Unincorporated Weber County

Storm Water Management Plan

June 2021

Weber County Engineering
2380 Washington Blvd., Suite 240
Ogden, UT 84401
(801) 399-8374

Table of Contents

Storm Water Management Plan

Permittee: Weber County

Permit Number: UTR090022

Location of MS4: Northern part of the Wasatch Front

Submitted with this permit is the following:

A map of the MS4 location

Information Regarding the overall quality concerns, priorities, and measureable goals specific to the Permittee that were considered in the development and/or revisions to the SWMP document

A description of the program elements that will be implemented in each of the six minimum control measures

A description of any modifications to ordinances or long-term/ongoing processes implemented in accordance with the previous MS4 general permit for each of the six minimum control measures

A description of how the Permittee intends to meet the requirements Permit as described in Part 4.0 by either referencing existing program areas that already meet the Permit requirements or a description and relevant measurable goals that include, as appropriate, the year by which the Permittee will achieve required actions, including interim milestones.

If applicable indication of joint submittal of Co-Permittees and the associated responsibility in meeting requirements of the SWMP

Certification

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

Signed:_____Date:_____

Chairman Weber County Commission

Storm Water Management Plan

Delegation Authority

I, _____ designate the person(s) or specifically described position(s) below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the MS4 Permit. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

Weber County Engineer

Gary Myers, PE
2380 Washington Blvd.
Ogden, UT 84401
(801) 399-8374

Director of Operations

Sean Wilkinson
444 24th Street
Ogden, UT 84401
(801) 625-3850

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in UTR090022, Section 6.8 and that the designee above meets the definition of a "duly authorized representative" as set forth in UTR090022, Section 6.8.

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

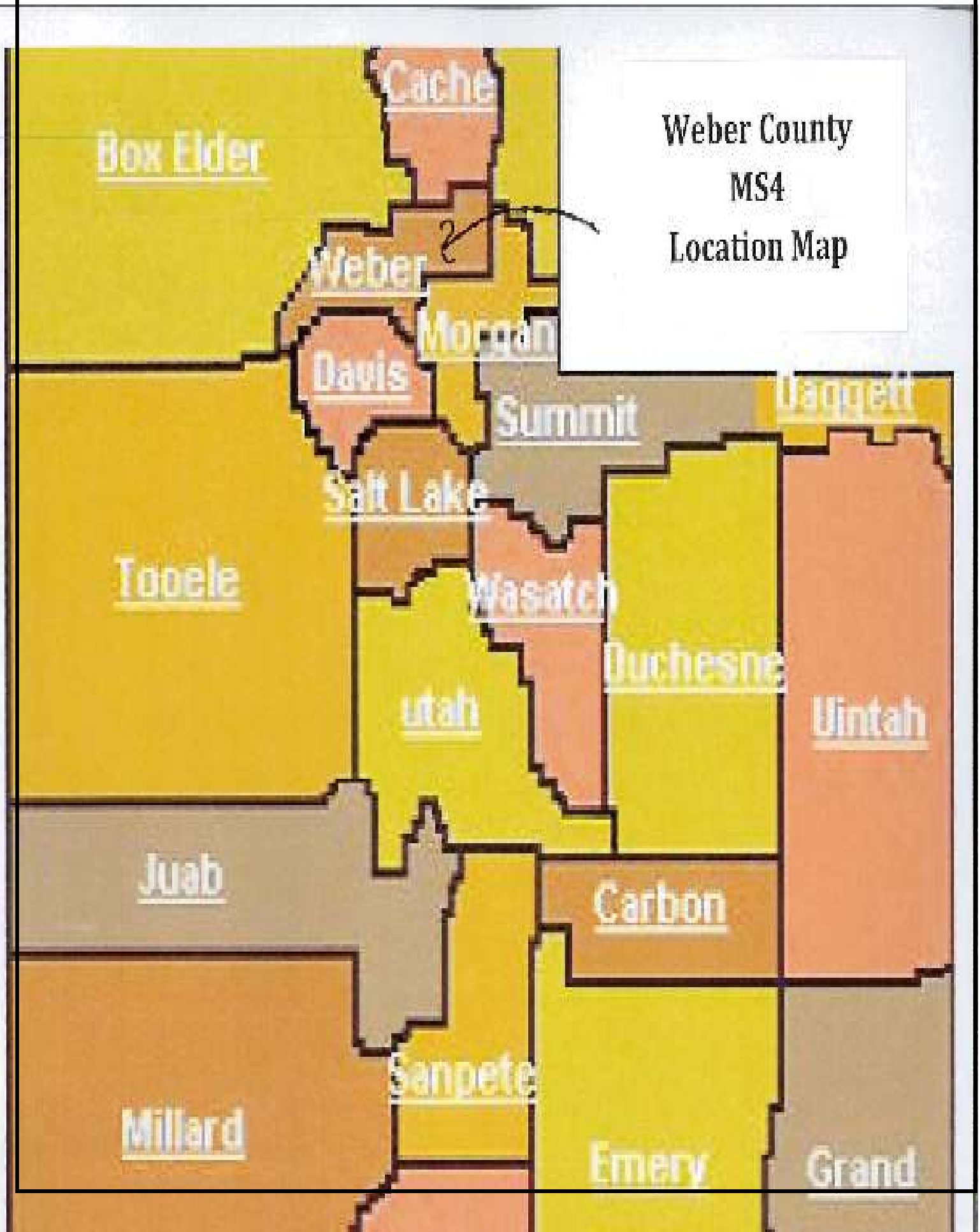
Name:

Company: *Weber County*

Title: *Chairman Weber County Commission*

Signature: _____

Date: _____


Weber County
MS4
Location Map
Box Elder
Cache
Weber
Morgan
Davis
Summit
Daggett
Salt Lake
Tooele
Wasatch
Duchesne
Utah
Uintah
Juab
Carbon
Sanpete
Millard
Emery
Grand

General Information

Storm Water Management Plan

General Information

• Introduction

The Clean Water Act required that all communities within certain metropolitan areas adopt a Storm Water Management Plan by March 8, 2003 and said plan to be updated on a regular basis. Unincorporated Weber County hereinafter referred to as "County", in the Wasatch Front Metropolitan area falls under this requirement. This updated Storm Water Management Plan or SWMP plan is intended to address the requirements of the Clean Water Act for the County.

As a minimum, these requirements consist of community information, naming responsible persons, mapping, addressing six Minimum Control Measures (MCM's), establishing Best Management Practices (BMP's), measurable goals and addressing the fiscal requirements of the plan. All of these items are discussed below. This document is being developed in accordance with the Small MS4 General UPDES Permit UTR090000. Weber County has been issued permit #UTR090022.

• Community Information

Weber County is located on the Wasatch Front of the Rocky Mountains in the north part of the State of Utah. The Unincorporated areas of Weber County mainly include the western and the eastern portions of the county. The eastern portion of the County is very mountainous, and has several water bodies, including Pineview Reservoir and Causey Reservoir. The population of the entire county from the 2010 Census is 231,236. In 2019, the Population was estimated as 260,000. The majority of the land use in the community is agricultural with blossoming areas of residential, commercial and industrial development.

