 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 • proper management of pet waste	1. Conduct "Classroom Lab Training" for lab users. 2. Provide lecturer(s) in classes once per year. 3. Develop informative website information related to storm water.	Environmental Health & Safety (EH&S), Facilities	Ongoing	CESW	1. Training logs are kept up-to-date. 2. Lectures completed. 3. Website is created and storm water information is up-to-date.	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
1	All Pollutants	BUS	**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 May also be part of 4.2.3.	Distribute information through the website/brochures that is targeted to businesses and commercial activities on the campus.	Sustainability, EH&S, Facilities	Ongoing	EM, PEP, UM	Website information and brochures are current and distributed as needed.	Ongoing
1	All Pollutants	DEV	**4.2.1.4** – Provide and document information provided to target audience concerning the development of SWPPPs and BMPs regarding reduction of adverse impacts from storm water runoff from development sites. May also be part of 4.2.4.	1. Participation in annual contractor training coordinated through Logan City. 2. Distribute storm water informational packets prior to construction.	Planning, Design & Construction (PDC)	1. Ongoing 2. July 2027	EM	1. Participation in the training and contractor meeting attendance sheet. 2. Informational packets are distributed and tracked.	Ongoing

3.2 MCM 2: Public Involvement / Participation

3.2.1 Overview

> *"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." (MS4 General Permit §4.2.2, pg. 15)*

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

- ✓ Students
- ✓ Faculty
- ✓ Staff
- ✓ Special Interest Groups

3.2.2 Summary of Existing Efforts

3.2.2.1 Sustainability Programs

Various programs are offered through the Sustainability department on the USU campus. One example of programs that are implemented across campus, recycling, is described below. For a full and up-to-date list, refer to https://sustainability.usu.edu/.

3.2.2.1.1 Recycling Program

The USU Recycling Center has promoted recycling since 1990. USU recycles all grades of paper products, cardboard, glass bottles, aluminum and steel cans, plastic containers, wood pallets, batteries and scrap metal. Recycling locations are at each campus building and housing dorms, along with convenient drop-off centers. The location for all things related to recycling on the USU campus is the website, https://www.usu.edu/recycle/.

Green waste is also a component to the recycling program. Compost and wood chips are created from scrap lumber and grass and shrub clippings. This is then reused around the campus by university landscapers in various applications.

3.2.3 Best Management Practices (BMPs)

To help meet the goals and objectives of this SWMP, USU has chosen to adopt the following BMPs for use within the MS4 boundaries as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. The BMPs listed below will be utilized by

USU as part of the implementation of this MCM. If BMPs are replaced, subtracted or modified, permit section 4.4 will be followed and documented by USU.

Table 3-4: BMPs for MCM 2 – Public Participation / Involvement

BMP	Code
Community Cleanup	CC
Educational Materials	EM

3.2.4 Measurable Goals

Measurable goals have been set by the University to meet this minimum control measure. These goals, along with the existing efforts of USU, fulfill the requirements of the Storm Water Phase II Final Rule for Public Involvement/Participation.

The following table, Table 3-5, includes the goals for MCM 2.

Table 3-5: MCM 2 – Public Participation / Involvement

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
2	All pollutants	All	**4.2.2.1** – Adoption of a program or policy directive to create opportunities for public input during the decision-making process	Develop a notification and public involvement process that may be used during permit renewal terms.	Facilities	Ongoing	EM	The program or policy is in place.	Ongoing
2	All pollutants	All	**4.2.2.1**- Renewal Permittees and New Applicants shall make the SWMP or Revised SWMP document available to the public for review and input prior to submission to the Division	Have a digital and online copy of the draft of the permit available.	Facilities	November 2026	EM	SWMP document is available for public review.	In Place
2	All pollutants	All	**4.2.2.3** – The current version shall be posted to the Permittee's website within 180 days from the effective date and clearly denote a specific contact person and phone number or email address to allow public input	1. Post the SWMP on the University website. 2. Post updated SWMP annually with required contact information.	Facilities	1. Nov. 2026 2. Ongoing	EM	SWMP is updated and posted on the website annually with contact information.	In Place
2	All Pollutants	All	Provide service opportunities to the campus community	Compile a list and resources for service opportunities	Facilities	Ongoing	CC	Update list annually.	Ongoing

