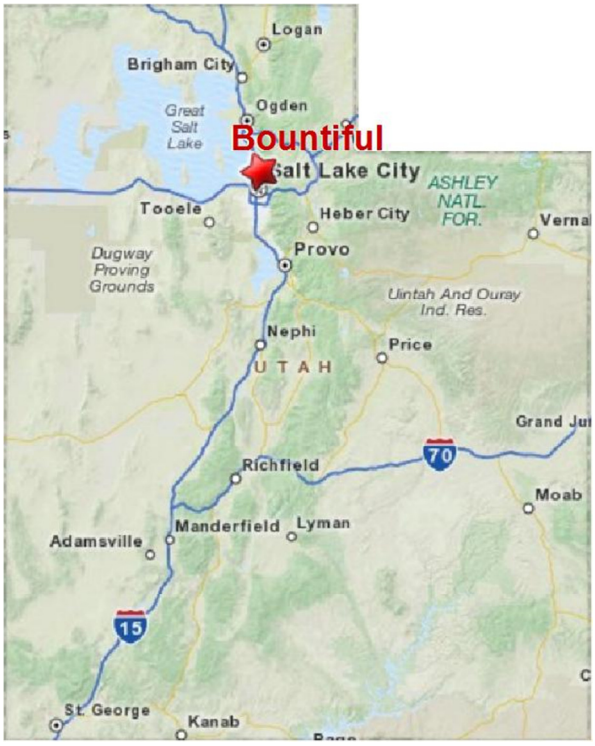
STORM WATER MANAGEMENT PROGRAM
for
BOUNTIFUL CITY



Bountiful City Engineering Dept.
790 South 100 East
Bountiful, Utah 84010

November, 2010
Last Updated December, 2018

BOUNTIFUL CITY

STORM WATER MANAGEMENT PROGRAM

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GLOSSARY

BMP	Best Management Practice
CPD	Common Plan of Development
DC	Davis County
DCSWC	Davis County Storm Water Coalition
DEQ	Department of Environmental Quality
DWQ	Division of Water Quality
EMC	Event Mean Concentrations
EPA	Environmental Protection Agency
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NOI	Notice Of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
PHF	Pesticides, Herbicides, and Fertilizer
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
UPDES	Utah Pollutant Discharge Elimination System
UAC	Utah Administrative Code
UDOT	Utah Department of Transportation
USC	United States Code

SECTION 1 – OVERVIEW

1.1 PURPOSE

This Storm Water Management Program (SWMP) will be implemented to limit, to the maximum extent practicable (MEP), the discharge of pollutants from the Bountiful City municipal storm sewer system to the waters of the State of Utah. The development and implementation of this SWMP is intended to fulfill requirements under the State UPDES Authorization to discharge Municipal Storm Water, in compliance with provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 2004, as amended (the "Act").

1.2 PROGRAM ELEMENTS

The Bountiful City Phase II storm water program will implement and enforce a storm water management program designed to reduce discharge of pollutants from the municipal separate storm sewer system to the "maximum extent practicable" to protect water quality. Six "minimum control measures" as listed below, are required under Phase II regulations:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Pollution Prevention/Good Housekeeping
5. Construction Site Runoff Control
6. Post-Construction Runoff Control

In addition, specific goals and best management practices (BMPs) for each minimum control measure are included in Bountiful City's SWMP.

1.3 OVERALL ENVIRONMENTAL CONCERNS

1.3.1 General

The overall program goal is to implement the storm water program according to the SWMP and permit requirements, including annual reviews each September. Annually reviewing the status of implementation for each program element (according to the goals) will provide a way to measure the effectiveness of the program in general.

Storm water runoff from Bountiful City is received by five creeks: Stone Creek, Barton Creek, Mill Creek, North Canyon Creek and Hooper Draw. Each of these creeks ultimately discharge to the Great Salt Lake. None of the portions of these streams receiving the city's storm water discharge are listed a "high quality" (per UAC R317-2-12 and R317-2-13.7B) or have TMDLs

(per CWA 303d list of approved TMDLs on DWQ website) but some are shown as impaired on the Utah Final 2016 Integrated Report:

- Mill Creek for TDS, and Dissolved Copper
- Stone Creek for Temperature, Dissolved Copper, pH, and e. coli

Oversight and maintenance of these streams fall under the jurisdiction of the Davis County Public Works Department. The Davis County Health Department, in cooperation with the Weber Basin Water Quality Laboratory perform baseline monitoring. Monitoring occurred on a quarterly schedule at four locations in Bountiful until 2016. These locations are: Lower Millcreek, Upper Millcreek, Lower Stone Creek and Upper Stone Creek. Davis County has archived the sampling results for TDS, TSS, turbidity, TOC, Nitrate-Nitrate, Dissolved Orthophosphate and Total Phosphorus. This information may be used to assist in determining water quality trends or checking for problems (not to measure the effectiveness of the program).

1.4 LEGAL AUTHORITY

Federal

In 1972, Congress enacted the first comprehensive national clean water legislation (Clean Water Act - 33 U.S.C. Chapter 26) in response to growing public concern for serious and widespread water pollution. The Clean Water Act is the primary federal law that protects our nation's waters including lakes, rivers, aquifers and coastal areas. The Clean Water Act provides the backbone for the national approach to water quality policy and action. The objective of this federal law is the total elimination of the discharge of pollutants into the nation's navigable waters and to restore and maintain the integrity of the nation's waters.

The storm water from Bountiful City is eventually received into the Great Salt Lake, a Water of the United States. Furthermore, Bountiful City has been designated as a Small Municipal Separate Storm Sewer System (MS4) as defined in 40 CFR 122. Small MS4s are subject to the permitting process of the Clean Water Act's National Pollutant Discharge Elimination System (NPDES).

State

The State of Utah Department of Environmental Quality is responsible to oversee the EPA NPDES Phase I and Phase II storm water regulations and issue Utah Pollutant Discharge Elimination System (UPDES) permits in the State of Utah. The Utah Administrative Code Title R317 – Environmental Quality, Water Quality sets forth the requirements and procedures needed for compliance with state law. Utah Code Title R317-8-3.9 specifically lists the requirements for municipalities to obtain a UPDES permit from the State of Utah. The program's main objective is to minimize pollution of waterways in urban areas. In Utah, Waters of the State include the streams that run through Bountiful and the groundwater.

City

The initial application deadline for Bountiful City, as a Phase II municipality, to submit a Notice of Intent to discharge storm water to Waters of the State, was March 1, 2016. The Phase II permit required the community to prepare a SWMP which summarized the Best Management Practices (BMPs) to be implemented in the aforementioned six minimum control measures to fulfill the goal of reducing or eliminating pollution from storm water.

The UPDES permit is issued in compliance with the provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 1953, as amended. A renewal permit was issued to Bountiful that became effective August 1, 2010. The renewal permit has many requirements that differ from the initial permit requirements. This SWMP is intended to meet the requirements of the current MS4 permit for Bountiful City.

Under Section 10-8-38 of the Utah Code the City Council is empowered to construct, reconstruct, maintain and operate culverts, drains, and all systems necessary to the proper drainage requirements of the city and to regulate the use and construction thereof.

Under Section 10-8-84 of the Utah Code the City Council is empowered to pass all ordinances and rules, and make all regulations, as are necessary and proper to provide for the safety and preserve the health, and promote the prosperity, improve the morals, peace and good order, comfort and convenience of city and its inhabitants.

Bountiful City has adopted a Storm water Management Ordinance (Title 6 Chapter 15 of the Bountiful Ctiy Code) giving the city legal authority to enforce its provisions set forth therein. The intent of this ordinance is to protect receiving waters from pollution and to comply with mandated storm water regulations. Other city ordinances which also apply to this program are Criminal Code - Littering (10-1-107), Public Works and Property – Building Materials in the Street (6-2-106), Public Works and Property – Obstructions (6-2-107), and Public Works and Property – Sand, Gravel, Lime and Cement (6-2-113).

<u>County</u>

The Davis County Public Works Department is responsible for flood control and maintenance of designated creeks and channels that traverse from the Wasatch mountains to the Great Salt Lake within the County limits. Davis County Ordinances 01-87 and 02-98 set forth the policy and procedures used by the County to provide this service. Five of these channels traverse Bountiful City. Permit coverage under the UPDES program authorizes Bountiful City to discharge storm water to these streams and to administer the storm water control program within the City.

1.5 SWMP COORDINATION

1.5.1 Bountiful City.

Contact:	Todd Christensen	Environmental Engineer, Program Manager Phone: (801) 298-6125
	Lloyd Cheney	Public Works Director, City Engineer

	Phone: (801) 298-6125
Gary Blowers	Streets & Storm Water Dept. Manager Phone (801) 298-6175
Charles Benson	Storm Water System Supervisor Phone (801) 298-6175
Tracy Hatch	Water Maintenance Supervisor Phone: (801) 298-6180)
C.J. Goodwin	Water Operator Phone (801) 298-6180
Brock Hill	Parks Director Phone: (801) 298-6178

Explanation of Responsibilities for Implementing the Bountiful City SWMP

Public Works Director, City Engineer

- Works with elected officials and city management
- Decides priorities for the storm water management program
- Ensures that major storm water program components such as ordinance updates, major
- Storm water Management Program updates and fee changes are taken to public meetings and adequate Public Notice is given
- Develops long-term storm water management standards

Assistant City Engineer: Lloyd Cheney

- Assists City Engineer working with elected officials and city management
- Assists City Engineer with developing long-term storm water management standards
- Prepares contracts with obligations for complying with Bountiful's pollution prevention procedures