• Responsible Persons

The responsible persons for the Storm Water System are the current Operations Director, and The County Engineer:

Sean Wilkinson, Operations Director
2380 Washington Blvd., Suite 250
Ogden, UT 84401 Office: (801) 625-3850

Gary Myers PE, Weber County Engineer
2380 Washington Blvd., Suite 240
Ogden, UT 84401
Office: (801) 399-8374

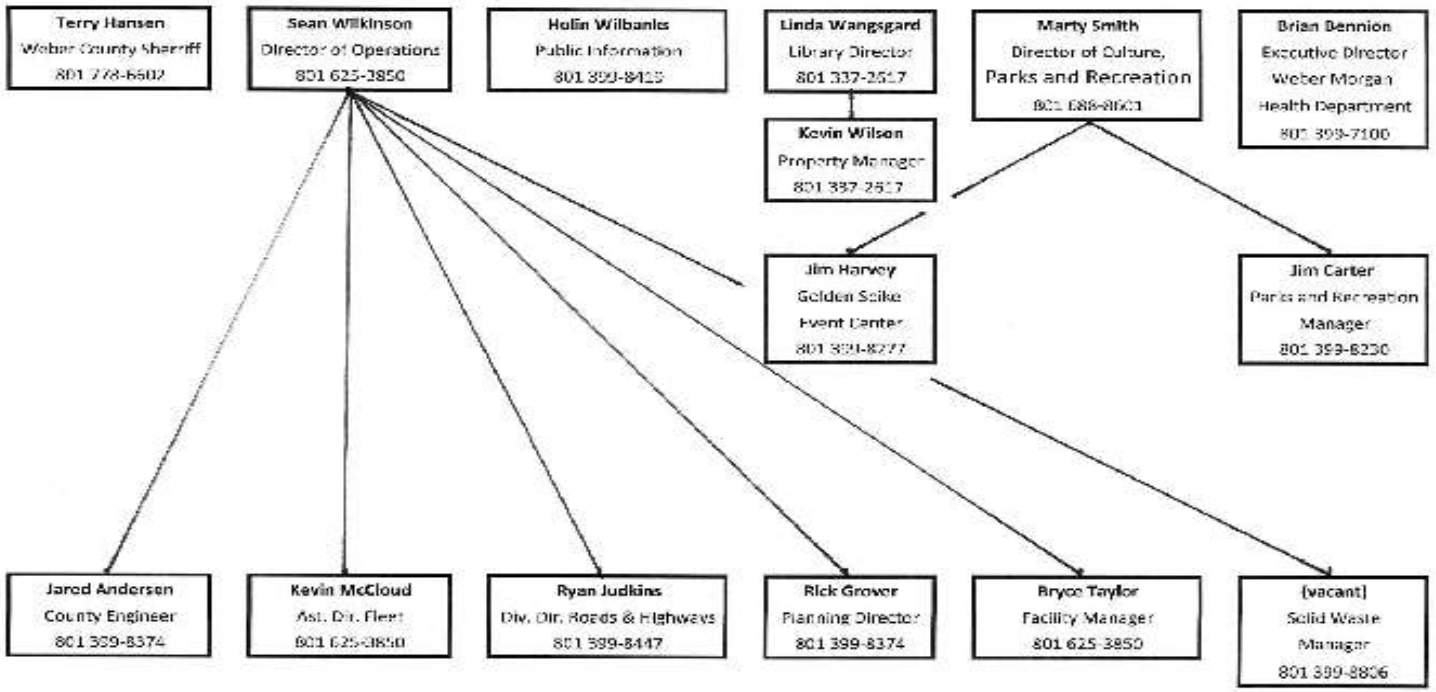
Please see the included Organizational Chart for additional responsibilities.

County Organization

Board of Commissioners

Matthew G. Bell, Kerry W. Gibson, James Ebert

801 399-8406



General Information

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

Organization Chart Department

Responsibilities

County Commission

- Liaison with the public

Director of Operations

- Liaison with County Commission
- General coordination of the Storm Water Pollution Prevention Program (SWPPP)

County Engineer

- Annual report
- Updating SWPPP and SWMP
- Tracking and documentation of activities and actions
- Database updates
- Engineering support
- Help with all reporting
- Oversee SWPPP program specifics and works with department heads
- Storm drain mapping
- Updating storm drain ordinances

Division Director – Roads and Highways

- Streets dept. maintenance work area
- Streets dept. equipment operation
- Equipment maintenance for streets dept.
- Training streets dept. personnel
- Chemicals storage in work area
- Snow plowing program
- Street sweeping program
- Salt and materials storage stockpile areas
- Metal fabrication area
- Weed control
- Responsible for shared facilities and general work areas including:
    - Large equipment wash area
    - Fueling station
    - Salt and materials storage stockpile areas
    - Storm drain system maintenance
    - General BMP maintenance
    - Small vehicle wash area

Organization Chart Department Responsibilities

Facility Manager

- Mowing program
- Snow removal from parking lots and walkways around the County's Buildings

Fleet Management

- Fleet department maintenance work area
- Purchase fleet vehicles
- Fleet maintenance (Outsourcing where possible to 3rd party shops)

Planning Director

- Low Impact Development Coordinator

Solid Waste Management

- Transfer Station
- C&D Landfill
- Compost Facility

Parks and Recreation Manager

- Parks Department maintenance work area
- Pesticide, Herbicide, and Fertilizer (PHF) program
- Training parks personnel
- Chemical and fertilizer storage in work area
- Parks department equipment operation and maintenance
- Mowing program

Golden Spike Event Center Manager

- Building Facilities
- Grounds Maintenance
- Chemical Storage
- Equipment operation and maintenance
- Training personnel
- Salt pile storage

Weber County Sheriff Facility Manager

- Weber County Sheriff's 12th Street Complex
- Kiesel Facility
- Animal Shelter
- Monte Trailhead Office

Ice Sheet Director

- Building Maintenance
- Grounds Maintenance

General Information

Storm Water Mapping

Included with this Plan, in Appendix G, are maps showing the storm drain system of the County. Discharges from the County are indicated. Master Plan pipes are also shown on the map. This is an electronic Geographic Information System (GIS) map system assembled to show our existing Storm Drain Infrastructure and our proposed Masterplan of Storm Sewers for the unincorporated west area of the County as well as the Ogden Valley area around Pineview Reservoir.

Priorities and Concerns

There have been pollutants of concern added to the different Minimum Control Measures. Please refer to the MCMs to view the concerns for each different area.