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3.3 MCM 3: Illicit Discharge Detection and Elimination (IDDE)

3.3.1 Overview

> *"All Permittees shall revise as necessary, implement and enforce an IDDE program to systematically find and eliminate sources of non-storm water discharges from the MS4 …." (MS4 General Permit §4.2.3, pg. 16)*

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

3.3.2 Summary of Existing Efforts

3.3.2.1 Spill Prevention/Clean-Up

The Environmental Health & Safety (EH&S) office is very proactive in spill prevention and illicit discharge monitoring. Currently, EH&S utilizes a document titled "Spill Prevention Containment and Countermeasure (SPCC) Plan." This document provides methods and procedures for spill prevention and clean-up. The SPCC Plan provides maps of areas throughout campus that have spill or illicit discharge potential (i.e. fuel storage tanks, etc.).

This great resource can be utilized in various situations related to storm water management. For easy access, this full document is referenced in Appendix F of this document.

3.3.2.2 Storm Drain System Map

See Appendix C.

3.3.3 Best Management Practices (BMPs)

In order to help meet the goals and objectives of this SWMP, USU has chosen to adopt the following BMPs for use within the MS4 boundaries as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. The BMPs listed below will be utilized by USU as part of the implementation of this MCM. If BMPs are replaced, subtracted or modified, permit section 4.4 will be followed and documented by USU.

Table 3-6: BMPs for MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

BMP	Code
Community Hotline	CH
Employee Training	ET
Hazardous Waste Management	HWM
Identify Illicit Connection	IIC
Illegal Dumping Controls	IDC
Map Storm Water Drains	MSWD
Non-Storm Water Discharge to Drains	NSWD
Policy Development	PD
Public Education / Participation	PEP
Used Oil Recycling	UOR

3.3.4 Measurable Goals

Measurable goals have been set by the University to meet this minimum control measure. These goals, along with the existing efforts of USU, fulfill the requirements of the Storm Water Phase II Final Rule for IDDE.

The following table, Table 3-7, includes the goals for MCM 3.

Table 3-7: MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
3	N/A	MS4	**4.2.3.1** – MS4 Map: Maintain a current storm water map that includes: • Outfall locations • Receiving waters • Storm drain pipes • Other storm water treatment and conveyance structures	Review and update mapping annually	Facilities	Annually	MSWD	Annual map review and if map is accurate	Complete
3	All Pollutants	MS4	**4.2.3.2** – Regulatory Mechanism: 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.	1. Review internal enforcement structure to prohibit non-SW discharges. 2. Implement policy needed to enforce non-SW discharges	Facilities, EH&S	Continually	PD	1. Determination of an enforcement mechanism by USU. 2. Policy implementation.	Ongoing
3	All Pollutants	MS4	**4.2.3.3** – IDDE Plan: Implement a written plan to detect and address non-SW discharges. The plan shall include: • Priority Area Identification - Priority areas likely to have illicit discharge (4.2.3.3.1) • Priority Area Inspections - 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 Inspections - Dry weather screening at least once during the 5-year Permit term verifying outfall locations (4.2.3.3.3) • Other Permitting - 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 *Division* (4.2.3.3.4) • Household Hazardous Waste Collection - Promote or provide services for the collection of Household Hazardous Waste (4.2.3.3.5) • IDDE Hotline - 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 (4.2.3.3.6).	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). 5. Provide training and disposal locations or pickup for HHW 6. Provide contact numbers: Customer Service – 797-3535 University Dispatch – 797-1939	Facilities, EH&S	Annually	NSWD, HWM, CH	1. Successful if required screens are done. 2. Successful if completed by that date and staff is following SOP. 3. Information accessible on the website and trainings and logs are up-to-date 4. Notification information is accessible on the website. Monitor and record number of calls received.	Ongoing
3	All Pollutants	MS4	**4.2.3.4** – SOPs: Implement the following standard operating procedures (SOPs) • Tracing Illicit Discharges (4.2.3.4.1) • Characterizing Illicit Discharges (4.2.3.4.2) • Ceasing Illicit Discharges (4.2.3.4.3) • Spill and Improper Disposal (4.2.3.4.4) • Program Evaluation and Assessment (4.2.3.4.5)	Prepare SOP	Facilities, EH&S	Continually	IIC, IDC	Completed and implemented SOP	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
3	All Pollutants	MS4	**4.2.3.5** – Records: Thoroughly document all IDDE investigations. Provide inspection reports to the Director, upon request and retain for five years.	Document Investigations	Facilities, EH&S	Continually	IIC, IDC	IDDE investigations are thoroughly documented and readily available for review	Ongoing

