

Utah County

Permit No. UTR090000

Utah County

Storm Water Management Plan

Effective February 15, 2014

Submitted to:

State of Utah

**Department of Environmental Quality
Division of Water Quality**

Submitted by:

Utah County, Public Works Department



February 2014

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Utah County

Storm Water Management Plan

Abbreviations

BMP	Best Management Practice
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
MS4	Municipal Separate Storm Sewer System
MSGP	Multi Sector General Permit
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
PHF	Pesticides, Herbicides, and Fertilizers
SOP	Standard Operating Procedures
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UAC	Utah Administrative Code
UPDES	Utah Pollutant Discharge Elimination System

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1.0 Coverage Under This Permit

1.1 Authority to Discharge

Utah County, Utah is located in central Utah south of Salt Lake City and is home to 516,564 inhabitants (10009 people in the unincorporated limits) according to the 2010 census. The County covers a large area spanning 2141 square miles (1730 square miles unincorporated) that encompass numerous water systems that have been identified to have total maximum daily loads (TMDLs) associated with them as discussed in the following sections. In order to minimize the effect of the pollutants the County has and will implemented monitoring practices along with various water quality devices throughout the County.

Utah County manages a variety of storm water infrastructure including curb inlet boxes, sumps, retention basins, detention basins, and several other conveyance mechanisms to treat and transport storm water throughout the County. The County is also actively working to evaluate new development standards which encourage the use of various low impact development practices which will minimize the impact of future development on storm water quality.

Until 2013, storm water permitting was covered under the State general discharge permit. In 2013, the State required Utah County to develop a Storm Water Management Plan (SWMP) and apply for separate coverage. This SWMP has been developed to limit, to the maximum extent practicable, the discharge of pollutants to the Utah County Municipal Separate Storm Sewer System (MS4). This SWMP separately addresses the execution of the minimum control measures to limit the discharge of pollutants in the following sections. The development and implantation of this SWMP will fulfill the requirements under the State of Utah's Utah Pollutant Discharge Elimination System (UPDES) Permit No. UTR090000 Authorization to Discharge Municipal Storm Water dated August 1, 2010 to July 31, 2015 in accordance with Section 1.1 Authority to Discharge in the UTR09000.

This document has been organized to follow the permit organization of UTR090000. The effective MS4, best management practices (BMPs), and standard operating procedures (SOPs) that Utah County has adopted, or will be adopting, to comply with the permit requirements are listed in the following sections. This SWMP has been organized to present permit in blue text followed by black text which describes how Utah County's SWMP will comply with each specific requirement. **For organizational consistency, the State of Utah's UPDES permit numbering has been duplicated in this document.**

Start Date	Due Date	Frequency	Task	Responsible Party
1/21/2014	2/4/2014	One time	County to pass resolution adopting SWMP	Engineering Division
2/1/2014	2/13/2014	One time	Send NOI and SWMP to State	Engineering Division
August 2014	October 2014	Annually	Review SWMP and complete annual report	Engineering Division
July 2015	December 2015	One time	Review new permit and update SWMP to meet additional requirements	Engineering Division

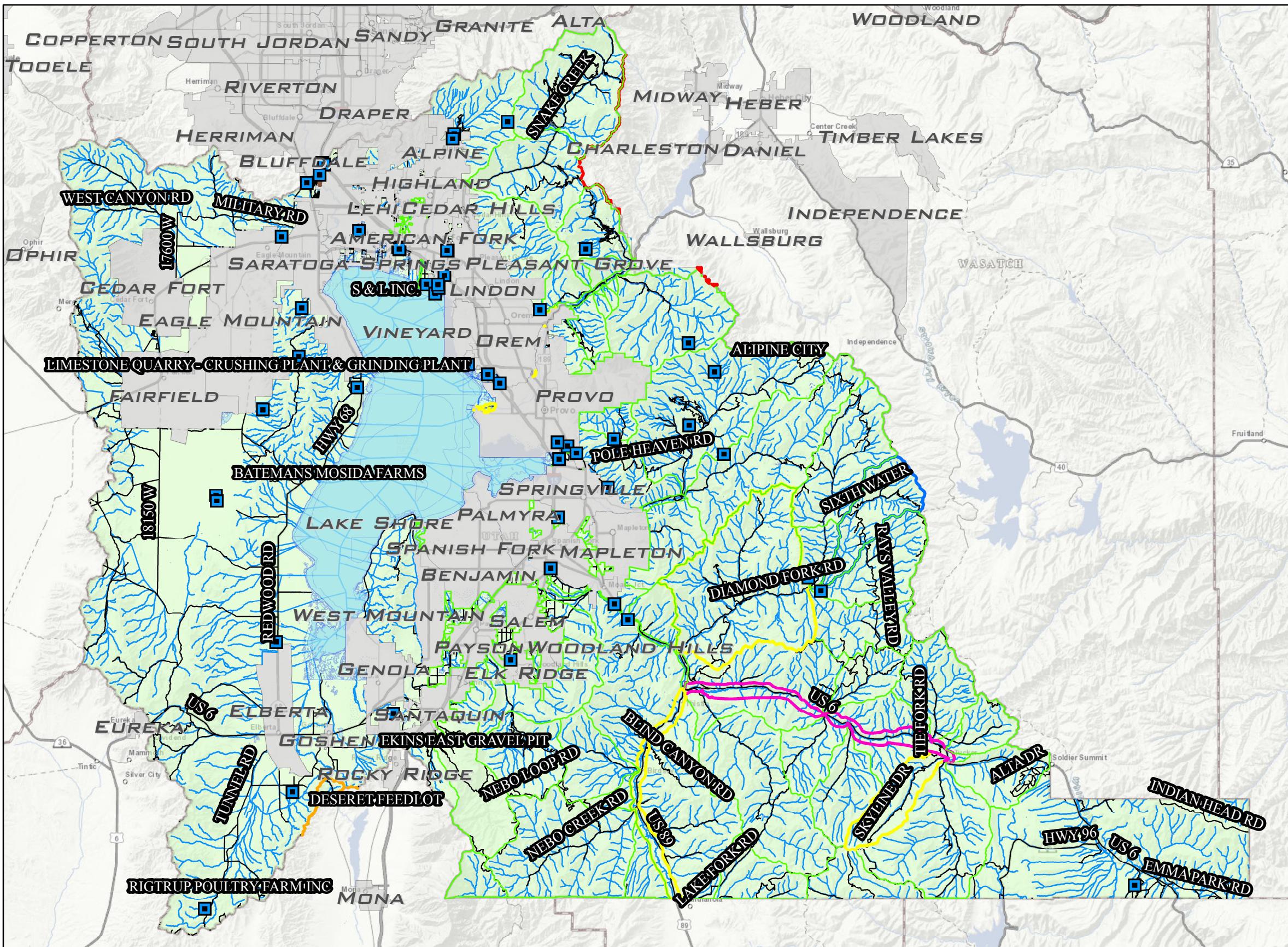
2.0 Notice of Intent and Storm Water Management Program Description

2.3.2.2 MS4 Location Description and Map

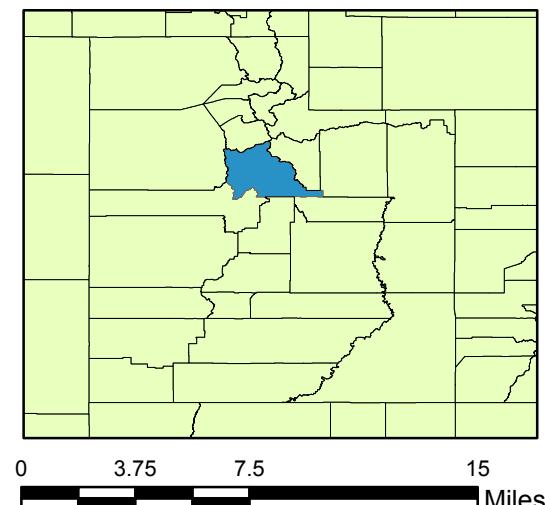
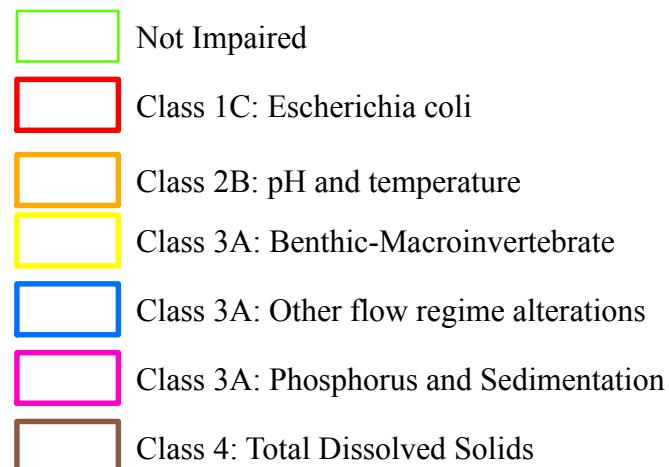
MS4 location and boundaries can be viewed in Figure 1 along with locations of identified TMDLs.

FIGURE 1
UTAH COUNTY PRELIMINARY SWMP
TMDLS NOT IN MUNICIPALITIES
UTAH COUNTY, UTAH

NOVEMBER 2013



Utah County WQ Assessment



2.3.2.3 Water Quality

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

This SWMP has been developed to meet the requirements set forth in the UPDES UTR090000 permit and consists of the six minimum control measures established by the EPA for Phase II storm water discharges as addressed in the following sections. Implementation of these control measures are expected to result in reductions of pollutants discharged into receiving waters including sediments, trash, pathogens, fertilizers/nutrients, hydrocarbons, metals, pesticides, acid and base products, road salts and increased stream flow. These pollutants can negatively impact the environment as described in the following table.

Pollutant	Source	Impacts
Sediment	Construction sites, vehicle/boat washing, agricultural sites, erosion	Destruction of aquatic habitat for fish and plants, transportation of attached oils, nutrients and other chemical contamination, increased flooding. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.
Nutrients (Phosphorus, Nitrogen Potassium, Ammonia)	Fertilizers from agricultural operations, lawns and gardens; livestock and pet waste, decaying vegetation, sewer overflows and leaks.	Harmful algal blooms, reduced oxygen in the water, changes in water chemistry and pH. Nutrients can result in excessive or accelerated growth of vegetation, resulting in impaired use of water in lakes and other receiving waters.
Hydrocarbons (Petroleum Products, Benzene, Toluene, Ethyl benzene, Xylene)	Vehicle and equipment fluid leaks, engine emissions, pesticides, equipment cleaning, leaking fuel storage containers, fuel spills, parking lot runoff	These pollutants are toxic to humans and wildlife at very low levels. Carcinogenic. Teratogenic.
Heavy Metals	Vehicle brake and equipment wear, engine emissions, parking lot runoff, batteries, paint and wood preservatives, fuels and fuel additives, pesticides, cleaning agents	Metals including lead, zinc, cadmium, copper, chromium and nickel are commonly found in storm water. Metals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic
Toxic Chemicals (Chlorides)	Pesticides, herbicides, dioxins, PCBs, industrial chemical spills and leaks, deicers, solvents	Chemicals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic.
Debris/Litter/Trash	Improper solid waste storage and disposal, abandoned equipment, litter	Aesthetically unpleasant. Risk of decay product toxicity. Risk of aquatic animal entrapment or ingestion and death.
Pathogens (Bacteria)	Livestock, human, and pet waste, sewer overflows and leaks, septic systems	Human health risks due to disease and toxic contamination of aquatic life.

Each control measure will include Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) necessary for proper storm water management. The BMPs and SOPs include specific tasks to meet the objective of each particular control measure. The BMPs and SOPs included in this SWMP will be implemented and reviewed throughout the permit term. This SWMP is intended to be a living document with BMPs added or deleted as new BMPs arise or are found to be ineffective. Schedules for implementing the BMPs are provided along with each minimum control measure.

2.3.3.1 Modifications to Ordinances

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.

As, this is the first rendition of the SWMP no modifications have yet been implemented. However, this SWMP introduces several plans for the modification of County ordinances in the future. Specifically, Chapter 19 Sewers will be revised to fulfill permit requirements set forth by this SWMP.

Start Date	Due Date	Frequency	Task	Responsible Party
2/15/2014	7/1/2014	One time	Add language to existing ordinance to comply with Section 4.2.3.2	Engineering Division
2/15/2014	7/1/2014	One time	Revise Ordinance Chapter 19 to include the minimum control measures	Engineering Division
2/15/2014	7/1/2014	One time	Revise Ordinance Chapter 19 to prohibit all discharges except those found in Section 1.2.2.2	Engineering Division
8/15/2014	8/15/2014	One time	Adopt Revised Ordinance Chapter 19	Engineering Division

3.1 Discharges to Water Quality Impaired Waters

3.1.1.1 Impaired Body Determination

Determine whether storm water discharge from any part of the MS4 contributes to a 303(d) listed (i.e., impaired) water body. A 303(d) list of impaired water bodies is available at

<http://www.waterquality.utah.gov/TMDL/index.htm>. Water quality impaired waters means any segment of surface waters that has been identified by the Division as failing to support classified uses. If the Permittee has discharges meeting these criteria, the Permittee must comply with Part 3.1.2 below and if no such discharges exist, the remainder of this Part 3.1 does not apply.

According to the Utah 2008 and most recent 2010 Integrated Report 303 (d) lists, there are several TMDLs that are located in Utah County that are not in a municipality as displayed in the following table.

The Utah Division of Water Quality is dynamically updating this database at the link below.

<http://mapserv.utah.gov/SurfaceWaterQuality/>

TMDLs in Utah County		Number of TMDLs
Class 2B: pH; Class 3A: pH, Water Temperature; Class 4: pH		1
	Currant Creek	
Class 2B: Dissolved Oxygen		1
	Big East Lake (on Nebo Loop Rd)	
Class 3A: Benthic-Macro invertebrate Bio assessments		3
	Clear Creek	
	Provo River-1	
	Thistle Creek-1	
Class 3A: Benthic-Macro invertebrate Bio assessments, Other flow regime alterations, Physical substrate habitat alterations		1
	Diamond Fork-1	
Class 3A: Other flow regime alterations, Physical substrate habitat alterations		1
	Sixth Water Creek	
Class 3A: Phosphorus (Total), Sedimentation/Siltation		1
	Soldier Creek-1	
Class 3A: Phosphorus (Total), Total Dissolve Solids, and PCBs		1
	Utah Lake	
Class 4: Total Dissolved Solids		1
	Jordan River-8	
Grand Total		10

3.1.1.2 TMDL Requirements

If the Permittee has "303(d)" discharges described above, the Permittee must also determine whether a Total Maximum Daily Load (TMDL) has been developed by the Division and approved by EPA for the listed water body. If there is an approved TMDL, the Permittee must comply with all requirements associated with the TMDL as well as the requirements of Part 3.1.2 below and if no TMDL has been approved, the Permittee must comply with Part 3.1.2 below and any TMDL requirements once it has been approved.

The TMDLs associated with Utah County will be routinely monitored including reviewing the National Pollutant Discharge Elimination System (NPDES) Permittees.

3.1.2 Water Quality Controls for Discharges to Impaired Water Bodies

If the Permittee discharges to an impaired water body, the Permittee must include in its SWMP document a description of how the Permittee will control the discharge of the 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.

Utah County does not discharge directly into any TMDLs such as Utah Lake; however, several Cities and County itself has implemented BMP's to limit the use of fertilizers as well as inform the public about proper use of chemicals and the effect illicit discharges have on the waters of the state.

4.0 Storm Water Management Program

4.1 Purpose

4.1.1 Requirements for SWMP

All Permittees must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants 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.

This SWMP has been developed to limit, to the maximum extent practicable, the discharge of pollutants to the Utah County Municipal MS4. This SWMP separately addresses the execution of the six minimum control measures in the following sections. The development and implementation of this SWMP is to fulfill requirements under the State of Utah UPDES Permit No. UTR090000 Authorization to Discharge Municipal Storm Water dated August 1, 2010 to July 31, 2015 in accordance to Section 1.1 Authority to Discharge of the UTR090000.

4.1.1.1 Implementation of SWMP

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

Utah County has and will implement numerous BMPs to protect their storm water infrastructure, which has been taking measures to protect water quality for many years. This SWMP will document a number of BMPs that are already in place, as well as present a schedule to implement additional measure to ensure compliance with UTR090000.

4.1.2 Ongoing Documentation of SWMP

Within 90 days after the coverage from this Permit is granted, 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.

