

# **HOOPER CITY STORM WATER MANAGEMENT PROGRAM**

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By

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Major Revisions by: J-U-B ENGINEERS, Inc.

**Revision Log**

<b>Date</b>	<b>Comments</b>	<b>Approved</b>
11/2010	Updated to address new permit requirements	
6/2016	Updated to address new permit requirements	
12/2021	Update to address new permit and LID requirements	

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## INTRODUCTION

Polluted storm water runoff is often transported to municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. EPA's Storm Water Phase II Rule establishes an MS4 storm water management program that is intended to improve the Nation's waterways by reducing the quantity of pollutants that are introduced into storm sewer systems during storm events. Common pollutants include oil and grease from roadways, roadway salts and deicing materials, pesticides and fertilizers from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, thereby discouraging use of the resource, contaminating drinking water supplies, and interfering with the habitat for fish, other aquatic organisms, and wildlife.

In 1990, EPA promulgated rules establishing Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program. The Phase I program for MS4s requires operators of "medium" and "large" MS4s, that is, those that generally serve populations of 100,000 or greater, to implement a storm water management program as a means to control polluted discharges from these MS4s. The Storm Water Phase II Rule extends coverage of the NPDES storm water program to certain "small" MS4s but takes a slightly different approach to how the storm water management program is developed and implemented.

In the State of Utah, the EPA has granted primacy to the State of Utah to oversee and manage the storm water program. The State has adopted the Utah Pollutant Discharge Elimination System (UPDES) for that purpose. Hooper City has prepared this Storm Water Management Program (SWMP) to meet the requirements of the UPDES Storm Water Discharge Permit for Small MS4s.

## Storm Water Management Program

A Storm Water Management Program should:

- Reduce the discharge of pollutants to the "maximum extent practicable" (MEP);
- Protect water quality;
- Satisfy the appropriate water quality requirements of the Clean Water Act; and
- Adapt to changing conditions and needs

Storm water management programs must include:

- ✧ Best Management Practices (BMPs) for each of the six minimum control measures;
  1. Public Education and Outreach
  2. Public Participation/Involvement
  3. Illicit Discharge Detection and Elimination
  4. Construction Site Runoff Control
  5. Post-Construction Runoff Control
  6. Pollution Prevention/Good Housekeeping
- ✧ Measurable goals for each minimum control measure (i.e., narrative or numeric standards used to gauge program effectiveness);
- ✧ Estimated months and years in which actions to implement each measure will be undertaken, including interim milestones and frequency; and
- ✧ The person or persons responsible for implementing or coordinating the storm water program.

## Permit Application and Notice of Intent

In 2003, Hooper City applied for and was granted a permit to discharge stormwater to waters of the United States. Hooper is permitted under UTR090046.

## Permit Requirements

On May 12, 2021, the State of Utah issued a revised General Permit for Discharges from Small Municipal Separate Storm Sewer Systems. With the revisions came new requirements and more clarity on existing requirements. This SWMP update is intended to help the city meet the requirements of this new permit. Some of the updated requirements of the permit include:

- A current version of the SWMP must be posted on the city's website within 180 days of the effective date of the permit.
- All staff, contracted staff, or other responsible entities, that as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4 including office personnel who might receive initial reports of illicit discharges must receive annual training in the IDDE program.
- An appeals process for construction site compliance issues is now required

- Projects requiring a SWPPP are now required to include a discussion/review of SWPPP requirements in a pre-construction meeting.
- Someone who prepares a SWPPP for a construction project is now prohibited from performing construction site inspections on behalf of the Permittee on that site.
- Electronic inspection tools may now be used by the Permittee in lieu of in person on-site inspection for up to half of the required inspections.
- Retention of the 80<sup>th</sup> percentile storm is now required on all new development, when feasible
- If not feasible, a rationale must be provided for the use of alternative design criteria.
- MS4s must allow a minimum of five LID practices from the list in Appendix C of “A Guide to Low Impact Development Within Utah”. If the City does not adopt specific LID guidelines, any LID approach described in the Guide may be used by developers.
- The MS4 is now required to review site plans to evaluate water quality impacts over the life of the project
- The MS4 is now required to inspect all permanent structural BMPs prior to closing out a construction project, to ensure that it was built according to approved plans.
- Inspections of permanent structural BMPs after construction is completed must be conducted at least once every two years (this is a reduction in inspection requirements)
- MS4s are required to have a SWPPP for each “high priority” permittee owned or operated facility
- Visual inspections of “high priority” facilities have been reduced from weekly to monthly
- Comprehensive inspections of “high priority” facilities have been reduced from quarterly to semi-annually.
- Visual observation of storm water discharges for “high priority” facilities have been reduced from quarterly to annually.

The chosen measurable goals, submitted in the Notice of Intent as a permit application, become the required storm water management program; however, the NPDES permitting authority can require changes in the mix of chosen BMPs and measurable goals if all or some of them are found to be inconsistent with the provisions of the Phase II Final Rule. Likewise, the permittee can change its mix of BMPs if it determines that the program is not as effective as it could be.

## Reports

The permit requires that the city review the SWMP annually, report on our activities and make any updates that might be required. The annual reports should use the form provided by the State. Generally, the annual report should include the following information:

- ✧ The status of compliance with permit conditions, including an assessment of the appropriateness of the selected BMPs and progress toward achieving the selected measurable goals for each minimum measure;
- ✧ Results of any information collected and analyzed, including monitoring data if any;
- ✧ A summary of the storm water activities planned for the next reporting cycle;
- ✧ A change in any identified BMP or measurable goals for any minimum measure; and
- ✧ Notice of relying on another governmental entity to satisfy some of the permit obligations (if applicable).

## Record Keeping

Records required by the State must be kept for at least 5 years and made accessible to the public at reasonable times during regular business hours. Records need not be submitted to the State unless the Permittee is requested to do so.

## Deadlines

The following deadlines are recognized as part of the program:

Date	Description
November 8, 2021	Implement Low Impact Development Program
November 8, 2021	Update SWMP to meet new permit requirements



## Penalties

The NPDES and UPDES permits that the operator of a regulated small MS4 is required to obtain is federally enforceable, thus subjecting the Permittee to potential enforcement actions and penalties by the NPDES permitting authority if the permittee does not fully comply with application or permit requirements. This federal enforceability also includes the right for interested parties to sue under citizen suit provision (section 405) of CWA.

This document contains a description of the community-specific Storm Water Management Program for Hooper City. The Program includes the following;

- ✧ An organizational chart depicting various departments/personnel within the city and their stormwater related responsibilities
- ✧ Best Management Practices (BMPs) for each of the six minimum control measures;
  1. Public Education and Outreach
  2. Public Participation/Involvement
  3. Illicit Discharge Detection and Elimination
  4. Construction Site Runoff Control
  5. Post-Construction Runoff Control
  6. Pollution Prevention/Good Housekeeping
- ✧ Measurable goals for each minimum control measure (i.e., narrative or numeric standards used to gauge program effectiveness);
- ✧ Estimated months and years in which actions to implement each measure will be undertaken, including interim milestones and frequency; and
- ✧ The person or persons responsible for implementing or coordinating the storm water program.