3	All Pollutants	DEV, MS4	**4.2.3.6** – Training: Train all staff, MS4 contractors, office personnel or others as follows:
			• Frequency – New hires and MS4 contractors within 60 days of hire/contract date, then annually thereafter
			• Topics – At a minimum include:
			  ○ Identification and reporting
			  ○ Investigation, termination, clean-up and enforcement
			  ○ Investigation documentation requirements
			• Records – Keep and maintain annual and new hire training records.
				Train employees on IDDE permit items and procedures	Facilities, EH&S	1. New Hires – Within 60 days
						2. Others – Annually
							ET	Training logged and summarized in the annual report.	Ongoing

3.4 MCM 4: Construction Site Storm Water Runoff Control

3.4.1 Overview

"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 …" (MS4 General Permit §4.2.4, pg. 19)

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 (SWPPP) and regular site inspection aid in implementation of this control measure to reduce non-storm water discharges.

3.4.2 Summary of Existing Efforts

3.4.2.1 Proposed Site Plan Reviews

As construction is planned, various plan reviews are completed by the Planning, Design and Construction team. These plans are reviewed and compared with the design standards that USU has created for construction projects on their campus.

3.4.2.2 Site Inspections

There is currently one storm water inspector to oversee construction on the campus. The inspector reviews the site BMPs for conformance with the erosion control plans. He also ensures the NOI, SWPPP and other related documents are on site and up to date.

3.4.3 Best Management Practices (BMPs)

To help meet the goals and objectives of this SWMP, USU has chosen to adopt the following BMPs for use within the MS4 boundaries as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. The BMPs listed below will be utilized by USU as part of the implementation of this MCM. If BMPs are replaced, subtracted or modified, permit section 4.4 will be followed and documented by USU.

Table 3-8: BMPs for MCM 4 – Construction Site Storm Water Runoff Control

BMP	Code
Campus Planning/Management	CPM
Contractor Certification and Inspector Training	CCIT
Employee Training	ET
Erosion Control Plan	ECP
Establish/Compile Design Standards	ECDS
Policy Development	PD
Public Education / Participation	PEP

3.4.4 Measurable Goals

Measurable goals have been set by the University to meet this minimum control measure. These goals, along with the existing efforts of USU, fulfill the requirements of the Storm Water Phase II Final Rule for Construction Site Storm Water Runoff Control.

The following table, Table 3-9, includes the goals for MCM 4.