The County currently utilizes a number of BMPs, storm water design standards, and standard operating procedures to manage storm water quantity and quality throughout the County. One of the first major challenges to implementing the SWMP will be a detailed documentation program of the existing County procedures.

To meet the 90 day permit requirement, the initial documentation program will consist of opening an e-mail account for the MS4 program. Inspection forms complying with the requirements of this permit (Section 6.8) will be completed in the field via smart phones tablets, and laptops; the results will then be e-mailed or submitted via web form to the account. When necessary, paper forms will be used in the field; the forms will then be digitized and e-mailed to the MS4 account. This will allow inspection forms to be easily searchable and readily available for reference.

The County's existing crews will be responsible for completing the appropriate form. For example, road crews will record snow removal activities repair and construction activities which could affect storm water quality. As the program expands, the municipal inspectors will utilize the same system to complete construction inspections of Illicit Discharge Detection and Elimination (IDDE) tracking the progress of post construction BMPs as well as construction inspections using the state form.

This e-mail account will serve as the digital archive for all inspections that will be frequently backed up and stored at a secondary offsite location. As the program expands, additional standardized forms will be developed. Also, this documentation method will be periodically reevaluated to investigate improved method, expanded, and/or modified as needed to ensure compliance, efficiency, and ease of use for the crews. Initially the documentation program will document:

- 1) Pre-construction meetings
- 2) SWPPP reviews
- 3) Storm drain cleaning activities
- 4) Inspections of key county facilities
- 5) Participation with the County Storm Water Coalitions meetings
- 6) Quarterly newsletters
- 7) Business licensing & storm water education materials

As other components of the program are developed, additional documentation will be recorded at this e-mail address including:

- 1) IDDE inspections
- 2) Enforcement actions
- 3) Construction site inspections
- 4) Post construction inspections

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	April 2014	One time	Develop standard SOP document form	Engineering Division
April 2014	April 2014	One time	MS4 email, web form and calendar setup and working	Engineering Division
May 2014	May 2014	One time	MS4 email address added to county activity reporting list	Engineering Division
May 2014	September 2014	One time	Develop standard email subjects for documenting SWMP activities in storm water account	Engineering Division

4.1.2.1 Tracking of SWMP

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 Division upon request and used by the Division to determine compliance with this Permit.

As noted in Section 4.2.1, these activates will be reported electronically to a dedicated email address. Public education and public involvement activates are currently conducted by, and tracked within the Utah County Storm Water Coalition system. Before June 1st, 2014, Utah County will implement procedures to document the Coalition activities in their system as outlined in the previous sections.

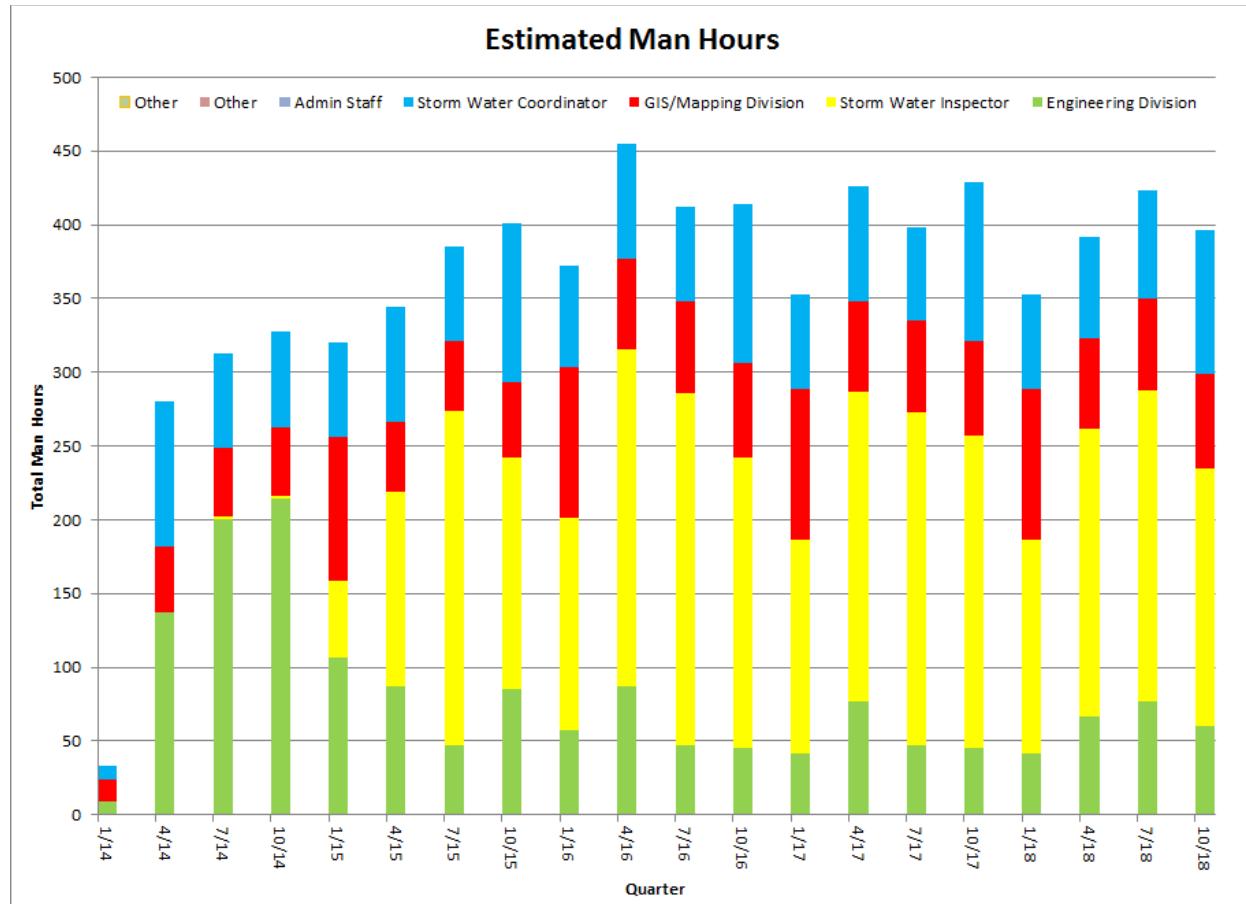
4.1.2.2 Annual Fiscal Analysis

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.

Responsibility for implementation of the storm water management program is divided between Utah County and the Utah County Storm Water Coalition. For the County, most of the work is performed by the Public Works Department other applicable Departments and Divisions; the administration of the entire program is done by the Public Works Department. The County entered into an agreement entitled, "*Interlocal Cooperation Agreement for NPDES Phase II Storm Water Public Education and Outreach Best Management Practice Compliance*" with several municipalities, which delegates Utah County and the Cities' responsibility for administration of the Interlocal Cooperation Agreement will be recorded in the documentation, when adopted. The newest revision of the agreement is currently in the process of being adopted. Within the County, the majority of work needed to comply with this permit will be completed by

personnel in the Public Works Department with administration of the program through the Engineering Division. Management and oversight of the County's responsibilities under the storm water management program is funded through the County's general fund. The revenue source for the work performed by the Utah County Storm Water Coalition is an assessment to the participating municipalities.

The vast majority of costs associated with the program are anticipated to be man hours through a combination of existing County Staff, additional personal and possibly contractors from time to time. The graph below presents an estimate of the staff time required, by quarter, to implement and maintain the program. The intent of this estimate is to ensure that department budgets and staffing can adequately plan and maintain resources required to support this program. Additional documentation is presented in Appendix C.



Start Date	Due Date	Frequency	Task	Responsible Party
August 2014	NA	Annual	Annual Fiscal Analysis	Engineering Division
2/1/14	2/15/14	One Time	Adopt NPDES Phase II agreement for Interlocal cooperation from the coalition	Engineering Division

4.1.3.2 Person Responsible

The SWMP document shall indicate the person or persons responsible for implementing or coordinating the BMPs contained within the SWMP document.

See Key Staff on Page v of this document.

4.1.3 BMP Implementation

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

This SWMP thoroughly discusses the detailed implementation of BMPs in the following sections for each of the minimum control measures. BMPs, as defined by Utah's Small MS4 General Permit, are the "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."

The BMPs that are prevalent to several of the control measures established in this SWMP include, but are not limited to, establishing SOPs, good housekeeping practices, employee and public training, routine inspections, and preventative maintenance.

The County currently uses a number of structural and operational BMPs to limit storm water discharge of pollutants. As part of the SWMP, the County will improve their documentation of the use of these BMPs by developing a standard reporting format, and documenting one or more existing procedure as described in more detail in Section 4.2.6.4. Once all the existing County procedures and BMPs are documented one procedure will be reviewed and improved or a new procedure implemented. These procedures will include:

- 1) Disposal of materials
- 2) Storm drain catch basin & collection network cleaning
- 3) Park lawn mowing and chemical application
- 4) Snow removal and salting procedures
- 5) County construction BMPs (SWPPP)
- 6) County facility inspections
- 7) Material storage, handling, use, and disposal
- 8) Vehicle washing and maintenance
- 9) Spill response
- 10) Construction inspection
- 11) Post construction inspections
- 12) Enforcement actions

Start Date	Due Date	Frequency	Task	Responsible Party
October 2018	NA	Quarterly	See Section 4.2.6.4 for documentation and review of BMPs/SOPs	Engineering Division

4.1.3.1 Measurable Goals Summary of BMPs

The measurable goals for each of the BMPs shall include, as appropriate, the months and years in which the Permittee will undertake required actions, including interim milestones and the frequency of the actions.

A table summarizing the dates to complete each activity described herein is in Appendix A. Additionally, space has been provided within the document to track the completion and performance of each BMP. These performance metrics will be evaluated at least annually and updated, replaced, and revised as needed.

4.2 Minimum Control Measures

Permittees covered under the previous General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, i.e. Renewal Permittees, are expected to have completed all of the following six minimum control measures as required in the previous Permit term. A Renewal Permittee must continue to implement its Storm Water Management Program (SWMP) 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.

The six minimum control measures that must be included in the storm water management program are:

- 4.2.1 Public Education and Outreach on Storm Water Impacts
- 4.2.2 Public Involvement/Participation
- 4.2.3 Illicit Discharge Detection and Elimination (IDDE)
- 4.2.4 Construction Site Storm Water Runoff Control
- 4.2.5 Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)
- 4.2.6 Pollution Prevention and Good Housekeeping for Municipal Operations

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) businesses, institutions, and commercial facilities, (3) developers and contractors (construction), and (4) MS4 industrial facilities. The minimum performance measures which should be based on the land uses and target audiences found within the community include:

This measure is intended to achieve greater public support for the storm water management program and greater compliance through education. An informed public can significantly contribute to the success of the program.

Education is emphasized in this SWMP because of its cost-effectiveness. It is a proactive approach because it prevents pollution rather than reactively treating pollution after it has occurred. The Education and Outreach Program in the Utah County Storm Water Coalition, includes involvement in:

- Fourth Grade Educational Program
- Utah County Storm Water Coalition
- Community/Residential Outreach Program
- Commercial Outreach Program
- Urban Development Outreach Program
- County Employees Training Program

The Utah County Public Works Department will continue coordinating with and participating in the Utah County Storm Water Coalition for the purpose of providing further education and training to the targeted audience with regards to storm water quality.

The Utah County Storm Water Coalition is a coalition of local agencies whose purpose is to reduce the load of pollutants entering storm drains and receiving waters, through education. The Coalition meets to coordinate new educational materials and programs, further storm water program development and inform all members of new regulations or storm water workshops.

A budget for the educational program is established annually based upon the population of the participating members as well as the number of schools per the participating members. The type of media and the distribution schedule are to be discussed by Utah County Storm Water Coalition members to more effectively target the public. The Utah County Storm Water Coalition current members are:

Alpine City	American Fork City
Cedar Hills City	Eagle Mountain City
Highland City	Lehi City
Lindon City	Mapleton City
Orem City	Payson City
Pleasant Grove City	Provo City
Salem City	Spanish Fork City
Springville City	Utah County

Specifically the coalition BMPs will include:

1. Regular meeting to discuss, upcoming regulations, and educational trainings for the County
2. An educational booth will be available to be scheduled and manned by the participating cities for City festivities, the County fair, etc.

Year	Measurable Goal Action Summary:	Document date(s), events, and attendees
2014		
2015		
2016		
2017		
2018		

3. A countywide, quarterly storm water newsletter will be written and distributed to all residents, businesses, and industries, by the participating cities. The newsletter will be published by the Utah County Storm Water Coalition.

Year	Measurable Goal Action Summary:	Document the date newsletter was mailed (save copy in MS4 email system)		
2014				
2015				
2016				
2017				
2018				

4. Fourth Grade Educational Program.
 - The objective of this program is to provide students with educational materials, demonstrations and outreach events regarding the impact of daily activities on storm water quality.
 - The Utah County Storm Water Educational Program is a storm water quality lesson taught by a teacher hired by the Utah County Storm Water Coalition. The lesson is interesting, easy to present and lasts approximately 45 minutes. The presentation begins with a container of clean water (tap water) that represents the rainwater that produces storm water runoff. Step by step different "contaminants" are added to the container, such as vegetable oil (oil), pet waste (dog food), dirt (sediment), twigs (floatables), and paper (litter). The presentation demonstrates the importance of preventing litter and keeping the storm drain system clean. The purpose of the presentation is to visually display the types of pollutants in storm water,

the sources of each pollutant, and their impacts. The teacher asks questions about the rain cycle, where the rain water flows too, and how pollutants are picked up along the way. At the end of the presentation an activity book and other educational materials regarding storm water are given to the students.

Year	Measurable Goal Action Summary:	Document date, school, and number of students taught
2014		
2015		
2016		
2017		
2018		

5. Utah County currently has quarterly newsletters available and will continue to utilize this existing platform to communicate with and educate the public on storm water quality related topics.

Start Date	Due Date	Frequency	Task	Responsible Party
1/23/14	NA	Bi-Monthly	Attend coalition meeting	Utah County Storm Water Coalition, Storm Water Coordinator
1/23/14	NA	Bi-Monthly	Document coalition activities (booth used, Newsletters, Pamphlets, 4th grade education, and other)	Utah County Storm Water Coalition, Engineering Division, County Storm Water Coordinator

4.2.1.1 Pollutants Targeted

Target specific pollutants and pollutant sources determined by the Permittee to be impacting, or have the potential to impact, the beneficial uses of 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, based on the land uses and target audiences found within the community;

The Engineering Division, in conjunction with the Utah County Storm Water Coalition, will continue to improve the educational program. The program will educate the target audience about impacts from storm water discharge, methods to avoid, minimize, and reduce impact of storm water discharge and actions one can take to improve water quality. The pollutants we are most concerned with are sediments, pathogens, nutrients, fertilizers, pesticides, herbicides, hydrocarbons, metals, road salts, detergents, chemicals, acid or base products, solid or liquid waste products, and human or animal wastes. The program will specifically focus on sources of TDS, fertilizers, and other TMDLs throughout the County that note municipal storm water as a contributing factor.

This program will integrate many other facets of the SWMP to provide information to our targeted audience which describe the potential impacts from storm water discharges, methods for avoiding, minimizing, reducing and/or eliminating pollutants from entering the MS4 and actions individuals can take to improve water quality, including encouraging participation in local environmental stewardship activities.

4.2.1.2 Information Given to the General Public

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

The Engineering Division will provide and document information given to the general public of prohibitions against illicit discharges and improper disposal of waste along with the associated negative impacts. The main topics of education include hazardous waste disposal, effects of lawn care activities (use of pesticides, herbicides and fertilizers as well as yard waste disposal), automotive work and car washing, and proper management of pet waste. Publications will be disseminated in conjunction with the Utah County Storm Water Coalition, which will include education pamphlets, quarterly newsletters, and informational booths during City and County activities.

Copies of the newsletters will be stored on the website at the link below:

<http://www.utahcounty.gov/Dept/PubWrks/StormWaterNewsletters.asp>

Start Date	Due Date	Frequency	Task	Responsible Party
January 2014	NA	Quarterly	Make coalition fliers and pamphlets available	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document newsletter content and publication quarter		
Quarter	First	Second	Third	Forth
2014				
2015				
2016				
2017				
2018				

4.2.1.3 Information Given to Businesses and Institutions

Provide and document information given to businesses and institutions of the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste. The Permittee must at a minimum consider the following topics. These topics are not inclusive and the Permittee must focus on those topics most relevant to the community: proper lawn maintenance (use of pesticides, herbicides and fertilizer); benefits of appropriate on-site 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). This education can also be a part of the Illicit Discharge Detection and Elimination measure detailed in Part 4.2.3.

