

Nibley City Stormwater Management Plan (SWMP) Update 2016



Permit #: UTR090037

Contents

INTRODUCTION AND GENERAL INFORMATION.....	2
MS4 DESCRIPTION AND MAP.....	4
LOCAL WATER QUALITY CONCERNS	5
PERSONNEL RESPONSIBILITIES AND CONTACT INFO.....	7
NITROGEN AND PHOSPHORUS REDUCTION	9
MCM1. PUBLIC EDUCATION AND OUTREACH	9
MCM2. PUBLIC PARTICIPATION/INVOLVEMENT	13
MCM3. ILLICIT DISCHARGE DETECTION AND ELIMINATION	15
MCM4. CONSTRUCTION SITE RUNOFF CONTROL.....	19
MCM5. POST CONSTRUCTION RUNOFF CONTROL	23
MCM6. POLLUTION PREVENTION / GOOD HOUSEKEEPING.....	27
STORMWATER BUDGET (EXCERPT TAKEN FROM THE CURRENT APPROVED CITY BUDGET)	31

INTRODUCTION AND GENERAL INFORMATION

Polluted stormwater runoff is often transported to municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. EPA's Stormwater Phase II Rule establishes an MS4 stormwater 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, 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) stormwater 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 stormwater management program as a means to control polluted discharges from these MS4s. The Stormwater Phase II Rule extends coverage of the NPDES stormwater program to certain "small" MS4s but takes a slightly different approach to how the stormwater management program is developed and implemented.

Controlling Document

Although Nibley City is responsible for the development and implementation of its own Stormwater Master Plan (SWMP), the controlling document that dictates what each SWMP shall contain is the State of Utah Small MS4 General UPDES Permit No. UTR090000 (effective March 1, 2016) under which Nibley's permit number is UTR090037.

Stormwater Management Program

A Stormwater 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
- Be phased in over a five year period.

Stormwater 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 stormwater program.

Record Keeping

Records required by the NPDES permitting authority 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 NPDES permitting authority unless the permittee is requested to do so.

Penalties

The NPDES permit 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.

Notice of Intent

In accordance with 2.1 – Notice of Intent and Stormwater Management Program Requirements of the State of Utah General NPDES Permit, Nibley City, having submitted a Notice of Intent with its previous Stormwater Management Program, is not required to submit an additional NOI with this update.

SWMP Contents

This SWMP contains a description of the community-specific Stormwater Management Program for Nibley City. The Program includes the following:

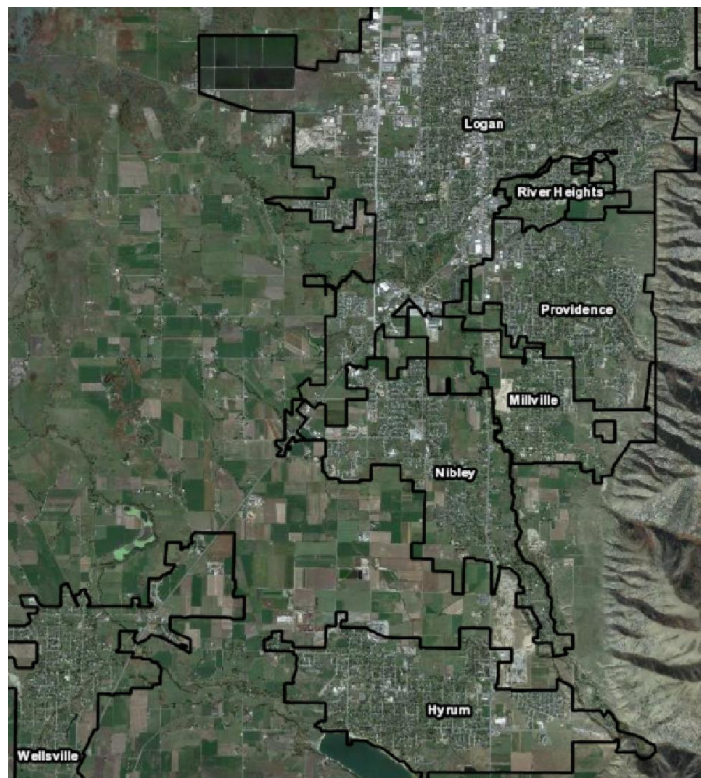
- Best Management Practices (BMPs) for each of the six minimum control measures;
 1. Public Education and Outreach
 2. Public Participation/Involvement
 3. Illicit Discharge Detection and Elimination
 4. Construction Site Runoff Control
 5. Post-Construction Runoff Control
 6. Pollution Prevention/Good Housekeeping

- Measurable goals for each minimum control measure (i.e., narrative or numeric standards used to gauge program effectiveness);
- Specific Pollutants and audiences targeted;
- Permit Reference/Requirements- which portion of the State of Utah UPDES Permit is being accomplished.
- Estimated months and years in which actions to implement each measure will be undertaken, including interim milestones and frequency;
- Which specific BMPs will be associated with each desired result; and
- A measure of effectiveness for each measureable goal

MS4 DESCRIPTION AND MAP

History

Nibley is an outgrowth of nearby Millville located a few miles south of Logan. It was named after Charles W. Nibley. There was a slaughterhouse and molasses factory in the early days, but Nibley was primarily an agricultural community. When the wooden pipes for the water system began to deteriorate there was a need for a grant to make the repairs. In order to get a government grant for the water system, the water must be run by a governmental agency. Nibley was incorporated May 21, 1935. Today, Nibley is a small rural community with some commercial business.



NIBLEY CITY CHARACTERISTICS

Population: 6,200

Size: 4.5 square miles

Graphic Description: Located 5 miles south of Logan on the East side of Cache Valley, with elevations ranging from 4,500 to 4,700 ft.

Receiving Waters: Blacksmith Fork and Logan River

Average Precipitation: 18.7 inches per year

Type of Community: A small rural city with high rates of residential growth that are expected to continue.

Latitude: 41.67°

Longitude: 111.84°

Existing Stormwater System

The stormwater in Nibley City is conveyed by a mix of curb and gutter, pipes, ditches and canals. The majority of the system where stormwater is collected drains to either the Blacksmith Fork River or the Hyrum Slough. There are a number of detention ponds throughout the city where storm water is collected and released at a controlled rate. There are two large regional ponds in the North West area of Nibley that drain large residential areas. Only one of these ponds have been constructed as of 2016. The property for the other pond has been purchased, but development in the area has not been sufficient to warrant the construction of it, as of 2016.