This document also contains the following information and documentation in its appendices:

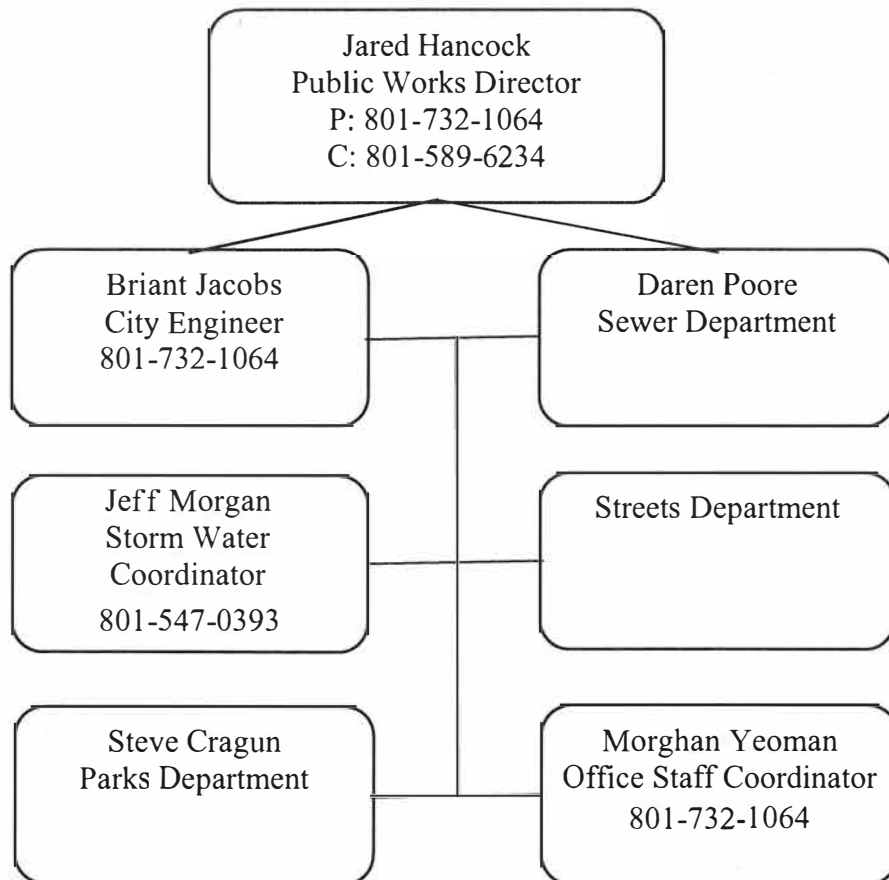
- ✧ Appendix A – Supplemental Guide to Storm Water Management for Contractors and Developers
- ✧ Appendix B – Supplemental Guide to Storm Water Management for Public Works Departments

- ✧ Appendix C – Standard Operating Procedures, Documentation and Elements of the Illicit Discharge Detection and Elimination program
- ✧ Appendix D – General program documentation including inspection forms, enforcement logs, training logs, annual reports, maintenance records, observation reports, and other general documentation
- ✧ Appendix E – Copies of the most current city ordinances applicable to stormwater
- ✧ Appendix F – Copies of State permits and documents regulating the Hooper City stormwater program
- ✧ Appendix G – System maps and inventories

# HOOPER CITY CHARACTERISTICS

## General Information

Hooper City has a very limited public works staff. The Mayor is ultimately responsible for the storm drain system. The following organizational chart shows responsible individuals and provides their contact information.



### Public Works Director

- Liaison with administration and City Council
- General coordination of the Storm Water Pollution Prevention (SWPP) program
- Responsible for the Pollution Prevention and Good Housekeeping Program
  - o Keep SOPs up to date

### Storm Water Coordinator

- Oversee Storm Water Program and work with Department Heads
- Responsible for Construction Program
  - o Review SWPPs
  - o Coordinate permitting

- Attend preconstruction conferences to review SWPPP requirements and expectations
- Site inspections
- Responsible for IDDE Program
  - Dry weather screening
  - Respond to complaints or calls
  - Annual High Priority Area inspection
  - Coordinating with the Health Department
  - Track Illicit Discharge activities and reporting
  - Publicize hotline reporting
  - Educate on Household Hazardous Waste – provide information for City website
- Responsible for Public Education and Outreach Program
  - Attend Golden Spike Storm Water Coalition meetings
  - Assist with annual Water Fair
  - Provide educational information for target audiences
  - Conduct Employee Training
  - Educational information for Quarterly Newsletters
- Responsible for Long-term Runoff Control Program
  - Work with City Engineer to include long-term BMPs on new development
  - Maintain inventory of long-term BMPs in the city
  - Oversight inspections of privately owned Long-term BMP
  - Work with the City Engineer on maintenance agreements
  - Annual inspection of City-Owned/Operated long-term BMPs
- Responsible for Public Involvement Program
  - Providing information for City Website postings
  - Keep a current version of the SWMP on the website
  - Review any public comments on the SWMP and respond appropriately
- Assist with the Pollution Prevention and Good Housekeeping Program
  - Tracking of Storm Water Program Activities
  - Semi-Annual Comprehensive Inspections of High Priority City-Owned Facilities
  - Annual sampling of storm water discharges at High Priority City-Owned Facilities
  - Work with Public Works Director in keeping SOPs up to date
  - Maintain inventory of City-Owned Facilities
  - Review flood management/control facilities for water quality
- Review and Update SWMP Annually
- Annual Report
- Coordinate any Storm Water Program issues with office staff

**City Engineer**

- Design reviews to include long-term BMPs

- Keep storm water system mapping updated
- Help educate contractors and developers
- Provide engineering support

**Parks Department Head**

- Maintain parks department work activities and areas
- Pesticide, Herbicide, and Fertilizer (PHF) program
- Training parks dept. personnel
- Chemical and fertilizer storage in work area
- Parks department equipment operation
- Equipment maintenance for parks dept. equipment
- Mowing, grounds maintenance program

**Streets Department Head**

- Streets dept. maintenance work activities and areas
- Streets dept. equipment operation
- Equipment maintenance for street dept.
- Training streets dept. personnel
- Chemicals storage in work area
- Snow plowing program
- Street sweeping program
- Salt and materials storage stockpile areas
- Conduct weekly inspections of High Priority City-Owned Facilities

**Office Staff**

- Coordinate permitting efforts
- Respond to public input – phone calls, emails and people stopping by
- Reporting of complaints
- Updating city website
- Assist in setting up training sessions

Some general information for Hooper City follows:

**Population:** 8,646 (2019 approximation)

**Size:** 86.6 sq. miles total  
11.8 sq. miles east of the Great Salt Lake

**Geographic Description:** 8 miles southwest of Ogden. Located in the southwest corner of Weber County with elevations varying between 4215 to 4240 ft.

**Receiving Waters:** Most of Hooper drains into either the Hooper Slough or the Howard Slough, both of which drain into the Great Salt Lake. There are small areas on the north side of town that drain into the extreme lower reaches of the Weber River. This section of the river is impaired. The defined impairments are for OE Bioassessment and Ammonia. This information was taken from the following link: <http://mapserv.utah.gov/surfacewaterquality/>

**Annual Precipitation:** 17.21 inches per year (as measured at the Ogden Sugar Factory, Antelope Island reports 15.48 inches per year)

**Type of Community:** A small rural city with moderate rates of residential growth that are expected to continue for many years.

**Latitude:** 41°10' N

**Longitude:** 112°08' W

**Census Bureau Place:**

**Urbanized Area:** 11.8 square miles excluding the Great Salt Lake and Fremont Island

**Percentage of Drainage to be Permitted:** The intent is to permit the entire portion of Hooper that is east of the Great Salt Lake. The lake itself and Fremont Island are to be excluded from the permit.