The Engineering and Business License Division will provide and document information regarding the storm water quality impacts associated with illicit discharges and improper disposal of waste to established businesses and institutions once a year through a newsletter and to new entities applying for a license or a building permit. The main topics of education include:

- Effects of lawn care activities (use of pesticides, herbicides and fertilizers as well as yard waste disposal)
- Proper management of waste water (illicit connections to the storm drain system)
- Proper management of parking lot surfaces and use of salt or other deicing materials
- Proper storage and management of raw materials and waste materials (emphasize pollution prevention and Industrial Multi Sector General Permit (MSGP)).
- Pesticide, Herbicide, and Fertilizer Educational Program: Information along with educational materials is to be presented to businesses and industries regarding the potential impact to receiving waters due to the over-application and misapplication of pesticides, herbicides, and fertilizers. General information regarding pesticide, herbicide, and fertilizer application will be distributed via brochures, information booths, mailings to commercial sprayers and industrial training events.
- Pollution Prevention and the UPDES MSGP: Federal and State Regulations and educational materials will be distributed to inform specific institutions, businesses and industries located within the County that effects storm water quality resulting from exposure of industrial activities. These will be distributed by various County departments.

Starting on or before September 1st, 2014, documentation will be distributed as part of the business licensing process. Existing businesses will also be informed as part of their business license renewal process. In addition, County staff will visit and inspect known problem areas to inform the business owners of current County ordinances and educate about proper procedures. Informational flyers for businesses will also be available at the link below.

<http://www.co.utah.ut.us/Dept/PubWrks/StormwaterNewsletters.asp>

The distribution of information will be tracked by including the MS4 e-mail on all business licensing distributions.

Start Date	Due Date	Frequency	Task	Responsible Party
September 2014	NA	Quarterly	Verify and update business storm water packet distribution with business licensing	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator

Year	Measurable Goal Action Summary:	Informational packet reviewed & updated (distribution is tracked by e-mail)		
2014				
2015				
2016				
2017				
2018				

4.2.1.4 Information Given to Engineers, Construction Contractors, and Developers

Provide and document information given to engineers, construction contractors, developers, development review staff, and land use planners concerning the development of storm water pollution prevention plans (SWPPPs) and BMPs for reducing 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.

The Engineering Division has developed a Design Standards for use within County limits (General Standards Division 17-6-3-1). Information provided includes approval procedure, design standards/regulations, rainfall runoff methods, and erosion control. The erosion control measures will be adopted the Utah/EPA SWPPP template for construction activities along with a County review procedure to help reduce the adverse impacts from storm water runoff from development sites. Development sites are strongly encouraged to use low impact development devices instead of traditional curb and gutter. A pre-application meeting is held between an Engineering Division and the developer to go over the permit requirements, SWPPP template, erosion controls, sediment controls, good housekeeping controls and post-construction controls (described at more length on Section 4.2.4).

Start Date	Due Date	Frequency	Task	Responsible Party
September 2014	NA	Quarterly	Verify and update construction storm water packet distribution	Engineering Division Storm Water Inspector

- Training sessions regarding UPDES regulations; SWPPP development, review and management, BMP selection and maintenance; SWPPP Inspections and other topics will be offered through the Utah County Storm Water Coalition once a year.

Year	Measurable Goal Action Summary:	Document training dates, attendance and course description
2014		
2015		
2016		
2017		
2018		

- The Engineering Division will document the number of pre-application meetings held with engineers, construction contractors, and land developers regarding Storm Water Pollution Prevention Plans SWPPPs.

Year	Measurable Goal Action Summary:	Document number of pre-application meetings
2014		
2015		
2016		
2017		
2018		

4.2.1.5 Information and Training Given to Employees

Provide and document information and training given to employees of Permittee-owned or operated facilities concerning the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste. 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 on-site infiltration (areas with low exposure to industrial materials such as roofs or employee parking); and proper maintenance of parking lot surfaces (sweeping).

The Engineering Division in conjunction with each Department or Division will provide and document information and training regarding the impacts associated with illicit discharges and improper disposal through a variety of means:

- 1) Starting on or before June 1st, 2014, information will be posted on information boards and updated once per quarter. The information will be specific to each building's general purpose (i.e. mechanics will receive training on proper disposal of used oil, while parks staff will receive information about chemical use and storage)

Year	Measurable Goal Action Summary:	Document topics		
2014				
2015				
2016				
2017				
2018				

- 2) At least once per year division managers of public works and emergency response coordinators will hold training meetings which include at least one water quality topic.

Year	Measurable Goal Action Summary:	Document topics and date of training
2014		
2015		
2016		
2017		
2018		

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	NA	Quarterly	Formal Employee Training Posted on bulletin boards	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator/Inspector
December 2014	NA	Annual	Formal Employee Training Meetings including topics as outlined in Sections 4.2.1.5, 4.2.3.11, 4.2.4.5, 4.2.5.6, and 4.2.6.9	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator/Inspector

4.2.1.6 Information Given to MS4 Engineers, Development Land Planners and Plan Review Staff Regarding Low Impact Development (LID) Practices

Provide and document information and training given to MS4 engineers, development and plan review staff, land use planners, and other parties as applicable to learn about Low Impact Development (LID) practices, green infrastructure practices, and to communicate the specific requirements for post-construction control and the associated Best Management Practices (BMPs) chosen within the SWMP.

The Engineering Division will explore various LID post-construction BMPs which can be adopted by the County to work with the types of soils and terrains within the County. Training opportunities will be sought within the next 24 months to help develop this program. Once the program is established, annual training of the staff will be done by either Engineering Division staff or a private consultant (further discussed in Section 4.2.5).

Year	Measurable Goal Action Summary:	Dates of LID meetings & attendees		
2014				
2015				
2016				
2017				
2018				

Start Date	Due Date	Frequency	Task	Responsible Party
February 2014	June 2015	Quarterly	Create and update design manual which will include LID alternatives	Engineering Division

4.2.1.7 Program Evaluation

An effective program must show evidence of focused messages and audiences as well as demonstration that the defined goal of the program has been achieved. The Permittee must define the specific messages for each audience. The Permittee must identify methods that will be used to evaluate the effectiveness of the educational messages and the overall education program. Any methods used to evaluate the effectiveness of the program must be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge. One method of evaluation of the program may be an evaluation of audience knowledge prior to commencement of the educational message followed by an evaluation after delivery of the message, such as a survey.

The Utah County Storm Water Coalition will administer public surveys. The survey will determine what type of information should be conveyed to the public. The follow up survey will also question the public about their actions to help refocus future educational messages, rather than just their knowledge. The purpose of the survey will be to give the Utah County Storm Water Coalition an idea as to how effectively the education program is working. Examples of questions are: 1) what do you do with your grass clippings; 2) do you dispose of your household hazardous wastes, and 3) etc. The survey will be developed and implemented with the assistance of a survey consultant.

Start Date	Due Date	Frequency	Task	Responsible Party
December 2015	NA	One Time	Document survey dates, survey score, and evaluation	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator

4.2.1.8 BMP Rational

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

Utah County is a member of the Utah County Storm Water Coalition and it was agreed that the Coalition would cover the Public Education and Outreach Program requirements of the permit for all of the participating communities. The BMPs have been developed and refined for many years by neighboring communities and generally determined to be effective. In the future, Utah County will take a more active role in evaluating and modifying BMPs.

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 such as advisory panels, public hearings, watershed committees, stewardship programs, environmental activities, other volunteer opportunities, or other similar activities. The Permittee should involve potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and education organizations. The minimum performance measures are:

This measure is intended to provide opportunities for the public to play an active role in both the development and implementation of the storm water management program. An active community is important to the success of the program. The BMPs in this chapter not only serve to involve the public, but also serve to educate the public on storm water issues. The program includes:

- Program Description/Establishing Standard Operating Procedures (SOPs)
- Comment Opportunities
- Public Notice Compliance Requirements
- Public Participation

The Public Involvement/Participation Program section of this SWMP addresses the requirements of applicable State and Local public notice requirements. Community participation provides for broader public support, shorter implementation schedules, a broader base of expertise, and the development of important relationships with other community and government programs. The sections described in this chapter include opportunities for the public to play an active role in the development and implementation of the storm water management program. Such opportunities will include advisory panels and public hearings. Efforts to reach out and engage potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowner associations, and education organizations regarding the implementation of new storm water rules and regulations to foster public input. The Engineering Division will review the SWMP once a year.

Start Date	Due Date	Frequency	Task	Responsible Party
August 2014	NA	Annually	Review storm water management plan and complete annual report	Engineering Division, Storm Water Coordinator

Year	Measurable Goal Action Summary:	The advisory board will be the primary advisory panel, document meetings dates and outcome.
2014		
2015		
2016		
2017		
2018		

4.2.2.1 Comment Opportunities

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.

The Engineering Division will provide opportunities for public involvement in the constant development, updates and implementation of the storm water management program, including development and adoption ordinances through the implementation of a web based system to accept comments about the storm water program. Ordinances will be modified in accordance with Utah law, providing the public numerous opportunities to contribute and voice concerns.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2014	August 2014	One time	Create and adopt revised ordinance	Engineering Division

Year	Measurable Goal Action Summary:	Record dates of public hearings & ordinances being discussed
2014		
2015		
2016		
2017		
2018		

4.2.2.2 Public Review of SWMP

Renewal Permittees shall make the revised SWMP document available to the public for review and input within 120 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 Executive Secretary of the requirement for Permit coverage.

The Engineering Division will provide opportunities for public involvement in the constant development, updates and implementation of the storm water management program, including development and adoption ordinances through the development of a web based system to accept and incorporate comments and suggestions about the storm water program within 180 days of receiving notification from the Executive Secretary.

4.2.2.3 Public Availability

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 to allow the public to review and provide input.

The Public Works Department Engineering Division, as administrator of the Storm Water Management Program, will make the 2014-2018 SWMP documents available to the public online for review and input by March 15th, 2014.

The SWMP document will remain available for public review and input for the life of the permit on the County web site and will allow the public to review and provide input. Any modifications to the SWMP will be made available.

Start Date	Due Date	Frequency	Task	Responsible Party
2/1/2014	3/15/2014	One time	Publish SWMP on website and provide method for public to comment	Engineering Division

Year	Measurable Goal Action Summary:	Document number of comments received on SWMP and answers given
2014		
2015		
2016		
2017		
2018		

4.2.2.4 State and local public notice compliance

The Permittee must at a minimum comply with State and Local public notice requirements when implementing a public involvement/participation program.

The County will comply with State and Local public notice requirements as part of the implementation of the public involvement/participation program. Public notice requirements will be met in accordance with the State Administrative Procedures Act as found in the link below. Public notices shall be published online. Public comments will be received and appropriate responses will be given documented.

<http://le.utah.gov/UtahCode/section.jsp?code=63G-4>

Year	Measurable Goal Action Summary:	Document dates of public notices & topic
2014		
2015		
2016		
2017		
2018		

4.2.3 Illicit Discharge Detection and Elimination (IDDE)

All Permittees shall develop, implement and enforce an 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 within 18 months of receiving coverage under this Permit unless a different timeframe is indicated. 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:

This measure is intended to minimize illicit discharges (discharges other than storm water) into the storm drain system. Storm drain systems are not designed to accept, convey, or discharge non-storm water flows. Eliminating illicit discharges helps prevent pollutants from entering receiving waters and maintain the infrastructure. The program includes:

- Storm Drain System Map
- Ordinances
- Dry Weather Screening Program
- Illicit Discharge Detection
- IDDE Education and Public Outreach

The Illicit Discharge Detection and Elimination (IDDE) section of this SWMP addresses non-storm water flows that are discharged into receiving waters through storm water conveyance systems. The program will implement BMPs and SOP's to assist in detection, the identification, and elimination of illicit discharges. This program will also focus on prevention of new illicit discharges to the storm water system by means of education, regulations, and a spill prevention and response program.

This program will also be integrated with the Public Education and Outreach program to promote awareness of the importance of protecting the storm water system from illicit discharges and their impact to receiving waters. The following BMPs describe implementation tasks and assessment tasks to be completed by the County for the Illicit Discharges and Improper Disposal Program.

4.2.3.1 Storm Drain System Map

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 pipe and other storm water conveyance structures within the MS4.

The Engineering Division and Mapping Division will maintain and update a storm drain system map showing the location of all municipal storm sewer outfalls with the names and location of all the Waters of the State that receive discharges from the MS4 storm water conveyance system. The system map will be updated and procedures developed for inspections during the first year before conducting inspections.

Year	Measurable Goal Action Summary:	Document number of storm water infrastructure, facilities and outfalls mapped
2014		
2015		
2016		
2017		
2018		

Start Date	Due Date	Frequency	Task	Responsible Party
January 2014	NA	Annual	Update and verify system map, document all discharge locations	Mapping Division

4.2.3.2 Ordinances Pertaining to Illicit Discharges

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, 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 escalating enforcement procedures as necessary for the severity of violation and/or the recalcitrance of the violator. Exceptions are 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. An SSO is a discharge of untreated sanitary wastewater. SSOs are illegal and must be eliminated. All SSOs must be reported to the Division of Water Quality and to the Permittee's local wastewater treatment plant.

Title 20-1-6 of Utah County Code pertains to illegal dumping where "It is unlawful for any person to sweep into or deposit garbage, paper or other rubbish in any gutter or ditch within the County limits, or to empty in any gutter or ditch within the County limits, any swill, house slops, or other filthy refuse. It is unlawful to deposit or dispose of used petroleum products or other chemical waste in any gutter, ditch or body of water in the County. It is also be unlawful for any person to dump any refuse, garbage, paper, trash, junk, market waste, trace waste, night soil, used petroleum products or other hazardous chemical waste on any premises in the County, except in an area designated by the County Health Department (Ord. No. 1973-9, Section 3-9-3, 1-2-74; Ord. No. 2003-37, 11-4-03)."

The ordinance will be revised to more closely mimic the requirements of this program to prohibit all discharges except those allowed in 1.2.2.2 of this permit. The revisions will be completed by August 1st, 2014.

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	August 2014	One Time	Adopt ordinance regarding illicit discharges	Storm Water Coordinator, Engineering Division and County Attorney

Year	Measurable Goal Action Summary:	Document updates to the ordinance
2014		
2015		
2016		
2017		
2018		

4.2.3.2.1 IDDE Program

The 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.

An IDDE program will be developed and implemented by January 2015 with authority to detect, investigate, and eliminate non-storm water discharges. The program will be enforced through updated and new County ordinances in accordance with this SWMP.

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	December 2014	One Time	Develop procedure to locate priority IDDE areas	Engineering Division and County Attorney
December 2014	NA	Annual	Review and Update priority IDDE areas	Engineering Division, Mapping Division, and County Attorney

4.2.3.3 Dry Weather Screening Program

Develop, implement and prepare in writing a 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:

The Engineering Division will develop and adopt written standard operating procedures (SOPs) for the dry weather screening program that will comply with 4.2.3.4 to detect and eliminate non-storm water discharges to the MS4. These procedures will be reviewed and updated annually and any changes will be documented. The SOPs will be enforceable by County ordinances by December 2014. The dry weather screening activities will start after the mapping activities are complete. It is anticipated the dry weather screening inspections will start in 2015.

4.2.3.3.1 Procedures for Locating Priority Areas

Develop and implement 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 that are more likely to have 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 with a history of sewer overflows or cross-connections; and
- Areas upstream of sensitive water bodies.

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.

The Engineering Divisions will create written systematic procedures for locating areas that are likely to have illicit discharges; the criteria for selecting these areas will include the areas applicable in the permit Section 4.2.3.3.1.

The Engineering Division will create a weighted matrix to prioritize areas of concern and will create and update, as needed, a list of all priority areas identified in the system. The Engineering Division will document the basis for its selection of each priority area. The list will be updated once a year to reflect changing priorities by and will be kept on the department's O&M Manual.

4.2.3.3.2 Outfalls Inspections

Field assessment activities for the purpose of verifying outfall locations and detecting illicit discharges, including dry weather screening of outfalls or facilities serving priority areas identified in Part 4.2.3.3.1 as well as routine dry weather screening of all outfalls that discharge within the Permittee's jurisdiction to a receiving water. Compliance with this provision shall be achieved by: prioritizing receiving waters for visual inspection to identify previously unknown outfalls and field assessing at least 20 percent of the priority areas identified in Part 4.2.3.3.1 to detect illicit discharges within one year of receiving coverage from this Permit, and field assessing an additional 20 percent of the identified high priority water bodies or other high priority area each year thereafter. Field assessment activities shall utilize an inspection form to document findings.

