MURRAY CITY

2020 STORM WATER

MANAGEMENT PROGRAM

PREPARED BY:

MURRAY CITY CORPORATION

PUBLIC WORKS

DELEGATION OF AUTHORITY

Utah Department of Environmental Quality
Division of Water Quality
195 North 1950 West
DEQ 3rd Floor
Salt Lake City, Utah 84116

Dear Executive Director:

As the principal executive officer (or ranking elected official) of Murray City, I hereby authorize Danny Astill acting as the Public Services Director to act on my behalf relative to documents, reports, notices or activities pertaining to the Murray City Small MS4 UPDES Storm Water Discharge Permit UTS 000001.

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

Respectfully Submitted,

Mayor: D. BLAIR CAMP

Signature: _____

Title: Mayor

Date: 9/24/2020

MURRAY CITY, STATE OF UTAH CORPORATE SEAL

ATTEST
Murray City Recorders Office

APPROVED AS TO CONTENT

APPROVED AS TO FORM

Murray City Attorneys Office

Storm Water Management Plan

Permittee: Murray City
Permit Number: UTS 000001
Location of MS4: Murray City

Submitted with this permit is the following:

- ☐ A map of the MS4 location
- ☐ Information Regarding the overall quality concerns, priorities, and measureable goals specific to the Permittee that were considered in the development and/or revisions to the SWMP document
- ☐ A description of the program elements that will be implemented in each of the six minimum control measures
- ☐ A description of any modifications to ordinances or long-term/ongoing processes implemented in accordance with the previous MS4 general permit for each of the six minimum control measures.
- ☐ A description of how the Permittee intends to meet the requirements Permit as described in Part 4.0 by either referencing existing program areas that already meet the Permit requirements or a description and relevant measurable goals that include, as appropriate, the year by which the Permittee will achieve required actions, including interim milestones.
- ☐ If applicable indication of joint submittal of Co-Permittees and the associated responsibility in meeting requirements of the SWMP

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

Danny Astill, Public Services Director

9-4-2020
Date

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 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.

MURRAY CITY CHARACTERISTICS

General Information

Murray City Storm Drain System falls under the Public Works Department. The Public Works Director can be contacted at the following address and phone number.

Public Works Facility
4646 S. 500 W.
Murray, Utah 84123
801 270-2400

Population:	49,917
Size:	12 square miles
Geographic Description:	Murray City is located from approximately 4500 S. to 6600 S. and 1300 West to the Van Winkle Expressway on the east
Receiving Waters:	Jordan River, Big Cottonwood Creek, Little Cottonwood Creek
Annual precipitation:	Average precipitation is 16.1 inch/yr

Type of Community:	Land use is approximately 10% vacant land 45% residential 20% commercial and industrial 15% transportation 10% parks and open area
Latitude:	40° 40′ 18.11″ N
Longitude:	111° 54′ 24.75″ W

History

Murray City was officially recognized in January 3, 1902. The City is made up of a wide variety of ethnic backgrounds and religions. The City is governed by a Mayor-Council form of government with a mayor and 5 council members. The City has its own water, power, fire, police, and public services departments.

Permit Application

Murray City is considered an MS4 Phase II permittee. Phase II designates MS4's that serve populations less than 100,000. The permit issued by the State of Utah under the direction of the EPA allows the city to discharge storm water runoff to the waters of the state. Cities required to permit under Phase II are allowed to cooperate and work together with neighboring cities in the application process. The permittee may join with a Phase I city or another Phase II city in applying for a permit. Individual MS4s may share responsibility for program development with neighboring communities and/or take advantage of existing local or state programs.

Notice of Intent (NOI) and Permit Requirements

The chosen measurable goals, submitted in the NOI 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 effective as it could be.

Reports

The permit requires that the city review the SWMP annually, report on activities and make any updates. Generally, the annual report will 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.

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.

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.

