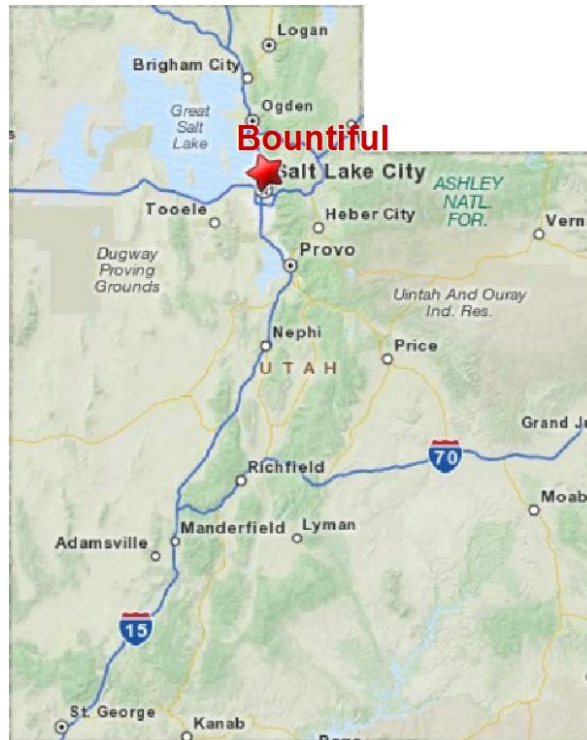


# **STORM WATER MANAGEMENT PROGRAM for BOUNTIFUL CITY**

**Permittee #UTR090005, UPDES General Permit  
for Discharges from Small Municipal Separate Storm Sewer Systems**



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



**November, 2010  
Last Updated April, 2015**



**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
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 as impaired (per CWA 303d list of approved TMDLs on DWQ website) or as “high quality” streams (per UAC R317-2-12 and R317-2-13.7B). 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 on a quarterly schedule at four locations in Bountiful. 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).

### **1.3.2 Threatened and/or Endangered Species**

As of August, 2010, there are no official listings of threatened or endangered species in Bountiful City. However, there are two species in nearby areas which should be noted. First, the Mountain Plover is proposed to be considered as a threatened species, and second, the Arctic Peregrine Falcon is listed as a recovering species. It is also appropriate to note that the Yellow Billed Cuckoo and the Least Chub are listed as “candidates.” This is based on information from US Fish and Wildlife Services website.

### **1.3.2 Historic Properties**

Bountiful City will comply with current law as it pertains to storm water construction activities adjacent to historic properties. City projects supported by federal, state or Redevelopment Agency funds which impact a Historic Property (listed on the National Register of Historic Properties, or at least 50 years old) will allow a 30 day advance evaluation period of the project and affected site by the State Historic Properties Officer prior to any modification being made. The City will notify the State Historic Preservation Officer in writing.

## **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 stormwater to Waters of the State, was March 10, 2003. 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 Stormwater Management Ordinance (Title 6 Chapter 15 of the Bountiful City 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).

## County

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

Agency:	Bountiful City	
Contact:	Todd Christensen	Environmental Engineer, Program Manager Phone: (801) 298-6125
	Paul Rowland	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

### 1.5.1 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 Municipalities 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) Businesses
  - c) Developers/contractors
  - d) Municipal Separate Storm Sewer System (MS4) Industrial 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 ordinance 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 sizing post-construction BMPs
- 6) Jointly participate to develop Standard Operating Procedures

## **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:

#### Construction/Landscape Materials

This applies 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.

#### 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

4<sup>th</sup> Grade Lessons: Teach 4<sup>th</sup> graders the fundamentals of storm water, receiving waters, and ways to prevent pollution to stormwater 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

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 Construction Packet***

Compile a “packet” of information to give to engineers, contractors, developers, planners, and staff for:

- Developing a SWPPP and construction site BMPs
- SWPPP review checklist
- LID opportunities review and encouragement
- Post-Construction preferred design standards
- Criteria for “Priority” construction sites
- List of inspections required and inspection form

- Project completion/close-out procedures

#### ***2.1.2.4 Employee 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 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.

In preparation for the implementation of new 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.

