

Annual Storm Water Training for City Council & Staff

2026

Introduction

What is the Storm Water Management Program?

- A Storm Water Management Program Plan (SWMP) is a “written plan that is used to describe the various control measures and activities the Permittee will undertake to implement the storm water management plan.”

Why is it required?

- Required by the EPA and the Utah Division of Water Quality (federal, state)
- Provides guidance and “measurable” goals

South Weber City
Storm Water Management Plan



July 2026

Prepared by
JONES & ASSOCIATES
Consulting Engineers

Introduction



SWMP Definitions

Minimum Control Measure (MCM)

- “Control Measure” refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to Waters of the State.

Best Management Practices (BMPs)

- BMPs are actions or items that prevent or reduce water pollution.
- Examples?
 - ordinances, standard operating procedures, street sweeping, silt fencing, inlet protection

SWMP Definitions

Permittee/MS4 (Municipal Separate Storm Sewer System)

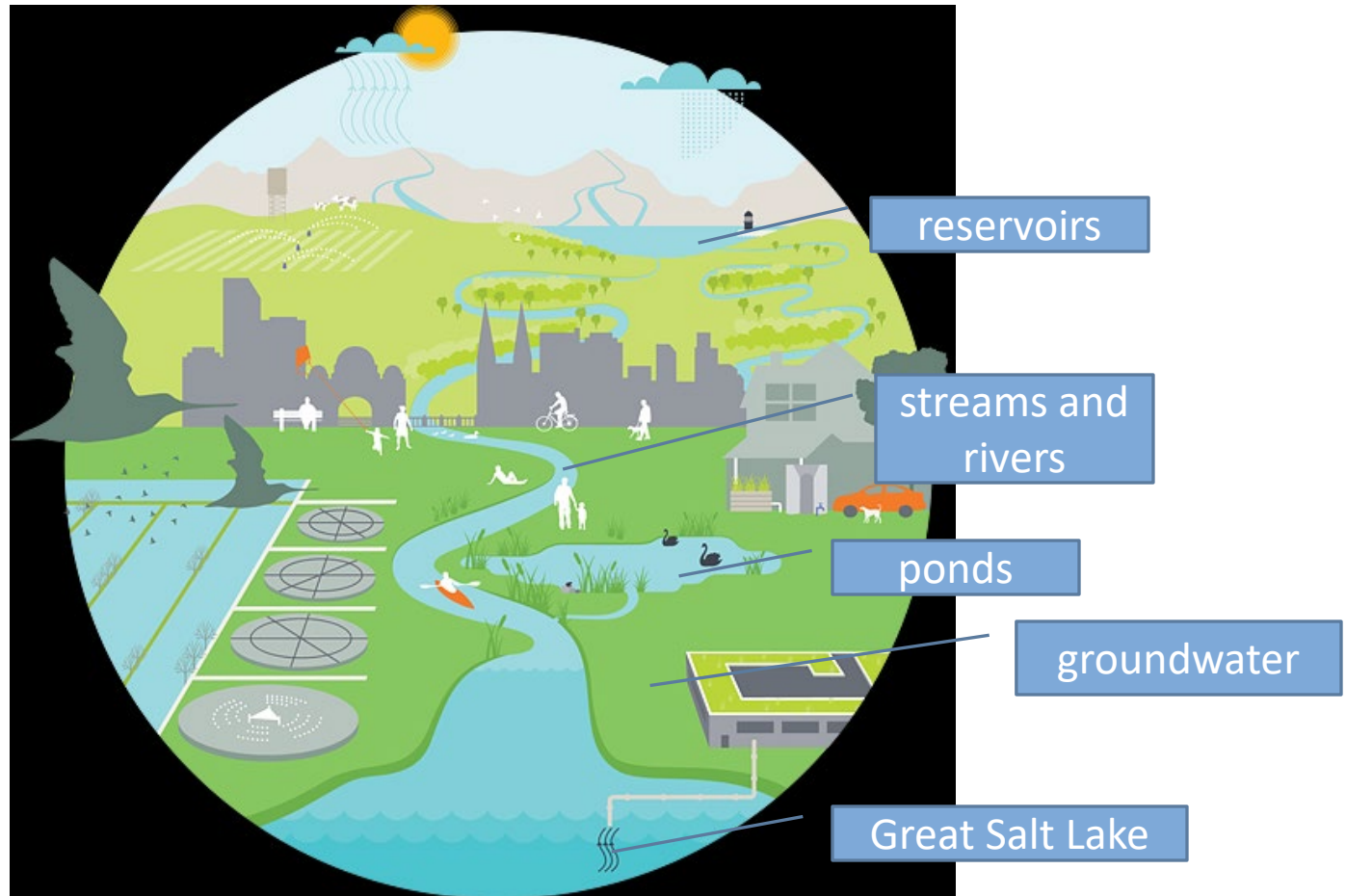
- South Weber City

Waters of the State

- Includes nearly all [water conveyances or impoundments](#), including groundwater

SWMP Definitions

Utah Waters of the State





SWMP Contents

Six Minimum Control Measures (MCMs)

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
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

Each MCM section contains tasks, goals, and deadlines

For each MCM, there are Action Items



MCM 1 – Public Education

Public Education and Outreach - General

- Provide and participate in a variety of stormwater education and outreach programs designed to build general awareness, reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts, and encourage the public to participate in stewardship activities
- Educate
 - General Public
 - Institutions, Industrial, and Commercial Facilities
 - Construction Engineers, Contractors, Developers, Development Review Staff, and
 - Land Use Planners
- Davis County Storm Water Coalition provides some public outreach and education





MCM 2 – Public Involvement

Public Involvement and Participation - General

- **Implement** a program that complies with applicable State and Local public notice requirements
- **Conduct** opportunities for public involvement and participation, a minimum of two (2) times annually
 - advisory panels