Storm Water Management Program

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

- Best Management Practices (BMPs) for each of the six minimum control measures (MCM);

    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:

1. Appendix A – Supplemental Guide to Storm Water Management for Contractors and Developers
    a. Storm Water Guidance Manual which includes hydraulic and hydrologic methods and standards, structural BMP examples
    b. Low Impact Development techniques
    c. BMP abbreviation master list
    d. BMP fact sheets

e. Land Disturbance/SWPPP Review Checklist
f. Storm Water Credit Application

2. Appendix B – Supplemental Guide to Storm Water Management for Public Services Departments
   a. SOP Master List
   b. Department SOP List

3. Appendix C – Standard Operating Procedures, Documentation and Elements of the Illicit Discharge Detection and Elimination program
   a. Dry Weather Screening Flow Chart
   b. Incident Response Flow Chart
   c. Spill Response Call and Response Reporting Forms
   d. Enforcement Action Log
   e. IDDE Inspection Inventory Log

4. Appendix D – General program documentation including goals, inspection forms, enforcement logs, training topics and logs, annual reports, observation reports, and other general documentation

5. Appendix E – Copies of the most current city ordinances applicable to storm water
   a. Storm Water Utility Ordinance
   b. Storm Water Management Ordinance
   c. Salt Lake County Inter-Local Agreement

6. Appendix F – Copies of State permits and documents regulating Murray City storm water program
   a. State General Permit.

7. Appendix G – System maps and inventories
   a. Facility Inventory List
   b. Facilities Map
   c. Facility Evaluation Form
   d. Outfall Monitoring Locations Inventory
   e. Active Site Construction Inventory
   f. Post Construction BMP Inventory

Ongoing Documentation Process

With this revised SWMP our program has been restructured. The SWMP itself has been reorganized to make it more of a working document with multiple appendices to help the City do a better job in record keeping and documenting our activities. Much of the documentation is or will be included in Appendix D. We have designed this SWMP to address regulations in the new UPDES Permit to become active. As the Management Plan needs revisions the evaluation sheets in Appendix D will be used to effect changes within the plan.

Our plan is to document our activities and to keep track of what is happening within our community. This SWMP includes many new forms and reports to help us in these documentation efforts. Report forms, logs, evaluation forms and backup information are spread throughout the applicable appendices.

PUBLIC EDUCATION AND OUTREACH

Permit Requirements

The permit requirements for Public Education and Outreach on Storm Water Impacts can be found in Section 4.2.1 of the UPDES General Permit UTS000001. A copy of the permit is included in Appendix F for reference. The permit outlines in general the following requirements.

1. The MS4 must 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, (2) businesses, institutions, and commercial facilities, (3) developers and contractors (construction), and (4) MS4 owned or operated facilities.

2. Providing information which describes targeted pollutants and pollutant sources and their potential impacts relating to storm water quality including avoiding, minimizing, reducing/eliminating adverse impacts of storm water discharges.

3. Provide information given to the general public of the city's prohibition of illicit discharges with a focus on lawncare (pesticides, herbicides and fertilizers), onsite filtration of storm water, effects of automotive work, car washing, pet waste and disposal of swimming pool water

4. Provide and document information given to the institutions, industrial and commercial facilities including lawn maintenance, onsite filtration, deicing materials, building and equipment maintenance, management of dumpsters, parking lot surfaces(sweeping).

5. Info to engineers, contractors, developers, land use planners, concerning BMPS and SWPPP plans development

6. Training to city employees concerning IDDE and waste disposal including lawn maintenance, onsite filtration, deicing materials, building and equipment maintenance, management of dumpsters, parking lot surfaces (sweeping).

7. Training given to MS4 engineers and plan review staff for LID practices, green infrastructure and post construction BMP's chosen in the SWMP

8. Identify methods used to evaluate effectiveness of the educational program.

9. Provide documentation or rationale as to why particular BMPs were chosen for its public education and outreach program.

Summary of Existing Efforts

The following BMP's are currently used to achieve the Public Education and Outreach goals of 2020 SWMP.

