



CITY OF
SARATOGA SPRINGS

STORM WATER MANAGEMENT PROGRAM



FEBRUARY 18, 2014

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Table 0-1 - List of Terms

ABOP	Antifreeze, Batteries, Oil & Paint
BMP	Best Management Practices
DCIAs	Directly Connected Impervious Areas
DWQ	Division of Water Quality
EPA	Environmental Protection Agency
GIS	Geographic Information System
HHW	Household Hazardous Waste
IDDE	Illicit Discharge Detection and Elimination
MEP	Maximum Extent Practicable
MIS	Management Information System
PHF	Pesticides, Herbicides, Fertilizers
SIC	Standard Industry Classification
SLVHD	Salt Lake Valley Health Department
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
UAC	Utah Administrative Code
UPDES	Utah Pollution Discharge Elimination System
TSS	Total Suspended Solids
DEQ	Division of Environmental Quality
LOD	Limits of Disturbance

Preface

Introduction

This Storm Water Management Plan (SWMP) has been prepared to limit, to the maximum extent practicable (MEP), the discharge of pollutants from Saratoga Springs' storm drain system. The development and implementation of this SWMP will fulfill the requirements for storm water discharges from a Small Municipal Separate Storm Sewer System (MS4) (UAC R317-8) and as a co-City under the State of Utah UPDES Permit for Utah County Authorization to Discharge Municipal Storm Water, Section II, in accordance with Section 402(p)(3)(B) of the Federal Clean Water Act, and the State Storm Water Regulations (UAC R317-8-3.8). The SWMP was developed to comply with Part 4.0 of the UPDES permit.

The City of Saratoga Springs has previously been covered under the UPDES Phase 1 Storm water Discharge permit. When the permit was issued, Saratoga Springs was part of unincorporated Utah County. The City of Saratoga Springs was incorporated in 1997, and as of August 13, 2013 (The State of Utah's Notice Letter) the City is now required to issue its own storm water permit under Phase II MS4 storm water regulations (Small MS4 UPDES General Permit No. UTR090000).

Saratoga Springs is located on the west side of Utah Lake in Utah County within the Utah Valley. Utah Valley is a terminal valley which drains to Utah Lake, flows through the Jordan River, and terminates at the Great Salt Lake.

Conveyance systems in Saratoga Springs consist of natural drainages from the Lake Mountains along the western boundary of the City and storm drain facilities installed to accommodate storm water runoff in urban development. Drainage systems generally flow easterly towards to Utah Lake and the Jordan River. The Jordan River flows from Utah Lake to the Great Salt Lake. The Great Salt Lake is a terminal system.

SWMP Coordination

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Executive Summary

This SWMP has been developed to meet the requirements of the UPDES permit and consists of the six minimum control measures established by the EPA for Phase II storm water discharges. Implementation of these control measures are anticipated to result in significant reductions of pollutants discharged into receiving water bodies. The six control measures are addressed in separate chapters.

Each control measure is facilitated by Best Management Practices “BMP’s” that outline specific tasks that, when implemented, will meet the objective of that control measure. This SWMP is intended to be a living document with BMP’s amended, added or deleted as necessary to meet the objectives of each control measure. The following provides a summary of each minimum control measure:

Section 1: Public Education and Outreach Program (UPDES 4.2.1)

- Ensure greater public support of and compliance to the storm water program
- Emphasize education in the SWMP as a cost-effective and proactive BMP to reduce, instead of treat, storm water pollutants

Section 2: Public Involvement/Participation Program (UPDES 4.2.2)

- Provide opportunities for the public to play an active role in the development and implementation of the storm water program
- Establish BMPs that involve and educate the public on the importance of protecting storm water and the issues relating to it

Section 3: Illicit Discharges and Improper Disposal Program (UPDES 4.2.3)

- Minimize illicit discharges into the storm drain system; discharges not composed entirely of storm water
- Prevent high levels of pollutants, the storm drain system was not designed for, from entering receiving waters

Section 4: Construction Site Storm Water Runoff Control Program (UPDES 4.2.4)

- Minimize polluted storm water runoff from construction activities
- Implement erosion and sediment controls during construction activities

Section 5: Post-Construction Storm Water Management Program (UPDES 4.2.5)

- Minimize the impact of development and redevelopment on storm water quality following construction
- Plan and design to minimize pollutants in runoff caused by the increase in impervious areas from development

Section 6: Pollution Prevention/Good Housekeeping Program (UPDES 4.2.6)

- Ensure a reduction in the amount and type of storm water pollutants
- Establish routine activities for operation and maintenance of municipal operations related to storm water runoff
- Set particular guidelines for source controls and materials management

Section - 1 Public Education and Outreach

The Public Education and Outreach Control Measure is intended to increase awareness of water quality concerns and the BMP's that can be implemented to address those concerns. This includes providing information which describe the potential impacts from storm water discharges; methods for avoiding, minimizing, reducing and/or eliminating the adverse impacts of storm water discharges; and the actions individuals can take to improve water quality, including encouraging participation in local environmental stewardship activities. (UPDES 4.2.1.1)

This section of the SWMP also includes recommendations for the training of local professionals and City employees. These education and training programs should introduce the Utah Pollutant Discharge Elimination System (UPDES) program, and focus on known contaminant sources and how to control and reduce these sources.

Target Audience

The main objective of the public education and outreach control measure is to communicate with the target audience the steps they can take to to reduce storm water pollution. The UPDES permit requires that the public education and outreach program specifically target the following groups:

- Residents
- Businesses
- Institutions
- Commercial facilities
- Developers
- Contractors (Construction)
- MS4 industrial facilities

BMP's for Public Education & Outreach (UPDES 4.2.1.8)

The following BMP's have been chosen for the Public Education and Outreach Program because of their ability to reach a large audience and were determined to be the best feasible options to educate the target audience about specific pollutants and pollutant sources determined by the City to be impacting, or have the potential to impact, the beneficial uses of receiving water.

BMP Title: City Web Page

Control Measure: Public Education and Outreach (UPDES 4.2.1)

Description: Provide information about storm water, pollutants, and methods for mitigating the negative impacts of storm water on the City's website. Also provide information on the NPDES and UPDES programs along with a copy of the City's SWMP.

Goal: Provide residents and local professionals with immediate and ongoing access to information pertaining storm water pollution, the City's Storm Water Management Plan and other related resources.

Implementation: The City will dedicate a location on the City's website that will provide a current copy of the SWMP, a link to the Utah County Storm Water Coalition website, a map showing locations that storm water discharges into Utah Lake and the Jordan river, a link to the Utah County's used oil program information sheet, and a link to the Utah County household hazardous waste disposal site and other links that the City finds beneficial to support the City's SWMP.

Assessment: Track how many people visit the storm water section of the City's web page (UPDES 4.2.1.7)

Start Date: 2014

End Date: Ongoing

BMP Title: City Newsletter

Control Measure: Public Education and Outreach (UPDES 4.2.1)

Description: Include information in the City's monthly newsletter to educate residents about specific pollutants and pollutant sources that are impacting, or have the potential to impact Utah Lake and the Jordan River. Also include methods residents can use for avoiding, minimizing, reducing and/or eliminating the adverse impacts of storm water discharges; and the actions they can take to improve water quality. Finally the newsletter can encourage participation in local environmental stewardship activities. Information will not be provided in every newsletter but on a consistent time frame.

Goal: Educate the public through educational materials and target issues that occur at a local scale.

Implementation: Gather information to distribute to the public that relates to the community needs through the City's monthly newsletter. Information will include but is not limited to storm drain systems, used oil programs, household hazardous waste disposal and information about specific local storm water issues.

Assessment: Document the information provided in the newsletters and keep track the number of households receiving the newsletters. (UPDES 4.2.1.7)

Start Date: 2015

End Date: Ongoing

BMP Title: Brochures

Control Measure: Public Education and Outreach (UPDES 4.2.1)

Description: Inform the public and businesses of the impact of storm water discharges on the Utah Lake, Jordan River, and Great Salt Lake systems. Information will be distributed through brochures.

Goal: Prepare and distribute educational brochures that address issues that occur at a local scale.

Implementation: Information pertaining to the SWMP will be distributed through brochures available at the City offices, distributed at preconstruction meetings, and with the issue of business licenses.

Assessment: Document the number of brochures that are distributed. (UPDES 4.2.1.7)

Start Date: 2017

End Date: 2019

BMP Title: Engineering & Development Standards

Control Measure: Public Education and Outreach (UPDES 4.2.1)

Description: Work with the planning department, engineering department, and the City Council to establish requirements and guidelines for Storm Water Pollution Prevention Plans (SWPPPs) and BMPs.

Goal: Prepare and adopt standards, specification, and standard details for the development of SWPPPs and site BMP's.

Implementation: The Current standards the City has adopted will be reviewed and areas that can be improved will be revised and implemented.

Assessment: City will review submitted SWPPP to ensure that the Standards are met. (UPDES 4.2.1.7)

Start Date: 2019

End Date: Ongoing

BMP Title: Training

Control Measure: Public Education and Outreach (UPDES 4.2.1)

Description: Annual training will provide City employees with general information that relates to the SWMP.

Goal: Develop a training program that will provide training to City employees focusing on providing a general background of the City's SWMP.

Implementation: Develop a training program that addresses and corrects current poor storm water management practices. The training program covers equipment inspection to ensure timely maintenance, proper storage of industrial materials, proper management and disposal of wastes, proper management of dumpster, minimization of use of salt and other de-icing materials, and proper maintenance of parking lot surfaces.

Assessment: Provide survey/quiz before and after training and document participation and attendance in training. Document the training each employee receives. (UPDES 4.2.1.7)

Start Date: 2019

End Date: Ongoing

BMP Title: Storm Water Coalition

Control Measure: Public Education and Outreach (UPDES 4.2.1)

Description: The Utah County Storm Water Coalition consists of a coalition of various local agencies located throughout Utah County. By joining the Utah County Storm Water Coalition the City will contribute in the Coalition's goal to utilize regional collaboration to identify existing resources and develop programs to reduce the negative impacts of storm water pollution.

Goal: Become a member of the Utah County Stormwater Coalition and participate in meetings.

Implementation: The City will join the Coalition. The coalition meets to discuss pertinent issues and reviews progress of each agency in meeting phase II requirements. Saratoga Springs will have representation at these meeting.