Impaired Waters

Impaired Waters is listed in the Draft 2022 Integrated Report prepared by the Utah Department of Water Quality including:

Pineview Reservoir
Ogden River from the Confluence with the Weber River to Pineview Reservoir
Weber River from the Great Salt Lake to the Slaterville Diversion
Weber River from the Ogden River Confluence to Cottonwood Creek
Burch Creek Weber River to Harrison
Burch Creek Harrison to Headwaters

Shared Responsibilities

The County in association with the member cities of the Golden Spike Storm Water Advisory Coalition are in progress with entering into new inter-local agreements. The County participates in the Golden Spike Storm Water Advisory Coalition working together the member cities with parts of various Minimum Control Measures.

Minimum Control Measures (MCM's)

The Phase II Rule of the Clean Water Act defines a small municipal separate storm sewer system (MS4s) storm water management program (SWMP), as a program comprising six elements that are expected to result in significant reductions of pollutants discharged into receiving water bodies within the State of Utah. The six MS4 program elements, termed "minimum control measures," are:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post Construction Storm Water Management
6. Pollution Prevention/Good House Keeping

They are discussed in the order given with the Measurable Goals, Implementation Schedule, and Fiscal Ability for each BMP. The format for the majority of the BMPs is similar to other communities along the Wasatch Front, originally obtained from Salt Lake County's Storm Water Management Plan.

General Information

- The measurable goals are mandated by the EPA. A community must show improvement over time with these goals. The Implementation Schedule is also included in MCM section, with the timetable for when the goals are scheduled to be reached. Fiscal Ability is the ability of the County to properly administer the BMPs. The table in the section briefly discusses the plan of the County's to meet these goals. Best Management Practices (BMPs) gives the details for the goals and provides information for staff and the public to implement these practices.

- ## Appendices

This Storm Water Management Plan includes several appendices, which are as follows.

Appendix A – Supplemental Guide for Contractors (BMP's)

Appendix B – Supplemental Guide for Public Works (SOP's)

Appendix C – IDDE Program

Appendix D – Documentation

Appendix E – Ordinances

Appendix F – State/County Permits

Appendix G – Storm Sewer Maps

Additional Information

Public Education and Outreach

Public Education and Outreach

Minimum Control Measure 1

1.1 Introduction

The County is committed to participate with the member cities of the Golden Spike Storm Water Advisory Coalition to meet the requirements of the Public Education and Outreach MCMs. The County provides materials and trainers in support of the Golden Spike Storm Water Advisory Coalition's requirements for annual Registered Stormwater Inspector training, assisting the Coalition to meet its annual requirements to the Utah Storm Water Advisory Committee. It also participates in the Weber County Annual Storm Water Fair put on for 4th grade elementary classes within the County. It has also participated in annual contractors training in regards to the construction general permit or CGP. It is also committed to participate in paying it proportional share as a coalition member in media and public relations, publications and advertisements, and school outreach programs. The County willingly responds to concerns from local city officials and relevant public committee recommendations.

With the adoption of the 2021 MS4 permit the County has committed to providing public outreach to four audiences of Residential, Commercial, Industrial, and Agricultural county constituents. The County has actively participated in the past with regards to the Residential Industry, Construction Industry, and participating in funding of public infomercials being broadcast over the local television networks in association with the Golden Spike Storm Water Coalition.

The County is committed to actively continue its participation in such outreach programs, as well as participating in the development of new outreach programs for the Commercial, Industrial and Agricultural audiences not heretofore targeted beyond that associated with Land Development and Building Construction.

1.2 Measurable Goals and Fiscal Ability

Please refer to the tables in this section which summarize the BMP's, Measurable Goals, and Implementation Schedule for each BMP.

1.3 Best Management Practices (BMP)

Included in Appendix B are the fact sheets that are referenced from the measurable MCM Outreach goals. There is an updated and expanded set of BMPs listed on the Weber County Engineering website that includes new BMPs for Low Impact Development (LID), Retention of the 80th Percentile Storm, and Post Construction BMP's. The format is similar to other communities on the Wasatch Front, having been originally obtained from Salt Lake County.

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
1	Trash, yard waste, chemicals	Residents and Businesses	4.2.1.1 To educate audiences about impacts from storm water discharge	Continue supporting TV ads as a member of the Golden Spike Storm Water Advisory Coalition.	Ongoing	PEP and UM	Ads continue to run
1	Trash, yard waste, chemicals, erosion	Residents (4th graders)	4.2.1.1 To educate audiences on ways to avoid, minimize, and reduce impacts of storm water discharge	Continue to participate in the annual storm water fair.	Annually	PEP and CESW	Fair occurs annually
1	See list in "desired result" column	General Public	4.2.1.2 Information is provided to target audiences on prohibitions against illicit discharge and improper disposal of waste including: maintenance of septic systems; effects of outdoor activities, such as lawn care; benefits of on-site infiltration of storm water; effects of automotive work and car washing on water quality; proper disposal of swimming pool water; and property management of pet wastes.	Include information on the website and included in the Weber County newsletter.	Ongoing	PEP and UM	Information is current on website and included in the Weber County newsletter.

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
1	See list in "desired result" column	Business and Institutions	4.2.1.3 Information is provided to target audiences on prohibitions against illicit discharges and improper disposal of waste including: Proper lawn maintenance Benefits of appropriate on-site infiltration of storm water Building and equipment maintenance Use of salt or other deicing materials Proper storage of materials Proper management of waste materials and dumpsters Proper management of parking lot surfaces.	Include information on the website and distribute a brochure to businesses with the business license renewal.	Annually	PEP and UM	Information is current on website and brochures are distributed.
1	Illicit discharge and waste	Contractors, Developers, and plan review staff	4.2.1.4 Reduce adverse impacts from development sites	Assemble packets of information on SWPPP and BMPs that the contractor must read and sign.	Annually	EM	Information packets are signed for every new development.

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
1	Illicit discharge and waste	Facility Maintenance and Public Works Employees	4.2.1.5 Information is provided to target audience on prohibitions against illicit discharges and improper disposal of waste including: Equipment inspection to ensure timely maintenance Benefits of appropriate on-site infiltration of storm water Minimization of use of salt or other deicing materials Proper storage of industrial materials Proper management of waste materials and dumpsters Proper management of parking lot surfaces.	Have training annually on illicit discharges.	Annually	ET	Training occurs once a year
1	All Pollutants	Agricultural via: Farm Bureau, Utah Cattlemen's Association, 4H, & FFA	4.2.1.5 Information is provided to target audiences on prohibitions against illicit discharges and improper disposal of waste. Distribution of Federal Department of Agriculture: Films and media Pertaining to Water Conservation and Pollution Control. Equipment inspection to ensure timely maintenance Benefits of appropriate on-site runoff retention and reuse.	Provide an annual mailer of environmental best management practices and distribution of Federally produced media materials	Annually		Annual Mailer

