

STORM WATER MANAGEMENT PLAN

UPDES Permit # 090029

State Permit # UTR090000

Effective May 2026 – May 2031

Updated 2026

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1. INTRODUCTION

Polluted storm water runoff is commonly conveyed through Municipal Separate Storm Sewer Systems (MS4s) and discharged directly into local streams, rivers, and waterbodies without treatment. Under the Environmental Protection Agency (EPA) Storm Water Phase II Final Rule and state regulatory authority, operators of small MS4s must develop and implement a Storm Water Management Plan (SWMP) designed to reduce pollutant discharges to the Maximum Extent Practicable (MEP) and protect local water quality.

Common storm water pollutants include oil, grease, and heavy metals from roadways; roadway salts and deicing agents; fertilizers and pesticides from landscapes; sediment from construction sites; and trash or debris. When carried into receiving waters, these pollutants impair water supply resources, degrade aquatic ecosystems, and limit public recreational use.

In the State of Utah, the EPA has granted primacy to the Utah Department of Environmental Quality (UDEQ), Division of Water Quality (DWQ), to administer storm water permitting under the Utah Pollutant Discharge Elimination System (UPDES). River Heights City has developed and updated this SWMP to meet the compliance standards set forth in the UPDES General Permit for Discharges from Small MS4s (Permit No. UTR090000).

A. Storm Water Management Plan (SWMP)

1. **A SWMP should:**
   Reduce the discharge of pollutants to the “maximum extent practicable”;
   Satisfy the appropriate water quality requirements of the Utah Water Quality Act; and
2. **The SWMP must include:**
   Six minimum control measures;
   1. Public Education and Outreach on Storm Water Impacts
   2. Public Participation/Involvement
   3. Illicit Discharge Detection and Elimination (IDDE)
   4. Construction Site Storm Water Runoff Control
   5. Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)
   6. Pollution Prevention and Good Housekeeping for Municipal Operations

   To reduce pollutants to the maximum extent practicable (MEP), this Storm Water Management Plan (SWMP) incorporates the following core components:

   - **Best Management Practices (BMPs):** Implemented across all six Minimum Control Measures (MCMs).
   - **Measurable Goals:** Established for each MCM, clearly defining execution schedules, interim milestones, and the frequency of actions.

B. Permit Application and Notice of Intent Renewal

The Utah Pollutant Discharge Elimination System (UPDES) Small MS4 General Permit requires regulated entities to submit a Notice of Intent (NOI) to the Division of Water Quality to obtain permit coverage. The NOI serves as the formal permit application and must be administered according to Part 2.0 of the permit:

- **Electronic Submission:** Both New Applicants and Renewal Permittees must prepare and submit their NOI electronically using the EPA's NPDES eReporting Tool (NeT), unless the Director grants a formal waiver from electronic reporting.
- **Submission Deadlines:** Renewal Permittees must submit their updated NOI within 180 days of the permit's effective date. New Applicants must submit their NOI within 180 days of receiving notification from the Director.
- **SWMP Submittal:** For New Applicants, the NOI submission must explicitly include the submittal of the Storm Water Management Plan (SWMP) document.
- **Cooperation and Shared Responsibility:** Regulated entities are allowed and encouraged to cooperate with neighboring jurisdictions during the application process. A permittee may partner with a Phase I entity or another Phase II entity to share responsibility for SWMP development and implementation, or take advantage of existing local and state programs, provided these shared responsibilities are clearly documented within the SWMP.

C. Permit Requirements

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

Reports

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

- The status of compliance with permit conditions, including an assessment of the appropriateness of the selected BMPs and progress toward achieving the selected measurable goals for each minimum measure;
- Results of any information collected and analyzed, including monitoring data if any;
- A summary of the storm water activities planned for the next reporting cycle;
- A change in any identified BMP or measurable goals for any minimum measure; and
- Notice of relying on another governmental entity to satisfy some of the permit obligations (if applicable).
- Reports for the permitting year of July 1 to June 30 are due the following October 1.

1. **Record Keeping**

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

D. Permit Coverage

Permit coverage is for the dates listed on the cover of the SWMP.

E. 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 the CWA.

2. RIVER HEIGHTS CITY CHARACTERISTICS

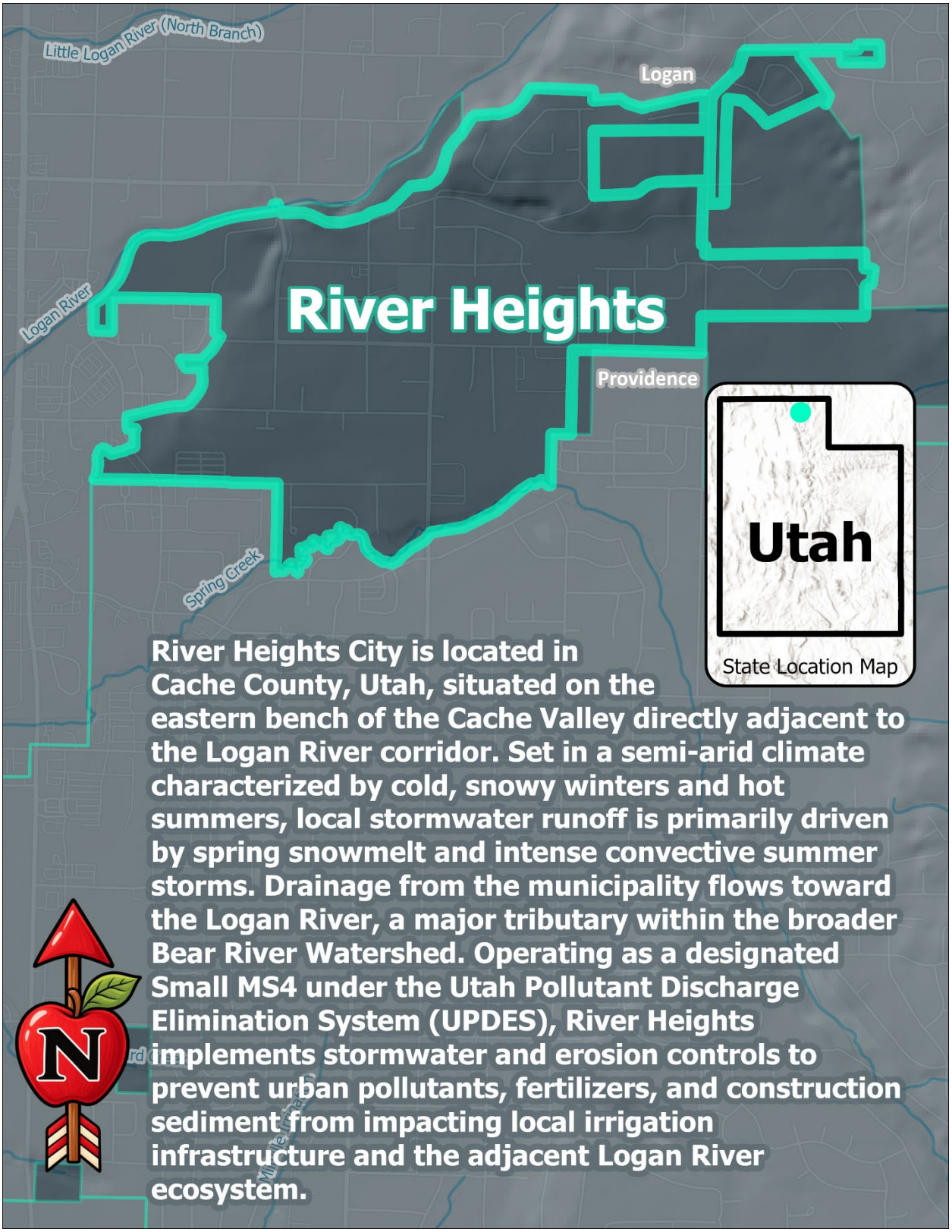
A. General Information

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

Clayten Nelson
520 South 500 East
River Heights, UT 84321
(435) 752-2646

Population:	2,195 (2026)
Size:	.54 sq. miles
Geographic Description:	Located on the southeast border of Logan City and north of Providence City with elevations varying between 4,500 ft. to 6,000 ft.
Receiving Waters:	Spring Creek, Logan River, Cutler Reservoir
Annual Precipitation:	17 inches per year
Type of Community:	A small city with moderate rates of residential growth that are expected to continue for many years.
Latitude:	41.71° N
Longitude:	111.82° W

River Heights City Boundaries Map



River Heights City

B. Storm Drain System

River Heights City operates and maintains a Municipal Separate Storm Sewer System (MS4) comprised primarily of roadside gutters leading to open ditches and canals which then discharge to other natural water ways that eventually carry the water to Cutler Reservoir.

System Characteristics and Receiving Waters:

- **Conveyance & Infiltration:** The majority of storm water runoff within River Heights City is collected via roadside gutters leading to vegetated ditches designed to promote natural infiltration, filtration and attenuation prior to discharge.
- **Receiving Waterbodies:** Storm water that does not infiltrate into the ground ultimately discharges into Cutler Reservoir—via Spring Creek and the Logan River. In some areas, runoff sheet-flows across agricultural land, which serves as a natural vegetative buffer before entering regional tributaries.
- **System Controls & LID Integration:** Primary storm water controls rely on non-structural measures, natural infiltration, and vegetated open conveyances. In accordance with Utah Small MS4 permit requirements, River Heights City emphasizes Low Impact Development (LID) practices, structural post-construction controls, and ongoing maintenance to minimize sediment and nutrient loading to receiving waters.

Inter-Jurisdictional Connections & Boundaries:

The River Heights City MS4 is interconnected with surrounding municipal and county systems, agricultural drainage networks, and regional water conveyance districts. River Heights City coordinates with adjacent incorporated municipalities, canal companies, and neighboring jurisdictions to manage shared outfalls, prevent illicit discharges, and protect downstream water quality.

C. Sanitary Sewer, Water Quality Impairments, and Target Pollutants Onsite Wastewater Systems & Sanitary Services

The majority of River Heights City is served by centralized sanitary sewer infrastructure with very few Onsite Wastewater Treatment Systems (septic systems). Because septic systems have the potential to impact local groundwater and surface water quality—particularly regarding nutrients (Nitrate/Total Nitrogen) and pathogens (*E. coli*)—River Heights City coordinates with the Bear River Health Department to monitor system density, oversee proper installation, and investigate potential failing systems through the City's Illicit Discharge Detection and Elimination (IDDE) program.

Local Water Quality Concerns & Impaired Waterbodies

Section 303(d) of the Clean Water Act requires the identification of waterbodies that do not meet state water quality standards. River Heights City storm water runoff flows to waterbodies and impoundments that are identified on Utah's 303(d) List of Impaired Waters or are subject to approved Total Maximum Daily Loads (TMDLs).

Impaired Surface Waters & TMDL Waterbodies:

- **Rivers & Streams:** Spring Creek and Logan River.
- **Lakes & Reservoirs:** Cutler Reservoir.

River Heights City's Storm Water Management Plan (SWMP) is explicitly tailored to prevent further degradation of these waterbodies and to support pollutant reduction goals established in the *Middle Bear River and Cutler Reservoir TMDL*.

Growth, Conveyance, and Runoff Control Standards

River Heights City is unique among most other Cache County communities. It is surrounded by either other cities or physical barriers that will limit its long-term growth. While there remains vacant land that can be developed, it is limited. The community is nearly all residential with limited possibilities for more commercial development. Continued residential growth in River Heights creates additional impervious surface area, increasing runoff volume and peak discharge rates into historic agricultural canals, ditches, and roadside swales. To mitigate capacity issues and downstream water quality degradation, River Heights City enforces post-construction storm water management standards that require developers to prioritize Low Impact Development (LID) practices, retain or attenuate peak flows via localized retention and detention facilities, and install structural Best Management Practices (BMPs) in accordance with the Utah Small MS4 General Permit.

Target Pollutants

Based on approved TMDL allocations, 303(d) listings, and MS4 land-use activities, River Heights City has established the following priority target pollutants to guide public education, illicit discharge detection, construction site runoff controls, and post-construction storm water management:

Table 2.A.1: Target Pollutants

Priority	Target Pollutant	Primary MS4 Source/Potential Origin
1	Total Phosphorus*	Construction runoff, fertilizers, eroded sediments, organic debris
2	Total Suspended Solids (TSS)*	Construction sites, road traction materials, unpaved surfaces

3	Total Dissolved Solids (TDS)	Winter road salting/deicing, agricultural/soils interaction
4	Nitrate as N	Failing septic systems, excess fertilizer application
5	Total Nitrogen (TN)	Urban fertilizers, animal waste, failing septic systems
6	BOD5	Organic material accumulation, yard waste, urban wash-down
7	E. coli	Animal waste, illicit sanitary cross-connections, failing septic systems
8	Oil & Grease	Vehicles, commercial/industrial impervious surfaces, illicit discharges

*Source: Logan River and Cutler Reservoir Final TMDL

MS4 Scope and Program Alignment

River Heights City's SWMP focuses strictly on activities, discharges, and development within the City's designated MS4 jurisdictional boundaries. The City implements cost-effective BMPs across all six Minimum Control Measures (MCMs) to control pollutants at the source, protect designated water uses, and maintain compliance with Utah DWQ Phase II Small MS4 Permit requirements.

D. Storm Water Steering Committee & Governance

River Heights City maintains a **Storm Water Steering Committee** originally established to guide Best Management Practice (BMP) selection, SWMP implementation, and inter-departmental policy alignment. The Steering Committee meets regularly to review program performance, update standard operating procedures (SOPs), ensure enforcement consistency, and prepare the annual report for the Utah Division of Water Quality. A list of the Steering Committee members is found in Table 2.B.1.

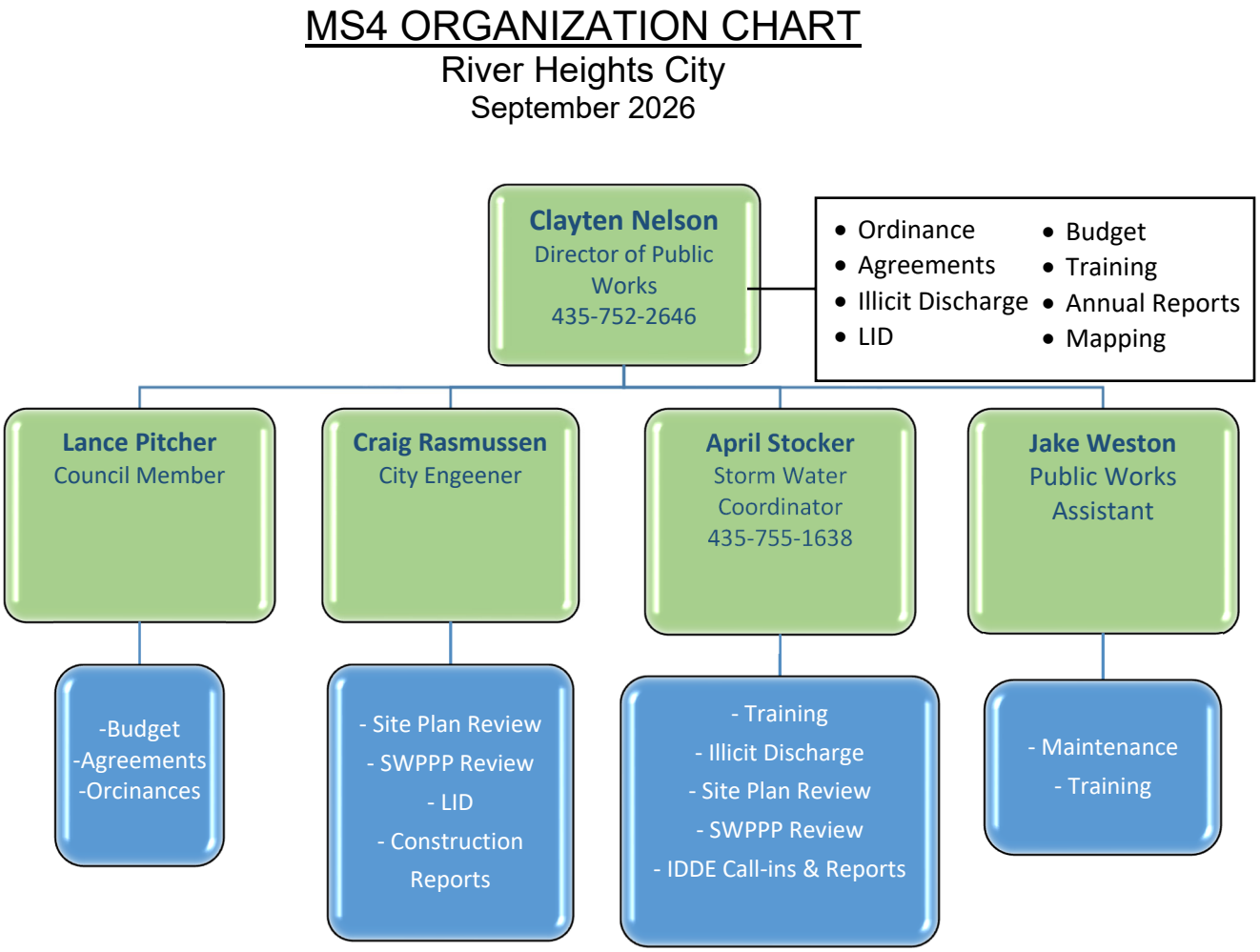
Table 2.B.1: River Heights Storm Water Steering Committee

Name	Department / Role	Primary SWMP Responsibilities
Clayten Nelson	Public Works Director	Program Administration, GIS/Mapping Oversight, Ordinance Enforcement
Lance Pitcher	Council Member / Streets, Storm water	Capital Budgeting, Inter-agency Agreements
Craig Rasmussen	City Engineer	Development Review, Post-Construction LID Standards, SWPPP Reviews
April Stocker	Storm water Inspector	Construction Inspections, SWPPP Review

Jake Weston	Public Works Assistant	Good Housekeeping, Municipal Maintenance

MS4 Organizational Structure & Departmental Responsibilities

Under the direction of the Steering Committee, MS4 operational duties are distributed across key City departments to ensure comprehensive coverage of all Phase II Minimum Control Measures (MCMs):



Departmental Roles & MCM Alignment

- **Public Works & Program Administration**
  - Budget allocation and SWMP funding management
  - Annually document and analyze capital/O&M expenditures and staff resource allocation
  - Employee training coordination (MCM 6)
  - Annual reporting and DWQ permit compliance tracking
  - Storm drain system mapping and GIS database management (MCM 3)

- **Planning & Zoning**
  - Zoning and land-use plan reviews
- **Engineering & Site Plan Review**
  - Development site plan reviews for storm water compliance
  - Construction SWPPP review and approval (MCM 4)
  - Post-construction structural BMP and LID plan evaluation (MCM 5)
  - Active construction site monitoring and inspection tracking
  - Encroachment permit approvals and land disturbance permitting
- **Storm Water Inspection & Field Operations**
  - Construction SWPPP review and approval (MCM 4)
  - Routine & active construction site SWPPP inspections (MCM 4)
  - Post-construction BMP structural inspections (MCM 5)
  - High-priority municipal facility inspections & SWPPP auditing (MCM 6)
  - IDDE screening, outfall monitoring, and hotline call-in investigation (MCM 3)
  - Staff operational SOP training (Good Housekeeping/Pollution Prevention)
  - Public education, outreach campaigns, and public involvement activities (MCM 1 & MCM 2)
- **Public Works Staff**
  - Infrastructure operation, cleaning, and preventative maintenance (MCM 6)
  - Secondary IDDE field surveillance and spill call-in reporting (MCM 3)
  - Staff operational SOP training (Good Housekeeping/Pollution Prevention)
  - Vegetation management and roadside swale/ditch maintenance

2. MINIMUM CONTROL MEASURES (MCM)

A. MCM 1 – Public Education and Outreach on Storm Water Impacts: UPDES Permit Section – 4.2.1

1. Program Overview

River Heights City implements a multimedia public education and outreach program designed to promote behavioral changes that reduce storm water pollution and prevent illicit discharges. In accordance with UPDES Permit Section 4.2.1, educational efforts must target specific pollutants, pollutant sources, and water quality impacts, addressing four primary target audiences:

1. **Residents (General Public)**
2. **Institutions, Commercial, and Industrial Facilities**
3. **Construction Engineers, Contractors, Developers, Development Review Staff, and Land Use Planners**
4. **MS4-Owned and Operated Facilities / Municipal Staff**

2. Summary of Existing Infrastructure & Ongoing Programs

1. **Solid Waste & Recycling Outreach (General Public & Commercial/Industrial):** River Heights City partners with contracted waste haulers and utilizes Logan City Environmental Department to deliver targeted multimedia outreach covering waste reduction, recycling best practices, dumpster management, and proper disposal of household and commercial waste.