#### ***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**

**2010-2015 MEASUREABLE GOALS FOR PUBLIC EDUCATION AND OUTREACH**

<b>GOAL</b>	<b>SCHEDULE &amp; Interim Milestones</b>	<b>LEAD PERSON</b>
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 30 days after available	Env. Engineer, working with City Attorney
Distribute pamphlets created by DCSWC to the intended audience within Bountiful City	Within 60 days after a new pamphlet is available	Environmental Engineer
Complete and compile the "Packet" of information about construction sites and post-construction controls	To be completed by 2/1/2012	Environmental Engineer
Complete packet items: developing a SWPPP, construction site BMPs, and a SWPPP review checklist	12/1/2011 Except inspection and enforcement by 2/1/2012	Environmental Engineer
Complete packet item: LID encouragement and review	12/1/2011	Environmental Engineer
Develop/define hydrologic methods and criteria for calculating runoff V and Q and for sizing post-const. BMPs	1/1/2012	Public Works Director
Complete packet item: preferred design standards for post-construction controls	12/1/2011	Environmental Engineer
Complete packet item: criteria for "priority" construction sites	12/1/2011	Environmental Engineer
Conduct training of MS4 departments	Annual Training	
Review training program to MS4 departments to consider items listed in permit (4.2.1.5); alter training program as necessary	3/1/2011	Environmental Engineer
Include review of IDDE program in department trainings	Annual	Environmental Engineer
Train engineers, plan review staff, land use planners to learn about LID/GI	12/1/2011	Public Works Director
Train permitting, plan review, inspection and enforcement staff in implementing their job duties as related to new construction and post-construction requirements	2/1/2012	Environmental Engineer
Prepare newspaper articles for publication in city newsletters.	2010 – 2015 Annually	Environmental Engineer
Include information about preventing pollution by sweeping parking lots using the city website or a newsletter article	Oct. 2011	Environmental Engineer

## 2010-2015 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
4 <sup>th</sup> Grade Lessons	Teach all public 4 <sup>th</sup> grade classes in county annually
Produce Education Materials	Develop one pamphlet annually
Purchase Education Materials	<ul style="list-style-type: none"> <li>• Have pamphlets printed for distribution by each coalition member</li> <li>• Purchase enough booklets and balls for 4<sup>th</sup> grade classes</li> <li>• Purchase stickers (fueling caution), pencils, and magnets to have continually available</li> </ul>
Water Fair	Hold one event annually
Trainings	<ul style="list-style-type: none"> <li>• Hold one training annually</li> <li>• Provide training opportunity for one person from each member-entity to APWA conf., StormCON, or UFSMA</li> </ul>
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
Model Ordinance	Have available by July 2011

### 2.1.4 Initial Decision Process (pre-2010)

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 as the outreach strategy, as follows:

Inform individuals and households about the steps they can take to reduce storm water pollution  
*This information will be provided to individuals and households with a combination of BMPs, using a multi-media approach in order to reach a wide range of people in different ways that would give impact to the message:*

*BMP – Publications: EPA publications customized for Davis County*

*BMP – Curb Markers: The decal program will also include distribution of the publications to residents (the program is divided into different areas for completion)*

*BMP – Newsletter Articles: Customized information will be written and submitted for publication in the city's newsletter*

*BMP – Water Fair: Information will be presented to participants (including chaperones) relating to storm water pollution prevention*



*BMP – Teaching at Public Schools: The 4<sup>th</sup> graders were selected because it is understood that children at their age are likely to take the information home and share it with family members, and correlates with their curriculum*

*BMP – DCSW Coalition: Publications will be selected and printed in large quantity*

*BMP – TV Ads*

Inform individuals and groups on how to become involved in the storm water program

*This information will be provided to individuals and groups with the following BMPs:*

*BMP – Curb Markers: The decal program will involve many volunteers in promoting storm water pollution prevention*

*BMP – Newsletter Articles: By including information about the storm water program*

Target audiences that include commercial, industrial, and institutional entities, and how the audiences were selected

*Residential (general residential)*

*Businesses that may be sources of pollution, as determined by SDSW Coalition. First, those having an obvious potential to pollute will be targeted (Auto Repair, Mobile Cleaners, Fueling Stations, and Landscapers).*

*Industrial audiences: Bountiful City employees and departments are included as a target audience (some are covered under separate industrial permit). Other industries will not specifically be targeted by Bountiful City because Bountiful has no heavy industry, and no industry zones. However, when the Coalition hosts industrial trainings, we will participate.*

*Institutional Entities will not specifically be targeted because the churches, hospital, and schools all have a reputation for being clean and responsible, and Bountiful has no large-scale institutional areas.*

*Contractors are targeted, but the BMPs targeting contractors are in the construction control measure*

Targeted pollutant sources

*Residential, illegal dumping/discharging, highly visible polluters, businesses that have an obvious potential to pollute the storm water, and MS4 activities*

Method for evaluating success

*Annually, we look 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.*

How measurable goals were selected:

*BMPs were selected to meet the purpose and responsibility for this control measure. 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.*

### **2.1.5 Additional Decision Process Information**

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.