 - **public hearings**
 - watershed committees
 - stewardship programs
 - environmental activities
 - volunteer opportunities
 - **other similar activities**
- **Involve** potentially affected stakeholder groups
 - commercial and industrial businesses
 - trade associations
 - environmental groups
 - homeowners' associations
 - education organizations



MCM 2 – Public Involvement

Public Involvement - Examples

- Develop program for installation of curb markers
- Earth Day activity
- Country Fair Days booth
- Public Hearing for input



<https://www.usabluebook.com/collection-systems/stormwater-markers/>





MCM 2 – Public Involvement

Public Involvement

- Place storm water information on city's website
 - SWMP
 - Hotline

STORM WATER

Storm water is just as it sounds: water from storm events. Any precipitation that falls from the sky, including rain, hail, and snow, is considered storm water.

Storm Water runs off of hard surfaces such as concrete, asphalt, and other hard impervious areas and does not have the ability to soak into the ground. As a result, water flows off these surfaces and collects in gutter or basins which run directly into the City's storm drains. These drains carry the water as well as any sediment, garbage, and toxic chemicals suspended in the stormwater directly to our lakes and streams. Most drainage systems do not provide treatment, so preventing contamination of stormwater is crucial to ensure that pollutants do not enter our waterways.

[South Weber City Storm Water Management Plan](#)

**Update link to new 2026 SWMP
after adopting it tonight**



CONTACT INFORMATION

Storm Water Department: 801-479-3177 ext. 2218

[Davis County Environmental Health Services Division](#): 801-525-5100

[Wasatch Integrated Waste Management District](#): 801-614-5600

Weber Basin Water Conservancy District: 801-771-1677

[Utah Botanical Center](#)



MCM 3 – Illicit Discharge

Illicit Discharge Detection and Elimination - General

- **Revise, implement and enforce** an Illicit Discharge and Elimination (IDDE) program to systematically **find and eliminate** sources of non-stormwater discharges from the MS4
- **Implement** defined procedures to prevent illicit connections and discharges





MCM 3 – Illicit Discharge

Illicit Discharge

- Any discharge into the storm drain system or Waters of the State that isn't purely storm water