Environmental Engineer, Storm Water Program Manager

- Coordinates the overall implementation of storm water management program
- Prepares Annual Reports
- Reviews and prepares updates for Bountiful's Storm Water Management Program
- Oversees distribution of information and training for residents, businesses, contractors, and MS4 staff about pollution prevention, reporting spills, and reporting illicit discharges
- Coordinates the writing and implementation of standard operating procedures for
- Storm water pollution prevention for city facilities and operations
- Prepares and submits storm water management program information to be posted on City's website
- Coordinates illicit discharge prohibition and enforcement, working with Davis County Health Dept.
- Coordinates Mapping of storm drain system, receiving waters, and outfalls
- Performs outfall screening

- Performs storm water pollution prevention plan reviews for sites disturbing one acre or more
- Inspects construction sites for storm water pollution prevention and initiates enforcement measures
- Coordinates the execution of agreements for maintenance of long-term storm water controls
- Prepares Storm Water Pollution Prevention Plans for MS4 industrial facilities
- Inventories city-owned long-term controls

Streets & Storm Water Department Manager
- Provides and coordinates the city's Household Hazardous Waste collection & disposal events
- Provides oversight for pollution prevention at municipal maintenance and storage yard and general streets maintenance

Storm Water Supervisor and Storm Water Operator
- Coordinates video-inspection of storm water pipes
- Inspects city-owned long term storm water controls
- Coordinates maintenance on the storm water collection system including inlet box cleaning, pipe cleaning, separator cleaning, and street/parking lot sweeping
- Performs and supervises inspections and visual storm water monitoring for city's maintenance and storage yard (streets/parks areas)
- Performs and supervises corrective action from findings of maintenance and storage yard inspections and visual monitoring (streets/parks areas)

Water Maintenance Supervisor
- Oversees and supervises pollution prevention procedures on water system maintenance projects

Water Operator: C.J. Goodwin
- Perform Inspections and visual monitoring for city maintenance and storage yard (water areas)
- Performs or coordinates corrective action from findings of maintenance and storage yard inspections and visual monitoring (water areas)

Parks Director: Brock Hill
- Oversees and supervises pollution prevention procedures for city parks and golf course

1.5.2 Davis County Storm Water Coalition.

The Davis County Storm Water Coalition (DCSWC) consists of representatives from 15 cities and Davis County, whose purpose is to minimize pollutants entering the storm drains and receiving water bodies, to comply with storm water regulations, and to receive input from stakeholders. Representatives from other entities such as Hill Air Force Base, consultants, vendors, and contractors are also invited to participate. The coalition meets regularly, and plans to continue regular meetings during the coming years to discuss storm water issues and coordinate activities.

The Coalition member entities initially entered into an interlocal agreement to jointly implement a portion of the SWMP in 2002. Coalition members have continued to perform coalition activities, and have committed to continue conducting and supporting ongoing Coalition activities. As a member of the Davis County Storm Water Coalition, Bountiful City will continue to work with other MS4s in Davis County for Coalition purposes. It is anticipated that the entities will jointly perform the following responsibilities:

1) Jointly purchase educational and training materials, as determined by the Coalition, for distribution to:
    a) Residents
    b) Institutions, industrial and commercial facilities
    c) Developers and contractors (construction)
    d) Municipal Separate Storm Sewer System (MS4) owned or operated facilities
2) Use the Coalition as a county-wide committee to:
    a) Train personnel
    b) Create partnerships
    c) Obtain input and feedback from special interest groups
3) Annually contribute updated storm drain system information for county-wide mapping purposes
4) Jointly prepare and promote a model ordinances, updates, and standards that addresses:
    a) Illicit discharges
    b) Construction site storm water runoff
    c) Long-term storm water management
5) Jointly arrange for and provide education about hydrologic methods and criteria for selecting and sizing post-construction BMPs
6) Jointly participate to develop Standard Operating Procedures
7) Jointly evaluate, identify, target and provide educational materials and outreach to address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges

1.5.3 Davis County Health Department.

The Davis County Health Department assists with specific aspects of the Storm Water Management Program within their realm of jurisdiction as stated by a Resolution of the Davis County Board of Health. Said Resolution is attached and describes procedures for managing and enforcing illicit discharges throughout Davis County. The city coordinates investigation, reporting, removal/cleanup, and enforcement for illicit discharges with Davis County. The county also trains dispatch personnel on taking reports of illicit discharges.

1.6 SWMP REVIEW AND MODIFICATION

This SWMP will be reviewed on an annual basis. The review will include evaluating the status of program implementation. Appropriate modifications will be made to the SWMP, according to the procedures required in the permit. Comments from the public or other interested parties will be considered. Modifications to this SWMP will be logged in section 4.

SECTION 2 -- MINIMUM CONTROL MEASURES

2.1 PUBLIC EDUCATION AND OUTREACH PROGRAM

The Public Education and Outreach measure is intended to increase public and professional awareness of storm water quality concerns and Best Management Practices (BMPs) that may be implemented to prevent water pollution. Bountiful City will participate with The Davis County Storm Water Coalition (in cooperation with other entities in the County) to coordinate the Public Education and Outreach efforts County-wide.

2.1.1 Priorities

Priorities for this control measure were established in cooperation with the other entities participating with the Davis County Storm Water Coalition. Target pollutants with accompanying audiences have been identified by Coalition representatives. Activities (BMPs) were selected to reach out to these audiences, educating them about the pollutants and encouraging behavior that prevents pollution to receiving waters. Measurable goals were established. A summary of this information (including target pollutants, target audiences, activities, and measurable goals) is included in the Appendix D.

Bountiful City will supplement the activities of the coalition for this control measure. The City has identified three pollutant sources for added focus: construction/landscape materials, parking lots, and dumpsters. These are further described as follows:

<u>Construction/Landscape Materials</u>
This applies in particular to these materials that are being stored in the street without permission from the City. The target audience is owners and operators of construction projects, especially

those less than one acre. Also included as the target audience is owners and operators of landscape projects.

The approach in reaching this audience is multi-faceted. Annual storm water trainings for City departments will include instruction on identifying and reporting the materials being stored in the street, especially for those who are often driving around the city. Follow-up will be made through our SOP for enforcing construction-site requirements. The city's building and public works inspectors will also be trained to look for these problems when doing their inspections. And violations and enforcement actions will be logged. Finally, brochures on pollution prevention will periodically be mailed to landscape companies in the area.

Landscape/Yard Care Business Owners
This group is a priority target audience for nutrient reduction, and will be regularly mailed information about stormwater pollution prevention from yard care activities.

Parking Lots
The audience for this is owners of parking lots including those having commercial, multi-family, and religious use. There will be a widespread approach to reaching this audience by distributing educational information encouraging owners to regularly sweep parking lots in the city newsletter and on the city website.

Dumpsters
The audience for this is owners of large permanent dumpsters. This will apply to commercial, multi-family, and religious facilities. The message is to keep these dumpsters lidded or covered; the requirement to do so has been included in the City Code (14-14-111). The approach to this will be through the plan review process. The plan reviewer will note the need for covered or lidded dumpsters. The city will also follow up on any complaints received about uncovered permanent dumpsters.

2.1.2 BMP's

2.1.2.1 Participate In Davis County Storm Water Coalition

The following list briefly describes the activities that the Coalition has decided to implement to fulfill the responsibilities listed above in Section 1.5.1:

TV Advertising: Educate the general public and businesses about ways (and reasons) to prevent storm water pollution through means that may be easily implemented
Monthly Coalition Meetings: Provide inter-local and interest-holder communication about storm water management programs
4th Grade Lessons: Teach 4th graders the fundamentals of storm water, receiving waters, and ways to prevent pollution to storm water from households
Educational Materials: Work together to develop and purchase educational materials, pamphlets, and promotional give-away items to aid in the educational program

Water Fair: Help organize and sponsor the transportation for school children and their adult chaperones to a fun event that educates them about storm water pollution prevention and other environmentally friendly topics
Trainings: Host training events related to storm water permit requirements for contractors, MS4 employees, industrial facility operators, or other groups
Training of Coalition members: Provide training opportunities for coalition members to gain insight and information about storm water programs and challenges
County Drainage Map: Help facilitate the assembly of a county-wide map for the purpose of protecting receiving waters in responding to spills and illegal dumping
Spill Response Hotline: Advertise and support the use of a common number for spill reporting and response
Standard Operating Procedures: Work together to develop model operating procedures that the member entities may use to implement in their jurisdictions
SWAC Meeting Attendance: Represent the DCSWC at Utah Storm Water Advisory Committee Meetings
Interlocal Agreements: Allow the coalition to function legally, in explicit agreement with each other
Model Ordinance: Work together to create model ordinances and encourage the adoption of similar ordinances by Coalition members
Nutrient Reduction: Jointly evaluate, identify, target ad provide educational materials and outreach to address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges.

See Appendix D. for information about target pollutants, target audiences, activities, and measurable goals established by the coalition.

2.1.2.2 Publications

Bountiful City and the County Storm Water Coalition will coordinate the publication and distribution of storm water pollution prevention information. Businesses will also be targeted for the development and distribution of publications that will be given to them regarding industry-specific pollutants. To coordinate this BMP with the IDDE control measure, part of the content for residents and businesses will include information about the hazards associated with illegal discharges and improper waste disposal.

2.1.2.3 Development Information

Compile a packet or handbook to give to engineers, contractors, developers, planners, and staff for:

- Project review and permitting process
- Developing a SWPPP & construction site BMPs
- Criteria for "Priority" construction sites
- SWPPP review checklist
- LID/long-term storm water management principles and standards
- LID feasibility and selection
- Flood Control Requirements

- List of inspections required and inspection form
- Project completion/close-out procedures

2.1.2.4 Training

The training program is intended to include aspects of training that are required by this and the other control measures.

Employees will be trained on prohibitions against illicit discharges and water quality impacts. Generally, the training will be done separately by departments (some will be lumped together), so that the training can be customized to the job duties of those in each department. MS4 employees and contract staff whose job duties may impact storm water will be trained in pollution prevention (especially as related to performing job duties/procedures), permit requirements, water quality concerns. Training or review of the IDDE program (from identifying illicit discharges through reporting them) will be included in the department trainings annually.