- **Educational Objective & Specific Messages:** Educate residents and commercial operations on avoiding illicit discharges and preventing litter/debris from entering catch basins. Messages emphasize keeping dumpster lids closed, sweeping parking lots, preventing runoff, and understanding the water quality impacts of improper waste disposal (Permit Parts 4.2.1.2 & 4.2.1.3.1).
- **Methods & Delivery:** Online resource guides, social media posts, landfill drop-off flyers, and print collateral distributed to residential and commercial customers.
- **Evaluation & Target Goals:** Documented annually by tracking total webpage visits, educational flyers distributed, and changes in improper dumping incident reports logged in the MS4 database to evaluate audience awareness and behavioral shift.
- **BMP Rationale:** Selected because trash, gross solids, and dumpster leachate represent a primary non-point source pollutant load in urbanized receiving waters.

2. **Household Hazardous Waste (HHW) & Chemical Disposal (General Public, Commercial, & Industrial):** River Heights City promotes and provides public education regarding the dedicated Household Hazardous Waste (HHW) collection facility located at the Logan Landfill.
    - **Educational Objective & Specific Messages:** Target residents, automotive businesses, and commercial facilities with focused messages on the proper collection, storage, and disposal of used motor oils, antifreeze, solvents, fuels, paints, electronic waste, and swimming pool discharge water. Messages highlight illicit discharge prohibitions, local environmental stewardship, and water quality protection (Permit Parts 4.2.1.2.1 & 4.2.1.3.1).
    - **Methods & Delivery:** Utility bill inserts, City website landing pages, instructional posters at collection drop-off sites, and targeted digital campaigns.
    - **Evaluation & Target Goals:** Evaluated annually by measuring total tonnage/gallons of HHW, electronics, and used oil collected at the facility, along with tracking annual attendance numbers at drop-off events to demonstrate public participation.
    - **BMP Rationale:** Directly mitigates high-risk chemical pollutants, toxic heavy metals, and automotive fluids from entering priority stream segments and groundwater sources.
3. **Green Waste, Composting & Outdoor Activity Management (General Public & Commercial Landscapers):** River Heights City provides educational guidance on curbside green waste collection, regional drop-off locations, and organic waste management.
    - **Educational Objective & Specific Messages:** Educate homeowners, HOAs, institutional facilities, and commercial lawn care providers on proper lawn maintenance, appropriate application and reduction of fertilizers, herbicides,

and pesticides, and proper management of lawn clippings and leaf litter. Promotes low-impact development (LID) practices including the benefits of onsite infiltration of storm water (Permit Parts 4.2.1.2.1 & 4.2.1.3.1).

- **Methods & Delivery:** Seasonal web articles, educational flyers provided during commercial business licensing, social media campaigns, and educational materials distributed to local nurseries and landscaping contractors.
- **Evaluation & Target Goals:** Evaluated annually through post-campaign online surveys measuring public understanding of fertilizer/herbicide impacts, green waste collection volume metrics, and reduced seasonal nutrient/organic loadings in local waterbodies.
- **BMP Rationale:** Specifically targets excess nitrogen, phosphorus, and organic matter responsible for nutrient enrichment and oxygen depletion in receiving streams.

4. **Regional Radio & Multimedia Coalitions (General Public & Broad Community):** In partnership with the Cache County Storm Water Coalition, the City executes bi-annual multimedia campaigns across regional radio stations, local digital outlets, and broadcast media.
    - **Educational Objective & Specific Messages:** Broadcast focused, seasonal pollution prevention messages reaching the public during key runoff windows (Spring thaw and Fall leaf drop). Core messaging targets pet waste management, automotive maintenance/car washing runoff, septic system maintenance, pool draining procedures, and deicing/salt application precautions (Permit Part 4.2.1.2.1).
    - **Methods & Delivery:** Spring and Fall radio spot airings, regional digital advertising banners, and coalition social media distribution.
    - **Evaluation & Target Goals:** Documented annually by logging airtime schedules, estimated regional listener reach/impressions, and tracking pre- and post-campaign survey data conducted by the Coalition to assess overall knowledge gain and community behavior change.
    - **BMP Rationale:** Leveraging a regional coalition pool allows for broad multimedia reach across municipal and county lines, ensuring consistent messaging to mobile populations at a lower cost.
5. **Contractor, Developer & Professional Training (Engineers, Contractors, Developers, Review Staff & Planners):** River Heights City conducts structured annual training sessions tailored specifically to land development professionals, construction operators, development review staff, and land use planners.
    - **Educational Objective & Specific Messages:** Provide technical instruction on developing, reading, and implementing compliant Storm Water Pollution Prevention Plans (SWPPPs), selecting and maintaining appropriate erosion and sediment control BMPs, executing post-construction storm water management,

and understanding local permit requirements and active site inspection protocols (Permit Part 4.2.1.4).

- **Methods & Delivery:** In-person workshop sessions, virtual training webinars, distributed local SWPPP guidance manuals, and pre-construction kickoff review meetings.
- **Evaluation & Target Goals:** Tracked and documented annually using sign-in logs recording dates, topics covered, target roles, and total number of professionals educated (engineers, contractors, planners). Success is evaluated by monitoring the reduction in first-time SWPPP non-compliance citations issued during routine site inspections.
- **BMP Rationale:** Directly addresses high-volume sediment runoff and construction-related pollutants at the source before land disturbance begins.

3. Best Management Practices

River Heights City has implemented specific BMPs to meet the permit requirements for MCM 1. Details regarding BMP descriptions, applicability, implementation schedules, and operational limitations are detailed in Appendix A.

- **BMP 1.1:** Public Education Materials (Distributing print and digital media detailing prohibitions on illicit discharges, proper hazardous waste disposal, pet waste management, lawn chemical reduction, and automotive maintenance)
- **BMP 1.2:** Multimedia & Regional Advertising Campaigns (Partnering with the Cache County Coalition to run seasonal radio, social media, and digital campaigns targeting peak risks like leaf disposal, fertilizer use, and deicing salt)
- **BMP 1.3:** Internal Staff & Municipal Employee Training (Training employees, inspectors, public works staff, and development review personnel on UPDES permit compliance, illicit discharge identification, and good housekeeping)

4. Measurable Goals & Public Education Implementation Schedule

To more fully realize the benefit of the BMP the city has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Public Education and Outreach. The following table includes the goals for MCM 1.

- **Target Pollutant(s):** Septic Effluent, Pet Waste, Yard Care Chemicals (Fertilizers/Pesticides), Pool Water/Chlorine, Sediment, Deicing Materials, Litter, Boat Waste, Used Oil, Nitrogen, and Phosphorus.
- **Target Audience(s):** General Public, Residents, Commercial & Industrial Facilities, Contractors, Developers, Builders, MS4 Staff, Engineers, Planners, and Recreational Users.
- **Responsible Department:** Public Works / Cache County Coalition

Table 3.A.1: MCM 1 – Public Education and Outreach on Storm Water Impacts

MCM / Permit Ref.	Measurable Goal & Action (Associated BMP)	Responsible Dept.	Schedule / Frequency	Measure of Success (Effectiveness)	Rationale / Compliance Note	Effect. Year
1.1 (4.2.1.1)	**General Public / Resident Radio Campaign:** Air seasonal radio ads via Cache County Storm Water Coalition educating on; seasonal runoff risks & illicit discharges.	Public Works / Cache County Coalition	Semi-Annually (30 consecutive days in Spring and Fall)	Ads aired minimum 2x/day during campaigns. Radio station affidavits of performance/broadcast logs retained. Estimated listener reach/impressions reported annually.	Meets permit requirement to target the public and residents with education on the impacts of illicit discharges and storm water pollution.	2026/2027
1.2 (4.2.1.2)	**"Resident Resources" Web & Media:** Maintain "Resident Resources" web page & post seasonal media covering septic care, pet waste, lawn care, & pool draining.	Public Works	Ongoing / Seasonal	Annual website pageviews for residential storm water resources tracked and quantified. Radio and social media postdate records.	Fulfills requirement to educate targeted audiences on specific localized pollutants (septic, pet waste, yard care, pool water).	2027
1.3 (4.2.1.3)	**Commercial & Industrial Outreach:** Provide digital guides & distribute BMP materials covering dumpsters, deicing, and material storage during routine inspections or business licensing.	Public Works	Ongoing / Annually	Total count of commercial/industrial facilities provided with educational guides or links logged annually.	Satisfies requirement to target institutions, industrial, and commercial facilities with educational materials regarding site-specific BMPs.	2027
1.4 (4.2.1.4)	**Contractor & Developer Education:** Provide construction storm water guidance packets to reduce adverse development and land disturbance impacts.	Storm water Inspector	Ongoing (Distributed with the Storm Water Permit)	Total Storm Water Permits issued containing SWPPP and site control guidance packets logged annually.	Meets mandate to provide targeted education to developers, contractors, and builders on storm water controls and construction impacts.	2027
1.5 (4.2.1.5)	**MS4 Field Staff Training:** Conduct mandatory annual/new-hire training for field staff covering IDDE, material storage, facility housekeeping, and deicing.	Public Works	Annually / Upon Hire	Signed employee training logs retained, documenting attendance rosters, specific topics covered, and training dates.	Complies with requirement to provide targeted ongoing education to MS4 personnel regarding illicit discharges, good housekeeping, and pollutant mitigation.	2027

1.6 (4.2.1.6)	**Engineer & Planner LID Workshop:** Perform an annual inter-departmental training focusing on Low Impact Development (LID), green infrastructure, and post-construction BMPs.	Public Works	Annually	Annual meeting date, attendance roster, and specific policy updates or design standards reviewed are documented.	Meets requirement to educate engineers, planners, and reviewers on LID practices, green infrastructure, and post-construction storm water controls.	2027
1.7 (4.2.1.7)	**Public Education Effectiveness Evaluation:** Evaluate public education program effectiveness using evidence-based methods (e.g., public surveys, HHW drop-off volumes, hotline report trends).	Public Works	Annually	Evaluation metrics, survey responses, and changes in behavior (e.g., HHW volume shifts) summarized in the October UPDES Annual Report.	Explicitly fulfills permit requirement to evaluate the effectiveness of the public education program using qualitative and quantitative metrics.	2027
1.8 (4.2.1.8)	**Written Rationale Documentation:** Maintain a written rationale in the SWMP (Appendix A) justifying the selected educational outreach tools based on local land uses and target pollutants.	Public Works	Annually / As SWMP is Updated	Updated BMP rationale documented in SWMP text; modifications to the program based on evaluation reported in Annual Report.	Satisfies requirement to document and maintain a written rationale for the selected target audiences, activities, and assessment methods.	2027
1.9	**Recreational User Signage:** Maintain storm water awareness signage and trash receptacles at high-traffic parks and ball fields.	Public Works	Annual Inspections	Sign and receptacle condition inspected and logged quarterly; damaged signage or bins repaired or replaced as needed	Supports public education goals by targeting recreational users and mitigating targeted pollutants at high-risk water bodies.	2027

B. MCM 2 – Public Participation / Involvement: UPDES Permit Section – 4.2.2

1. Program Overview

Involving the public is vital to the success of River Heights City's Storm Water Management Plan (SWMP). Engaging local stakeholders, fosters community support, increases public awareness of water quality issues, and encourages compliance with storm water regulations.

In accordance with Permit Section 4.2.2, River Heights City provides opportunities for public involvement in the development, implementation, and periodic review of the SWMP. Key target stakeholder groups include:

- Residences
- Commercial and Industrial Businesses
- Trade Associations and Construction Developers
- Environmental Groups
- Homeowners Associations (HOAs)
- Educational Organizations and School Districts

Public Notice & SWMP Availability

River Heights City complies with state and local public notice requirements for all public meetings where the SWMP is discussed or acted upon.

To ensure public participation, the City maintains the current SWMP on the River Heights City website, making it accessible for public review and comment year-round. Prior to formal submission to the Utah Division of Water Quality (DWQ) or approval by the River Heights City Public Works Director, the draft SWMP is posted online to provide a formal public review period. Comments received from the public are logged, reviewed annually by the Public Works Director, and incorporated into SWMP updates as appropriate.

2. Summary of Existing Infrastructure & Ongoing Programs

Storm Water Advisory / Steering Committee: Formed in 2002, the committee consists of City employees, council members and local stakeholders who actively participate in selecting Best Management Practices (BMPs), assessing program effectiveness, and updating the SWMP. *(Refer to Section 2.D.1 for current committee membership).*

County-Wide Recycling & Waste Reduction Program: Waste Management is contracted to provide collection and disposal services. The program reduces solid waste and proper disposal options for household hazardous waste (HHW) to prevent storm water contamination.

- *Accepted Materials (Regional Landfill):* Cardboard, newspaper, mixed paper, aluminum cans, tin/steel cans, plastic containers (#1 & #2), green waste, scrap aluminum, ferrous metals, tires, used oil, oil filters, antifreeze, carpet padding, batteries, and wooden pallets.
- *Drop-off Locations:* Drop sites located throughout the county facilitate community-wide recycling of paper, metals, plastics, and green waste.

Green Waste Collection & Composting: Curbside green waste collection and regional drop-off bins are available across the County. Green waste delivered to the regional facility is composted

or processed into wood chips and firewood, reducing organic load and nutrient runoff in regional waterways.

3. Best Management Practices

River Heights City has implemented specific BMPs to meet the permit requirements for MCM 2. Details regarding BMP descriptions, applicability, implementation schedules, and operational limitations are detailed in Appendix A.

- **BMP 2.1:** Community Storm Water Hotline & Public Reporting System (24/7 hotline and online complaint intake portal for illicit discharges, spills, and general storm water concerns)
- **BMP 2.2:** Public SWMP Review & Public Notice Comment Process (Perpetual online hosting of the SWMP, digital public comment intake, 4-day public notice prior to Council meetings, and 10-day public notice for public hearings,)
- **BMP 2.3:** Volunteer Cleanups & Community Event Stewardship (Promoting and supporting stream cleanups, Household Hazardous Waste collection days, and green waste recycling events)

4. Measurable Goals & Public Participation/Involvement Implementation Schedule

To more fully realize the benefit of the BMP the city has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Public Participation and Involvement. The following table summarizes the goals for MCM 2.

- **Target Pollutant(s):** Trash/Litter, Household Hazardous Waste (HHW), Organic/Green Waste, and Illicit Discharges.
- **Target Audience(s):** General Public, Stakeholders, Residents, Youth Organizations, and Environmental Groups.
- **Responsible Department:** Administration / Public Works

Table 3.B.1: MCM 2 – Public Participation / Involvement

MCM / Permit Ref.	Measurable Goal & Action (Associated BMP)	Responsible Dept.	Schedule / Frequency	Measure of Success (Effectiveness)	Rationale / Compliance Note	Effect. Year
2.1 (4.2.2.1)	**Public Decision-Making Input & Notice Policy:** Adopt and maintain a policy/program allowing public and stakeholder input during SWMP decision-making. Provide public notice at least 4 days prior to City Council	Administration / Public Works	Annually / As Needed (Min. 4-day advance notice)	Public notice posted on website and local outlets; public comments received and documented in SWMP log.	Ensures compliance with 4.2.2.1 requiring formal public notification and stakeholder opportunities to participate in SWMP development/updates.	2027

	meetings (10 days for Public Hearings) where SWMP updates or major decisions are acted upon. *(BMP 2.2)*					
2.2 (4.2.2.2)	**Draft SWMP Public Review & Intake:** Post the draft digital SWMP document on the City website with an active public comment portal for a minimum 30-day review period prior to permit submittal or re-issuance. *(BMP 2.2)*	Public Works	Prior to Permit Submittal / Annually / As Needed	Draft SWMP accessible online; public comment intake portal active; comment response summary compiled.	Satisfies permit part 4.2.2.2 mandating public availability and comment mechanisms for draft SWMP updates prior to official submission.	2027
2.3 *(4.2.2.3)*	**Website SWMP Hosting & Contact Info:** Post the latest version of the SWMP on the City website within 180 days from the effective date of the Permit, and continuously host it along with designated contact details (name, phone, email) for public storm water comments. (BMP 2.2)	Public Works	Continuous (Website) / Annual Contact Review (by Oct 1)	Current SWMP accessible 24/7 online; designated contact details verified, active, and updated annually.	Direct compliance with 4.2.2.3 requiring perpetual online SWMP access and designated public contact information throughout the permit term.	2027
2.4 *(4.2.2.4)*	**Community Hotline & Spill Reporting:** Maintain a 24/7 hotline and online form for public reporting of illicit discharges and storm water concerns. Investigate 100% of reported complaints within 72 hours. *(BMP 2.1)*	Public Works	Continuous (24/7 Intake; 72-hr Response)	Hotline operational; incident log updated with intake time, response time, findings, and resolutions.	Fulfills public reporting involvement requirements and coordinates directly with IDDE complaint response protocols.	2027
2.5 *(4.2.2.5)*	**Volunteer Public Involvement Events:** Promote, support, and sponsor	Public Works	Semi-Annually (Spring & Fall)	Event participation records maintained; total	Engages local stakeholders and residents (targeting litter, nutrients, and	2027

	volunteer community involvement events (e.g., stream cleanups, HHW collection days, green waste recycling) targeting residents, youth, and environmental groups. *(BMP 2.3)*			weight/volume of trash, HHW, or organic waste diverted from storm drains documented.	HHW) through active hands-on stewardship and waste reduction events.	

3. MCM 3 – Illicit Discharge Detection and Elimination (IDDE): UPDES Permit Section – 4.2.3

1. Program Overview

An illicit discharge is defined as any non-storm water discharge entering the Municipal Separate Storm Sewer System (MS4) and discharging into receiving waters of the State, excluding allowable non-storm water flows (e.g., firefighting activities, permitted discharges).

The objective of River Heights City's IDDE program is to systematically detect, trace, characterize, and eliminate non-storm water connections, illegal dumping, and hazardous spills within the city's storm drain infrastructure. Under Section 4.2.3 of the 2026 UPDES Small MS4 Permit, River Heights City fulfills this objective through four mandatory program components:

1. **Infrastructure Mapping (4.2.3.1):** Maintaining a GIS map of all MS4 outfalls, pipes, structures, treatment facilities, and receiving waters.
2. **Regulatory Authority (4.2.3.2):** Enforcing local ordinances and an Escalating Enforcement Response Plan (ERP) that explicitly prohibit non-storm water discharges.
3. **Written IDDE Plan & Standard Operating Procedures (4.2.3.3 / 4.2.3.4):** Executing priority area inspections, dry-weather screening, spill response, public intake, and formal SOPs for tracing, characterizing, and ceasing illicit flows.
4. **IDDE Documentation & Recordkeeping (4.2.3.5):** Maintaining comprehensive written logs and records of all IDDE investigations, dry-weather screenings, spill response actions, enforcement actions, staff training rosters, and annual program evaluations for 5 years.
5. **Training & Outreach (4.2.3.5 / 4.2.3.6):** Educating City personnel, field inspectors, and the public on illicit discharge identification, household hazardous waste (HHW) management, and proper disposal.

2. Summary of Existing Infrastructure & Ongoing Programs

- **GIS Infrastructure & Outfall Mapping:** River Heights City maintains an up-to-date GIS storm water mapping layer that includes, City-owned storm drain pipes, catch basins, manholes, and detention/retention basins.

  - All MS4 outfall locations discharging to receiving waters of the State, complete with unique ID tags and priority classifications.
  - Locations of potential hazardous material storage, industrial facilities, and high-risk commercial areas to guide prioritized outfall screening.
- **Legal Authority & Ordinances**: River Heights City enforces storm water and environmental protection ordinances that explicitly prohibit non-storm water discharges and illegal dumping into the MS4. These regulations give the City legal authority to inspect private properties, issue cease-and-desist orders, require remediation, and cost-recover cleanup expenses from responsible parties following hazardous spills or illicit discharges
- **Spill Response & Emergency Dispatch:** Emergency hazardous spills and acute illicit discharge events are reported through 911 Dispatch. Incident notifications are logged and coordinated among:
  - Logan City Fire Department / Regional HazMat Response Team
  - Bear River Health Department (BRHD)
  - River Heights City Public Works
  - Utah Division of Water Quality (DWQ) Spills Line (for reportable quantities)
- **Common Local Illicit Discharge Assessment:** Historic assessments indicate that permanent sanitary sewer cross-connections are rare within the city. The most prevalent non-storm water discharge risks include:
  - Failing septic system / sanitary sewer overflows and agricultural runoff.
  - Spills and fluid releases from traffic accidents along major transit corridors (e.g., US-89/91).
  - Uncontained concrete washout water and construction vehicle wash downs.
  - Improper disposal of household hazardous waste (HHW), used oil, and automotive fluids into drainage ditches and roadside swales.
- **Used Oil & Household Hazardous Waste (HHW) Collection:** River Heights City partners with the Utah Department of Environmental Quality (UDEQ) Division of Waste Management and Radiation Control and the Logan City Environmental Division to promote designated Used Oil Collection Centers (UOCCs) and permanent HHW drop-off facilities.