<https://www.durhamnc.gov/2822/Illicit-Discharge-Detection-and-Eliminat>



MCM 3 – Illicit Discharge

Non-storm water discharges:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering runoff
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Residual street wash water
- Dechlorinated water reservoir discharges
- Discharges or flows from emergency fire fighting activity



MCM 3 – Illicit Discharge

Illicit Discharge Detection and Elimination – Tasks

- General Idea:
 - Avoid illicit discharges
 - Locate problem areas
 - Find the source, remove/correct illicit connection or discharge
 - Document actions taken
- **Inspect** outfalls
- **Promote** collection of household hazardous waste
 - Spring Cleanup
 - Fall Cleanup
- **Publicize** hotline for reporting illicit discharges
- **Develop** SOPs for avoiding, cleaning, tracking spills, responding to public referrals of illicit discharges, etc.
- Conduct IDDE annual **training**
- **Document, document, document**



MCM 3 – Illicit Discharge



<https://www.chathamcountync.gov/government/departments-programs-iz/watershed-protection/illicit-discharge>



<https://dem.ri.gov/ri-stormwater-solutions/violations.php>



<https://lwr.danecounty.gov/illicit-discharges>



<https://dem.ri.gov/sites/g/files/xkgbur861/files/ri-stormwater-solutions/documents/IDDE.pdf>



MCM 3 – Illicit Discharge

Motor Oil
Leak



<https://www.brightonco.gov/432/Illicit-Discharges>

Illicit Connection
into Storm Drain

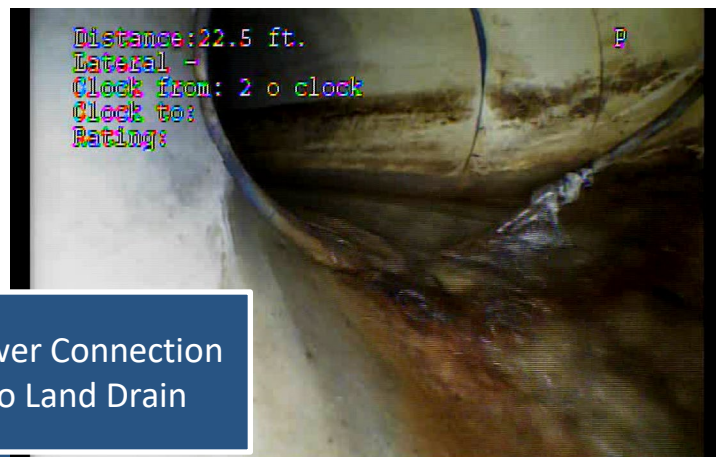


Non-residential
Vehicle Wash
Water



<https://www.christiansburg.org/DocumentCenter/View/9552/IDDE-Field-Guide>

Sewer Connection
to Land Drain





MCM 3 – Illicit Discharge



<https://www.yorkcountygov.com/910/Illicit-Discharge-Detection-Elimination>

Concrete cutting water
and concrete wash outs
– watch for small
projects like fences,
sidewalks, and
driveways

<https://www.pflugervilletx.gov/713/Environmental-Pollution-Prevention-Hotli>



Paint wash out
into storm drain



https://www.knoxcounty.org/stormwater/illlicit_discharge.php



MCM 3 – Illicit Discharge



Leaking
dumpster

<https://sustainablestormwater.org/2011/03/10/stormwater-emergency-response-series-part-1-dumpster-cleanups/>

Dumping
liquids off of
loading dock



<https://www.wilmingtonma.gov/stormwater-management/illicit-discharge-detection-elimination/>