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

## **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**

<b>GOAL</b>	<b>SCHEDULE/FREQUENCY &amp; Interim Milestones</b>	<b>LEAD PERSON</b>
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.	2010 – 2015 Monthly meetings (normally)	Environmental Engineer
Comply with State and local laws regarding the advertisement and notification of public hearings.	2010 – 2015  Jan 2012 for revised ordinance	Environmental Engineer and Public Works Director
Provide Contact for storm water program questions and comments from public.	2010 – 2015 Continuously	Environmental Engineer
Provide public access to information on storm water information through city website. Include SWMP, a way to submit comments, and publicize Hotline #	Jan 1, 2011 (initially) Continually thereafter	Environmental Engineer, Working with IT Department

The measurable goals and time frame/frequency has been organized to reflect the 5 year term from 2010-2015

**2.2.4 Initial Decision Process (pre-2010)**

For this control measure, the fundamental objective 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, as follows:

How the public has been involved in development and submittal of the 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.*

*Applicable BMP: Inter-Local and Interest Holder Communication*

*Applicable BMP: Public Access to Storm Water Information*

How the public will be actively involved in the development and implementation of the program *State and local public notice requirements will be followed. This is to be 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 Coalition will also provide an avenue for public and stakeholders to provide input.*

*Note: A public hearing at a City Council meeting was held on June 5, 2001, that followed Public Notice requirements. Furthermore, 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.*

*Applicable BMP: Public Notice Requirements*

*Applicable BMP: Public Access to Storm Water Information*

Target audiences for the public involvement program, describing the types of ethnic and economic groups engaged

*The Boy Scouts were targeted as an organization that is likely to be willing to help with the volunteer activities (BMP- Curb Markers). Otherwise, all other ethnic and economic groups will be targeted equally through public notices.*

Types of public involvement activities included in the program

- Citizen representatives of a storm water management panel: *not included*
- Public hearings: *described above in this section under, “How the public will be actively involved...”*
- Working with citizen volunteers willing to educate others about the program: *The Boy Scout office will be notified of the opportunity to serve the community with the “Storm Drain Decal Program” (see BMP-Curb Markers under Public Education). Also, when Boy Scouts or others inquire about community service opportunities, they will be informed about the Decal Program.*
- Volunteer monitoring or stream clean-up activities: *not included*

Responsible Person: *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.*

Method for evaluating the success of the minimum requirements for this measure: *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.*

How measurable goals were selected:

*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.*

## **2.2.5 Additional Decision Process Information**

The storm drain stenciling program was completed previous to the permit renewal in 2010. The entire city had been 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 needs 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.

## **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**

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. After considering the results of the dry weather screening and the possible priority areas, no areas of concern were identified.

### **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, non-commercial 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, 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. On a county basis, Wasatch Integrated Waste accepts household hazardous waste throughout the year. 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, so Bountiful City has modified the annual dry weather screening schedule to reduce the frequency at which most outfalls are screened.

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 five years.

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, and reporting discharges.

### 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**

<b><u>Pollutant Description</u></b>	<b><u>Report to:</u></b>
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.

#### 2010-2015 MEASURABLE GOALS FOR IDDE PROGRAM

GOAL	SCHEDULE/FREQUENCY & Interim Milestones	LEAD PERSON
Verify revised storm water ordinance meets IDDE permit requirements	2/1/2012	Environmental Engineer working with City Attorney
Maintain and update storm drain system map	2010 – 2015 Update map at least once per year	Environmental Engineer
Provide Waste Oil and Household Hazardous Waste Program for City Residents	2010 – 2015 Annually	Storm Water Dept. Manager
Perform “subsequent” dry weather screening of all outfalls: at least 50% by year end 2015	10% by Dec. 2011 20% by Dec. 2012 : 100% by Dec. 2020	Environmental Engineer
Perform “high priority” dry weather screening of facilities or outfalls serving high priority areas	20% by Dec. 2015 40% by Dec. 2016 : 100% by Dec. 2019	Environmental Engineer
Complete Video Inspection of 25,000’ of storm drain annually	2010-2015 Measured during each fiscal year	Storm Water Dept. Manager
Create inspection report for documenting source of illicit discharge	Oct. 1, 2011	Environmental Engineer

### 2.3.4 Initial Decision Process (pre-2010)

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.