Assessment: Document the City's participation in the Utah County Storm Water Coalition. (UPDES 4.2.1.7)

Start Date: 2016

End Date: Ongoing



<u>General Public</u>	<i>City Web Page</i>	<i>City News Letter</i>	<i>Brochures</i>	<i>Engineering & Development Standards</i>	<i>Training</i>	<i>Storm Water Coalition</i>
(UPDES 4.2.1.2)						
• Proper Maintenance of Septic Systems	X		X			
• Effects of Outdoor Activities such as Lawn Care (use of pesticides, herbicides, fertilizer)	X	X	X			X
• Effects of Automotive Work and Car Washing on Water Quality	X	X	X			X
• Proper Disposal of Swimming Pool Water	X	X	X			X
• Proper Management of Pet Waste	X	X	X			X

<u>Businesses, Institutions, and Commercial Facilities</u>	<i>City Web Page</i>	<i>City News Letter</i>	<i>Brochures</i>	<i>Engineering & Development Standards</i>	<i>Training</i>	<i>Storm Water Coalition</i>
(UPDES 4.2.1.3)						
• Proper lawn maintenance (use of pesticides, herbicides and fertilizers)	X	X	X			X
• Building and equipment maintenance (proper management of waste water)			X			
• Use of salt or other deicing materials (cover/prevent runoff to storm system and contamination to ground water)		X	X			
• Proper storage of materials (emphasizing pollution prevention)	X	X	X			
• Proper Management of waste materials and dumpsters (cover and pollution prevention)		X	X			
• Proper management of parking lot surfaces (sweeping)			X			

<u>Engineers, Developers, Contractors, Land Planners</u>	<i>City Web Page</i>	<i>City News Letter</i>	<i>Brochures</i>	<i>Engineering & Development Standards</i>	<i>Training</i>	<i>Storm Water Coalition</i>
(UPDES 4.2.1.4)						
• Instructions for Development of Storm Water Pollution Prevention Plan (SWPPP)				X	X	
• Best Management Practices (BMP) for Reducing Adverse Impacts of Storm Water Runoff. Information will be given with site plan and preliminary plan.				X		
• Post-Construction Controls – permit at business				X		
<u>City Staff</u>	<i>City Web Page</i>	<i>City News Letter</i>	<i>Brochures</i>	<i>Engineering & Development Standards</i>	<i>Training</i>	<i>Storm Water Coalition</i>
(UPDES 4.2.1.5)						
• Equipment Inspection to Ensure Timely Maintenance					X	
• Proper Storage of industrial materials (emphasizing pollution prevention)					X	
• Proper management and disposal of wastes			X		X	
• Proper management of dumpsters		X	X		X	
• Minimization of use of salt and other de-icing materials (cover/prevent runoff to MS4 and ground water contamination)		X	X		X	
• Proper maintenance of parking lot surfaces (sweeping)			X		X	

**MS4 Engineers, Development and Plan
Review Staff, and Land Use Planners**

(UPDES 4.2.1.6)

- **Low Impact Development (LID) practices**
- **Green Infrastructure practices**
- **Communicate specific requirements for post-construction control and the associated Best Management Practices (BMPs) chosen with the SWMP**

	<i>City Web Page</i>	<i>City News Letter</i>	<i>Brochures</i>	<i>Engineering & Development Standards</i>	<i>Training</i>	<i>Storm Water Coalition</i>
	x				x	
	x				x	
	x				x	

Section - 2 Public Involvement / Participation

The Public Involvement/Participation control measure addresses the importance of public involvement with respect to the protection of storm water. Community participation provides for broader public support, public understanding of the nature and magnitude of the problems faced with, shorter implementation schedules, a broader base of expertise, and development of important relationships with other community programs.

This section of the SWMP includes opportunities for the public to play an active role in the development and implementation of the SWMP. Such opportunities include the public notification process and efforts to reach out and engage all demographic groups, and additional community programs to foster public input and participation.

Public Notice (UPDES 4.2.2.4)

The City will comply with State and local public notice requirements when implementing a public involvement and participation program. Public involvement and participation programs will include steps to foster and include public input in developing, implementing, and reviewing storm water management programs.

BMP's for Public Involvement / Participation

The following BMP's have been chosen for the Public Involvement and Participation program because they were determined to provide the best opportunities for public involvement and participation through activities such as public hearings, volunteer opportunities, or other similar activities.

BMP Title: Public Hearing

Control Measure: Public Involvement/Participation (UPDES 4.2.2)

Description: Public Hearings will allow residents the opportunity to voice concerns and offer suggestions to more efficiently reduce our impact on our receiving waters.

Goal: Hold Public hearings that encourage the public to be involved in addressing storm water quality concerns. In public hearings elicit ideas from residents for improving the existing SWMP and activities to involve the public in preventing and cleaning up pollutants in the storm drain system.

Implementation: The SWMP document will be provided for public review and the City will make available the opportunity to provide input prior to adoption. The document will be made available within 180 days of notification of the requirement for Permit coverage received on August 15, 2013 (UPDES 4.2.2.2).

The City will comply with State and Local public notice requirements (UPDES 4.2.2.4)

Also the City will hold a public hearing at least every 5 years with renewal of the SWMP to involve the residents in SWMP updates. The revised SWMP will be made available to the public for review and input within 120 days from the date of the permit.

Assessment: Document comments received and attendance at public hearings.

Start Date: 2014

End Date: Ongoing

BMP Title: Storm Drain Marking

Control Measure: Public Involvement/Participation (UPDES 4.2.2)

Description: Labeling storm drain inlets will help discourage illegal dumping and inform the public of the impacts of storm water discharge into Utah Lake and the Jordan River. Utilize public volunteer groups to mark storm drain inlets and distribute educational flyers in the area where storm drain inlets were marked.

Goal: Identify and mark storm drains.

Implementation: The City Council will consider purchasing county stream crossing signs with the City logo and place them at major stream discharge areas as well as purchase inlet markers with Utah County. After obtaining the markers the City will contact community volunteer groups that can place the markers and distribute educational flyers in the areas the markers are placed.

The City will develop a map to track project locations and identify inlet box condition.

Assessment: The City will document the location and number of markings placed and also document the number of flyers passed out.

Start Date: 2015

End Date: Ongoing

BMP Title: Stream/Roadway Cleanup

Permit Requirement: Public Involvement/Participation (UPDES 4.2.2)

Description: A program for community volunteers to cleanup drainage and roadway areas that have the highest potential impact on storm water pollution.

Goal: Clean different locations throughout the City that may impact the storm drain system and/or receiving waters.

Implementation: Initiate a program for interested community groups to clean and maintain rivers, drainages, shorelines, Lake and roadways.

Assessment: The City will document the number of participants and map what streams/roadways are cleaned in the program.

Start Date: 2016

End Date: Ongoing occurred

Section - 3 Illicit Discharge Detection and Elimination (IDDE)

The IDDE control measure is intended to systematically find and eliminate sources of non-storm water discharges from the MS4 and to implement defined procedures to prevent illicit connections and discharges. The program will implement BMPs to assist in identifying illicit discharges to the storm water system and eliminating these discharges from the system. This program will focus on prevention of new illicit discharges to the system by means of education, regulation, spill prevention, and improved response.



Public Awareness (UPDES 4.2.3.7 & 4.2.3.8)

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 City will inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. The City will promote services for the collection of household hazardous waste.

Evaluation (UPDES 4.2.3.10)

The City will adopt and implement procedures for program evaluation and assessment which includes maintaining a database for mapping, tracking of the number and type of spills or illicit discharges identified and the inspections conducted.

BMP's for IDDE

The following BMPs describe implementation tasks and assessment tasks to be completed by Saratoga Springs for this program.

BMP Title: Storm Sewer System Mapping

Permit Requirement: IDDE (4.2.3.1)

Description: A map that identifies locations of all municipal storm sewer outfalls.

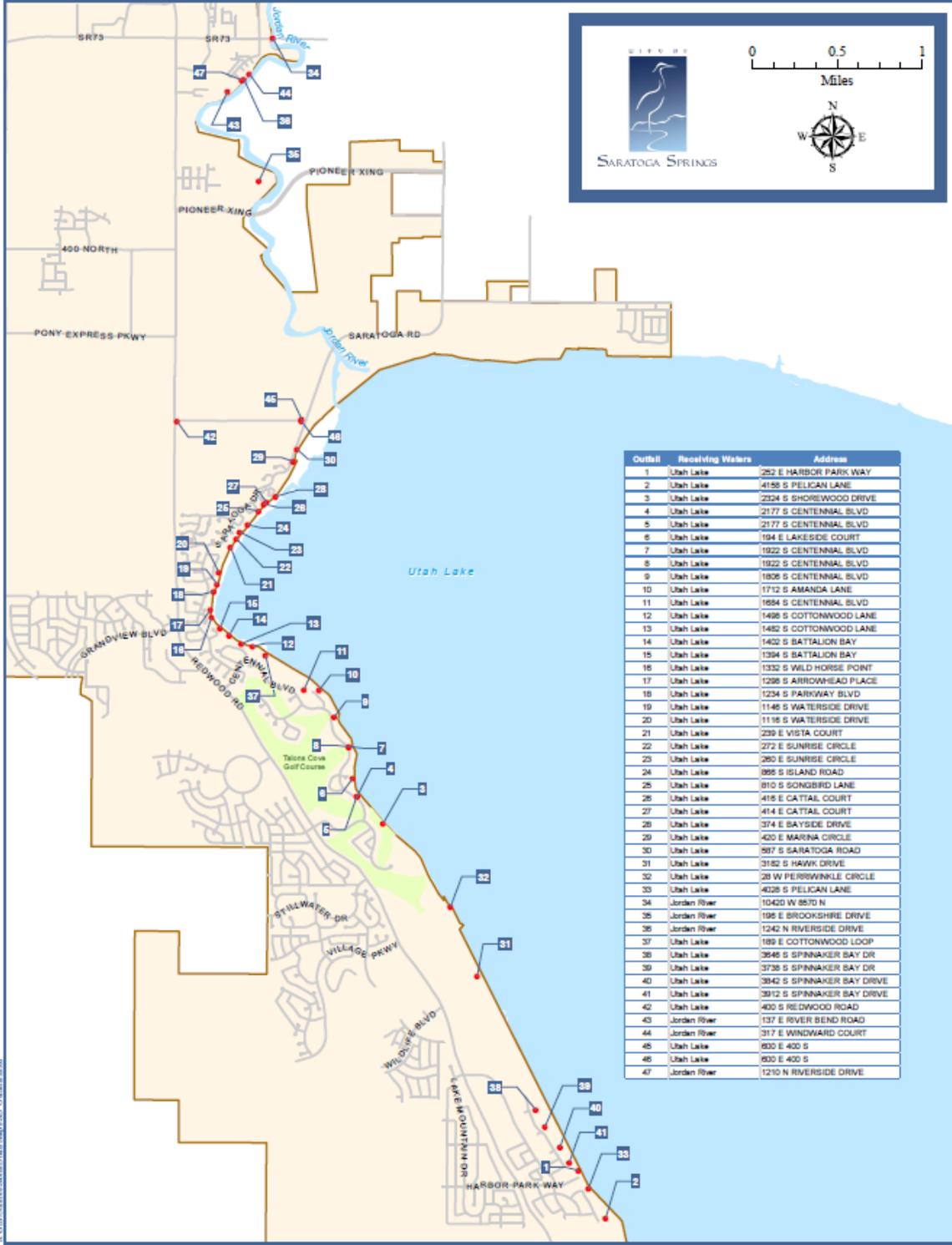
Goal: Keep an updated map of all City outfall locations with accompanying addresses of each outfall.