Table 3-9: MCM 4 – Construction Site Storm Water Runoff Control

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
4	Sediment, Construction Site Debris, Oils and Grease	MS4	**4.2.4.1** – Regulatory Authority: Revise, as necessary, and enforce an ordinance or other regulatory mechanism that requires compliance with all requirements in the most current, applicable UPDES construction storm water permit. Ordinance shall: • Require a Storm Water Pollution Prevention Plan (SWPPP) (4.2.4.1.1) • Permittees shall ensure construction operators obtain and maintain coverage under the current UPDES Storm Water General Permit for Construction (4.2.4.1.2) • Ordinance shall include a provision for access to inspect construction sites including storm water BMPs on private properties (4.2.4.1.3)	1. Require a SWPPP for every construction site required to permit. 2. Review contractor permit coverages throughout project.	Facilities	1. Continually 2. Continually	PD	Successful if all permitted sites have an updated SWPPP.	Ongoing
4	Sediment, Construction Site Debris, Oils and Grease	MS4	**4.2.4.2** – Enforcement Strategy: Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism which shall include: • Construction Oversight Enforcement SOP – Develop SOP that includes: ○ specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators ○ appropriate escalating enforcement procedures and actions including an appeals process that is published in a publicly accessible location ○ Notification and documentation procedures for enforcement actions ○ Definition of who has authority to implement enforcement procedures • Enforcement Tracking - Documentation and tracking of all enforcement actions (4.2.4.2.2)	1. Develop escalating enforcement through existing policy documents and standards. 2. Develop and begin using a construction site enforcement log/database.	Facilities	Continually	PD	1. Successful if completed by milestone date. 2. Successful if log is being used regularly.	Ongoing
4	Sediment, Construction Site Debris, Oils and Grease	DEV, MS4	**4.2.4.3.** – Pre-Construction SWPPP Review: Development and implementation of a checklist for pre-construction SWPPP review that is consistent with the requirements of the current, applicable UPDES construction storm water permits. • Meeting – Conduct a pre-construction SWPPP meeting which includes: ○ Site design ○ Planned operations at the site	1. Develop a pre-construction SWPPP review checklist/SOP.	Facilities	Continually	PD	When SWPPP check list is being used.	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
			○ Planned BMPs during construction ○ Planned BMPs to manage runoff after construction ○ Permittees enforcement policy • Public Input – Develop procedures for receiving and considering information by the public. • Site Prioritization – Determine whether the site is a priority construction site.						
4	Sediment, Construction Site Debris, Oils and Grease	DEV, MS4	**4.2.4.4** – <u>Construction Site Storm Water Runoff Control Inspection Program:</u> Implement and document a construction site storm water runoff control inspection program which must provide: • Construction Oversight Inspection SOP – Develop SOP that includes: ○ Who is responsible for site inspections ○ Procedures for the inspections, follow-up and documentation ○ Procedures for being notified by operators/owners of completion • Monthly Inspections – Conduct inspections of all new construction sites at least monthly by qualified personnel using the Construction Oversight Inspection Form (4.2.4.4.2). • Priority Inspections – Conduct inspections of priority construction sites at least monthly by qualified personnel using the Construction Oversight Inspection Form (4.2.4.4.3) • Other Inspections – Conduct inspections at qualifying construction sites of all phases of construction including: ○ One inspection prior to land disturbance ○ One inspection each year during active construction ○ One inspection following active construction ○ Inspections to investigate any verified complaint • Electronic Oversight Inspections – Utilize an electronic site inspection to conduct MS4 oversight inspections at construction sites. • Inspection Follow-up – Take all necessary follow-up actions to ensure compliance (4.2.4.4.4).	1. Conduct monthly inspections by a qualified individual. 2. Develop a written procedure for notice of completion of active construction. 3. Develop escalating enforcement documents. 4. Develop a log of violations, enforcement actions, etc.	Facilities	1. Current 2. Current 3. Current 4. Current	ECP	Successful if the construction program is fully developed and implemented	Ongoing

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

4	Sediment, Construction Site Debris	MS4	**4.2.4.5** – Training: Train all staff and MS4 contractors as follows:
			• Frequency – New hires and MS4 contractors within 60 days of hire/contract date, then annually thereafter
			• Topics – At a minimum include:
			  ○ Permitting
			  ○ Plan review
			  ○ Construction site inspections
			  ○ Enforcement
			• Records – Keep and maintain annual and new hire training records.
				Train employees on permit items and procedures	Facilities, EH&S	New Hires – Within 60 days
						Others – Annually
							ET	Training logged and summarized in the annual report.	Ongoing

4	Sediment, Construction Site Debris	MS4	**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	Facilities	Continually	ECP	Successful if active construction sites are recorded in the log	Ongoing

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

3.5.1 Overview

> *"Permittees 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…." (MS4 General Permit §4.2.5, pg. 23)*

This control measure pertains to both water quantity and water quality. Techniques such as Low Impact Development (LID) are required 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.

3.5.2 Summary of Existing Efforts

3.5.2.1 Design Standards

USU Facilities Planning, Design and Construction (PDC) Department has implemented various design standards that implement certain long-term storm water management. These standards are reviewed throughout the planning process and the design process as well.