1. Jordan Valley Municipalities Coalition (Coalition) As a Co-Permitee with the Jordan Valley Municipalities as part of the 2017 Interlocal Cooperation Agreement MCM 1 satisfies this portion of the Permit.

    a. Description – As a member of the Coalition education of the four target groups is achieved through the printed fliers, commercials, water fair, school involvements

b. Audience – 1) residents 2) businesses 3) Contractors
c. Targeted pollutants – nitrogen and phosphorus reduction, pet wastes, fertilizers, herbicides, pesticides, trash, debris, household items antifreeze, batteries, oil and paint, automotive work and car washing
d. UPDES Permit Reference – 4.2.1.1, 4.2.1.2, 4.2.1.3, 4.2.1.4, 4.2.1.6

2. Public Events
   a. Description – Presentations, classes and audience interaction during Water Fair, Earth Day activities, Health and Safety Fair
   b. Audience – 1) residents 3) institutions 2) businesses
   c. Targeted pollutants – pet wastes, debris, trash, minimizing and reducing storm water discharges and actions individuals can take to improve water quality
   d. UPDES Permit Reference – 4.2.1.1, 4.2.1.2
   e. Evaluation of effectiveness – The effectiveness of the BMP is measured by the number of residents using the ABOP program, the number of schools and students

3. Informational Pamphlets
   a. Description – Storm water informational pamphlets are inserted into the business and residential utility bill envelope. Pamphlets are also distributed to those attending City sponsored events (Earth Day Fair, Health and Safety Fair) and placed in city office reception areas. Presentations, classes and audience interaction during Water Fair, Earth Day activities, Health and Safety Fair
   b. Audience – 1) residents 3) institutions 2) businesses
   c. Targeted pollutants – pet wastes, debris, trash, minimizing and reducing storm water discharges and actions individuals can take to improve water quality
   d. UPDES Permit Reference – 4.2.1.1, 4.2.1.2
   e. Evaluation of effectiveness – The effectiveness of the BMP is measured by

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Murray City has chosen the BMP's listed on MCM -1 Goal Summary Table. 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 A.

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 Education and Outreach.

The following table includes the goals for MCM - 1.

MCM – 1
ONGOING DOCUMENTATION PROCESS
Public Education – Goal Summary Table

Measurable Goal	Implementation Date	goal achieved ?	BMP's used	Action items for obtaining goals.
Participate as a Co-Permittee in the Jordan Valley Municipalities	January 2014		EM, ET, PEP, UM,WO	Continued participation with the Jordan Valley Municipalities through the Interlocal Agreement as a Co-Permittee to achieve Public Education and Outreach requirements
Participate in Murray City Business License Application for automotive, body & paint, detail shops, carwashes	8/2020		PEP, EM	Give business owner informational pamphlets when applying for business licenses addressing storm water education for potential nitrogen and phosphorus reduction

This process should take place continually, or as a minimum, annually. See SWMP Goals for further details.

PUBLIC PARTICIPATION / INVOLVEMENT

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.

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.

Summary of Existing Efforts

The City currently is a Co-Permitee of the Jordan Valley Municipalities as part of the 2013 Interlocal Cooperation Agreement which satisfies the MCM 2 portion of the Permit.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Murray City has chosen the BMP's listed on MCM -2 Goal Summary Table. 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 A.

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 Public Involvement and Participation.

The following table summarizes the goals for MCM - 2.

MCM - 2
ONGOING DOCUMENTATION PROCESS
Public Participation/Involvement – Goal Summary Table

Measurable Goal	Implementation Date	goal achieved?	BMP's used	Action items for obtaining goals.
Participate as a Co-Permittee in the Jordan Valley Municipalities	January 2014	Ongoing	WO	Continued participation with the Jordan Valley Municipalities through the Interlocal Agreement as a Co-Permittee to achieve Public Involvement/Participation requirements
The SWMP shall remain available for public review and input with contact information	August 2020	9/2020	PEP	The Murray City website has been changed to include not only the SWMP but also contact information for the Storm Water Superintendent and Supervisor

This process should take place continually, or as a minimum, annually. See SWMP Goals for further details.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

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.

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.

3. Develop and implement a plan to detect and address non-storm water discharges, including spills, illicit connections, and illegal dumping to the MS4.

4. Develop procedure for locating and listing priority areas likely to have illicit discharges: industrial, commercial, past illicit discharge and dumping areas, onsite sewage disposal, areas with history of sewage overflows, areas upstream of sensitive water bodies.

5. Develop and implement standard operating procedures (SOPs) for:

    a. tracing the source of an illicit discharge.
    b. characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges found or reported.
    c. Recording location, description, date observation, date of reported discharge
    d. ceasing the illicit discharge, including notification of appropriate authorities, property owners, and technical assistance for removing the source and follow-up inspections.