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Measurable Goals

1	All Pollutants	Commercial	4.2.1.5 Information is provided to target audiences on prohibitions against illicit discharges and improper disposal of waste including: Equipment inspection to ensure timely maintenance Benefits of appropriate on-site infiltration of storm water Minimization of use of salt or other deicing materials Proper management of waste materials and dumpsters Proper management of parking lot surfaces.	Provide an annual mailer of environmental best management practices	Annually		Annual Mailer
1	All pollutants	Industrial	4.2.1.5 Information is provided to target audience on prohibitions against illicit discharges and improper disposal of waste including: Equipment inspection to ensure timely maintenance Benefits of appropriate on-site infiltration of storm water Minimization of use of salt or other deicing materials Proper management of waste materials and dumpsters Proper management of parking lot surfaces.	Provide an annual mailer of environmental best management practices	Annually		Annual Mailer
1	All pollutants	Permittee engineers, development and plan review staff, land use planners	4.2.1.6 Training on LID, Green Infrastructure, and post construction BMPs	Require an annual meeting with all engineers, development and plan review staff, and land use planners to review acceptable LID practices	Annually		Annual meeting

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Measurable Goals

1	All pollutants	All Audiences	4.2.1.7 Evaluate the effectiveness of the public education program by a defined method.	Research evaluation methods and select the best one. Implement the selected evaluation method.	Annual report		Evaluation method chosen (2011) and implemented (2012)
1	All pollutants	All Audiences	4.2.1.8 Document why certain BMPs were chosen for public education program (over others)	Include an explanation in the SWMP.	Annually		Documented rationale included in the SWMP.

Public Involvement and Participation

Public Involvement and Participation

Minimum Control Measure 2

2.1 Introduction

The County is committed to meet the requirements of Public Involvement and Participation MCM. The County is an active member of the Golden Spike Storm Water Advisory Coalition a group of representatives from cities throughout Weber and Box Elder Counties serving as an advisory committee for public involvement and participation for addressing storm water issues.

2.2 Pollutants of Concern

Consider what happens to detergents from washing your car, leaf and lawn clippings left in the gutter, or litter that is carelessly deposited alongside of the road. These are the kinds of pollutants that flow into the storm drain system. Below is a brief description of some of the more typical non-point source stormwater pollutants and the potential impacts these pollutants may have on waterways.

Sediment

Sediment can be harmful to aquatic life (plants, fish, and other animals that live in lakes and streams. Light needed by plants in water is blocked by sediments. Sediments can carry chemicals that are toxic and cause the oxygen in water to be used up. Sediments clog fish gills and fill in the deep pools and eddies where they hide. Sediment generally is the result of soil erosion from lawns, hillsides, and gardening/landscaping, and construction activities.

Floatables

Floatables are pieces of litter in the water. They may be contaminated with toxic chemicals and bacteria. Floatables are also an eyesore in our waterways. Commonly observed floatables include cigarettes, plastic containers, wrappers, and cans. Floatables such as these are generally the result of careless waste handling practices and littering.

Bacteria and Viruses

Bacteria are washed with animal excrement and leakage from sewers and septic tanks into waterways. These organisms can cause disease in both animals and humans. Biological contaminants come from litter, organic matter, and animal waste.

Oxygen Demanding Substances

The chemical breakdown of organic materials (leaves, excrement and common organic street litter) washed into waterways decreases levels of dissolved oxygen in water. Aquatic life requires this oxygen to exist.

Nutrients

Nutrients such as nitrogen and phosphorus result in excessive plant growth that clogs waterways, blocks sunlight, and reduces oxygen. Some sources of nutrients are fertilizer, excrement, and detergents. The clearing of natural vegetation for building construction and land development if left unprotected allows for soil erosion releasing the Nitrogen and Phosphorus compounds naturally found in the soil.

Oil and Grease

Petroleum products (gasoline, oil, and grease) are toxic to aquatic life, even in small amounts. Oil and grease in storm drains are generally traced to automotive leaks and spills and improper disposal of used oil and automotive products into storm drains.

Pesticides, Herbicides and Fertilizers

Excess amounts of pesticides, herbicides, and fertilizers applied to yards, lawns and greenways are washed into streams during rainfall events. These chemicals can cause increased algae growth and toxicity to native bacteria and organisms.

Metals

Metals such as: lead, zinc, mercury, copper, and cadmium in water, can be toxic to humans, aquatic life and other animals that drink the water. Metals come from vehicle exhaust, weathered paint, metal plating, tires, motor oil and brake dust.

Toxic Substances

Gasoline, household products, paint and paint thinner are examples of toxic substances. These substances can deplete oxygen in waterways and cause toxic effects in living native bacteria and small organisms.

2.3 General Practices

As citizens, there are many things that we can do to protect the water in our environment. These general practices can be executed by simple changes to routine habits. With every resident practicing good housekeeping, waste and material management, great effects can be seen in local water quality. Here are just a few:

Household and Home Maintenance

- Buy household products such as cleaners and furniture polish labeled "non-toxic". Use small quantities and purchase only the amount you need
- Follow manufacturer's recommendations for use and storage of all toxic products, including cleaners, solvents, and paints
- Properly dispose of household hazardous wastes (any toxic substance) at the county's solid waste transfer station or other licensed waste handling facilities
- Rinse paint brushes in the sink. Filter and reuse paint thinner or brush cleaners. Dispose of used materials at a hazardous materials collection event
- Recycle reusable material: Throw litter into trash cans and keep cans tightly covered to prevent foraging by neighborhood animals

Lawn and Garden

- Minimize the use of pesticides, herbicides and fertilizers; apply carefully and sweep up excess
- Use a broom rather than a hose to clean up sidewalks and driveways, do not hose down gutter
- Deposit leaves and clippings in a garbage can or a compost pile
- Divert rain spouts and garden hoses from paved surfaces onto grass or garden areas to allow filtration through the soil. Water only your lawn and garden

Public Involvement and Participation

- Control sediment migration and erosion, don't let it reach the gutter, sweep up and re-use it
- Do not over-water – Don't be a 'gutter flooder'.
- Put pet waste in a garbage can using pick-up or pet waste bags

Automotive

- Recycle used motor oil and antifreeze at automotive centers
- Have your car inspected and maintained regularly to reduce leakage of oil, antifreeze and other fluids
- Reduce automotive emissions through regular auto maintenance, ride sharing, and by using public transportation
- Conserve water when washing your car and use a biodegradable soap or detergent.

Commercial

- Encourage Good Housekeeping Practices
- Adopt good winter time salt, sand and deicing material storage and usage
- Provide for regular parking lot sweeping and disposal of collected sweeping materials

Industrial

- Encourage Good Housekeeping Practices
- Adopt good winter time: salt, sand and deicing material storage and usage.
- Provide for regular parking lot sweeping and disposal of collected sweeping materials

Agricultural

- Encourage Good Housekeeping Practices
- Keep current on and use USDA recommendations for Water Conservation and Pollution prevention.

Non-point source pollution comes from many sources and its control is everyone's responsibility. Pollution prevention and good housekeeping practices are essential to reducing non-point source pollution. From the: individual gardener, public official, business owner, commercial facility maintenance staff, industrial facility maintenance staff, to the commercial and local farmer and rancher, everyone has a stake in protecting our resources. The best place to get started is in our own backyards, garages, parking lots, and farm yards.