3.5.3 Best Management Practices (BMPs)

To help meet the goals and objectives of this SWMP, USU has chosen to adopt the following BMPs for use within the MS4 boundaries as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. The BMPs listed below will be utilized by USU as part of the implementation of this MCM. If BMPs are replaced, subtracted or modified, permit section 4.4 will be followed and documented by USU.

Table 3-10: BMPs for MCM 5 – Long-Term Storm Water Management in New Development and Redevelopment

BMP	Code
BMP Inspection & Maintenance	BMPIM
Campus Planning/Management	CPM
Educational Materials	EM
Employee Training	ET
Establish/Compile Standard Drawings	ECSD
Policy Development	PD

3.5.4 Measurable Goals

Measurable goals have been set by the University to meet this minimum control measure. These goals, along with the existing efforts of USU, fulfill the requirements of the Storm Water Phase II Final Rule for Long-Term Storm Water Management.

The following table, Table 3-11, includes the goals for MCM 5.

Table 3-11: MCM 5 – Long-term Storm Water Management in New Development and Redevelopment

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
5	All Pollutants	RES, BUS, DEV, MS4	**4.2.5.1** – Post-Construction Controls: Have requirements or standards to ensure that any storm water controls for new development and redevelopment will prevent or minimize impacts to water quality.	1. Review existing design standards or other policies that apply to storm water planning, design and construction. 2. Update design standards as necessary.	PDC	1. Continually 1. Ongoing	PD, ECDS	Successful if planning documents are updated to incorporate long-term storm water controls.	Ongoing
5	All Pollutants	DEV	**4.2.5.1.1** – Non-Structural Controls - The Permittees new development/redevelopment program shall include non-structural BMPs such as the following requirements and standards: • Minimize development in areas susceptible to erosion and sediment loss • Minimize the disturbance of native soils and vegetation • Preserve areas in the municipality that provide important water quality benefits • Implement measures for flood control • Protect the integrity of natural resources and sensitive areas	Prepare a map/list of sensitive areas that indicate the information such as steep slopes, proximity to natural water bodies, flood zones.	Facilities	Continually	CPM	Successful if completed by milestone	Ongoing
5	All Pollutants	BUS, DEV, MS4	**4.2.5.1.2** – Retention Requirement - Permittee shall develop and define specific hydrologic method(s) for calculating runoff volumes and flow rates. Require the following conditions: • New development projects must manage rainfall on-site and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event or a predevelopment hydrologic condition, whichever is less. • Redevelopment projects shall provide a site-specific and project-specific plan aimed at net gain to onsite retention or a reduction to impervious surface.	Incorporate the 80th percentile rain event into design standards.	PDC	Complete	CPM	Design standards have been updated and implemented	Complete
5	All Pollutants	DEV	**4.2.5.1.3** – LID Approach – Permitees program shall include a process which requires the evaluation of a 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 and reuse storm water on site to reduce runoff from the site and protect water quality. Permittees shall allow for use of a minimum of five LID practices from the list in Appendix C of the LID 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.	1. Create LID evaluation process to be used with planning documents. 2. Update Design Standards to list a minimum of 5 approved LID practices.	PDC, Facilities	1. Complete 2. Complete	CPM	1. Implementation of LID on all new/redevelopment projects. 2. Successful when design standards are in place and being implemented	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
5	All Pollutants	MS4	**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 others.	1. Develop an appeal form for projects that are infeasible to meet retention standards	PDC	Complete	ECDS	When appeal form is completed and ready accessible for use	Ongoing
5	All Pollutants	RES, BUS, DEV, MS4	**4.2.5.2** – <u>Regulatory Mechanism:</u> Develop, adopt, and implement an ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites. The regulatory mechanism shall include: • Enforcement Authority - Specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators (4.2.5.2.1). • Access - 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. • Maintenance Agreements - In lieu of requiring that the Permittee's staff inspect and maintain storm water controls on private property, instead require private property owner/operators or qualified third parties to conduct maintenance and provide certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality. If the Permittee requires a maintenance agreement addressing maintenance requirements for any control measures installed on site, the agreement shall allow ○ the Permittee to conduct oversight inspections of any installed storm water control measure onsite ○ account for transfer of responsibility in leases and/or deeds ○ allow 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. • Regulatory Authority Documentation - Maintain documentation on how the requirements of the ordinance or other regulatory mechanism will protect	3. Review existing design standards or other policies that apply to storm water planning, design and construction. 4. Update design standards as necessary. . Enter into agreements with leasees of University property 1. Review policy Documents for Inspection of post construction.	PDC, Facilities	1. Continually 1. Ongoing	PD, ECDS	Successful if planning documents are updated to incorporate long-term storm water controls. Agreements are in place with leases.	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
			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 expected from the selected BMPs; and The technical basis which supports the performance claims for the selected BMPs.						
5	All Pollutants	RES, BUS, DEV, MS4	**4.2.5.3** – Plan Review: Permittee shall: • Adopt and implement SOPs for site plan review. • Review post-construction plans for all new development and redevelopment sites.	1. Review post-construction plans. 2. Compile list of preferred design specifications. 3. File the material distributed.	Facilities	1. Continually 2. Complete 3. Continually		When procedures for site plan review have been implemented	Ongoing
5	All Pollutants	MS4	**4.2.5.4** – Inspections: Adopt and implement SOPs for site inspection and enforcement. These SOPs shall include procedures for inspection, follow-up, and documentation according to the requirements below: • Control Verification Inspection – Inspect permanent structural storm water controls at least once during installation. Upon completion, verify that controls were constructed as designed and document inspection. • Maintenance Inspections – Permittee or property owner/operator shall conduct inspections and necessary maintenance at least every other year. The inspection report shall include: ○ Inspection date ○ Name and signature of inspector ○ Project location ○ Current ownership information ○ Description of the condition of the control ○ Specific maintenance issues or violations	1. Inspect and maintain all storm water control measures every other year 2. Keep records of inspections.	Facilities	1. Completed 2. On going	CPM	Successful if inspections and documented every other year.	Ongoing
5	All pollutants	MS4	**4.2.5.5** – Inventory: The Permittee must maintain an updated and current inventory of all post construction structural storm water control measures. Each entry shall include: • Project's name, owner's name and contact information, location, installation date • Short description of each storm water control measure • Short description of maintenance requirements • Inspection information	Create an inventory log of post construction BMPs installed.	Facilities	Continually	BMPIM	If log is created and updated regularly.	Ongoing