The Hooper storm water system consists of a very few curb and gutters, many miles of open ditch, culverts, a few typical piped sections, swales and canals. Most storm water facilities continue to drain into irrigation canals where they empty either into the Howard Slough or the Hooper Slough. The two sloughs wind their way westward where they each empty into the Great Salt Lake. Very few controls exist within the system. Most of the streets use swales and ditches to collect storm water runoff with the remaining using curb and gutter. Approximately 50% of the city's sanitary sewer system consists of individual septic tanks and drain fields. Several alternative methods of individual treatment have been tried, most unsuccessfully. The city installed, owns and operates a vacuum sewer collection tank system in the city, but all new developments are required to connect to the public sanitary sewer system if they are within 300 feet times the number of lots of an existing sewer line.

## History

Hooper is a relatively young city in the State of Utah. Hooper was incorporated on November 30, 2000 and has a population of approximately 8,646 people. Much of what is now the city has traditionally been devoted to agricultural land uses including the raising of animals and the cultivation of alfalfa, grain, corn and onions. The balance of the land area is largely developed with single-family dwellings on large lots (one acre or greater).

After incorporating, a decision was made to operate the City without a mill levy (property tax). Because of the rural nature of the community there is little existing infrastructure and correspondingly little revenue to work with. The current city staff consists of one Mayor who works part time for the City and two clerks who also work part time for the City, a Public Works Director, a Sewer System Director, a Streets Superintendent, and a few other full and part time Public Works Employees. The staff works closely together to handle issues as they arise.

The City currently contracts with Weber County to do maintenance on its streets. Culinary water is supplied by the Hooper Water Improvement District (HWID). In 2007 Hooper City began operating the first phases of its sanitary sewer collection system. There are still numerous septic tanks and associated drain fields. The storm drain system consists of many miles of open ditch with culverts at road crossings and driveways. A handful of the newer subdivisions have installed curb and gutter with catch basins and piping to drain to the nearest open ditch.

## Local Water Quality Concerns

The surface water quality within the city of Hooper has historically been very poor. In January 2001, Parsons Engineering Science, Inc completed a study for the Weber-Morgan Board of Health, entitled *Shallow Groundwater Management Study for West Weber County*. The results of this study indicate that the shallow groundwater in this part of Weber County is high in nitrates. As a result of this study the Board of Health adopted a policy allowing no net increase in the number of septic systems within the county. It is thought that one of the main culprits leading to the high nitrates is the septic systems that have been installed in areas with a high water table. With the limited budget available for Hooper City, the initial focus was on trying to minimize the influence of the sewage system on the water quality within the city. As the city has slowly been progressing toward a city-wide sewer system more attention has been given to other aspects of the city's plan. Hooper is also at the bottom end of the watershed. The only thing downstream of Hooper is the Great Salt Lake. By the time water gets to Hooper through existing drainage channels, the water has been degraded.

Because of the rural agricultural nature of the city other secondary target pollutants include phosphorus and total suspended solids. Hooper's SWMP has been geared toward small city applications, targeting the pollutants mentioned.

The lower section of the Weber River is considered to be an impaired water. The listed impairments are OE bioassessment and ammonia. The northern portion of Hooper flows into the lower Weber River. Potential sources of ammonia that might be prevalent in Hooper are agricultural sources like fertilizers and animal waste, and residential sources like septic systems. The City has adopted aggressive policies to expand the sewer collection system and reduce the number of septic systems within the city.

## Stormwater Advisory Committee

A steering committee was formed in the summer of 2002 for the purpose of developing the initial SWMP. Since the initial permitting an Advisory Committee reviews and oversees the stormwater program. The Advisory Committee includes:

Dale Fowers, Mayor  
Jared Hancock, Public Works Director  
Briant Jacobs, City Engineer  
Jeff Morgan, Storm Water Coordinator, Consultant

Input and recommendations from this committee were used to update this Storm Water Management Program (SWMP). Their countless hours devoted to this task are greatly appreciated and are reflected in this program.

## Ongoing Documentation Process

Much of the documentation is or will be included in Appendix D. As part of this update, the existing BMPs and measurable goals have been reviewed and assessed for their effectiveness and contribution in helping us achieve our desired results. We have completed evaluation worksheets to document our review and our assessment of our current program. These evaluation sheets are found in Appendix D. This evaluation combined with new permit requirements provided the foundation for this update. We have tried to build off of the positive things that have been accomplished and renewed our commitment to improve in areas where our program has been lacking. We feel the revised program is more focused.

Our plan is to document our activities and to keep better track of what is happening within our community. We will continue to use the forms, logs, evaluation forms and backup information from the last major update. In the coming months we will focus attention on updating city standards to meet the new retention requirements.



## PUBLIC EDUCATION AND OUTREACH (Section 4.2.1)

### Permit Requirements

The permit requirements for Public Education and Outreach on Storm Water Impacts can be found in Section 4.2.1 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements.

1. The MS4 shall promote behavior change by the public to reduce water quality impacts associated with pollutants in storm water runoff and illicit discharges. This is a multimedia approach targeted to specific audiences. The four audiences are: (1) residents (4.2.1.3), (2) institutions, industrial and commercial facilities (4.3.2.4), (3) developers and contractors (construction) (4.2.1.5), and (4) MS4 owned and operated facilities (4.2.1.6).
2. The MS4 shall identify target pollutants and pollutant sources and their potential impacts relating to storm water quality (4.3.1.1).
3. The MS4 shall provide and document information given to the four focus audiences.
4. The MS4 must identify methods that will be used to evaluate the effectiveness of the educational messages and overall education program (4.2.1.7).
5. The MS4 shall provide documentation or rationale as to why particular BMPs were chosen for its public education and outreach program (4.2.1.8).

### Summary of Existing Efforts

To-date, Hooper City has completed the following activities relative to our public education and outreach program:

- Prepared and distributed information on the proper methods for disconnecting septic tanks and drain fields for residents who have connected to the sanitary sewer system.
- Provided some general training for municipal staff
- Encouraged and invited contractor and developer training provided by the Golden Spike Storm Water Coalition.
- Participate in the public outreach program for the Golden Spike Coalition  
Including:
  - Brochures and printed materials
  - A public information video
  - Annual Water Fair
  - Annual Contractor Training

Currently the city is looking at several items that, if implemented, could and will be utilized to help further the cause of public education and outreach.

## Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP Hooper City has chosen to adopt the following BMPs. Each BMP is cross referenced alphabetically by code in Appendix B to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness. The BMPs listed are the ones that the City has committed to utilize. Documentation of the selection/evaluation process for these BMPs can be found in Appendix D.

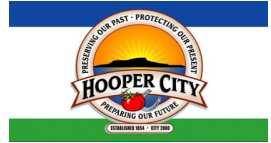
BMP	Code
Using Media	UM
Public Education/Participation	PEP
Classroom Education on Storm Water	CESW
Educational Materials	EM
Employee Training	ET

## Goals

In order to more fully realize the benefits of the BMPs the city has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Education and Outreach.

The following table includes the goals for MCM 1.