Implementation: GIS administrator will prepare and continually update a comprehensive and detailed map and data base of City storm sewer system including all outfalls.

Start Date: 2014

End Date: Ongoing

Storm Drain Outfalls



Outfall	Receiving Waters	Address
1	Utah Lake	252 E HARBOR PARK WAY
2	Utah Lake	4155 S PELICAN LANE
3	Utah Lake	2324 S SHOREWOOD DRIVE
4	Utah Lake	2177 S CENTENNIAL BLVD
5	Utah Lake	2177 S CENTENNIAL BLVD
6	Utah Lake	194 E LAKESIDE COURT
7	Utah Lake	1922 S CENTENNIAL BLVD
8	Utah Lake	1922 S CENTENNIAL BLVD
9	Utah Lake	1806 S CENTENNIAL BLVD
10	Utah Lake	1712 S AMANDA LANE
11	Utah Lake	1684 S CENTENNIAL BLVD
12	Utah Lake	1486 S COTTONWOOD LANE
13	Utah Lake	1482 S COTTONWOOD LANE
14	Utah Lake	1402 S BATTALION BAY
15	Utah Lake	1394 S BATTALION BAY
16	Utah Lake	1332 S WILD HORSE POINT
17	Utah Lake	1298 S ARROWHEAD PLACE
18	Utah Lake	1234 S PARKWAY BLVD
19	Utah Lake	1146 S WATERSIDE DRIVE
20	Utah Lake	1116 S WATERSIDE DRIVE
21	Utah Lake	239 S VISTA COURT
22	Utah Lake	272 E SUNRISE CIRCLE
23	Utah Lake	260 S SUNRISE CIRCLE
24	Utah Lake	898 S ISLAND ROAD
25	Utah Lake	810 S SONGBRID LANE
26	Utah Lake	416 E CATTAL COURT
27	Utah Lake	414 E CATTAL COURT
28	Utah Lake	374 E BAYSIDE DRIVE
29	Utah Lake	420 E MARINA CIRCLE
30	Utah Lake	887 S SARATOGA ROAD
31	Utah Lake	3182 S HAWK DRIVE
32	Utah Lake	28 W PERSWINKLE CIRCLE
33	Utah Lake	4028 S PELICAN LANE
34	Jordan River	10420 W 8570 N
35	Jordan River	196 E BROOKSHIRE DRIVE
36	Jordan River	1242 N RIVERSIDE DRIVE
37	Utah Lake	189 E COTTONWOOD LOOP
38	Utah Lake	3646 S SPINNAKER BAY DR
39	Utah Lake	3738 S SPINNAKER BAY DRIVE
40	Utah Lake	3842 S SPINNAKER BAY DRIVE
41	Utah Lake	3912 S SPINNAKER BAY DRIVE
42	Utah Lake	400 S REDWOOD ROAD
43	Jordan River	137 E RIVER BEND ROAD
44	Jordan River	317 E WINDWARD COURT
45	Utah Lake	800 E 400 S
46	Utah Lake	800 E 400 S
47	Jordan River	1210 N RIVERSIDE DRIVE

8 December 2010

BMP Title: New City Ordinances for Illicit Discharge

Permit Requirement: IDDE (4.2.3.2)

Description: City Ordinances help in order to implement appropriate enforcement procedures. Ordinances will be used to prohibit any discharge to the storm drain system that is not composed entirely of storm water into the storm drain system.

Goal: Create/Revise City ordinances to prohibit illicit discharges.

Implementation: The City will review current city ordinances and develop new ordinances as necessary to prohibit illicit discharges. The City will address appropriate enforcement procedures and action in ordinances. With these ordinances or by-Laws the City will ensure that it has adequate legal authority to detect, investigate, eliminate, and enforce against non-storm water discharges, including illegal dumping into the MS4. The City will provide references or citations of the authority the City will use to implement all aspects of the IDDE program. Enforcement options that will be implemented will allow an escalating enforcement process.

Notes: Any discharge to the storm drain system that is not composed entirely of storm water is considered illicit with the following exceptions (UPDES Permit 1.2.2.2) (unless the City identifies these discharges as significant sources of pollutants):

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering runoff
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Residual street wash waters
- Dechlorinated water reservoir discharges
- Discharges or flows from firefighting activity

Start Date: 2015

End Date: 2019

BMP Title: Public Reporting System

Permit Requirement: IDDE (4.2.3.9)

Description: A public phone line will allow residents the opportunity to reports spills or other illicit discharges.

Goal: Reduce impacts of illicit discharges through early notification.

Implementation: The City will create and publicly list and publicize a local telephone number that the community can call to report spills and illicit discharges. A written record will be kept of all calls received, all follow-up actions taken, and any feedback received from the public education efforts. Proper city personnel will be notified and investigate the reports.

The City will also develop a written spill/dumping response procedure, and a flow chart for internal use, that shows the procedures for responding to public referrals of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the City. The procedure and list will be incorporated as part of the IDDE program and incorporated into the City's SWMP document. The list will be maintained and updated as changes occur.

Start Date: 2016

End Date: Ongoing

BMP Title: Dry Weather Screening

Permit Requirement: IDDE (4.2.3.3)

Description: Dry weather screenings helps in identifying areas that are experiencing non-storm water discharges. These may include spills, illicit connections, sanitary sewer overflows and illegal dumping.

Goal: Develop written procedures for dry weather screenings and identify potential problem areas.

Implementation: The City will develop an outfall field screening program to initiate more detailed drainage area investigations. The areas will be prioritized by likelihood of having illicit discharge. The City will consider:

- Areas with older infrastructure that are more likely to have illicit connections
- Industrial, commercial, or mixed use areas
- Areas with a history of past illicit discharges
- Areas with a history of illegal dumping
- Areas with onsite sewage disposal systems
- Areas with older sewer lines or with a history of sewer overflows or cross connections
- Areas upstream of sensitive water bodies

These areas will be monitored and the Utah County Health Department will be informed if any illicit connections or illegal discharges are found. The City will, at a minimum, field assess 20% of the priority areas identified each year. The implementation schedule for the dry weather screening program is provided on the following page.

Start Date: 2019

End Date: Ongoing



Implementation Schedule (4.2.3.3.2):

1. Understand the storm water infrastructure through outfall screening
 - a. Use GIS Maps to determine main storm sewer outfalls
 - b. Use dyes to help trace flows through storm sewer system
2. Walk all of the streams in Saratoga Springs in the first permit cycle
 - a. Identify all outfalls into Utah Lake and Jordan River
3. Complete a desktop assessment of illicit discharge potential
 - a. Delineate sub watersheds within Saratoga Springs
 - b. Compile available mapping for each drainage unit including land use info
 - c. Screen and rank illicit discharge potential at the sub watershed level
4. Field Assessment Activities
 - a. Field assess at least 20% of the priority areas annually
 - b. Find problem outfalls in priority sub watersheds
 - c. Document all areas assessed including assessment comments
 - d. Develop standard sub-basin I.D. to use for planning field assessment activities and documentation.
 - e. City Engineer will create schedule to cover entire city system
5. Trace any illicit discharge problems to the specific source
 - a. Trunk and onsite investigations
 - b. Corrections and Enforcement
6. Prevent illicit discharge problems in the field
 - a. Select key discharge behaviors
 - b. Community outreach programs to prevent illicit discharge from neighborhoods
 - c. Storm drain stenciling
7. IDDE Documentation – Record the Following Information in an Inspection Report (UPDES 4.2.3.5.1). All IDDE investigations will be thoroughly documented and made available to the Division at their request (UPDES 4.2.3.5.1). The Division reserves the right to request documentation or further study of a particular non-storm water discharge of concern, to require a reasonable basis for allowing the non-storm water discharge and excluding the discharge from the City's program, and to require inclusion of the discharge in the City's program, if water quality concerns cannot otherwise be reasonably satisfied (UPDES 4.2.3.12). All reports will have the following:
 - a. Date City became aware of illicit discharge
 - b. Date investigation of the discharge was initiated
 - c. Date the discharge was observed
 - d. Location of the discharge
 - e. Description of the discharge
 - f. Method of discovery
 - g. Date of removal, repair, or enforcement action
 - h. Date and method of removal verification
 - i. The decision process for utilizing analytical monitoring and procedures
8. IDDE Notification and Cessation Procedures
 - a. City Engineer will notify Utah County Authorities regarding IDDE

actions

- b. Develop City Ordinance regarding Illicit discharges
9. IDDE Program Training and Evaluation (UPDES 4.2.3.11)
- a. City Engineer and Public works director will provide IDDE training annually to employees.
 - b. City Engineer will Evaluate the IDDE program annually

Standard Operating Procedures

SOP Title: Tracking the Source of an Illicit Discharge

Permit Requirement: IDDE (4.2.3.4)

Objective: Develop and implement standard operating procedures (SOPs) or similar type of documents for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, using field tests of selected chemical parameters as indicators of discharge sources, collecting and analyzing water samples for the purpose of determining sanctions or penalties, and/or other detailed inspection procedures.

Start Date: 2016

End Date: Ongoing

SOP Title: Characterizing the Nature of Illicit Discharges

Permit Requirement: IDDE (4.2.3.5)

Goal: Develop and implement standard operating procedures (SOPs) or similar type of documents for characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges found by or reported to the City by the hotline or other telephone number described in 4.2.3.9. These procedures shall include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. Compliance with this provision will be achieved by initiating an investigation immediately upon being alerted of a potential illicit discharge. Reports will be completed following the IDDE documentation when illicit discharge is identified and confirmed.

Start Date: 2016

End Date: Ongoing

SOP Title: Ceasing Illicit Discharge

Permit Requirement: IDDE (4.2.3.6)

Objective: Develop and implement standard operating procedures (SOPs) or similar type of documents for ceasing the illicit discharge, including notification of appropriate authorities; notification of the property owner; technical assistance for

removing the source of the discharge or otherwise eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated. Upon detection, the City shall require immediate cessation of improper disposal practices upon confirmation of responsible parties in accordance with its enforceable legal authorities established pursuant to Part 4.2.3.2.1. of this Permit. All IDDE investigations will be thoroughly documented.