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

5	All pollutants	MS4	**4.2.5.6** – Training: Train all staff and MS4 contractors including inspectors, engineers, development plan review staff, land use planners as follows:
			• Frequency – New hires and MS4 contractors within 60 days of hire/contract date, then annually thereafter
			• Topics – At a minimum include:
			  ○ Fundamentals of long-term storm water management
			  ○ Plan review
			  ○ Inspections
			  ○ Enforcement
			  ○ LID and green infrastructure practices
			  ○ Specific requirements for post-construction control
			• Records – Keep and maintain annual and new hire training records.
				Train employees on permit items and procedures	Facilities, EH&S	New Hires – Within 60 days
						Others – Annually
							ET	Training logged and summarized in the annual report.	Ongoing

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3.6 MCM 6: Pollution Prevention / Good Housekeeping for Municipal Operations

1.6.1 Overview

> *"All Permittees shall implement a program for Permittee-owned or operated facilities, operations and structural storm water controls that includes SOPs, pollution prevention BMPs, SWPPPs 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." (MS4 General Permit §4.2.6, pg. 27)*

The intent of the Pollution Prevention / Good Housekeeping control measure is to maintain and construct permittee-owned facilities in such a way to prevent pollutants from entering into the storm water system. A component that must be included in this SWMP is the identification of responsible parties (department or specific staff) for performing each activity described in this section.

1.6.2 Summary of Existing Efforts

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

Table 3-12: Existing Storm Water System Maintenance Items

Item	Maintenance
Catch Basins	As Needed
Detention Basins	As Needed
Sumps	As Needed
Canals	Cooperation with Canal Co.
Parking Lot Sweeping	As Needed

1.6.3 Best Management Practices (BMPs)

To help meet the goals and objectives of this SWMP, USU has chosen to adopt the following BMPs for use within the MS4 boundaries as applicable. Appendix A describes the BMP, its applicability, its limitations, and its effectiveness. The BMPs listed below will be utilized by USU as part of the implementation of this MCM. If BMPs are replaced, subtracted or modified, permit section 4.4 will be followed and documented by USU.