6. Inform public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste.

7. Promote or provide services for the collection of household hazardous waste.

8. Publicly list and publicize a hotline or other local number for public reporting of spills and other illicit discharges.

9. Develop a written spill/dumping response procedure, and a flowchart for internal use, including various responsible agencies and their contacts.

10. Adopt and implement procedures for program evaluation and assessment.

11. Train employees, at a minimum, annually on the IDDE program and new employees with 60 days of hire.

Summary of Existing Efforts

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

Illicit Spills
Reports of spills are handled by the Storm Water Department with assistance from Fire Department or County Health Department.

ABOP
The City participates in the ABOP program where people can drop off used oil, antifreeze, paint and batteries to be collected by Salt Lake County to be disposed of properly.

Green Waste Collection
The city allows residents to rent green waste trailers where it is ground into bark mulch for free to residents.

Illicit Connections
The City has not generally experienced problems with individuals or businesses illicitly connecting their sanitary wastewater piping to storm drains. More common types of illicit discharges include natural runoff from sites where former industrial businesses once stood, spills from highway accidents, concrete truck wash out water, residential yard waste and debris being washed into the gutters, and carpet cleaner waste.

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

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Murray City has chosen the BMP's listed on MCM -3 Goal Summary Table. 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 A.

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 Illicit Discharge Detection and Elimination.

The following table includes the goals for MCM - 3.

MCM -3
ONGOING DOCUMENTATION PROCESS
Illicit Discharge Detection and Elimination –Goal Summary Table

Measurable Goal	Implementation Date	goal achieved?	BMP's used	Action items for obtaining goals.
Review the ordinance to conform with new permit	2014		OD	Ordinance conforms with the permit
Maintain a current SD System Map on all new developments within 6 months	2014		MSWD	City storm water facilities for new developments will be updated within 6 months after the development is accepted by the City
Do dry weather screening of 20% of all outfalls each year	2014		IDC, NSWD	Set schedule for dry weather screening of 20% of outfalls each year. Document in the City Works Data Base.
Have SOP in place and training to Staff to recognize and tracing the source of illicit discharges and train new employees within 60 days of hire	8/2020		ET	Develop SOP for tracing source of illicit discharge and SW staff is trained to identify and stop source of discharge, identify responsible party/owner, proceed with proper enforcement
Have SOP in place and training to Staff, create the Incidence Response Flow Chart and train personnel	2014		ET	Train Staff to follow Incidence Response Flow Chart SOP
Develop and distribute educational materials for businesses concerning hazards associated with Illicit discharges	2014		PEP	Issue business newsletter on alternating year with residential newsletter
Promote the collection of hazardous household waste	2014		UOR	Put the SL County hazardous household waste contact information on City Web Site
List a hotline for reporting spills and illicit discharges	2014		CH	Put the SL County hazardous household waste contact information and the City hotline on City Web Site
Database is created in GIS to record illicit discharges, connections, cleanups,	2014	2014 thru 2020	MSWD	Database is created and Storm Water personnel are trained in the use of the and data input of the database

This process should take place continually, or as a minimum, annually. See SWMP Goals for further details.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Permit Requirements

The permit requirements for Construction Site Storm Water Runoff 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. Develop an ordinance to ensure contractor compliance with the General Permit, development of Storm Water Pollution Prevention Plan (SWPPP) for areas larger than 1 acre.
2. Develop SOP's for preconstruction review of SWPPP's.
3. Develop SOP's for site inspection and enforcement procedures with regulatory authority from the storm water ordinance.
4. Conduct biweekly inspections of priority construction sites.
5. Tracking and follow-up actions of all enforcement actions to ensure compliance regarding construction runoff.
6. Annual training of MS4 personnel involved with permitting, planning, inspections and enforcement of construction section of the storm water program.

Summary of Existing Efforts

City Ordinance
The City storm water ordinance has been developed to ensure contractor compliance to storm water requirements through the issuing of a Land Disturbance Permit and education in the Storm Water Guidance Manual.

Contractor Training
Areas with construction larger than 1 acre require the contractor to view a video concerning construction site runoff.

Inspection of Construction Sites
The storm water inspector currently inspects each construction site issued a land disturbance permit on a weekly basis.