For construction and post-construction requirements, staff involved in permitting, plan review, inspection, and enforcement will be trained. Each will be trained in implementing the new requirements as related to their job duties. These trainings will be done annually; newly hired employees will be trained immediately upon hire. Training records will be kept on file and will include dates, course agenda, names and positions of attendees.

Also, because Bountiful City relies on Davis County Health Department for a portion of our IDDE Program, we will make sure Health Department Personnel are trained on permit requirements and applicable SOPs.

2.1.2.5 Newsletter Articles

At least once per year, an article will be prepared for publication in the City newsletter. Articles will focus on reducing the pollution entering our streams. Directions will be given as to properly disposing of used oil, antifreeze and paints.

2.1.3 Measurable Goals

2016-2021 MEASUREABLE GOALS FOR PUBLIC EDUCATION AND OUTREACH

GOAL	SCHEDULE & Interim Milestones	LEAD PERSON
Pay fee to Coalition as assessed/invoiced	Annually, 60 days after invoice	Env. Engineer/Storm Water Dept. Manager
Renew and execute inter-local agreement for Coalition	Within 60 days after available	Env. Engineer, working with City Attorney
Distribute pamphlets created by DCSWC to the intended audience within Bountiful City	Annually by Sept. 1st of each year	Environmental Engineer
Develop nitrogen and phosphorus program		Environmental Engineer with Davis County Stormwater Coalition
Determine Potential Sources	2016	
Prioritize Sources and Develop Outreach Materials	2016	
Perform Outreach Measures	Jun. 2017	
Annual Outreach to Yard Care/Landscaping Business Owners	Annually of each year thereafter	
Complete revised Packet or Handbook for construction sites and post-const. controls	9/1/2017	Environmental Engineer
Decide feasibility conditions and restrictions on retention and infiltration	7/1/2016	Environmental Engineer
Decide which LID practices the City can support and prioritize them	7/1/2016	Environmental Engineer
Modify existing plan review process to include LID requirements (will require changing zoning ordinance)	9/1/2019	Public Works Director
Complete packet/handbook and incorporate SWPPP and floodplain development information	9/1/2019	Environmental Engineer
Conduct training of MS4 departments and contract staff with job functions that could impact storm water	Annually (by end of reporting year) & immediately upon hire	Environmental Engineer
Train County Health Dept. on permit requirements they need to understand for assisting with IDDE	10/1/2016	Environmental Engineer with Davis County Stromwater Coalition
Revise training program agendas and attendance forms to include requirements of 4.2.3.11 of permit	Annually (by end of reporting year)	Environmental Engineer
Prepare newspaper articles for publication in city newsletters.	2016 – 2021 Annually	Environmental Engineer
Include information about preventing pollution by sweeping parking lots using the city website or a newsletter article	2016	Environmental Engineer

2016-2021 DCSWC BMPs and GOALS FOR PUBLIC EDUCATION AND OUTREACH

COALITION ACTIVITY	MEASURABLE GOAL
TV Advertising	Pay annual portion of cost to S.L. County
Monthly Coalition Meetings	Hold 10 meetings annually
4th Grade Lessons	Teach all public 4th grade classes in county annually
Produce Education Materials	Develop one pamphlet annually
Purchase Education Materials	• Have pamphlets printed for distribution by each coalition member • Purchase enough booklets and balls for 4th grade classes • Purchase stickers (fueling caution), pencils, and magnets to have continually available
Water Fair	Hold one event annually
Trainings	• Hold one training annually • Provide training opportunity for one person from each member-entity to APWA conf., StormCON, or UFSMA
County Drainage Map	Request updates annually
Spill Report Hotline	Get reports semi-annually
Standard Operating Procedures	Review and update annually
SWAC meeting Representation	Have 1 voting member and 1 alternate assigned and represent coalition at 90% of monthly meetings
Interlocal Agreement	Execute once per permit cycle

2.1.4 Decision Process

For this control measure, the fundamental responsibility is to educate the community about the impacts of storm water discharges, and the steps they can take to reduce pollutants in storm water. The specific requirements are to be met with BMPs through a multi-media approach.

How BMPs and measurable goals were selected:
BMPs were selected to meet the purpose and responsibility for this control measure. For BMPs that are implemented through the Davis County Storm water Coalition, Bountiful has taken an active part in providing input and working together with others MS4 entities to decide on practices and ways to implement them. Attention has been given to use a mulit-media approach and target four audiences: 1) Residents, 2) Businesses/Commercial, 3) Developers/Contractors, and 4) Municipal Employees. The goals for the BMPs were set in a way that would allow us to make a quantification of the progress, or fulfillment, for each goal.

This control measure was re-organized in the revised SWMP for the 2010 renewal permit term. The overall objective is modified to educate and influence behavior for pollution-prevention. The activities that the DCSWC plans to perform, along with the measurable goals that the coalition established, were separated from activities that the City would primarily be responsible for. The

targeted pollutants, pollutant sources, and method for evaluating success have been revised as follows:

- *Targeted pollutants and pollutant sources: per the DCSWC targets (see appendices), supplemented by those established by Bountiful (material/debris in street, business dumpsters, and sweeping of parking lots) – see below*
- *Method for evaluating success: will also be done by looking at program implementation*

Coalition Priorities as described in the "Priorities" sub-section were established through coalition meetings March 2010–Oct. 2010 and coalition sub-committee meetings Oct-Nov 2010.

Bountiful City will supplement the education and outreach program by focusing on three areas which have been identified by City Staff for additional emphasis. Bountiful has identified opportunities to provide educational material for these three areas that can efficiently be incorporated into the Storm Water Management Program.

In all areas of the City, unauthorized placement or storage of construction and landscaping materials in the public right-of-way is a constant concern that represents a potential source of debris and sediment. Outreach and education will be provided through the plan review process and by construction inspections.

In addition to materials in the roadway, dumpsters and parking lots at various facilities have a potential to release pollutants. Plan reviews for developments will include a review for dumpsters – that permanent dumpsters will be covered and placed appropriately.

City Staff also felt that parking lots at commercial and multi-family sites represent an important location where storm water runoff could be improved by sweeping. Therefore, information about the benefit of sweeping parking lots will be provided through the city website or newsletter.

City staff wanted to implement a pro-active approach to combine education and outreach efforts to contractors and developers with some of the construction and post-construction needs. Therefore, it was determined by City Staff that an effective approach would include preparation of a packet of information specific to Bountiful City, which could be widely distributed to developers, contractors, engineers, architects, etc. for use in preparation of construction and development plans. The packet would include SWPPP information, use of construction controls, post-construction controls, inspection requirements, sample forms, etc.

A storm drain stenciling (curb marker) program was completed previous to the permit renewal in 2010. The entire city was canvassed by volunteers (led primarily by Boy Scouts) marking curb inlets and delivering information about storm water pollution prevention.

A coalition sub-committee worked to provide county-wide guidance on addressing nutrient reduction by evaluating information relating to Davis County surface waters, identifying potential sources of the nutrients, identifying target audiences, and providing ideas for outreach. In early 2017 the sub-committee provided a written report of findings and recommending target audiences and outreach ideas. This was adapted to Bountiful.

2.2 PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

The Public Involvement/Participation Program section of the SWMP addresses the importance of public involvement with respect to protection of storm water. 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. Such opportunities include the public notice process and efforts to reach out to foster public input.

2.2.1 Priorities

Bountiful's primary priority for this control measure is to manage the storm water program in a way that complies with State and Local public notice laws. The secondary priority is to make information about the program easily accessible to stakeholders and the public.

2.2.2 BMPs

2.2.2.1 Inter-local and Interest-Holder Communication through the Davis County Storm Water Coalition

The DCSWC will be utilized to give and receive input, feedback and recommendations for the storm water management programs in Davis County. Bountiful City will participate with the DCSWC to facilitate communication with contractors, developers, consultants, industrial representatives, and others affected by or interested in NPDES storm water issues.
See section 1.5.1 for more information regarding Davis County Storm Water Coalition participation and activities.

2.2.2.2 Public Notice Requirements

Comply with State and local laws regarding the advertisement and notification of public hearings and other related meetings regarding the development and implementation of the SWMP.

2.2.2.3 Public Access to Storm Water Information

Allow the public access to documents, plans, and reports, including MS4 annual reports and the Storm Water Management Program. The public may also give information (comments, concerns, etc.) regarding construction activities. Utilize the city website to post the SWMP and other information about the storm water program, along with a way to provide input.

2.2.3 Measurable Goals

The table below represents measurable goals that are to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness.

MEASURABLE GOALS FOR PUBLIC INVOLVEMENT AND PARTICIPATON

GOAL	SCHEDULE/FREQUENCY & Interim Milestones	LEAD PERSON
Actively participate in the Davis County Storm Water Coalition to develop and promote the activities associated with the Public Involvement and Participation program, by attending at least 10 Coalition meetings or activities annually.	2016 – 2021	Environmental Engineer
Comply with State and local laws regarding the advertisement and notification of public hearings.	2016 – 2021 Aug. 2016 for revised ordinance	Environmental Engineer and Public Works Director
Provide Contact for storm water program questions and comments from public.	2016 – 2021 Continuously	Environmental Engineer
Provide public access to information on storm water information through city website. Include revised SWMP, a way to submit comments, and publicize Hotline #	Jul. 1, 2016 (initially) Continually thereafter	Environmental Engineer, Working with IT Department

2.2.4 Decision Process

The fundamental objective of this control measure is to implement a public involvement/participation program which, at a minimum, complies with State and local public notice requirements. Specific aspects of the program are to be met with BMPs.