Table 3-13: BMPs for MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations

BMP	Code
Area Control Procedures	ACP
BMP Inspection & Maintenance	BMPIM
Buildings & Ground Maintenance	BGM
Catch Basin Cleaning	CBC
Contractor Certification & Inspector Training	CCIT
De-Icing Chemical Use & Storage	DCUS
Employee Training	ET
Housekeeping Practices	HP
Material Use	MU
Policy Development	PD
Vehicle & Equipment Maintenance & Repair	VEMR

1.6.4 Measurable Goal

Measurable goals have been set by the University to meet this minimum control measure. These goals, along with the existing efforts of USU, fulfill the requirements of the Storm Water Phase II Final Rule for Pollution Prevention and Good Housekeeping.

The following table, Table 3-14, includes the goals for MCM 6.

Table 3-14: MCM 6 – Pollution Prevention / Good Housekeeping for Municipal Operations

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
6	All Pollutants	MS4	**4.2.6.1** – Inventory: Permittees shall develop and keep current a written inventory of all potential "high priority" Permittee-owned or operated facilities and storm water controls	Update current inventory list	Facilities	Annually	ACP, HP	Complete and updated list	Ongoing
6	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. and make a list of common pollutants. A description of the assessment process and findings must be included in the SWMP document	Create an assessment process that will be followed	Facilities	Continually	ACP, HP	Assessment document is completed and being used	
6	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. that have: • Pollutants stored at the site • Improperly stored materials • Potential pollutant-generating activities performed outside • Close proximity to fresh water and water bodies • Potential to discharge pollutants to impaired waters	Based on assessment, determine "high priority" facilities	Facilities	Continually	HP	Inventory of "high priority" facilities is created and up to date	
6	All Pollutants	MS4	**4.2.6.3.1** – The Permittee shall implement water quality control measures and BMPs at all "high priority" sites designed to target the specific pollutants generate onsite. Control measures, BMPs, and monitoring schedules shall be specified in the Permittee's SWMP.	Determine control measures	Facilities	July 2027	HP	Inventory of "high priority" facilities is created and up to date	
6	All Pollutants	MS4	**4.2.6.3.2** – The Permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for each "high priority" Permittee-owned or operated facility within 180 days.	Develop SWPPP's for each "high priority" facility	Facilities	Complete	HP	SWPPP's are created and updated	Ongoing
6	All Pollutants	MS4	**4.2.6.4** – Inspections: The following inspections shall be conducted at "high-priority" Permittee-owned or operated facilities: 1. Monthly visual inspections (4.2.6.4.1) 2. Semi-annual comprehensive inspections (4.2.6.4.2) **3.** Annually a visual observation of storm water discharges (4.2.6.4.3)	Complete required inspections	Facilities	Continually	BMPIM, HP	95% of inspections are completed	Ongoing
6	All Pollutants	MS4	**4.2.6.5** – SOPs shall be developed and implemented for the following types of facilities and/or activities: 1. Buildings and facilities 2. Material storage areas 3. Heavy equipment storage areas and maintenance areas 4. Parks and open space 5. Vehicle and equipment 6. Roads, highways and parking lots 7. Storm water collection and conveyance system	Develop and compile SOP's	Facilities	July 2027	BGM, CBC, DCUS, HP, MU, VEMR	SOP's are developed and updated	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
6	All Pollutants	MS4	**4.2.6.5.2** – MS4 Maintenance SOPs: Develop SOPs that include a schedule for Permittee owned road and parking lot sweeping and storm drain maintenance.	Develop and compile SOP's	Facilities	July 2027	BGM, CBC, DCUS, HP, MU, VEMR	SOP's are developed and updated	Ongoing
6	All Pollutants	MS4	**4.2.6.5.3** – Waste/Wastewater Disposal: Permittee shall ensure and document proper disposal methods of all waste and wastewater removed during cleaning and maintenance.	Develop and compile SOP's	Facilities	July 2027	BGM, CBC, DCUS, HP, MU, VEMR	SOP's are developed and updated	Ongoing
6	All Pollutants	MS4	**4.2.6.5.4** – Vehicle/Equipment Washing: Permittee shall ensure that vehicle, equipment, and other wash waters are not discharged to the MS4 or waters of the state.	Develop and compile SOP's	Facilities	July 2027	BGM, CBC, DCUS, HP, MU, VEMR	SOP's are developed and updated	Ongoing
6	All Pollutants	MS4	**4.2.6.5.5** – Snow Disposal/Melt: Permittee shall minimize discharges to waters of the state that are associated with snow disposal and melt.	Develop and compile SOP's	Facilities	July 2027	BGM, CBC, DCUS, HP, MU, VEMR	SOP's are developed and updated	Ongoing
6	All Pollutants	MS4	**4.2.6.5.6** – Spill Prevention Plan: Permittee shall develop a spill prevention plan in coordination with the local fire department.	Develop and compile SPCC	Facilities	July 2027	BGM, CBC, DCUS, HP, MU, VEMR	SPCC is developed and updated	Ongoing
6	All Pollutants	MS4	**4.2.6.6** – Floor Drain Inventory: Permittee shall maintain an inventory of all floor drains inside all owned or operated buildings.	Develop and compile inventory	Facilities	July 2027	BGM, CBC, DCUS, HP, MU, VEMR	Inventory is developed and updated	Ongoing
6	All Pollutants	MS4	**4.2.6.7** – Outside Contracting: 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 PPGH Contractors as needed	Facilities	Continually	CCIT	Contractors are following standards as required	Ongoing
6	All Pollutants	DEV, MS4	**4.2.6.8** – Flood Management Controls Assessment: The Permittee shall 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. • 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 (4.2.6.8.1).	Draft a policy/process to assess water quality impacts on all new flood control projects.	PDC	July 2027	PD	Draft is prepared and retrofit program is followed as needed	Ongoing