## MCM 1- Public Education and Outreach



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
1		General Public	4.2.1.2 Provide and document education outreach given to the general public.	Continue to support storm water fair through the County Coalition annually	Hold Water Fair in the Spring	PEP and UM	Water Fair is held annually
1		"	"	Create video on protecting our water ways and make available	Jun-22	PEP and UM	
1		Institutions and Commercial	4.2.1.3. Provide and document information given to institutions, industrial, and commercial facilities on an annual basis of the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste.	Include information on the website, through flyers, and in the newsletter	Ongoing		Track information being sent out
1	"	Engineers, Construction Contractors, Developers	4.2.1.4. & 4.2.1.6 Provide and document information given to engineers, construction contractors, developers, development review staff, and land use planners concerning the development of storm water pollution prevention plans (SWPPPs) and BMPs for reducing adverse impacts from storm water runoff from development sites.	Include information on the website, through flyers, and in the newsletter	Ongoing		Track information being sent out

### MCM 1- Public Education and Outreach



1	"	"	"	Participate in Annual Contractor Training every February	Feb-22		Attend and Participate in Training
1	"	MS4 staff	4.2.1.5 Provide and document information and training given to employees of Permittee owned or operated facilities concerning the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste.	Quarterly Awareness Training	Ongoing		Document training with attendance/participation logs
1	All pollutants	All Audiences	4.2.1.7 Evaluate the effectiveness of the public education program by a defined method.	Conduct a survey by the end of the permit cycle to evaluate program effectiveness	Ongoing	PEP & UM	Conduct survey once every 5 years
1	All pollutants	All Audiences	4.2.1.8 Document why certain BMPs were chosen for public education program (over others)				

## PUBLIC PARTICIPATION / INVOLVEMENT (4.2.2)

### Permit Requirements

The permit requirements for Public Participation and Involvement on Storm Water Impacts can be found in Section 4.2.2 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements.

1. Comply with applicable State, and local public notice requirements to involve interest groups and stakeholders for their input on the SWMP (4.2.2.1).
2. Make available to the public a current version of the SWMP document for review and input for the life of the permit. This should be posted on the City's website. A specific contact person and phone number or email address shall be identified for those wishing to comment (4.2.2.2 and 4.2.2.3).

### Summary of Existing Efforts

#### **Advisory Committee**

The City has a Storm Water Advisory Committee. This committee is described on page 7 of this document.

#### **Recycling Program**

Hooper City has a Recycling Program.

#### **Green Waste Collection**

Hooper City residents are encouraged to take advantage of Weber County's Green Waste Recycling Program.

#### **Service Groups**

There are local scout and community volunteer groups that have participated in street cleanup and litter reduction.

### Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP Hooper City has chosen to adopt the following BMPs for use within our city as applicable. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness in the indicated appendix.

BMP	Code	Appendix
Public Education/ Participation	PEP	B

### Goals

In order to more fully realize the benefits of the BMPs the city has set the following

goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Public Involvement and Participation.

The following table summarizes the goals for MCM 2.

## MCM 2 - Public Involvement/Participation



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
2	All pollutants	General public	4.2.2.1 – Adoption of a program or policy to create opportunities for public input during the decision making process	Follow City standard notification requirements for all public meetings regarding the SWMP.	Ongoing	PEP	The program or policy is in place
2	All pollutants	General public	4.2.2.2 Have SWMP document available for public review before it's submitted to the state	Hold a public hearing when the SWMP update is completed. Make updated SWMP available prior to meeting	Week before city council meeting	PEP	SWMP document is available for public review a week before public hearing
2	All pollutants	General public	4.2.2.3 Have SWMP document available to the public at all times	Post the latest 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 continuously	Post updated SWMP on City website	Ongoing	PEP	SWMP is updated and posted on the website annually
2	Garbage and debris	General Public	Give citizens the opportunity for hands on participation	Continue to support City recycling program	Ongoing	PEP	If program is active
2	Green Waste	General public	Give citizens the opportunity for hands on participation	Continue to support green waste programs	Ongoing	PEP	If program is active

## ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) (4.2.3)

### Permit Requirements

The permit requirements for Illicit Discharge Detection and Elimination on Storm Water Impacts can be found in Section 4.2.3 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements.

1. Maintain a storm sewer system map of the MS4, showing the location of all outfalls and the names and location of all State waters that receive discharges from those outfalls (4.2.3.1).
2. Through an ordinance, or other regulatory mechanism, a prohibition (to the extent allowable under State, or local law) on non-storm water discharges into the MS4, and appropriate enforcement procedures and actions (4.2.3.2).
3. Develop and implement a plan to detect and address non-storm water discharges, including spills, illicit connections, sanitary sewer overflows, and illegal dumping to the MS4. The plan should include:
  - a. Procedures for locating and listing priority areas likely to have illicit discharges (4.2.3.3.1)
  - b. Annual field inspections of priority areas (4.2.3.3.2)
  - c. Dry weather screening (4.2.3.3.3)
  - d. Reporting of businesses that may require a separate industrial permit (4.2.3.3.4).
4. Develop and implement standard operating procedures (SOPs) for
  - a. tracing the source of an illicit discharge (4.2.3.4).
  - b. characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges found or reported (4.2.3.5).
    - i. Reporting/recording all illicit discharges (4.2.3.5.1)
  - c. ceasing the illicit discharge, including notification of appropriate authorities, property owners, and technical assistance for removing the source and follow-up inspections (4.2.3.6).
5. Inform public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste (4.2.3.7).
6. Promote or provide services for the collection of household hazardous waste (4.2.3.8).
7. Publicly list and publicize a hotline or other local number for public reporting of spills and other illicit discharges (4.2.3.9).



8. Develop a written spill/dumping response procedure, and a flowchart for internal use, including various responsible agencies and their contacts (4.2.3.9.1).
9. Adopt and implement procedures for program evaluation and assessment (4.2.3.10).
10. Train employees, at a minimum, annually on the IDDE program (4.2.3.11).

## Summary of Existing Efforts

### **Ordinances**

Hooper City has an ordinance designed to specifically prohibit illicit discharges to the storm sewer system.

### **Illicit Spills**

Currently, reports of spills are handled by the Fire Department or County Health Department.

### **Converting from Septic Tanks to a Sewer Collection System**

In 2007, the City implemented the initial phases of a community-wide sewage collection system. The system covers approximately 50% of the total land area within the city. The areas included in the service were high priority areas, determined by population density and potential for pollution. As part of the new sewer collection system, the City has adopted a policy requiring new development to expand the collection system if the development is within 300 feet times the number of lots of the existing sewer. A copy of this policy can be found at City Hall

### **Mapping**

The city has a fairly comprehensive, storm drain map showing the storm drain system and its points of discharge. A copy of this map is included in Appendix G.

### **Education**

Hooper City participates in the Golden Spike Coalition education programs. Various efforts are applicable to different target audiences. Printed materials are also available to city staff to distribute as needed.

## Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP Hooper City has chosen to adopt the following BMPs for use within our city as applicable. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness in the indicated appendix.

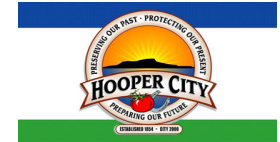
BMP	Code	Appendix
Community Hotline	CH	B,C
Employee Training	ET	B,C
Hazardous Waste Management	HWM	B,C
Illegal Dumping Control	IDC	B,C
Identify Illicit Connections	IIC	B,C
Illegal Solids Dumping Controls	ISDC	B,C
Leaking Sanitary Sewer Control	LSSC	B,C
Non-Storm Water Discharge to Drains	NSWD	B,C
Ordinance Development	OD	B,C
Public Education/ Participation	PEP	B,C
Used Oil Recycling	UOR	B,C

## Goals

In order to more fully realize the benefits of the BMPs the city has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Illicit Discharge Detection and Elimination.

The following table includes the goals for MCM 3.