SWPPP Review Checklist
Construction of any area larger than 1 acre requires submittal of a SWPPP. The SWPPP is reviewed using a checklist to ensure all applicable items during and after construction are addressed.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Murray City has chosen the BMP's listed on MCM - 4 Goal Summary Table. 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 A.

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
ONGOING DOCUMENTATION PROCESS
Construction Site Runoff Control – Goal Summary Table

Measurable Goal	Implementation Date	Goal achieved	BMP's used	Action items for obtaining goals.
Ordinance requiring land disturbance permit for all sites over 1 acre	2014		OD	During plan review ensure all active construction sites over 1 acre have been issued an LDP.
Review and compare current City ordinance with Permit requirements and revise as needed	2014		OD	Review for compliance with permit and enhanced enforcement in yearly SWMP review
Continue using a construction site enforcement action log/database	2014		IM	Site enforcement actions are logged on regular basis
Review current preconstruction SWPPP checklist, develop SOPs for plan reviews, pre-con meetings, water quality issues and LID practices	8/2020		SPR	Review SWPPP checklist, include SWPPP requirements in plan reviews and pre-con meetings. Change SWPPP checklist to meet any updated requirements, including review for erosion potential, slope, size water quality of receiving water body, non-stormwater discharges. Enforcement policy to be included during pre-con meeting.
Conduct biweekly inspections of priority construction sites.	8/2020		IM, CE	All priority sites are inspected biweekly and any enforcement actions recorded and tracked for compliance. include appropriate, escalating enforcement procedures and actions including an appeals process that is published and readily accessible
Training of MS4 personnel involved with permitting, planning, inspections and enforcement of construction section of the storm water program.	8/2020		ET	City MS4 inspector(s) to receive annual training concerning inspections, enforcement, etc. New staff members are to be trained within 60 days of hire

This process should take place continually, or as a minimum, annually. See SWMP Goals for further details.

POST-CONSTRUCTION STORM WATER MANAGEMENT

Permit Requirements

The permit requirements for Construction Site Storm Water Runoff 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 an ordinance to ensure new development and redeveloped sites meet predevelopment hydrology and to reduce the amount of storm water discharge for areas larger than 1 acre. The ordinance must allow for inspection by City personnel and ensure the control structures are constructed and maintained properly.
2. Develop enforcement strategy (ordinance and SOP's) for enforcement of BMP's including escalating enforcement procedures and sanctions.
3. Develop and define methods for calculating runoff volumes and flow rates. Define the specific design storm that the post-construction structural BMP will be treating.
4. On review of a retro-fit plan to include criteria that addresses water body location, status of water body to improve impaired water body, hydrologic condition of receiving water body, proximity to protected areas.
5. Review SWPPPs to ensure long term storm water management measures are met. Provide Contractors and developers with preferred design specifications to treat storm water for different sites
6. Develop SOPs for inspection of BMPs.
7. All structural control measures must be inspected at least once during installation and prior to construction permit close-out to ensure the BMP's were constructed as designed and at least every 5 years by the Permittee. Condition of the structure, maintenance and violations and re-inspection dates are to be documented.
8. Develop an ordinance to allow inspection and maintenance of private post-construction BMP's by City inspectors or 3rd party. Cost recovery for maintenance should be included.
9. Maintain an inventory of post-construction BMPs including location, description, maintenance requirements, owner contact information, inspection information.

Summary of Existing Efforts

Ordinance Development
The storm water ordinance addresses post-construction requirements on new and redeveloped properties including inspection access, maintenance agreements and BMP installations.

Structural BMPs
Design of structural BMPs must include calculations for the design storm, peak runoff, runoff volumes, and conveyance capacities, flow velocities, etc. prior to approval of

plans submitted to the City. Structural BMPs installed to date include oil/water separators, systems designed as onsite detention, Snouts used as oil/water and debris separator.

Maintenance Incentive/Maintenance Agreement
The City is currently requiring privately owned storm water treatment systems in new developments and redevelopments larger than 1 acre to enter into a maintenance agreement. The City does provide a reduction of up to 45% in the assessed storm water utility fee if the owner maintains their storm water BMPs. If the BMPs are not properly maintained the City may revoke the fee reduction.

SWPPP Review
During the SWPPP and plan review the post construction BMPs are reviewed to determine if they will meet the needs for treatment of runoff for quality and quantity, retention of the 80th percentile storm and review of LID principles.