MCM	Target		Permit Reference/Desired Result	Measurable Goal	Responsible Party	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)	Status
	Pollutant(s)	Audience(s)							
5	All Pollutants	MS4	**4.2.6.9** – Retrofit Plan: The Permittee must develop a plan to retrofit existing developed sites that are adversely impacting water quality. The plan must emphasize controls that infiltrate, evapotranspiration or harvest and use storm water discharges. The retrofit plan shall include a ranking based on the following: • Proximity to waterbody • Current assessment of the 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 • Any sites that could be further enhanced by retrofitting storm water controls	1. Review sites eligible for LID practices and maintain a log of recommended sites. 2. Updated log annually	Facilities	Complete	CPM	1. Successful if log is created. 2. Log is updated annually.	Ongoing
6	All Pollutants	DEV, MS4	**4.2.6.10** – Training: Train all employees, MS4 contractors, and other responsible entities as follows: • Frequency – New hires and MS4 contractors within 60 days of hire/contract date, then annually thereafter • Topics – At a minimum include: ○ Importance of protecting water quality ○ The requirements of Part 4.2.6 ○ Inspections ○ Ways to prevent or minimize impacts to water quality by how they perform their job duties ○ SOPs for operation and maintenance duties ○ SWPPPs for the “high priority” facilities ○ Permittee’s prohibition against illicit discharges and improper disposal of waste • Records – Keep and maintain annual and new hire training records.	Train all applicable staff annually	Facilities	Continually	ET	If all appropriate personnel are trained and log kept	Ongoing

2. GLOSSARY OF TERMS

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

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

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

Conveyance System: Any channel or pipe for collecting and directing the storm water.

Culvert: A covered channel or large diameter pipe that directs water flow below the ground surface.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

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

Pollutant: Generally, any substance introduced into the environment that adversely affects the usefulness of a resource. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

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

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

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

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

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

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

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

Storm Water: Rainfall runoff, snowmelt runoff, and drainage. This excludes infiltration.

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

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

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

TMDL (Total Maximum Daily Load): An acronym for and in this Permit refers to a study that:

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

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

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

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