The Engineering Division will conduct field assessment activities for the purpose of verifying outfall locations and detecting illicit discharges during the periods of dry weather. Priority will be given to the areas of concern identified by the Engineering Division, visual inspections of at least 25 percent of all known outfalls will be inspected annually and all outfalls should be inspected at least once during the permit term. Field assessment activities will be documented on an inspection form. All inspections will be recorded at the County's storm water e-mail address.

Year	Measurable Goal Action Summary:	Document number of out falls inspected
2014		
2015		
2016		
2017		
2018		

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	January 2015	One Time	Develop written IDDE screening SOP and inspection forms	Engineering Division, Storm Water Coordinator
January 2015	NA	Monthly	Conduct dry weather screenings and investigations	Storm Water Inspector

4.2.3.4 Illicit Discharge Source Tracing

Develop and implement standard operating procedures (SOPs) or similar type of documents for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, 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.

The Engineering division will develop an SOP (noted in Section 4.2.3.5.1) that will include procedures for inspectors to follow when a suspected IDDE is located, including working upstream to find and document the source, collect samples when necessary, and enforcement procedures once the source is determined. The procedure will also include spill response procedures to minimize the discharge of pollutants.

4.2.3.5 Illicit Discharge Response

Develop and implement standard operating procedures (SOPs) or similar type of documents for characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges 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 shall be immediately contained and steps to be taken for containment of the discharge. Compliance with this provision will be achieved by initiating an investigation immediately upon being alerted of a potential illicit discharge.

The Engineering Division will update and implement procedures on its O&M manual for characterizing the nature of, and the potential environmental threat posed by an illicit discharge found by or reported to the County by public through the Sheriff Department's dispatch phone number or advertised illicit discharge phone numbers. These procedures will include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. The department will investigate the source and will involve other parties if necessary.

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	December 2014	One Time	Develop SOP for Sheriff and hotline response of IDDE post public work number on website	Engineering Division

4.2.3.5.1 IDDE Inspection Report

When the source of a 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.

After the source of a non-storm water discharge is identified and confirmed, the Engineering Division will record the following information on an inspection report that will contain:

- The date the County became aware of the non-storm water discharge
- The date the County initiated the investigation of the discharge
- The date the discharge was observed
- The location of the discharge
- The description of the discharge
- The method of discovery
- The date and method of verification, removal, repair or enforcement action
- The decision process for utilizing analytical monitoring/sampling to aid in the identification of the potential source of an illicit discharge and characterization of the nature of an illicit discharge

Year	Measurable Goal Action Summary:	Document number of IDDE inspected
2014		
2015		
2016		
2017		
2018		

4.2.3.6 Ceasing Illicit Discharges

Develop and implement standard operating procedures (SOPs) or similar type 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. 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.

Upon detection of an illicit discharge, the Engineering Division or its appointees will require the immediate cessation of improper disposal practices upon confirmation of the responsible parties.

The County will develop and implement standard operating procedures on its O&M Manual for ceasing illicit discharges that will include:

- Notification of appropriate authorities
- Notification of the property owners
- Technical assistance for removing/eliminating the source of the discharge
- Follow-up inspection
- Escalating enforcement and legal actions if the discharge is not eliminated

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	December 2014	One Time	Develop SOP for the sewers collections department for ceasing illicit discharges	Engineering Division

4.2.3.6.1 IDDE Investigation Documentation

All IDDE investigations must be thoroughly documented and may be requested at any time by the Division. 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 Division written documentation or rationale describing the circumstances why compliance with the minimum performance measures was not possible. All IDDE documentation must be included in the SWMP document.

The Engineering Division or its appointees will thoroughly investigate and all illicit discharges. All of the investigation documentation and procedures will be kept in the Engineering Division and the SWMP electronic files.

Year	Measurable Goal Action Summary:	Document number of inspections & type of inspection Screening, complaint response, or other
2014		
2015		
2016		
2017		
2018		

4.2.3.7 Improper Disposal of Waste

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

Section 4.2.1.3 in Public Education and Outreach Program covers this requirement.

4.2.3.8 Household Hazardous Waste Collection

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

Section 4.2.1.2 in Public Education and Outreach Program covers this requirement where information regarding hazardous waste and proper disposal will be provided to the public.

4.2.3.9 Reporting Hotline

Permittees shall publicly list and publicize 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.

The Public Works Department phone number (801-851-8600) and hotline (801-851-7873) will be listed and advertised to the public for the reporting of spills and other illicit discharges. The public may also call the Sheriff Departments to report any of these activities. The Public Works Department will train with the Sheriff Departments to coordinate and document the number of calls received and follow-up actions taken. As specified in Section 4.2.3.6.1, these phone numbers will also be listed and advertised to collect feedback from the public education efforts.

Year	Measurable Goal Action Summary:	Document number of calls received, information received, action taken, and feedback received
2014		
2015		
2016		
2017		
2018		

4.2.3.9.1 Spill Response Procedures

The Permittee must develop a written spill/dumping response procedure, 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 incidence 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.

The Engineering Division in conjunction with the Sheriff Departments will develop a written spill/dumping response procedure and flow chart, that shows the procedures for responding to illicit discharges/spills, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response. The procedure and list will be incorporated as part of the IDDE program and incorporated as part of each department's O&M manual IDDE program. This plan will be updated as changes occur.

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	NA	Annual	Review and Update spill/dumping response procedure and internal flow chart	Engineering Department, Fire Marshall

Year	Measurable Goal Action Summary:
2014	Document and describe changes to the spill response plan
2015	
2016	
2017	
2018	

4.2.3.10 IDDE Program Evaluation

Permittees shall adopt and 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.

The Engineering Division will adopt procedures for the IDDE program evaluation and assessment that will include a database for mapping, tracking of the number and type of spills or illicit discharges and inspections conducted. This program will be evaluated annually as part of the annual report.

4.2.3.11 IDDE Employee Training

Permittees shall at a minimum, annually train employees about the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections. Permittees shall provide training to all field staff 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. Permittees shall also train office personnel who might receive initial reports of illicit discharges. 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.

The Engineering Division will develop an IDDE training program and will annually train County employees. The IDDE training will include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge (described at more length in Section 4.2.6.9 with lead entry and summary of goals) and documented in accordance with Section 4.1.

4.2.3.12 IDDE Documentation

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

As specified in Section 4.1.2, ongoing documentation will be established and available for review upon request.

4.2.4 Construction Site Storm Water Runoff Control Program Ordinances

All Permittees shall develop, implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale according to the minimum performance measures listed below within 18 months of receiving coverage under this Permit. 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:

This measure is intended to minimize polluted storm water runoff from construction activities. Construction activities can contribute significant levels of sediment to storm water runoff if erosion and sediment controls are not implemented. The program includes:

- Program Description/Establishing SOPs
- Ordinances
- SWPPP
- Construction Site Inspections
- Personnel Training
- Record Keeping of Permitted Sites

The County will develop and implement a Construction Site Storm Water Runoff Control Program to reduce pollutants in any storm water runoff to the MS4 from sites with a land disturbance 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. Public and private projects, including projects proposed by the County's own departments and agencies will comply with these requirements.

The ordinance will address any kind of land disturbance activities that disturb an area 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. The ordinance also requires storm water pollution prevention controls on sites that do not meet the description mentioned above. Because the state is currently in the process of revising the current construction general permit, the County intends to delay adoption of this ordinance until the new construction permit is complete.

4.2.4.1 Erosion Requirements

Develop and adopt 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 technical requirements set forth in the UPDES Storm Water General Permit for Construction Activities, UTR300000 which can be found at

<http://www.waterquality.utah.gov/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 and to construction projects of less than one acre that are part of a larger common plan of development or sale. Existing local requirements to apply storm water controls at smaller sites shall be retained.

Starting in April 2014, the County will require contractors to submit an erosion control plan in the form of a SWPPP before final approval and submit evidence of a Notice of Intent (NOI) prior to construction.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	April 2014	One Time	Add SWPPP requirements to storm water general permit requirements for construction activities	Engineering Division and County Attorney
April 2014	December 2014	One Time	Update construction storm water ordinance to comply with state updates	Engineering Division and County Attorney
December 2014	December 2014	One Time	Adopt construction storm water ordinance to comply with state updates	Engineering Division and County Attorney

4.2.4.1.1 SWPPP Requirement

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 such as, 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 UPDES Storm Water General Permit for Construction Activities, UTR300000.

The County will require contractors to first develop a SWPPP for all construction greater than one acre or common plan of development by April 2014.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	December 2014	One Time	Develop enforcement mechanism(s) and penalties for non-compliance	Engineering Division and County Attorney
December 2014	December 2014	One Time	Adopt enforcement code changes	Engineering Division and County Attorney

4.2.4.1.2 Inspection Access to Private Properties

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.

The County Land Use Ordinance has provisions for the Right of Entry for Inspector and County personnel to access permitted sites for the purpose to ensure compliance of any County ordinance or resolution violation. The Engineering Division and Legal Department will continue to update the County Ordinance to effectively track and permit land disturbance activities; any changes to the ordinance will be documented on table below.

Year	Measurable Goal Action Summary:	Document updates to the County ordinance regarding private property access
2014		
2015		
2016		
2017		
2018		

4.2.4.2 Enforcement Mechanism

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

The general penalty for continuing violations as specified in 1-1-9 is that whenever Code or in any ordinance of the County an act is prohibited or is made or declared to be unlawful or an offense or a misdemeanor, or whenever in such Code or ordinance the doing of any act is required or the failure to do any act is declared to be unlawful, and no specific penalty is provided therefore, the violation of any such provision or the failure to perform any such act shall be punishable by a fine of less than one thousand dollars (\$1,000.00) or by imprisonment not to exceed six (6) months or by both such fine and imprisonment in the discretion of the court. Each day that any such violation or failure to perform such act shall continue, constitutes a separate offense, unless otherwise specifically provided. The County will add specific storm water violations to the ordinances in 2014 and amend them as necessary as the program develops.

4.2.4.2.1 Enforcement Procedures Plan

Standard operating procedures (SOPs) or similar type of documents that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators which shall include appropriate, escalating enforcement procedures and actions.

An enforcement procedures plan will be developed to include specific processes and sanctions to minimize the occurrence of violations, and obtain compliance from violators. The plan will include appropriate, escalating enforcement procedures and actions. Any proposed ordinances will include the available sanctions for enforcement.

The Engineering Division standard operating procedures to obtain compliance from violations associated with operators of land disturbance activity sites will follow the below stages:

- A verbal warning with specific amount of time is given to the operator to correct the deficiency
- An Notice of Violation (NOV) is issued describing the violation to be corrected and additional time given to correct the deficiency with the threat to stop work, issuance of citation, or both
- A stop work order is issued, this can be verbal or in writing. All work must be stopped except for the activity needed to repair deficiency. At this point, a citation could be issued depending on the severity or recurrence of the problem
- A citation is issued to appear in court to face possible fines even after the deficiency is corrected
- Call of bond to repair deficiency

4.2.4.2.2 Tracking Enforcement Actions

Documentation and tracking of all enforcement actions.

The Storm Water Inspector will document and track all of the enforcement actions and will continue to do so. The tracking system mechanism includes the use of e-mail and GIS mapping.

Year	Measurable Goal Action Summary:	Document Number of enforcement actions
2014		
2015		
2016		
2017		
2018		

4.2.4.3 SWPPP Review Procedures

Develop and implement SOPs or similar type of documents for pre-construction Storm Water Pollution Prevention Plan (SWPPP) review and 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, to ensure plans are complete and in compliance with State and Local 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:

The Engineering Division procedures will be developed to establish that a SWPPP will be prepared and submitted to the County for review before the contractor can obtain the UPDES permit. The plan will include possible sources of storm water pollutants and Selection of Best Management Practices (BMPs) to reduce or eliminate pollutant impacts. The SWPPPs will be reviewed and discussed with the contractor at the preconstruction meeting as described in the permit.

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	June 2014	One Time	Sign up for account on State SWPPP database https://secure.utah.gov/account/login.html?returnToUrl=https%3A%2F%2Fsecure.utah.gov%2Fstormwater%2Fuui_authentication	Engineering Division
January 2015	NA	Monthly	Verify SWPPP reviews are properly documented	Storm Water Coordinator
January 2015	NA	Monthly	Review construction SWPPP plans and comment places where LID could be better utilized	Storm Water Inspector

4.2.4.3.1 SWPPP Pre-Construction Review

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

The Engineering Division will conduct a SWPPP pre-construction review meeting starting in 2015 with the contractor after ordinances, standard operating procedures, and checklist are developed where it will include a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned post-construction BMPs to manage runoff created after development. Preconstruction meetings and contractor education pamphlets are described in more detail in Section 4.2.1.4.

4.2.4.3.2 SWPPP Review Check List

Incorporate into the SWPPP review procedures the consideration of potential water quality impacts and procedures for pre-construction review which shall include the use of a checklist.

The Engineering Division reviews each SWPPP considering the potential water quality impacts. Procedures for the SWPPP review include ensuring that all the proper SWPPP BMPs and documentation is included on this document before the building permit is issued. Potential to incorporate LID into the design is also considered. The County will develop a form for inspections before June 1st, 2014.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2014	June 2014	One Time	Develop SWPPP review check list see Section 4.2.4 for requirements	Engineering Division

4.2.4.3.3 Low Impact Design (LID) Opportunities

Incorporate into the SWPPP review procedures for an evaluation of opportunities for use of low impact design (LID) and green infrastructure and when the opportunity exists, encourage such BMPs to be incorporated into the site design.

The Engineering Division will encourage the use of LID BMPs and green infrastructure to be incorporated into the site design when the opportunity exists as part of the SWPPP review. See Section 4.2.5 and the link below for additional information.

4.2.4.3.4 Priority Construction Sites

Identify priority construction sites, including at a minimum those construction sites discharging directly into or immediately upstream of waters that the State recognizes as impaired (for sediment) or high quality;

The Engineering Division will identify as priority construction sites, sites that discharge **directly** into waters of the State, or are otherwise deemed to have a high probability of effecting water quality. The SWPPP review check list will contain a box denoting if the project is classified as "high priority."

4.2.4.4 SOPs for Site Inspections and Enforcement

All Permittees shall develop and implement SOPs or similar type of documents for construction site inspection and enforcement of construction storm water pollution control measures. The procedures must clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. 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:

The Engineering Division Storm Water Inspector will be the person responsible for site inspections that disturb an area greater than one acre or are part of a common plan of development. Construction projects that require SWPPP's will be determined in the project review phase and the inspector(s) notified of approved projects as part of the pre-construction meeting.

Inspection and enforcement SOP's will be developed in the first year of the permit prior to starting site inspections in accordance with Section 4.2.4.4.1.

Start Date	Due Date	Frequency	Task	Responsible Party
December 2014	June 2015	One Time	Prepare to start SWPPP inspections of all construction sites with SWPPP plans. Download state form, develop SOP for inspectors, and identify inspector(s).	Engineering Division, Storm Water Inspector
June 2015	NA	Monthly	Complete SWPPP inspections on all active construction projects with SWPPP plans. High priority sites require 2 inspections per month.	Storm Water Inspector

4.2.4.4.1 Construction Site Inspection Checklist

Inspections of all new construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale at least monthly by qualified personnel using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at <http://www.waterquality.utah.gov/UPDES/stormwatercon.htm> .

The Engineering Division will develop inspection procedures by June 1st, 2016 for all construction sites with a land disturbance of greater than one acre, including projects less than one acre that are part of a larger common plan of development or sale at least monthly by qualified personnel using the Construction Storm Water Inspection Form.

4.2.4.4.2 Construction Site Inspection

The Permittee must inspect all phases of construction: prior to land disturbance, during active construction, and following active construction. The Permittee must include in its SWMP document a procedure for being notified by construction operators/owners of their completion of active construction so that verification of final stabilization and removal of all temporary control measures may be conducted.

The Storm Water Inspector will inspect all phases of construction until the termination of the project. All sites will be inspected by the County Storm Water Inspector on a monthly basis and priority sites will be inspected every two weeks. Inspections will be documented on the state form and emailed for documentation. All inspections will follow the inspection SOP. Procedures for termination notification by the operator of a permitted site to verify the final stabilization and removal of all temporary control measures will be developed.