3. Best Management Practices

To meet the goals and requirements of the 2026 UPDES Small MS4 Permit, River Heights City has adopted specific Best Management Practices (BMPs) designed to locate, identify, trace, and eliminate non-storm water discharges into the storm drain system. Appendix A details each BMP's full description, operational procedures, applicability, limitations, and effectiveness. River Heights City utilizes the following primary BMPs for MCM 3 implementation:

- **BMP 3.1:** Storm Sewer System Mapping & Infrastructure Inventory (Outfalls, Receiving Waters, High-Risk Storage Mapping)
- **BMP 3.2:** Regulatory Mechanism & Escalating Enforcement Strategy (IDDE Ordinance Development & Enforcement)
- **BMP 3.3:** Community Hotline & Illicit Discharge Reporting System

- **BMP 3.4:** IDDE Inspection, Dry-Weather Screening & Tracing Procedures
- **BMP 3.5:** Targeted Education, Public Outreach & Household Hazardous Waste (HHW) Management
- **BMP 3.6:** Employee Training & Municipal Staff Spill Protocols

4. Measurable Goals & IDDE Implementation Schedule

To more fully realize the benefit of the BMP the city has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for IDDE.

The following table includes the goals for MCM 3.

- **Target Pollutant(s):** Wastewater, Septic Effluent, Used Oil, Chemicals, Concrete Washout, Trash, Nutrients
  - **Target Audience(s):** City Staff, Inspectors, Residents, Commercial Businesses, Construction Contractors, Septic Haulers
  - **Responsible Department:** Public Works / GIS / Environmental Health / City Attorney

Table 3.C.1: MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

MCM / Permit Ref.	Measurable Goal & Action (Associated BMP)	Responsible Dept.	Schedule / Frequency	Measure of Success (Effectiveness)	Rationale / Compliance Note	Effect. Year
3.1 (4.2.3.1)	**MS4 Infrastructure Mapping:** Maintain and update GIS map of all outfalls, pipes, structures, treatment basins, receiving state waters, and priority land-use sites. *(BMP 3.2)*	GIS Division / Public Works	Continuous / Annual update by Oct 1	Map updated with 100% of new outfalls and infrastructure; layer available to field inspectors.	Required mapping of storm drain outfalls and receiving waters under 2026 permit part 4.2.3.1.	2027
3.2 (4.2.3.2)	**IDDE Regulatory Mechanism & ERP:** Enforce local storm water ordinance prohibiting non-storm water discharges with an Escalating Enforcement Response Plan (ERP). *(BMP 3.1)*	City Attorney / Public Works	Ongoing / Annual Review	100% of verified illicit discharges subjected to ERP sanctions; enforcement log maintained.	Mandatory legal authority required to inspect private property and enforce cessation.	2027
3.3 (4.2.3.3)	**Written IDDE Plan & Priority Screening:** Execute written IDDE plan including dry-weather screening on priority outfalls and high-risk commercial/industrial land uses. *(BMP 3.3)*	Public Works	Annually (Min. 20% outfalls/yr; 100% per 5-yr cycle)	Dry-weather screening logs completed; water samples tested if flow is detected; UPDES notifications sent in 30 days.	Verifies outfall locations and detects chronic unpermitted commercial/industrial flows.	2027
3.4 (4.2.3.4)	**Hotline & Complaint Intake:** Maintain 24/7 hotline and web portal for public spill	Public Works Staff	Continuous (24/7 Intake; 72-	Incident log populated with intake time,	Establishes mandatory 72-hour investigation	2027

	reporting. Investigate 100% of reported complaints within 72 hours. *(BMP 3.4)*		hr response)	response time, location, source trace, and resolution.	window for public illicit discharge reports.	
3.5 (4.2.3.4.2)	**Spill Characterization & Logging:** Execute SOPs for characterizing reported discharges. Record intake date, investigation date, location, description, and removal verification date. *(BMP 3.3 & 3.4)*	Public Works Staff	Continuous (Per Incident)	Complete inspection report on file for 100% of incidents capturing all permit-required data fields.	Mandates complete standardized data logging for all reported or discovered spills.	2027
3.6 (4.2.3.4.3)	**Discharge Cessation & Containment:** Require immediate cessation of detected spills. City must initiate containment/cleanup if responsible party is unknown. *(BMP 3.3 & 3.4)*	Public Works	Immediate / Contain within 24 hrs	Active spills contained; follow-up verification site visits documented; cost recovery initiated where applicable.	2026 permit mandate: MS4 must act to stop discharge even if the discharger is unidentified.	2027
3.7 (4.2.3.6)	**Employee Training & New Hires:** Train all public works crews, inspectors, and office intake staff annually on IDDE SOPs and spill tracing. Train new hires within 60 days. *(BMP 3.6)*	Public Works	Annually / Within 60 days of hire	Signed training attendance rosters, agendas, and new-hire onboarding records archived for DWQ audit.	Ensures municipal personnel recognize, report, and trace illicit flows during routine operations.	2027
3.8 (4.2.3.6)	**Public IDDE Education & HHW Services:** Inform public and businesses of IDDE hazards. Promote UOCC used oil centers and permanent HHW collection facilities. *(BMP 3.5)*	Public Works	Ongoing / 2 HHW Events per Year	HHW event collection metrics (gallons of oil/hazardous waste diverted); website contact links maintained.	Prevents improper roadside dumping of household hazardous waste, used oil, and chemicals.	2027
3.9 (4.2.3.5)	**Program Evaluation & Centralized Records:** Maintain a database tracking all spills, screenings, and enforcement. Retain all IDDE logs and training records for permit term. *(BMP 3.3)*	Public Works Staff	Continuous / Annual Report Submittal	Centralized digital database updated; annual IDDE summary included in DWQ Annual Report.	Fulfills 2026 mandatory recordkeeping and program evaluation requirements.	2027

4. MCM 4 – Construction Site Storm Water Runoff Control: UPDES Permit Section – 4.2.4

1. Program Overview

River Heights City implements and enforces a construction site storm water runoff control program to reduce pollutants in storm water runoff entering the MS4 from all qualifying construction sites (land disturbances greater than 1 acre, or less than 1 acre if part of a common plan of development). This program applies universally to private developments and public projects proposed by City departments and agencies.

Under Section 4.2.4 of the UPDES Small MS4 Permit, River Heights City satisfies the minimum performance measures through six core program elements:

1. **Regulatory Authority (4.2.4.1):** Enforcing an ordinance or regulatory mechanism that mandates compliance with current UPDES Construction Storm Water Permits, requires operators to maintain SWPPPs and online EPA Net-CGP coverage, and provides qualified City inspectors right-of-entry onto private properties.

2. **Pre-Construction SWPPP Plan Review (4.2.4.3.1):** Conducting formal engineering and SWPPP reviews prior to land disturbance permit approval.

3. **Written Enforcement Strategy (4.2.4.2):** Executing a Construction Oversight Enforcement SOP that outlines escalating enforcement, published appeals procedures, notification protocols, clear authority designations, and centralized enforcement tracking.
4. **Priority Site Identification (4.2.4.3.3):** Establishing criteria to identify priority (high-risk) construction sites based on slope, soil erodibility, size, and proximity to sensitive waters. Established criteria list is as follows:
    - Any site that discharges to a high quality or nutrient impaired water body shall be classified as a priority site.
    - Any other site with a discharge that has direct hydrologic connectivity, where sediment from the site could reasonably reach a storm drain, watercourse, canal, pond, wetland, or other receiving water due to a lack of effective sediment controls. For the purposes of this definition, discharges that pass through a retention basin or pond are not considered to have a direct connection.
    - Any site with existing or proposed slopes exceeding 15% in combination with sandy or silty soils, or any other soil types determined by the City Engineer or their authorized representative to possess a high susceptibility to erosion
    - Any site with a history of more than two enforcement actions may be deemed a high priority site.

5. **Pre-Construction SWPPP Review & Meetings (4.2.4.3):** Implementing a pre-construction SWPPP review checklist, conducting mandatory pre-construction meetings

(covering site design, operations, BMPs, post-construction controls, and enforcement policies), establishing public comment procedures, and determining priority site status

6. **Construction Oversight Inspection Program (4.2.4.4):** Maintaining an Inspection SOP that establishes qualified inspector duties, conflict-of-interest prohibitions (SWPPP preparers cannot conduct MS4 oversight inspections for the same site), risk-tiered and phase-based inspection schedules (monthly, reduced frequencies for adequate compliance history/frozen/arid conditions, and priority inspections), electronic oversight inspection protocols (with 48-hour advance notice for justified on-site visits), follow-up enforcement tracking, and final stabilization verification prior to closeout.

7. **Staff & Contractor Training (4.2.4.5):** Providing comprehensive initial training for new hires/contractors within 60 days of hire/contracting, annual refresher training on permitting, plan review, inspections, and enforcement, and maintaining full training logs.

8. **Record Retention (4.2.4.6):** Maintaining complete records of site plan reviews, SWPPP checklists, oversight inspections, verbal/written warnings, NOVs, and Stop Work Orders for a minimum of 5 years or until project completion, whichever is longer.

2. Summary of Existing Infrastructure & Ongoing Programs

- **Regulatory Mechanism & Operator Coverage:** River Heights City enforces storm water regulations requiring all qualifying construction activities to obtain and maintain UPDES Construction General Permit (CGP) coverage via EPA Net-CGP and implement a compliant SWPPP. Local ordinances grant qualified inspectors full right-of-entry to inspect storm water BMPs on private property.
- **Pre-Construction Review & Public Input:** City plan reviewers utilize an updated SWPPP review checklist during pre-construction reviews and hold mandatory pre-construction meetings with site operators prior to land disturbance. Public comments and concerns are received via the city website portal and hotline.
- **Inspection Workflows & Conflict-of-Interest Controls:** Inspections are conducted by qualified personnel using State-approved Construction Oversight Inspection Forms. Per permit requirements, third-party contractors hired to prepare a project's SWPPP are strictly prohibited from conducting MS4 oversight inspections for that same site. Electronic oversight inspections are utilized where appropriate, with on-site inspections scheduled with 48-hour advance notice when specific compliance triggers occur.
- **Training & Centralized Tracking:** All plan reviewers, site inspectors, and contracted program staff complete training within 60 days of hire and annually thereafter. Project files—including SWPPP checklists, inspection forms, enforcement logs, and final stabilization verification—are centrally archived for at least 5 years.

3. Best Management Practices

- River Heights City adopts six primary BMPs to fulfill the requirements of Section 4.2.4. Detailed operational procedures, applicability, limitations, and effectiveness metrics are provided in Appendix A.
- **BMP 4.1:** Construction Regulatory Mechanism & Operator UPDES Permit Coverage
- **BMP 4.2:** Construction Oversight Enforcement SOP & Appeals Process
- **BMP 4.3:** Pre-Construction SWPPP Review Checklist, Meetings & Site Prioritization
- **BMP 4.4:** Construction Oversight Inspection Program SOP & Electronic Inspection Protocols
- **BMP 4.5:** Final Stabilization Verification & Notice of Termination (NOT) Closeout
- **BMP 4.6:** Qualified Inspector Training & Centralized Record Retention

4. Measurable Goals & Construction Program Implementation Schedule

To more fully realize the benefit of the BMP the city has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Construction Site Storm Water Runoff Control. The following table includes the goals for MCM 4.

- **Target Pollutant(s):** Sediment, Construction Debris, Fuel/Oil/Grease, Concrete Washout, Paints/Solvents, Trash
- **Target Audience(s):** Developers, General Contractors, Excavators, Site Engineers, City SWPPP Inspectors, Contracted MS4 Personnel
- **Responsible Department:** City Engineer / Storm Water Inspectors / City Attorney

Table 3.D.1: MCM 4 – Construction Site Storm Water Runoff Control

MCM / Permit Ref.	Measurable Goal & Action (Associated BMP)	Responsible Dept.	Schedule / Frequency	Measure of Success (Effectiveness)	Rationale / Compliance Note	Effect. Year
4.1 (4.2.4.1)	**Regulatory Authority & Coverage:** Enforce ordinance requiring UPDES CGP coverage (Net-CGP), compliant SWPPPs, and right-of-entry for qualified inspectors on all qualifying sites. *(BMP 4.1)*	Public Works / Attorney	Ongoing / Annual Review	100% of active qualifying projects maintain verified CGP coverage and complete SWPPPs.	Mandates legal authority and operator compliance under permit part 4.2.4.1.	2027
4.2 (4.2.4.2)	**Enforcement SOP & Tracking:** Implement written Construction Oversight Enforcement SOP with published appeals process, escalating sanctions, and centralized enforcement logging. *(BMP 4.2)*	Public Works / Code Enforcement / Attorney	Ongoing (Per violation)	Publicly accessible appeals procedure posted; 100% of enforcement actions logged and tracked to resolution.	Required enforcement framework and public transparency under part 4.2.4.2.	2027

4.3 (4.2.4.3)	**Pre-Con SWPPP Review & Meetings:** Review SWPPPs using State-aligned checklists and conduct pre-con meetings covering site design, operations, BMPs, post-con, and ERP policy. *(BMP 4.3)*	Public Works / Storm water Inspector / City Engineer	Prior to land disturbanc e	Completed checklist and signed pre-con meeting summary on file for 100% of approved sites.	Prevents non-compliant site setups prior to breaking ground (part 4.2.4.3.1).	2027
4.4 (4.2.4.3.2)	**Public Input & Site Prioritization:** Process public comments on proposed projects and determine priority (high-risk) site status during pre-construction review. *(BMP 4.3)*	Storm Water Inspector / Public Works	Continuous	Public comment portal active; priority site classification documented for 100% of projects.	Mandated public input process and risk categorization (parts 4.2.4.3.2 & 4.2.4.3.3).	2027
4.5 (4.2.4.4.1)	**Oversight Inspection SOP:** Implement Inspection SOP defining inspector qualifications, conflict-of-interest prohibitions, and operator notification rules for final stabilization. *(BMP 4.4)*	Public Works / Storm Water Inspector	Ongoing	SOP enforced; 0% instances of SWPPP preparers conducting MS4 oversight on the same project.	Explicit conflict-of-interest prohibition required under part 4.2.4.4.1.	2027
4.6 (4.2.4.4.2)	**Monthly & Reduced-Frequency Inspections:** Conduct monthly oversight inspections using Division forms. Apply reduced frequencies only for adequate compliance history, frozen, or arid conditions. *(BMP 4.4)*	Qualified Inspectors	Monthly (or per approved reduction criteria)	Inspection forms on file; regular frequencies immediately resumed upon thawing or rain events.	Core inspection frequency mandate with strict environmental exception triggers (part 4.2.4.4.2).	2027
4.7 (4.2.4.4.3 / 4.2.4.4.4)	**Priority & Phase-Based Inspections:** Inspect priority sites monthly. Conduct phase inspections for all sites: pre-disturbance, annual active, post-construction, and complaint response. *(BMP 4.4)*	Qualified Inspectors	Monthly (Priority) / Phase-based	100% of priority sites inspected monthly; required phase inspections and complaint investigations logged.	Mandates milestone inspections across project life cycle (parts 4.2.4.4.3 & 4.2.4.4.4).	2027
4.8 (4.2.4.4.5)	**Electronic & On-Site Inspections:** Conduct electronic oversight inspections; schedule on-	Qualified Inspectors	Continuous	Electronic inspection logs archived; 48-hour notices	Incorporates modern electronic inspection framework under part 4.2.4.4.5.	2027

	site inspections with 48-hour advance notice when documented reasons occur. *(BMP 4.4)*			documented for on-site visits.		
4.9 (4.2.4.5)	**Staff & Contractor Training:** Train new hires/MS4 contractors within 60 days of hire/contract date and annually thereafter on permitting, review, inspections, and ERP. *(BMP 4.6)*	Public Works Director / Storm Water Inspector	Within 60 days of hire / Annually	Training logs on file containing course descriptions, dates, and attendee names/positions.	Mandates 60-day onboarding window and annual refresher training (part 4.2.4.5).	2027
4.10 (4.2.4.6)	**5-Year Record Retention:** Retain all site plan reviews, SWPPP checklists, oversight inspection forms, verbal/written warnings, and NOVs for 5 years or project completion. *(BMP 4.6)*	Storm Water Inspector	Continuous (5-yr retention min.)	Centralized database updated; 100% of project records retained and accessible for DWQ audits.	Full document retention mandate under part 4.2.4.6.	2027

5. MCM 5 – Long-term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management): UPDES Permit Section – 4.2.5

1. Program Overview

River Heights City implements and enforces a post-construction storm water management program to address post-construction storm water runoff from qualifying new development and redevelopment sites (land disturbances ≥\ 1 acre, or < 1 acre if part of a common plan of development). This program applies to both private and public development sites, including roads. Water quality requirements under this measure complement, but do not replace or substitute, local water quantity or flood management requirements.

Under Section 4.2.5 of the UPDES Small MS4 Permit, River Heights City satisfies the minimum performance measures through six core program components:

1. **Post-Construction Controls & Sizing Standards (4.2.5.1):**
   - **Non-Structural Controls (4.2.5.1.1):** Incorporating non-structural BMPs to minimize development in flood/erosion-prone areas, preserve native soils/vegetation, protect sensitive natural resources, and preserve natural water quality functions.
   - **Retention Sizing Standard (4.2.5.1.2):** Defining hydrologic sizing methods for consistent control sizing. New development projects must manage rainfall on-site and prevent off-site discharge from all rainfall events less than or equal to the 80th

percentile rainfall event (or predevelopment hydrologic condition, whichever is less). Redevelopment projects must provide a project-specific plan aimed at net gain to on-site retention or reduction of impervious area; if impervious area increases by greater than 10 percent, the project must manage rainfall on-site for the net increase in volume associated with the 80th percentile storm event.

- **LID Approach & Infeasibility Evaluation (4.2.5.1.3 / 4.2.5.1.4):** Requiring LID evaluation for all qualifying projects. River Heights City allows for at least 5 LID practices from Appendix C of *A Guide to Low Impact Development within Utah* (or any feasible LID approach meeting retention standards). If full LID retention is infeasible due to site constraints (high groundwater, drinking water source protection zones, tight soils, steep slopes, accessibility, or excessive costs), the applicant must document and quantify that infiltration, evapotranspiration, and rainwater harvesting have been used to the Maximum Extent Practicable (MEP) using the Division's Storm Water Quality Report template (LID Guide Appendix B).

2. **Regulatory Mechanism & Maintenance Agreements (4.2.5.2):** Enforcing an ordinance requiring selection, design, installation, operation, and maintenance standards for post-construction BMPs. The ordinance includes escalating enforcement procedures (with a published appeals process), post-construction inspection access rights, maintenance agreement provisions (enabling MS4 oversight, lease/deed transfer tracking, and MS4 authority to perform neglected maintenance and recover costs), and documented technical justification for selected BMP performance claims.
3. **Plan Review SOPs (4.2.5.3):** Adopting and executing written SOPs for site plan reviews to evaluate potential water quality impacts and post-construction controls from conceptual design through project closeout.
4. **Post-Construction Inspections (4.2.5.4):** Executing SOPs for control verification inspections (at least once during installation and upon completion) and ongoing maintenance inspections (conducted biennially by the MS4 or property owner; MS4 inspects owner-maintained sites and records at least once every 5 years). Inspection reports must capture date, inspector signature, location, ownership, structural/vegetative condition, sediment/debris accumulation, and specific correction deadlines.
5. **Post-Construction BMP Inventory (4.2.5.5):** Maintaining a live inventory database of all public and private post-construction structural controls installed since permit coverage. Entries must track project/owner details, control specifications, maintenance schedules, and inspection history/compliance status.
6. **Staff & Contractor Training (4.2.5.6):** Training new hires and MS4 contractors within 60 days of hire/contracting, and annually thereafter, on long-term storm water management, plan review, inspections, enforcement, and LID practices. Training records (dates, course descriptions, names, and positions) must be maintained.

2. Summary of Existing Infrastructure & Ongoing Programs

- **Design Standards & Sizing Framework:** River Heights City Construction Standards require qualifying development projects to evaluate LID practices and manage post-construction

runoff volumes. Sizing calculations adhere to the 80th percentile storm event retention criteria for new development and applicable redevelopment projects.

- **Legal Authority & Maintenance Agreements:** Local ordinances mandate post-construction storm water controls and require project developers to execute legally binding maintenance agreements prior to project approval. Agreements grant City personnel right-of-entry for oversight inspections and establish MS4 authority to remediate neglected controls at the property owner's expense.
- **Inspection Workflows & Inventory Management:** Structural BMPs are inspected during installation and verified upon construction completion. Private post-construction controls are tracked in a GIS-integrated inventory database, with MS4 oversight inspections performed at least once every 5 years to verify owner compliance and log structural integrity.
- **Staff Qualification & Training:** City plan reviewers, engineers, and inspectors complete onboarding training within 60 days of hire and annual refresher training covering LID design evaluation, post-construction inspection protocols, and enforcement mechanisms.