Sewer System

Nibley City installed a municipal sewer system in 2005. Nibley contracts with Logan City for the treatment of sewer discharge. There are no combined sewers in this system.

Recycling Program

Nibley City contracts with Service District 1 for waste management and recycling services. In turn, Service District 1 contracts with the City of Logan Environmental Department to provide those services. The recycling program provides curb side pick-up for cardboard, newspaper, aluminum cans, tin/steel cans, plastic pop bottles, plastic milk jugs, green waste. These services also provide proper disposal options at the landfill for hazardous wastes that can be difficult to dispose of such as: tires, used oil, oil filters, antifreeze, carpet pad, batteries and wood pallets.

In addition Nibley has constructed a recycle site drop off area in town that gives residents a convenient place to drop off green waste and cardboard materials to be recycled.



LOCAL WATER QUALITY CONCERNS

No stream or waterway within Nibley's boundaries has been identified as protected under Section 303 (d) of the Clean Water Act. However, Nibley does discharge into waters that

eventually end up in Spring Creek and into Cutler Reservoir, both of which are 303 (d) impaired waters, and have had a Total Maximum Daily Load (TMDL) established by the State Division of Environmental Quality.

Spring Creek:

The TMDL for Spring Creek has established pollutants of concern as: Fecal coliforms, Salinity, TDS, Chlorides, Thermal Modification. The entire TMDL is available for public view at the following link on the State DEQ web site:

http://www.deq.utah.gov/ProgramsServices/programs/water/watersheds/docs/2006/09Sep/Spring_Creek_TMDL.pdf

Pollutants of primary concern with this TMDL are: Total Phosphorus (TP), Dissolved Oxygen (DO), Ammonia, Temperature and Fecal Coliforms

Cutler Reservoir

The TMDL for Cutler Reservoir has established pollutants of concern as: Phosphorus and Dissolved Oxygen. The entire TMDL is available for public view at the following link on the State DEQ web site:

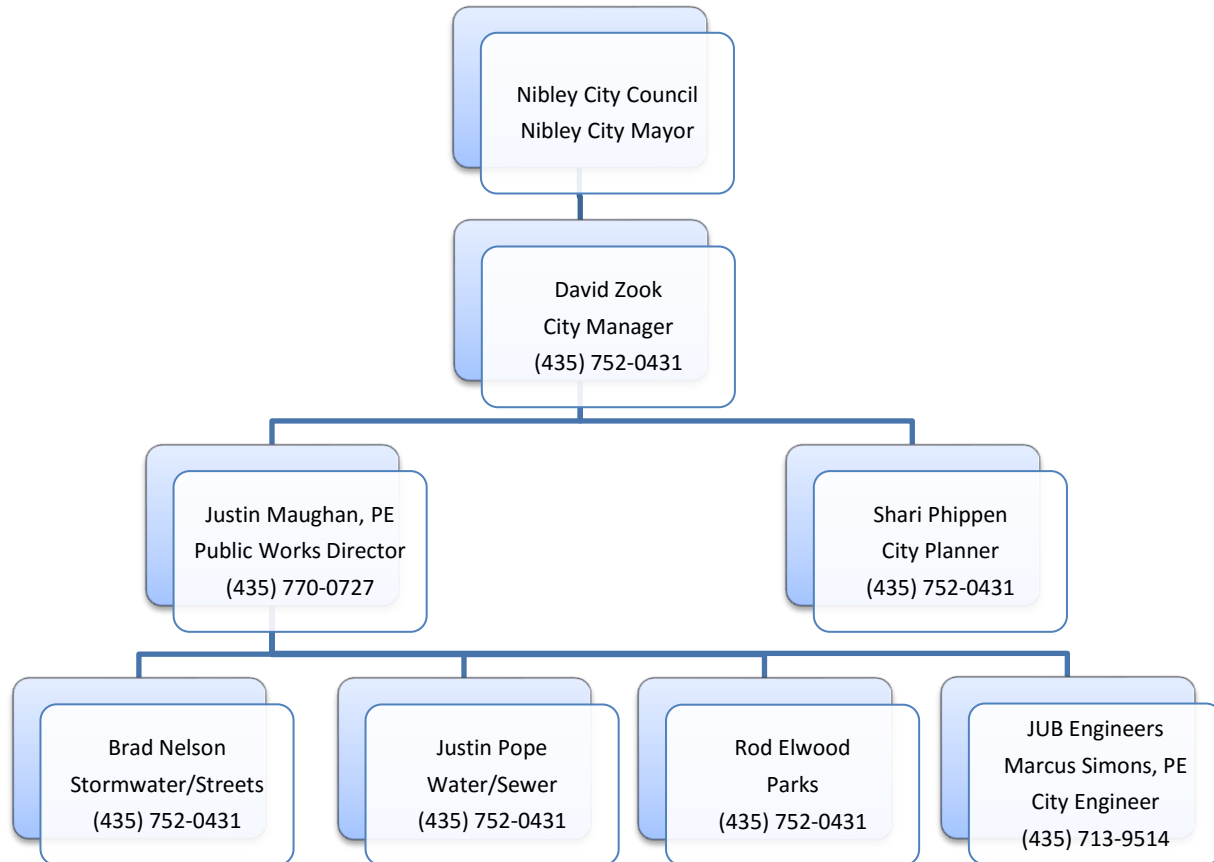
<http://www.deq.utah.gov/ProgramsServices/programs/water/watersheds/docs/2010/03Mar/BearRiverCutlerReservoirTMDLsFinalReportFeb2010.pdf>

Pollutants of primary concern with this TMDL are Low dissolved oxygen (DO) and Excess total phosphorus.