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

*Engineering and Storm Water Dept personnel know that the CAD map exists of the storm drain system. When a discrepancy is found, it will either be changed immediately, or will be marked on a map that will record needed changes in the map that will be updated occasionally.*

*Applicable BMP: Storm Drain System Map*

Mechanism that will be used to prohibit illicit discharges and why it was chosen:

*An ordinance will be used for this purpose, chosen because it is the most feasible way for the city to prohibit illicit discharges. Ordinance ideas from other nearby cities and the EPA will be used to develop the ordinance for ideas on what to include.*

*Major revisions to the city's storm water ordinance were drafted in 2005, using an EPA model ordinance as a basis, chosen because it is from the leading regulating authority. The city's ordinance, with major revisions, was adopted in June of 2005.*

*Applicable BMP: Storm Water Ordinance*

The plan to ensure that the illicit discharge ordinance is implemented:

*Before being taken to the city council for approval, the ordinance will be reviewed by the city attorney. Then, a recommendation will be made to the city council to accept the ordinance. This was done in 2005.*

*Applicable BMP: Storm Water Ordinance*

The plan to detect and address illicit discharges to the system, including discharges from illegal dumping and spills AND procedures for locating priority areas which includes areas with higher likelihood of illicit connections:

*A dry weather screening plan will be followed that will characterize any flowing outfalls.*

*Outfalls to one of the five streams will be screened each year. The streams collecting runoff from the oldest part of the city (possibly most likely for cross connections) will be checked first.*

*Other practices that will be used to detect illicit discharges are: video-inspecting storm drain lines; publicizing a hotline number and placing markers with the number near curb inlets; and training employees to keep watch for illicit dumping (addressed more specifically in Pollution Prevention Good Housekeeping control measure).*

*Applicable BMP: Used Oil and Hazardous Waste Disposal (as a preventative measure)*

*Applicable BMP: Public Reporting*

*Applicable BMP: Outfall Screening*

*Applicable BMP: Video-Inspect Storm Drain Lines*

Procedures for tracing the source of an illicit discharge and tracing it to a source AND removing the source of the illicit discharge:

*These procedures are included in the section above that describes the outfall screening program.*

*The same practices for tracing and removing the source of an illicit discharge, as described in that section, will be followed at any time (not just during a period of dry-weather screening).*

*Applicable BMP: Storm Water Ordinance*

*Applicable BMP: Outfall Screening*

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:

*This will be 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.*

Responsible Parties for the program:

*The engineering department will do the following: update storm drain map and keep it up to date; coordinate the work to get an ordinance ready and recommend to the city officials to adopt the ordinance; coordinate the work to inform employees and others of the hazards associated with illegal discharges (the Davis county Storm Water Coalition will be utilized to help with this practice); perform the dry weather screening; work with volunteers to mark curb inlets.*

*The storm water department will do the following: handle the contract to video-inspect the storm drain lines; fund and operate the household hazardous waste program*

Procedures for program assessment and evaluating the success of the minimum measures and how the measurable goals for each BMP was selected:

*The program will be assessed by checking the status of the measurable goals. This will be done annually.*

*The measurable goals, as shown in the table for measurable goals, were selected by considering the requirements of the permit, along with how we would reasonably meet those requirements with the BMPs that were selected. Then, a feasible goal was set in a way that could somehow be quantified. The measurable goal for Public Reporting is in the Public Education section, because Public Reporting is closely tied to Public Education.*

### **2.3.5 Additional Decision Process Information**

Because the program was mostly developed prior to the 2010 SWMP revisions, procedural changes have been identified as modifications to the revised SWMP. There are changes to some BMPs, especially the sub-parts to the BMP for Detecting and Eliminating Illicit Discharges. The spill response and reporting BMP with the flow chart was added.