3. Best Management Practices

- River Heights City adopts six primary BMPs to fulfill the requirements of Section 4.2.5. Detailed operational workflows, applicability, limitations, and effectiveness metrics are provided in Appendix A.
- **BMP 5.1:** Post-Construction Ordinance, Escalating Enforcement & Technical Performance Documentation
- **BMP 5.2:** 80th Percentile Sizing Hydrologic Methods, LID Approach & Infeasibility Evaluation
- **BMP 5.3:** Maintenance Agreements, Private Owner Certification & MS4 Cost Recovery
- **BMP 5.4:** Post-Construction Plan Review SOPs & Conceptual-to-Closeout Evaluation
- **BMP 5.5:** Post-Construction Structural Control Verification, Biennial/5-Year Inspections & Reporting
- **BMP 5.6:** Post-Construction BMP Inventory Database & Annual Employee Training Protocols

4. Measurable Goals & post Construction Program Implementation Schedule

To more fully realize the benefit of the BMP the city has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Long-term Storm Water Management in New Development and Redevelopment. The following table includes the goals for MCM 5.

- **Target Pollutant(s):** Post-Development Sediment, Heavy Metals, Hydrocarbons, Nutrients, Excessive Peak Flow Volume

- **Target Audience(s):** Developers, Design Engineers, Land Use Planners, Commercial Owners, HOAs, City Inspectors
- **Responsible Department:** City Engineer / Public Works / Storm Water Inspectors / City Attorney

Table 3.E.1: MCM 5 – Long-term Storm Water Management in New Development and Redevelopment

MCM / Permit Ref.	Measurable Goal & Action (Associated BMP)	Responsible Dept.	Schedule / Frequency	Measure of Success (Effectiveness)	Rationale / Compliance Note	Effect. Year
5.1 (4.2.5.1.1 / 4.2.5.1.2)	**Non-Structural Controls & Retention Standards:** Enforce 80th percentile retention standard for new developments and net gain / 80th percentile increase standard for >10% redevelopment projects. *(BMP 5.1 & 5.2)*	City Engineer	Ongoing (At plan review)	100% of approved qualifying site plans verify on-site retention compliance using defined hydrologic methods.	Core performance mandate for new development and redevelopment volume management (4.2.5.1.2).	2027
5.2 (4.2.5.1.3 / 4.2.5.1.4)	**LID Evaluation & Infeasibility Process:** Require LID evaluation (allowing ≥ 5 Utah LID Guide practices). Require formal MEP quantification and Storm Water Quality Report rationale when LID is infeasible. *(BMP 5.2)*	City Engineer / Public Works Director	Prior to project approval	100% of projects submit LID evaluations; complete infeasibility documentation on file for constrained sites.	Mandated LID framework and MEP infeasibility process under parts 4.2.5.1.3 & 4.2.5.1.4.	2027
5.3 (4.2.5.2)	**Regulatory Mechanism & Enforcement:** Enforce post-construction ordinance including escalating sanctions, appeals process, right-of-entry, and technical performance basis for selected controls. *(BMP 5.1)*	Engineering / Public Works / Code Enforcement / Attorney	Ongoing / Annual Review	Ordinance enforced; publicly accessible appeals process posted; technical basis documented for approved BMPs.	Required regulatory framework and technical documentation under parts 4.2.5.2 & 4.2.5.2.4.	2027
5.4 (4.2.5.2.3)	**Long-Term Maintenance Agreements:** Require	Public Works /City Attorney / Engineering	Prior to final plat / closeout	Executed maintenance agreement	Ensures legal responsibility and MS4	2027

	executed maintenance agreements for private controls allowing MS4 oversight, deed/lease transfers, and MS4 cost recovery for neglected maintenance. *(BMP 5.3)*			recorded for 100% of private post-construction structural BMPs.	corrective action/cost recovery authority (4.2.5.2.3).	
5.5 (4.2.5.3)	**Post-Construction Plan Review SOPs:** Execute written SOPs to evaluate water quality impacts and post-construction controls from conceptual design to project closeout. *(BMP 5.4)*	Public Works / City Engineer	Continuous (During plan review)	Completed post-construction review checklists on file for 100% of qualifying development projects.	Plan review SOP mandate spanning conceptual design through project closeout (4.2.5.3).	2027
5.6 (4.2.5.4.1)	**Control Verification Inspections:** Inspect permanent structural BMPs during installation and verify constructed design specifications prior to project closeout. *(BMP 5.5)*	Qualified Inspector	During installation & at closeout	Signed verification inspection forms on file for 100% of newly constructed post-construction controls.	Verifies structural controls are installed as engineered prior to final sign-off (4.2.5.4.1).	2027
5.7 (4.2.5.4.2)	**Maintenance Inspections & Reporting:** Conduct biennial inspections (by MS4 or owner). Inspect owner-maintained sites and records at least once every 5 years using State-aligned reports. *(BMP 5.5)*	Qualified Inspectors	Biennial (Owner/MS4) / 5-yr MS4 Audit	Standardized inspection reports on file capturing vegetation, structures, sediment accumulation, and deadlines.	Establishes inspection frequency and mandatory report content elements (part 4.2.5.4.2).	2027
5.8 (4.2.5.6)	**Post-Construction BMP Inventory:** Maintain and update live inventory tracking project info, owner details, control specifications, maintenance rules, and inspection history. *(BMP 5.6)*	GIS / Public Works Staff	Continuous / Annual update	100% of public and private post-construction structural controls logged and updated upon ownership/BMP changes.	Mandatory inventory tracking for all post-construction BMPs installed under permit (4.2.5.5).	2027

5.9 (4.2.5.6)	**Staff & Contractor Training:** Train new hires/MS4 contractors within 60 days of hire/contracting, and annually thereafter, on LID, plan review, inspections, and enforcement. *(BMP 5.6)*	Storm Water Inspector / Public Works	Within 60 days of hire / Annually	Complete training logs maintained with dates, activity descriptions, and attendee names/positions.	Mandates 60-day onboarding window, annual refresher, and training record retention (4.2.5.6).	2027

6. MCM 6 – Pollution Prevention / Good Housekeeping for Municipal Operations: UPDES Permit Section – 4.2.6

1. Program Overview

River Heights City implements and enforces a pollution prevention and good housekeeping program for Permittee-owned or operated facilities, operations, and structural storm water controls. The intent of this control measure is to maintain and operate municipal facilities, perform operational activities, and maintain structural storm water controls in a manner that prevents or reduces the runoff of pollutants into the storm water system and waters of the state. Water quality requirements under this measure apply to all city facilities, public works yards, storage areas, public buildings, and municipal maintenance practices.

Under Section 4.2.6 of the UPDES Small MS4 Permit, River Heights City satisfies the minimum performance measures through ten core program components:

1. **Facility Inventory & Pollutant Assessment (4.2.6.1 / 4.2.6.2):** Developing and keeping current a written inventory of all potential high-priority Permittee-owned or operated facilities (including public works yards, public buildings, equipment yards, and parking lots). Performing an assessment of inventoried facilities to identify common urban pollutants (sediment, nutrients, metals, hydrocarbons, pesticides, chlorides, trash) and documenting prevention measures within the SWMP.
2. **Identification of High-Priority Facilities (4.2.6.3):** Evaluating inventoried sites and identifying "high-priority" facilities based on pollutant storage, improperly stored materials, outdoor pollutant-generating activities, proximity to waterbodies, and potential to discharge to impaired waters.
3. **Control Measures & Facility SWPPPs (4.2.6.3.1 / 4.2.6.3.2):** Implementing water quality control measures targeting site-specific pollutants at high-priority sites. Developing and implementing site-specific Storm Water Pollution Prevention Plans (SWPPPs) within 180 days of permit coverage for each high-priority facility, incorporating detailed site maps, drainage locations, potential pollutant sources, structural controls, and non-structural BMPs.
4. **Facility Inspections & Reporting (4.2.6.4):** Conducting and logging routine facility inspections at high-priority sites, including monthly visual inspections, semi-annual

comprehensive inspections (2x per year), and annual visual observations of storm water discharges during storm events.

5. **Operations & Maintenance SOPs (4.2.6.5 / 4.2.6.5.1):** Developing and implementing written Standard Operating Procedures (SOPs) for municipal facilities and operations, including chemical/material storage, waste management, equipment cleaning/painting, lawn/landscaping practices, vehicle repair, fueling under cover, cold weather operations/de-icing, and public event cleanups.
6. **MS4 Maintenance, Sweeping & Waste Disposal (4.2.6.5.2 / 4.2.6.5.3):** Executing SOPs for road and parking lot sweeping and storm drain system maintenance. Prioritizing sweeping and conveyance cleaning (catch basins, pipes, ditches, culverts) based on water quality concerns and pollutant accumulation rates. Ensuring proper dewatering, containment, and legal disposal of sweepings and catch basin solids.
7. **Washing, Snow Melt, Spill Plans & Floor Drains (4.2.6.5.4 / 4.2.6.5.5 / 4.2.6.5.6 / 4.2.6.6):** Preventing wash water discharges to the MS4, minimizing snow disposal/melt impacts, maintaining a local Spill Prevention Plan in coordination with the local fire department, and maintaining a complete inventory of all indoor building floor drains to ensure proper discharge locations.
8. **Outside Contractor Oversight (4.2.6.7):** Requiring contractors performing municipal maintenance or operation activities to adhere to City SOPs, BMPs, and MS4 permit standards through binding contract provisions and periodic site oversight.
9. **Flood Management Structural Controls & Retrofit Planning (4.2.6.8 / 4.2.6.9):** Assessing water quality impacts in the design of new flood management structural controls, evaluating existing flood structures for water quality improvements, and developing a prioritized site retrofit plan for City-owned sites that adversely impact receiving waterbodies.
10. **Staff & Contractor Training Protocols (4.2.6.10):** Providing annual job-specific storm water training for employees and contractors with maintenance/operational job functions, and training new hires/contractors within 60 days of hire/contracting. Maintaining detailed records of dates, course descriptions, attendee names, and positions.

2. Summary of Existing Infrastructure & Ongoing Programs

- **Facility Inventory & High-Priority SWPPPs:** River Heights City maintains an active inventory of Permittee-owned facilities. High-priority sites (including the Public Works yard) operate under facility-specific SWPPPs that feature detailed site maps, outfall locations, containment protocols, and inspection schedules.
- **O&M Standard Operating Procedures:** Standardized procedures govern chemical storage, fueling, vehicle washing, and maintenance activities at the Public Works facility. Wash water is contained and prohibited from entering the storm drain (commercial carwash), and road salt is stored inside covered bays on impervious surfaces (Providence City Public Works Yard).
- **System Maintenance & Waste Management:** Street sweeping and catch basin cleanings are conducted on prioritized schedules based on sediment accumulation and water quality sensitivity. Vactor solids and sweepings are dewatered in a contained area prior

to proper solid waste disposal. Floor drains in City facilities are mapped and verified to discharge appropriately.

- **Contractor Oversight & Staff Training:** Municipal maintenance contracts incorporate mandatory storm water compliance conditions. Operational personnel and maintenance contractors complete onboarding training within 60 days of hire/contract execution and participate in annual refresher training logged by the Public Works Director.

3. Best Management Practices

River Heights City adopts twelve primary BMPs to fulfill the requirements of Section 4.2.6. Detailed operational workflows, applicability, limitations, and effectiveness metrics are provided in Appendix A.

- **BMP 6.1:** Municipal Facility Inventory, High-Priority Site Identification & SWPPP Development
- **BMP 6.2:** High-Priority Facility Inspections (Monthly Visual, Semi-Annual Comprehensive & Annual Discharge)
- **BMP 6.3:** Municipal O&M Standard Operating Procedures (Chemicals, Lawn Care, Vehicle Maintenance & Fueling)
- **BMP 6.4:** Road & Parking Lot Sweeping Priority Schedules & Operational Protocols
- **BMP 6.5:** Storm Water Conveyance Cleaning, Catch Basin Maintenance & Waste/Wastewater Dewatering SOPs
- **BMP 6.6:** Vehicle & Equipment Wash Water Containment & Snow Disposal Management
- **BMP 6.7:** Facility Floor Drain Inventory & Municipal Spill Prevention Plan Execution
- **BMP 6.8:** Outside Maintenance Contractor Compliance & Contractual Oversight
- **BMP 6.9:** Flood Management Structural Control Design & Existing Control Water Quality Assessment
- **BMP 6.10:** MS4 Property Retrofit Plan & Water Body Improvement Prioritization
- **BMP 6.11:** De-Icing Chemical & Covered Salt Storage SOPs
- **BMP 6.12:** Municipal Employee & Contractor Annual Storm Water Training Protocols

4. Measurable Goals & Pollution Prevention Program Implementation Program

To more fully realize the benefit of the BMP the city has set specific goals. The goals, set along with the existing efforts, fulfill the requirements of the Storm Water Phase II Final Rule for Pollution Prevention / Good Housekeeping for Municipal Operations. The following table includes the goals for MCM 6.

- **Target Pollutant(s):** Sediment, Nutrients, Heavy Metals, Hydrocarbons (BTEX), Pesticides, Chlorides, Trash & Debris, Wash Wastewater
- **Target Audience(s):** Public Works Staff, Contractors
- **Responsible Department:** Public Works Department / City Attorney

Table 3.F.1: MCM 6 – Pollution Prevention / Good Housekeeping for Municipal Operations

MCM / Permit Ref.	Measurable Goal & Action (Associated BMP)	Responsible Dept.	Schedule / Frequency	Measure of Success (Effectiveness)	Rationale / Compliance Note	Effect. Year
6.1 (4.2.6.1 / 4.2.6.2 / 4.2.6.3)	**Facility Inventory & High-Priority Identification:** Maintain and annually update written inventory of all Permittee-owned facilities (covering all 26 permit categories). Assess pollutant potential and designate high-priority sites. (BMP 6.1)	Public Works	Annually	Inventory up to date; documented assessment report and high-priority list on file.	Establishes baseline facility inventory and pollutant identification framework (4.2.6.1–4.2.6.3).	2027
6.2 (4.2.6.3.1 / 4.2.6.3.2)	**High-Priority Facility SWPPPs:** Implement water quality controls and maintain site-specific SWPPPs with maps, outfalls, flow paths, and structural BMPs for all high-priority sites within 180 days of permit coverage. (BMP 6.1)	Public Works	Within 180 days of permit / Annual review	100% of high-priority sites have updated, compliant SWPPPs maintained on-site.	Mandated SWPPP elements and 180-day implementation timeframe (4.2.6.3.2).	2027
6.3 (4.2.6.4)	**Facility Inspection Logging:** Perform and record monthly visual inspections, semi-annual comprehensive inspections (2x/yr), and annual storm water discharge observations at all high-priority sites. (BMP 6.2)	Qualified Inspectors	Monthly / Semi-Annually / Annually	100% of required inspection logs and corrective action records maintained in site SWPPPs.	Mandates specific inspection tiers, frequencies, and corrective action logging (4.2.6.4).	2027
6.4 (4.2.6.5 / 4.2.6.5.1)	**Operations & Maintenance SOPs:** Develop, implement, and enforce written O&M SOPs covering chemical use, salt storage, waste, landscaping, vehicle	Public Works	Continuous / Annual review	Documented SOP manual distributed; annual facility audits confirm SOP compliance.	Comprehensive O&M SOP requirement protecting water quality across operations (4.2.6.5).	2027

	repair, fueling, and event cleanups. (BMP 6.3 & 6.11)					
6.5 (4.2.6.5.2 / 4.2.6.5.3)	**Sweeping & MS4 System Maintenance:** Execute prioritized schedule for sweeping roads/parking lots and cleaning catch basins/conveyances. Contain, dewater, and legally dispose of all collected waste. (BMP 6.4 & 6.5)	Public Works	Continuous (Prioritized Schedule)	Priority areas cleaned at highest frequency; waste disposal logs maintained.	Prioritize system O&M based on water quality concerns and proper waste handling (4.2.6.5.2).	2027
6.6 (4.2.6.5.4 / 4.2.6.5.5 / 4.2.6.5.6 / 4.2.6.6)	**Wash Water, Spill Plan & Floor Drains:** Prevent wash water discharge to MS4; maintain Fire Dept. coordinated Spill Plan; maintain indoor floor drain inventory verifying proper discharge. (BMP 6.6 & 6.7)	Public Works	Ongoing / Annual review	Zero unpermitted wash water discharges; complete floor drain inventory verified on file.	Addresses specific high-risk operational discharges and indoor plumbing connections (4.2.6.5.4–4.2.6.6)	2027
6.7 (4.2.6.7)	**Outside Contractor Oversight:** Require contractors performing municipal O&M to follow MS4 permit standards, SOPs, and BMPs through contractually binding language and site visits. (BMP 6.8)	Public Works	Ongoing (Per contract execution)	100% of municipal maintenance contracts contain required storm water clauses and oversight logs.	Holds contractors to identical operational standards as MS4 personnel (4.2.6.7).	2027
6.8 (4.2.6.8 / 4.2.6.8.1)	**Flood Management Water Quality Assessment:** Evaluate water quality impacts in design of new flood management structures and assess existing structures for water quality retrofits. (BMP 6.9)	City Engineering	Ongoing (At project design)	Water quality impact evaluations on file for all new and existing flood control structures.	Mandates water quality integration into flood management infrastructure (4.2.6.8).	2027

6.9 (4.2.6.9)	**MS4 Site Retrofit Plan:** Maintain and update a ranked retrofit plan for MS4-owned sites adversely impacting water quality, prioritizing LID infiltration, evapotranspiration, and rainwater harvesting. (BMP 6.10)	City Engineer / Public Works Director	Annual review	Ranked site retrofit list maintained and integrated into capital improvement planning.	Site retrofit planning mandate targeting impaired waterbody protection (4.2.6.9).	2027
6.10 (4.2.6.10)	**Employee & Contractor Annual Training:** Train new hires and MS4 contractors within 60 days of hire/contracting, and all responsible staff annually on SWPPPs, SOPs, inspections, and illicit discharge reporting. (BMP 6.12)	Public Works Director / Storm Water Inspector	Within 60 days of hire / Annually	Complete training logs maintained with dates, course descriptions, and attendee rosters.	Mandates 60-day onboarding timeframe, annual refresher, and training record retention (4.2.6.10).	2027

SWMP
APPENDIX A

BEST MANAGEMENT PRACTICES (BMPs)

UPDATED 2026

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BMP: Animal Carcass Removal

Description:

Removal and proper disposal of animal carcass' can improve storm water quality by reducing pollution or contamination.

Approach:

- Improper animal carcass disposal can have a negative impact upon water quality and can lead to pollution or contamination of water intended for domestic use. Carcasses should be disposed of within 24 hours and must not be disposed of in water or on a publicly used road. Animal carcasses may be disposed of at the Logan Landfill (193 N 1400 W Logan, UT 84321) during regular business hours.

Limitations:

- Public awareness.
- Ability for the public to haul carcasses.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☐Sediment
- ☒Nutrients
- ☐Heavy Metals
- ☒Toxic Materials
- ☒Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☒Bacteria & Viruses
- ☐Other Waste

Impact

- ☒High
- ☐Medium
- ☐Low or Unknown

BMP: Area Control Procedures

Description:

Area control procedures involve practicing good housekeeping measures such as maintaining clean indoor/covered material storage and industrial processing areas. Keeping these locations clean reduces the risk of pollutants contacting storm water.

Approach:

- Area control Procedures can be used at any facility where materials may be tracked into areas where they can come in contact with storm water runoff including locations that store, process, or otherwise handle potentially polluting materials.
- Foot mats and other devices used to collect residual materials should be cleaned regularly.
- Material storage areas and industrial processing areas should be checked regularly to ensure good housekeeping measures are implemented.

Limitations:

- May not be effective in managing liquid pollutants.
- May not be effective in areas with high vehicle traffic.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☒Nutrients
- ☒Heavy Metals
- ☒Toxic Materials
- ☐Oxygen Demanding Substances
- ☒Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☒Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Buildings and Grounds Maintenance

Description:

Prevent or reduce the discharge of pollutants to storm water from buildings and grounds maintenance by washing and cleaning up with as little water as possible, preventing and cleaning up spills immediately, and maintaining the storm water collection system,

Approach:

- Preserve existing native vegetation to reduce water, fertilizer, and pesticide needs
- Carefully use pesticides and fertilizers in landscaping.
- Don't over water landscaped areas.
- Sweep paved surfaces.
- Map and clean storm drain system, including catch basins on a regular basis.
- Properly dispose of wash water, sweepings, and sediments.

Limitations:

- Public awareness.
- Ability for the public to haul carcasses.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Catch Basin Cleaning

Description:

Maintain catch basin and storm water inlets on a regular basis to remove pollutants, prevent clogging of the downstream conveyance system, and restore the sediment trapping capacity. A catch basin is distinguished from a storm water inlet by having a sediment sump designed to catch and retain sediments below the overflow point.