The public was involved in development and submittal of initial NOI and storm water management program. In March of 2001, over 100 commercial, institutional, and multi-family representatives (from properties with at least 10 ERU, about 0.9 ac. of impervious surface) were invited to discuss information about storm water regulations, program requirements, and a proposal to create a new utility for storm water. Twenty-five people attended the meeting. Later, a public hearing at a City Council meeting was held on June 5, 2001, that followed Public Notice requirements. Invitations were extended to over 100 representatives (same representatives described above). This public hearing was for a proposed storm water utility ordinance, and the creation of a new city storm water department.

The public are welcome to be actively involved in the continued development and implementation of the program by following State and local public notice requirements. This is accomplished by going through the City council for approval of the SWMP, participation in the SDSW Coalition, and adopting the storm water ordinance (and revisions to the ordinance). Public Notice is given for all City Council meetings, and the meetings are open to the public. The city website and the Coalition will also provide an avenues for public and stakeholders to provide input.

Overall management for this control measure will be performed primarily by Bountiful City's Engineering Department. Some of the implementation for this control measure will be done

through the Davis County Storm Water Coalition. The Storm Water Department Superintendent will be responsible to provide the necessary funding for this and other control measures.

Success will be measured by … Confirming that public notice requirements were met for City Council approval of the SWMP, participation in the DCSWC, and adopting the storm water ordinance (and revisions to the ordinance).
After deciding up on the BMPs to implement, measurable goals were chosen to ensure implementation of the BMPs and, more importantly, meet the permit requirements for this control measure.

BMPs were selected to meet the purpose and responsibility for this control measure. The goals for the BMPs (as shown in the table above) were set in a way that allows us to make a quantification of the progress and/or implementation for each goal.

A storm drain stenciling program was completed previous to the permit renewal in 2010. The entire city was canvassed by volunteers (led primarily by Boy Scouts) marking storm drains and delivering information about storm water pollution prevention to residences.

In order for this program to comply with the 2010 renewal permit, the SWMP needed to be placed on the city website. This activity (and description) was therefore included into the BMP: Public Access to Storm Water Information, and a measureable goal was set regarding this requirement. This requirement also applies to the 2016 renewal permit.

2.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The Illicit Discharge Detection and Elimination measure of the SWMP addresses non-storm water discharges to receiving waters, typically via storm water conveyance systems. The program implements BMPs to assist in the identification of illicit discharges and removal of these discharges from the system. This program will also focus on prevention of new illicit discharges to the storm water system by means of education, regulations, and through spill prevention and response.

This program will be integrated with the Public Education and Outreach Program to promote awareness of the importance of protecting the storm water system from illicit discharge and the resultant impact to receiving waters. The following BMPs describe implementation tasks and assessment tasks to be completed by Bountiful City for the Illicit Discharge Detection and Elimination (IDDE) Program.

2.3.1 Priorities

High Priority field screening areas have been identified (in 2014) for more frequent screening based on land use. The areas that have been identified as High Priority are those in the following land use zones: **Heavy Commercial, General Commercial,** and **Downtown**. Drainage facilities

or outfalls serving these High Priority areas will be field-screened for illicit discharges once every year.

2.3.2 BMPs

2.3.2.1 Storm Drain System Map

Bountiful City will update and maintain a current storm drain map in order to determine the source and extent of both the wet and dry weather flows, and the particular water bodies these flows would affect. The map will include locations of outfalls to the streams that flow into the Great Salt Lake. During the fieldwork of outfall screening, data is gathered regarding the size, material, and location of outfalls. This and other field-collected data will be compared with existing map data, and map updates will be made when discrepancies are found.

Bountiful City will also provide current storm drain maps, upon request, to representatives from Davis County for the purpose of maintaining a county-wide drainage map to aid county personnel in their efforts to provide/coordinate spill response and cleanup.

2.3.2.2 Legal Authority – Storm Water Ordinance

The legal authority to prohibit illicit discharges and apply enforcement actions is established through adoption of the Storm Water Management Ordinance. The primary section of code relating to this control measure is Chapter 15: Storm Water Management. The code describes a violation as being a misdemeanor, which is automatically escalating. Bountiful City will enforce the adopted ordinance to prohibit illicit discharges into the storm drain system.

Illicit discharges are flows into the storm drain system not composed entirely of storm water (unless exempt as listed below). Examples of illicit discharges include sanitary wastewater, improper disposal of waste oil, paint, household toxics and spills from roadway accidents. Some non-storm discharges have not been identified as significant contributors of pollutants; these are exempt: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, groundwater infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains, crawl space pumps, air condition condensation, springs, individual residential washing of vehicles, natural riparian habitat or wet-land flows, swimming pool discharges (if de-chlorinated to less than one PPM chlorine), residual street wash water, emergency fire fighting activities, discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety, and dye testing (with notification to the authorized enforcement agency prior to test).

The city also works alongside Davis County Health Dept. according to a Resolution issued by Davis County. The Health Dept. has a consistent and streamlined enforcement mechanism that can include recouping costs incurred by the city related to illicit discharge investigation and cleanup. In general, the Health Department will be help with to coordinate the investigation, removal, and enforcement for illicit discharges that are not associated with construction activity.

2.3.2.3 Used Oil And Hazardous Waste Disposal

In an attempt to minimize dumping of used oil and other hazardous materials into the storm drain system, Bountiful City supports and encourages efforts to provide acceptable disposal options for these substances. Bountiful City accepts used oil for recycling at the City Public Works shop Located at 950 South 200 West in Bountiful. Residents can take used oil to this location for proper disposal. The City also sponsors and pays for an annual household hazardous waste disposal program. This allows Bountiful residents to bring their household hazardous waste to a centralized location in Bountiful on a specified day for proper disposal. Residents will be made aware of an appropriate way to dispose of their household hazardous waste.

2.3.2.4 Public Reporting

Bountiful City will promote reporting of illegal dumping and illicit discharges through BMPs listed in the educational and public involvement sections of this SWMP. The purpose of public reporting is to enable the City or the Davis County Health Department to respond to citizen complaints regarding water quality. Reports may be called into phone number 525-5100. As necessary, Bountiful City and Davis County Public Works will assist the Health Department to investigate the source of the pollution. It is the practice of the Davis County Health Department to document all investigations and enforcement measures, including any fee penalties.

Bountiful City will also seek to **prevent** illicit discharges through measures listed in the public education and public involvement sections of this SWMP. These measures will inform the public of the hazards associated with illegal dumping and improper disposal of waste. The good housekeeping section also includes ways that city personnel can help to identify and prevent illicit discharges. For more information on BMPs that other control measures contain to prevent, identify, and fix illicit discharges, refer to the corresponding sections.

2.3.2.5 Video-Inspect Storm Drains

Storm Drain Lines will be video-inspected. The City will contract with a company to video-camera certain portions of the storm drain system, and report findings to the City. The inspections will be a means to find damage to the drain system and to possibly detect illicit discharges.

2.3.2.6 Detecting and Eliminating Illicit Discharges

Outfall screening is a way to find illicit discharges entering the streams. This is best done when no other runoff is expected. In Bountiful, this will *best* be done in the fall after October 20, when the irrigation system water is shut off and drained while the snowmelt is minimal. The screening will be done when there has been no precipitation in the area within the last 24 hours (preferably 48 hours).

Bountiful City will perform dry-weather screening of the outfalls that flow into the open streams/channels within the City. Initially, the City screened one of the five channels each year,

therefore all of the existing outfalls were screened within 5 years (about 20% of these outfalls each year 2006-2010). Screening began in the northern-most stream (where the oldest area of the city drains into open channels) progressing southward. It was thought that this area may be most prone to illicit connections due to its age. The initial fieldwork done in the fall of 2005 identified and mapped existing outfalls. Obvious illicit discharges were looked for and none were found. All of the outfalls were screened during the 2006-2010 inspection period.

During the dry weather screening, data is gathered as to how much flow exists and what physical indicators for illicit discharge are present. The field sheet that came as appendix D-3 to the Illicit Discharge Detection and Elimination guidance manual by the Center for Watershed Protection (2004), or a similar field sheet, will be used for inventory/sample collection. Each outfall will be characterized overall as to whether it contains an illicit discharge as "unlikely", "potential", "suspect", or "obvious" according to the field sheet, which takes into consideration the number and severity of the physical indicators.

The city will use the following Standard Operating Procedures: Outfall/Discharge Inspection and Characterization, Tracing Source of Discharge, and Removing Illicit Discharges. These SOPs refer to separate SOPs for Discharge/Spill Inspection Report and Spill Incident Reporting. All of these procedures will be used for verifying outfalls, detecting illicit discharges, tracing the source of a discharge, ceasing illicit discharges, reporting discharges, and reporting dischargers suspected of needing a UPDES permit to the Division of Water Quality.

2.3.2.7 Spill Incident Response and Reporting

The following spill incident reporting chart will be used to respond to spills and report them to appropriate agencies:

- Spill is observed or Report of Spill comes in
  - ◊ Does the incident pose an immediate threat to life or health?
    - → Yes – Call 911 (give description of material, amount, and extent)
      - describe incident in spill log
    - → No – move to next step
  - ◊ Are you able to safely contain the spill with tools and/or material at hand?
    - → Yes – Contain the spill and secure the area, then ensure clean up is done
      - report according to the reporting list below, and
      - describe incident in spill log
    - → No – move to next step
  - ◊ Is it during regular working hours?
    - → No – Call 911 (give description of material, amount, and extent)
      - describe incident in spill log
      - on next working day report according to reporting list below
    - → Yes – report according to reporting list below
      - describe incident in spill log

Bountiful City Environmental Compliance Team Member (Environmental Engineer) should be contacted after any spills and should assist in making appropriate calls
801-298-6125

Pollutant Description	**Report to:**
Pollutant releases to water (surface or ground water)	Davis Co., UDEQ, & NRC
Hydrocarbons (fuel, oil), release of 25 gallons or more	Report to Davis Co. and UDEQ
Radiological Materials, any spill or release	Report to Davis Co. and UDEQ
Extremely Hazardous chemicals, 2.2 lb. or more (e.g. Cyanides, Arsenic, Chlorine)	Report to Davis Co. and UDEQ
Other Hazardous chemicals, 220 lb. or more	Report to Davis Co. and UDEQ
Underground Storage Tank, any leaking or release	Report to UDEQ

Other spills, particularly those contained and cleaned up, do not need to be reported

Phone Contact List:

Emergency	911
Bountiful Environmental Engineer	801-298-6125
Davis County Environmental Health	801-525-5100
National Response Center (NRC)	800-424-8802 (24 hour)
Utah Dept. of Environmental Quality (UDEQ)	801-536-4123 (24 hour)
Utah Division of Solid and Hazardous Waste	801-538-6170
Utah Hazmat Response Officer	801-538-3745 (24 hour)

2.3.3 Measurable Goals

The table below represents measurable goals that are to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness.