Current programs established to assist with disposal of household chemicals include:

HOUSEHOLD HAZARDOUS WASTE DISPOSAL
at the
Weber County Transfer Station
867 West Wilson Lane, Ogden
9 a.m. to 5 p.m.

Public Involvement and Participation

2.4 Measurable Goals and Fiscal Ability

Please refer to the tables in this section which summarize the BMP's, Measurable Goals, Implementation Schedule for each BMP.

2.5 Best Management Practices (BMP)

Included in Appendix B are the fact sheets that are referenced from the measurable-goals. There are also new and updated BMPs being added to the Weber County Engineering website that include BMPs for Low Impact and Greenscape Development, as well as the onsite retention of the 80th percentile storm and other various BMP applications. Also of note are new BMPs regarding Post Construction BMPs. These BMPs are used by other communities along the Wasatch Front, having been developed by Salt Lake County.

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
2	All pollutants	General public	4.2.2.1 Have a program or policy in place that allows for the public to provide input	Coalition is open to stakeholders and general public	Ongoing	PEP	Meetings occur monthly
2	All pollutants	General public	4.2.2.2 Have SWMP document available for public review	Have a copy of the draft of the SWMP available at the Engineering office	Ongoing	PEP	SWMP document is available for public review and feedback
2	All pollutants	General public	4.2.2.3 Have SWMP document available to the public at all times	Post the SWMP on the website	Ongoing	PEP	SWMP is updated and posted on the website
2	All pollutants	General public	4.2.2.3 Make updated SWMP document available to the public annually	Post updated SWMP annually	Ongoing	PEP	SWMP is updated and posted on the website annually
2	All pollutants	General public	4.2.2.4 Comply with State and Local public notice requirements	Research and document what the State and Local public notice requirements are. Set goals to comply with them.	July 6, 2016	PEP	Understand what the state and local public notice requirements are.

Illicit Discharge Detection and Elimination

Minimum Control Measure 3

3.1 Introduction

In addition to the County's own requirements regarding Illicit Discharge Detection and Elimination, the County is an active member of the Golden Spike Storm Water Coalition previously known on as the Weber County Storm Water Coalition. The Coalition is made up of representatives from the Cities of Weber and Box Elder Counties and as well as representatives from the Weber County staff all of who together serve as a storm water advisory committee for public participation addressing storm water issues in the communities and Un-incorporated areas represented.

3.2 Measurable Goals and Fiscal Ability

Please refer to the tables in this section which summarize the BMP's, Measurable Goals, Implementation Schedule for each BMP.

3.3 Best Management Practices (BMP)

The following pages consist of the BMP's for the County. Each page represents a separate BMP with details given. The intent of this section is to provide a variety of practices that could be related to Illicit Discharge Detection and Elimination. The format is similar to other communities along the Wasatch Front, having been originally obtained from Salt Lake County's Storm Water Management Plan.

3.4 Storm Water Mapping

Included in Appendix B are the fact sheets that are referenced from the measurable-goals. There are also other BMPs listed on the Weber County Engineering website that include other possible BMPs for various applications. These BMP's are used by other communities along the Wasatch Front, having been originally obtained from Salt Lake County.

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
3	All Pollutants	Contractors, Developers, County Commission	4.2.3 Enforcement ability for storm water rules	Review and update the ordinance to conform with new permit	Ongoing	OD	If ordinance is in place and meets the permit requirements
3	N/A	Engineering, Public Works, Spills Response	4.2.3.1 Maintain Storm Water Map	Maintain SD System Map	Ongoing	MSWD	Editable GIS SD map is online
3	All Pollutants	All Audiences	4.2.3.2 Prohibit through ordinance non-SW discharges	Review and update the ordinance to conform with new permit	Annually	NSWD	If ordinance is in place and meets the permit requirements
3	"	"	4.2.3.3 Implement a plan to detect and address non-SW discharges	Review and update the ordinance to conform with new permit		NSWD	
3	"	"	4.2.3.3.1 Locate & list priority areas for IDDE	List priority areas with justification		NSWD	
3	"	"	4.2.3.3.2 Field inspections of priority areas for IDDE	Complete annual inspection of priority areas	Annually	NSWD	Successful if all inspections are completed
3	"	"	4.2.3.3.3 Dry weather screening	20% of all system outfalls each year	Annual report	NSWD	Successful if all screenings are completed
3	All Pollutants	All Audiences	4.2.3.4 Develop and implement standard operating procedures for tracing the source of illicit discharge	SOP in place and training to Staff	Annually	IIC	SOP in place and training being held
3	All Pollutants	All Audiences	4.2.3.5 Develop and implement standard operating procedures for characterizing the nature of any illicit discharges found or reported to the Permittee by the hotline developed in 4.2.3.9	Create the Incidence Response SOP, complaint form, and train personnel	Completed	IIC, CH	Successful if completed by that date and staff is following SOP
3	"	"	"	Review SOP with staff and provide training annually.	Ongoing	IIC, CH	Successful if training is completed annually for all staff involved in incident reporting.
3	All Pollutants	All Audiences	4.2.3.6 Develop and implement standard operating procedures for ceasing the illicit discharge	Create the Incidence Response SOP and train personnel	Completed	IDC, ISDC	Successful if illicit discharges are rectified

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Associated BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
3	All Pollutants	Public Employees, Businesses and Residents	4.2.3.7 Inform public employees, businesses, and general public of hazards associated with illicit discharges and improper disposal of waste	See MCM 1		PEP, ET	See MCM 1
3	Household Hazardous Waste	Residents	4.2.3.8 Promote or provide services for the collection of household hazardous waste	Transfer Station Address and Phone number is on County Web Site	Completed	UOR, HWM	Successful
3	Household Hazardous Waste	Residents	4.2.3.9 Publicly list and publicize a hotline or other telephone number for public reporting of spills and other illicit discharges	Put the Address and Phone number on County Web Site	Completed	CH	Successful
3	All Pollutants	All Audiences	4.2.3.10 Adopt and implement procedures for program evaluation and assessment. Include a database for mapping, tracking of the spills or illicit discharges identified and inspections conducted	Create a spreadsheet for tracking Illicit Discharges	Completed	IIC, MSWD	Successful
3	All Pollutants	County Employees associated with IDDE	4.2.3.11 Annul IDDE training for staff	Annual training	Ongoing	IIC, MSWD	Ongoing

Construction Site Runoff Control

Minimum Control Measure 4

4.1 Introduction

The County has established a Construction Site Storm Water Permit for construction sites over 5,000 square feet of disturbance and or in moving in excess of 200 cubic yards of material.

The County is an active member of the Golden Spike Storm Water Advisory Coalition previously known on as the Weber County Storm Water Coalition. The Coalition is made up of representatives from Cities of Weber and Box Elder Counties and as well as representatives from the Weber County staff all of who together serve as a storm water advisory committee for public participation addressing storm water issues in the communities and Un-incorporated areas represented.