Approach:

- Annual inspections.
- Prioritize maintenance to clean catch basins and inlets in areas with the highest pollutant loading or in high priority areas.
- Keep accurate logs of the number of catch basins cleaned.
- Record amount of waste collected.

Limitations:

- Staff time and/or funding to complete cleaning.
- Ensuring that private catch basins are maintained and inspected.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☐Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☐High
☒Medium
☐Low or Unknown

BMP: Community Cleanup

Description:

Promote and encourage community members to clean up neighborhoods, city parks, streets, streams, or other properties. This effort involves the removal of litter and debris, green waste, and other types of undesirable vegetation

Approach:

- Provide localized green waste and recycling dumpsters throughout the valley and specified community locations.
- Provide roadside cleanup volunteers plastic bags for the collection and disposal of waste along city roads.

Limitations:

- The number of locations is limited based on cost of removal services.
- All trash waste must still be taken to the Logan Landfill.

Minimum Control Measures

- ☐Public Education and Outreach
- ☒Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☒Heavy Metals
- ☒Toxic Materials
- ☒Oxygen Demanding Substances
- ☐Oil & Grease
- ☒Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Community Hotlines

Description:

Government authorities cannot monitor all water bodies all the time, so community hotlines provide an additional means for citizens and agencies to contact the appropriate authority to report water quality concerns.

Approach:

- For emergencies where spills or discharges can pose an immediate threat to life or property, the public should be directed to call 911. Dispatch operators can then contact the correct local authority.
- Non-emergency storm water concerns can be emailed to cnelson@riverheights.gov or call 435-752-2646.
- All distributed materials should include pollution hotline numbers and information.

Limitations:

- The ability to properly inform the public about where to call and for what issues.
- No immediate staffing is available outside regular business hours for non-emergency spills.

Minimum Control Measures

- ☐Public Education and Outreach
- ☒Public Participation/Involvement
- ☒Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☒Heavy Metals
- ☒Toxic Materials
- ☒Oxygen Demanding Substances
- ☒Oil & Grease
- ☒Floatable Materials
- ☒Bacteria & Viruses
- ☒Other Waste

Impact

- ☒High
- ☐Medium
- ☐Low or Unknown

BMP: Concrete Waste Management

Description:

Prevent or reduce the discharge of pollutants to storm water from concrete waste by either conducting washout off-site or performing on-site washout in a designated area.

Approach:

- Store dry and wet materials undercover, away from drainage areas.
- Avoid mixing or ordering excess amounts of concrete.
- Use designated washout areas for all concrete waste.
- Allow concrete to harden then haul to the Logan Landfill.
- Train employees and contractors in proper concrete waste management.

Limitations:

- Off-site washout of concrete waste may not always be possible.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☐Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☐Nutrients
☒Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Contractor Certification & Inspector Training

Description:

One of the most important factors determining whether erosion and sediment controls will be properly installed and maintained on a construction site is the knowledge and experience of the contractor. By providing training opportunities, contactors will have a better understanding of required and recommended storm water techniques.

Approach:

- Training and certification will help to ensure that storm water plans are properly implemented, and the best management practices are properly installed.
- Contractor certification can be accomplished through City/County sponsored training events.
- The City will have mandatory pre-construction meetings and conduct regular and final inspections visits to provide information to contractors.

Limitations:

- Contractor certification and inspector training programs require a substantial amount of time and effort.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☐Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☐Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: De-Icing Chemical Use and Storage

Description:

De-icing chemicals are used each winter on roads, parking lots, and sidewalks. Sodium chloride (salt) is the main chemical used. Proper use and storage of salt will reduce the chance of high chloride concentration in runoff that may damage the environment.

Approach:

- Store salt products in closed containers or covered locations. When not in use, long-term stockpiles should have a barrier placed to limit potential runoff.
- De-icing equipment should be calibrated annually prior to snow season to ensure proper application rates.
- Use only enough salt to break the ice/pavement bond.

Limitations:

- Public safety is of primary importance, and de-icing materials will be used as needed to maintain safe roadways.
- Environmental conditions of each storm create a variable need for de-icing material requiring adjustment of application rates.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☐Sediment
☒Nutrients
☐Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Design Standards

Description:

Standard drawings show contractors and inspectors what is proper practice and provides a minimum requirement. This also includes compilation of storm water-related drawings with other standard drawings.

Approach:

- Develop specifications that reduce water pollutants.
- Adopt standards that depict proper construction practices and acceptable designs and make them available to the public and contractors.
- Require that the design standards be met on all projects.
- Train inspectors and other City personnel on all storm water-related standards.

Limitations:

- Must be enforced to be effective.
- Sometimes site conditions are different than planned and standards must be changed.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☒Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☒Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Dust Control

Description:

Dust control measures are used to stabilize soil from wind erosion and reduce dust by construction activities. This does not apply to gravel and dirt roads.

Approach:

- Water trucks are typically used for dust control on construction sites.
- Limit application of water to minimize runoff of site excavation.
- Depending on weather, water may need to be applied multiple times a day.
- Watch for possible sediment track out from construction site onto roadways.

Limitations:

- Topography may limit accessibility of water trucks.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☐Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☐Nutrients
☐Heavy Metals
☐Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☐High
☒Medium
☐Low or Unknown

BMP: Education Materials

Description:

Education materials present information to the public on storm water issues, and water quality awareness is important to help the public, contractors and employees understand the need for and importance of the program. Providing storm water education online, and at the city office exposes the message to a wide variety of people. Topics can include water conservation, proper lawn and garden care, and disposal of hazardous household waste.

Approach:

- Building a strong relationship with citizens is an important step in providing storm water education.
- Education material can be tailored to all age groups and backgrounds.
- Educational materials should make people aware of the potential impacts of hazardous household materials, how to properly store and dispose of chemicals, proper use of fertilizers, and many others.

Limitations:

- Not everyone will read or incorporate the information into their everyday lives.

Minimum Control Measures

☒Public Education and Outreach
☒Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☒Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☒Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Employee Training

Description:

Employee training is critical to operate an effective storm water program. Employees need to understand how storm water impacts their work activities and be able to inform contractors, businesses, and the public about storm water requirements.

Approach:

- Promote a clear identification and understanding of City and State storm water regulations, specific to each position and department's needs.
- Train employees on pertinent BMP's and SOP's
- Integrate employee feedback into the SWMP, BMP's, and SOP's implementation.
- Integrate training regarding storm water quality management with existing training programs that may be required for other regulations.

Limitations:

- Obtaining employee focus and acceptance on yet another requirement which may alter long-held standard practices.

Minimum Control Measures

☒Public Education and Outreach
☐Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☒Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☒Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Erosion Control Plan

Description:

For erosion control measures to be effective during a construction project, an Erosion Control Plan will be submitted and approved before work can begin. An Erosion Control Plan describes what erosion control BMP's will be implemented during the project.

Approach:

- The City may assist contractors in creating a list of possible erosion control BMP's that could be implemented in any given project
- Require submittal of erosion & sediment control plans for projects that require it.
- Maintain comprehensive and easy to use checklists for City staff and contractors/builders so everyone is equally informed of requirements and expectations.

Limitations:

- Must be enforced to be effective.
- Sometimes site conditions are different than planned and the site plans must be modified.
- The BMP's have to be installed early on in the project, maintained, and removed at the end of the project.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☐Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☐Heavy Metals
☐Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Hazardous Materials Storage Mapping

Description:

Create maps of existing hazardous materials storage locations to facilitate better housekeeping practices and emergency response.

Approach:

- Utilize GIS to create accurate maps of the hazardous materials storage, including the material stored, approximate quantities, storage address, and responsible party contact information.
- All City facilities should be inventoried and mapped.
- Private industrial and commercial facilities with large hazardous material storage areas should also be inventoried and mapped.

Limitations:

- It may be difficult to develop a complete and comprehensive list and location of all privately controlled hazardous materials.
- Maintaining accurate logs of the materials, quantities, and location may be difficult as those materials are used or new materials are received.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☐Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Hazardous Waste Management

Description:

Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use, waste disposal, and training of employees, the public, and contractors. Many of the chemicals used on-site can be hazardous upon disposal. These wastes may include paint and solvents, petroleum products, herbicides, pesticides, acids, and concrete products.

Approach:

- Use all the product before disposing of the container.
- Do not remove the original product label, it contains important safety and disposal information.
- Apply herbicides and pesticides only as needed and only in accordance with the requirements established on the label.

Limitations:

- Educating the public and contractors about proper disposal of hazardous waste.

Minimum Control Measures

☒Public Education and Outreach
☐Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☐Sediment
☐Nutrients
☐Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☒Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Housekeeping Practices

Description:

Promote efficient and safe housekeeping practices (storage, use, and cleanup) when handling potentially harmful materials such as fertilizers, pesticides, cleaning solutions, paint products, and automotive products.

Approach:

- Integrate this BMP as much as possible with existing programs.
- Educate the public on the importance of safe storage and handling of hazardous products.
- City facilities should develop controls on the application of pesticides, herbicides, and fertilizers in public rights-of-way and city facilities.
- Follow user manuals for product use and application rates, equipment uses and maintenance procedures, keep maintenance and public notice records.

Limitations:

- It may be difficult finding the best medium to disseminate information to the public.

Minimum Control Measures

- ☒Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☒Nutrients
- ☒Heavy Metals
- ☒Toxic Materials
- ☒Oxygen Demanding Substances
- ☒Oil & Grease
- ☒Floatable Materials
- ☒Bacteria & Viruses
- ☒Other Waste

Impact

- ☒High
- ☐Medium
- ☐Low or Unknown

BMP: Identifying Illicit Connections

Description:

Identification and elimination of illegal or inappropriate connections of industrial, commercial, residential, agricultural wastewater sources to the storm drain system or natural waterways. It attempts to prevent contamination of ground and surface water supplies by regulation, inspection, and removal of these connections.

Approach:

- Use visual inspections to identify possible illicit connections. Inspections with camera equipment.
- Review plans and plumbing details to examine potential sites where improper connections have occurred.
- Dye testing may be necessary to identify illegal connections between the sanitary sewer and storm drain system.
- Monitor storm drain flows during dry periods to check for illegal connections.

Limitations:

- Access to private property can be difficult.
- Rain fall can hamper efforts to monitor flows.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☒Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☒Nutrients
- ☒Heavy Metals
- ☒Toxic Materials
- ☒Oxygen Demanding Substances
- ☒Oil & Grease
- ☒Floatable Materials
- ☒Bacteria & Viruses
- ☒Other Waste

Impact

- ☒High
- ☐Medium
- ☐Low or Unknown

BMP: Illegal Dumping Controls

Description:

Implement measures to detect, correct, and enforce against illegal dumping of pollutants on roads, into the storm drain system, on the ground, and into natural waterways. Illegally dumped substances include paints, automotive fluids, construction debris, chemicals, concrete, green waste, and pet waste.

Approach:

- Increase the public's awareness of the issue and help them identify the incident and correct it.
- Provide educational material for city staff and the public to recognize and report incidents.
- Track illegal dumping incidents which will identify location, date/time, type and quantity of material, and the responsible party if possible.
- Clean the illegally dumped materials as soon as possible.

Limitations:

- Ability to enforce is limited because identifying the party responsible is difficult.

Minimum Control Measures

☒Public Education and Outreach
☐Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☒Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Infiltration

Description:

A series of systems in which much of the runoff from small storms is infiltrated into the ground rather than discharged to a surface water body. Infiltration systems include vegetated areas, ponds, vaults, trenches, dry wells, porous pavement, and concrete grids.

Approach:

- Volume of the BMP should be sized to capture a particular amount of runoff from an event.
- Emergency overflow or bypass for larger storms is needed.
- Infiltration surface must be protected during construction.
- Exposed earth needs vegetation or other stabilizing methods installed to prevent erosion.

Limitations:

- Loss of infiltrative capacity and high maintenance cost in fine soils.
- Low removal of dissolved pollutants in coarse soils.
- May not be suitable on steep slopes.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☒Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☐Heavy Metals
☐Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Infrastructure & Land Use Planning

Description:

Infrastructure planning makes wise decisions about where to locate public services including water, sewer, roads, schools, and emergency services. Land use mechanisms should protect sensitive lands, encourage appropriate development, and minimize impact on natural areas.

Approach:

- Focus development into areas that have a broad range of services.
- Locate new development on or near roads already receiving services.
- Enforce zoning mechanisms that protect sensitive lands.

Limitations:

- Infrastructure planning is often difficult due to the limited amount of land available for development.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☒Post-construction Runoff Control
- ☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Inlet Protection

Description:

Inlets at or near areas where construction activities will occur should be protected from sediments and other construction related pollutants and runoff.

Approach:

- Utilize an approved method to restrict sediment and other construction related pollutants from entering inlets. The type, method, and installation of inlet protection must be approved and inspected prior to construction activities.
- Inlet protection must be inspected periodically and after large storm events.
- Remove accumulated sediments on a regular basis to ensure proper functioning of the protection system.

Limitations:

- Excess flows may bypass the inlet protection requiring downgradient controls.
- Ponding may occur at inlet.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☒Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☒High
- ☐Medium
- ☐Low or Unknown

BMP: Inspection & Maintenance of BMP's

Description:

Inspect and maintain all structural BMP's on a routine basis to remove pollutants from entering storm drain inlets. This includes the establishment of a schedule for inspections and maintenance.

Approach:

- Regular maintenance of all structural BMP's is necessary to ensure their proper functionality.
- Annual Inspections.
- Prioritize maintenance to clean, maintain, and repair or replace structures in areas with the highest pollutant loading.
- Keep accurate logs of what structures were maintained and when they were maintained.
- Record the amount of waste collected.

Limitations:

- Cost
- Availability of trained staff.
- Private facilities may not have a proper understanding of the needs and methods to complete the needed maintenance and inspections.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☒Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☐Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Long-term Operation & Maintenance

Description:

Establish and implement a schedule for long-term operation and maintenance procedures for the existing storm drain system.

Approach:

- Review existing maintenance schedule and/or efforts.
- Review the requirements necessary to maintain the existing storm drain system.
- Implement a schedule for long-term operations and maintenance of the storm drain system.

Limitations:

- Cost
- Availability of trained staff.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☒Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☐Heavy Metals
☐Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☒Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Material Use

Description:

Prevent or reduce the discharge of pollutants to storm water from material use by using alternative products, minimizing hazardous material use on-site, and training employees and subcontractors.

Approach:

- Use less hazardous, alternative materials when possible.
- Use materials only when and where needed to complete the construction activity.
- Follow manufacturer's instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals.
- Personnel who use hazardous materials should be trained in proper use.
- Allow sufficient dry time between chemical application and potential rain.

Limitations:

- Alternative materials may not be available, suitable, or effective in every case.

Minimum Control Measures

☒Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☐Sediment
☒Nutrients
☐Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Ordinance Implementation

Description:

Implement existing ordinances and policies to prohibit non-storm water discharges into the Municipal Separate Storm Sewer System (MS4) and meet the requirements of the Utah General Construction Permit.

Approach:

- Implement ordinances and infrastructure standards for consistency and compliance with state regulations.
- Ensure that ordinances, the SWMP, BMP's, and SOP's comply and meet the minimum requirements of the State.
- Educate the public about new/updated ordinances and standards to ensure enforcement is fair and equitable.

Limitations:

- Because of the complicated and comprehensive nature of the requirements, ensure clear and non-overlapping requirements in the appropriate location (ordinance, standards, SWMP, supporting materials) is difficult.

Minimum Control Measures

☒Public Education and Outreach
☐Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☒Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☒Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Portable Toilets

Description:

Temporary on-site sanitary facilities for construction personnel.

Approach:

- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access for servicing and for on-site personnel.
- Position portable toilets so they are secure and will not be tipped or knocked over.
- Position at least 10 feet from any storm water conveyance, inlet, curb or gutter.
- Portable toilets should be maintained in good working order with regular waste collection. All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

Limitations:

- No limitation.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☐Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☐Sediment
☒Nutrients
☐Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☒Floatable Materials
☒Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Riprap

Description:

Riprap is a permanent, erosion-resistant protective layer made of rock. It is intended to protect soil from erosion in areas of concentrated runoff. Riprap may also be used to stabilize slopes that are unstable because of seepage problems.

Approach:

- Riprap is normally used at locations where erosive forces from water flow exceed the ability of the soil or vegetation cover to resist those forces.
- Riprap can be used for pipe outlet protection, channel lining, scour protection, etc.
- For slopes steeper than 2:1, consider using materials other than riprap for erosion protection.
- When working with streams, obtain any required State and Federal Permits and follow permit requirements.
- Riprap should be inspected annually and after major storms. Make repairs as necessary.

Limitations:

- Riprap may be unstable on steep slopes.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☒Construction Site Runoff Control
☒Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☐Nutrients
☐Heavy Metals
☐Toxic Materials
☐Oxygen Demanding Substances
☐Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☐High
☒Medium
☐Low or Unknown

BMP: Rock Check Dams

Description:

A small dam constructed across a drainage ditch to reduce velocity or concentrated storm water flows, thereby reducing the erosion of the ditch. Rock check dams can be utilized in temporary drainage paths, permanent drainage ways not yet stabilized, existing drainage paths receiving increased flows due to construction, or in steep drainages that cannot be stabilized with vegetation only.

Approach:

- Construct dams in conformance with City construction standards.

Limitations:

- Do not use in running streams or natural waterways.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☒Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Site Revegetation

Description:

Seeding of grass and planting of trees, shrubs, vines, and ground covers provide long-term stabilization of soil. Grass can be planted for temporary and long-term stabilization. This BMP is the preferred method of site stabilization in the City.

Approach:

- Types of vegetation, site preparation, planting time, fertilization, and water requirements should be considered for each application.
- Use of native plant materials that require less water and maintenance are preferred.
- Grass or ground cover for immediate and full ground coverage, perennials, shrubs, and trees for more extensive stabilization of soils.
- Noxious or invasive weeds must be removed from site.

Limitations:

- Vegetation may not be appropriate in dry periods without irrigation.
- Grass may need to be watered and mowed.
- Fertilizer and green waste may create pollution.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☒Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☒Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Septic System Controls

Description:

Locate failed septic systems, non-permitted systems, or systems that do not work appropriately.

Approach:

- Map all septic systems
- If failed systems are located, refer them to the Bear River Health Department for correction or replacement.

Limitations:

- Septic systems are completely under the control of the Sate of Utah and the Bear River Health Department.
- Perhaps the biggest limitation to correcting failing septic systems is the lack of techniques for detecting individual failed systems.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☒Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☐Sediment
- ☒Nutrients
- ☐Heavy Metals
- ☒Toxic Materials
- ☒Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☒Bacteria & Viruses
- ☐Other Waste

Impact

- ☒High
- ☐Medium
- ☐Low or Unknown

BMP: Silt Fence

Description:

A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts which can be used as perimeter barrier, sediment barrier, protection for existing waterways, and inlet protection.

Approach:

- Place posts 6 feet apart along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts. Backfill trench over fabric.
- Inspect periodically and after rainfall events to ensure effectiveness. Repair or replace as needed.
- Remove accumulated sediment when it reaches ½ the height of the fence.

Limitations:

- Recommended maximum drainage of 0.5 acre per 100 feet of fence.
- Recommended maximum uphill grade of 2:1.
- Recommended maximum flow rate of 0.5 cfs.
- Ponding should not be allowed against fence.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Sorbents

Description:

Sorbents are materials that can clean up spills through the chemical process of adsorption. Sorbents adsorb (an attraction to the outer surface of a material) or absorb (taken in by the material like a sponge) only when they come in contact with the sorbent material. Sorbents are a useful BMP for facilities with liquid materials on-site.

Approach:

- Apply sorbents immediately to the spill area to adsorb and absorb the spilled material.
- Properly dispose of the sorbent.

Limitations:

- Requires a knowledge of the chemical makeup of a spill to choose the best sorbent.
- May be an expensive practice for large spills.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☒Illicit Discharge Detection and Elimination
- ☐Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☐Sediment
- ☐Nutrients
- ☐Heavy Metals
- ☒Toxic Materials
- ☐Oxygen Demanding Substances
- ☒Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☒High
- ☐Medium
- ☐Low or Unknown

BMP: Stabilized Construction Entrance

Description:

A stabilized pad of crushed stone located where construction traffic enters or exits the site from or to a paved surface.

Approach:

- Clear and grub area and grade to provide minimum slope of 2% away from the paved roadway.
- Place and compact coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.
- Inspect adjacent roadway daily for sediment deposits and clean by sweeping or shoveling.
- Repair entrance and replace gravel as required to maintain a good working condition.

Limitations:

- Requires periodic top dressing with additional gravel.
- Should be used in conjunction with street sweeping adjacent public right-of-way.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Straw Bale Barrier

Description:

Temporary sediment barrier consisting of a row of entrenched straw bales that can be used as perimeter barrier, sediment barrier, protection for existing waterways, and inlet protection.