2016-2021 MEASURABLE GOALS FOR IDDE PROGRAM

GOAL	SCHEDULE/FREQUENCY & Interim Milestones	LEAD PERSON
Revise ordinance for "emergency" fire-fighting activities as allowed non-storm discharge	9/1/2016	Environmental Engineer working with City Attorney
Maintain and update storm drain system map	2016 – 2021 Update map at least once per year	Environmental Engineer
Provide Waste Oil and Household Hazardous Waste Program for City Residents	2016 – 2021 Annually	Storm Water Dept. Manager
Perform dry weather screening of outfalls	20% by Dec. 2016 40% by Dec. 2017 : 100% by Dec. 2020	Environmental Engineer
Perform "high priority" dry weather screening of facilities or outfalls serving high priority areas	100% each year by Dec 31st of each year	Environmental Engineer
Complete Video Inspection of 25,000' of storm drain annually	2016-2021 Measured during each fiscal year	Storm Water Dept. Manager
Revise IDDE SOPs to include notifying DWQ of discharges suspect of needing a separate UPDES permit	2016	Environmental Engineer
Review high priority areas for IDDE based on recent screenings for possible re-prioritization	2020	Environmental Engineer

2.3.4 Decision Process

For this control measure, the city is responsible to implement and enforce a program to detect and eliminate illicit discharges. Specific aspects of the program are to be met with BMPs.

Storm drain information has been kept over time, with information from development plans, aerial photos, and discoveries made in the field which has been used to produce and update a storm drain map. Locations which were developed prior to annexation into the City have the least amount of reliable storm drain map information. Outfalls were found by walking along the stream and identifying the outfall and a location – information that has been placed on an outfall map

The maps are updated regularly to show changes to the storm drain system and to correct inaccurate information (when found).

An ordinance is used to prohibit illicit discharges, chosen because it is the most feasible way for the city to prohibit illicit discharges. Ordinance ideas from other nearby cities and the EPA were used to develop the ordinance. Major revisions to the city's storm water ordinance were drafted and adopted in 2005, using an EPA model ordinance as a basis, chosen because it is from the leading regulating authority. Each revision of the ordinance is reviewed by the City Attorney before a recommendation is made to the City Council.

In order to detect and address illicit discharges, a dry weather screening plan is followed (with prioritized areas) that characterizes any flowing drains or outfalls. The streams collecting runoff from the oldest part of the city (possibly most likely for cross connections) was checked first. Other practices used to detect illicit discharges are: video-inspecting storm drain lines; publicizing a hotline number and training employees to keep watch for illicit dumping (addressed more specifically in Pollution Prevention Good Housekeeping control measure).

The Procedures for tracing the source of a potentially illicit discharge AND removing the source of an illicit discharge have been written and included in the SOPs. An overview of these procedures is included in the section above that describes the outfall screening program.

Procedures to inform public employees, businesses, and the general public of hazards associated with illegal discharges and proper disposal of waste, including how this will coordinate with the public education and pollution prevention/good housekeeping minimum measures is done entirely by practices for the Public Education and Outreach control measure and the practice of municipal employee training in Pollution Prevention/Good Housekeeping control measure.

The IDDE program evaluation/assessment will be done by:

- *Maintaining a mapping database: checking to make sure map is being updated*
- *Looking at the spill and dumping reports (for those that may impact storm water). We look at the number of reports, and the materials spilled/dumped.*
- *Reviewing the inspections conducted (inspections for documenting illicit discharges per the BMP for Reporting and Ceasing Illicit Discharges)*
- *Status of program implementation and measurable goals*

Incidentally, this is similar to the method for evaluating success for the public education control measure.

Rationale regarding Priority Areas for this control measure: Review of possible priority areas was made by city staff Nov. 10th 2010. The list in the permit of areas likely to have illicit discharges was reviewed. Dry weather screening began on the North end of the City, and progressed South from there. This was done because the oldest infrastructure in the city (plat A) drains to the two northern-most streams. In Plat A, the storm drain system and improvements came after the sewer was constructed (and homes were required to connect). Bountiful has no areas with on-site sewer and no areas with a history of sewer overflows or cross connections. Bountiful has no impaired receiving waters nor any heavy industrial areas. The initial conclusion

was that there is no reason to identify one area above another as priority. However, a 2014 audit by DWQ staff showed a need for priorities in this part of the program, so a re-evaluation was done identifying areas zoned for commercial and downtown uses as priority for the IDDE program.

Training for this control measure is included with the training program as established in the Public Education control measure.

Publicizing the hotline number (a permit requirement) is included in the Public Outreach control measure BMP to post the SWMP and other storm water related information on the city website.

2.4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM

The Construction Site Storm Water Runoff Control Program section of the SWMP addresses water quality concerns for construction sites. All of the BMPs and related requirements in this section will apply to sites greater than or equal to one acre, and smaller sites that are part of a common plan of development that will be disturbing one acre or more. Polluted storm water runoff from construction sites can cause physical, chemical and biological harm to receiving waters. The BMPs described in this section of the SWMP include the development of a construction site program designed to reduce pollutants in storm water runoff from construction activities.

Some of the materials referred to in this section will be made part of the packet/handbook of information (and applicable goals) described in the SWMP section for public education.

2.4.1 Priorities

The City has identified the following as priority construction sites:

- Construction sites with 1 acre or more of disturbance, where a receiving water traverses through the site.

2.4.2 BMPs

2.4.2.1 Ordinance For Construction Sites

Bountiful City will use an ordinance to adopt enforceable requirements for construction operators to use BMPs to reduce pollutants discharged during times of soil disturbances or excavation activities. The ordinance will apply to sites within a common plan of development that disturbs one acre or more. The technical requirements of the ordinance will be equivalent to those requirements of the most current UPDES Construction General Permit. Penalties will be used to enforce the ordinance and ensure compliance. The ordinance will include a provision for access to private property for inspection.

2.4.2.2 Construction Site Permit Application Process

A construction site permit will be required for construction activities in accordance with the storm water ordinance. For the purposes of this permit, construction activities are defined as activities that disturb the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation, but does not apply to agricultural use of land.

Before a permit will be issued, the city will:

- perform a review of the site to determine whether construction and long-term storm water management requirements apply. If so:
    - review plans for long-term storm water management requirements
    - determine if site will be designated a priority construction site
    - perform a SWPPP review according to checklist
- require the applicant to show that a UPDES construction permit has been obtained for the site
- require the applicant to post a storm water bond
- upon issue of a permit, the SWPPP, plan review, enforcement records, and a copy of the SWPPP will be kept for a minimum of 5 years or until construction is complete, whichever is longer

2.4.2.4 Site Inspections and Enforcement

Bountiful will inspect the construction sites according to SOP for inspecting construction sites to make sure that the sites are appropriately managing the storm water, and preventing storm water pollutants from leaving the site. If any structural post-construction controls need to be installed during construction at least one inspection will be done to make sure the control is installed correctly.

An SOP for Enforcing Construction Site Requirements will be followed to ensure compliance. The storm water bond release procedures will ensure site owners/operators notify the city upon completion of the project because the bond will be held until a final storm water inspection is passed and a N.O.T. has been filed. Final stabilization and removal of temporary BMPs will be required as conditions for passing the final inspection. Retaining records will be included with the procedures for inspection and enforcement.

2.4.3 Measurable Goals

The table below represents measurable goals that are to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness.

2016-2021 MEASURABLE GOALS FOR CONSTRUCTION SITE CONTROLS

GOALS	SCHEDULE/ FREQUENCY & Interim Milestones	LEAD
Revise Storm Water Ordinance to include technical requirements of most current UPDES Const. General Permit	9/1/2016	Environmental Engineer working with City Attorney
Review Site Plans (SWPPP) for all technical requirements of most current UPDES Const. General Permit	Continuously 2016 – 2021	Environmental Engineer
Publicize hotline number for reporting issues on construction sites	7/1/2016	Environmental Engineer
Conduct site inspections according to site inspection procedure	monthly	Environmental Engineer
Re-consider criteria of prioritizing construction sites based on new list of criteria in permit (4.2.4.3.3)	8/1/2016	Environmental Engineer
Enforce construction site requirements according to enforcement procedure	2016 – 2021	Environmental Engineer

2.4.4 Decision Process

For this control measure, the city's primary responsibility is to implement and enforce a program to reduce pollutants from construction sites. Specific aspects of the program are to be met with BMPs.

An ordinance is used for requiring storm water pollution prevention controls at construction sites, chosen because it is the most feasible way for the city to implement the requirements and is enforceable. The ordinance encompasses illicit discharge, construction, and post construction requirements.

The specific requirements for construction sites are detailed in the ordinance and a checklist for storm water permit applications. These requirements will include minimum requirements of the most current UPDES Construction General Permit and additional local requirements as applicable.

Regarding site plan review, if a project meets the criteria requiring a storm water review (one acre or more or part of CPD) the project will not receive a building permit or storm water permit until the site plan and SWPPP have been reviewed and meet minimum requirements for construction site storm water pollution prevention.