PERSONNEL RESPONSIBILITIES AND CONTACT INFO

See the following flow diagram for the Nibley City organizational structure:



Description of responsibilities:

City Manager

- Liaison with Mayor and City Council

Public Works Director

- General coordination of Stormwater Management Plan
- Stormwater Design Standards
- Public education, outreach and interaction

City Planner

- Database updates
- Help with all reporting

City Engineer

- Storm Drain mapping
- Development Review (compliance with Design Standards)
- SWPPP Review

Stormwater Division Supervisor

- Oversee SWMP program specifics and work with department heads
- 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
 - Vehicle wash area
- Annual report
- Updating SWMP
- Employee training

Streets Division Supervisor

- Streets dept. maintenance work area
- Streets dept. equipment operation
- Equipment maintenance for streets dept.
- Chemicals storage in work area
- Snow plowing/Salt program
- Street sweeping program
- Salt and materials storage stockpile areas
- Metal fabrication area

Parks Division Supervisor

- Parks dept. maintenance work area
- Pesticide, Herbicide, and Fertilizer (PHF) program
- Chemical and fertilizer storage in work area
- Parks department equipment operation
- Equipment maintenance for parks dept. equipment
- Mowing Program

Water/Sewer Division Supervisor

- Maintenance work area
- Chemical storage in work area
- Equipment operation
- Equipment maintenance

NITROGEN AND PHOSPHORUS REDUCTION

Summary of Requirements (new with 2016 update)

The Permittee must prioritize which targeted sources are likely to obtain a reduction in nitrogen and phosphorus discharges through education. The Permittee must distribute educational materials or equivalent outreach to the prioritized targeted sources. The Permittee may incorporate the education and outreach strategies provided in accordance with Permit Part 4.2.1 .

Summary of Existing Efforts:

While this is new for many MS4's around the state of Utah, Nibley City has been targeting these pollutants since 2010, when the TMDL came out for Cutler Reservoir, and has not posed any additional BMP's or SOP's as of the time of this update.

MCM1. PUBLIC EDUCATION AND OUTREACH

Summary of Requirements

1. The Permittee must implement a public education and outreach program to promote behavior change by the public to reduce water quality impact associated with pollutants in stormwater runoff and illicit discharges. Outreach and educational efforts shall include a multimedia approach and shall be targeted and presented to specific audiences for increased effectiveness. The educational program must include documented education and outreach efforts for the following four audiences: (1) residents, (2) commercial, (3) developers and contractors, (4) MS4 industrial facilities.
2. Determine the appropriate best management practices (BMPs) and measurable goals for the minimum control measure.

Summary of Existing Efforts:

Educational Materials

Nibley City contracts with Logan City to provide garbage collection and for recycling. Logan City provides printed educational materials covering subjects of recycling, waste reduction and proper disposal that are available at City Hall as well as information about the programs on the Logan City Environmental Department web page.

Stormwater Fair

Nibley City participates with other municipalities in the annual Stormwater Fair, held at the Cache County fairgrounds. This fair is targeted at 4th graders throughout Cache Valley. Among

other things, students see demonstrations and receive information on the water cycle, how stormwater runoff can effect water ways and water bodies, and how they can help protect them.

Newsletter

Nibley City sends out a monthly printed newsletter with utility bills. It informs the public of current issues and upcoming events, as well as occasional educational information about stormwater runoff and other related MS4 issue's.



Social Media

Nibley maintains an active and current web page at www.Nibleycity.com. Nibley City SWMP document can be viewed here by the public, as well as contact information for responsible parties. Nibley also uses an active Facebook page to disseminate information, and interact with the public.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Nibley City has chosen to adopt the following BMP's. Each BMP is cross referenced alphabetically by code in Appendix A. 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. Only those BMPs listed below will be utilized by Nibley City as part of their SWMP at the present time.

Table 1: Selected BMP's for MCM1

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

Table 2 contains a summary of further detailed permit requirements and related information about how Nibley City will use the listed BMP's in Table 1 to accomplish MCM1.

Table 2: MCM1 Public Education and Outreach Goals and Milestones

MCM	Pollutants	Target Audience	Permit Reference/Requirement	Measurable Goal	Milestone Date	Associated BMPs	Measure of Effectiveness
1	All Pollutants	Residents (4 th graders)	4.2.1.1- To educate audiences on ways to avoid, minimize and reduce impacts of stormwater discharge	Continue annual stormwater fair	April or May of each year	PEP/CESW	
1	Nitrogen & Phosphorus	General Public	4.2.1.2- Information is provided to target audience on prohibitions against illicit discharges and improper disposal of waste including: maintenance of septic systems; effectiveness 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 proper management of pet waste.	Provide four educational articles throughout the year, in the City newsletter and posted on social media.	March, May July and September of each year	PEP/UM	
1	Nitrogen & Phosphorus	Businesses 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 stormwater; building and equipment maintenance; use of salt or other de-icing materials; proper storage of materials; proper management of waste materials and dumpsters; proper management of parking lot surfaces.	Create educational article for commercial and industrial businesses on proper disposal of potentially hazardous materials and mail to all business licenses yearly.	March of each year	PEP/UM	
1	Nitrogen & Phosphorus	Contractors, developers and plan review staff	4.2.1.4- Reduce adverse impacts from development sites	Amend building permit application and create subdivision application to address stormwater requirements.	Implemented by Sep 1 st 2016	EM	
1	Nitrogen & Phosphorus	Employees	4.2.1.5- 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 stormwater; building and equipment maintenance; use of salt or other de-icing materials; proper storage of materials; proper management of waste materials and dumpsters; proper management of parking lot surfaces	Documented semi-annual training of employees on proper maintenance of equipment, storage and use of materials. Documented training of new employees.	May and November of each year/ on going for new hires	ET	

1	All pollutants	Permittee engineers, development and plan review staff, land use planners	4.2.1.6- Provide and document information and training to MS4 engineers, development and plan review staff, land use planners and other parties as applicable to learn about Low Impact Development Practices (LID'S).
1	All pollutants	All audiences	4.2.1.7- Evaluate the effectiveness of the public education program by a defined method
1	All pollutants	All audiences	4.2.1.8- Document why certain BMPs were chosen over others for public education program

MCM2. PUBLIC PARTICIPATION/INVOLVEMENT

Summary of Requirements

1. The Permittee must implement a program that complies with applicable State and Local public notice requirements. The SWMP shall include ongoing opportunities for public involvement and participation such as advisory panels, public hearing, watershed committees, stewardship programs, environmental activities, other volunteer opportunities, or other similar activities. The Permittee should involve potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and education organizations. (From the State UPDES Permit).
2. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Nibley City has chosen to adopt the following BMP's. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations and its effectiveness in Appendix B.



Table 3: Selected BMP's for MCM2

BMP	Code
Public Education/Participation	PEP

Table 4 contains a summary of further detailed permit requirements and related information about how Nibley City will use the listed BMP's in Table 3 to accomplish MCM2.