Start Date: 2016

End Date: Ongoing

BMP Title: Training

Permit Requirement: IDDE (4.2.3.11)

Description: Annual training will be provided to City employees relating to the IDDE Program.

Goal: Develop a training program for the IDDE program. Provide training to all applicable employees.

Implementation: Develop an annual training program that trains employees about the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal and illicit connections. This training will be provided to all field staff that, as part of their normal job responsibilities, might come in contact with or otherwise observe an illicit discharge or illicit connection to the MS4. The City will also train office personnel who might receive initial reports of illicit discharges. The training developed will include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge.

Assessment: Provide survey/quiz before and after training and document participation and attendance in training

Start Date: 2018

End Date: Ongoing

Section - 4 Construction Site Storm Water Runoff Control Program



This control measure addresses water quality concerns for construction sites greater than or equal to one acre including projects less than one acre that are part of a larger common plan of development or sale. Polluted storm water runoff from construction sites often flows to storm drains and into receiving waters. This runoff can contribute more sediment to receiving waters than would

be deposited naturally during several decades. The resulting situation can cause physical, chemical and biological harm to receiving waters. The BMPs described in this section of the SWMP include the development of a program designed to reduce pollutants in storm water runoff from construction activities. This program should include procedures for construction site plan review, site inspections and notification of site specific requirements to all construction site owners/operators. Public and private projects, including projects proposed by the City departments will also be required to comply with these requirements. The development, implementation and enforcement of this program must be implemented within **18 months** of receiving coverage under this Permit.

Record Keeping (4.2.4.6)

The City will adopt and implement procedures to maintain records of all projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The City will keep records which include site plan reviews, SWPPPs, inspections and enforcement actions including verbal warning, stop work orders, warning letter, notices of violation, and other enforcement records. The City will keep these records of these projects for five years or until construction is completed, whichever is longer.

BMPs for Construction Site Storm Water Runoff

This program will also be integrated with other facets of the SWMP to provide information and up-to-date BMPs to the public, construction site operators, etc. The following BMPs describe goals and assessment tasks to be completed by Saratoga Springs for the Construction Site Storm Water Runoff Control Program:

BMP Title: City Ordinances for Construction Site Storm Water Runoff Control

Permit Requirement: Construction Site Storm Water Runoff Control (4.2.4.1)

Description: City Ordinances help in order to implement appropriate enforcement procedures. The ordinances will be used to require the use of erosion and sediment control practices at construction sites.

Goal: Create/Revise City ordinances to require the use of erosion and sediment control practices at construction sites.

Implementation: A city ordinance will be created, if not currently in place, and will include control of pollution generated by storm water runoff from construction activities. The Ordinance will be equivalent with the technical requirements set forth in the UPDES Storm Water General Permit for Construction Activities, UTR300000 at www.waterquality.utah.gov/UPDES/stormwater.htm. The ordinance will include sanctions to ensure compliance. This ordinance will apply to projects disturbing greater than or equal to one acre and to construction projects of less than one acre that are part of a larger common plan of development or sale. It will require that construction operators, for a consultant, prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs to protect water quality, reduce the discharge of pollutants, and control waste (discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site and so forth). The ordinance will also include a provision to allow access by qualified personnel to inspect construction storm water BMPs on private properties that discharge to the MS4.

Start Date: 2014

End Date: 2019

BMP Title: Training

Permit Requirement: Construction Site Storm Water Runoff Control (4.2.4.5)

Description: Training will be provided to City employees relating to Construction Storm Water Program.

Goal: Develop or find a training program for all staff whose primary job duties are related to implementing the construction storm water program.

Implementation: The City will ensure that all staff whose primary job duties are related to implementing the construction storm water program are trained to conduct these activities. The training may be conducted by the MS4 or outside training can be attended. Training will extend to third-party inspectors and plan reviewers as well. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance Training may include the following:

- Have a city employee become Registered Storm water Inspector for Utah
- Train city personnel regarding storm water regulations and storm water controls requirements on construction sites
- Provide city personnel with specific storm water BMP information
- Require city employees to view the Utah County Storm water Coalition training videos (<http://www.co.utah.ut.us/Dept/PubWrks/StormwaterVideos.asp>)

Start Date: 2014

End Date: Ongoing

Standard Operating Procedures (SOPs)

SOP Title: Enforcement Strategy and Implementation of Enforcement of Construction Site Storm Water Runoff Ordinance

Permit Requirement: Construction Site Storm Water Runoff Control (4.2.4.2)

Objective: Develop a SOP or similar type of document that includes specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators which will include appropriate, escalating enforcement procedures and actions. Also develop a method for documenting and tracking all enforcement actions.

Start Date: 2014

End Date: Ongoing

SOP Title: Pre-Construction Storm Water Pollution Prevention Plan (SWPPP) Review

Permit Requirement: Construction Site Storm Water Runoff Control (4.2.4.3)

Objective: Develop a SOP or similar type of document for pre-construction SWPPP review and keep records for, at a minimum, all construction sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure plans are complete and in compliance with State and Local regulations. The City will keep records of these projects for five years or until construction is completed, whichever is longer. Elements of this SOP will require the City, prior to construction, to do the following:

1. A pre-construction SWPPP review which includes a review of the site design, the planned operation at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development.
2. Incorporate into the SWPPP review procedures the consideration of potential water quality impacts and procedures for pre-construction review which shall include the use of a checklist
3. Incorporate into the SWPPP review procedures for an evaluation of opportunities for use of LID and green infrastructure and if applicable encourage such BMPs to be incorporated into the site design.
4. Identify priority construction sites, including at a minimum those construction sites discharging directly into or immediately upstream of water that the State recognizes as impaired (for sediment) or high quality.

Start Date: 2014

End Date: Ongoing

SOP Title: Construction Site Inspection and Enforcement of Construction Storm Water Pollution Control Measures.

Permit Requirement: Construction Site Storm Water Runoff Control (4.2.4.4)

Objective: Develop a SOP or similar type of document for construction storm water pollution control measures. The procedures will clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The Construction site storm water runoff control inspection program will provide the following:

1. Inspections will be required monthly by qualified personnel using the Construction Storm Water inspection Form found at www.waterquality.utah.gov/UPDES/stormwatercon.htm on all new construction sites that meet size requirements need for a SWPPP.
2. The City will inspect all phases of construction: prior to land disturbance, during active construction, and following active construction. The City will include in this document a procedure for being notified by construction operators/owners of their completion of active construction so that verification of final stabilization and removal of all temporary control measures may be conducted.
3. Inspections by the MS4 of priority construction site will be conducted at least biweekly using the form list above.
4. Based on site inspection findings, the City must take all necessary follow-up actions to ensure compliance in accordance with the City's enforcement strategy. These follow-up and enforcement actions will be tracked and documented.

Start Date: 2014

End Date: Ongoing

Section - 5 Long Term Storm Water Management in New Development and Redevelopment

The Post-Construction Storm Water Management in new development and redevelopment program (Post-Construction Storm Water Management Program) addresses the importance of storm water runoff management with discharges into the MS4 following post construction. The City of Saratoga Springs is still in the early phases of development. Therefore, the city's post-construction program will mostly focus on new development projects. The City will implement this program within **18 months** of receiving coverage under this permit. All items in Section 5 are addressing sites disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

Inventory of Post-Construction Structural Storm Water Control Measures (4.2.5.7)

The City will develop a method to inventory all post-construction storm water control measures installed and implemented at new and redeveloped sites. This inventory will include both public and private sector sites located within the City's service area. Each entry will include basic information on each project (project name, owners name, contact information, location, start/end dates, etc.) and inventories will also include:

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

The city will include a method to update the inventory as appropriate where changes occur in property ownership or the specific control measures implemented at the site.

BMP for Long Term Storm Water Management

Substantial impacts of post-construction runoff are caused by an increase in the type and quantity of pollutants in storm water runoff. The BMPs described in this section of the SWMP include the development of structural and non-structural storm water runoff strategies and the development of post-construction programs that consider water quality impacts of new development and redevelopment projects in the comprehensive land use master planning process.

The following BMPs describe goals and assessment tasks to be completed by Saratoga Springs for the Post-Construction Storm Water Management in new development and redevelopment program.

BMP Title: City Ordinances for Long-Term Storm Water Management

Permit Requirement: Long-Term Storm Water Management (4.2.5.1)

Description: Create/Revise City ordinances to require long term post-construction storm water controls at new development and redevelopment sites.

Goal: Reduce pollutants from construction site storm water runoff through City ordinances.

Implementation: Develop and adopt an ordinances that apply to new development and redevelopment sites that discharge to the MS4 and that disturb the required area stated at the begin of this section. The ordinance or other regulatory mechanism will be equivalent with the technical requirements set forth in the UPDES Storm Water General Permit for Construction Activities found at www.waterquality.utah.gov/UPDES/stormwatercon.htm. Any existing City requirements pertaining to storm water controls at smaller site will remain in place. The Ordinance will also require BMP selection, design, installation, operation and maintenance standards necessary to protect water quality and reduce the discharge of pollutants to the MS4.

Start Date: 2014

End Date: 2019

BMP Title: City Standards

Permit Requirement: Long-Term Storm Water Management (4.2.5.3)

Description: Standards that ensure any storm water controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality.

Goal: Minimize impact to water quality from new and redevelopment.

Implementation: The City will develop standards to minimize development in areas susceptible to erosion and sediment loss, minimize the disturbance of native soils and vegetation, preserve areas in the City that provide important water quality benefits, implement measures for flood control, and protect the integrity of natural resources and sensitive areas. Also the City will evaluate and encourage LID approach where it is practicable. Caution will be used because of the presence of collapsible soils throughout the City.

In addition to standards the City will create a plan to retrofit existing developed sites that are adversely impacting water quality. The plan will be developed to emphasize controls that infiltrate, evapotranspire, or harvest and use storm water discharges. The plan will include a ranking of control measures to determine those best suited for retrofitting as well as those that could later be considered for retrofitting. The City will include the following when developing the criteria for retrofit plan (UPDES 4.2.5.3.3):

1. Proximity to waterbody
2. Status of waterbody to improve impaired waterbodies and protect unimpaired waterbodies
3. Hydrologic condition of the receiving waterbody
4. Proximity to sensitive ecosystem or protected area
5. Any upcoming sites that could be further enhanced by retrofitting storm water controls

Also the City will develop and define specific hydrologic method(s) for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs in their jurisdiction and to facilitate plan review.