Ensuring compliance will be done by first requiring a construction site permit, then by performing inspections. During construction, inspectors will observe whether any obvious storm water pollution prevention problems exist threatening receiving waters. Sanctions will be used as follows:

- *Warnings will be given for non-severe problems*
- *Stop Work Orders will be issued for sites with severe threats to storm water and for sites with other problems where a warning has been issued*
- *Fines will be issued at sites where previous orders to correct deficiencies have not been followed.*
- *Criminal Citations may be issued for sites with recurring threats to storm water*
- *Requests for Utah DWQ to do inspections for sites with recurring threats to storm water*
- *A hold on getting building inspections (if a severe problem exists at the site)*

All building construction sites (including those disturbing less than one acre) will be observed by the building inspectors and the public works inspector when they go perform scheduled building and/or concrete inspections for apparent threats to storm water.

Receipt and consideration of information submitted by the public:
Information regarding storm water pollution prevention for construction sites will be posted on the website along with contact information (See BMP: Public Access to Storm Water Information in the Public Involvement and Participation control measure). Staff who may receive reports of problems will be trained on receiving the reports and forwarding the information to the appropriate person who can follow-up.

This measure will be evaluated by reviewing the status of the goals which have been prepared for this measure.

BMPs were selected to meet regulatory requirements. Goals were then identified to ensure implementation of the BMPs.

A November 15, 2010 City Staff review of permit requirements for designation of priority construction sites determined that priority construction site status would be applied to construction sites at least one acre in size that have a receiving water traverse through the site. Construction activities on these properties represent the most immediate threat to water quality during construction. This was re-considered Jan 17, 2017 because some of the items listed in the latest permit for consideration were not included in the initial review. The conclusion for prioritization remains the same.

2.5 POST-CONSTRUCTION STORM WATER MANAGEMENT PROGRAM

The Post-Construction Storm Water Management Program addresses the importance of storm water runoff management in new development and redevelopment projects (land disturbance greater than or equal to one acre). Some of the permit requirements for this program are integrated with the Public Education program and the Construction Site Storm Water Runoff Control Program.

Structural and non-structural BMPs used in post construction storm water management are intended to primarily address two areas of storm water quality:

1. An increase in the quantity and type of pollutants entering the storm drain system. This occurs as storm water flows over the developed area, picking up pollutants.
2. An increase in the quantity of runoff produced by more impervious surfaces.

2.5.1 Priorities

Priority for this control measure should be given to developments that are adversely impacting water quality. Although sites have been checked for water quality impacts, none have been identified. Also, no receiving waters are impaired, and no sites are known to be adversely affecting water quality; no priority areas have been identified (see decision process information below). Through ongoing inspections, if any sites or areas are identified as impacting water quality, they will be prioritized and planned for retrofit with BMPs designed to infiltrate, evapotranspire, or harvest and use storm water.

2.5.2 BMPs

2.5.2.1 Ordinance

Bountiful City will revise the storm water management ordinance to require post-construction controls to manage storm water on site to prevent the discharge from the first 0.6" of precipitation using LID practices to the maximum extent technically feasible. This will apply to both public and private developments.

The city will require a storm water permit to be obtained by all new development and redevelopment projects that disturb one acre or more, Also, the need for and requirement of implementing post-construction controls will be reviewed during the plan review process. The permit process is explained in Section 2.4, Construction Site Storm Water Runoff Control Program.

2.5.2.2 Standards for Post-Construction Controls

Standards will be used for checking the design of post-construction controls and for calculating runoff from the site. These standards will be included in the packet/handbook described in the pollution prevention control measure.

2.5.2.3 Post-Construction Maintenance

Procedures will be used to ensure long-term operation and maintenance of storm water controls at post-construction sites for both privately owned and publicly owned storm drain facilities. Prior to final approval, development agreements will be prepared which define operational and maintenance responsibilities for storm drain facilities along with specific ways to ensure maintenance is performed.

2.5.2.4 Inspections and Inventory

Bountiful City personnel will provide inspection during the construction process to verify post-construction BMP's are built as designed. This will also be ensured by the storm water bond which will not be released unless post-construction controls are constructed according to

approved plans. Permanent facilities (both public and private) will be included in an inventory which defines maintenance requirements. Follow-up inspections will be performed, and the information regarding the inspection/compliance status will be logged into the inventory.

Enforcement procedures will also be followed to ensure long-term maintenance is being done for the permanent controls.

2.5.3 Measurable Goals

The table below represents measurable goals that are to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness.

2016-2021 MEASURABLE GOALS FOR POST-CONSTRUCTION PROGRAM

GOALS	SCHEDULE	LEAD PERSON
Develop standards for long-term storm water management	9/1/2019	Public Works Director
Determine LID practices that will be allowed by city including non-structural LID practices	7/1/2016	Public Works Director
Determine feasibility requirements of LID practices	8/1/2016	Public Works Director
Revise Preferred Design Specifications	9/1/2019	Environmental Engineer
Compile revised packet/handbook including requirements for controlling peak flow and floodplain development	9/1/2019	Environmental Engineer
Revise storm water management ordinance for long-term stromwater management requirements	9/1/2019	Environmental Engineer working with City Attorney
Revise inventory of permanent post-construction controls for private sites to include maintenance requirements and inspection information (date, follow-up procedures, prioritization of follow-up activities, and compliance status)	10/1/2016	Environmental Engineer
Perform annual inspection of post-construction controls	Annually by June 30th	Environmental Engineer

2.5.4 Decision Process

For this control measure, the city's fundamental responsibility is to implement a program that will protect water quality long-term with controls from new development and re-development projects.

The program requires post-construction and long term measures for storm water quality that will be established with an ordinance. These requirements will be included with the ordinance for illicit discharges and construction sites.

In order to minimize water quality impacts and attempt to maintain pre-development runoff conditions, New developments disturbing one acre or more will be subject to the following requirements:

1- *Manage rainfall on site to prevent discharge of runoff from rainfall events producing less than or equal to 0.6" of precipitation using practices designed to infiltrate, evapotranspire, and/or harvest rainwater to the maximum extent technically feasible, as the 2016 MS4 permit requires*
2- *A way to reduce peak flows to pre-development conditions (assumed to be 0.2 cfs/ac) based on a critical 10 year runoff event (25 year in RF zone). This was selected because:*
    a. *It is widely applicable with few restrictions*
    b. *Provides moderate pollutant removal from a variety of pollutants but is generally more effective at removing tss and metals*
    c. *Relatively low cost and long lasting*

(per EPA Natl Menu of BMPs Post-Construction Storm Water Management pg 5-12)
Also, contractors, developers, and designers are already familiar with the concept

3- *Other controls as determined by city engineer, which was also included in ordinance because it may be important in special cases to control pollutants or concern, significant pollutants, or pollutants from high-priority or other developments. Best done on a case-by case basis.*

City engineering and planning staff have considered a list of non-structural controls that the city will allow (or require as applicable) under certain conditions:

- *Narrow Roads. The PUD ordinance allows reducing the standard pavement width and eliminating sidewalk*
- *Cluster Development: The PUD ordinance allows cluster development*
- *Preserving Open Space: In addition to the PUD ordinance for cluster development (which also preserves open space areas), the RF zone has very high landscape/open space requirements and prevents development on slopes over 30%.*
- *Eliminating directly connected impervious areas*
- *Minimizing Disturbed Areas*
- *Minimizing Soil Compaction*
- *Having Natural Buffers and/or Riparian Buffers*
- *BMP Maintenance for Long Term Storm Water Management: will be required*

Note: Minimum landscape requirements are not planned to be increased because the city already has very high minimums (40% in Multi-Family residential).

City engineering and planning staff have considered a list of structural controls and decided on those that the city will allow where feasible:

- *Storage Practices*
  - *Above Ground Retention*
  - *Below Ground Retention*
  - *Above Ground Detention*
  - *Below Ground Detention*
  - *Rain Gardens*
  - *Permeable Pavements*
  - *Injection Wells*

- *Infiltration Practices*
  - *Infiltration Trenches*
  - *Amended Soil*
  - *Bio-infiltration*
  - *Planter Boxes with Infiltration*

- *Harvest Practices*
  - *Rain Barrels*
  - *Cisterns*
  - *Underground Detention*

  Note: Constructed Wetlands will not likely be allowed due to concerns of nuisances that come with them as well as concern of the property becoming further regulated as jurisdictional wetlands.

- *Filtration and Separation Practices*
  - *Extended Detention*
  - *Filter Strips*
  - *Sediment/Floatable Separators*
  - *Media Filters*
  - *Hydrodynamic Separators*

The city's Preferred Long Term Controls from Different Developments Types chart provide guidance on selecting long-term controls. A document from Oregon Dept. of Transportation regarding storm water treatment program BMP selection was used as a reference in creating the chart. Based on research, it provides useful reference information about effectiveness of treatment mechanisms for different pollutants, suitability considerations, maintenance factors, and other considerations.

An ordinance will be used to require post-construction runoff controls, chosen because it is the most feasible way for the city to implement post-construction requirement. The same ordinance will encompass illicit discharge, construction, and post construction requirements. Additional standards and guidance on city standards will be included in a packet/handbook for educating contractors and developers on the practices and city standards.

Long term operation and maintenance will be ensured through conditions that will be set forth in development agreements.

This measure will be evaluated by reviewing the status of the goals which have been prepared for this measure. Meeting the defined goals will determine the success of the program.

BMPs were selected to meet regulatory requirements. Goals were then identified to ensure implementation of the BMPs.

The training requirements of the permit will be fulfilled according to the training program for MS4 employees described in the public education control measure.