4.2.4.4.3 Biweekly Inspections of Construction Sites

Inspections by the MS4 of priority construction sites defined in Part 7.36 must be conducted at least biweekly using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at <http://www.waterquality.utah.gov/UPDES/stormwatercon.htm> .

The Storm Water Inspector will inspect sites with the priority designation (as determined during the SWPPP review) at least biweekly using the standard construction inspection SOP.

4.2.4.4.4 Inspection Enforcement

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.

The Engineering Division Storm Water Inspector will take all necessary follow-up actions (re-inspection, enforcement) to ensure compliance in accordance with County Ordinances. Enforcement actions will be tracked and documented by e-mailing all actions to the MS4 account.

4.2.4.5 Personnel Training

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, is trained to conduct these activities. The training can be conducted by the MS4 or outside training can be attended. Such training must extend to third-party inspectors and plan reviewers as well. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

The Engineering Division will train staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement. The training will be conducted by the Engineering Division personnel or a third party. Third party training events for inspectors and plan reviewer will be conducted through the Utah County Storm Water Coalition. Training records will include dates, course description and names and positions of staff in attendance and recorded in Section 4.2.1.5.

Year	Measurable Goal Action Summary:	Document training dates, attendance and course description
2014		
2015		
2016		
2017		
2018		

4.2.4.6 Record Keeping of Permitted Sites

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

Initially all inspections will be e-mailed, to the MS4 account to provide a record of all inspections, enforcement actions, and other pertinent information. Monthly the inspector will review the account to ensure inspections are being properly documented. This account will also house copies of the original SWPPP, SWPPP review sheets, pre-construction meeting notes, etc. As the program develops the County may choose to investigate alternative tracking software.

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

All Permittees shall develop, implement and enforce a program to address post-construction storm water runoff to the MS4 from new development and redevelopment construction sites 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, according to the minimum performance measures listed below within 18 months of receiving coverage under this Permit. The objective of this control measure is for the hydrology associated with new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water. 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 developments. 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, including roads.

This measure is intended to minimize the impact to storm water quality caused by development and redevelopment. The increase in impervious areas caused by development can cause an increase in the type and quantity of pollutants in runoff. Prior planning and design to minimize pollutants in runoff from these areas is an important component to storm water quality management. The program includes:

- Program Description/Establishing SOPs
- Modifications to Existing Ordinances
- Design Standards for Post-Construction Water Controls
- Review of Post-Construction Water Controls
- SOPs for Inspections and Enforcement
- Personnel Training
- Post-Construction BMP Inventory

The Engineering Division will update the post-construction storm water management program to address runoff from new development and redevelopment construction sites disturbing an area greater than or equal to 1 acre, including projects less than 1 acre that are part of a larger common plan of development or sale to the MS4.

The objective of this program is for the hydrology associated with the new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2016	June 2016	One Time	Review ordinance and design manual for compliance with 4.2.5	Engineering Division

Year	Measurable Goal Action Summary:	Document other updates
2014		
2015		
2016		
2017		
2018		

4.2.5.1 Post Construction Ordinances

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 and 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. The ordinance or other regulatory mechanism shall, at a minimum, be equivalent with the technical requirements set forth in the UPDES Storm Water General Permit for Construction Activities, UTR300000 which can be found at <http://www.waterquality.utah.gov/UPDES/stormwatercon.htm>. Existing local requirements to apply storm water controls at smaller sites shall be retained. 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 pollutants to the MS4.

The Engineering Division will update the County Design Standards to address storm water controls at new development and redevelopment sites with post-construction considerations by 2016. The structural post-construction BMP selection, design, installation and operation for each site will be reviewed to make sure it will perform adequately in the soil and terrain conditions for the particular site before approval per the Engineering Division. The Engineering Division will continuously update post- construction BMPs that will minimize impacts from development runoff to the MS4.

Year	Measurable Goal Action Summary:	Document the changes in regulations
2014		
2015		
2016		
2017		
2018		

4.2.5.2 Enforcement Responsibilities

Develop an enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism. Procedures for enforcement of BMPs include:

The County will develop SOPs for the inspection and maintenance requirements for long term BMPs on or before February 1st, 2015.

Year	Measurable Goal Action Summary:	Document the number of enforcement actions taken
2014		
2015		
2016		
2017		
2018		

Start Date	Due Date	Frequency	Task	Responsible Party
February 2014	February 2015	One Time	Develop SOP for post construction inspections and enforcement actions. See 4.2.5.2.1, 4.2.5.5, 4.2.5.5.3 for details	Engineering Division

4.2.5.2.1 Enforcement Procedures and Actions

Procedures that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators which shall include appropriate, escalating enforcement procedures and actions.

The procedures and actions to gain compliance from violators will be developed over the next year but are anticipated to include the following components:

- The enforcement options are detailed on the proposed County Ordinances
- BMP Inspection prior to accept of site improvements
- Maintenance easements must be properly recorded in the land record
- Maintenance arrangements with third parties will be arranged through appropriate legal means
- Periodic inspections of private and County owned or operated post-construction BMPs by the Engineering Division personnel or Storm Water Inspector
- If a third party property is not maintained or repaired within the time allowed, the County will perform the maintenance and repairs at its expense, and bill the same to the property owner
- Notification to owners of a problem location, specifying time of compliance
- Other actions include: notice of violation, stop work orders, cease and desist orders, and citations

4.2.5.2.2 Documentation for Post-Construction BMP Requirements

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 expected from the selected BMPs; and
- The technical basis which supports the performance claims for the selected BMPs.

The County GIS databases and email will be used to keep an inventory of all new Post-Construction BMPs starting on March 15th, 2015. Each BMP is reviewed and approved by the Engineering division during the permitting process. The selection process includes what the intended objective of the BMP was; the targeted pollutants the BMP would help control, how effective this BMP will be and the requirements for implementing this BMP.

Start Date	Due Date	Frequency	Task	Responsible Party
March 15th 2015	NA	Monthly	Verify new post construction BMPs have been uploaded to GIS database	Mapping Division and Engineering Division

4.2.5.3 Post-Construction Controls Standards for Development and Redevelopment Projects

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.

The Engineering Division will create requirements and standards to ensure that any storm water controls or management practices for development and redevelopment projects will prevent or minimize impacts to water quality.

4.2.5.3.1 New Developments Post Construction

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

Additional requirements will be investigated as part of the review in Section 4.2.5.1 and will consider:

- Minimize development in areas susceptible to erosion and sediment loss
- Minimize disturbance of native soils and vegetation
- Preserve areas that provide important water quality benefits
- Implement measures for flood control
- Protect the integrity of natural resources and sensitive areas

4.2.5.3.2 Post Construction Controls

For new development or redevelopment projects 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, the program shall include a process to evaluate and encourage a Low Impact Development (LID) approach which encourages the implementation of structural BMPs, where practicable, that infiltrate, evapotranspire or harvest and use storm water from the site to protect water quality. Structural controls may include green infrastructure practices such as rainwater harvesting, rain gardens, permeable pavement, and vegetated swales. The selection and design of post-construction controls must take into consideration clogging or obstruction issues, freeze-thaw problems, effect on slope stability and groundwater, and the ability to effectively maintain the control.

The Engineering Division will develop a process to evaluate and encourage a Low Impact Development (LID) approach which encourages the implementation of structural BMPs, where practicable, that infiltrate, evapotranspire, or harvest and use storm water from the site to protect water quality. Structural controls may include green infrastructure practices such as rainwater harvesting, rain gardens, permeable pavement, and vegetated swales. The selection design of post-construction controls will take into consideration clogging or obstruction issues, freeze-thaw problems, effect on slope stability and groundwater, and the ability to effectively maintain the control.

If LID practices are proposed to be used on a site, the Engineering Division will review and evaluate the proposal to make sure it will perform adequately in the soil and terrain conditions for the particular site before approval. Meetings and actions taken to advance LID will be documented as part of Sections 4.2.1.6, 4.2.4.3.2 and 4.2.4.3.3.

4.2.5.3.3 Retrofit of Existing Storm Infrastructure

The Permittee must develop a plan to retrofit existing developed sites that are adversely impacting water quality. The retrofit plan must be developed to emphasize controls that infiltrate, evapotranspire, or harvest and use storm water discharges. The plan must include a ranking of control measures to determine those best suited for retrofitting as well as those that could later be considered for retrofitting. The Permittee must include the following when developing the criteria for the retrofit plan:

- Proximity to water body
- Status of water body to improve impaired water bodies and protect unimpaired water bodies
- Hydrologic condition of the receiving water body
- Proximity to sensitive ecosystem or protected area
- Any upcoming sites that could be further enhanced by retrofitting storm water controls

Starting in the third year of the program (2016), the County will begin the process of mapping, documenting, and inspecting existing BMPs within the County. As the mapping develops priority sites will be identified (using the criteria above) and added to the routine inspection schedule. Potential improvements to this system will be reevaluated in 2018.

Existing sites which are found to be contributing to the degradation of water quality the Engineering Division will develop a plan, on a case by case basis to retrofit existing developed sites to minimize impacts. The retrofit plan will be developed to emphasize controls that infiltrate, evapotranspire, or harvest and use storm water discharges.

Start Date	Due Date	Frequency	Task	Responsible Party
January 2016	NA	Quarterly	Develop map of existing post construction BMPs and identify priority sites	Mapping Division
June 2018	July 2018	One Time	Identify existing County owned facilities that require modification	Engineering Division

Year	Measurable Goal Action Summary:	Document Number of Retrofit Inspections
2014		
2015		
2016		
2017		
2018		

4.2.5.3.4 Hydrological Methods for Determining Storm Water

Each Permittee shall develop and define 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. Specific criteria which require that Best Management Practices (BMPs) are designed to treat the water from a specific design storm (e.g., the 2-year, 24-hour event) must be incorporated into the Permittee's post-construction minimum control measure and documented in the SWMP. Permittees may allow other unique or complex methodologies.

The Title 17-6-3-1 General Standards (5) for Drainage of Utah County Codes designates that Drainage facilities shall be provided in the form of culverts, bridges, curbs, etc., engineered for the twenty-five-year storm at each driveway, designed according to the standards for public streets adopted by Utah County.

4.2.5.4 Site Plan Review of Post-Construction Storm Water Controls

All Permittees shall adopt and implement procedures for site plan review which incorporate consideration of water quality impacts. Prior to construction, Permittees shall:

The Engineering Division has procedures in place for reviewing the proposed post-construction BMPs in order to address water quality impacts. Prior to site plan approval, the Engineering Division will review the SWPPP, specify any preferred design, and document any storm water facilities impacted.

4.2.5.4.1 SWPPP Review

Review Storm Water Pollution Prevention Plans (SWPPPs) 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, to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure.

The Engineering Division procedures establish that a SWPPP will be prepared and submitted to the County for review before the contractor can obtain the approval for construction over an acre. The plan must include possible sources of storm water pollutants and Selection of Best Management Practices (BMPs) to reduce or eliminate pollutant impacts. The SWPPP's will be reviewed and discussed with the contractor at the preconstruction meeting as described in the permit. The SWPPP pre-construction review meeting will include a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned post-construction BMPs to manage runoff created after development. Preconstruction meetings and contractor education pamphlets are described in more detail in Section 4.2.1.4 and 4.2.4.3.

4.2.5.4.2 Preferred Design Specifications

Permittees shall provide developers and contractors with preferred design specifications to more effectively treat storm water for different development such as industrial parks, commercial strip malls, retail gasoline outlets, restaurants, parking lots, automotive service facilities, street and road construction, and projects located in, adjacent to, or discharging to environmentally sensitive areas.

The Engineering Division will review and revise procedures as stated in Section 4.2.5.2. The inclusion of preferred design criteria for post construction BMP controls to more effectively treat storm water discharges will be evaluated. As part of the site plan design review process the Engineering Division will provide developers and contractors with preferred design criteria to more effectively treat storm water for different development types though updates to the design criteria.

4.2.5.4.3 Storm Water Documentation

Permittees shall keep a representative copy of information that is provided to design professionals; and if information is distributed to a large number of design professionals at once, the dates of the mailings and lists of recipients.

The Engineering Division will keep a representative copy of information that is provided to design professionals. The County does not plan on mailing information to a large number of design professionals; instead, design professionals will be directed to the County website where they can download pertinent information. Training seminars may be offered through the Utah County Storm Water Coalition; if so, attendance and material presented will be documented.

4.2.5.5 Standard Operating Procedures for Inspections and Enforcement of Post-construction Storm Water Control Measures

All Permittees shall adopt and implement SOPs or similar type 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.

The Engineering Division will adopt and implement SOPs for site inspection and enforcement of post-construction storm water control measures by 2016. These procedures will ensure adequate ongoing long-term operation and maintenance of approved private and County owned or operated storm water control measures. Inspections of existing BMPs are anticipated to begin during the next permit cycle (2019).

4.2.5.5.1 Standard Operating Procedures for Inspections and Enforcement of Post-construction Storm Water Control Measures

The ordinance or other regulatory mechanism shall include provisions for both construction-phase and 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, 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 annual certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality. In this case, the Permittee must require 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.

Information pertaining to building permits and general inspections practices can be found at the County website at the link below.

<http://www.utahcounty.gov/Dept/ComDev/BuildingInsp/index.asp>

Specific inspection provisions can be found in the Utah County Land Use Ordinance.

The general penalty for continuing violations as specified in 1-1-9 is that whenever Code or in any ordinance of the County an act is prohibited or is made or declared to be unlawful or an offense or a misdemeanor, or whenever in such Code or ordinance the doing of any act is required or the failure to do any act is declared to be unlawful, and no specific penalty is provided therefore, the violation of any such provision or the failure to perform any such act shall be punishable by a fine of less than one thousand dollars (\$1,000.00) or by imprisonment not to exceed six (6) months or by both such fine and imprisonment in the discretion of the court. Each day that any such violation or failure to perform such act shall continue, constitutes a separate offense, unless otherwise specifically provided.

Specific fines for storm water violations will be included in ordinance revisions, noted in Section 2.3.3.1.

4.2.5.2 BMP inspections during installation

Permanent structural BMPs shall be inspected at least once during installation by qualified personnel.

The Engineering Division will inspect and document structural BMPs at least once during installation by the Public Works Engineering Division Inspectors and/or Storm Water Inspector during routine construction inspections as part of existing SOPs.

4.2.5.3 Inspection Report

Inspections and any necessary maintenance must be conducted annually by either the Permittee or through a maintenance agreement, 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. The Permittee must document its findings in an inspection report which includes 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;
- Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and re-inspection dates.

The Engineering Division will inspect and maintain structural BMPs owned or operated by the County annually in 2016 using the standard post-construction inspection SOP developed in 4.2.5.2. Facilities that are owned/operated by a private entity will also be inspected and maintained by the owner/operator as specified in the maintenance agreement with the County. The Storm Water Inspector will inspect and document storm water controls at least **once every five years**, or as specified in the maintenance agreement.

Start Date	Due Date	Frequency	Task	Responsible Party
August 2015	January 2016	One Time	Develop post construction SOPs and forms	Engineering Division
March 2016	NA	Quarterly	Inspect post construction BMP's	Storm Water Inspector

4.2.5.6 Personnel Training

Permittees shall provide adequate training for all staff involved in post-construction storm water management, planning and review, and inspections and enforcement. 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. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

The Engineering Division will provide training for all staff involved in post-construction storm water management, planning, review, inspections and enforcement. Training will include reviewing County Ordinances and Storm Water Drainage Plans. The training records will include the training date, course description, and names and positions of staff in attendance. Training events are also described and documented in Section 4.2.1.5, 4.2.3.11, 4.2.4.5, and 4.2.6.9 of this document.

4.2.5.7 Inventory of Post Construction Structural BMPs

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. This inventory shall include both public and private sector sites located within the Permittee's service area.

The Engineering Division in conjunction Mapping Division with the will start to maintain an inventory of all post-construction structural storm water control BMPs throughout the County. This inventory will include both public and private sites located within the County boundaries and service areas.

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	NA	Monthly	Update and verify inventory for changes in property ownership or post construction control measures	Engineering Division and Mapping Division

4.2.5.7.1 Post Construction Storm Water Inventory

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).

The Post Construction Storm Water Inventory entry will include basic information such as:

- Project Name and Location
- Owner's name and contact information
- BMP description
 - Storm water control measure(type, number, design or performance specifications);
 - Maintenance requirements (frequency of inspections and maintenance)
- Installation date
- Inspection history

4.2.5.7.2 Updates to the Inventory

Based on inspections conducted pursuant to Part 4.2.5.5, the Permittee must update the inventory as appropriate where changes occur in property ownership or the specific control measures implemented at the site.