Start Date: 2014

End Date: Ongoing

BMP Title: Training

Permit Requirement: Long-Term Storm Water Management (4.2.5.6)

Description: Training will be provided to City employees relating to the Long-Term Storm Water Management Program.

Goal: Reduce pollutants to receiving waters through training in Long-Term Storm Water Management Program.

Implementation: The City will provide adequate training for all staff involved in post-construction storm water management, planning and review, and inspections and enforcement. Training will be made available for staff in the fundamentals of long-term storm water management through the use of structural and non-structural control methods. The City will keep training records' including dates, activities or course descriptions, and names and positions of staff in attendance.

Start Date: 2014

End Date: Ongoing

Standard Operating Procedures (SOPs)

SOP Title: Procedures for Enforcement of Ordinances for Long-Term Storm Water Management.

Permit Requirement: Long-Term Storm Water Management (4.2.5.2)

Objective: Develop an enforcement strategy and implement the enforcement provisions of the Ordinance. Procedures will include specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators which shall include appropriate, escalating enforcement procedures and actions. Also the City will develop documentation on how the requirements of the ordinance will protect water quality and reduce the discharge of pollutants to the MS4. The documentation will include:

1. How long-term storm water BMP's were selected
2. The pollutant removal expected from the selected BMPs
3. The technical basis which supports the performance claims for the selected BMPs.

The Ordinance will also include provisions for both construction-phase and post-construction access for the City to inspect storm water control measures on private properties that discharge to the MS4 to ensure that adequate maintenance is performed.

Start Date: 2014

End Date: Ongoing

SOP Title: Site Plan review procedures for Long-Term Storm Water Management.

Permit Requirement: Long-Term Storm Water Management (4.2.5.4)

Objective: The City will adopt and implement procedures for site plan reviews which incorporate considerations of water quality impacts. The City will develop procedures to:

1. Review SWPPPs for all new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. This review is to ensure that the plans include long-term storm water management measures that meet the requirements.
2. Provide developers and contractors with preferred design specifications to more effectively treat storm water for different development types.
3. Keep a representative copy of information that is provided to design professionals.

Start Date: 2014

End Date: Ongoing

SOP Title: Inspections and Enforcement for Long-Term Storm Water Management.

Permit Requirement: Long-Term Storm Water Management (4.2.5.5)

Objective: The City will develop and adopt procedures for the inspection and enforcement of post construction storm water control measures. Permanent structural BMPs will be inspected at least once during installation by qualified personnel. Inspections and any necessary maintenance will be conducted annually by either the City or through a maintenance agreement, the property owner/operator. On sites where the property owner/operator is conducting maintenance, the City will inspect those storm water control measures at least once every five years. The City will document its findings in an inspection report which includes the following:

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

Start Date: 2014

End Date: Ongoing

Section - 6 Pollution Prevention and Good Housekeeping

The Pollution Prevention and Good Housekeeping Program is put in place to reduce pollutants from City owned and/or operated facilities. It addresses routine activities in the operation and maintenance for drainage systems, roadways, parks and open spaces, and other municipal operations to help ensure a reduction in pollutants entering the storm drain system.

Inventory of City Owned and/or Operated facilities (4.2.6.1)

The City will develop and keep a current written inventory of all City owned or operated facilities and storm water controls that may include materials storage yards, pesticide storage facilities, all public buildings, salt storage facilities, street repair and maintenance sites, City owned and/or maintained structural storm water controls and so forth.

Assessment of facilities (4.2.6.2)

After the City compiled an inventory of all facilities the City will proceed to assess the inventory for their potential to discharge to storm water the following pollutants:

1. Sediments
2. Nutrients
3. Metals
4. Hydrocarbons (e.g., benzene, toluene, ethylbenzene, and xylene)
5. Pesticides
6. Chlorides
7. Trash
8. Other pollutants associated with the City's facilities that could be found in storm water discharges.

Identifying High Priority Facilities (4.2.6.3)

After each facility has been assessed the City will develop a process to identify which of these facilities are "high priority" (have high potential to generate storm water pollutants). The factors that will be considered in this ranking process include the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must be performed outside, proximity to water bodies, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water.

Maintenance (4.2.6.5)

If the City contracts with a third-party to conduct municipal maintenance or allows private developments to conduct their own maintenance they will be held to the same standards as the City. This expectation will be defined in contracts between the City and the other respective party. The City will be responsible for ensuring, through contractually-required documentation or periodic site visits that the third party are using appropriate storm water controls and following the SOPs, storm water control measures, and good housekeeping practices of the City.

Water Quality Impacts (4.2.6.7)

The City will develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the City or that discharge to the MS4. This process will include consideration of controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives. In addition existing flood management structural controls will be assessed to determine whether changes or additions should be made to improve water quality.

Construction Projects (4.2.6.7)

All Public construction projects will comply with the requirements applied to private projects. All public projects approved after the effective date of this Permit will include construction and post-construction controls selected and implemented pursuant to sections 4 and 5.

BMP for Good Housekeeping

The program will implement the following BMP's that whose ultimate goal is preventing or reducing pollutant runoff from all City owned or operated facilities.

BMP Title: Operation and Maintenance program for “High Priority” Facilities

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4)

Description: Specific procedures for City owned facilities using BMPs.

Goal: Prevent or reduce pollutant runoff from all City owned or operated facilities through O & M.

Implementation: The City will develop O & M program that will address facilities identified as “High Priority”. The O & M program shall include the following inspections:

- Weekly Visual Inspection (4.2.6.6.1)
- Quarterly Comprehensive Inspection (4.2.6.6.2)
- Quarterly Visual Observation of Storm Water Discharges (4.2.6.6.3)

Facilities shown on the proceeding pages, if identified as “High Priority”, will be considered when developing the O & M program.

Start Date: 2014

End Date: Ongoing

O&M Facility: Buildings and Facilities (Within 180 Days of Receiving Coverage)

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4.1)

Objective: The O & M program will address City owned or operated offices, police and fire stations, pools, parking garages, and other City owned or operated buildings or utilities. SOPs will be developed for the following topics, if needed:

- Use, Storage, and Disposal of Chemicals
- Spill Prevention
- Dumpsters and Other Waste Management
- Sweeping Parking Lots

The City will also develop an inventory, including a map, of all storm drains located on the property of all City owned or operated buildings and facilities.

O&M Facility: Material Storage Areas, Heavy Equipment Storage Areas, and Maintenance Areas

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4.2)

Objective: The O & M program will address City material storage areas, heavy equipment storage areas, and maintenance areas. SOPs will be developed, if needed, to protect water quality at each of these facilities owned or operated by the City and not covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities.

O&M Facility: Parks and Open Space

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4.3)

Objective: The O&M program will address, if needed, SOPs for the following topics:

- Application, Storage, and Disposal of Fertilizer, Pesticides, and Herbicides
- Sediment and Erosion Control
- Evaluation of Lawn Maintenance and Landscaping Activities
- Trash Containers at Parks other Open Spaces
- Cleaning of maintenance equipment, building exteriors, trash containers, and the disposal of the associated waste and wastewater.

The SOPs will be developed and put into the O & M program on an as needed basis.

O&M Facility: Vehicles and Equipment

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4.4)

Objective: The O&M program will address, if needed, SOPs for:

- Vehicle maintenance and Repairing Activities
- Vehicle Wash Waters (To prohibit them from discharging to MS4 waters)

The SOPs will be developed and put into the O and M program on an as needed basis.

O&M Facility: Roads, Highways, and Parking Lots

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4.5)

Objective: The O&M program will address, if needed, SOPs for the following topics:

- Sweeping Streets and City Owned or Operated Parking Lots
- Road and Parking Lot Maintenance
- Cold Weather Operations
- Right-of-Way Maintenance
- Municipally-Sponsored Events

The SOPs will be developed and put into the O & M program on an as needed basis. A schedule for sweeping streets will also be included in the program.

O&M Facility: Storm Water Collection and Conveyance System

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4.6)

Objective: The O & M program will address, if needed, SOPs for the following topics:

- Inspection, Cleaning and Repair of Catch Basins, Storm Water Conveyance Pipes, Ditches and Irrigation Canals, Culverts, Structural Storm Water Controls, and Structural Runoff Treatment and/or Flow Control Facilities
- Annual Inspections of Swales, Detention Basins, other structures.
- Proper Disposal of all Waste and Wastewater Removed from Storm Water Conveyance System.

The SOPs will be developed and put into the O & M program on an as needed basis.

O&M Facility: Other Facilities and Operations

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.4.7)

Objective: The City will identify any facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff. BMPs will be developed, if needed, within the O & M program if facilities are found to be “High Priority”.

BMP Title: Training for Municipal Operations

Permit Requirement: Pollution Prevention and Good Housekeeping for Municipal Operations (4.2.6.9)

Description: Training for City Employees.

Objective: Prevent or reduce pollutant runoff from all City owned or operated facilities through training of employees.

Implementation: The City will develop a training program for all employees who have primary construction, operation, or maintenance job functions that are likely to impact storm water quality. The City will identify target employees to participate in the training sessions. Training will address:

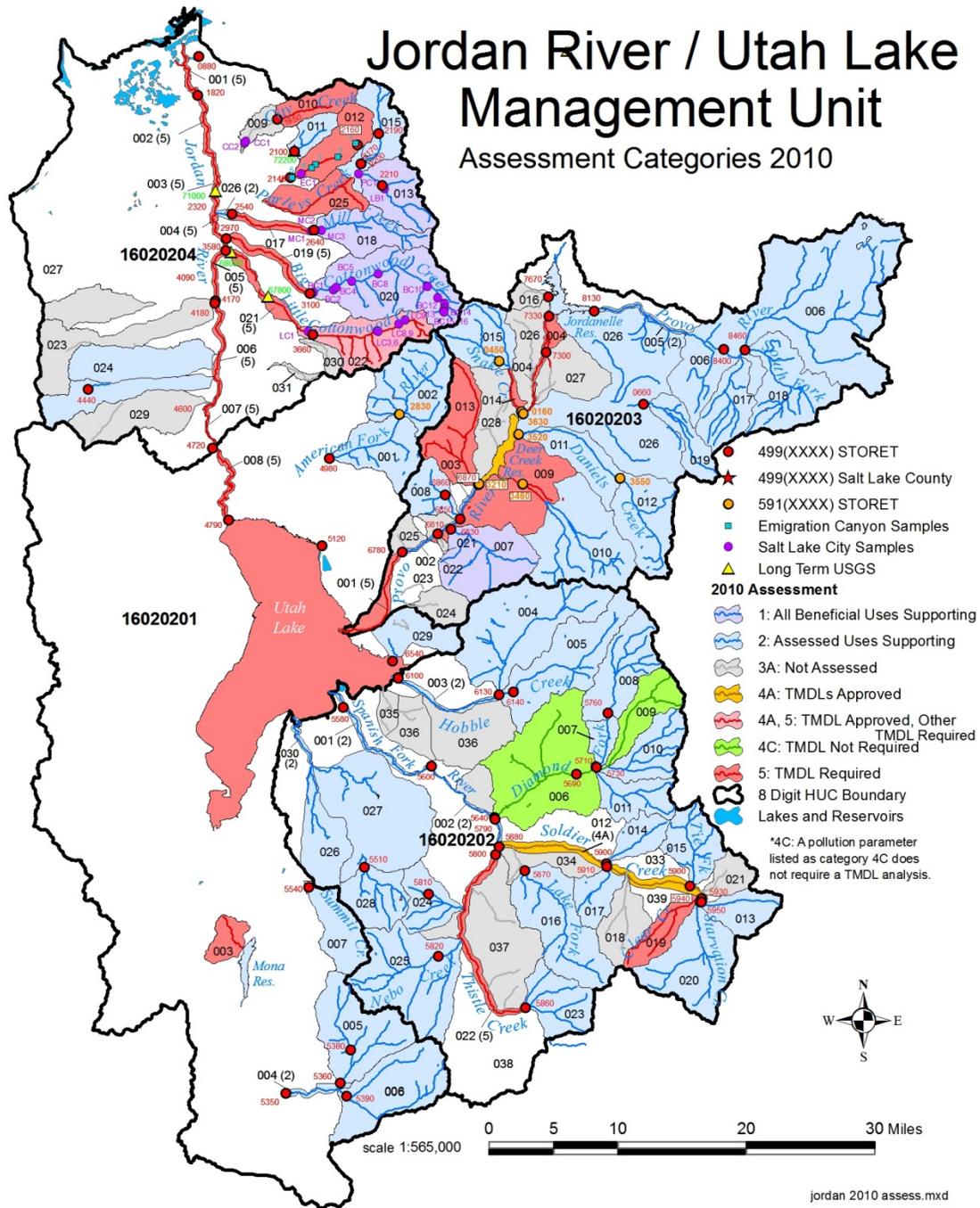
- Importance of Protecting Water Quality
- Requirements of this Permit
- Operation and Maintenance Requirements
- Inspection Procedures
- Ways to Perform their Job Activities to Prevent or Minimize Impacts to Water Quality
- SOPs for the Various City Owned or Operated Facilities
- Procedures for Reporting Water Quality Concerns

Follow-up training will be provided as needed to address changes in procedures, methods, or staffing.

Start Date: 2014

End Date: Ongoing

Figure 6-1 - Jordan River/Utah Lake Management Unit



SIGNATURES – APPROVAL OF THE PLAN

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 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

The City of Saratoga Springs – Principle Executive
Officer or Elected Official or Duly Authorized
Representative
(PRINTED NAME AND POSITION)

The City of Saratoga Springs – Principle Executive
Officer or Elected Official or Duly Authorized
Representative
(SIGNATURE)

Date

Appendix

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

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



INSTRUCTIONS ON BACK PAGE

DWQ USE ONLY

Coverage No. _____

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

Part I. General Information

Governmental Entity Name: City of Saratoga Springs

Mailing Address: Street 1307 N. Commerce Dr. #200

City Saratoga Springs State Utah Zip Code 84045

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

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

Operator Contact Person: Name Jeremy Lapin

Title City Engineer Telephone Number (801) 766-9793

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

Latitude 40°20'15.31"N Longitude 111°55'5.07"W

Population served by your MS4: 21,137 (2012 U.S. Census Bureau estimate) People

Storm Water Management Program Responsible Person:

Name Jeremey Lapin Title City Engineer

Telephone Number (801) 766-9793

Part II: Outfalls and Receiving Waters

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

	Outfall	Receiving Water
1.	See Attached Sheet	
2.		
3.		
4.		
5.		
6.		

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

1. Public Education and Outreach on Storm Water Impacts

Outreach Techniques

- Classroom education/school programs
- Outreach to commercial entities
- Printed material
- Media campaign
- Classroom educational materials
- Events and Programs
- Displays
- Speakers to community groups
- Economic incentives
- Promotional giveaways
- Others

Management Practices to Encourage

- Proper lawn and garden care (fertilizer and pesticide use, sweeping, etc.)
- Low impact development
- Pet waste management
- Pollution prevention for businesses
- Proper disposal of household hazardous wastes
- Water Conservation Practices
- Others

2. Public Involvement/Participation

Involvement Techniques

- Advisory/partner committees
- Local storm water contact
- Public access to documents and information
- Public review of plans and annual reports
- Watershed organizations
- Attitude surveys
- Community hot lines
- Stakeholder meetings
- Others

Participation Activities

- Adopt-a-stream
- Storm drain stenciling
- Stream/roadway cleanup
- Volunteer monitoring
- Wetland plantings
- Others

3. Illicit Discharge Detection and Elimination

Detection and Elimination Activities

- System mapping
- Regulatory Control Program
- Identifying and Eliminating illicit connection procedures
- Dye testing/Tracing Procedures
- System inspections
- Dry Weather Screening Program/ Field Testing
- Others

Type of Discharges to Target

- Failing septic systems
- Illegal dumping
- Industrial/business connections
- Recreational sewage
- Sanitary sewer overflows
- Wastewater connections to the storm drain system
- Others

4. Construction Site Storm Water Runoff Control

Program Activities

- Regulatory Control Program
- Erosion and Sediment Control BMP's
- Other Waste Control Program
- Site Plan Review Procedures
- Public Information handling Procedures
- Site Inspection/Enforcement Procedures
- Other Construction Site Runoff Controls
- Contractor certification and inspector training
- Others

Best Management Practices

- Construction Entrance/Exit Stabilization
- Perimeter Controls
- Sediment Retention Structure Requirements
- Sediment filters and sediment chambers
- Mulching Requirements
- Temporary/Permanent Stabilization Requirements
- Vehicle maintenance and washing areas
- Cement Truck Washout Area
- OtherBMP's

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

- Community Control Strategy
- Regulatory Control Program
- Long Term O& M Procedures
- Pre-Construction Review of BMP Designs
- Site Inspections During Construction
- Post Construction Inspections
- Others

- Infiltration trench/basin
- Infrastructure planning
- storm water inlet specifications
- Narrower residential streets
- Open space design
- Ordinances for post construction runoff
- Storm water wetland
- Zoning
- Others:

6. Pollution Prevention/Good Housekeeping for Municipal Operations

- Employee Training Program
- Inspection and Maintenance Program
- Municipal Operations Storm Water Control
- Others

- Municipal Operations Waste Disposal
- Flood Management/Assessment Guidelines
- Others:

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

<p>1. Public Education and Outreach on Storm Water Impacts</p> <p>Measurable goals (with start and end dates):</p> <p>SEE ATTACHED SHEETS.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Milestones: Year 1: Year 2: Year 3: Year 4: Year 5:</p>	<p>4. Construction Site Storm Water Runoff Control</p> <p>Measurable goals (with start and end dates):</p> <p>SEE ATTACHED SHEETS.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Milestones: Year 1: Year 2: Year 3: Year 4: Year 5:</p>
<p>2. Public Involvement/Participation</p> <p>Measurable goals (with start and end dates):</p> <p>SEE ATTACHED SHEETS.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Milestones: Year 1: Year 2: Year 3: Year 4: Year 5:</p>	<p>5. Post-Construction Storm Water Management in New Development and Redevelopment</p> <p>Measurable goals (with start and end dates):</p> <p>SEE ATTACHED SHEETS.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Milestones: Year 1: Year 2: Year 3: Year 4: Year 5:</p>
<p>3. Illicit Discharge Detection and Elimination</p> <p>Measurable goals (with start and end dates):</p> <p>SEE ATTACHED SHEETS.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Milestones: Year 1: Year 2: Year 3: Year 4: Year 5:</p>	<p>6. Pollution Prevention/Good Housekeeping for Municipal Operations</p> <p>Measurable goals (with start and end dates):</p> <p>SEE ATTACHED SHEETS.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Milestones: Year 1: Year 2: Year 3: Year 4: Year 5:</p>

Part V. Certification

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

Print Name: Jeremy Lapin

Signature: 

Date: 2/13/2014

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

List entity names responsible for implementation of the SWMP

1. _____ 2. _____
 3. _____ 4. _____
 5. _____ 6. _____

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

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

<u>RESPONSIBILITY</u>	<u>ENTITY</u>					
a. Public Education and Outreach	1.	2.	3.	4.	5.	6.
b. Public Involvement and Participation	1.	2.	3.	4.	5.	6.
c. Illicit Discharge Detection and Elimination	1.	2.	3.	4.	5.	6.
d. Construction Site Run-off Control	1.	2.	3.	4.	5.	6.
e. Post-Construction Storm Water Management in New Development and Redevelopment	1.	2.	3.	4.	5.	6.
f. Pollution Prevention/Good Housekeeping for Municipal Operations	1.	2.	3.	4.	5.	6.

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

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

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

Entity	Authorized Signature	Date	Entity	Authorized Signature	Date
1.	_____	_____	2.	_____	_____
3.	_____	_____	4.	_____	_____
5.	_____	_____	6.	_____	_____

Instructions for Completing the Notice of Intent for Coverage Under a UPDES General Permit for Storm Water Discharges From SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
Permit No. UTR090000

Who Must File a Notice of Intent?

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

When to File the NOI Form

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

Where to File the NOI Form

NOIs must be sent to the following address:

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

Completing the NOI Form

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

Part I. MS4 General Information

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

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

Indicate the legal status of the MS4 operator as a Federal, State, private, or other public entity (other than Federal or State). This refers only to the operator, not the owner of the land on which the MS4 is located.
Indicate whether the MS4 discharges storm water into one or more receiving water(s). Enter the name(s) of the receiving water(s).
Indicate whether the MS4 discharges storm water into one or more receiving water(s). Enter the name(s) of the receiving water(s).