Table 4: MCM 2- Public Participation/Involvement Goals and Milestones

MCM	Pollutants	Target Audience	Permit Reference/Requirement	Measurable Goal	Milestone Date	Associated BMPs	Measure of Effectiveness
2	All pollutants	General Public	4.2.2.1- Have a program or policy in place that allows for the public to provide input during the decision-making process	Provide public notification of all meetings where SWMP will be considered and allow for comment; hold public hearing	Annually in August of each year	PEP	Annual report of number of comments received at Public Hearing
2	All pollutants	General Public	4.2.2.2- Have SWMP available for public review	Post SWMP for public review 7 days prior to City Council meeting where it will be reviewed.	Post online by July 2016	PEP	Annual report of number of hits on web site
2	All pollutants	General Public	4.2.2.3- Have SWMP available to the public at all times	Post SWMP on City website by July 1 st where it will remain	Post online by July 2016	PEP	Annual report of number of hits on web site
2	All pollutants	General Public	4.2.2.4- Comply with State and Local public notice requirements	Post all info on State public notice website and City website; continue compliance with posting requirements	Post online by July 2016	PEP	Annual report of number of comments received at Public Hearing

MCM3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

Summary of Requirements

1. All Permittees shall develop, implement and enforce an IDDE program to systematically find and eliminate sources of non-stormwater discharges from the MS4 and to implement defined procedures to prevent illicit connections and discharges. The IDDE program must be described in writing, incorporated as part of the Permittee's SMP document.
2. The determination of appropriate best management practices and measurable goals for this minimum control measure.

Summary of Existing Efforts

Ordinance

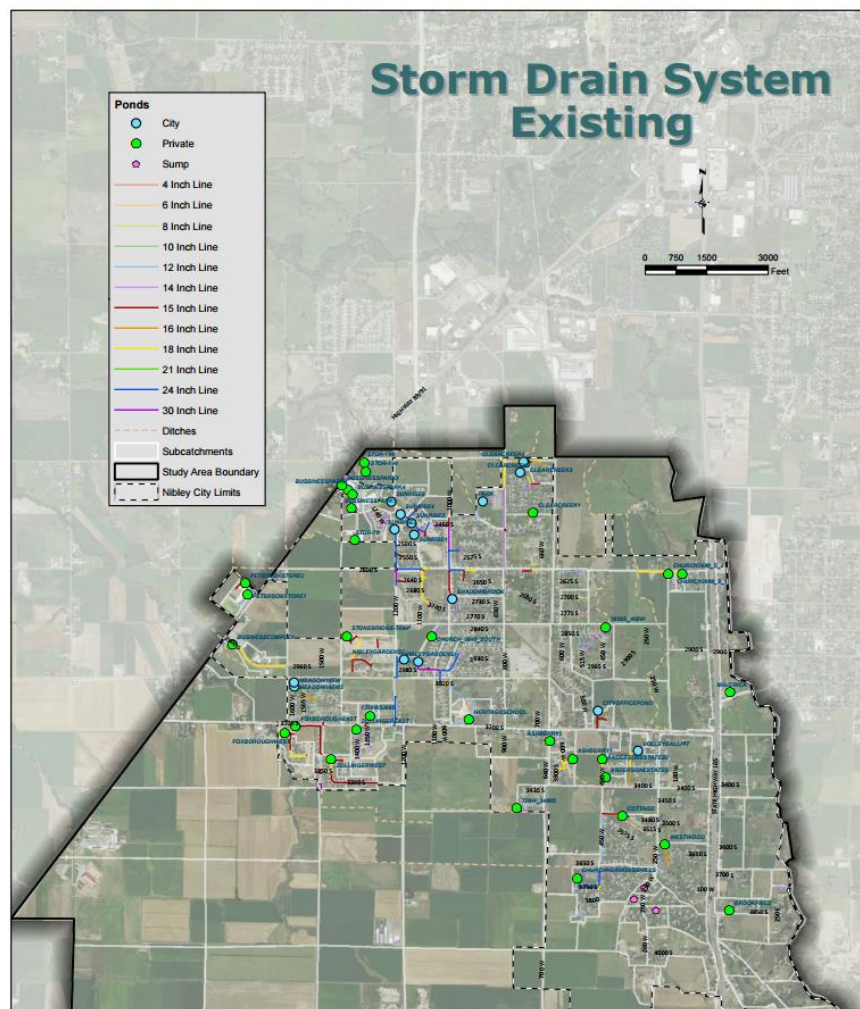
In 2010, Nibley City Council passed Ordinance 10-01, establishing Nibley City's compliance with the State of Utah requirements for stormwater controls and established regulations providing for their enforcement.

Hazardous Spills

Currently, reports of spills are handled by the Hyrum Fire Department and or Count Health Department.

Stormwater System Mapping

Stormwater mapping is handled by the City Engineer. Currently the system has been GPS'ed and is in a GIS format. The GIS file is housed at the City Engineers office.



Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Nibley City has chosen to adopt the following BMP's summarized in Table 5 for use within our city. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP, its applicability, its limitations and its effectiveness in Appendix B.

Table 5: Selected BMP's for MCM3

BMP	Code
Ordinance Development	OD
Illegal Dumping Controls	IDC
Identify Illicit Connection	IIC
Non-Stormwater Discharges to Drains	NSWD
Map Stormwater Drains	MSWD
Community Hotline	CH
Illegal Solid Dumping Control	ISDC
Public Education and Participation	PEP
Employee Training	ET
Used Oil Recycling	UOR
Hazardous Waste Management	HWM

Table 6 contains a summary of further detailed permit requirements and related information about how Nibley City will use the listed BMP's in Table 5 to accomplish MCM3.

Table 6: MCM-3 Illicit Discharge Detection and Elimination Goals and Milestones

MCM	Target Pollutants	Audience	Permit Reference/Requirement	Measurable Goal	Milestone Date	Associated BMPs	Measure of Effectiveness
3	All Pollutants	Public Works	4.2.3.1- Maintain stormwater map	Engineer will update stormwater map yearly.	March of each year	MSWD	Have a current and useful map
3			4.2.3.2- Prepare a plan to address enforcement of an ordinance/plan to detect and address non-SW discharges. Include a variety of enforcement options and address illegal dumping and sanitary sewer overflows into system.	Use existing escalating enforcement chart; initial non-citation enforcement done by Nibley City; authority for citation lies with Cache Sheriff, per inter local agreement w/City.	Ongoing	OD	Annual report of citations issued
3			4.2.3.3- Implement a written plan to address non-stormwater discharges to MS4, including spills, illicit connections, sanitary sewer overflows and illegal dumping.	See Measurable Goal for 4.2.3.3.1-4.2.3.3.4. The plan shall include those measurable goals.			
3			4.2.3.3.1- Written procedures in place for high priority areas more likely to have illicit discharges.	Use City GIS system to identify/map high priority areas	9/1/16	MSWD	Have a current and useful map of high priority areas
3			4.2.3.3.2- Conduct field inspections for areas identified as high priority.	Weekly inspection of high-priority areas;	Ongoing	IDC, IIC, NSWDC, ISDC Forms located in appendix C of SWMP.	Documented inspection forms
3			4.2.3.3.3- Dry weather screening to verify outfall locations and identify illicit discharges.	Conduct screening, at a maximum, every 5 years, but annually, when possible.	Every 1 to 5 years, evaluate annually	IDC, IIC, NSWDC, ISDC Forms located in B5 of SWMP	Documented inspection forms
3			4.2.3.3.4- Notify DWQ of areas where separate UPDES permit is needed	Keep a detailed log of phone calls made to DWQ	Ongoing	ET	Documented History of calls made to DWQ
3			4.2.3.4- Implement standard operating procedures for tracing the source of illicit	Conduct visual field tests at various points along system	Ongoing	IIC Appendix B1	Documented inspection