Post-Construction BMP Inventory
An inventory of BMPs and locations is maintained by the Storm Water Division. Structural BMPs are inspected annually to determine if they are operating properly and any required maintenance.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Murray City has chosen the BMP's listed on MCM - 5 Goal Summary Table. 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 A.

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 - 5.

MCM - 5
ONGOING DOCUMENTATION PROCESS
Post-Construction Runoff Control – Measurable Goal Summary Table

Measurable Goal	Implementation Date	goal achieved	BMP's used	Action items for obtaining goals.
Develop ordinance to ensure developing sites maintain predevelopment hydrology.	2014		OD	Ordinance currently in place and addresses this goal

The ordinance must include provision for inspection of BMP's during and after construction by City personnel and provide for enforcement of BMP's	2014		OD	Ordinance currently in place and addresses this goal
Develop methods for calculating runoff volumes and rates to ensure post construction BMP's will treat required storm runoff.	8/2020	8/2020	ECP	Achieved through Storm Water Guidance Manual Appendix B For 80th percentile storm and LID
Review SWPPP's to ensure long term storm management measures are met including retention of the 80th percentile storm and review of an increase of impervious surface greater than 10%	8/2020	8/2020	PCSPR	Achieved through Storm Water Guidance Manual located in Appendix A
Develop SOP's for inspection of structural BMP's to ensure they are built according to design	8/2020		IM	SOP's for pre and post construction inspection written
Develop SOP's for inspection of post construction BMP's - bi annual by owner and every 5 years by City personnel.	8/2020		IM, LTOM	SOP's for bi annual and 5 year inspections of private BMP's written. Develop inspection report for any observed failures
Annual training for staff involved with planning, review, inspection and enforcement of structural and non-structural control measures.	2014		ET	Storm Water staff to be trained for staff involved with planning, review and inspection of control measures
Adopt procedures for plan review to minimize water quality impacts	8/2020	8/2020	PCSPR,SPR	SWPPP review to include review: of sites larger than 1 acre, of runoff volumes and flow rates of design storm including 80th percentile storm retainage, long term controls (LID) are implemented and structural BMP design meets permit requirements
Keep record of information provided to design professionals.	January 2104			Information to design professionals can be obtained from web site and guidance manual

This process should take place continually, or as a minimum, annually.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Permit Requirements

The permit requirements for Construction Site Storm Water Runoff 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. Keep an inventory of Permittee owned facilities and storm water controls including buildings, golf courses, parks, maintenance yards and equipment storage. Assess the facilities for storm water pollution potential and identify high priority sites.
2. Develop O&M programs for each facility that will protect storm water from being polluted from that facility. As part of the O&M program schedules and SOPs must be developed to address but not limited to the following items: storage and handling of chemicals, employee training, dumpster management, cleaning washing maintenance of equipment and vehicles, parking lot cleaning, landscape maintenance, storage areas, fertilizer/pesticide/herbicide storage application and disposal, spill response, street sweeping, salt storage and handling, storm water conveyance maintenance, fire fighter training, construction and any other activities that introduce pollution into the storm water system.
3. Develop SOP's for weekly visual inspections and quarterly visual and comprehensive inspections of high priority sites.
4. Assessment of new and existing flood control structures to determine changes that can improve water quality.
5. Compliance of Public Services construction projects with UPDES Permit requirements.

Summary of Existing Efforts

Inventory of Facilities
All City facilities have been inventoried, mapped, floor drains verified to drain to sanitary sewer and assessed for priority status.

Assessment of Flood Control Structures
In 2019 the Storm Drain Master Plan was updated. In the Master Plan the entire system was evaluated, inadequacies in the system were found in the conveyance portion of the system. Flood control structures in detention basins are evaluated for improving water quality when they are part of a larger project.

Public Services Construction Projects
Public Services construction projects that disturb more than 1 acre are required to submit a SWPPP and comply with the regulations found in the UPDES Permit

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP, Murray City has chosen the BMP's listed on MCM - 6 Goal Summary Table. 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 A.

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 - 6.