Priority Areas for this control measure: Review of possible priority areas was made by city staff Nov. 10<sup>th</sup> 2010. The list in the permit of areas likely to have illicit discharges was reviewed. The oldest part of the city is Plat A. 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. As of the date of the review, all outfalls had been screened, and no illicit connections were found. Bountiful has no impaired receiving waters nor any heavy industrial areas. The conclusion is that there is no reason to identify one area above another as priority, therefore no areas were identified as priority for the IDDE program.

The method for evaluating success, as described in the initial Decision Process has been modified as to be an IDDE program evaluation/assessment, which 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

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

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 STORMWATER 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” 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 runs 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 Utah Construction General Permit UTR300000. 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
  - review LID opportunities
  - determine if site will be designated a priority construction site
  - perform a SWPPP review according to checklist
  - review plans for post-construction requirements
- 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 review records and a copy of the SWPPP will be kept for a minimum of 5 years or until construction is complete

#### ***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.

The bond will be released upon passing a final inspection and verification that a N.O.T. has been filed. An SOP for Enforcing Construction Site Requirements will be followed to ensure compliance from violators. Retaining records will be part of 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.



**2010-2015 MEASURABLE GOALS FOR CONSTRUCTION SITE CONTROLS**

<b>GOALS</b>	<b>SCHEDULE/ FREQUENCY &amp; Interim Milestones</b>	<b>LEAD</b>
Revise Storm Water Ordinance to include technical requirements of UTR300000	2/1/2012	Environmental Engineer working with City Attorney
Review Site Plans (SWPPP) for all technical requirements of UTR300000	2/1/2012 – 2015	Environmental Engineer
Create a construction site inspection procedure	2/1/2012	Environmental Engineer
Conduct site inspections according to site inspection procedure	Begin 2/1/2012 Monthly thereafter	Environmental Engineer
Create a construction site enforcement procedure	2/1/2012	Environmental Engineer
Enforce construction site requirements according to enforcement procedure	2/1/2012-2015	Environmental Engineer

**2.4.4 Initial Decision Process (pre-2010)**

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.

The mechanism which will be used to require erosion and sediment controls at construction sites, and why the mechanism was chosen:

*An ordinance will be used for this purpose, chosen because it is the most feasible way for the city to implement the requirements and is enforceable. The ordinance will encompass illicit discharge, construction, and post construction requirements.*

*Applicable BMP: Ordinance for Construction Sites*

The plan to ensure compliance with the erosion and sediment control regulatory mechanism, including a description of the sanctions:

*Ensuring compliance will be done by requiring a construction site permit. Before the permit is issued, a site plan (storm water pollution prevention plan) will be reviewed and will need to meet*

*a list of requirements. During construction, inspectors will observe whether any obvious problems exist threatening the storm water. Sanctions will be used as follows:*

- Failure to have required inspections scheduled or performed, if a severe problem exists at the site*
- Warnings will be given once 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*

*Applicable BMP: Construction site Permit Application*

*Applicable BMP: Site Plan Review*

*Applicable BMP: Site Inspections*

Requirements for construction site operators to implement appropriate pollution prevention BMPs:

*The specific requirements will be detailed in the ordinance and the checklist for storm water permit applicants*

*Applicable BMP: Ordinance for Construction Sites*

*Applicable BMP: Site Plan Review*

Procedures for 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 has been reviewed for storm water pollution prevention and meets minimum requirements for erosion control, sediment removal, waste disposal, and inlet protection.*

Procedure for receipt and consideration of information submitted by the public:

*See BMP: Public Access to Storm Water Information in the Public Information and Outreach control measure*

Procedures for site inspection and enforcement of control measures:

*All building construction sites 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. Penalties progress from warning and failed inspection to stop work order to \$500 fee for clean up to citation.*

*Applicable BMP: Site Inspections*

Responsible person for the overall management and implementation of the storm water construction site program:

*The city engineering department is responsible for the management of this program. The contractor education BMP is expected to be fulfilled in cooperation with the Davis County Storm Water Coalition.*

Description of how the success of this minimum control measure will be evaluated:

*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 progress of implementing the program.*

How the measurable goals were selected for the BMPs:

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

#### **2.4.5 Additional Decision Process Information**

This control measure was modified for the requirements of the 2010 permit.

Some measures were implemented for the previous permit term, and have been tailored from how they are described in the initial decision process (pre2010). Here are the primary differences with a brief explanation:

- BMP guidance was placed on the city website, but is no longer a goal. We'll continue to have it available there.
- SWPPP reviews, site inspections, and enforcement will occur as previously implemented (see initial decision process) until changed according to Revised SWMP (2010).