### MCM 3 - Illicit Discharge Detection and Elimination



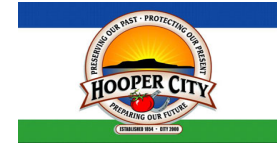
MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
3	N/A	Public Works	4.2.3.1 – Maintain a current storm water map that includes: <ul style="list-style-type: none"> <li>• Outfall locations with names and location of all State waters that receive discharge from these outfalls</li> <li>• Storm drain pipe and other structures</li> </ul>	Implementing policy to have all map updates done within 12 months of final approval.	Ongoing	NSWD	Successful if 90% are input within 12 months
3	All Pollutants	All Audiences	<b>4.2.3.2.1</b> – Effectively prohibit, through ordinance or other regulatory mechanism, non-SW discharges. The IDDE program must have adequate legal authority to detect, investigate, eliminate and enforce against non-SW discharges.	Review and update ordinance. Include escalating enforcement and right of access for inspections	Nov-21		If ordinance is updated
3	"	"	4.2.3.3.1 Written systematic procedures for locating and listing the following priority areas likely to have illicit discharges (if applicable to the jurisdiction)	Develop written procedure for determining priority areas.	Dec-21		Written policy in place
3	"	"	4.2.3.3.2 Field inspections of areas which are considered a priority shall be achieved by inspecting each priority area annually	Conduct field inspections of IDDE priority areas annually	Ongoing	Inspect	Successful if reports are completed and filed

### MCM 3 - Illicit Discharge Detection and Elimination



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
3			4.2.3.3.3 Dry weather screening for the purpose of verifying outfall locations and detecting illicit discharges	Do Dry weather screening 20% of all outfalls each year as required in Part 4.2.3.3.3	1 July of each year	NSWD	Successful if all screens are done
3	"	"	4.2.3.3.4 Report suspected unpermitted discharges (dewatering or industrial) to the State	Develop policy to report suspected activities	Dec-21		If policy is written
3	All Pollutants	All Audiences	4.2.3.4 Develop and implement standard operating procedures for tracing the source of illicit discharge	Train on flow charts	Ongoing	IIC	Successful if training is completed and documented

### MCM 3 - Illicit Discharge Detection and Elimination



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
3	All Pollutants	All Audiences	<p>4.2.3.5 – Implement SOPs for characterizing the nature of any illicit discharges found or reported to the Permittee by the hotline developed in 4.2.3.9. The Permittee must record the following in an inspection report:</p> <ul style="list-style-type: none"> <li>• The date the Permittee became aware of the non-SW discharge</li> <li>• The date the Permittee initiated an investigation of the discharge</li> <li>• The date the discharge was observed</li> <li>• The location of the discharge</li> <li>• Description of the discharge</li> <li>• Method of discovery</li> <li>• Date of removal, repair or enforcement action</li> <li>• Date and method of removal verification</li> </ul>	Train Personnel annually on the incident response flow chart	Annually	IIC, CH	Successful if employees are trained and are using the flow chart
3	All Pollutants	All Audiences	<p><b>4.2.3.6</b> – Implement SOPs for ceasing the illicit discharge. All IDDE investigations must be thoroughly documented and may be requested at any time by the <i>Division</i> .</p>	Annual training on the Incidence Response Flow Chart	Ongoing	IDC, ISDC	Successful if training is completed and documented

### MCM 3 - Illicit Discharge Detection and Elimination



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc BMPs	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
1	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	Put the HHW Address and Phone number on City Web Site	Ongoing	UOR, HWM	If address and phone number are on website
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 Hotline phone number on City Web Site	Ongoing	CH	Successful if on the web site
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	Track illicit discharges with a database or map	Ongoing	IIC, NSWD	Successful if complete by that date
3	All Pollutants	Staff, Contracted Staff or other responsible entities	4.2.3.11 – Receive minimum annual training in the IDDE program. Immediate training for new hires along with follow-up training as needed to address to changes. A summary of such training shall be included in the annual report.	Provide annual training of all city employees and contracted staff, including new hires	Ongoing	ET	Successful if training is completed

## CONSTRUCTION SITE RUNOFF CONTROL (4.2.4)

### Permit Requirements

The permit requirements for Construction Site Runoff Control on Storm Water Impacts can be found in Section 4.2.4 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements

1. Have an ordinance or other regulatory mechanism requiring the implementation of proper erosion and sediment control practices on construction sites (4.2.4.1).
  - a. This will include a requirement for a Storm Water Pollution Prevention Plan (SWPPP) and enforcement provisions.
  - b. Ensure construction operators obtain and maintain UPDES Construction Permit coverage for the duration of the project.
  - c. Require access for qualified personnel to inspect the construction site
2. Develop a written enforcement strategy including
  - a. Standard Operating Procedures (SOPs) for enforcing processes and sanctions on construction sites with escalating enforcement.
  - b. Document and track all enforcement actions
3. Develop and implement SOPs for preconstruction SWPPP review. Include the following:
  - a. A preconstruction conference to review plans and requirements
  - b. Identifying priority construction sites
4. Develop and implement SOPs for construction site inspections and enforcement including:
  - a. Inspecting sites monthly
  - b. Inspecting all phases of construction
  - c. Inspecting priority areas every two weeks
  - d. Follow up on inspection action items
5. Train staff to implement the construction storm water program, including permitting, plan review, construction site inspections, and enforcement.
6. Establish 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.

### Summary of Existing Efforts

#### **City Ordinances**

The City currently has an ordinance that requires a storm water construction activity permit for construction activities. The application for this permit requires a completed Storm Water Pollution Prevention Plan (SWPPP).

### **Site Plan Review Process**

The City currently has a procedure requiring the submittal of construction drawings prior to approving a new development. This process does not specifically require water quality impacts to be considered.

### **Inspectors**

The City has qualified inspectors making monthly inspections at all construction sites.

### **Training**

The City makes sure all staff associated with the construction of projects is trained annually.

### **Standard Drawings and Specifications**

The city has a set of standard drawings and specifications for subdivision site development.

## **Plan and Implementation Measures**

In order to help meet the goals and objectives of this SWMP Hooper City has chosen to adopt the following BMPs for use within our city as applicable. Unlike some of the other minimum control measures, this is one where the majority of the BMPs listed will be utilized by contractors. Because of this, two lists of BMPs have been prepared; ones to be implemented by the City, the other is simply a list of BMPs that the city will consider approving on construction sites. Specific BMPs will vary for each site depending on the individual circumstances at each site. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness in the indicated appendix.

### **City Implemented BMPs**

BMP	Code	Appendix
Certification and Inspector Training	CCIT	A,B
Erosion Control Plan	ECP	A,B
Landscape and Irrigation Plan	LIP	A,B
Ordinance Development	OD	A,B
Zoning	ZO	A,B

## **Goals**

In order to more fully realize the benefit of the BMP the city has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Construction Site Runoff Control.



The following table includes the goals for MCM 4.