	discharge.	to trace source of discharge.		of SWMP	forms
3	4.2.3.5- Implement standard operating procedures for characterizing the nature of illicit discharges found or reported by the hotline developed in 4.2.3.9. Ensure contact information for Health and Fire Department is provided.	Use Incident Response Flow Chart and conduct semi-annual staff training on procedures.	March and November of each year	ET Appendix B1 of SWMP	Documented training forms and attendance sheet
3	4.2.3.5.1- Document identification, confirmation and source of non-stormwater discharge.	Continue to use forms already in place for documentation		NSWD	Documented forms
3	4.2.3.6- Implement standard operating procedures for ceasing illicit discharge	Use Incident Response Flow Chart and conduct semi-annual staff training on procedures.	March and November	ET B1 of SWMP	Documented training forms and attendance sheet
3	4.2.3.6.1- Document all illicit discharge investigations.	City will provide DWQ with information on illicit discharge investigations.		IDC, IIC, NSW, ISDC	Documented inspection forms
3	4.2.3.7- Inform public employees, businesses and general public of hazards associated with illicit discharges and improper discharge of waste.	Use Cloudspeaker system and social media to provide up-to-date info to public on hazards.		PEP	Document use of Cloudspeaker system
3	4.2.3.8- Permittee shall provide or promote household hazardous waste collection.	Continue to contract with Logan City for garbage pickup and disposal of household hazardous waste.		PEP, HWM, UOR, ISDC, IDC	
3	4.2.3.9- Publicly list and publicize a hotline/ telephone number for public reporting of spills and illicit discharges.	Continue to have on-call contact information on City website; post on social media		CH	Documented call log of all stormwater related calls
3	4.2.3.10- Implement procedures for program evaluation and assessment. Include database for mapping and tracking of spills and illicit discharges identified and inspections conducted.	Create GIS database/map to track spills, discharges and inspections.	By September 1 st 2017	SWDM	Functional GIS system up and running
3	4.2.3.11- Ensure that responsible entities receive annual training on illicit discharge program	Provide all staff semi-annual training on program; Dept. head will attend annual stormwater conference		ET	Documented training forms and attendance sheet

MCM4. CONSTRUCTION SITE RUNOFF CONTROL

Summary of Requirements:

1. All Permittees shall develop, implement and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Including projects proposed by the Permittee's own departments and agencies, shall comply with these requirements.
2. Determine the appropriate Best Management Practices and measurable goals for this Minimum Control Measure

Summary of Existing Efforts

Ordinances

Ordinance 10-01, passed in 2010 by the Nibley City Council covers specifications related to erosion, sediment control and construction site runoff.

Site Plan Review

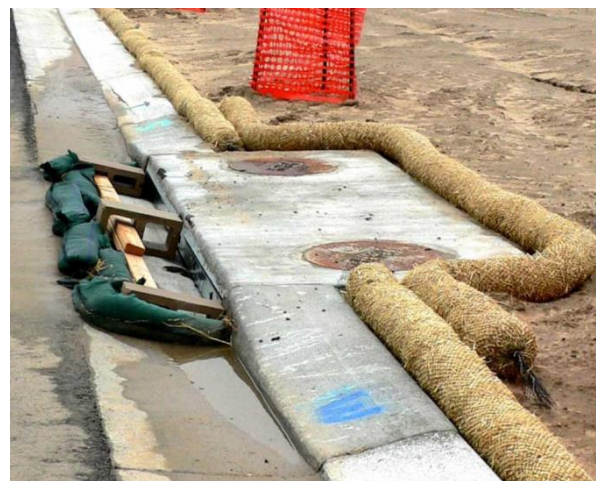
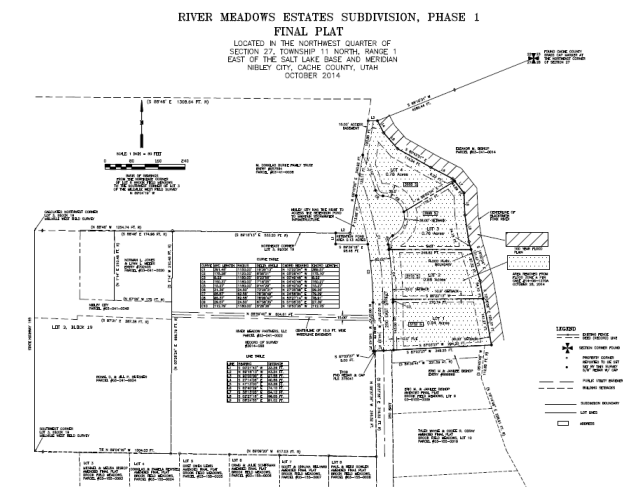
Prior to approval of final plat, developers are required to submit construction drawings. It will be determined at that point if a SWPPP will be required. If so, a compliant SWPPP shall be submitted prior to Notice to Proceed is given.

Site Inspectors

Public works personnel oversee local construction as it relates to construction site runoff control. In accordance with City ordinances regarding erosion control, the inspectors shall inspect construction projects to ensure that SWPPP are being complied with.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Nibley City has chosen to adopt the following BMPs summarized in Table 7 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 Appendix B.

Table 7: Selected BMP's for MCM4

BMP	Code
Erosion Control Plan	ECP
Landscape and Irrigation Plan	LIP
Certification and Inspector Training	CCIT
Zoning	ZO
Ordinance Development	OD
Community Hotline	CH
Illegal Solid Dumping Control	ISDC
Public Education and Participation	PEP
Education and Training	ET
Used Oil Recycling	UOR
Hazardous Waste Management	HWM

Table 8 contains a summary of further detailed permit requirements and related information about how Nibley City will use the listed BMP's in Table 7 to accomplish MCM4.