Based on inspections conducted, the Departments and Divisions involved will update the inventory as needed when changes occur in property ownership or changes to the control structural post-construction BMPs.

4.2.6. Pollution Prevention and Good House Keeping for Municipal Operators

All Permittees shall develop and implement an operations and maintenance (O & M) program for Permittee-owned or operated facilities, operations and structural storm water controls that includes standard operating procedures (SOPs) or similar type of documents and a training component that have the ultimate goal of preventing or reducing pollutant runoff from all Permittee-owned or operated facilities and operations. All components of an O & M program shall be included in the SWMP document and must identify the department (and where appropriate, the specific staff) responsible for performing each activity described in this section. The Permittee must develop an inventory of all such Permittee-owned or operated facilities. The Permittee must review this inventory annually and update as necessary. The minimum performance measures are:

This measure is intended to ensure a reduction in the amount and type of storm water pollutants by establishing routine activities in the operation and maintenance of municipal operations that affect storm water runoff. Setting particular guidelines for source controls and materials management is an important component to storm water quality management. The Program includes:

- Operation and Maintenance Program Description/Establishing SOPs
- Facilities Inventory
- High Priority Facilities and Activities
- Inspection of Facilities
- Personnel Training

The Pollution Prevention and Good Housekeeping Program of this SWMP addresses routine activities in the operation and maintenance of County owned facilities, drainage systems, roadways, parks and open spaces, and other municipal operations to reduce pollutants entering the storm drain system.

Various County Departments and Divisions will prepare an operations and maintenance manual (O&M Manual) for the County owned facilities and County activities with standard operating procedures (SOPs) for the maintenance and proper operation of structural storm water controls along with a training component that has the ultimate goal of preventing or reducing pollutant runoff from the County owned facilities and operations. All of the components of the O&M program will be included in this document. It will identify the department and the staff responsible for performing each activity described in this section.

4.2.6.1 Inventory of Owned or Operated Facilities

Permittees shall develop and keep current a written inventory of Permittee-owned or operated facilities and storm water controls that may include but is not limited to:

- Composting facilities
- Equipment storage and maintenance facilities
- Fuel farms
- Hazardous waste disposal facilities
- Hazardous waste handling and transfer facilities
- Incinerators
- Landfills
- Landscape maintenance on municipal property
- Materials storage yards
- Pesticide storage facilities
- Public buildings, including libraries, Sheriff stations, fire stations, municipal buildings, and similar Permittee-owned or operated buildings
- Public parking lots
- Public golf courses
- Public swimming pools
- Public works yards
- Recycling facilities
- Salt storage facilities

- Solid waste handling and transfer facilities
- Street repair and maintenance sites
- Vehicle storage and maintenance yards
- Permittee-owned and/or maintained structural storm water controls

Facilities covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities do not need to develop an O & M program but must instead maintain the Storm Water Pollution Prevention Plan (SWPPP) required by that permit.

The Engineering Division in conjunction with other County Departments and Divisions created an inventory of County owned facilities that can be viewed in the following section. This list will be reviewed annually and updated as necessary. The care and maintenance of each facility will be assigned to a specific Department or Division for its care and maintenance. The list includes:

- Parks and open space
- Material storage yards
- Pesticide storage facilities
- Public buildings including sheriff complex, emergencies services facilities, municipal buildings, etc.
- Parking lots
- Public works yards
- Salt storage facilities
- Road repair and maintenance sites
- Vehicle maintenance and storage yards
- Structural storm water controls

Facilities covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities will maintain a Storm Water Pollution Prevention Plan (SWPPP).

Inventory of County Owned Facilities

Building	Address
Administration Building	100 East Center, Provo
Air Plane Hanger, #41	2050 North 300 West, Spanish Fork
Animal Shelter North	193 North 2000 West, Lindon
Animal Shelter South	3075 North Main Street Spanish Fork
Children's Justice Center	112 East 300 South, Provo
Courthouse	51 South University Avenue, Provo
Elections Storage Building	2615 South State, Provo
Emissions	3255 North 150 West, Spanish Fork
Foothill Treatment Center	3281 North Main, Spanish Fork
Foothill Day Treatment	15 North 100 East, Provo
Fuel Station – Provo	2815 South State Provo
Fuel Station - Spanish Fork	3015 North 400 West, Spanish Fork
Health Services Building	589 South State, Provo
Health/Justice Building	151 South University, Provo 84601
Motor Pool	2801 South State, Provo
Public Works	2855 South State Street Provo
Security Center/Sheriff	3075 North Main, Spanish Fork
Utah Valley Convention Center	220 West Center Street, Provo

Park	Address
American Fork Debris Basin	Debris Basin, American Fork
Benjamin Park	7300 South 3200 West
Bonneville Shoreline Trail	Southeast 1.5 miles
Canyon View Park	1085 East Provo Canyon Rd, Provo
Cottonwood Park	399 North 2000 West, Provo
Equestrian Park	9400 North 6800 West
Gamesfield Park	105 North 2900 West, Provo
Hobble Creek Parkway	Springville I Hobble Creek
Indian Ford Park	11500 North 10000 West, Lehi
Inlet Park	314 South Saratoga Rd
Jordan River Parkway	7185 North Saratoga Rd
Lincoln Beach	4700 So. Lincoln Beach Rd, West Mountain
Lindon Wetlands	5700 North 4500 West, Lindon
Murdock Trail	800 North 1000 East Orem & 17 miles Northwest
Nunns Park	3.3 miles up Provo Canyon. 2017 East Provo Canyon Rd.
Payson Debris Basin	Payson Canyon
Provo River Parkway	150 North 2800 West, Provo (east 2.5 miles)
Radio Controlled Airplane Park (Wetlands Park)	7205 North Saratoga Rd
Santaquin Debris Basin	Santaquin Canyon
Skipper Bay	Utah Lake State Park
Spanish Fork River Park	11150 S. Thistle Slide Rd
Thistle Gun Range	12814 So. Highway 89
Upper Falls Park	Provo Canyon 2704 East Provo River Dr.
Vivian Park	Approximately 5.8 miles up Provo Canyon 6828 N. South Fork Rd
Vineyard Beach	Off of Vineyard Road near Geneva & S. of Lindon Marina
Wildlife Park	Jordan River at 9600 North
Willow Park	9800 West 8570 North
Utah Lake Parkway	5600 North 4600 West, Lindon

NPDES Permits Issued:

- NPSES# 0782 Utah County Public Works([UTG170016](#))
 - http://iaspub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110045509222
- NPSES# 09631 Utah County Mosquito Abatement at Public Works ([UTG170018](#))
 - http://iaspub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110045509240

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	NA	Annually	Develop / review SWPPP plans for County facilities listed in 4.2.6.1	Storm Water Coordinator
January 2015	NA	Annually	Review inventory of County owned facilities identify "high risk facilities" (4.2.6.3) List of exempt facilities 4.2.6.4.2	Storm Water Coordinator, Mapping Division

4.2.6.2 Pollutant Discharge Potential Assessment

All Permittees must initially assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1 for their potential to discharge to storm water the following typical urban pollutants: sediment, nutrients, metals, hydrocarbons (e.g., benzene, toluene, ethyl benzene and xylene), pesticides, chlorides, and trash. Other pollutants may be associated with, but not generated directly from, the municipally-owned or operated facilities, such as bacteria, chlorine, organic matter, etc. Therefore, the Permittee must determine additional pollutants associated with its facilities that could be found in storm water discharges. A description of the assessment process and findings must be included in the SWMP document.

The Engineering Division in conjunction with other County Departments and Divisions will assess the County owned facilities and operations annually for their potential to discharge to storm water systems the following typical urban pollutants annually. A description of the assessment process and findings will be included on each O&M Manual.

4.2.6.3 High Priority Facilities and Activities

Based on the assessment required in Part 4.2.6.2, the Permittee must identify as "high-priority" those facilities or operations that have a high potential to generate storm water pollutants. Among the factors that must be considered in giving a facility a high priority ranking is the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must be performed outside (e.g., changing automotive fluids), proximity to water bodies, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

The Engineering Division in conjunction with other County Departments and Divisions will identify facilities as "high priority" based on the pollutant discharge potential assessment of each facility or operations that have a high potential to generate storm water pollutants. The factors that will be considered in giving a facility a high priority ranking will be the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must be performed outside, proximity to water bodies, poor housekeeping practices, and discharge of pollutants of concern to impaired waters by January 1st, 2016.

4.2.6.4 High Priority Facilities SOPs

Each "high priority" facility identified in Part 4.2.6.3 must develop facility-specific standard operating procedures (SOPs) or similar type of documents. The SOPs shall include BMPs that, when applied to the municipal operation, facility or storm water control will protect water quality and reduce the discharge of pollutants to the MS4. Low impact development (LID) techniques should be considered for all new and redeveloped Permittee-owned or operated facilities. The SOPs shall include appropriate pollution prevention and good housekeeping procedures for all of the following types of facilities and/or activities listed below:

Each County Department or Division overseeing a "high priority" facility or operation will start to document the existing SOPs and BMPs that are currently in place to manage storm water runoff. Through the documentation program opportunities to include LID practices and general improvements will be evaluated. Once existing practices are updated and documented, the SOPs will be reviewed quarterly to look for additional improvements. SOP documentation will be recorded in 4.1.2 of this document.

4.2.6.4.1 Operation and Maintenance Program for County Buildings and Facilities

Buildings and facilities: The O & M program shall address, but is not limited to: Permittee-owned or operated offices, police and fire stations, pools, parking garages, and other Permittee-owned or operated buildings or utilities. The SOPs must address the use, storage and disposal of chemicals and ensure through employee training, that those responsible for handling these products understand and implement the SOPs. All Permittee-owned or operated facilities must develop and ensure that spill prevention plans are in place, if applicable, and coordinate with the local fire department as necessary. The SOPs must address dumpsters and other waste management which includes, but is not limited to, cleaning, washing, painting and other maintenance activities. The O & M program must include schedules and SOPs for sweeping parking lots and keeping the area surrounding the facilities clean to minimize runoff of pollutants. Within 180 days of receiving coverage from this Permit, all Permittees must develop an

inventory of all floor drains inside all Permittee-owned or operated buildings. The inventory must be kept current. The Permittee must ensure that all floor drains discharge to appropriate locations. Within 180 days of receiving coverage from this Permit, all Permittees must develop an inventory including a map of all storm drains located on the property of all Permittee-owned or operated buildings and facilities. The Permittee must ensure that only storm water is allowed into these drains and that the appropriate BMPs are in place to minimize pollutants from entering the MS4.

The O&M program will include: County owned or operated offices, sheriff complex, parking lots, etc. Each Department or Division that has an impact on storm water discharging to the municipal separate storm sewer system (MS4), will create or update their O&M Manuals and SOPs to include the following items:

- Address the use, storage and disposal of chemicals and ensure, through employee training, that those responsible for handling these products understand and implement SOPs
- All County owned or operated facilities will ensure that spill prevention plans are in place
- The SOPs will address dumpsters and other waste management which includes, but is not limited to cleaning, washing, painting and other maintenance activities
- The O&M program will include schedules and SOPs for sweeping parking lots and keeping the area surrounding the facilities clean to minimize runoff of pollutants
- The County Departments and Divisions will develop an inventory, including a map, of all storm drains located on the property of all the County owned or operated buildings/facilities in their care
 - Each County Department and Division must ensure that only storm water is allowed into these drains and that the appropriate BMPs are in place to minimize pollutants from entering the MS4

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for County buildings and facilities (offices, Sheriff and Emergency Service Complex, parking lots, etc.) and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2014		
2015		
2016		
2017		
2018		

4.2.6.4.2 Material Storage Areas, Heavy Equipment Storage Areas and Maintenance Areas

Permittees shall develop and implement SOPs to protect water quality at each of these facilities owned or operated by the Permittee and not covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities.

The County will develop a list of facilities not covered under this permit, and document the controlling regulations for each facility that limit storm water pollution. This list will be updated annually.

Start Date	Due Date	Frequency	Task	Responsible Party
May 2014	NA	Annually	Update list of facilities not covered under permit and document the controlling regulations for each facility	Engineering Division
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for material storage areas, heavy equipment storage areas, and maintenance areas and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:
2014	List facilities not covered under this permit and the regulating permit number
2015	
2016	
2017	
2018	

4.2.6.4.3 Parks and Open Space

The O & M program shall address, but is not limited to: SOPs for the proper application, storage, and disposal of fertilizer, pesticides, and herbicides including minimizing the use of these products and using only in accordance with manufacturer's instruction; sediment and erosion control; evaluation of lawn maintenance and landscaping activities to ensure practices are protective of water quality such as, proper disposal of lawn clippings and vegetation, and use of alternative landscaping materials such as drought tolerant plants. The SOPs must address the management of trash containers at parks and other open spaces which include scheduled cleanings and establishing a sufficient number of containers, and for placing signage in areas concerning the proper disposal of pet wastes. The SOPs must also address the proper cleaning of maintenance equipment, building exterior, trash containers and the disposal of the associated waste and wastewater. Permittees shall implement park and open space maintenance pollution prevention/good housekeeping practices at all park areas, and other open spaces owned or operated by the Permittee.

The Parks Division and Building and Grounds Division will update their O&M Manual SOPs to address:

- Proper application, storage, and disposal of fertilizers, pesticides, and herbicides proper including minimizing the use of these products and using only in accordance with manufacturers instruction
- Sediment and erosion control
- Lawn maintenance and landscaping activities that evaluate practices to ensure protection of water quality such as, proper disposal of lawn clippings and vegetation, and use alternative landscaping materials such as drought tolerant plants
- Management of trash containers at parks and other open spaces that include scheduled garbage pickup, number of containers, and signage in areas concerning proper disposal of pet wastes
- Cleaning of maintenance equipment, building exterior, trash containers and the disposal of the associated waste water

The Parks Division and Building and Grounds Division will implement pollution prevention and good housekeeping practices at their facilities through the implementation of these BMPs.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for the Parks and Building and Grounds Division and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2014		
2015		
2016		
2017		
2018		

4.2.6.4.4 Vehicle and Equipment

The O & M program shall address, but it not limited to: SOPs that address vehicle maintenance and repair activities that occur on Permittee-owned or operated vehicles. BMPs should include using drip pans and absorbents under or around leaky vehicles and equipment or storing indoors where feasible. Fueling areas for Permittee-owned or operated vehicles shall be evaluated. If possible, place fueling areas under cover in order to minimize exposure. The O & M program shall include SOPs to ensure that vehicle wash waters are not discharged to the MS4 or surface waters. This Permit strictly prohibits such discharges.

Motor Pool Division will update their O&M Manual SOPs to address vehicle maintenance and repair needs. Specifically, the Motor Pool Division that maintains vehicles at their facilities will include BMPs such as drip pans and absorbents under or around leaky vehicles and equipment or storing indoors where feasible.

The Fueling area operated by the County is constantly monitored and evaluated according to the requirements of their MSGP SWPPP. Vehicle wash procedures will be addressed by all Departments and Divisions to ensure that wash waters are not discharged to the MS4 or surface waters.

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2014		
2015		
2016		
2017		
2018		

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for all Departments and Divisions addressing vehicle maintenance and repairs (specifically motor pool, fuel stations etc.) and one general BMP/SOP	Storm Water Coordinator

4.2.6.4.5 Roads, Highways, and Parking Lots

The O & M program shall address, but it not limited to: SOPs and schedule for sweeping streets and Permittee-owned or operated parking lots and any other BMPs designed to reduce road and parking lot debris and other pollutants from entering the MS4; road and parking lot maintenance, including pothole repair, pavement marking, sealing and repaving; cold weather operations, including plowing, sanding, and application of deicing compounds and maintenance of snow disposal areas; right-of-way maintenance, including mowing, herbicide and pesticide application; and municipally-sponsored events such as large outdoor festivals, parades or street fairs. The Permittee must ensure that areas used for snow disposal will not result in discharges to receiving waters.