Through the Coalition an annual contractor training event has been conducted. The Coalition has and continues to provide training for Registered Stormwater Inspectors in support of both the Coalition and the Utah Storm Water Advisory Committee.

The County is limited in responsibility for this control measure to only the unincorporated areas of the Weber County, except for the mutual cooperation and coordination with the incorporated cities of the Coalition at the their request.

4.2 Pollutants of Concern

Sediment in stormwater is the primary pollutant of concern during construction. Other pollutants including heavy metals, nutrients, and additional toxics (construction materials and chemicals) however, are also often found in runoff waters from construction sites. The following pollutants of concern are associated with construction site activity along with their impacts to receiving waters.

Sediment

Soil erosion is the process by which soil particles are removed from the land surface by wind, water, or gravity. Water erosion is the primary mechanism for the transport of sediment into storm runoff and receiving waters. Vegetation protects soil from erosion by intercepting and absorbing rainfall, and by binding soil together with their root structure. When trees and brush are removed, soil is exposed and is easily transported off site, resulting in increased sediment migration. Natural depressions and hills which temporarily pond water are often removed by grading activities; rainfall then runs off the area, taking with it soil particles. Runoff from areas which have been cleared and grubbed typically result in higher volumes of runoff flowing faster and carrying sediments.

Excessive sediment in water can cause increased turbidity and reduced light penetration, resulting in impaired vision for aquatic life, clogging of fish gills, and a reduction in aesthetic values. In addition, other substances including but not limited to: nutrients, heavy metals, and hydrocarbons tend to attach to sediment and in turn are transported with the sediments.

Nutrients

Nutrients like nitrogen and phosphorus from: soil disturbance, fertilizers, pesticides, construction chemicals, and solid waste are often generated at construction sites. Excessive discharge into waterways may result in algae growth which can cause odor problems and reduce the dissolved oxygen available to fish and other aquatic life.

Construction Site Runoff Control

Oils and Greases

Oil and grease contain a wide array of hydrocarbon compounds, some of which are toxic to fish and other aquatic life at very low concentrations. The main sources of oil and grease during construction activities are leakage from engines, spills at fueling stations, overfilled tanks, and waste oil disposal.

Other Toxic Chemicals

Construction of buildings and roads may require toxic or hazardous materials such as pesticides, herbicides, petroleum products, and building materials such as asphalt, sealants and concrete which may pollute stormwater running off the construction site. These types of pollutants often contain small amounts of metals and other toxic materials which may be harmful to humans, plants, and fish in streams.

Miscellaneous Wastes

Miscellaneous wastes include wash water from car washing, concrete mixing, paints and painting equipment cleaning activities, solid wastes resulting from trees and shrubs removed during land clearing, wood and paper materials derived from packaging of building products, food containers such as paper, aluminum, and metal cans, and sanitary wastes. The discharge of these can lead to unsightly, smelly polluted waterways.

4.1 Measurable Goals and Fiscal Ability

Please refer to the tables in this section which summarize the BMP's, Measurable Goals, Implementation Schedule for each BMP.

4.2 Best Management Practices (BMP)

Included in Appendix B are the fact sheets that are referenced from the measurable-goals. There are also new and updated BMPs being added to the Weber County Engineering website that include BMPs for Low Impact and Greenscape Development, as well as the onsite retention of the 90 percentile storm and other various BMP applications. Also of note are new BMP's regarding Post Construction BMP's. These BMP are used by other communities along the Wasatch Front, originally obtained from Salt Lake County.

4.3 Measurable Goals and Fiscal Ability

Please refer to the tables in this section which summarize the BMP's, Measurable Goals, Implementation Schedule for each BMP.

4.4 Best Management Practices (BMP)

Included in Appendix B are the fact sheets that are referenced from the measurable-goals. There are also new and updated BMPs being added to the Weber County Engineering website that include BMPs for Low Impact and Greenscape Development, as well as the onsite retention of the 90 percentile storm and other various BMP applications. Also of note are new BMP's regarding Post Construction BMP's. These BMP are used by other communities along the Wasatch Front, originally obtained from Salt Lake County.

General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success
	Pollutant(s)	Audience(s)			Date	BMP	(Effectiveness)
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.1 Regulatory mechanism to require erosion and sediment control on const. sites including SWPPP & NOI	Require a SWPPP for every construction site as required by UPDES	Ongoing	OD	Successful if all new construction sites have a NOI
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.2 Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism	Review and update ordinance to include escalating enforcement provisions	Ongoing	OD	Successful
4	"	"	4.2.4.2.2 Documentation and tracking of all enforcement actions	Construction inspections are logged in ComplianceGo	Ongoing	OD	Successful
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.3 Develop and implement SOP's for pre-construction SWPPP review for construction sites	Utilize checklist for preconstruction reviews of SWPPP	Ongoing	ECP	Successful
4	"	"	4.2.4.3.1 Conduct a pre-construction meeting	Hold Pre-con meetings on all sites greater than 1 acre or as part of common plan of development	Ongoing		Successful

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
4	"	"	4.2.4.3.2 Identify the priority construction sites	Rank the construction sites during SWPPP review	Ongoing	ZO	Integrate the rating process with SWPPP review
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.4.1 Inspections of all new construction sites ... at least monthly by qualified personnel	Conduct monthly inspections of new (started after August 1, 2010) construction sites - Emphasize self-inspections - sensitive areas to be inspected twice monthly	Ongoing	CCIT	Successful if all new construction sites are inspected monthly
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.4 Inspections of all new construction sites ... at least monthly by qualified personnel, document inspections and follow-up as necessary	Conduct monthly inspections of construction sites	Ongoing	CCIT	Successful if all new construction sites are inspected monthly

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
4	"	Contractors, developers and MS4 staff	4.2.4.5 Provide training to construction inspection staff	Annual training completed	Ongoing	CCIT	Successful
4	"	"	4.2.4.6 Maintain a log of active construction sites	Update ComplianceGo	Ongoing	ECP	Successful

Minimum Control Measure 5

5.1 Introduction

The County includes in its Best Management Practice list Post Construction practices for construction sites over 5000 square feet of disturbance and or moving in excess of 200 cubic yards of material. The County is an active member of the Weber County Storm Water Coalition a county-wide storm water advisory committee for public participation and for addressing storm water issues. The County is otherwise limited to enforcement of such to the unincorporated areas of the county, except for mutual cooperation and coordination with incorporated cities of the county at the city's request.

This section is similar to MCM 6 – Pollution Prevention/good Housekeeping, except that this section applies more to Redevelopment and long term Operation and Maintenance. MCM 6 applies more to preventing pollution in areas other than construction.

5.2 Pollutants of Concern

Because of the many different types of residential, commercial and construction activities, there can be a wide variety of pollutants that make it into stormwater runoff. Even different facilities of the same industry may need different approaches to reducing pollutant discharges to stormwater. Therefore, it is imperative that the owner/operator of each facility understand the potential pollutants and impacts from their individual processes. This chapter will only discuss the most typical pollutants found in industrial stormwater runoff.