Table 8: MCM 4- Construction Site Stormwater Runoff Control Goals and Milestones.

MCM	Pollutants	Target Audience	Permit Reference/Requirement	Measurable Goal	Milestone Date	Associated BMPs	Measure of Effectiveness
4	Sediment, Construction Site Debris, Hydrocarbons	Contractors and Developers	4.2.4.1- Revise as necessary and enforce and ordinance or other regulatory mechanism that requires the use of erosion and sediment control practices at construction sites.	Revise City ordinance to ensure inclusion of SWPPP requirements	Completed and through City Council by Dec 2016	OD	
4			4.2.4.2- Develop written enforcement strategy & implement enforcement provisions of the ordinance	Have written document implemented into the SWMP	Completed by February 2017	OD	
4			4.2.4.2.2- Document all enforcement actions	Maintain up to date logs of enforcement actions			
4			4.2.4.3- Develop and implement SOPs for pre-construction SWPPP review for construction sites and keep records for it.	Require city RSI signature on SWPPP checklist prior to NTP issuance and keep records for 5 years or longer.			
4			4.2.4.3.1- Conduct pre-construction SWPPP review	Hold pre-con meeting for sites over one acre or as part of common plan of development			
4			4.2.4.3.2- Incorporate into SWPPP review procedures the consideration of potential water quality impacts and procedures for pre-construction review which shall include the use of a checklist.	Create a water-quality checklist to be used as part of SWPPP review process.	In place by Sept 1 st 2016		
4			4.2.4.3.3- Incorporate into the SWPPP review procedures for an evaluation of opportunities for use of Low Impact Development (LID) and green infrastructure and when the opportunity exists, encourage such BMPs to be incorporate into the site design.	Create LID's applicable to city with MS4 engineers and have in place for contractors by August 1 st 2016 and then review annually to change as needed.	Created and in place by Sept 1 st 2016		
4			4.2.4.3.4- Identify priority construction, including, at a minimum, those construction sites discharging directly into or immediately upstream of waters	Develop & maintain sensitive area map showing areas within the City where additional protection may be	In place by Sept 1 st 2016		

	that the State recognizes as impaired or high quality.	required.	
4	4.2.4.4- Develop and implement SOPs for construction site inspection/enforcement	Create a checklist for inspection, include enforcement measures	B1 in SWMP
4	4.2.4.4.1- Inspection of all new construction sites...conducted at least monthly by qualified personnel.	Conduct monthly inspections of all construction sites. Identified sensitive areas should be inspected twice monthly.	A12 in SWMP
4	4.2.4.4.2- Inspect all phases of construction: prior to disturbance, during active construction and following active construction.	Create forms for inspection during each phase of construction.	A12 in SWMP
4	4.2.4.4.2- Document in SWMP procedure for being notified of construction completion.	Include in subdivision procedure a requirement for SWPPP improvement acceptance prior to final subdivision acceptance	
4	4.2.4.4.3- Conduct bi-weekly inspections on high priority construction sites	Maintain inspection logs for high priority sites	
4	4.2.4.4.4- Make all necessary follow-up actions	Maintain inspection logs for follow-up actions, such as re-inspection	
4	4.2.4.4.5- Make publicly available contact info for reporting storm water related issues	***Copy from 4.2.3.9***	
4	4.2.4.5- Ensure that storm water staff is trained on all aspects of permitting procedures	Conduct annual training for storm water staff	
4	4.2.4.6- Maintain a log of active construction sites	Ensure log is up to date with active construction	

MCM5. POST CONSTRUCTION RUNOFF CONTROL

Summary of Requirements:

1. All Permittees shall develop, implement and enforce a program to address post – construction stormwater runoff to the MS4 from new development and redevelopment construction sites disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.
2. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

Summary of Existing Efforts

Ordinance

Ordinance 10-01, adopted by Nibley City Council in 2010, establishes codes and guidelines to address stormwater runoff from construction and new development sites.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP Nibley City has chosen to adopt the following BMP summarized in Table 9. Each BMP is cross referenced alphabetically by code to a fact sheet that describes the BMP in Appendix B.

Table 9: Selected BMP's for MCM5

BMP	Code
Ordinance Development	OD
Infrastructure Planning	IPL
Educational Material	EM
Landscape and Irrigation Plan	LIP
BMP Inspection and Maintenance	BMPIM

Table 10 contains a summary of further detailed permit requirements and related information about how Nibley City will use the listed BMP's in Table 9 to accomplish MCM5.

Table 10 – MCM5 Post Construction Runoff Control Goals and Milestones

MCM	Pollutants	Target Audience	Permit Reference/Requirement	Measurable Goal	Milestone Date	Associated BMPs	Measure of Effectiveness
5			4.2.5.1- Develop and adopt an ordinance or other regulatory measure that requires long term post-construction stormwater controls at new development and redevelopment sites.	Use maintenance agreement for all privately held storm water ponds that addresses post-construction controls			
5			4.2.5.2.1- Implement escalating enforcement strategy to address recurring violations	Follow City enforcement strategy			
5			4.2.5.2.2- Document how requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4.	Ensure documentation includes: <ul style="list-style-type: none"> • How BMPs were selected • Expected pollutant removal • Technical basis to support BMP performance claims 			
5			4.2.5.3.1- Development program should include non-structural BMPs	Comply with city BMPs that address: areas susceptible to erosion/sediment loss minimize disturbance of native soils and vegetation, preserve areas that benefit water quality, implement flood control measures and protect natural resources.			
5			4.2.5.3.2- Include a process which requires the evaluation of LID	City will provide contractor/developer with a list of LID's for the city and then the contractor must perform studies to evaluate best practice for that area.	In place By Sept 1 st 2016		
5			4.2.5.3.3- Permittee must develop a plan to retrofit existing developed sites that adversely impact water quality.	Keep Storm Drain Master Plan and GIS mapping data current to ensure water quality components are addressed.			