## MCM 4 - Construction Site Runoff Control



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.1.1 The ordinance or other regulatory mechanism shall, at a minimum, require construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs as necessary to protect water quality	Require a SWPPP for every construction site over one acre	Ongoing	OD	Successful if 95% of all active construction sites have a working SWPPP
4			4.2.4.1.3 The ordinance shall include a provision for access by qualified personnel to inspect construction storm water BMPs	Make sure the ordinance allows access for inspectors	Dec-21		
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 which shall include: <ul style="list-style-type: none"> <li>• SOPs</li> <li>• Documentation and tracking of all enforcement actions</li> </ul>	Enforce ordinance to include escalating enforcement provisions	Ongoing	OD	Successful if tracking enforcement actions
4			4.2.4.2.1 - Standard Operating Procedures that include specific processes and sanctions to minimize the occurrence of violations and obtain compliance from violators.	Review and update SOPs for inspections and enforcement actions	Dec-21		

## MCM 4 - Construction Site Runoff Control



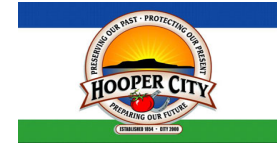
MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
4	"	"	4.2.4.2.2 Documentation and tracking of all enforcement actions	Continue using a construction site enforcement action log/database	Ongoing	OD	Successful if we have a log and are using it
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.3. Development and implementation of a checklist for pre-construction SWPPP review that is consistent with the requirements of the current UPDES Storm Water General Permits for Construction Activities	Use checklist to do preconstruction reviews of SWPPP	Ongoing	ECP	Successful if we are conducting SWPPP reviews
4	"	"	4.2.4.3.1 – Conduct a pre-construction SWPPP meeting	Hold Pre-con meetings with water quality issues on the agenda on all sites greater than 1 acre or as part of common plan of development	Ongoing	ECP	Successful if we are conducting Pre-con meetings
4	"	"	<b>4.2.4.3.2</b> – Identify priority construction sites	Review construction projects using SWPPP preconstruction review to determine if site is a priority.	Ongoing	ZO	Successful if we have post construction BMPs on 50% of projects

## MCM 4 - Construction Site Runoff Control



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
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 all construction sites - Emphasize self inspections - sensitive areas to be inspected twice monthly	Ongoing	CCIT	Successful if 90% of all active construction sites are inspected monthly and reports filed
4	"	Contractors, developers and MS4 staff	4.2.4.4.2 ...The Permittee must document in its SWMP the 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.	Support State's on-line process	Ongoing	ECP	Successful if 95% of all active construction sites are terminated appropriately
4	"	Contractors, developers and MS4 staff	"	Train SWPPP inspectors, their supervisors, and any personnel who grant final occupancy permits on the NOT process	Ongoing	ECP	Successful if 95% of all active construction sites are terminated appropriately
4	"	"	4.2.4.4.3 Conduct Bi-weekly inspections on high priority construction sites	Inspect high priority sites	Ongoing	ECP	Successful if all high priority sites are inspected bi-weekly and reports filed

**MCM 4 - Construction  
 Site Runoff Control**



MCM	Target		Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
4	"	"	4.2.4.4.5 Based on site inspection findings, the Permittee must take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the Permittee's enforcement strategy. These follow-up and enforcement actions must be tracked and documented.	Track and document all follow-up and enforcement actions	Ongoing		Completed log of follow-up and enforcement actions
4	"	Contractors, developers and MS4 staff	4.2.4.5 Provide training to city staff and 3rd party designers	Enforce a city policy to require all SWPPP inspectors to be RSI	Ongoing	CCIT	Successful if all SWPPP inspectors are RSI
4	"	"	4.2.4.6 Maintain a log of active construction sites	Maintain an active log	Ongoing	ECP	Successful if active construction sites are recorded in the log

## LONG TERM STORM WATER MANAGEMENT (4.2.5)

### Permit Requirements

The permit requirements for Long-Term Storm Water Management in New Development and Redevelopment can be found in Section 4.2.5 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements

1. Develop requirements or standards for new development and redevelopment projects to include storm water controls or management practices that will prevent or minimize impacts to water quality, including (4.2.5.1):
  - a. Non-structural BMPs (4.2.5.1.1)
  - b. Requires the prevention of off-site discharge of the 80<sup>th</sup> percentile storm for all new development sites (4.2.5.1.2)
  - c. Requires no net gain in storm water runoff for redevelopment sites that result in an increase of more than 10% of impervious area.(4.2.5.1.2)
  - d. Requires structural BMPs that focus on Low Impact Development which encourage infiltration, evapotranspiration or harvesting (4.2.5.1.3)
  - e. Include details of at least five LID practices in the City's standard detail sheets (4.2.5.1.3).
  - f. If LID is not feasible document why and provide the rationale for alternative controls to be used (4.2.5.1.4)
  - g. Recommends using a Storm Water Quality Report for documenting a given project (4.2.5.1.4).
2. Have an ordinance or other regulatory mechanism requiring the implementation of long-term post-construction storm water controls at new and redevelopment sites. (4.2.5.2)
  - a. Develop an enforcement strategy and implement enforcement provisions of the ordinance including escalating enforcement for recalcitrant violators. (4.2.5.2.1)
  - b. Maintain documentation of how decisions were made for items required in the ordinance, ie. what the expected results are from the requirements and how BMPs were selected (4.2.5.2.2)
  - c. Develop SOPs for site inspection of permanent water quality facilities both during construction to ensure they are built right and after construction to ensure they operate correctly and are being properly maintained. (4.2.5.2.2)
  - d. Address maintenance concerns for all permanent facilities that are not owned or operated by the MS4. (4.2.5.2.3)
  - e. Ensure that inspections of all long-term structural BMPs are constructed as designed (4.2.5.2.4)

- f. Ensure that long-term stormwater BMPs are being properly maintained and are functioning as intended (4.2.5.2.5)
3. Adopt and implement procedures for site plan review which incorporate consideration of water quality impacts These procedures shall include:
  - a. Reviewing plans to ensure that they include long-term storm water management measures that meet the requirements (4.2.5.3.2)
  - b. water
4. Maintain an inventory of all post-construction structural storm water control measures. This includes public and private facilities. (4.2.5.4)
  - a. Include basic facility information as part of the inventory (4.2.5.4.1)
  - b. Keep the facility inventory up-to-date (4.2.5.4.2)
5. Provide adequate training for staff concerning post-construction storm water management, plan review, inspections and enforcement. (4.2.5.5)

## Summary of Existing Efforts

### **Ordinances**

The City is updating its ordinance to require onsite retention as per the UPDES permit requirements.

### **Low Impact Development Practices**

Historically, Hooper City has been known as a rural farming community. There is a strong desire to maintain that identity. As such, the City has discouraged development on small lot sizes. There are State statutes that require “affordable housing”. These statutes have required that the City allow for a certain percentage of smaller lot sizes. Outside of these requirements the City has tried to limit a majority of individual building lot sizes to 0.5 acres or more. Larger lot sizes decrease the percentage of the lot that is impermeable, allowing for more infiltration and on-site retention of storm water.

The city has adopted LID Practices that are compatible with the character of the city and may not be some of the more popular practices implemented in more urban areas.

The City is implementing a new LID Handbook to assist the development community in evaluating LID alternatives and selecting and sizing appropriate BMPs.

LID feasibility in Hooper is going to be limited. The average water table in Hooper is probably no more than 2 to 3 feet below the existing ground surface. Historically, conventional septic tank and drain fields have not been very successful. Detention basins typically are limited in depth because ground water fills them if they are too deep. The City’s LID Handbook details standards that need to be met for infiltration to be feasible. This new manual will be the foundation of the new LID program.

### **Post Construction BMPs**

When LID practices are not feasible, development will be required to install BMPs that will filter or otherwise help clean the storm water before discharging it. Each of these new facilities is inspected annually, with the city conducting oversight inspections at least once every five years.

### **Landscaping Plans**

Developers are required to present a plan outlining landscaping plans to the city.

## **Plan and Implementation Measures**

In order to help meet the goals and objectives of this SWMP Hooper City has chosen to adopt the following BMPs for use within our city as applicable. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness in the indicated appendix.