MCM - 6
ONGOING DOCUMENTATION PROCESS
Pollution Prevention/Good Housekeeping – Goal Summary Table

Measurable Goal	Implementation Date	goal achieved	BMP's used	Action items for obtaining goals.
Develop and maintain a written inventory of City operated facilities and storm water controls	January 2014		MSWD	Facility inventory has been completed see Appendix G
Facilities will be categorized into high and low according to high and low priority according to the inventory of onsite pollutants	January 2014			Facility categorization has been completed see Appendix G
SOP's will be developed to protect water quality and reduce discharge of pollutants from high priority sites	January 2014		ET, HP	SOP's to protect water quality in high priority sites written. Training to all
The City will ensure all floor drains from each facility discharge to the sanitary sewer or the appropriate BMP's are in place to minimize pollutant discharge.	January 2014		IM	City facility floor drain have been mapped
SOP's will be developed for routine maintenance activities of sites including: parking lot and street sweeping, dumpsters, vehicle washing, plowing paving, mowing, material storage, etc.	January 2014		ET, HP,SC	SOP's have been written for standard maintenance of all City facilities including high priority facilities
SOP's will be developed for monthly, semi-annual inspections of high priority facilities and annual wet weather discharges and associated documentation	8/2020		IM	High priority facilities inspection SOP's have been written
Structural controls will be evaluated to determine any changes that can improve water	January 2014		ECP	Structural controls are evaluated under Land Disturbance Checklist

quality discharge				
Public construction projects will comply with requirements of private projects pertaining to BMP selection.	January 2014		HP	Public construction projects disturbing over 1 acre will be required to submit a Land Disturbance Permit
Annual training will be provided for all employees whose jobs are likely to impact storm water quality including construction and maintenance positions.	January 2014		ET	City employees with jobs where storm water can be affected will receive annual training

This process should take place continually, or as a minimum, annually.

Murray City Boundary Map

SALT LAKE COUNTY
CONTRACTS & PROCUREMENT

CONTRACT SUMMARY PAGE (INTERNAL USE)

Contract Number: PT20115C Version: 1 Desc: PWE Co-Permittees UPDES
Supplier Name: MURRAY CITY
Comments: PWE-Exempt Interlocal - Participation as Co-Permitees under UPDES Permit # UTS000001 (Jordan Valley Municipalities). Each party to implement and enforce within its own jurisdiction its own responsibilities for complying with the permit requirements. Each party to pay its own costs relating to its own stormwater systems; parites shall reimburse each other for expenses incurred in providing services for each other. See Exhibits A-C. Term through the duration of the Permit to 02/25/2025
Contract Amount: $1.00
Agency Name: PW-Permits & Regulatory
Period Performance from 6/2/2020 to 2/25/2025
Procurement Type: EXI Exempt Interlocal **Reason Code:**
Buyer: XGao

A20.148

County Contract No. PT20115C

D.A. No. _____

INTERLOCAL COOPERATION AGREEMENT
between
SALT LAKE COUNTY
and
THE CITY OF MURRAY
for
Participation as Co-Permittees under UPDES Permit No. UTS000001
(Jordan Valley Municipalities)

***

THIS AGREEMENT is entered into this 3rd ___day of __June 2020____ . by and between SALT LAKE COUNTY (the "COUNTY"), a body corporate and politic of the State of Utah; and THE CITY OF MURRAY (the "CITY"). a municipal corporation of the State of Utah;

WITNESSETH:

WHEREAS, the parties are public agencies and are therefore authorized by the Utah Interlocal Cooperation Act, Section 11-13-1, et seq., UTAH CODE ANN., to enter into agreements with each other for joint or cooperative action; and

WHEREAS. the Environmental Protection Agency has published its " Final Rule" setting for the National Pollutant Discharge Elimination Systems permit application rules and regulations for stormwater discharges to municipal separate storm sewer systems: and

WHEREAS, the State of Utah, through its Department of Environmental Quality, Division of Water Quality, has statutory rule making authority and authority to issue pollutant discharge elimination system permits within the State of Utah pursuant to the rules and regulations of the Utah Pollutant Discharge Elimination System (" UPDES"):

and

WHEREAS, the rules and regulations provide that where more than one public entity owns or operates a municipal separate storm sewer within a geographic area (including adjacent or interconnected municipal separate storm sewer systems), such entities may be co-applicants to the same application and permit renewal; and