5	4.2.5.3.4- Each Permittee shall develop and define specific hydrologic method or methods for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs in their jurisdiction.	Review and update existing design standards to ensure compliance with permit requirements.	
5	4.2.5.4.1- Review SWPPP	See goals for MCM 4.	
5	4.2.5.4.2- Permittees shall provide developers and contractors with preferred design specifications to more effectively treat storm water for different development types...projects located in, adjacent to, or discharging to environmentally sensitive areas.	Include preferred design specs in City design standards and specifications. Provide to all developers and contractors.	In place by Sept 1 st 2016
5	4.2.5.4.3- Permittees shall keep a representative copy of information that is provided to design professionals;...the dates of mailing and lists of recipients	Keep at copy of preferred design specs; Maintain current list of those who have copies.	
5	4.2.5.5- All permittees shall adopt and implement SOPs or similar type of documents for site inspection and enforcement of post-construction storm water control measures.	Review and customize SOPs for inspection and enforcement of post-construction control measures.	
5	4.2.5.5.1- Ordinance or other regulatory mechanisms shall include provisions for inspection of storm water infrastructure on private property that discharges to MS4.	Create template for agreement of maintenance/ inspection of privately held storm water infrastructure.	Sept 1 st 2016
5	4.2.5.5.2- Permanent structural BMPs shall be inspected at least once during installation...verify, post construction, that BMPs were constructed as designed.	Inspect permanent BMPs at least once during construction; inspect upon completion; maintain inspection logs.	
5	4.2.5.5.3- Inspection and any necessary maintenance must be conducted annually by either Permittee or through a maintenance agreement, the property owner/operator. On sites where the property owner/operator is conducting maintenance, Permittee shall inspect	Develop inspection report form for post-construction BMPs. Include: <ul style="list-style-type: none"> • Responsible party • Dates of annual inspection for City-owned BMPs 	

	those storm water control measures at least once every five years.	<ul style="list-style-type: none"> Dates of inspection for privately owned BMPs.
5	4.2.5.6- 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. Go to trainings annually.
5	4.2.5.7- Maintain an inventory of post construction BMPs	<p>Maintain and regularly update inventory log. Log shall include:</p> <ul style="list-style-type: none"> Short description of each control measure Short description of maintenance requirements Inspection information <p>Changes in property ownership</p>

MCM6. POLLUTION PREVENTION / GOOD HOUSEKEEPING

Summary of Requirements:

1. All Permittees shall develop and implement an operations and maintenance (O&M) program for Permittee-owned or operated facilities, operations and structural stormwater controls that includes standard operating procedures (SOPs) or similar type of documents and a training component that have the ultimate goal of preventing or reducing pollutant runoff from all Permittee-owned or operated facilities and operations. 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. The Permittee must develop an inventory of all such permittee-owned or operated facilities. The Permittee must review this inventory annually and update as necessary.
2. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

Summary of Existing Efforts

Stormwater System Maintenance

The City contracts with an outside contractor to clean the City stormwater system. Annual cleaning budget is \$25k. Pipes and Catch basins are cleared of sediment and debris by use of high pressure jetting and vacuuming. The current low bid for these services is by Twin D, for \$250.00 per hour of cleaning.



The City owns and operates a street sweeping truck. All roads are cleaned at least once in the spring, and then throughout the year on an as needed basis.

Recycling Program

Nibley City contracts with Service District 1 for waste management and recycling services. In turn, Service District 1 contracts with the City of Logan Environmental Department to provide those services. The recycling program provides curb side pick-up for cardboard, newspaper, aluminum cans, tin/steel cans, plastic pop bottles, plastic milk jugs, green waste. These services also provide proper disposal options at the landfill for hazardous wastes that can be



difficult to dispose of such as: tires, used oil, oil filters, antifreeze, carpet pad, batteries and wood pallets.

In addition Nibley has constructed a recycle site drop off area in town, which gives residents a convenient place to drop off green waste and cardboard materials to be recycled.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP Nibley City has chosen to adopt the following BMPs summarized in Table 11 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, limitations and its effectiveness in Appendix B.

Table 11: Selected BMP's for MCM5

BMP	Code
Street Cleaning	SC
Catch Basin Cleaning	CBC
Building and Grounds Maintenance	BGM
Housekeeping Practices	HP
Infrastructure Planning	IPL
Educational Materials	EM
BMP Inspection and Maintenance	BMPIM

Table 12 contains a summary of further detailed permit requirements and related information about how Nibley City will use the listed BMP's in Table 11 to accomplish MCM6.

Table 12: MCM6- Pollution Prevention and Good Housekeeping goals and milestones

MCM	Target Pollutants	Audience	Permit Reference/Requirement	Measurable Goal	Milestone Date	Associated BMPs	Measure of Effectiveness
6			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...				
6			4.2.6.1- Permittees shall develop and keep current a written inventory of Permittee-owned or operated facilities	Keep current list of MS4 owned/operated facilities			
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 4.2.6.1 for their potential to discharge to storm water the following typical urban pollutants...	Annual assessment on existing and potential new "priority" areas.			
6			4.2.6.3- Based on the requirements of 4.2.6.2, identifies "high priority" facilities.	Annual assessment on existing and new potential new "high priority" areas.			
6			4.2.6.4- Develop and implement a SWPPP or similar document for each "high priority" area.	Develop SWPPP within 180 days of Permit effective date.			
6			4.2.6.5- High Priority Inspections	See Below			
6			4.2.6.5.1- Perform weekly visual inspections of "high priority" areas	Continue using weekly inspection form and logs; conduct weekly inspections			
6			4.2.6.5.2- Perform quarterly comprehensive inspection of "high priority" facilities	Continue using weekly inspection form and logs; conduct quarterly			

		inspections	
6	4.2.6.5.3- Perform quarterly visual inspection of storm water discharges from “high priority” facilities.	Conduct quarterly visual observations of storm water discharges at “high priority” facilities	
6	4.2.6.6- Develop and implement SOPs for all types of facilities and activities throughout the City.	Develop SOPs specific to each department, activity and facility	Implemented July 1 st 2016
6	4.2.6.7- Third-party contractors of municipal maintenance and privately held maintenance shall be held to the same maintenance standards as Permittee.	Develop a standard maintenance agreement; provide training, including keeping a log of training, for all third-party and private maintenance contractors.	
6	4.2.6.8- Develop and implement process to address water quality impacts in the design of all new flood impact controls.	N/A- The City does not have structural controls that discharge to our MS4.	
6	4.2.6.9- Public construction projects shall comply with requirements applied to private projects.	Develop SWPPP for all public construction projects.	
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.	Develop training schedule; keep record of all trainings.	