During March 2015, the basin inspections began to incorporate checking for water quality impacts as evidenced by erosion problems, chronic maintenance problems, excessive trash, and evidence of illicit discharge. All of the inspections showed that the basins were free from such problems. The permit requires a retrofit plan for sites that are adversely affecting water quality. However, no sites within the city are known to contribute pollutants of concern or adversely affect receiving water. No receiving waters are impaired. Therefore, no sites have become prioritized. Through ongoing inspections, if any sites or areas are identified as impacting water quality, they will be prioritized and planned for retrofit with BMPs.

The 2016 permit requires storm water management based on the 90th percentile storm. Bountiful has decided to use 0.6" as the 90th percentile rainfall amount for the entire city. This is the value published for Salt Lake City in the Center for Watershed Protection manual Managing Stormwater in Your Community (EPA Publication No: 833-R-08-001). The same value has been calculated by DWQ staff using data from the Salt Lake International Airport. Some weather stations exist within Bountiful City, and the records from the one within Bountiful (Val Verda) that seems most reliable were downloaded in March 2016 and examined from NOAA records at http://www.ncdc.noaa.gov. The records for Salt Lake International Airport were also downloaded at the same time and examined. Val Verda records did not have data available for the most recent 1.5 years and is missing data for about 200 other days.

2.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING PROGRAM

The Pollution Prevention/Good Housekeeping Measure of the Storm Water Management Program addresses routine activities in the operation and maintenance for drainage systems, roadways, parks and open spaces, and other municipal facilities to help ensure minimizing pollutants entering the storm drain systems. Some of the permit requirements for this program are integrated with the Public Education and Outreach, Construction, and Post Construction programs.

2.6.1 Priorities

Bountiful staff reviewed an inventory of city-owned facilities, and assessed them for their potential to discharge specific pollutants. It was determined that the streets/parks/water

department headquarters with the maintenance/fueling areas and storage yard is a high priority municipal facility.

The priority areas for storm drain system maintenance are Plat A and Main Roads:

- 400 E/Orchard Dr./2600 S
- 500 S, 200 W – Bountiful Blvd. (via Lakeview Dr.)
- 400 N, 100 E – Bountiful Blvd.
- 1800 S, Hwy 68 – Bountiful Blvd.

2.6.2 BMPs

2.6.2.1 Pollution Prevention for Buildings

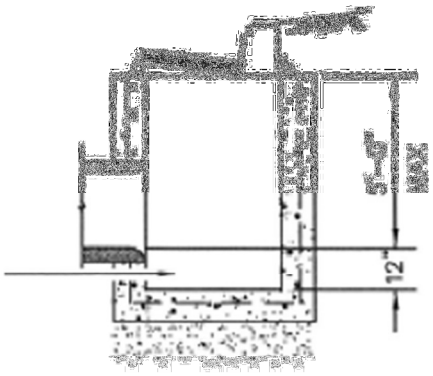
City-owned buildings will have floor drains and storm water drains checked to verify that the drains flow to appropriate locations (only storm water in the storm water drains). A log will describe the drain lines and discharge points. Standard Operating Procedures for these buildings will address pollution prevention for maintenance activities.

2.6.2.2 Pollution Prevention for Roads and Parking Lots

Streets and parking lots, owned by Bountiful City, will receive regular sweeping.

The city will also selectively install holding pits in new and rebuilt inlet boxes according to the following BMP:

BMP: Down-System Holding Pits



DESCRIPTION:

Storm Drain boxes constructed with holding pits in order to capture pollutants that enter the storm drain system before they are allowed to discharge into receiving waters. Boxes with holding pits are placed in strategic locations.

APPLICATION:

- Locations near downstream end of system;
- Locations where less than 40 gallons of holding pit capacity exists down-system before discharge to receiving water.

INSTALLATION / APPLICATION CRITERIA:

- Boxes are built according to local standard (APWA Plan 315) with dimensions sufficient to ensure required holding pit capacity.

LIMITATIONS:

- Holding pits often fill with water from rain and sprinkler overspray which becomes stagnant and promotes the breeding of mosquitoes and the spread of West Nile Virus;
- Conflicts with other utilities may require a box to be constructed with less than the specified capacity;
- Boxes with holding pits require more maintenance than those without them.

MAINTENANCE:

- Inspect after upstream and nearby spills;
- Follow inspection and cleaning schedule: Inspect each one at least twice per year. Clean when found by inspection that cleaning is needed; clean each one at least once per year;
- Remove pollutants that have collected in the holding pits using appropriate methods that may include shovels, vacuum, and absorbent materials;
- Dispose of materials removed from holding pits appropriately;
- See SOP – Debris Disposal.

OBJECTIVES

- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☒	☐	Nutrients
☒	☐	☐	Heavy Metals
☒	☐	☐	Toxic Materials
☐	☒	☐	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☒	☐	☐	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☒	☐	☐	Capital Costs
☒	☐	☐	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

H = High M = Medium L = Low

Bountiful City
BMP
(draft 12/22/2014)

2.6.2.3 Standard Operating Procedures for Municipal Activities

Standard Operating Procedures for various maintenance activities will be used. Each procedure will focus on storm water pollution prevention specific to an activity. Procedures will be followed for activities associated with:

a. Parks
b. Streets/Storm Drain
c. Water
d. Buildings
e. Storage Yard
f. Vehicle and Equipment Management

These are included in Appendix C.

The streets/water maintenance and storage yard is a facility that has a separate Storm Water Pollution Prevention Plan. The detailed plan describes possible pollutants and pollutant-generating activities at the site along with pollution control measures.

2.6.2.4 Storm Drain System Maintenance

Maintenance will include the following:

1. Clean inlet sediment traps on a regular basis as needed.
2. Video and clean select storm drain lines in the city.

2.6.2.5 Contracts for Maintenance

Bountiful city contracts with companies to help with the maintenance of public infrastructure. While performing work for the city, the contractors will be expected to practice storm water pollution prevention according to the same standards that the city is held to. This will be ensured through contractual documentation.

2.6.2.6 Flood Control Projects

Bountiful will assess flood control projects with respect to water quality concerns. Although most flood control projects are administered by Davis County, those that are administered by Bountiful City will be evaluated for opportunities to incorporate BMPs to minimize negative impacts to water quality.

2.6.3 Measurable Goals

The table below represents measurable goals that are to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness.

2016-2021 MEASURABLE GOALS FOR
POLLUTION PREVENTION/GOOD HOUSEKEEPING PROGRAM

GOALS	SCHEDULE/ FREQUENCY	LEAD PERSON
Check floor drains at city-owned buildings to verify drainage to appropriate location and document	2016	Environmental Engineer
Write and implement additional procedures for the following:		Environmental Engineer
for buildings: exterior cleaning; use, storage, and disposal of chemicals; address dumpsters	2016	Environmental Engineer
Outdoor festivals and parades	2016	Environmental Engineer
Assess storm water management at parks:		
Assess use of alternate landscape materials such as drought-tolerant plants	2016	Parks Director
Address management of waste containers at parks/open space to consider two aspects: 1) whether number of containers is sufficient and 2) scheduled cleaning of waste containers and procedures for doing so	2016	Parks Director
Update public works yard site map to include all items in part 6.2.6.4 of permit	2016	Environmental Engineer
Provide street and municipal parking lot cleaning – 130 miles/year	F. Y. 2016 – 2021	Storm Drain System Operator
Clean the following priority areas twice per year: Plat A 400 E/Orchard Dr/2600 S 500 S, 200 W – Bountiful Blvd 400 N, 100 E – Bountiful Blvd 1800 S, Hwy 68 – Bountiful Blvd	2017-2021	Storm Drain System Operator
Clean at least 10,000 ft of storm drain per year	2016-2021 Annually	Storm Water Dept. Manager
Prioritize storm drain system maintenance based on criteria in 4.2.6.6.6 of permit	12/31/2016	
Include water quality considerations for any new city flood control projects	2016-2021	Environmental Engineer

2.6.4 Decision Process

For this control measure, the city is responsible to implement an operation and maintenance program from municipal activities such as park and open space maintenance, fleet and building maintenance, land disturbances, and storm water systems maintenance. This program must be designed to reduce the discharge of pollution and it must include a training component.

A document of city Standard Operating Procedures was developed in 2010 using as a template developed by the Davis County Storm Water Coalition. The SOPs were adapted for Bountiful City's use with input from those who would be using the SOPs to perform their job duties. This document has evolved to include additional SOPs written specifically for Bountiful's purposes. The document has procedures in categories for general maintenance activities, waste disposal, IDDE, inspection/enforcement, and department-specific procedures. Spill incident response, reporting, and inspection procedures are included.

The success of this measure will be evaluated annually by looking at whether the goals have been met, which will show the progress of implementing the program.

How the measurable goals were selected for the BMPs:
The measurable goals were selected by first looking at the BMPs that were selected to meet the minimum regulation requirements. Then, the goals were set in a manner to help ensure implementation of the BMPs.

On Nov.15, 2010, city staff made an assessment of the inventory of city facilities. The potential to discharge specific pollutants (as listed in the permit) were considered for each facility. Parks were each listed, but evaluated as a whole, because their potential to discharge pollutants are similar. The same method was applied to detention basin evaluations because of their similarity (Large basins on the creeks are under Davis County jurisdiction). The assessment identified the Bountiful City maintenance and storage yard as the only ***"high priority" facility****. Vehicle and Equipment maintenance, fueling, and storage are done at the facility along with salt storage/loading, Bountiful's Water and Parks Departments operations/storage are also centered at the facility. This facility was covered by a multi-sector industrial storm water permit from Nov. 2010 until Dec. 2013. At a request from DWQ, discharges from the site then became covered by the MS4 storm water permit. A SWPPP for that facility was developed to meet the industrial permit requirements and has been updated to continue to use it as the plan for that facility. The SWPPP includes a schedule for sweeping and maintenance of separators. The SWPPP also includes an inspection schedule for performing weekly and quarterly inspections.*

On Nov. 15, 2010, city staff decided to implement a process to assess water quality for new ***flood control projects.*** *It was decided that flood control projects administered by the city will be reviewed by a staff member, qualified in storm water quality, to assess the project. The project will be evaluated for opportunities to incorporate BMPs which minimize impacts to water quality, while meeting other project objectives. Note: Davis County has jurisdiction over the major streams and channels in Bountiful, and corresponding flood control structures.*

City operations were assessed, regardless of whether such operations are specifically mentioned in the permit. This led to the development and adoption of BMPs and SOPs. Some of the BMPs that were implemented are now simply listed as SOPs (e.g. snow removal, storm drain maintenance, and storm drain waste disposal, PHF use).