BMP	Code	Appendix
BMP Inspection and Maintenance	BMPIM	A,B
Educational Materials	EM	A,B
Infrastructure Planning	IPL	A,B
Landscape and Irrigation Plan	LIP	A,B
Land Use Planning / Management	LUPM	A,B
Zoning	ZO	A,B
Grassed Swales	GS	A,B
Open Space Design	OSD	A,B
Ordinance Development	OD	A,B
Biofilters	BF	
Conservation Easements	CE	
Minimizing Directly Connected Impervious Areas	DCIA	
Filter Strips	FS	
Floatable Skimmers	FS	
Infiltration	IN	
Seeding and Planting	SP	



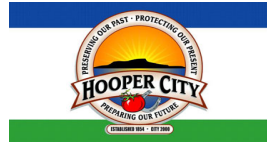
## Development Site Possible Post Construction BMPs

### Goals

In order to more fully realize the benefit of the BMP the city has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Post Construction Runoff Control.

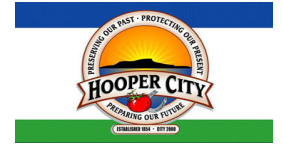
The following table includes the goals for MCM 5.

## MCM 5 - Post Construction Runoff Control



MCM	Target		Permit Reference/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 Post Construction Controls. The permittee's new development/redevelopment program must have requirements or standards to ensure that any storm water controls or management practices for new development and redevelopment will prevent or minimize impact to water quality.	Review city standards to make sure there are standards for BMPs selected	Dec-21		If standards include BMP details
5	"	"	4.2.5.1.1 – The Permittee’s new development/redevelopment program shall include non-structural BMPs	Select non-structural BMPs for long term storm water management and incorporate them into an updated standard	Dec-21	IPL	If non structural BMPs are included in the new standard
5	"	"	4.2.5.1.2 – New development projects must manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event.	Draft new storm water LID handbook that includes requirements to retain the 80th percentile storm or approved alternative design criteria	Dec-21	IPL	If new handbook is in place
5	"	"	4.2.5.1.2 - Redevelopment projects must provide a site-specific and project specific plan aimed at net gain to onsite retention or a reduction in impervious surface to provide similar water quality benefits	Implement a policy of no net gain to runoff from redevelopment projects	Dec-21		If policy has been adopted

## MCM 5 - Post Construction Runoff Control



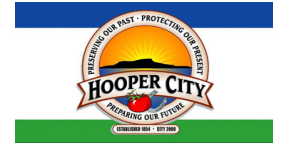
MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
5	"	"	4.2.5.1.3 The program shall include a process which requires the evaluation of a Low Impact Development approach for all new development projects. Permittees must allow for use of a minimum of five LID practices from the list in Appendix C of the State's "A Guide to Low Impact Development Within Utah"	Adopt at least 5 of the LID practices in the State's manual	Dec-21		If there are standard details for at least 5 practices in the city's standards
5	"	"	4.2.5.1.4 Feasibility. If meeting the retention standards described in Part 4.2.5.1.2 is infeasible, a rationale shall be provided for the use of alternative design criteria. The new or redevelopment project must document and quantify that infiltration, evapotranspiration, and rainwater harvesting have been used to the maximum extent feasible and that full employment of these controls are infeasible due to constraints.	Adopt the use of a Water Quality Report providing the justification for the methods being employed and explaining how the Water Quality Volume is being handled.	Dec-21		If a Water Quality Report is required

## MCM 5 - Post Construction Runoff Control



MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
5	All Pollutants	All Audiences	4.2.5.2. Develop and adopt an ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites.	Review existing ordinance to determine if it meets requirements of new permit	Dec-21	OD	If review is complete
5	"	"	"	Draft ordinance revisions, if needed	Nov-21	OD	If draft is complete and ready for others to review
5	"	"	"	Adopt updated ordinance	Dec-21	OD	If ordinance has been passed
5	"	"	<p><b>4.2.5.2.2</b> – Document how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4. Documentation shall include:</p> <ul style="list-style-type: none"> <li>• How long-term storm water BMPs were selected</li> <li>• The pollutant removal expected from the selected BMPs</li> <li>• The technical basis which supports the performance claims for the selected BMPs</li> </ul>	5.5 Use a Water Quality Report 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	Dec-21	IPL	If draft is completed by the milestone date

## MCM 5 - Post Construction Runoff Control



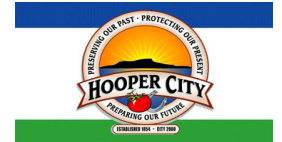
MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
5			4.2.5.2.3 Require private property owner/operators or qualified third parties to conduct maintenance and provide annual certification that adequate maintenance has been performed on long term water quality facilities	Require maintenance agreements on all privately owned water quality facilities	Dec-21		
5	"	"	4.2.5.2.4 - Permanent structural BMPs shall be inspected at least once during installation by qualified personnel.	Inspect all permanent facilities at least once during construction	Ongoing		Include a column on the inventory of long term BMPs for construction inspections. Track inspections using the inventory
5	"	"	4.2.5.2.5 Inspections and any necessary maintenance must be conducted at least every other year or as necessary to maintain functionality of the control by the Permittee, or, if applicable, the property owner/operator.	Provide a column on the permanent BMP inventory to track the last inspection.	Ongoing		
5	"	"	"	Set up a schedule for inspections every other year	Ongoing		

## MCM 5 - Post Construction Runoff Control



MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
5	"	MS4 Staff, Contractors and Developers	4.2.5.3.1 Adopt and implement procedures for site plan review which evaluate water quality impacts. The procedures shall apply through the life of the project from conceptual design to project closeout.	Discuss water quality requirements at all meetings with Developers. Add water quality requirements to all Developer handout materials	Ongoing		
5	"	MS4 Staff, Contractors and Developers	4.2.5.3.2 Review post-construction plans for, at a minimum, all new development and redevelopment sites to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure.	Add long-term storm water management measures to all review checklists	Dec-21		
5	"	MS4 Staff	4.2.5.4 The Permittee must maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redevelopment sites. This inventory must include both public and private sector sites that were developed since the Permittee obtained coverage by this permit or the date that post construction requirements came into effect.	Inventory log updated annually	Ongoing		If log is updated

## MCM 5 - Post Construction Runoff Control



MCM	Target		Permit Reference/Desired Result	Measurable Goal	Milestone Date	Assoc. BMP	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)					
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 HOUSEKEEPING (4.2.6)

### Permit Requirements

The permit requirements for Pollution Prevention and Good Housekeeping on Storm Water Impacts can be found in Section 4.2.6 of the permit. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements

1. Maintain an inventory of city-owned or operated facilities and storm water controls. Assess said list for their potential to discharge typical urban pollutants to the storm water system. (4.2.6.1)
2. Identify common pollutants that may originate from city owned facilities (4.2.6.2)
3. Identify 'high-priority' facilities or operations that have a high potential to generate storm water pollutants. Provide water quality control measures at these 'high priority' facilities. (4.2.6.3)
4. Develop and implement a SWPPP for all "high priority" facilities (4.2.6.4)
5. Conduct inspections of "high priority" facilities
  - a. Monthly visual inspections (4.2.6.5.1)
  - b. Semi-annual comprehensive inspections (4.2.6.5.2)
  - c. Annual visual observation of storm water discharges (4.2.6.5.3)
6. Included with Standard Operating Procedures (SOPs) specific to municipal operations. The SOPs shall include appropriate pollution prevention and good housekeeping procedures for all of the following types of facilities and/or activities listed below:
  - Buildings and facilities
  - Material storage areas,
  - Heavy equipment storage areas and maintenance areas
  - Parks and open spaces
  - Vehicle and equipment
  - Roads, highways, and parking lots
  - Storm water collection and conveyance system
  - a. SOPs should include maintenance schedules and regular inspections and cleaning activities (4.2.6.6.2)
  - b. SOPs should include solid waste disposal (4.2.6.6.3)
  - c. SOPs should include liquid waste disposal (4.2.6.6.4)
  - d. Develop a Spill Prevention Plan (4.2.6.6.5)
  - e. Maintain a floor drain inventory for all MS4 owned facilities (4.2.6.6.6)



7. If a third-party is to conduct municipal maintenance or private developments conduct their own maintenance, the contractor shall be held to the same standard as the City. This should be outlined and defined in contracts.(4.2.6.7)
8. 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 MS4.(4.2.6.8)
9. Develop a retrofit plan for existing developed sites that the city owns and operates that are adversely impacting water quality. (4.2.6.9)
10. Include annual employee training on how to incorporate pollution prevention and good housekeeping techniques into municipal operations, including SOPs. (4.2.6.10)

## Summary of Existing Efforts

### ***Existing Maintenance Program***

The City currently maintains inlet boxes, pipes, and other MS4 improvements on an as-needed basis.