WHEREAS, the State of Utah has issued a UPDES permit (Permit No. UTS000001, the "Permit") to the Jordan Valley Municipalities, including the COUNTY and the CITY. A copy of the Permit is attached hereto as "Exhibit A" and incorporated herein; and

WHEREAS, Section 1.5.1.2 of the Permit provides, in addition to the Jordan Valley Municipalities including the COUNTY and the CITY, additional operators of small municipal separate storm sewers within the boundaries of Salt Lake County which sign on during the course of the permit cycle may also be co-permittees under the Permit; and

WHEREAS, the COUNTY and the CITY desire to sign on as co-permittees under the Permit and participate in the Jordan Valley Municipalities UPDES municipal storm water permit program under the terms and conditions set forth in the Permit and in this Agreement; and

WHEREAS, the parties now desire to enter into this Agreement setting forth their present understanding as to their respective responsibilities regarding their participation as co- permittees under the Permit;

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the parties agree as follows:

///

AGREEMENT

1. The COUNTY and the CITY agree to be co-permittees under the existing Permit for the geographic area, which includes all of the municipal separate storm water systems belonging to and operated by the parties to this Agreement as described in Section 1.2.1.2.2 of the Permit in "Exhibit A."

2. As co-permittees, each party agrees to implement and enforce within its own jurisdiction its own responsibilities for complying with the Permit requirements including, but not limited to, those responsibilities and requirements listed in the Co-Permittee Accountability statement. The Co-Permittee Accountability statement is attached hereto as "Exhibit B" and incorporated herein.

3. Each party shall be responsible to pay the costs relating to its own stormwater systems. The parties shall reimburse each other for expenses incurred in providing services for each other as may be agreed by the parties concerning the various tasks and responsibilities required under the Permit. Detailed services to be provided and reimbursement thereof is set forth in the interlocal media agreement, already in place, which is attached hereto as "Exhibit C" and incorporated herein.

4. To the maximum extent possible, the parties agree to assist each other in providing and sharing information, maps, data, drawings, plans and other resources necessary to comply with the Permit requirements. Co-permittees may also collaborate on projects, programs and control measures as may be required in Sections 1.6.1.2, 1.6.1.3 and 4.4 of the Permit.

5. The parties agree the duration of this Agreement shall commence upon entry and shall run concurrent with the duration of the Permit, which expires at midnight

on February 25, 2025. The parties agree that this Agreement shall not apply to any subsequent permits or co- permittees unless the parties agree in writing to extend this Agreement.

6. No separate entity is created by this Agreement; however, to the extent that any administration of this Agreement becomes necessary. the n the Public Works Director or City Engineer of each party, or their designees. shall constitute a joint board for such purpose.

7. In the event any property is jointly acquired and paid for by the municipalities for this undertaking, then it shall be divided as the parties representatives shall agree; or, if no agreement is reached. then it shall be divided according to their respective payments for property; or, if it cannot be practically divided, then the property shall be sold and the proceeds divided according to the parties proportionate share of the purchase of the item of property. If property is purchased at one party s sole expense in connection with this agreement. then the property so purchased shall be and remain the property of the party which purchased it.

8. This Agreement embodies the entire agreement between the parties hereto and cannot be altered except in a written amendment signed by the parties.

[Signatures on Following Page]

IN WITNESS THERE OF, the parties here to execute this Agreement effective as of the day and year first written above.

SALT LAKE COUNTY

By: _____
Mayor or Designee

Departmental Approval:

By: Scott Baird Digitally signed by Scott Baird Date: 2020.06.01 15:13:25 -06'00'
Scott Baird, Public Works Director

Date: _____

Division Approval:

By: Kade Moncur Digitally signed by Kade Moncur Date: 2020.05.29 15:25:47 -06'00'
Kade Moncur, Division Director

Date: 05/29/2020

Approved as to Form:

By: Ryan W. Lambert
Deputy District Attorney

Date: 4/16/2020

THE CITY OF MURRAY

By: _____
Mayor or Designee

ATTEST:

By: Jennifer Kennedy
City of Murray Recorder

Date: 5/8/2020

MURRAY CITY, STATE OF UTAH ★ CORPORATE SEAL ★

Approved as to Form:

By: _____
Murray City Attorney

Date: 5-6-20

Approved as to the availability of funds
Finance and Administration

_____
Budget Officer