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.

#### **2.5 POST-CONSTRUCTION STORMWATER 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 BMP selection of post-construction controls, which will meet the post-construction technical requirements of the UPDES permit for construction activities, UTR 300000. 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 Stormwater 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” 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. Permanent facilities (both public and private) will be included in an inventory which defines specific 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.

#### 2010-2015 MEASURABLE GOALS FOR POST-CONSTRUCTION PROGRAM

GOALS	SCHEDULE	LEAD PERSON
Revise storm water management ordinance for post-construction requirements	2/1/2012	Environmental Engineer working with City Attorney
Develop standards for post-construction controls to minimize impacts to water quality; include specific hydrologic methods	2/1/2012	Public Works Director
Develop agreement form(s) for maintenance of post-construction controls on private property	2/1/2012	Public Works Director working with City Attorney
Create inventory of permanent post-construction controls for public and private sites	2/1/2012 – 2015	Environmental Engineer
Populate inventory for publicly-owned	2/1/2012	Environmental Engineer
Add to inventory for privately-owned	Beginning Feb 2012	Environmental Engineer
Develop an inspection procedure and inspection form for post-construction controls	2/1/2013	Environmental Engineer
Develop enforcement procedure with specific sanctions to ensure maintenance of post-construction controls	2/1/2012	Environmental Engineer, working with City Attorney
Perform annual inspection of post-construction controls	Initially by 2/1/2013 Annually thereafter	Environmental Engineer

### 2.5.4 Initial Decision Process (pre-2010)

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 to address storm water runoff from new development and redevelopment projects: *The program is to require 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. No priority areas have been identified.*

Description of how the program will minimize water quality impacts and attempt to maintain pre-development runoff conditions.

*New developments will be required to minimize peak runoff to pre-development conditions, based on a critical 10 year runoff event. New development will be required to limit storm water discharge to 0.2 cfs/acre, which is assumed as the pre-development condition. Detention of storm water will improve water quality by allowing sediment removal during detention time.*

Non-Structural BMPs in the program:

*Applicable BMP: Ordinance*

*No other non-structural BMPs are included in the program*

Policies or ordinances that encourage infill development in higher density urban areas and areas with existing storm water infrastructure:

*None*

Education programs for developers and the public about project designs that minimize water quality impacts:

*None*

Other measures (such as minimizing impervious area, minimizing directly connected impervious area, source controls, preventative maintenance and spill prevention):

*None*

Structural BMPs in the program:

- Storage practices (such as wet ponds and extended-detention outlet structures)  
*Detention practices will be required. The specific type of detention will be proposed by the owner/operator for city approval*
- Filtration practices (such as grassed swales, bioretention cells, sand filters, and filter strips)  
*These will be optional*
- Infiltration practices (such as infiltration basins and infiltration trenches)  
*These will be optional*

The mechanism which will be used to address post-construction runoff, and why the mechanism was chosen:

*An ordinance will be used for this purpose, 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.*

A description of how long-term operation and maintenance of the selected BMPs will be ensured:  
*Long term operation and maintenance will be ensured through conditions that will be set forth in development agreements.*

Person responsible for the overall management and implementation of the post-construction storm water management program and BMPs:

*Bountiful Engineering Department will be responsible for this control measure. Some of the responsibility will continue with land owners to maintain the post-construction BMPs on their property.*

Description of how the success of this control measure will be evaluated:

*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 progress of implementing the program.*

How the Measurable Goals for the BMPs was selected:

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

## **2.2.5 Additional Decision Process Information**

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.

Long-Term Controls required by ordinance (as revised March 2012) and the rationale for these requirements:

- 1- Minimum post construction requirements of UTR300000. The construction general permit requires the developer to describe the controls and give the technical basis for the controls (if flows are increased). There is also a requirement to install velocity-dissipation to minimize erosion.
- 2- A way to reduce peak flows (typically extended detention). 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-Constuction 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.

In addition, (per 4.2.5.4.2 and 4.2.5.3.2) The city's preferred long term controls from different developments types provide guidance on selecting long-term controls from different development

types. 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.