Approach:

- Excavate a 4-inch-deep trench, place bales in trench with ends tightly abutting, fill any gaps, anchor each bale with 2 stakes driven flush with top of bale, backfill and compact along the bales.
- Inspect immediately after any rainfall and daily during prolonged rainfall. Look for runoff bypassing or undercutting barrier.
- Repair or replace bales a necessary to prevent failure.

Limitations:

- Recommended maximum area of 0.5 acre per 100 feet of barrier.
- Recommended maximum uphill grade of 2:1.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Temporary Drains and Swales

Description:

Temporary drains and swales are used to divert off-site runoff around the construction site, divert runoff from stabilized areas around disturbed areas, and direct runoff into sediment traps.

Approach:

- Temporary drainage swales will effectively convey runoff and avoid erosion if installed properly.
- The drain/swale should conform to predevelopment drainage patterns and capacities.
- Inspect weekly and after each rainfall. Repair any erosion immediately and remove any sediment built up.

Limitations:

- Temporary drains/swales must not adversely impact upstream or downstream properties.
- Temporary drains/swales must conform to local floodplain management requirements.

Minimum Control Measures

- ☐Public Education and Outreach
- ☐Public Participation/Involvement
- ☐Illicit Discharge Detection and Elimination
- ☒Construction Site Runoff Control
- ☐Post-construction Runoff Control
- ☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

- ☒Sediment
- ☐Nutrients
- ☐Heavy Metals
- ☐Toxic Materials
- ☐Oxygen Demanding Substances
- ☐Oil & Grease
- ☐Floatable Materials
- ☐Bacteria & Viruses
- ☐Other Waste

Impact

- ☐High
- ☒Medium
- ☐Low or Unknown

BMP: Used Oil Recycling

Description:

Used motor oil is a hazardous waste because it contains heavy metals picked up from the engine during use. Since it is toxic to humans, wildlife, and plants, it should be disposed of properly.

Approach:

- Used oil should be disposed of at a vehicle service center that accepts used oil, Logan Landfill or other businesses that accept or use used oil.

Limitations:

- If oil is mixed with other substances or if storage containers have residues of other substances, this can contaminate oil and make it a hazardous waste.
- It is often difficult to effectively educate the public and convince them of the importance of recycling used oil.

Minimum Control Measures

☒Public Education and Outreach
☐Public Participation/Involvement
☒Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☐Sediment
☐Nutrients
☒Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☒Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Using the Media

Description:

The media can help in educating the public about storm water issues. Through the media, a program can educate targeted or mass audiences about problems and solutions, build support for remediation and retrofit projects, or generate awareness and interest in storm water management.

Approach:

- Newsletters are a great way to deliver educational information, public notices, and other messages.
- Radio remains a strong media presence due to its affordable production costs and ability to reach targeted and mass audiences.
- The internet is a powerful means of communication and will be the primary method of information distribution used by the City.

Limitations:

- There can be costs associated with some forms of media presence.

Minimum Control Measures

☒Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☐Pollution Prevention/Good Housekeeping

Targeted Pollutants

☒Sediment
☒Nutrients
☒Heavy Metals
☒Toxic Materials
☒Oxygen Demanding Substances
☒Oil & Grease
☒Floatable Materials
☒Bacteria & Viruses
☒Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

BMP: Vehicle & Equipment Maintenance & Repair

Description:

Prevent or reduce the discharge of pollutants to storm water from vehicles and equipment maintenance and repair by running a dry shop.

Approach:

- Keep equipment clean, don't allow excessive build-up of oil and grease.
- Keep drip pans under leaking equipment until repairs can be made.
- Do not change motor oil or perform maintenance in non-appropriate areas.
- Inspect equipment for leaks on a regular basis.
- Make sure oil filters are drained before disposal.
- Clean equipment yard storm drains regularly.
- Do not pour materials down drains.
- Sweep instead of hose down work areas.
- Recycle automotive fluids.

Limitations:

- Space and time limitations may preclude all work from being conducted indoors.
- Dry floor cleaning methods may not be sufficient for some spills.

Minimum Control Measures

☐Public Education and Outreach
☐Public Participation/Involvement
☐Illicit Discharge Detection and Elimination
☐Construction Site Runoff Control
☐Post-construction Runoff Control
☒Pollution Prevention/Good Housekeeping

Targeted Pollutants

☐Sediment
☐Nutrients
☒Heavy Metals
☒Toxic Materials
☐Oxygen Demanding Substances
☒Oil & Grease
☐Floatable Materials
☐Bacteria & Viruses
☐Other Waste

Impact

☒High
☐Medium
☐Low or Unknown

SWMP

APPENDIX B

STANDARD OPERATING PROCEDURES

UPDATED 2026

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BUILDINGS — Dumpsters/Garbage Storage & Management of Trash Containers

Description: This section contains information and guidelines for management of dumpster, trash containers and storage areas.

Permit Section: 4.2.6.4.1

Applicability: Maintenance of garbage storage areas

1. Preparation
   a. Train employees on proper trash disposal.
   b. Locate dumpsters and trash cans in convenient, easily observable areas.
   c. Provide properly-labeled recycling bins to reduce the amount of garbage disposed.
   d. Install berms, curbing, or vegetation strips around storage areas to control water entering/ leaving storage areas.
   e. Whenever possible store garbage containers beneath a covered structure or inside to prevent contact with storm water.
2. Process
   a. Inspect garbage bins for leaks regularly, and have repairs made immediately by responsible party.
   b. Request/use dumpsters, and trash cans with lids and without drain holes.
   c. Locate dumpsters on a flat, hard surface that does not slope or drain directly into the storm drain system.
3. Clean-up
   a. Keep areas around dumpsters clean of all garbage.
   b. Have garbage bins emptied regularly to keep from overfilling.
   c. Wash out bins or dumpsters as needed to keep odors from becoming a problem.
4. Documentation
   a. Document training of employees

BUILDINGS — Parking Lot Maintenance

Description: This section contains information and guidelines for cleaning and maintenance of parking areas.

Permit Section: 4.2.6.4.1

Applicability: Maintaining parking areas

1. Preparation
   a. Conduct regular employee training to reinforce proper housekeeping.
   b. Restrict parking in areas to be swept prior to and during sweeping using regulations as necessary.
   c. Perform regular maintenance and services in accordance with the recommended vehicle maintenance schedule on sweepers to increase and maintain efficiency.
2. Process
   a. Sweep parking areas, as needed, or as directed by the city's responsible official.
   b. Hand sweep sections of gutter if soil and debris accumulate.
   c. Pick-up litter as required to keep parking areas clean and orderly.
3. Clean-up
   a. Dispose of sweepings properly (appropriate solid waste facility).
   b. Street sweepers to be cleaned out in a manner as instructed by the manufacturer and in a location that swept materials cannot be introduced into a storm drain.
   c. Swept materials will not be stored in locations where storm water could transport fines into the storm drain system.
4. Documentation
   a. Keep accurate logs to track swept parking areas and approximate quantities.
   b. Document training of employees.

BUILDINGS — Material Storage, Heavy Equipment Storage, and Maintenance Areas

Description: This section contains information and guidelines for storing materials such as fertilizers, salts, and other chemicals. It also includes information on storing and maintaining equipment.

Permit Section: 4.2.6.4.2

Applicability: Storing materials, storing heavy equipment, and maintaining equipment

1. Preparation
   a. Store vehicles indoors where possible and in an area with no floor drains that lead to storm water system.
   b. Watch for leaking equipment and vehicles.
   c. Store materials in a dry place if applicable of the floor.
2. Process
   a. Use drip pans to collect leaking fluids from equipment or vehicles.
   b. Repair leaking vehicles as soon as possible to protect storm drain system.
   c. Wash vehicles and equipment in dedicated areas.
   d. Dispose of materials that are out-dated or beyond use.
3. Clean-up
   a. Properly clean any areas that have been polluted by leaking vehicles.
   b. Discharge all wash water containing contaminates (degreasers, acids, and oil bases) to a treatment facility or sanitary sewer if it meets treatment plant standards.
   c. Do not store or wash vehicles over storm drain inlets.

CONSTRUCTION — Pre-Construction SWPPP

Description: This section contains information and guidelines for protecting and preparing a construction site with BMPs and a SWPPP.

Applicability: Protecting construction sites and surrounding runoff areas prior to construction.

1. Preparation
   a. Conduct a pre-construction review of site and planed operations.
2. Process
   a. Plan which BMP's to implement during construction to manage runoff created from site.
   b. Incorporate in the SWPPP a set of procedures that will protect potential water quality impacts.
   c. Incorporate into the SWPPP opportunities for use of low impact design (LID) and green infrastructure when opportunities exist.
3. Clean-up
   a. None.
4. Documentation
   a. Record all construction sites that disturb greater than or equal to one acre.
   b. Keep any notes or comments of any problems.

CONSTRUCTION — During and Post Construction Site Inspection

Description: This section contains information and guidelines for protecting a construction site with BMPs and a SWPPP during and after the construction of a project.

Applicability: Protecting construction sites and surrounding runoff areas.

1. Preparation
   a. Incorporate a SWPPP for any construction project disturbing greater than or equal to one acre in area.
2. Process
   a. Inspect construction site and surrounding area regularly for possible storm drain contamination.
   b. Follow SWPPP guidelines and checklists to verify that standards are met.
3. Clean-up
   a. Remove inlet protection.
   b. Clean flow paths.
4. Documentation
   a. Keep any notes or comments of any problems.

CONSTRUCTION — LONG-TERM POST CONSTRUCTION OPERATIONS AND MAINTENANCE FOR CITY AND PRIVATE OWNED STORM WATER FEATURES

Description: These instructions and inspection report can serve as a Standard Operating Procedure (SOP) to comply with the Utah Department of Environmental Quality mandate that city and private storm water features that discharge to the River Heights MS4 are properly inspected annually.

Applicability: Long-Term post construction operations and maintenance.

INSPECTION PROCEDURE:

Site evaluation — Submit a copy of the inspection report to the River Heights City Public Works Director by September 30th of each year.

1. Dumping Evidence: Evaluate catch basins, inlets, manholes, gutters etc. for the presence of stains from dumping or paints, thinners, oils, or other hazardous substances.
2. Spill Evidence: Evaluate pavements and soils for spills, particularly for evidence of neglected spills.
3. General Site Exposure: Evaluate materials, devices, and operations that are exposed to weather. Inspect to verify that BMP's are in place or that there are practices that will contain or minimize pollutants and pollutant sources. Look for uncontained waste material, oil, antifreeze, cleaners and other materials and chemicals that could seep into the ground, enter the storm drain system, or affect water quality.
4. Other Pollution Sources: Evaluate any activity or operations that are or may pollute the environment.
5. Storm Water Storage: Inspect for proper maintenance and conditions of detention/retention ponds. Check for proper capacity, debris or sediment accumulation, and that overflow devices are in place and in good condition.
6. Inlets and Catch Basins: Inspect for proper maintenance and function of storm water inlets and catch basins. Inspect for pollutants, debris, and excessive amounts of dirt and sediment. Inlets, basins, and covers should be in good working order.
7. Conveyance System: Inspect for proper maintenance, condition, and functions of storm water pipes, catch basins, swales, ditches and other conveyances.
8. Manholes: Inspect manholes for condition, debris, excessive amounts of sediment, proper maintenance, and function.
9. Parking: Inspect parking areas for proper maintenance and condition. Inspect for pollutants, spills, etc. Pavement areas should indicate regular sweeping activity and maintenance.
10. Waste Collection: Inspect for proper maintenance and functions of waste collection facilities. Inspect for stains and leaks from containers. Ensure that lids are kept closed.
11. Landscaping: Inspect for condition, maintenance, and function. Inspect for excessive debris. Ensure proper application of chemicals by looking for accumulation of excess fertilizers, herbicides, insecticides, etc.

12. Sumps: Inspect for proper maintenance and condition of sumps, injection wells, and other similar underground devices designed to collect storm water and percolate it into the ground.
13. Flow Control Devices: Inspect for proper maintenance and function of weirs, orifice plates and other similar flow control devices.
14. Site Specific SOP Items: Certain land uses require site specific storm water management SOP's to ensure the quality of storm water that is discharged from a site. Review site inspections for compliance with site SOP's. Evaluate the current SOP's and modify, update, or amend them as needed.
15. Other: Inspect other post construction storm water items for proper function. This could include pumps, vaults, backflow devices, filters, bio-retention area, permeable pavement, green roofs, etc.

IDDE — Illicit Discharge Hotline Reporting

Description: This section includes procedures for initiating spill response through the use of a hotline and collection of documentation for an illicit discharge.

Permit Section: 4.2.3.5

Applicability: Illicit discharges or hazardous spills.

1. Preparation
   a. Include the emergency response numbers for the Bear River Health Department on the city website.
   b. Provide city contact person to Bear River Health Department for contact when illicit discharges are reported.
   c. Provide city contact information on the city website.
2. Process
   a. Determine the nature of the spill.
   b. If the spill is hazardous in nature or significant in size and near a water body where it could enter, report the spill immediately to 911.
   c. If the spill is hazardous in nature and may impact human life report the spill immediately to 911.
   d. For small spills requiring investigation contact River Heights City at (435) 752-2646 ext. (1) to report the complaint. They will investigate the situation and prepare a report of the incident.
   e. For small spills requiring investigation after hours contact the River Heights City Public Works Department at (435) 752-2646 ext. (2) to report complaints. An individual should return your call within 10 minutes to discuss the situation and provide assistance.
3. Clean-up
   a. If the spill is significant or toxic, emergency crews will be dispatched immediately.
   b. If Bear River Health Department is contacted, they will contact the community representative when a complaint is issued so the community may provide assistance with the cleanup.
   c. If spills are small or non-critical the city may conduct the cleanup effort.
4. Documentation
   a. Bear River Health Department and/or city representative will document incident reports received by their personnel when of a significant nature.
   b. Fill out the Dry Weather Screening and Visual Storm Water Discharge Examination Report Form.

IDDE — Outfall Inspections

Description: This section contains information and guidelines for inspection and detection of problems within outfall areas.

Permit Section: 4.2.3.4

Applicability: Inspecting outfall locations

1. Preparation

   a. Know the past and present weather conditions. Conduct inspections during dry weather periods.

   b. Gather all necessary equipment including tape measure, clear container, clipboard with necessary forms, flashlight, and camera (optional).

   c. Obtain maps showing outfall locations and identifiers.

   d. Obtain outfall description and observations from previous inspections, so the outfall can be accurately identified and observations compared.

2. Process

   a. Perform an inspection of each outfall at least once per year. Whenever, possible use the same personnel for consistency in observations.

   b. Identify each outfall with a consistent and unique identifier. For example "Howard Slough-#13". Use maps and previous inspection reports to confirm the outfall identity and location.

   c. If dry weather flow is present at the outfall, then document and evaluate the discharge by completing the following steps:

      1. Collect field samples for visual observations in a clean, clear container and in a manner that avoids stirring up sediment that might distort the observation.
      2. Characterize and record observations on basic sensory and physical indicators (e.g., outfall condition, flow, odor, color, oil sheen) on the Outfall Inspection Form.
      3. Compare observations to previous inspections.
      4. If the flow does not appear to be an obvious illicit discharge (e.g., flow is clear, odorless, etc.), attempt to identify the source of the flow (groundwater, intermittent stream, etc.)

d. If an illicit discharge (such as raw sewage, petroleum products, paint, etc.) is encountered or suspected, follow the procedure of SOP IDDE - Tracing Illicit Discharges.

3. Clean-up

4. Documentation

   a. File completed outfall inspection forms.

   b. Update maps if new outfalls are observed and inspected.

ILLICIT DISCHARGE — Tracing the Source of Illicit Discharge

Description: This section contains information and guidelines for identifying the source of illicit discharge into storm drain system. This also includes characterizing the nature of, and potential public/environmental threat posed by the illicit discharge.

Applicability: Identifying the source of Illicit Discharge.

1. Preparation
   a. Become familiar with the surrounding water bodies and watersheds that could become contaminated.
   b. Look for areas that might have potential to have illicit discharge. (industrial areas or older neighborhoods)
2. Process
   a. Smoke test, TV, or dye test storm drain system to trace potential or difficult to detect illicit discharges.
   b. Determine the type of illicit discharge by collecting and analyzing samples of the water.
   c. Characterize the type of illicit discharge from analyzed samples or from source.
   d. Control possible discharge during dry weather with the use of sandbags or dams.
3. Clean-up
   a. Clean any equipment used in performing detection of illicit discharge.
4. Documentation
   a. Document beginning of work, completion of work and any cleanup items performed on site.
   b. Keep logs of past and existing illicit discharges.
   c. Record the area and amount of illicit discharge.
   d. Keep any notes or comments of any problems.

ILLICIT DISCHARGE — Removing Illicit Connections and Discharges

Description: This section contains information and guidelines for stopping illicit discharges into storm drain system. This also includes characterizing the nature of, and potential public/environmental threat posed by the illicit discharge.

Applicability: Removal/Ceasing of Illicit Discharges.

1. Preparation
   a. Follow IDDE inspection schedule to check for any illicit discharges in the community.
   b. Log inspections on the IDDE inspection checklist.
   c. Locate illicit discharge.
2. Process
   a. Contact Bear River Health Department at 435-792-6500 during working hours, or 435-716-8771 after working hours for hazardous or unknown spills.
   b. Notify violator of offending discharge and give direction to correct the problem.
   c. Work with violator by providing technical assistance.
   d. Perform follow-up inspections and enforce legal actions if discharge is not eliminated.
   e. Elevate the enforcement action as necessary to obtain results.
3. Clean-up
   a. Stabilize all disturbed soils and surfaces.
   b. Haul all debris, sediment or contaminated soil removed from area to approved dumping site.
4. Documentation
   a. Document beginning of work, completion of work and any cleanup items performed on site.
   b. Keep logs of past and existing illicit discharges.
   c. Record the area and amount of illicit discharge.
   d. Keep any notes or comments of any problems.

MUNICIPAL— High Priority Facilities

Description: This section includes information on operation of high priority facilities to protect water quality and reduce discharge of pollutants to the MS4

Permit Section: 4.2.6.4

Applicability: All high priority facilities owned or operated by the MS4.

1. Preparation
    a. Determine if the facility is "high priority" by using the selection criteria located in the Permittee Owned Facilities Evaluation.
    b. For high priority facilities perform an inventory of chemical products, floor drains and storm drain infrastructure.
    c. Develop spill prevention plans for chemicals located at these locations.
    d. Consider community wide operational SOPs for material and equipment storage, parks and open space, vehicle maintenance storm water systems and other operation items in creation of the specific SOP.
    e. Create a specific operational SOP where necessary for a facility.
    f. Maintain a clean and tidy work area to prevent spills from occurring.
2. Process
    a. Implement operational SOPs listed in the high priority facility SOP.
    b. Perform weekly visual inspections of high priority facilities.
    c. Perform quarterly comprehensive inspections of high priority facilities. Inspect in accordance with the facility SOPs and the documentation process.
    d. Perform quarterly visual inspections of all storm water discharges from high priority facilities. If quarterly inspections are not feasible due to frozen conditions, conduct 4 inspections during seasons where discharge flows may occur.
3. Clean Up
    a. Implement the spill response plan for the facility if a spill occurs or one is found during an inspection.
4. Documentation
    a. Maintain logs of all inspection activities that occur for weekly and quarterly inspections of high priority facilities.

MUNICIPAL — Municipally-Sponsored Events

Description: This section contains information for proper cleaning and maintenance after an event such as a parade, community celebrations, etc.

Permit Section: 4.2.6.4.5

Applicability: Cleaning after city event

1. Preparation
   a. Prior to event, schedule crews to facilitate an effective clean up before contaminates and debris migrate to storm water system.
   b. Provide any trash bags or other required tools for cleaning.
2. Process
   a. Sweep parking areas, as needed, or as directed by the city's responsible official.
   b. Hand sweep sections of gutter if debris accumulate.
   c. Pick-up litter as required to keep parking areas clean and orderly.
3. Clean-up
   a. Dispose of sweepings properly (appropriate solid waste facility).
   b. Street sweepers to be cleaned out in a manner as instructed by the manufacturer and in a location that swept materials cannot be introduced into a storm drain.
   c. Swept materials will not be stored in locations where storm water could transport fines into the storm drain system.
4. Documentation
   a. Document any problems that arise.

MUNICIPAL — Provide Training to Employees

Description: This section informs municipalities to train employees who are likely to work/impact storm water quality.

Applicability: Training employees to protect storm water.

1. Preparation
   a. Map out storm drain system so that each employee can be aware of the network.
   b. Implement an operations and maintenance program (0 & M).
2. Process
   a. Train employees on how to reduce pollutant run off from operated facilities and operations.
   b. Train employees who have primary construction operation, or maintenance job roles about standard operating procedures.
   c. Keep and inventory of operated facilities and storm water controls.
   d. Provide follow-up training as needed to address changes and procedures.
3. Clean-up
   a. None.
4. Documentation
   a. Keep record of those who have been trained
   b. Keep any notes or comments of any problems.