Employee training for MS4 employees about pollution prevention/good housekeeping is included with the training program as outlined in Section 2.1, Public Education and Outreach Program. MS4 construction projects are addressed in Section 2.4, Construction Site Storm Water Runoff Program.

The BMP for placing holding pits in all boxes has been modified (Jan 2015) in order to reduce the threat of West Nile Virus. This will be done by selectively placing boxes with holding pits. The city intends to apply this standard to newly installed and re-built boxes. This will normally be done for new road projects, new subdivisions, and replacing boxes that are in a state of disrepair.

The threat of West Nile Virus from mosquitoes did not exist when the City's SWMP was originally developed in 2002 which included the practice of installing holding pits in new and rebuilt drainage boxes. These boxes often fill with runoff and sprinkler overspray water. Such water stagnates and attracts mosquitoes, becoming a place for mosquito breeding. The holding pits therefore enhance the potential for West Nile Virus infections and outbreak.

The modification will provide the benefit of the holding pits and reducing the spread of West Nile Virus. This will be done by using a stronger standard for holding pits, yet being selective in their placement. The BMP is to have a minimum storage volume of 40 gallons for each holding pit. There is also an inspection and cleaning schedule to make sure the trapped pollutants get cleaned sufficiently and are properly disposed. They will be placed only in locations where the holding pits will provide benefit for protecting water quality.

The inspection and cleaning schedule will be followed to ensure the effectiveness of the practice. These boxes with a holding pit will be inspected at least twice per year. Cleaning and maintenance will be done when needed as found according to the inspections. Regardless, the boxes will be cleaned at least once per year.

The minimum holding capacity was determined by examining records for spills that have occurred in the city. The volume of spilled material from the vast majority of spills that have occurred in the last several years have been much less than 40 gallons of material. Each holding pit will hold this amount in volume. This will provide a high level of protection to the receiving waters.

On Jan 12, 2017 parks/building, engineering, and streets/stormwater staff reviewed new permit requirements. The discussion led to SOPs for Buildings, Festivals/Parades, and waste receptacles. SOPs for planting were revised to include decisions from considering alternate landscape materials such as drought-tolerant plants. An SOP for pet waste was not developed because pets are not allowed in Bountiful Parks.

Also, priorities were set for storm drain system cleaning after consideration of items listed in permit. Plat A is one priority area, chosen because it is a flatter area where more accumulation tends to occur and much of it drains to one of our impaired waters (Stone Creek). Also, select main roads were chosen because there is more vehicle dust and much of the main road areas drain to impaired waters (Mill and Stone Creeks).

SECTION 3 - ANNUAL REPORTS

Bountiful City will submit an annual report which includes applicable data obtained during the reporting period (July-June of each year. This Report will document BMP activities conducted throughout the year, per the form that is provided by the State Storm Water Program. The Annual Report will be submitted each year by October 1st.

SECTION 4 - LOG OF SWMP UPDATES

Updates that are made to this Storm Water Management Program will be logged and described in this section as they occur. Revisions to correct typographical errors and to revise wording for clarity will not be listed separately.

DATE	SECTION	DESCRIPTION
Sept. 2005 through Sept 2010		See log in SWMP dated Sept. 2010
Oct-Nov 2010		Major Revision to update SWMP for new permit requirements and submittal by Dec. 1, 2010
Sept 2011	1.3.1, 1.3.2	Added references for lists of impaired & high quality waters, and threatened & endgd. species
Sept 2011	1.5.1	Update the role of Davis Coalition per the 2011 Interlocal Agreement
Sept 2011	2.1.3	Revised milestone dates: completing packet items from 9/1/11 & 8/15/11 to 12/1/11; develop hydrologic methods for BMPs from 3/1/11 to 1/1/12; remove item listed twice (train on LID)
Sept 2011	Misc.	Re-worded for clarity: 1.5.1, 2.2.3, 2.3.2.2, 2.3.2.6a, 2.4.2.4, 2.6, 4
Sept 2011	2.3.2.7	Updated spill incident and reporting chart
Sept 2011	Appendix E	Added inventories for MS4 building drains
Sept 2012	1.3.1	Include a note on using County stream data
Sept 2012	1.4	Add info about city's authority to establish laws and the intent of the storm water ordinance
Sept 2012	2.3.2.2	Update to correlate with permit and city code
Sept 2012	2.3.2.4	Update Phone number
Sept 2012	2.3.2.6	Changed to refer to the SOPs which are now being used
Sept 2012	2.3.5	Add statement regarding heavy industrial areas
Sept 2012	2.4.2.4	Revised to refer to SOPs which are now being used
Sept 2012	2.5.2.3	Add statement regarding ensuring maintenance is performed
Sept 2012	2.5.3	Revised milestone goal date for writing post-construction procedure for inspecting & form
Sept 2012	2.2.5	Clarify info about retrofit plan and long-term controls required by city
Sept 2013	1.3.2	Revised wording for clarity about species listed as candidates
Sept 2013	2.3.2.4	Reworded for clarity
Sept 2013	Appendix C	Added SOPs for Post-Const Inspection and Enforcement
Sept 2013	Appendix E	Updated Floor Drain Inventory for new Power Plant and map showing the Streets Drying Bed And the order of the inventories
Sept 2014	1.3.1	Re-word for consistency
Sept 2014	1.4	Updated ordinance citations that had changed
Sept 2014	1.5	Updated names and titles of responsible people
Sept 2014	2.6.2.3	Added paragraph about Maintenance Yard SWPPP
Sept 2014	2.3.2.2	Explanation added about coordinating with Davis Co. Health Dept. for IDDE
Nov 2014	2.3.2.6 & 2.3.3	Added explanation and measurable goals for High Priority IDDE areas
Jan 2015	2.1.1	Expanded to clarify how priority pollutant sources are targeted in Public Education Program
Jan 2015	2.6.2.2 & 2.6.5	Modified BMP for down-system holding pits in inlet boxes
April 2015	2.5.1 & 2.5.5	Added more info and details about post-construction prioritizations and retrofit
June 2016	1.3	Eliminated parts for historic properties and threatened/endangered species
June 2016	1.5	Added more specific information on staff responsibilities
June 2016	1.5.1	Updated information for coalition activities
June 2016	2.1	Changes to plan for packet/handbook & employee trainings to meet new permit requirements
June 2016	2.3.1 &2.3.2.6	Moved paragraph from 2.3.2.6 to 2.3.1 and re-worded
June 2016	2.3.2.2	Changes to reflect ordinance and permit on allowed non-storm discharges
June 2016	2.4.2.1	Changed UTR300000 to "Most Current" for construction site requirements
June 2016	2.4.2.2	Changed to incorporate retention and LID requirements
June 2016	2.4.2.4	Added more explanation about project close-out procedures
June 2016	2.5.2.1 & 2	Explained plan to change ordinance and standards for retention/LID requirements
June 2016	2.6.2.1	Revise BMPs for buildings will to apply to additional buildings besides high-priority
June 2016	Meas. Goals	Set new measurable goals based on new MS4 permit issued 2016 (effective 2016-2021)
June 2016	Decision Processes	Updated decision process information for all control measures; included decision process information for new and changed requirements with permit that was issued March 2016.
Sept 2016	Meas. Goals	Revise dates for measurable goals relating to the retention standard of permit
Jan 2017	2.4.4	Add rational for re-consideration of priority construction sites
Jan 2017	2.6.1	Priorities included for storm drain system maintenance

Jan 2017	2.6.3	New Measurable Goals relating to priority storm drain maintenance areas
Jan 2017	2.6.4	Decision Process added for Jan 2017 new and revised SOPs and Priority considerations
Sept 2017	1.3.1	Updated reference to impairment listings per Utah 2016 Final Integrated Report
Sept 2017	2.1.2	Updated to address nutrient reduction
Sept 2017	2.3.2.3	Change: Wasatch Integrated no longer accepts HHW generated in Bountiful
Sept 2017	2.3.3	Changed the date for re-evaluating priorities of IDDE high priority areas
Sept 2017	2.6.3	Updated measurable goal (relating to contractual obligations)
Sept 2018	1.3.1	Updated narrative about Davis County's stream sampling
Sept 2018	1.5.1	Updated staff information
Dec 2018	2.1.3 & 2.5.3	Revised schedule of implementation of LID items per changes in permit

SECTION 5 - CERTIFICATION

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

_____ _____

Signature Date (mm/dd/yyyy)

_____

Gary Hill, City Manager

APPENDICES

APPENDIX A

GENERAL PERMIT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

APPENDIX B

BOUNTIFUL CITY ORDINANCE TITLE 6, CHAPTER 15 – STORM WATER MANAGEMENT

APPENDIX C

BOUNTIFUL CITY STANDARD OPERATING PROCEDURES

APPENDIX D

DAVIS COUNTY STORM WATER COALITION INFORMATION

- INTERLOCAL AGREEMENT
- DOCUMENTATION PLAN
- DAVIS COUNTY BOARD OF HEALTH ILLICIT DISCHARGE RESOLUTION

APPENDIX E

INVENTORIES

- MS4 FACILITIES
- PERMANENT POST-CONSTRUCTION CONTROLS
- MS4 BUILDING DRAIN INVENTORIES