Solids, nutrients, metals, oxygen demanding substances, bacteria and viruses, and oil and grease are the pollutants most frequently associated with stormwater runoff. These pollutants are discussed in the following subsection.

Solids

Solids (often referred to as total or suspended solids) can cause many receiving water problems. First, it can cause direct toxicity to aquatic organisms, through such mechanisms as fouling of gills, suffocation, etc. Second, high solids concentrations can reduce water clarity. Third, solids act as a vehicle to transport other pollutants. Excessive solids are often the result of poor construction practices at the industrial site.

Nutrients

Excessive nutrients such as nitrogen and phosphorus in the receiving water can cause problems by stimulating the growth of algae or rooted aquatic plants. Excessive plant growth can cause dissolved oxygen problems, reduce biologic diversity, worsen aesthetics, or impair use for water supply. Some industrial activities typically associated with nutrients include fertilizer/pesticide manufacturing and distribution, waste treatment, and food processing.

Metals

Metals, especially "heavy" metals can be toxic at very low concentrations. Metals can also bio accumulate in fish and other species and be passed on to higher levels of the food chain, including humans. Certain metals including cadmium, copper, lead, silver, and zinc are the most common metals which contaminate waterways. Industrial activities which commonly deal with metals include mining, electroplating, cement, battery production, and metal recycling.

Post Construction Storm Water Management

Oxygen-Demanding Substances

Oxygen-demanding substances tend to deplete the dissolved oxygen levels in streams and lakes. The depleted oxygen supply can result in loss of aquatic life. Oxygen demanding substances are commonly found in food processing industries and chemical manufacturing plants.

Bacteria and Viruses

Bacteria and viruses are the most common microorganisms found in surface water runoff. Bacteria and viruses often carry diseases which can be transferred to animal life and to humans. Food processing and medical wastes

are often associated with microbiological contamination.

Oil and Grease
Oil and grease contain a wide array of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Industrial sources of oil and grease are generally associated with automobile related industries such as: repair shops, body and paint shops, retail distribution, and dismantlers/recyclers.

Floatables
Trash and litter from industrial sites may contain amounts of pollutants which will affect stormwater quality. Floatables in waterways and drainage systems pose both aesthetic and maintenance problems.

Other Toxic Materials (Priority Pollutants)
Facilities may contribute other toxic materials to storm water in low concentrations. Pesticides, phenols and polynuclear or polycyclic aromatic hydrocarbons (PAHs) are most frequently found in stormwater discharges associated with industrial operations.

5.3 Measurable Goals and Fiscal Ability

The following table summarizes the BMPs, Measurable Goals, Implementation Schedule, and Fiscal ability of the County for each BMP.

5.4 Best Management Practices (BMP)

Included in Appendix B are the fact sheets that are referenced from the measurable-goals. There are also new and updated BMPs being added to the Weber County Engineering website that include BMPs for Low Impact and Greenscape Development, as well as the onsite retention of the 90 percentile storm and other various BMP applications. Also of note are new BMP's regarding Post Construction BMP's. These BMP are used by other communities along the Wasatch Front, originally obtained from Salt Lake County.

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
5	All Pollutants	All Audiences	4.2.5.1. Develop and adopt an ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites.	Annually review existing ordinance to determine if it meets requirements	Ongoing	OD	Successful
5	"	"	4.2.5.1.2 Retention Requirement: Develop hydrologic methods	Update ordinance as necessary for ongoing improvements	Ongoing	IPL	Successful
5	"	"	4.2.5.1.3 LID Requirement: Require evaluation of LID approach to promote implementation of BMPs that infiltrate, evapotranspire, or harvest storm water	Develop evaluation process, select minimum of five accepted LID practices	Ongoing	IPL	Successful
5	"	"	4.2.5.1.4 Retention Feasibility: Require evaluation of LID feasibility	Evaluate each development	Ongoing	IPL	Successful

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

5	"	"	4.2.5.2.2 Documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4.	Utilize standard to require contractors and developers to submit documentation on: how long-term BMPs were selected, pollutant removal expected from the BMP, and technical basis supporting performance claims	Ongoing	IPL	Successful
5	"	"	4.2.5.2.3 Regulatory mechanism for post-construction inspection	Review ordinance to verify inspection access and maintenance	Ongoing	IPL	
5	"	MS4 Staff	4.2.5.2.4. & 4.2.5.2.5. Structural BMP installation & maintenance inspection	Incorporate inspections with project inspections	Ongoing	IPL	Successful
5	"	MS4 Staff	4.2.5.3. The Permittee must develop a plan to review proposed projects that may adversely impacting water quality.	Incorporate into plan review process	Ongoing	IPL	Successful

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
5	"	MS4 Staff, Contractors and Developers	4.2.5.4 Inventory post-construction controls	Update annually	Ongoing	IPL	Successful
5	"	MS4 staff	4.2.5.5. Permittees shall provide adequate training for all staff involved in post-construction storm water management, planning and review, and inspections and enforcement.	Schedule and conduct training for appropriate personnel	Annually	BMPIM	If all appropriate personnel are trained

Pollution Prevention/Good House Keeping

Minimum Control Measure 6

6.1 Introduction

The County includes in its Standard Operating Procedures for all of the county facilities for pollution prevention and good housekeeping. The County is an active member of the Golden Spike Storm Water Advisory Coalition a multi-county storm water advisory committee for public participation and for addressing storm water issues. The County is otherwise limited to enforcement of such to its own facilities and coordination with incorporated cities of the county at the city's request.

MCM 6 applies to preventing pollution in areas other than construction areas and establishing good techniques for Public Works maintenance activities.

6.2 Pollutants of Concern

A variety of pollutants are associated with stormwater pollution due to municipal activities including: sediment, nutrients, bacteria and viruses, oxygen demanding substances, oil and grease, metals, toxic pollutants, and floatables (Table 6-1). The impacts of these pollutants on water quality along with a discussion on municipal activities which can potentially contribute to their introduction into stormwater runoff is presented in the following subsections.

Sediment

Sediment is a common component of stormwater, and is considered to be one of the most damaging pollutants in Utah. Sediment fills in streams, lakes, rivers, wetlands, and road ditches, and can affect aquatic life by smothering fish larvae and eggs. Suspended soil particles can cause water to look cloudy or turbid. Excessive turbidity reduces light penetration in water, impairs sight of feeding fish, clogs fish gills, and increases drinking water treatment costs. Fine sediment also acts as a vehicle to transport other pollutants including nutrients, trace metals, and hydrocarbons to nearby surface waters.

Significant sediment-borne pollutants are associated with highway runoff; originating from pavement wear, vehicles, atmospheric deposition, and road maintenance. Other sources of sediment include erosion from new development and construction sites.

Nutrients

Nutrients, especially nitrogen and phosphorus, can cause algal blooms and excessive aquatic plant growth in lakes. These conditions can impair many important uses of these waters, including recreation, fish habitat, and water supply.