MUNICIPAL — Weekly and Quarterly Inspections

Description: This section informs municipalities about the types of inspections that need to be done on a regular basis.

Applicability: Inspection of storm water and drainage system.

1. Preparation

   a. Map out existing storm drain system.

   b. Watch for possible storm drain system contaminates.

2. Process

   a. Perform weekly visual inspections to minimize the potential for pollutants.

   b. Perform quarterly comprehensive inspections of "high priority" facilities, including all storm water controls, waste storage areas, dumpsters, vehicle and equipment maintenances areas, and similar pollutant generating areas.

   c. Perform quarterly visual observations of storm water discharge; by looking for any possible contaminants to the storm drain system.

   d. Look for evidence of spills and immediately clean them to prevent contact with run off.

3. Clean-up

   a. None.

4. Documentation

   a. Keep any notes or comments of any problem areas.

MUNICIPAL — Compliance from Violators (escalating enforcement)

Description: This section contains information for the steps of escalating enforcement for storm water violations.

Permit Section: 4.2.4.2.1

Applicability: Enforcing storm water regulations

1. Preparation
   a. In order to enforce the storm water regulations, the city must first create/adopt an ordinance declaring that current storm water regulations must be followed, and lists the steps to be taken and consequences for non-compliance.
2. Escalating Enforcement:
   a. Verbal warning: The city must decide what will occur when violations are seen/reported. A verbal warning informs the violator of the ordinance being violated, and gives the violator a timeframe to comply. Depending on the severity of the violation, this period may be 24 hours or it may be 7 days.
   b. Stop Work: If the violator does not comply within the given timeframe, the city then informs the violator that they must stop work or further actions will be taken.
   c. Letters: If the violator refuses to stop work and does not comply, the city then writes a letter to the violator stating the ordinance being violated and the fines that will be applied if the action continues.
   d. Notice of violation (N.O.V.): An NOV is issued when the violator refuses to comply after the previous measures have been taken. The NOV states that if the violator does not comply with a certain amount of time (city determined) a fine will be issued (city determined).
   e. Fines: Since the city itself cannot write citations, the Cache County Sherriff's Office should be contacted and the citation will be issued if the violator has not complied within the timeframe given.
   f. Jail: After fines have been applied and the violator still refuses to comply, the Cache County Sherriff's Office should be contacted to arrest the violator.

MUNICIPAL— Flood Control and Water Quality Impacts

Description: This section informs municipalities about assessing the water quality impacts in the design of new flood management structural controls.

Applicability: Installing new flood management devices.

1. Preparation
   a. Assess existing flood management devices to determine whether changes or additions should be made to improve water quality.
2. Process
   a. Incorporate in the SWPPP a set of procedures that will protect potential water quality impacts.
   b. Incorporate into the SWPPP opportunities for use of low impact design (LID) and green infrastructure when opportunities exist.
   c. Consider controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives.
3. Clean-up
   a. None.
4. Documentation
   a. Keep log of actions performed including date and individuals involved.
   b. Record the amount of materials removed or imported.
   c. Keep any notes or comments of any problems.
   d. Use "before" and "after" photographs to document activities as applicable.

MUNICIPAL — Vehicle Maintenance and Repair Activities

Description: This section is to inform municipalities about the protection of storm drain system from vehicles or equipment that may leak or drip petroleum products and that may also collect large amounts of dirt.

Applicability: Storing and washing of vehicles and equipment.

1. Preparation
   a. Store vehicles indoors where possible and in an area with no floor drains that lead to storm water system.
   b. Watch for leaking equipment and vehicles.
2. Process
   a. Use drip pans to collect leaking fluids from equipment or vehicles.
   b. Repair leaking vehicles as soon as possible to protect storm drain system.
   c. Wash vehicles and equipment in dedicated areas.
3. Clean-up
   a. Properly clean any areas that have been polluted by leaking vehicles.
   b. Discharge all wash water containing contaminates (degreasers, acids, and oil bases) to a treatment facility or sanitary sewer if it meets treatment plant standards.
   c. Do not store or wash vehicles over storm drain inlets.
4. Documentation
   a. Record location where vehicles and equipment were leaking.
   b. Keep any notes or comments of any problems.

PARKS — Cleaning Equipment

Description: This section contains information and guidelines for cleaning off equipment and how to dispose of debris collected.

Permit Section: 4.2.6.4.3

Applicability: Cleaning Equipment

1. Preparation
    a. Review process with all Parks employees
2. Process
    a. Wipe off dirt, dust and fluids with disposable towel
    b. Wash equipment in approved wash station
3. Clean-up
    a. Dispose of towels in proper trash receptacle
    b. Sweep floor and dispose of debris.

PARKS — Open Space Management

Description: This section contains information and guidelines protecting open spaces within the storm water runoff area. Including how to clean up if open spaces are not meeting requirements.

Permit Section: 4.2.6.4.3

Applicability: Managing open spaces within a runoff area.

1. Preparation

   a. Provide a regular observation and maintenance of parks, and other public open spaces.

   b. Identify public open spaces that are used for storm water detention and verify that detention areas are included on the storm drain system mapping, inspection schedules, and maintenance schedules.

2. Process

   a. Ensure that any storm drain or drainage system components on the property are properly maintained.

   b. Avoid placing bark mulch (or other floatable landscaping materials) in storm water detention areas or other areas where storm water runoff can carry the mulch into the storm drainage system.

   c. Follow all SOPs related to irrigation, mowing, landscaping, and pet waste management.

3. Clean Up

   a. Keep all outdoor work areas neat and tidy. Clean by sweeping instead of washing whenever possible. If areas must be washed, ensure that wash water will enter a landscaped area rather than the storm drain. Do not use soap for outdoor washing.

   b. Pick up trash on a regular basis.

4. Documentation

   a. Document any observed deficiencies for correction or repair.

PARKS — Right-of-way Maintenance

Description: This section contains information on the proper care of Right-of-way areas and how to keep them clean and free of obstructions.

Permit Section: 4.2.6.4.5

Applicability: Mowing, trimming, and clearing of right-of-way

1. Preparation
   a. Locate all storm drain collection structures and inlets in the right-of-way.
   b. Call the Blue Stakes Center of Utah (801) 662-4111 at least 2 working days before any digging or grading will be done, to reveal the location of any underground utilities.
2. Process
   a. Mow in a manner to minimize clippings blown toward collection structure inlets and water ways.
   b. Pick-up litter within Right-of-way to avoid catch basins from becoming plugged.
3. Clean-up
   a. Scrape and brush mowers at the shop — Sweep dry spoils and dispose at approved facilities.
   b. Wash equipment in approved wash station
4. Documentation
   a. Keep accurate logs to track when maintenance was done so areas don't go unmanaged.
   b. Document training of employees.

PARKS — Chemical Application Pesticides, Herbicides, Fertilizers

Description: This section contains information on the application of Pesticides, Herbicides and Fertilizers to Parks. Including how to prepare, take care, and disposal of chemical products.

Applicability: Using chemicals in city parks.

1. Preparation
   a. Calibrate fertilizer and pesticide application equipment to avoid excessive application.
   b. Use pesticides only if there is an actual pest problem
   c. Time and apply the application of fertilizers, herbicides or pesticides to coincide with the manufacturer's recommendation for best results ("Read the Label").
   d. Know the weather conditions. Do not use pesticides if rain is expected. Apply pesticides or herbicides only when wind speeds are low (less than 5 mph).
2. Process
   a. Always follow the manufacturer's recommendations for mixing, application and disposal. ("Read the Label").
   b. Do not mix or prepare pesticides for application near storm drains.
   c. Employ techniques to minimize off-target application (e.g. spray drift, over broadcasting.) of pesticides and fertilizers.
3. Clean-up
   a. Sweep pavements or sidewalks where fertilizers or other solid chemicals have fallen, back onto grassy areas before applying irrigation water.
   b. Triple rinse containers, use rinse water as product. Dispose of unused pesticide as hazardous waste.
   c. Always follow all federal and state regulations governing use, storage and disposal of fertilizers, herbicides or pesticides and their containers. ("Read the Label")
4. Documentation
   a. Keep copies of MSD sheets for all pesticides, fertilizers and other hazardous products used.
   b. Record fertilizing and pesticide application activities, including date, individual who did the application, amount of product used and approximate area covered.

PARKS — Mowing and Trimming

Description: This section contains information on mowing and trimming around drainage structures and the proper cleaning of mowing and trimming equipment.

Applicability: Mowing and trimming in city parks.

1. Preparation
   a. Locate all storm drain collection structures and inlets in the right-of-way.
2. Process
   a. Mow in a manner to minimize clippings blown toward collection structure inlets and water ways.
3. Clean-up
   a. Scrape and brush mowers at the shop — Sweep dry spoils and dispose at approved facilities.
   b. Wash equipment in approved wash station
4. Documentation

None.

PARKS — Planting Vegetation.

Description: This section contains information on the planting of within parks and rights-of-way.

This also includes cleaning of the area and how to dispose of excess soil.

Applicability: Planting in Parks and rights-of-way.

1. Preparation
   a. Call the Blue Stakes Center of Utah (801) 662-4111 at least 2 working days before any digging will be performed, to reveal the location of any underground utilities.
   c. Determine where any spoils will be taken.
2. Process
   a. Dig holes; place spoils near the hole where they may easily be placed back around roots. Avoid placing spoils in the gutter or areas that may drain into water ways
   b. Bring each plant near the edge of the hole dug for it.
   c. Check the depth of the hole, adjust the depth if necessary. The depth of the hole for a tree should be as deep as the root ball, so that the top of the root ball is level with the top of the hole.
   d. Carefully remove pot or burlap.
   e. Place the plant in the hole.
   f. Backfill the hole with existing spoils, compost, and fertilizer if desired. Do not use excessive amendments.
   g. Water the plant.
   h. Stake the plant, if necessary, to stabilize it.
3. Clean-up
   a. Move any extra spoils into truck or trailer. Place the spoils on a tarp if there is likelihood that some of the dirt would be lost through openings in the bed.
   b. Sweep dirt from surrounding pavement(s) into the planter area
   c. Transport spoils to their designated fill or disposal area.

PARKS — Seeding

Description: This section contains information on the seeding of areas in parks and rights-of-way. This also includes cleaning of the area and how to dispose of excess soil.

Applicability: Planting in Parks and Rights-of-way.

1. Preparation
   a. Call the Blue Stakes Center of Utah (801) 662-4111 at least 2 working days before any digging or grading will be done, to reveal the location of any underground utilities.
   c. Decide on the application rate, method, water source, and ensure adequate materials are in possession.
   d. Grade and prepare the soil to receive the seed. Place any extra soil in a convenient location to collect.
2. Process
   a. Place the seed and any cover using the pre-determined application method (and rate).
   b. Lightly moisten the seed.
   c. Adjust watering rates to minimize runoff from seeded area.
   d. Monitor site for erosion. Correct as needed.
3. Clean-up
   a. Move any extra spoils into truck or trailer. Place the spoils on a tarp if there is likelihood that some of the dirt would be lost through openings in the bed.
   b. Sweep dirt, seed, and any cover material from surrounding pavement(s) into the planter area
   c. Transport spoils to their designated fill or disposal area.
4. Documentation
   a. None.

STREETS/STORM DRAIN — Catch Basins

Description: This section contains information on the cleaning of catch basins in the storm drain system. This includes the processes of disposal of excess waste and the record keeping of the amounts of waste collected.

Applicability: Cleaning catch basins or storm drains.

1. Preparation:
   a. Clean off sediment and trash off grate.
   b. Do visual inspection on outside of grate.
   c. Make sure nothing needs to be replaced.
   d. Do inside visual inspection to see what needs to be cleaned.
2. Process
   a. Clean catch basin using manual or mechanical means.
   b. For manual means, place removed material in a location protected from potential runoff.
   c. Place spoils in vehicle for transport to disposal area.
   d. Dispose of spoils in an approved location for dewatering if necessary.
   e. For mechanical cleaning use a vac truck/trailer to remove sediment. When sediment is removed use a high pressure washer to clean any other sediment out of catch basin.
   f. After catch basin is clean, send the rodder of the vac truck downstream to clean pipe and pull back sediment that might have moved down stream of the catch basin.
3. Clean-up
   a. When vehicle is full of spoils take them to a contained area for drying.
   b. After drying, put it into a dump truck and take it to the landfill.
4. Documentation
   a. Keep logs of the date and number of catch basins cleaned. Record employees involved with the activity.
   b. Record the estimated amount of waste collected from each catch basin.
   c. Keep any notes or comments of any problems.

STREETS/STORM DRAIN — Curb Painting

Description: This section contains information on the painting of curbs and how to protect the drainage system from hazardous wastes. The use of BMP's in case of accidents and spills is recommended. This also includes the processes of disposal, clean up, and record keeping of any paint entering into the storm drain system.

Applicability: Curb Surface painting.

1. Preparation
   a. Calculate the amount of paint required for the job
   b. Use water-based paints if possible.
   c. Determine whether the wastes will be hazardous or not and the required proper disposal of said wastes
   d. Determine locations of storm drain inlets and sewer inlets that may need to be protected. If possible, prepare surfaces to be painted without generating waste water, use sandblasting and or scraping.
   e. If using a pressure washer to remove loose paint, place filter fabric or containment devices at entrances to storm drains or natural waterways to collect materials. (i.e. place geotextile beneath catch basin grates, use curb dyke)
   f. Use a citrus-based paint remover whenever possible, less toxic than chemical strippers
2. Process
   a. Paint curb.
   b. Prevent over-spraying of paints and/or excessive sandblasting
   c. Use drip pans and drop clothes in areas of mixing paints and painting
   d. Store latex paint rollers and brushes in air-tight bags to be reused later with the same color.
   e. Have available absorbent material and other BMP's ready for an accidental paint spill.
3. Clean-up
   a. Paint out brushes and rollers as much as possible. Squeeze excess paint from brushes and rollers back into the containers prior to cleaning them.

b. Pour excess paint from trays and buckets back into the paint can containers and wipe with cloth or paper towels. Dispose of the towels according to the recommendations on the paint being used.

c. Rinse water-based paint brushes in the sink after pre-cleaning. Never pour excess paint or waste water from cleanup of paint in the storm drain.

d. Cleanup oil-based paints with paint thinner. Never clean oil-based brushes in a sink or over a storm drain. Filter solvents for reuse if possible and/or store in approved drum for recycling.

4. Documentation

a. Write-up/report of any discharges into storm drain system

STREETS/STORM DRAIN — Culvert and Storm Water Pipe Cleaning

Description: This section contains information on the cleaning of storm drain culverts and pipes. This also includes what methods to use to remove sediment and debris from the structure. A record keeping procedure is also outlined for tracking the cleaning process.

Applicability: Cleaning of Culverts and Pipes.

1. Preparation:
   a. Clean sediment and trash off inlet to culvert/storm water pipe.
   b. If possible, do visual inspection of inside of culvert/storm water pipe.
   c. Look for cracks, missing or broken pieces in the walls/sides of structure.
   d. Do inside visual inspection to see what needs to be cleaned.
2. Process
   a. Clean using a vac truck/trailer, cleaning the sides of the structure and sucking out sediment on the bottom.
   b. Send high powered hose down culvert and pull back any sediment.
   c. Clean inlets and outlets.
   d. Move truck down to next storm drain.
3. Clean-up
   a. When vac truck is full of sediment take it to Logan City to dump all the sediment out of the truck into a dry pond.
   b. When evaporates are dry, clean it up with a backhoe, put it into a dump truck and take it to the landfill.
4. Documentation
   a. Keep logs of culverts/storm water pipes and wells that have been cleaned.
   b. Record the amount of waste collected.
   c. Keep any notes or comments of any problems.

STREETS/STORM DRAIN — Sumps and Injection Wells (Includes Underground Storm Water Detention Structures)

Description: This section contains information on the cleaning of storm drain sumps and injection wells. This also includes what methods to use to remove sediment and debris from the structures. A record keeping procedure is also outlined for tracking the cleaning process.

Applicability: Cleaning of Sumps and Injection Wells.

1. Preparation:
   a. Clean sediment and trash off inlet to sump/injection well.
   b. Determine how water is supposed to drain from the structure and assess the ability of the structure to allow water to drain as designed.
   c. If possible, do visual inspection of inside of sump/injection well.
   d. Look for cracks, missing or broken pieces in the walls/sides of structure.
   e. Do inside visual inspection to see what needs to be cleaned.
2. Process
   a. Clean using a vac truck/trailer, cleaning the sides of the structure and sucking out sediment on the bottom.
   b. Remove fine sediments that might inhibit the drainage of water if the structure is designed such that the water drains out the bottom.
   c. Clean those places where to water drains if the structure is designed to drain out the sides of the sump/injection well.
   d. Clean inlets and overflow outlets.
3. Clean-up
   a. When vac truck is full of sediment take it to Logan City to dump all the sediment out of the truck into a dry pond.
   b. When sediment is dry, clean it up with a backhoe, put it into a dump truck and take it to the landfill.
4. Documentation
   a. Keep logs of culverts/storm water pipes wells cleaned.
   b. Record the amount of waste collected.
   c. Keep any notes or comments of any problems.

STREETS/STORM DRAIN — Detention Ponds

Description: This section contains information on the maintenance and cleaning of storm drain detention ponds and structures. This also includes what methods to use to remove sediment and debris from the structure. A record keeping process is also outlined for maintenance.

Applicability: Maintenance of detention structures.

1. Preparation:
   a. Remove any sediment and trash from grates.
   b. Do a visual inspection to make sure grates are in good shape and everything is in good working order.
   c. Remove grates, inspect inside of structures/boxes/pipes.
2. Process
   a. Provide outlet protection where feasible to minimize the amount of debris that might leave basin during cleaning process.
   b. If necessary, clean basin by using backhoe to remove silt and sediment off the bottom
   c. Place all sediment into a dump truck.
   d. Clean structures as described for in cleaning catch basins SOP.
3. Clean-up
   a. Haul and dump sediment at the landfill.
4. Documentation
   a. Keep logs of number of detention basins cleaned including date, estimated quantity of material, individuals involved in cleaning, and a description of the type of debris removed.
   b. Record the estimated amount of waste collected.
   c. Keep any notes or comments of any problems.

STREETS/STORM DRAIN — Creek Maintenance

Description: This section contains information on the maintenance and preservation of natural water courses including creeks and streams. This also includes identifying what maintenance needs to be done and the method of how it will be accomplished. Record keeping is necessary for stream maintenance.

Applicability: Maintaining any creek or stream.

1. Preparation
   a. Monitor streams on a regular basis (Monthly).
   b. Check culverts and crossings after every storm or runoff event.
   c. Maintain access to stream channels wherever possible.
   d. Identify areas requiring maintenance.
   e. Determine method of maintenance that will be least damaging to the channel.
   f. Determine what manpower or equipment will be required.
   g. Obtain necessary permits as required by the Army Corp. of Engineers or State Engineers Office.
   h. Identify access and easements to area requiring maintenance.
2. Process
   a. Follow requirements of permits as applicable.
   b. Use techniques to minimize disruption to the stream bank or channel
   c. Install clean materials free of pollutants and contaminants.
   d. Place removed materials in an area upland of the waterway to prevent them from re-entering the channel.
3. Clean-up
   a. Stabilize all disturbed soils.
   b. Haul all debris or sediment removed from area to approved dumping site.
   c. Remove all tracking from paved surfaces near maintenance site, if applicable.
4. Documentation
   a. Keep log of actions performed including date and individuals involved.
   b. Record the amount of materials removed or imported.
   c. Keep any notes or comments of any problems.
   d. Use "before" and "after" photographs to document activities as applicable.

STREETS/STORM DRAIN — Canal/Ditch Maintenance

Description: This section contains information on the maintenance and preservation of canals. This also includes identifying what maintenance needs to be done and the method of how it will be accomplished. Record keeping is necessary in canal maintenance.

Applicability: Maintaining canal or irrigation ditch.

1. Preparation
   a. Monitor canals on a regular basis (Monthly).
   b. Establish maintenance responsibilities with irrigation company boards and operators.
   c. Create a maintenance schedule with the irrigation company.
   d. Identify areas requiring maintenance with irrigation company annually at a minimum.
   e. Identify access and easements to canal area.
   f. Establish procedures for removal of material from canal maintenance. Including stockpiling of material removed or hauling methods.
   g. Check canal/ditch crossings on schedule, including during and after storm events.
   h. Determine what man power or equipment will be required.
2. Process
   a. Perform maintenance as outlined in agreement with irrigation company
   b. Install clean materials free of pollutants and contaminants.
   c. Place removed materials in an area upland of the watercourse to prevent them from re-entering the channel.
   d. Haul material away as outlined in agreements with irrigation company.
3. Clean-up
   a. Stabilize all disturbed soils.
   b. Haul all debris or sediment removed from area to approved dumping site.
   c. Remove all tracking from paved surfaces near maintenance site, if applicable.
4. Documentation
   a. Keep log of actions performed including date and individuals involved.
   b. Record the amount of materials removed or imported.
   c. Keep any notes or comments of any problems.
   d. Use "before" and "after" photographs to document activities as applicable.