Part II. Outfalls and Receiving Waters

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

Part III. Initial Identification of Management Practices

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

Part IV. Identification of Initial Measurable Goals

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

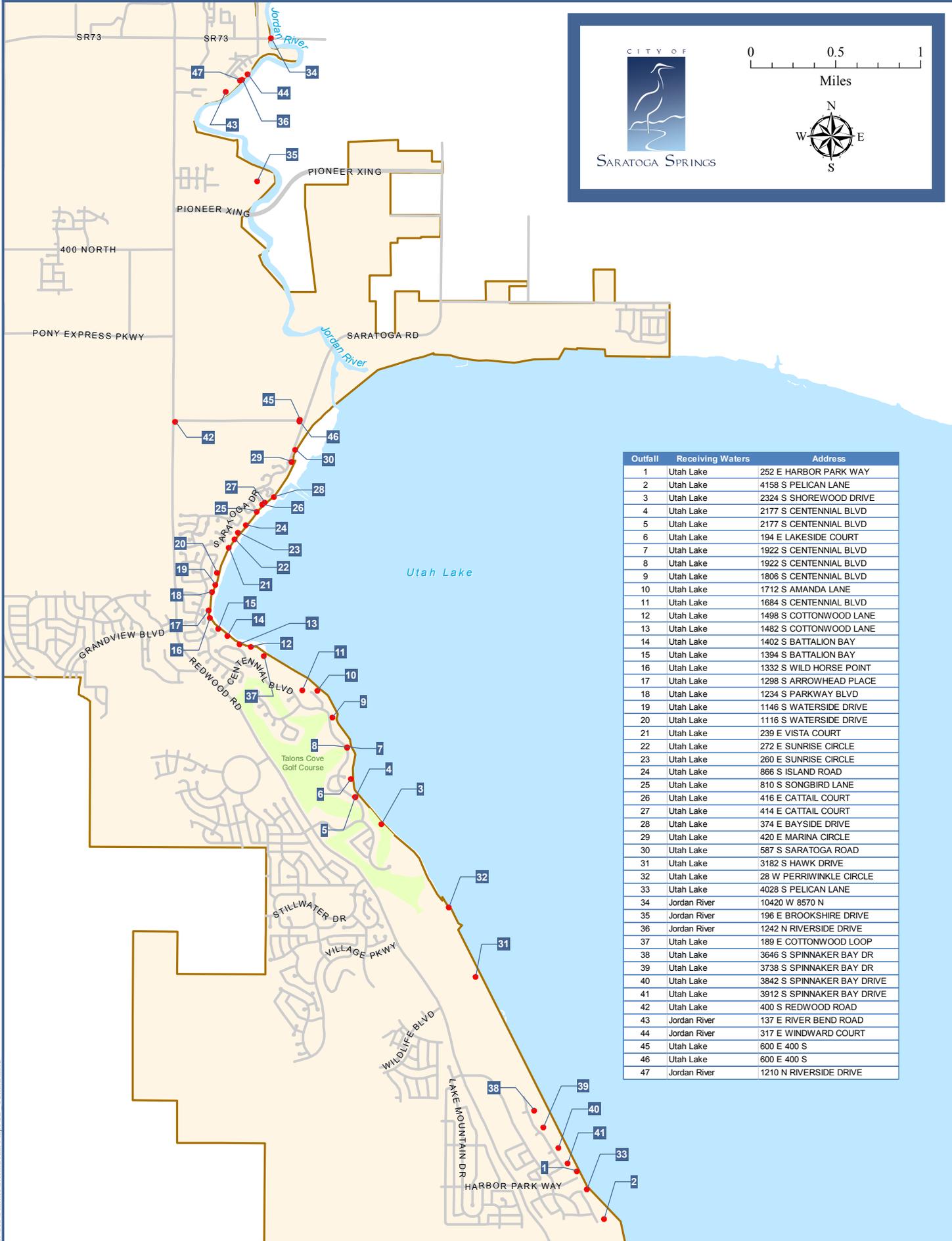
Part V. Certification

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

Part VI. Contract Certification for Co-Permittee SWMP Implementation

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

Storm Drain Outfalls



Outfall	Receiving Waters	Address
1	Utah Lake	252 E HARBOR PARK WAY
2	Utah Lake	4158 S PELICAN LANE
3	Utah Lake	2324 S SHOREWOOD DRIVE
4	Utah Lake	2177 S CENTENNIAL BLVD
5	Utah Lake	2177 S CENTENNIAL BLVD
6	Utah Lake	194 E LAKESIDE COURT
7	Utah Lake	1922 S CENTENNIAL BLVD
8	Utah Lake	1922 S CENTENNIAL BLVD
9	Utah Lake	1806 S CENTENNIAL BLVD
10	Utah Lake	1712 S AMANDA LANE
11	Utah Lake	1684 S CENTENNIAL BLVD
12	Utah Lake	1498 S COTTONWOOD LANE
13	Utah Lake	1482 S COTTONWOOD LANE
14	Utah Lake	1402 S BATTALION BAY
15	Utah Lake	1394 S BATTALION BAY
16	Utah Lake	1332 S WILD HORSE POINT
17	Utah Lake	1298 S ARROWHEAD PLACE
18	Utah Lake	1234 S PARKWAY BLVD
19	Utah Lake	1146 S WATERSIDE DRIVE
20	Utah Lake	1116 S WATERSIDE DRIVE
21	Utah Lake	239 E VISTA COURT
22	Utah Lake	272 E SUNRISE CIRCLE
23	Utah Lake	260 E SUNRISE CIRCLE
24	Utah Lake	866 S ISLAND ROAD
25	Utah Lake	810 S SONGBIRD LANE
26	Utah Lake	416 E CATTAIL COURT
27	Utah Lake	414 E CATTAIL COURT
28	Utah Lake	374 E BAYSIDE DRIVE
29	Utah Lake	420 E MARINA CIRCLE
30	Utah Lake	587 S SARATOGA ROAD
31	Utah Lake	3182 S HAWK DRIVE
32	Utah Lake	28 W PERRIWINKLE CIRCLE
33	Utah Lake	4028 S PELICAN LANE
34	Jordan River	10420 W 8570 N
35	Jordan River	196 E BROOKSHIRE DRIVE
36	Jordan River	1242 N RIVERSIDE DRIVE
37	Utah Lake	189 E COTTONWOOD LOOP
38	Utah Lake	3646 S SPINNAKER BAY DR
39	Utah Lake	3738 S SPINNAKER BAY DR
40	Utah Lake	3842 S SPINNAKER BAY DRIVE
41	Utah Lake	3912 S SPINNAKER BAY DRIVE
42	Utah Lake	400 S REDWOOD ROAD
43	Jordan River	137 E RIVER BEND ROAD
44	Jordan River	317 E WINDWARD COURT
45	Utah Lake	600 E 400 S
46	Utah Lake	600 E 400 S
47	Jordan River	1210 N RIVERSIDE DRIVE

Goals and Timeline					
BMP Title	Start Date	End Date	Milestones	Measurable Goals	Control Measure*
City Web Page	2014	Ongoing	Have functioning web page available to the public	Track number of page views	1
City Newsletter	2015	Ongoing	Provide storm water information in City newsletter	Publish on a regular basis	1
Brochures	2017	2019	Create brochure for businesses and contractors	Distribute brochures	1
Engineering & Development Standards	2019	Ongoing	Provide design standards and guidelines for SWPPP and site BMP's	Adopt Standards	1
Training Public Education and Outreach	2019	Ongoing	Develop training program for City employees	Provide Training	1
Storm Water Coalition	2016	Ongoing	Become members of the Utah County Storm Water Coalition.	Send City representative to coalition meetings	1
Public Hearing	2014	Ongoing	Post SWMP to website for public review and input. Hold public hearing for renewal of permit.	Document and consider public input	2
Storm Drain Marking	2015	Ongoing	Make initial identification of storm drain inlets and purchase markers to install near inlets	Document what SD inlets have been marked.	2
Stream/Roadway Cleanup	2016	Ongoing	Establish a stream and roadway cleanup program	Document what roadways and streams were cleaned and when cleanup occurred	2
Storm Sewer System Mapping	2014	Ongoing	Identify and Map City outfall locations	Perform regular updates to the map	3
New City Ordinances for Illicit Discharge	2015	2019	Create regulatory ordinance for illicit discharges	Adopt ordinance	3
Public Reporting System	2016	Ongoing	Establish a public reporting system	Document all calls received	3
Dry Weather Screening	2019	Ongoing	Create Dry Weather Screening Program	Implement program	3

Training IDDE	2018	Ongoing	Create a IDDE training program, including dry weather screening	Implement training program	3
City Ordinances for Construction Site Storm Water Runoff Control	2014	2019	Create/revise an ordinance to require the use of erosion and sediment control practices at construction sites	Adopt ordinance	4
Training	2014	Ongoing	Develop/Join a training program for construction site storm water runoff	Implement training program and have a minimum of one registered storm water inspector	4
City Ordinances for Long-Term Storm water Management	2014	2019	Create/revise an ordinance requiring post-construction storm water controls	Adopt ordinance	5
City Standards	2014	2019	Develop storm water control standards that prevent or minimize impacts to water quality	Adopt Standards	5
Training	2014	Ongoing	Develop a training program for Long-Term storm water management	Implement training program	5
Operation and Maintenance program for "High Priority" Facilities	2014	Ongoing	Develop O & M program to identify and address facilities identified as "High Priority"	Implement program	6
Training for Municipal Operation	2014	Ongoing	Develop a training program for Municipal Operations	Implement training	6

Control Measures*

1 - Public Education

2 - Public Involvement / Participation

3 - Illicit Discharge Detection and Elimination

4 - Construction Site Storm Water Runoff Control

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

6 - Pollution Prevention / Good Housekeeping for Municipal Operations



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

AUG 13 2013

**CERTIFIED MAIL
(Return Receipt Requested)**

Mia Love, Mayor
City of Saratoga Springs
1307 North Commerce Drive Ste 200
Saratoga Springs, UT 84045

Dear Mayor Love:

Subject: Municipal Separate Storm Sewer System Program & Permit Requirements

You are receiving this letter because all or part of your jurisdiction has been identified as being located within an urbanized area according to the 2010 Census and therefore your Municipal Separate Storm Sewer System (MS4) will come under the purview of the Clean Water Act's storm water permitting requirements in accordance with 40 C.F.R. §122.32(a)(1). Storm water discharges are a significant contributor to local water quality impairments as high levels of sediment, oil, toxics and other pollutants flow from impervious surfaces into waterways. In 1987, Congress established a phased approach to regulating storm water discharges from municipal storm sewer systems. The largest municipalities were regulated first, followed by smaller municipalities that are located in urbanized areas. The Census defines where the urbanized areas are, and the latest Census shows that all or part of your jurisdiction is located within an urbanized area.

A reference map identifying the Census 2010 urbanized areas within your jurisdiction can be accessed on the following website: www.epa.gov/npdes/stormwater/urbanmaps. If you believe that your MS4 service area is not located, at least in part, within an urbanized area as determined by the 2010 census data, please call your State or EPA contact identified at the end of this letter.