### ***Inventory of City Owned Facilities***

The City maintains a list of all city owned facilities and has identified 'high priority' facilities. The Public Works yard has received has no discharge to the storm drain collection system and has not been listed as 'high priority'.

### ***High Priority City Owned Facilities***

The City Cemetery is the highest priority city owned facility. No real maintenance activities occur at this facility. Soils from grave excavation are temporarily stored in a dump truck until the grave is backfilled. A SWPPP has been developed for this site.

### ***SOPs***

The City has developed SOPs for many routine activities. They can be found here: [http://www.webercountyutah.gov/Engineering/swm/documents/swmp/appendix\\_b.pdf](http://www.webercountyutah.gov/Engineering/swm/documents/swmp/appendix_b.pdf)

### ***Employee Training***

The City conducts periodic training of staff.

## Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP Hooper City has chosen to adopt the following BMPs for use within our city as applicable. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations, and its effectiveness in the indicated appendix.

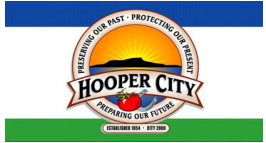
BMP	Code	Appendix
Catch Basin Cleaning	CBC	A,B
Housekeeping Practices	HP	A,B
Infrastructure Planning	IPL	A,B
Septic System Controls	SSC	A,B
Storm Drain System Cleaning	SDF	A,B
Employee Training	ET	A,B

## Goals

In order to more fully realize the benefit of the BMP the city has set the following goals. The goals set along with the existing efforts fulfill the requirements of the Final Storm Water Phase II Rule for Pollution Prevention/Good Housekeeping.

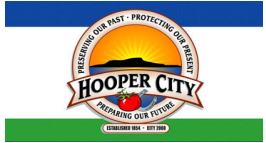
The following table includes the goals for MCM 6.

## MCM 6 - Pollution Prevention Good Housekeeping



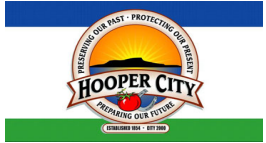
MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
6			4.2.6.1 The Permittee shall develop and keep current a written inventory of all potential "high priority" facilities that are owned or operated by the Permittee	Review the list annually and update as needed	Ongoing		
6	All Pollutants	MS4 Staff	4.2.6.2 All permittees shall assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls for their potential to discharge to storm water typical urban pollutants	Reevaluate existing city-owned facilities	Nov-21	HP	If evaluation sheets are complete for each facility on the list
6	All Pollutants	MS4 Staff	4.2.6.4 The permittee shall update the SWMP to include a list of "high priority" facilities and prepare a SWPPP for each facility.	After re-evaluation create a "high priority" list	Nov-21	HP	If list is prepared
6	"	"	4.2.6.4 ... prepare a Storm Water Pollution Prevention Plan (SWPPP) for each "high priority" facility	Prepare a SWPPP for each "high priority" facility	Dec-21		If SWPPPs are prepared
6	All Pollutants	MS4 staff	4.2.6.5.1 Monthly visual inspections: The Permittee must perform weekly visual inspections of "high priority" facilities in accordance with the developed SOPs to minimize the potential for pollutant discharge.	Conduct monthly inspections	Ongoing	HP	If at annual review all weekly inspections are logged and reports completed

**MCM 6 - Pollution Prevention**  
**Good Housekeeping**



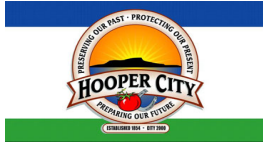
MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
6	"	"	4.2.6.5.2 Semi-annual comprehensive inspections: At least once every six months, a comprehensive inspection of "high priority" facilities, including all storm water controls, must be performed	6.3 Conduct semi-annual comprehensive inspections	Ongoing	HP	If at annual review all quarterly inspections are logged and reports completed
6	"	"	4.2.6.5.3 Annual visual observation of storm water discharges: At least once a year, the Permittee must visually observe the quality of the storm water discharges from the "high priority" facilities	6.4 Conduct annual visual observations of storm water discharges at high priority facilities	Ongoing	HP	If at annual review all quarterly visual monitoring is completed and logged and reports completed
6	"	"	4.2.6.6. Permittees shall develop and implement SOPs to protect water quality at each of the facilities owned or operated by the Permittee and/or activities conducted by the permittee	Develop and/or update appropriate SOPs for facilities	Dec-21	HP	If SOPs are updated and current by milestone date
6	"	"	4.2.6.6.5 The Permittee shall develop a spill prevention plan in coordination with the local fire department	Prepare a spill prevention plan	Ongoing	HP	If spill prevention plan is in writing
6	"	"	4.2.6.6.6 All Permittees must maintain an inventory of all floor drains inside all Permittee-owned or operated buildings.	Inventory floor drains	Ongoing	HP	If there is a written inventory

**MCM 6 - Pollution Prevention**  
**Good Housekeeping**



MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
6			4.2.6.7 The Permittee shall be responsible for ensuring, through contractually-required documentation and/or periodic site visits that contractors performing Operation and Maintenance activities for the Permittee are using appropriate storm water controls	Review standard contractor/vendor contract language to include water quality concerns			
6	"	MS4 Staff, Contractors and Developers	4.2.6.8. The Permittee must develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the Permittee or that discharge to the MS4.	Draft a policy/process to assess water quality impacts on all new flood control projects	Dec-21	IPL	To be included in LID Handbook
6	"	"	"	Enforce policy	Ongoing	IPL	If policy is approved and adopted by milestone date
6	"	MS4 staff	4.2.6.8.1 Existing flood management structural controls must be assessed to determine whether changes or additions should be made to improve water quality.	Identify places where existing infrastructure needs to be modified to improve water quality			

## MCM 6 - Pollution Prevention Good Housekeeping



MCM	Target		Desired Result	Measurable Goal	Milestone	Assoc.	Measure of Success (Effectiveness)
	Pollutant(s)	Audience(s)			Date	BMP	
6	"	"	4.2.6.9 The Permittee must develop a plan to retrofit existing developed sites that the Permittee owns or operates that are adversely impacting water quality.	Develop and implement a plan to retrofit those existing locations that need to be improved			Provide column on City-owned or operated facilities inventory to mark those adversely impacting water quality
6	"	"	4.2.6.10. Permittees shall provide training for all employees who have primary construction, operation, or maintenance job functions that are likely to impact storm water quality.	100% of topics covered annually with appropriate personnel	Ongoing	ET	If training is completed and documented according to schedule at annual evaluation