Nitrogen and phosphorus associated with highway runoff come from atmospheric deposition and roadside fertilizer application. Phosphorus has also been associated with application of sand and salt on roads. Nutrients are a result of yard debris, garbage, as well as fertilizer and pesticide use.

Metals

Trace metals are a water quality concern because the toxic effects they can have on aquatic life. Metals can also be a health hazard to humans through direct ingestion of contaminated water or through eating contaminated fish. The most common trace metals found in stormwater runoff in urban areas are lead, zinc, and copper. These metals originate from galvanizing, chrome plating, and other metal sources associated with automobiles. Lead, cadmium, nickel and zinc in urban runoff have also been associated with different sources including body rust, brake lining wear, steel highway structures, and tire wear from automobiles.

Pollution Prevention/Good House Keeping

Oxygen-Demanding Substances

Oxygen-demanding substances tend to deplete the dissolved oxygen levels in streams and lakes. The depleted oxygen supply can result in the reduction of aquatic life. Oxygen demanding substances are found in yard waste (such as leaves and lawn clippings), animal wastes, street litter, and organic matter.

Bacteria and Viruses

Bacteria and viruses are the most common microorganisms found in surface water runoff. Bacteria and viruses often carry diseases which can be transferred to animal life and to humans. The main sources of these contaminants are animal excrement and sanitary sewer overflows.

Oil, Grease and Hydrocarbons

Oil, grease and hydrocarbons contain a wide array of compounds, some of which are toxic to aquatic organisms at low concentrations. The main sources of oil and grease are leakage from engines, restaurant grease traps, and waste oil disposal. Hydrocarbons typically come from spills, leaks, lubricants and asphalt surface leachate. Hydrocarbon levels are highest from parking lots, roads and service stations.

Floatables

Floatables are pollutants that may be contaminated with heavy metals, pesticides, and bacteria. Typically resulting from street refuse or industrial yard waste, floatables also create an aesthetic "eye sore" in waterways or detention basins.

Table 6-1. Potential pollutants of concern associated with municipal activities.

Activity	Pollutant	Potential Source
Construction	Sediment	Poor erosion control practices on hillsides, undeveloped property, right-of-way for construction sites
Residential and Parks	Nutrients	Yard debris, garbage, fertilizer and pesticide use, rat poison, pyrotechnics
Transportation and	Metals	Paint, plastics, pottery pigments and glazes, automobile tires, common galvanized coatings, pesticide use, root killer application on sewer lines, old lead paint an glazes, wood preservatives, batteries
Residential	Oxygen demanding Substances	Yard debris, animal wastes, organic chemical use
Parks and Residential	Bacteria and Viruses	Human and animal (pets and aquatic life) waste, sanitary sewer infiltration into storm drain system, decomposing yard waste
Commerci Residential	Oil, Grease, and Hydrocarbons	Asphalt surface leaching, spills, leaks, construction activities
Residential Parks	Floatables	Street refuse, industrial yard waste

Pollution Prevention/Good House Keeping

6.2 Measurable Goals and Fiscal Ability

Please refer to the tables in this section which summarize the BMP's, Measurable Goals, Implementation Schedule for each BMP.

6.3 Best Management Practices (BMP)

Included in Appendix B are the fact sheets that are referenced from the measurable-goals. There are also new and updated BMPs being added to the Weber County Engineering website that include BMPs for Low Impact and Greenscape Development, as well as the onsite retention of the 90 percentile storm and other various BMP applications. Also of note are new BMP's regarding Post Construction BMP's. These BMP are used by other communities along the Wasatch Front, originally obtained from Salt Lake County.

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
6	All pollutants	MS4 staff	4.2.6 ...All components of an O & M program shall be included in the SWMP document and must identify the department (and where appropriate, the specific staff) responsible for performing each activity described in this section…	Complete Org chart and define specific responsibilities for all departments shown	Ongoing	HP	Successful
6	"	"	4.2.6.1. Permittees shall develop and keep current a written inventory of Permittee-owned or operated facilities	Complete listing of MS4 owned/operated facilities	Ongoing	HP	Successful
6	"	"	4.2.6.2. All Permittees must initially assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1. for their potential to discharge to storm water the following typical urban pollutants:	Complete assessments and identify "high priority" facilities	Ongoing	HP	Assessments are completed and documentation recorded in SWMP
6	"	"	4.2.6.4. Each “high priority” facility identified in Part 4.2.6.3. must develop facility-specific standard operating procedures (SOPs) or similar type of documents.	Review, customize and update appropriate SOPs	Ongoing	HP	SOPs are updated and current by milestone date

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
	"	"	4.2.6.5. Inspections	Perform inspections	Ongoing	HP	Completed
			4.2.6.6.1 SOPs to minimize the potential for pollutant discharge.	Develop SOPs and add to list as needed	Ongoing	HP	Completed inspection form and log
6	"	"	4.2.6.6.2 Schedule for system maintenance	Develop maintenance inspection schedule	Ongoing	HP	Completed inspection form and log
6	"	"	4.2.6.6.3 Document system maintenance	Conduct quarterly comprehensive inspections	Ongoing	HP	Report completed
6	"	"	4.2.6.6.4 Minimize discharges	Review MS4 activities annually	Ongoing	HP	
6	"	"	4.2.6.6.5 Develop a spill prevention plan	Completed plan	Ongoing	HP	Plan completed
6	"	"	4.2.6.6.6 Inventory floor drains	Completed inventory	Ongoing	HP	Report completed

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
6	"	MS4 Staff, Contractors and Developers	4.2.6.7. The Permittee must ensure contractors are using appropriate storm water controls	Project inspection must incorporate storm water quality concerns	Ongoing	IPL	
6	"	MS4 staff	4.2.6.8 Existing flood management structural controls must be assessed to determine whether changes or additions should be made to improve water quality.	See MCM 5 for goals (part of the retrofit program)			
6	"	MS4 staff	4.2.6.9 Plan to retrofit existing sites	Evaluate existing sites and prioritize retrofit plan	Ongoing		
6	"	MS4 staff	4.2.6.10 Annual training for persons involved in activities affecting water quality	Document training and attendees	Ongoing		

General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

Appendix A

Supplemental Guide for Contractors
BMP's

Appendix B

Supplemental Guide
For
Public Works

Appendix C

IDDE Program

Appendix D

Documentation

Appendix E

Ordinances

Appendix F

State NPDES Permits

Appendix G

Storm Sewer Maps

Additional Information

Additional Information

STORMWATER RESOURCES

Environmental Protection Agency (EPA) Region VIII.....(800) 227-8917

Army Corps of Engineers.....(801) 295-8380 ext. 18

Utah Department of Environmental Quality.....(801) 536-4400

Environmental Incidents..... (801) 536-4123

Utah Division of Natural Resources
General Information.....(801) 538-7200

Weber County

County Engineer..... (801) 399-8374

Storm Water Management..... (801) 399-8374

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