The Engineering Division O&M Manual will be reviewed annually and updated, if necessary, to describe in writing standard operating procedures for:

- Maintenance for BMPs designed to reduce road debris and other pollutants from entering the MS4 including schedules disposal methods of waste removed such as LIDs
- Pothole repairs
- Pavement marking
- Sealing and repaving
- Plowing, application of deicing compounds, and maintenance of snow disposal areas
- Right of way maintenance including mowing and herbicide application
- Municipal sponsored events (parade and street fair clean up)

The Buildings and Grounds Division, and Parks Division O&M Manuals will be updated to describe in writing standard operating procedures for:

- Sweeping of parking lots and any other BMPs designed to reduce parking lot debris and other pollutants from entering the MS4
- Snow removal and application of deicing compounds

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2014		
2015		
2016		
2017		
2018		

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document or Review one ongoing BMP/SOP for material storage areas, heavy equipment storage areas, and maintenance areas and one general BMP/SOP	Engineering Division

4.2.6.4.6 Storm Water Collection and Conveyance System

The O & M program shall address, but is not limited to: SOPs and schedule for the 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 shall implement catch basin cleaning, storm water system maintenance, scheduled structural BMP inspections and maintenance, and pollution prevention/good housekeeping practices. Permittees should prioritize storm sewer system maintenance, with the highest priority areas being maintained at the greatest frequency. Priorities should be driven by water quality concerns, the condition of the receiving water, the amount and type of material that typically accumulates in an area, or other location-specific factors. All Permittee-owned or operated storm water structural BMPs including but not limited to, swales, retention/detention basins or other structures must be inspected annually to ensure that they are properly maintained to reduce the discharge of pollutants into receiving waters. Permittees shall develop, ensure, and document proper disposal methods of all waste and wastewater removed from 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 must be reviewed and approved by the Division. 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 Engineering Division O&M Manual SOPs will be updated to describe standard operating procedures and schedules for the inspection, cleaning, maintenance and repair of:

- Detention/retention basins
- Catch basins
- Storm water conveyance pipes
- Ditches and irrigation canals
- Culverts
- Structural storm water control
- Structural runoff treatment
- Flow control facilities

The Division will create a storm sewer system maintenance map and schedule to document inspections. This data will be used to designate priority areas that will be maintained more frequently. Also, the O&M Manual SOPs will include proper documentation procedures and disposal methods of all waste and waste water removed from the storm water conveyance system.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for the storm water and conveyance system (catch basins, ditches and irrigation canals, culverts, flow control facilities, etc.) and one general BMP/SOP	Engineering Division

Year	Measurable Goal Action Summary:	The Engineering Division will meet with each Division within the Public Works department quarterly to help create, review or make changes to O&M Manual, SOPs, and BMPs		
2014				
2015				
2016				
2017				
2018				

4.2.6.4.7 Other Facilities and Operations

Permittees shall identify any facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff, and develop, implement, and document the appropriate BMPs to protect water quality from discharges from these sites in the O & M program.

Each Department or Division will identify any facility or operations that could reasonably be expected to discharge to the municipal separate storm sewer system (MS4) and update their O&M Manuals SOPs to include facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review ongoing BMP/SOP by each Department or Division for other facilities and operations that could discharge and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:	The Engineering Division will meet with each Department or Division annually to help create, review or make changes to the O&M Manual SOPs and BMPs
2014		
2015		
2016		
2017		
2018		

4.2.6.5 Third Party Maintenance of Storm Water Facilities

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 in contracts between the Permittee and its contractors or the contractors of private developments. The Permittee shall be responsible for ensuring, through contractually-required documentation or periodic site visits that contractors are using appropriate storm water controls and following the standard operating procedures, storm water control measures, and good housekeeping practices of the Permittee.

The Engineering Division will allow private developments to be able to conduct their own maintenance and inspections of storm water BMPs and will be held to the same standards as County Personnel. These expectations will be defined through a proposed County Ordinance to insure through contractually required documentation or periodic site visits, that the owner of such storm water BMPs is following SOPs to maintain such controls. This permit requirement is also covered in Section 4.2.5 of this plan.

4.2.6.6 Inspection of County Owned or Operated Facilities

An O & M program designed for Permittee-owned or operated facilities shall include the following inspections:

Each Department or Division O&M Manual will include weekly visual inspections of “high priority” facilities, quarterly comprehensive inspections of “high priority” facilities, and quarterly visual observations of storm water discharges from “high priority” facilities.

Start Date	Due Date	Frequency	Task	Responsible Party
May 2014	NA	Annual	Develop and Review inspection check list for each high priority facility	Engineering Division
July 2014	NA	Quarterly	Complete quarterly inspection of high priority sites	Mapping Division/Storm Water Inspector

4.2.6.6.1 Weekly Visual Inspections

The Permittee must perform weekly visual inspections of “high priority” facilities in accordance with the developed SOPs to minimize the potential for pollutant discharge. The Permittee must look for evidence of spills and immediately clean them up to prevent contact with precipitation or runoff. The weekly inspections must be tracked in a log for every facility and records kept with the SWMP document. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

Each Department or Division will perform weekly visual inspections of their “high priority” facilities or areas of the facilities that each department is responsible for in accordance with their O&M Manual to minimize the potential for pollutant discharge. Any spill discovered will be documented and cleaned up immediately to prevent contact with precipitation or runoff.

The weekly inspections will be tracked ONLY IF ACTION ITEMS ARE REQUIRED in a log by each Department or Division and records kept in their O&M Manual reporting section. The inspection log will include the date of an identified deficiency and the date corrective actions were taken to remedy the deficiency. Copies of these logs will be loaded annually to an electronic file for each department or division.

4.2.6.6.2 Quarterly Comprehensive Inspections of High Priority Facilities

At least once per quarter, 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 quarterly 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.

Each Department or Division will perform, at least once per quarter, a comprehensive inspection of the “high priority” facilities identified. During the “high priority” facility inspections, specific attention will be given to:

- Waste storage areas
- Dumpsters
- Vehicle and equipment maintenance areas
- Fueling areas
- Material handling areas
- Pollutant-generating areas

These quarterly inspections will be documented by sending copies to the e-mail address and records kept with the O&M Manual and done in accordance to the O&M Manual SOPs. The report will include identified deficiencies and the corrective actions taken to remedy the deficiencies.

Year	Measurable Goal Action Summary:	The Engineering Division will make sure that all of the inspections are being performed and data gathered in the correct electronic files. Document dates of department file review.
2014		
2015		
2016		
2017		
2018		

4.2.6.6.3 Quarterly Visual Observation of Storm Water Discharges

At least once per quarter, the Permittee must visually observe the quality of the storm water discharges from the “high priority” facilities (unless climate conditions preclude doing so, in which case the Permittee must attempt to evaluate the discharges four times during the wet season). Any observed problems (e.g., color, foam, sheen, turbidity) that can be associated with pollutant sources or controls must be remedied to prevent discharge to the storm drain system. Visual observations must be documented and records kept with SWMP document. This inspection must be done in accordance with the developed SOPs. The inspection report must also include any identified deficiencies and corrective actions taken to remedy the deficiencies.

The Engineering Division Storm Water Inspector will visually observe the quality of storm water discharges from “high priority” facilities. Any observed problems such as color, foam, sheen, or turbidity that can be associated with pollutant sources or controls will be remedied to prevent discharge to the storm drain system. Remedies that will require modification to structural controls will be presented to the Public Works Department for approval where temporary remedies will be implemented during that period of time. Visual observations will be documented and records kept with the SWMP document.

SOPs for the inspection are as follows:

- Locate monitoring discharge point
- Collect sample in a glass container
- Document with pictures: water sample, runoff flow patterns, observed sheen flows, etc
- Identify deficiencies and report to the parties responsible for the deficiencies
- Responsible party will then report back to the Storm Water Inspector the corrective actions taken
- Storm Water Inspector conducts a follow up inspection to verify correction and finish report

Start Date	Due Date	Frequency	Task	Responsible Party
July 2014	NA	Quarterly	Wet weather inspection of runoff from high priority sites	Storm Water Inspector

Year	Measurable Goal Action Summary:	Document number of inspections conducted
2014		
2015		
2016		
2017		
2018		

4.2.6.7 Flood Management Controls Design

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. This process must 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 must be included in the SWMP document

The Engineering Division will 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 discharges to the MS4. The process will include consideration of controls that can be used to minimize impacts to site water quality and hydrology while still meeting project objectives. Description of this process is as follows:

- Developer submits proposed flood management structural control method
- Developer submits technical literature from manufacturer of selected pre-treatment control listing the pollutant removal capabilities of said pre-treatment control
- Engineering Division reviews submitted technical literature and determines if the selected control's pollutant removal capabilities are acceptable

4.2.6.7.1 Existing Flood Management

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 and determinations should be included in the SWMP document.

Existing flood management structural controls will be assessed by the Engineering Division to determine whether changes or additions should be made to improve water quality. General standards pertaining to Flood Hazard Reductions are addressed in Utah County Land Use Ordinances.

4.2.6.8 Public Construction Projects

Public construction projects shall comply with the requirements applied to private projects. All construction 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, owned or operated by the Permittee are required to be covered under the General UPDES Permit for Storm Water Discharges Associated with Construction Activities. All public projects approved after the effective date of this Permit shall include construction and post-construction controls selected and implemented pursuant to the requirements in Parts 4.2.4 and 4.2.5.

Public construction projects shall comply with the requirements applied to private projects. All construction 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, owned or operated by the Permittee are required to be covered under the General UPDES Permit for Storm Water Discharges Associated with Construction Activities. All public projects approved after the effective date of this Permit shall include construction and post-construction controls selected and implemented pursuant to the requirements in Sections 4.2.4 and 4.2.5.

4.2.6.9 Personnel Training

Permittees shall provide training for all employees who have primary construction, operation, or maintenance job functions that are likely to impact storm water quality. The Permittee shall identify target employees to participate in the training sessions. Training shall address the importance of protecting water quality, the requirements of this Permit, operation and maintenance requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, SOPs for the various Permittee-owned or operated facilities and procedures for reporting water quality concerns, including potential illicit discharges. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing.

More specific information pertaining to employee training can be found in 4.2.1 of this document.

Appendix A

Notice of Intent

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY
 195 North 1950 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870 (801)536-4300

Notice of Intent (NOI) for Coverage Under the UPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4's), Permit No. UTR090000.



INSTRUCTIONS ON BACK PAGE

DWQ USE ONLY

Coverage No. _____

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a UPDES permit issued for storm water discharges from Small Municipal Separate Storm Sewers in the State of Utah. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

Part I. General Information

Governmental Entity Name: UTAH COUNTY

Mailing Address: Street 12855 SOUTH STATE STREET

City PROVO State UT Zip Code 84606-1111

Operator Type (Circle One): (City, County, Hospital, Prison, Military Base, Park, College/University, UDOT, Sewer District, Flood Control District, Drainage District, Association, Other(list) COUNTY)

Operator Status (Circle One): (Federal/State Local Other Public Entity(list) LOCAL)

Operator Contact Person: Name GLEN TANNER

Title SENIOR ENGINEER TECHNICIAN Telephone Number 801-851-8600

Latitude/Longitude at Center of land for which you are requesting authorization to discharge:

Latitude 40.198208 Longitude -111.616932

Population served by your MS4: 110009 People

Storm Water Management Program Responsible Person:

Name RICARD NIELSON Title PUBLIC WORKS DIRECTOR

Telephone Number 801-851-8600

Part II: Outfalls and Receiving Waters

Receiving Waters: List all separate storm water outfall receiving waters (all discharges to waters under the definition of waters of the State). If all receiving waters are not known at the time of the NOI submittal, list known outfalls and update the list on annual reports. (ATTACH ADDITIONAL SHEETS AS NEEDED)

	Outfall	Receiving Water
1.	Map Pending Year 1	
2.		
3.		
4.		
5.		
6.		

Part III. Initial Identification of Best Management Practices (ATTACH ADDITIONAL SHEETS AS NEEDED)

1. Public Education and Outreach on Storm Water Impacts

Outreach Techniques	Management Practices to Encourage
<input checked="" type="checkbox"/> Classroom education/school programs <input checked="" type="checkbox"/> Outreach to commercial entities <input checked="" type="checkbox"/> Printed material <input type="checkbox"/> Media campaign <input checked="" type="checkbox"/> Classroom educational materials <input checked="" type="checkbox"/> Events and Programs <input checked="" type="checkbox"/> Displays <input type="checkbox"/> Speakers to community groups <input type="checkbox"/> Economic incentives <input type="checkbox"/> Promotional giveaways <input type="checkbox"/> Others	<input checked="" type="checkbox"/> Proper lawn and garden care (fertilizer and pesticide use, sweeping, etc.) <input checked="" type="checkbox"/> Low impact development <input checked="" type="checkbox"/> Pet waste management <input checked="" type="checkbox"/> Pollution prevention for businesses <input checked="" type="checkbox"/> Proper disposal of household hazardous wastes <input checked="" type="checkbox"/> Water Conservation Practices <input checked="" type="checkbox"/> Others <u>Hazardous Waste Disposal</u>

2. Public Involvement/Participation

Involvement Techniques	Participation Activities
<input checked="" type="checkbox"/> Advisory/partner committees <input checked="" type="checkbox"/> Local storm water contact <input checked="" type="checkbox"/> Public access to documents and information <input checked="" type="checkbox"/> Public review of plans and annual reports <input type="checkbox"/> Watershed organizations <input checked="" type="checkbox"/> Attitude surveys <input checked="" type="checkbox"/> Community hot lines <input checked="" type="checkbox"/> Stakeholder meetings <input type="checkbox"/> Others	<input type="checkbox"/> Adopt-a-stream <input type="checkbox"/> Storm drain stenciling <input type="checkbox"/> Stream/roadway cleanup <input type="checkbox"/> Volunteer monitoring <input type="checkbox"/> Wetland plantings <input type="checkbox"/> Others

3. Illicit Discharge Detection and Elimination

Detection and Elimination Activities	Type of Discharges to Target
<input checked="" type="checkbox"/> System mapping <input checked="" type="checkbox"/> Regulatory Control Program <input checked="" type="checkbox"/> Identifying and Eliminating illicit connection procedures <input type="checkbox"/> Dye testing/Tracing Procedures <input checked="" type="checkbox"/> System inspections <input checked="" type="checkbox"/> Dry Weather Screening Program/ Field Testing <input type="checkbox"/> Others	<input type="checkbox"/> Failing septic systems <input checked="" type="checkbox"/> Illegal dumping <input type="checkbox"/> Industrial/business connections <input type="checkbox"/> Recreational sewage <input type="checkbox"/> Sanitary sewer overflows <input type="checkbox"/> Wastewater connections to the storm drain system <input type="checkbox"/> Others

4. Construction Site Storm Water Runoff Control

Program Activities	Best Management Practices
<input checked="" type="checkbox"/> Regulatory Control Program <input checked="" type="checkbox"/> Erosion and Sediment Control BMP's <input type="checkbox"/> Other Waste Control Program <input checked="" type="checkbox"/> Site Plan Review Procedures <input checked="" type="checkbox"/> Public Information handling Procedures <input checked="" type="checkbox"/> Site Inspection/Enforcement Procedures <input type="checkbox"/> Other Construction Site Runoff Controls <input checked="" type="checkbox"/> Contractor certification and inspector training <input type="checkbox"/> Others	<input checked="" type="checkbox"/> Construction Entrance/Exit Stabilization <input checked="" type="checkbox"/> Perimeter Controls <input checked="" type="checkbox"/> Sediment Retention Structure Requirements <input checked="" type="checkbox"/> Sediment filters and sediment chambers <input type="checkbox"/> Mulching Requirements <input checked="" type="checkbox"/> Temporary/Permanent Stabilization Requirements <input checked="" type="checkbox"/> Vehicle maintenance and washing areas <input checked="" type="checkbox"/> Cement Truck Washout Area <input type="checkbox"/> OtherBMP's

5. Post-Construction Storm Water Management in New Development and Redevelopment

<input checked="" type="checkbox"/> Community Control Strategy <input checked="" type="checkbox"/> Regulatory Control Program <input checked="" type="checkbox"/> Long Term O & M Procedures <input checked="" type="checkbox"/> Pre-Construction Review of BMP Designs <input checked="" type="checkbox"/> Site Inspections During Construction <input checked="" type="checkbox"/> Post Construction Inspections <input type="checkbox"/> Others	<input type="checkbox"/> Infiltration trench/basin <input type="checkbox"/> Infrastructure planning <input checked="" type="checkbox"/> storm water inlet specifications <input type="checkbox"/> Narrower residential streets <input type="checkbox"/> Open space design <input checked="" type="checkbox"/> Ordinances for post construction runoff <input type="checkbox"/> Storm water wetland <input type="checkbox"/> Zoning <input type="checkbox"/> Others:
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6. Pollution Prevention/Good Housekeeping for Municipal Operations