Some jurisdictions identified by the Census may be eligible for a waiver from this program if it has fewer than 10,000 people and meets other requirements, including whether the MS4 discharges any pollutants identified as a cause of impairment to the water body to which it discharges. The specific criteria for the two types of waivers can be found at 40 C.F.R. 122.32(d) and (e), which has been summarized in the attached General Overview fact sheet for your convenience. If after reviewing the waiver criteria you feel that this may apply to you, please call your state contact promptly to

discuss further. A formal written request demonstrating the appropriateness of the waiver would then be required to be submitted promptly for evaluation.

Unless a waiver is granted, the EPA regulations require that owners and operators of MS4s in Utah obtain Utah Pollutant Discharge Elimination System (UPDES) Permit coverage for discharges from the MS4 jurisdiction. The State of Utah Division of Water Quality (DWQ) has issued UPDES General Permit No. UTR090000 for discharges from small MS4s, for which your jurisdiction may obtain permit coverage. This Permit sets out requirements that apply to regulated small MS4 discharges throughout Utah. The requirements of the UPDES General Permit are to reduce the discharge of pollutants to the maximum extent practicable (MEP) and to meet water quality standards through the development and implementation of a Storm Water Management Plan (SWMP). A SWMP uses a variety of Best Management Practices (BMPs) aimed at reducing the discharge of pollutants into the receiving waters of the MS4. A SWMP is comprised of six minimum control measures that must be developed and implemented as part of your overall MS4 program. These measures include:

- Public Education & Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Long-term Storm Water Management in New Development and Redevelopment
- Pollution Prevention & Good Housekeeping for Municipal Operations

These programs must include, among other things, educating the public about ways they can prevent wastes, such as used oil, from entering storm drains, ensuring that construction sites implement appropriate erosion and sediment control measures, ensuring that municipal operations minimize the amount of pollutants carried or discharged into the MS4, ensuring that municipal facilities are operated and maintained to minimize the discharge of pollutants to the maximum extent practicable, identifying and eliminating illicit connections or discharges into the MS4, ensuring that new development and redeveloped areas are designed to minimize the impact of storm water discharges, and develop an effective enforcement program to deter non-compliance. Hopefully, your jurisdiction is already implementing some of these activities.

In general, as communities grow, more impervious cover, such as concrete and asphalt, is installed. Impervious cover prevents rain water from soaking into the ground resulting in a greater volume and velocity of runoff that enters nearby waterways. This increased runoff contains numerous pollutants, causes erosion of stream banks and potentially increases downstream flooding. There are cost-effective ways to ensure that, as development occurs, waterways are protected. These involve the use of natural systems, such as grassed swales, that soak up the water and reduce the volume and velocity of runoff. These natural systems provide many other benefits to the community as well. Communities that incorporate these measures as they develop will protect their valued waters.

The first step for you, as the owner or operator of a regulated small MS4 in Utah, is to submit a notice of intent (NOI) to DWQ to comply with the small MS4 General Permit for storm water. The NOI is to be filled out and submitted as the formal application for a permit. In general, the NOI includes Best Management Practices and identification of Measurable Goals that the jurisdiction

plans to implement as part of its Storm Water Management Program (SWMP). The NOI should be submitted to DWQ within 180 days from the receipt of this letter. The NOI must include submittal of the SWMP document. Detailed information on SWMP requirements can be found in Part 4.0 of the Small MS4 General UPDES Permit.

The NOI, MS4 General Permit and other instructional information are available from our website at <http://www.waterquality.utah.gov/UPDES/stormwatermun.htm>.

For a general overview of the MS4 program and examples of some of the reference materials available, please see the fact sheet included with this letter. For additional overview information on the Phase II storm water rule from EPA, please visit: <http://www.epa.gov/npdes/pubs/fact2-1.pdf>. To learn more about municipal storm water training opportunities from EPA, you may visit (scroll down to the "stormwater" section): www.epa.gov/npdes/training.

The State of Utah DWQ and EPA stand ready to assist you in developing your storm water program and in determining how to comply with the regulations. Please feel free to contact us should you have any questions or concerns regarding this letter. We can provide further explanation of why you're receiving this letter, what this letter means for your community, next steps, and answer any other questions you may have.

If your jurisdiction is not the owner or operator of the MS4 or if you are not the appropriate contact for this program, please forward to the appropriate person and contact us promptly with updated information. Your contacts here at DWQ are Rhonda Thiele (801-536-4396) and Jeff Studenka (801-536-4395), and your contact at EPA Region 8 is Amy Clark (303-312-7014). We look forward to hearing from you and appreciate your efforts to protect our valuable waterways.

Sincerely,



John J. Whitehead
Acting Director

JW/RT/mc

Enclosure: General Overview of Storm Water Phase II Small MS4 Program Requirements

cc (w/o encl): Amanda Smith, DEQ Executive Director
Craig Anderson, Utah Assistant Attorney General
Amy Clark, EPA Region 8
Cameron Diehl, Utah League of Cities & Towns

General Overview of the Stormwater Phase II Small MS4 Program Requirements

STORMWATER PROBLEMS

Stormwater runoff occurs when precipitation from rain and snowmelt events flows over land or impervious surfaces without soaking into the ground. When this runoff flows over paved streets, parking lots, and building rooftops, it accumulates trash, chemicals, sediment or other pollutants which are conveyed through municipal separate storm sewer systems, or MS4s, or directly to nearby waterbodies with little or no treatment. The volume and velocity of stormwater can also impact waterbodies. MS4 owners can use stormwater controls to reduce these stormwater impacts on their waters.

PROGRAM OVERVIEW

The EPA's existing Phase II Stormwater Rule, which was finalized in 1999, regulates operators of small municipal separate storm sewer systems, or MS4s, that are located within the boundaries of a Bureau of the Census-defined "urbanized area" based on the latest decennial Census. The Bureau of Census recently released its 2010 Census and this Census changes the boundaries of the urbanized area. Currently unregulated MS4s that are located within the new urbanized area boundaries are now subject to regulation, although waivers are available in some circumstances.

Owners/operators of these regulated small MS4s are required to develop programs to reduce the discharge of pollutants to the "maximum extent practicable" (MEP) to protect water quality. The Phase II Stormwater Rule defines a small MS4's stormwater management program as a program comprising six elements that, when implemented together, are expected to result in significant reductions of pollutants discharged into receiving water bodies.

These six MS4 program elements, termed "minimum control measures," are outlined below. For more information on each of these required control measures, see www.epa.gov/npdes/stormwater/swfinal



Public Education and Outreach: Distributing educational materials and performing outreach to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.



Public Participation/Involvement: Providing opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a stormwater management panel.



Illicit Discharge Detection and Elimination: Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system (includes developing a system map and informing the community about hazards associated with illegal discharges and improper disposal of waste).

What's an MS4?

The term Municipal Separate Storm Sewer System, or MS4, includes some storm sewer systems owned/operated by local governments, State departments of transportation, universities, local sewer districts, hospitals, military bases, and prisons. It can include a system of underground pipes, roads with drainage systems, curbs, gutters, storm drains, and ditches.



What's an urbanized area?

An urbanized area is a densely settled territory with a population of at least 50,000 people.





Construction Site Runoff Control: Developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb 1 or more acres of land (controls could include silt fences and temporary stormwater detention ponds).



Post-Construction Runoff Control: Developing, implementing, and enforcing a program to address discharges of post-construction stormwater runoff from new development and redevelopment areas. Applicable controls could include preventative actions such as protecting sensitive areas (e.g., wetlands) or the use of structural controls such as grassed swales or porous pavement.



Pollution Prevention/Good Housekeeping: Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations. The program must include municipal staff training on pollution prevention measures and activities to reduce the amount of pollutants in stormwater (e.g., regular street sweeping, reduction in the use of pesticides or street salt, or frequent catch-basin cleaning).

WAIVERS

There are two waiver options available to operators of automatically designated small MS4s if discharges do not cause, or have the potential to cause, water quality impairment.

The first waiver applies to systems that:

- ✓ Serves a population of less than 1,000 people within the urbanized area;
- ✓ Are not contributing substantially to the pollutant loadings of a physically interconnected regulated MS4; and
- ✓ Demonstrate that stormwater controls are not needed based on wasteload allocations that are part of an EPA approved or established total maximum daily load, or TMDL, that addresses the pollutant(s) of concern if the system discharges any pollutants identified as a cause of impairment of any waterbody to which it discharges.

The second waiver applies to systems that:

- ✓ Serves a population of less than 10,000 people;
- ✓ Demonstrates that stormwater controls are not needed based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern or an equivalent analysis; and
- ✓ It is determined that future discharges from the small MS4 do not have the potential to result in exceedances of water quality standards.



A total maximum daily load, or TMDL, is a water quality assessment that determines the source(s) of pollutants of concern for a particular waterbody, consider the maximum amount of pollutants the waterbody can assimilate, and then allocate to each source a set level of pollutants that it is allowed to discharge (i.e. a "wasteload allocation").

AVAILABLE RESOURCES

There are many tools available to help MS4s as they implement their stormwater programs in an effective and cost-efficient manner.

The stormwater website includes fact sheets, case studies, guidance documents, the National Menu of BMPs – a compilation of over 120 fact sheets on stormwater best management practices, measurable goals guidance, and other helpful information and is available at:



- www.epa.gov/npdes/stormwater/municipal

There are also a number of webcasts available that describe the basic elements of the stormwater program as well as provide examples of how communities are meeting their stormwater requirements. Scroll down to the “stormwater” section:

- www.epa.gov/npdes/training

Specific introductory webcasts you may find useful include:

- [Stormwater 101: The Basics](#)
- [Using Outreach and Public Involvement to Meet Your Stormwater Phase II Goals Webcast](#)
- [Developing Your IDDE Program \(IDDE 101\)](#)
- [Stormwater Phase II: Developing an Effective Municipal Stormwater Management Program For Construction Sites \(Construction 101\)](#)
- [Post-Construction Overview and Introduction to Smart Growth and Low Impact Development \(Post Construction 101\)](#)
- [Killing Two Birds with One Stone: Building a Local Program to Maintain Your Stormwater Practices and Prevent Pollution from Municipal Operations](#)



For Additional Information

Contacts

State and EPA Headquarters and Regions Contacts:
<http://www.epa.gov/npdes/stormwater/contacts>

EPA Websites

EPA's Stormwater Program:
<http://www.epa.gov/npdes/stormwater>

Urbanized Area Information:
<http://www.epa.gov/npdes/stormwater/urbanmaps>



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