## **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.

### **2.6.2 BMPs**

#### ***2.6.2.1 Pollution Prevention for Buildings***

City-owned buildings in high priority areas 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 map will show 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***

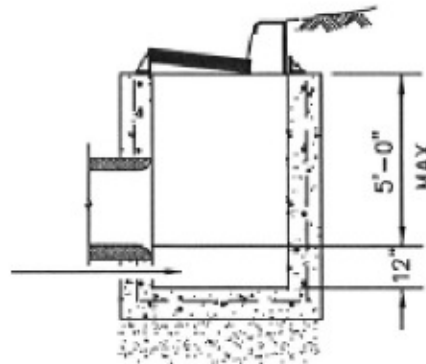
Streets and parking lots, owned by Bountiful City, will receive regular sweeping.

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



## BMP: Down-System Holding Pits

40 GALLON  
CAPACITY (MIN)  
HOLDING PIT



### 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.

**2010-2015 MEASURABLE GOALS FOR  
POLLUTION PREVENTION/GOOD HOUSEKEEPING PROGRAM**

<b>GOALS</b>	<b>SCHEDULE/ FREQUENCY</b>	<b>LEAD PERSON</b>
Check and map drains at high priority buildings to verify drainage to appropriate location	1/28/2011	Environmental Engineer
Write and implement additional procedures for high priority facilities	12/31/2013	Environmental Engineer
for buildings:	12/31/2013	Environmental Engineer
for storage yard	12/31/2013	Environmental Engineer
for vehicle/equipment maintenance:	12/31/2013	Environmental Engineer
Provide street and municipal parking lot cleaning – 130 miles/year	F. Y. 2011 – 2015	Storm Drain System Operator
Clean at least 10,000 ft of storm drain per year	2010-2015 Annually	Storm Water Dept. Manager
Maintain permit coverage and SWPPP for municipal industrial facilities	2010 – 2015 Continuously	Environmental Engineer
Include pollution prevention obligation for contractors hired by city for maintaining infrastructure	Beginning Jan 2011	Public Works Director
Assess city flood control projects for water quality concerns	Beginning 2/1/2012	Environmental Engineer

**2.6.4 Initial Decision Process (pre-2010)**

For this control measure, the city is responsible to implement an operation and maintenance program from 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.

The operation and maintenance program:

- Municipal operations that are impacted by this operation and maintenance program
  - *Streets, Storm Water, Water, Parks, and Golf Course departments*
- List of industrial facilities owned by the municipality (required to have separate storm water permit coverage under UPDES Multi-Sector General Permit)
  - *Bountiful Sanitary Landfill*
  - *Bountiful Maintenance and Storage Yard*

Municipal employee training program that will be used  
*See BMP: Municipal Employee Crew Training*

Other specifics of the program:

- Maintenance activities  
*The specifics of this are included in:  
Applicable BMP: Storm Drain System Maintenance  
Applicable BMP: Storm Drain System Waste Removal*
- Maintenance schedules  
*A measurable goal has been established for the cleaning of storm drain lines. There are some other maintenance schedules included in the Industrial SWPPP for the Bountiful Maintenance and Storage Yard for oil-sediment separators and other items*
- Long term inspection procedures for controls
  - *Annual visual inspection (minimum) of public permanent control structures (detention basins)*
  - *Annual sweeping of city streets*
  - *Other controls per the Industrial SWPPP for the Maintenance and Storage Yard*
- Controls for streets  
*Street Sweeping will be performed*
- Controls for municipal parking lots  
*Municipal parking lots will be swept with the streets*
- Controls for Maintenance and Storage Yards: *per Industrial UPDES SWPPP*
- Fleet or Maintenance Shops with outdoor storage: *per Industrial UPDES SWPPP*
- Salt storage locations: *per Industrial UPDES SWPPP*

Responsible person for the overall management and implementation of the storm water construction site program:

*The city storm water department is responsible for the management of this program. The City Engineering Department will manage the employee training and inventory mapping of this program.*

Description of how the success of this minimum control measure will be evaluated:

*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:

*First, we looked 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.*

### **2.6.5 Additional Decision Process Information**

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. As of Nov. 2010, this facility is covered by a multi-sector industrial permit that expires Dec. 31, 2013.

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.

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). There are also SOPs listed for activities that were not separately listed as BMPs in this control measure.

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.

### **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), an assessment of the program's conclusions concerning the data and whether the permit objectives are being met. This Report will also 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 1<sup>st</sup>.

## **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.

<b>DATE</b>	<b>SECTION</b>	<b>DESCRIPTION</b>
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 stormwater 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

## **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  
Name of Certifying Official, Title

## **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