<input checked="" type="checkbox"/> Employee Training Program <input checked="" type="checkbox"/> Inspection and Maintenance Program <input checked="" type="checkbox"/> Municipal Operations Storm Water Control <input type="checkbox"/> Others	<input checked="" type="checkbox"/> Municipal Operations Waste Disposal <input checked="" type="checkbox"/> Flood Management/Assessment Guidelines <input type="checkbox"/> Others:
--	--

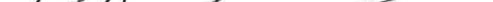
Part IV. Initial Identification of Measurable Goals (Attach additional sheets as needed)

<p>1. Public Education and Outreach on Storm Water Impacts</p> <p>Measurable goals (with start and end dates): Utah Coalition Involvement (Now-Indefinite) Business Outreach (Sept. 2014-Indefinite) Developer Outreach (Sept. 2014-Indefinite) Employee Training (Dec. 2014-Indefinite) </p>	<p>4. Construction Site Storm Water Runoff Control</p> <p>Measurable goals (with start and end dates): Constr. Ordinance Updates (Apr. 2014-Dec. 2014) Constr. SOP (Feb. 2014-Jun. 2014) Constr. SWPPP Review (Jan. 2015-Indefinite) Constr. SWPPP Inspection (Apr. 2015-Indefinite) </p>
<p>Milestones: Year 1: Program Start Year 2: Year 3: Year 4: Year 5:</p>	<p>Milestones: Year 1: Program Start Year 2: Construction Inspections Year 3: Year 4: Year 5:</p>
<p>2. Public Involvement/Participation</p> <p>Measurable goals (with start and end dates): Plan Availability (Mar. 2014-Indefinite) Annual Report Revision (Aug. 2014-Indefinite) Comment Opportunities (Mar. 2014-Indefinite) </p>	<p>5. Post-Construction Storm Water Management in New Development and Redevelopment</p> <p>Measurable goals (with start and end dates): Design Manual (Feb. 2016-Jun. 2016) Post Constr. Ordinance (Mar. 2014-Dec. 2015) Post Constr. SOP (Aug. 2015-Jan. 2016) Post Constr. Inspection (Mar. 2016-Indefinite) Contr. Modification Identification (July 2018)</p>
<p>Milestones: Year 1: Program Start Year 2: Year 3: Year 4: Year 5:</p>	<p>Milestones: Year 1: Program Start Year 2: Development of Ordinance and SOP Year 3: Construction Inspections Year 4: Year 5: Constr. Modification Identification</p>
<p>3. Illicit Discharge Detection and Elimination</p> <p>Measurable goals (with start and end dates): Inventory Mapping (Mar. 2014-Indefinite) IDDE Ordinance (Mar. 2014 - Aug. 2014) IDDE SOP (Jun. 2014-Dec. 2014) IDDE Inspections (Jan. 2015-Indefinite) </p>	<p>6. Pollution Prevention/Good Housekeeping for Municipal Operations</p> <p>Measurable goals (with start and end dates): SWPPP Plans for Facilities (Mar. 2014-Indefinite) SOPs for Divisions (April 2014-Indefinite) Facility Inspections (July 2014-Indefinite) Review High Risk Facilities (Jan. 2015-Indefinite)</p>
<p>Milestones: Year 1: Program Start Year 2: IDDE Inspections Year 3: Year 4: Year 5:</p>	<p>Milestones: Year 1: Program Start Year 2: Year 3: Year 4: Year 5:</p>

Part V. Certification

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

Print Name: GARY ST ANDREWS

Signature: 

Date: 10/21/14

**Part VI: Contract Certification for Co-Permittee SWMP Implementation
(ATTACH ADDITIONAL SHEETS AS NEEDED)**

List entity names responsible for implementation of the SWMP

1. PUBLIC WORKS 11111111111111111111
2. 11111111111111111111
3. 11111111111111111111
4. 11111111111111111111
5. 11111111111111111111
6. 11111111111111111111

The above entities have entered into an agreement or contract to satisfy the implementation requirements of the Storm Water Management Program listed in the NOI. As stated in the existing agreements (MOU's) or contracts, the entities have agreed to the following responsibilities.

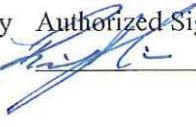
Circle the entity numbers (entity numbers correspond to entity name numbers listed above) corresponding with responsibilities, or portions thereof, of each entity entering into this agreement in the table below:

<u>RESPONSIBILITY</u>	<u>ENTITY</u>					
a. Public Education and Outreach	<input type="radio"/>	2.	3.	4.	5.	6.
b. Public Involvement and Participation	<input type="radio"/>	2.	3.	4.	5.	6.
c. Illicit Discharge Detection and Elimination	<input type="radio"/>	2.	3.	4.	5.	6.
d. Construction Site Run-off Control	<input type="radio"/>	2.	3.	4.	5.	6.
e. Post-Construction Storm Water Management in New Development and Redevelopment	<input type="radio"/>	2.	3.	4.	5.	6.
f. Pollution Prevention/Good Housekeeping for Municipal Operations	<input type="radio"/>	2.	3.	4.	5.	6.

If any entity is agreeing to accomplish only a portion of a responsibility in the table then explain the responsibility portion (e.g. entity 1 is responsible for storm drain stenciling program in the MS4 area, entity 2 is responsible for conducting phone surveys for item (a) in the table etc.) on a separate sheet.

The following statement and the accompanying signatures serve as certification that the agreements (MOU's) or contracts have been developed and agreed upon for the implementation of the Operator's (Identified in Part I of the NOI) SWMP.

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

Entity	Authorized Signature	Date	Entity	Authorized Signature	Date
1.		<u>10/20/14</u>	2.		<u>1111111</u>
3.		<u>1111111</u>	4.		<u>1111111</u>
5.		<u>1111111</u>	6.		<u>1111111</u>

Instructions for Completing the Notice of Intent for Coverage Under a UPDES General Permit for Storm Water Discharges From SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Permit No. UTR090000

Who Must File a Notice of Intent?

If you are an operator of a regulated small MS4 designated for permitting, you must apply for coverage under a UPDES permit, or apply for a modification of an existing UPDES permit. If you have questions about whether you need a permit under the UPDES Storm Water Program, contact the Utah Division of Water Quality. The NOI must be submitted in accordance with the deadlines established in Part 2.A. of the UPDES MS4 General Permit.

When to File the NOI Form

DO NOT FILE THE NOI UNTIL YOU HAVE READ A COPY OF THE SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM GENERAL PERMIT. You will need to determine your eligibility, prepare your storm water management plan, and correctly answer all questions on the NOI form, all of which must be done before you can sign the certification statement on the NOI in good faith (and without risk of committing perjury).

Where to File the NOI Form

NOIs must be sent to the following address:

Department of Environmental Quality
Division of Water Quality
P.O. Box 144870
Salt Lake City, UT 84114-4870

Completing the NOI Form

Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to the address above. Attach additional pages as needed for detailed explanations of items on the form.

Part I. MS4 General Information

Provide the legal name of the person, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or other legal entity that operates the MS4 described in this application. The responsible party is the legal entity that controls the MS4's operation. Provide the telephone number of the MS4 operator. Provide the mailing address of the MS4 operator. Include the street address or P.O. box, city, state, and zip code. All correspondence regarding the permit will be sent to this address, not the MS4 address in Section B.

Enter the official or legal name of the MS4.

Enter the city or cities, county or counties, and state in which the MS4 is located. Enter the latitude and longitude of the approximate center of the MS4 in degrees/minutes/seconds. Latitude and longitude can be obtained from U.S. Geological Survey (USGS) quadrangle or topographic maps or by using a GPS unit, calling 1-(888) ASK-USGS, searching for your Facility's address on several commercial map sites on the Internet, or searching the U.S. Census Bureau database at <http://www.census.gov/cgi-bin/gazetteer>. Additionally, estimate the acreage of land area that drains to the MS4. This estimate can be made using topographic maps or topographic data in a geographic information system.

Indicate the legal status of the MS4 operator as a Federal, State, private, or other public entity (other than Federal or State). This refers only to the operator, not the owner of the land on which the MS4 is located.

Indicate whether the MS4 discharges storm water into one or more receiving water(s). Enter the name(s) of the receiving water(s).

Indicate whether the MS4 discharges storm water into one or more receiving water(s). Enter the name(s) of the receiving water(s).

Part II. Outfalls and Receiving Waters

Indicate all major outfalls (by outfall description) and the receiving water body for each outfall. Indicate whether any of the receiving water bodies are included on the 303(d) list for water quality impairments.

Part III. Initial Identification of Management Practices

Check the management practices that you have selected to meet each of the minimum measures. If a selected practice is not on the list, check "Other" and write the name of the practice in the space provided.

Part IV. Identification of Initial Measurable Goals

List the person(s) responsible for implementing or coordinating the storm water management program. Provide a narrative description of the measurable goals that will be used for each of the storm water minimum control measures. Indicate the month and year in which you will start and fully implement each of the minimum control measures, or indicate the frequency of the action in the description. Attach additional pages as necessary.

Part V. Certification

Certification statement and signature. (CAUTION: An unsigned or undated NOI form will prevent the granting of permit coverage.) State statutes provide for severe penalties for submitting false information on this application form. State regulations require this application to be signed by either a principal executive or ranking elected official as described in Part VI.H. of the Small MS4 General Permit.

Part VI. Contract Certification for Co-Permittee SWMP Implementation

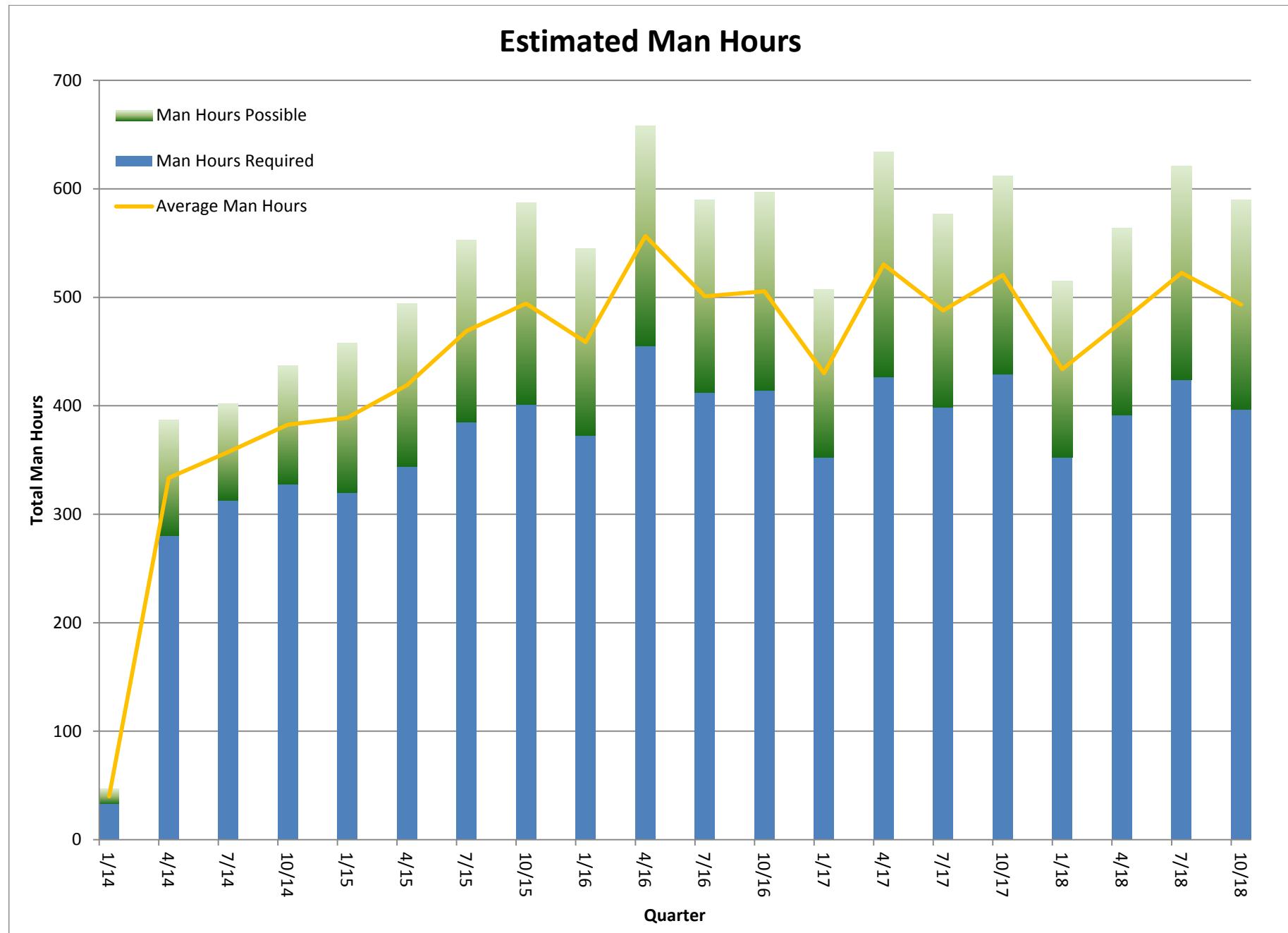
Contract certification is required when more than one entity will be implementing the SWMP for the operator filing the NOI. The form must be completely filled out to clearly identify all coordinating agencies. Additional pages shall be used as necessary to define the responsibilities for each entity in preparation and implementation of the SWMP. The form must be signed by all coordinating entities, certifying that local agreements and/or contracts have been developed and agreed upon.

Appendix B

Implementation Schedule

Appendix C

Estimated Staffing Requirements



Estimated Man Hours Per Quarter

		1/1/2014	4/1/2014	7/1/2014	10/1/2014	1/1/2015	4/1/2015	7/1/2015	10/1/2015	1/1/2016	4/1/2016	7/1/2016	10/1/2016	1/1/2017	4/1/2017	7/1/2017	10/1/2017	1/1/2018	4/1/2018	7/1/2018	10/1/2018
All People	Minimum	33	280	313	328	320	344	385	401	373	455	412	414	353	427	399	429	353	392	424	397
	Maximum	47	387	402	437	458	494	553	588	545	658	590	597	508	634	577	612	515	564	621	590
	Difference	14	107	89	109	138	150	168	187	173	203	178	183	155	208	178	183	163	173	198	194
	Average	40	334	358	383	389	419	469	494	459	557	501	506	430	530	488	521	434	478	523	493
Engineering Division	Minimum	9	137	200	214	107	87	47	85	57	87	47	45	42	77	47	45	42	67	77	60
	Average	12	167.5	228.5	252.5	122.5	102.5	55	104	67.5	105	55	54	48.5	97.5	55	54	48.5	80	90	76.5
	Maximum	15	198	257	291	138	118	63	123	78	123	63	63	55	118	63	63	55	93	103	93
Storm Water Inspector	Minimum	0	0	2	2	52	132	227	157	144.5	228.25	239	197	144.5	209.5	225.75	212	144.5	194.5	210.75	174.5
	Average	0	0	3	3	78	173	288	204.25	191.75	290.5	302.5	250.5	188	271.75	289.25	265.5	191.75	249.25	278	226.75
	Maximum	0	0	4	4	104	214	349	251.5	239	352.75	366	304	231.5	334	352.75	319	239	304	345.25	279
GIS/Mapping Division	Minimum	15	45	47	47	97	47	47	51	102	62	62	64	102	62	62	64	102	62	62	64
	Average	17	51	53.5	53.5	116	53.5	53.5	58.5	121	71	71	73.5	121	71	71	73.5	121	71	71	73.5
	Maximum	19	57	60	60	135	60	60	66	140	80	80	83	140	80	80	83	140	80	80	83
Storm Water Coordinator	Minimum	9	98	64	65	64	78	64	108	69	78	64	108	64	78	64	108	64	68	74	98
	Average	11	115	72.5	73.5	72.5	90	72.5	127.5	78.5	90	72.5	127.5	72.5	90	72.5	127.5	72.5	77.5	83.5	116.5
	Maximum	13	132	81	82	81	102	81	147	88	102	81	147	81	102	81	147	81	87	93	135
Admin Staff	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Average	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Average	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Average	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Stats	Minimum	954				1450				1654				1607				1564			
	Maximum	1273				2093				2390				2330				2290			
	Difference	319				643				736				724				726			
	Average	1114				1771				2022				1969				1927			