STORMWATER BUDGET (EXCERPT TAKEN FROM THE CURRENT APPROVED CITY BUDGET)

The Stormwater Department is spending the last part of this fiscal year diligently working to update the City's Stormwater Management Plan, an update that is mandated by changes to the State of Utah's new Municipal Separate Storm Sewer System (MS4) Permit. Other accomplishments of the department this year have included:

COMPLETION OF A STORMWATER MASTER PLAN

- Adopted by City Council September 2015

CONSTRUCTION

- Installed a drain line through Old Nibley Park that runs 1000ft from the center of the park where flooding was occurring to a storm box on the corner of 3200 South and 250 East.
- Installed 415ft of storm drain line in River Meadows subdivision that connected the storm drain box from the street to the Blacksmith Fork River.

INSPECTIONS

- Performed hundreds of site inspections for new and existing construction sites.

UPCOMING DEPARTMENT GOALS

- Contract for cleaning the storm water system similar to what is done with the sewer.
 - This will ensure that the City remains compliant with the new State of Utah MS4 permit.
- Perform site inspections, pre-construction reviews and the update to problem areas in the storm water system.

PROJECT PRIORITIZATION

Projects listed with a GL number are budgeted for this year. Those without a GL number are future projects. Project explanations may be found in the budget notes for the listed GL account.

- 53-40-730 Install a min of 3 stormwater BMPs (snouts) in outfalls to improve water quality.
- 53-40-730 3200 South and 1500 West tie in.
- 53-40-514 Engineering plan and designs for 3200 South 1350 crossing.
- 53-40-514 Engineering plan and designs for 2600 south 600 to 550 West pipe.
- 2600 South Regional Pond and piping



Stormwater Budget Overview

Revenue	Account Number	Actual FY 2015	Actual Year-to-date FY 2016	Budget FY 2016	Final Budget FY 2017
CIB Grant	53-37-345	\$ -	\$ 27,456	\$ -	\$ -
Stormwater Inspection Fee	53-37-411	950	2,400	-	3,000
Appropriate Fund Balance	53-37-601	-	-	18,040	2,000
Interest	53-37-610	609	-	500	500
Stormwater Manhole Fee	53-37-694	-	-	2,000	-
Stormwater Service Fee	53-37-710	130,295	156,609	171,000	177,000
Total Revenues		\$ 131,854	\$ 186,465	\$ 191,540	\$ 182,500

Operating & Capital Expenses	Account Number	Actual FY 2015	Actual Year-to-date FY 2016	Budget FY 2016	Final Budget FY 2017
Operating Charges	53-40-000	\$ 75,463	\$ 63,955	\$ 91,040	\$ 101,310
Capital Outlay - Improvements	53-40-730	-	-	62,500	37,503
Capital Outlay - Equipment	53-40-740	-	-	-	-
Reserves	53-40-850	-	-	-	-
Administrative Charge	53-40-910	28,550	38,000	38,000	43,687
Total Operating & Capital Expenses		\$ 104,013	\$ 101,955	\$ 73,042	\$ 182,500

Surplus/(Deficit) **\$ 27,841 \$ 84,510 \$ - \$ -**

Beginning Cash Balance (Est.) \$ 218,916

Reserves (Fund Balance App.) -

Ending Cash Balance (Est.) \$ -

53-37-411 Storm water Inspection Fee – This is a fee paid by builders for inspection of their construction site.

53-37-601 Appropriate Fund Balance – This is where funds can be appropriated from the ongoing fund balance to be expended in the current budget year.

53-37-610 Interest – Interest earned on all fund balances of money held in interest bearing accounts. This is apportioned out once per year at the end of the fiscal year to each of the individual funds based on the percentage of the total fund balance.

53-37-694 Stormwater Manhole Fee - These are fees paid by developers to reimburse the city for work done by public works staff to align pavement to stormwater facilities after construction.

53-37-710 Utility Service Fees – Increasing Budget to \$177,000 – Accounts for the monthly stormwater fee increase of \$0.25 to \$6.75, which was proposed to be done each year in the Capital Facilities Finance Plan completed Zions Bank.

Stormwater Expenses

Fund Detail Budget- Expenses	Account Number	Actual FY 2015	Actual Year-to-date FY 2016	Budget FY 2016	Final Budget FY 2017
Salaries & Wages	53-40-110	\$ 34,955	\$ 39,261	\$ 46,000	\$ 30,000
Seasonal Salaries & Wages	53-40-115	-	-	-	5,700
Employee Benefits	53-40-130	12,574	12,338	19,000	14,000
Travel	53-40-230	-	-	500	500
Maintenance	53-40-250	7,296	3,415	16,000	16,000
Canal Maintenance	53-40-260	-	3,500	3,500	3,500
Cleaning	53-40-270	-	-	-	25,000
Telephone	53-40-280	607	390	540	360
Membership & Dues	53-40-300	-	-	-	750
Education & Training	53-40-330	50	2,546	500	500
Engineering	53-40-514	10,100	2,505	5,000	5,000
Capital Outlay Improvements	53-40-730	-	-	62,500	37,503
Capital Outlay Equipment	53-40-740	-	-	-	-
Administrative Charge	53-40-910	28,450	38,000	38,000	43,687
Reserves	53-40-999	-	-	-	-
Total Stormwater Fund Expenses		\$ 94,032	\$ 101,955	\$ 191,540	\$ 182,500

53-40-110 Salaries – Adjusting per annual changes. Includes pay for half of one employee (BJ).

53-40-115 Seasonal Salaries & Wages – Wages for one seasonal employee working 8 months of the year.

53-40-130 Benefits – Adjusting based on premium/contribution changes and actual costs.

53-40-230 Travel – Hotel costs, mileage reimbursement and per diem for meals not included at conferences.

53-40-250 Maintenance- General – for repair and maintenance of storm water facilities.

53-40-260 Canal Maintenance - \$3,500 was budgeted as the contribution to the Nibley Blacksmith Fork Canal Company for shared maintenance of storm water facilities based on the agreement with the company.

53-40-270 Cleaning – Nibley City is going to begin contracting to have a section of the SW pipes cleaned each year. This is something that has never been done before.

53-40-280 Telephone – One-half of BJ's phone allowance.

53-40-300 Membership Dues – Fees for professional membership in American Public Works Association.

53-40-330 Education & Training – For the charges related to conferences, classes, continuing education.

53-40-514 Engineering – This is the fee charged by City engineers for services related to stormwater facilities.

53-40-730 Capital Outlay Improvements – These funds will be used to accomplish several construction projects on the Stormwater Department's Capital Improvement list .

53-40-910 – Admin Charge to General Fund – Based upon expenses in General Fund.