STREETS/STORM DRAIN — Chip Seal

Description: This section contains information on the protection and maintenance of storm drain system while chip sealing roadways. This also includes guidelines for chip sealing and for the cleaning of roadways after a chip seal has been applied.

Applicability: Chip sealing roadways.

1. Preparation
   a. Remove weeds from the roads.
   b. Correct any areas with poor drainage.
   c. Clean and dry areas where materials are to be applied. Ensure manholes and catch basins are covered to prevent oil and materials from getting inside the structures or system.
   d. Calibrate spreader to minimize excess chips from being placed on the emulsion.
   e. Review standard operating procedure with contractor performing work.
2. Process
   a. Apply emulsion at recommended rate.
   b. Spread chips closely behind emulsion distributor.
   c. Roll chips. Rollers follow closely behind the chip spreader. Roll entire surface twice. Maximum speed 5 mph
3. Clean-up
   a. Use street sweeper to pick up excess chips.
   b. Remove excessive asphalt applications and spills.
   c. Remove covers from storm drain structures and remove debris that has entered the collection system.
4. Documentation
   a. Record location and date on the maintenance log.

STREETS/STORM DRAIN — Seal Coat/HAA5

Description: This section contains information on the protection and maintenance of storm drain system while applying slurry seal to roadways.

Applicability: Applying slurry seal to roadways.

1. Preparation
   a. Remove weeds from the roads.
   b. Clean and dry areas where materials are to be applied.
   c. Correct any areas with poor drainage.
   d. Cover/protect catch basins and manholes.
   e. Review standard operating procedure with contractor performing work.
2. Process
   a. Apply seal coat in a smooth and uniform manner.
   b. Protect adjacent areas and storm drainage systems from product during application.
3. Clean-up
   a. Remove covers/protection from catch basins and manholes.
   b. Clean up any excess material that may have entered the storm drain.
   c. Dispose of excess materials at an approved location.
4. Documentation
   a. Record location and date on the maintenance log.

STREETS/STORM DRAIN — Overlays and Patching

Description: This section contains information on the protection and maintenance of storm drain system while the roadway is being overlaid or patched.

Applicability: Overlaying or patching roadways.

1. Preparation
   a. Correct any areas with poor drainage.
   b. Fill pothole areas and soft spots.
   c. Seal cracks in asphalt.
   d. Manholes and catch basins are covered to prevent oil and materials from getting inside the structures or system.
   e. Surface should be clean and dry.
   f. Review standard operating procedure with contractor if performing work.
2. Process
   a. Apply tack coat uniformly at the required rate. Do not over apply.
   b. Protect area outside of work zone from overlay material.
   c. Place removed material in a truck for removal from the job site.
   d. Protect manholes and catch basins when raising covers as necessary.
3. Clean-up
   a. Remove covers from catch basins and manholes
4. Documentation
   a. Record location and date on the maintenance log.

STREETS/STORM DRAIN — Crack Seal

Description: This section contains information on the protection and maintenance of roadway and storm drain system while cracks are being sealed on roadway surface.

Applicability: Crack sealing on roadways.

1. Preparation
   a. Remove weeds from the cracks.
   b. Remove sediments from crack to a specified depth.
   c. Surface should be clean and dry.
   d. Review standard operating procedure with contractor performing work.
2. Process
   a. Place material as specified.
   b. Minimize material from spilling outside of crack and into storm drain systems.
   c. Keep crack sealing equipment on asphalt surface to control any material spills.
3. Clean-up
   a. Remove excessive sealant or spills from roadway.
4. Documentation
   a. Record location and date on the maintenance log.

STREETS/STORM DRAIN — Shouldering

Description: This section contains information on the protection and maintenance of roadway and storm drain system while shouldering. This includes traffic control, cleaning, and record keeping of the project.

Applicability: Shouldering roadways.

1. Preparation
   a. Use traffic control devices as necessary.
   b. Install protection for storm drain system from receiving shouldering material.
   c. Determine quantity required for shouldering and distribute along roadway as needed trying to minimize stockpiles.
2. Process
   a. Place import material as needed and perform grading to achieve proper drainage.
   b. Compact as placement of material occurs to minimize erosion.
3. Clean-up
   a. Clean any loose material off asphalt or gutter by dry methods
   b. Remove protection from the storm drain system.
   c. Clean up any excess material, that has entered the storm drain system.
4. Documentation
   a. Record location and date on the maintenance log.

STREETS/STORM DRAIN — Gravel Road Maintenance

Description: This section contains information on gravel roadway maintenance and the protection of the storm drain system.

Applicability: Performing any maintenance on gravel roadways.

1. Preparation
    a. Locate drainage features along length of road to be maintained
    b. Protect drainage structures from material entering the system during maintenance activities
    c. Determine disposal site for excess materials
    d. Install traffic control as necessary.
    e. Stockpile material as necessary for the work.
    f. Install BMP's as necessary for the level of work to be performed.
2. Process
    a. Grade road to promote drainage away from the roadway.
    b. Place imported material as needed for roadway.
    c. Compact material quickly to maintain moisture content and reduce potential for erosion.
    d. Repair/revise drainage structures to collect runoff.
    e. Stabilize shoulders after completing maintenance.
    f. Install/maintain BMP's as necessary along roadway.
3. Clean-up
    a. Remove stockpiled material from work area.
    b. Stabilize any loose material or disturbed areas.
    c. Clean any tracked materials from paved surfaces.
4. Documentation
    a. Record location and date on the maintenance log.

STREETS/STORM DRAIN — Concrete Work

Description: This section contains information on proper concrete placement and how to clean a site to prevent excess concrete materials from entering the storm drain system.

Applicability: Performing any maintenance on roadways.

1. Preparation
   a. Train employees and contractors in proper concrete waste management
   b. Store dry and wet materials under cover, away from drainage areas
   c. Determine how much new concrete will be needed.
   d. Locate or construct approved concrete washout facility.
2. Process
   a. Remove any damaged concrete that may need to be replaced.
   b. Prepare and compact subbase.
   c. Set forms and place any reinforcing steel that may be required.
   d. Moisten subbase just prior to placing new concrete. Place new concrete in forms.
   e. Consolidate new concrete.
   f. Screed off surface.
   g. Let concrete obtain its initial set.
   h. Apply appropriate surface finish
3. Clean-up
   a. Perform washout of concrete trucks and equipment in approved washout area.
   b. Remove and dispose of excess concrete spilled on site. Sweep and remove concrete dust from grinding activities from the site.
4. Documentation
   a. None

STREETS/STORM DRAIN — Garbage Storage

Description: This section contains information on proper placement, installation, and cleaning of garbage dumpsters. Also, proper use and repair of damaged garbage bins to prevent leakage into drainage system.

Applicability: Garbage dumpster/bin location.

1. Preparation
   a. Locate dumpsters and trash cans with lids in convenient, easily observable areas.
   b. Locate dumpsters on a flat, impervious surface that does not slope or drain directly into the storm drain system.
   c. Install berms, curbing or vegetation strips around storage areas to control water entering/leaving storage areas.
   d. Provide properly labeled recycling bins to reduce the amount of garbage disposed.
   e. Provide training to employees to prevent improper disposal of general trash.
2. Process
   a. Inspect garbage bins for leaks regularly, and have repairs made immediately by responsible party.
   b. Have garbage bins emptied as often as needed to keep from overfilling.
   c. Keep lids closed when not actively filling dumpster.
   d. Make necessary improvements to prevent runoff from dumpsters to enter the storm drain system.
3. Clean-up
   a. Keep areas around dumpsters clean of all garbage.
   b. Wash out bins or dumpsters as needed to keep odors from becoming a problem.

STREETS/STORM DRAIN — Snow Removal and De-icing (Providence City)

Description: This section contains information on proper storage and loading of de-icing material in order to prevent materials from entering the storm drain system.

Applicability: Snow removal or application of de-icing materials.

1. Preparation
   a. Store de-icing material under a covered storage area.
   b. Collect and deliver water coming off the de-icing materials to the sanitary sewer or reuse as salt brine.
   c. Slope loading area away from storm drain inlets
   d. Design drainage from loading area to collect runoff before entering storm water system
   e. Wash out vehicles (if necessary) in approved washout area before preparing them for snow removal.
   f. Calibrate spreaders to minimize amount of de-icing material used and still be effective
   g. Train employees in spill cleanup procedures and proper handling and storage of de-icing materials
2. Process
   a. Load material into trucks minimizing spillage.
   b. Sweep loading area periodically to reduce the amount of de-icing materials exposed to runoff
   c. Distribute the minimum amount of de-icing material to be effective on roads
   d. Do not allow spreaders to idle while distributing de-icing materials.
   e. Park trucks with de-icing material inside when possible.
3. Clean-up
   a. Sweep up all spilled de-icing material around loading area.
   b. Clean out trucks after snow removal duty in approved washout area.
   c. Provide maintenance for vehicles in covered area.
4. Documentation
   a. None

STREETS/STORM DRAIN — Street Sweeping

Description: This section contains information and guidelines on proper street sweeping techniques in order to prevent high rates of oils and other pollutants from getting into the storm drain system.

Applicability: Streets with a high quantity of debris and pollutants.

1. Preparation
   a. Prioritize cleaning routes to use at the highest frequency in areas with the highest pollutant loading.
   b. Perform preventative maintenance and services on sweepers to increase and maintain their efficiency.
   c. Review standard operating procedure with contractor if performing work.
2. Process
   a. Drive street sweeper safely and pick up debris.
   b. Dispose of debris at an approved street sweeper disposal location.
3. Clean-up
   a. Clean street sweepers at an approved street sweeper cleaning station
   b. Street sweeping cleaning stations shall separate the solids from the liquids.
   c. Once solids have had a chance to dry out haul to the local landfill.
4. Documentation
   a. Keep accurate logs to track streets swept and streets still requiring sweeping.
   b. Log the approximate amount of debris collected and hauled off.

STREETS/STORM DRAIN — Transporting Soil and Gravel

Description: This section contains information for proper site preparation and maintenance while materials are being transported to or from a site. The use of a SWPPP is also recommended.

Applicability: Removing or importing fill materials for a site.

1. Preparation
   c. Dry out wet materials before transporting to prevent spillage on the roadway.
   d. Spray down dusty materials to keep from blowing.
   e. Know and understand the SWPPP requirements for the site you will be working at.
2. Process
   a. Use a stabilized construction entrance to access or leave the site where materials are being transported to/from.
   b. Cover truck bed with a secured tarp before transporting.
   c. Follow the SWPPP requirements for the specific site to/from which the materials are being hauled.
   d. Do not to overfill materials when loading trucks.
3. Clean up
   a. Clean up any materials tracked out on the roads from site with street sweeper or by hand methods.
   b. Wash mud from vehicles before leaving site.
4. Documentation
   a. Document tracked material cleanup in maintenance logs.

VEHICLES — Fueling

Description: This section contains information and guidelines for proper fueling of equipment and vehicles.

Permit Section: 4.2.6.4.4

Applicability: Fueling vehicles and equipment

1. Preparation

   a. Train employees on proper fueling methods and spill cleanup techniques.

   b. Absorbent spill clean-up materials and spill kits shall be available in fueling areas and on mobile fueling vehicles and shall be disposed of properly after use.

2. Process

   a. Shut off the engine.

   b. Ensure that the fuel is the proper type of fuel for the vehicle.

   c. Nozzles used in vehicle and equipment fueling shall be equipped with an automatic shut off to prevent overfill.

   d. Fuel vehicle carefully to minimize drips to the ground.

   e. Fuel tanks shall not be 'topped off'.

   f. Mobile fueling shall be minimized. Whenever practical, vehicles and equipment shall be transported to the designated fueling area in the Facilities area.

   g. When fueling small equipment from portable containers, fuel in an area away from storm drains and water bodies.

3. Clean Up

   a. Immediately clean up spills using dry absorbent (e.g., kitty litter, sawdust, etc.) sweep up absorbent material and properly dispose of contaminated clean up materials.

   b. Large spills shall be contained as best as possible and the HazMat team should be notified ASAP.

4. Records

   a. Document training of employees.

VEHICLES — Washing

Description: This section contains information and guidelines for washing off equipment and vehicles.

Permit Section: 4.2.6.4.4

Applicability: Washing vehicles and equipment

1. Preparation

   a. Vehicles and equipment should be washed at an off-site location (car wash) when possible.

   b. No vehicle washing will be done where the drain system is connected to the storm sewer system.

2. Process

   a. Minimize water and soap use when washing vehicles inside the shop building.

   b. Soap should not be used when washing vehicles outside the shop building. Water only.

   c. Use hoses with automatic shut off nozzles to minimize water usage.

   d. When washing outside the building, it is the operators' responsibility to make sure all wash water is contained on the wash pad and does not have access to the storm drain.

   e. Never wash vehicles over or a storm drain.

3. Clean Up

   a. Sweep wash areas after every washing to collect what solids can be collected to prevent them from washing down the drain system.

   b. Clean solids from the settling pits on an as needed basis.

WATER — Planned Waterline Excavation Repair/Replacement

Description: This section contains information for proper waterline excavation. Including protection of storm drain inlets and clearing of gutters.

Applicability: Repairing or replacing waterlines.

1. Preparation
   a. Determine where discharge flow will go.
   b. Protect Storm drain inlet(s).
   c. Clean Gutters leading to inlet.
   d. Isolate waterline to be worked on.
2. Process
   a. Direct any discharge to pre-determined area.
   b. Neutralize any chlorine residual before discharging water to a storm drain or waterway.
   c. Backfill excavation.
   e. Haul off excavated material or stockpile nearby.
   f. Stabilize any stockpiled material until installed or hauled away.
3. Clean Up
   a. Clear gutter/ waterway where water flowed
   b. Clean up and stabilize all areas around excavation
   c. Clean up travel path of hauled material if necessary.
4. Documentation
   a. Use "before" and "after" photographs to document activities as applicable.

WATER — Unplanned Waterline Excavation Repair/Replacement

Description: This section contains information for proper waterline excavation when an unexpected leak has occurred. Including protection of storm drain inlets and clearing of gutters.

Applicability: Repairing or replacing waterlines when unexpected leak occurs.

1. Preparation
    a. Equip leak repair equipment with filter material (Inlet Protection Filter bags)
2. Process
    a. Stop the discharge
    b. Inspect flow path of discharged water
    c. Protect water inlet areas.
    d. Follow planned repair procedures.
    e. Haul off spoils from excavation
3. Clean-up
    a. Repair eroded areas as needed.
    b. Stabilize area from further erosion.
    c. Clean traveled path of hauled material
4. Documentation
    a. Use "before" and "after" photographs to document activities as applicable.

WATER — Transporting Excavated Materials & Spoils

Description: This section contains information for proper transport of dry excavated materials that may have environmental contaminants.

Applicability: Transport of excavated materials & spoils.

1. Preparation
   a. Utilize truck with proper containment of materials
   b. Determine disposal site of excavated materials
   c. Install BMP's if necessary for operations.
2. Process
   a. Load truck with materials
   b. Check truck after loading for possible spillage. Clean up when loading operations complete for the day.
   c. Cover truck with tarp.
   d. Transport in manner to eliminate spillage & tracking.
   e. Utilize one route for transporting.
3. Clean-up
   a. Clean loading area.
   b. Clean transporting route using sweeper or dry methods.
   c. Wash off truck and other equipment at approved wash location.
4. Documentation
   a. Document beginning of work, completion of work and any cleanup items performed on site.

WATER — Waterline Flushing for Routine Maintenance

Description: This section contains information for proper waterline flushing, protection of inlet structures, and maintaining a clean flow path for waterway.

Applicability: Waterline flushing for routine maintenance.

1. Preparation
    a. Determine flow path of discharge to inlet of waterway.
    c. Neutralize chlorine residual if necessary.
2. Process
    a. Clean flow path.
    b. Protect inlet structures.
    c. Use diffuser to dissipate pressure to reduce erosion possibilities
3. Clean-up
    a. Clean flow path
    b. Remove inlet protection if installed.
4. Documentation
    a. Document beginning of work, completion of work and any cleanup items performed on site.
    b. Residual tests of discharge water.

WATER — Waterline Flushing after Construction/System Disinfection with Discharge to Storm Drain

Description: This section contains information for proper waterline flushing, protection of inlet structures, and maintaining a clean flow path for waterway after a construction project or system disinfection with discharge to storm drain.

Applicability: Waterline flushing after construction projects or after system disinfection.

1. Preparation
   a. Determine chlorine content of discharged water. Utilize de-chlorination equipment if necessary.
   b. Determine flow path of discharge.
   c. Obtain discharge permit if necessary.
2. Process
   a. Protect inlets in flow path.
   b. Sweep and clean flow path.
   c. Use diffuser to reduce velocities.
3. Clean Up
   a. Remove inlet protection.
   b. Clean flow paths.
   c. Remove equipment from flush point.
4. Documentation
   a. Document beginning of work, completion of work and any cleanup items performed on site.
   b. Residual test of discharged water.

WATER — Waterline Flushing after Construction/System Disinfection with Discharge Haul Off (Used for Dust Control/Compaction)

Description: This section contains information for proper waterline flushing and the hauling off of the discharged water in a tanker to use for dust control and compaction

Applicability: Waterline flushing after construction projects or after system disinfection.

1. Preparation
   a. Determine chlorine content of discharged water.
   b. Neutralize chlorine content.
   c. Determine appropriate construction activity for treatment.
   d. Provide backflow prevention device.
2. Process
   a. Flush to tanker.
   b. Conform that application of water is in appropriate location.
   c. Conform to BMP's at the construction site to prevent tracking.
3. Clean-up
   a. Remove equipment from flush point.
4. Documentation
   a. Document beginning of work, completion of work and any cleanup items performed on site.
   b. Residual test of discharged water.
   c. Location of water discharged.

WATER — Chemical Handling/Transporting and Spill Response

Description: This section contains information for transporting or handling of chemicals and actions that need to be taken when a chemical spill occurs.

Applicability: Transporting or handling of chemicals and possible spill of contaminates.

1. Preparation
    a. Understand MSDS sheets for handling of product.
    b. Determine proper place of handling.
    c. Have necessary containment and spill kits at handling place.
2. Process
    a. Begin transfer process.
    b. Discontinue operations if spill levels occur.
    c. Disconnect and store handling equipment.
3. Clean-up
    a. Clean up spills with proper material.
    b. Dispose of contaminated material at appropriate facility.
4. Documentation
    a. Report spills to Bear River Health Department.

WATER — Swimming Pools and Spas Discharge to Storm Water System

Description: This section contains information and guidelines for the draining of swimming pools and spas into the storm drain or sanitary sewer systems.

Applicability: Pool and Spa draining into storm water or sanitary sewer systems.

Note: Pool owners may discharge their pool water and filter backwash water to the sanitary sewer. There are no limitations on chlorine content or pH levels for discharges to the sanitary sewer. It is also acceptable to discharge to the sanitary sewer if the water is cloudy discolored, or contains algae. The pool owner should contact Public Works Department prior to discharging water from any pool or spa regardless of where they plan to discharge the water - sanitary sewer, onto the ground, or in a manner such that it enters the storm water system. After approval has been given by the public works department, swimming pool water may be discharged into the sanitary sewer system or the storm water system. The city must ensure the sewer system can accommodate the additional swimming pool water discharge. There may be a fee associated with discharging pool or spa water into the sanitary sewer.

1. Preparation
   a. With the help of Public Works officials determine the best place to discharge the water from the pool/spa.
   b. A pool or spa may be emptied onto the ground or into the storm water system if the chlorine content is less than one part per million and free of other chemicals.
   c. The pH level of the water must be tested prior to discharge and must fall within a range of 7 to 8.
   d. The water must not be cloudy or discolored and must be free of algae or other contaminants.
   e. Do a visual inspection of the pathway the water will take to ensure contaminants, trash, or soils or other sediments will not be washed into the storm water system. Clean as needed.
2. Process
   a. Clean, as needed, any storm water structure that will be used to convey the water into and through the storm water system.

b. Drain the pool or spa to the location determined by Public Works officials using the pool system's pumps or by gravity.

c. Carefully watch the draining process at all times to ensure the water flow is going as planned and does not overload the system.

d. Water being discharged may not cause erosion and may not go into a neighbor's property without their express written permission.

3. Documentation

a. Keep logs of pools and spas drained. Record the amount of water drained and where the water was drained to. Keep any notes or comments of any problems.