Discharging
contaminated
water

<https://nc-cleanwater.com/>



Grass
clippings in
the gutter

<https://bradfordil.com/2021/07/06/state-law-reminder-grass-clippings/>

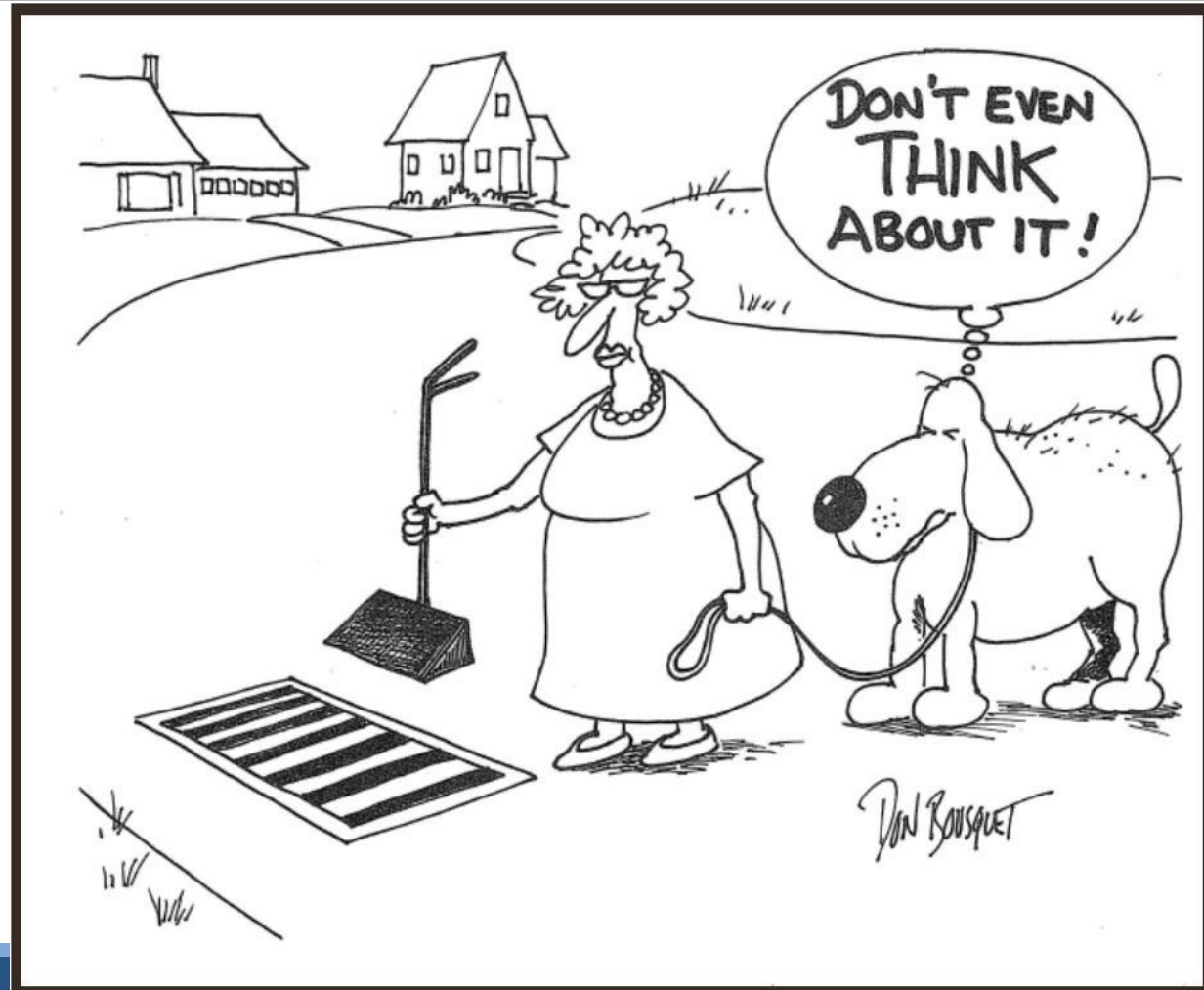


Grass
clippings
dumped in
drainage

<https://www.newtonkansas.com/Departments/Public-Works/Stormwater-Management>



MCM 3 – Illicit Discharge





MCM 3 – Illicit Discharge

IF YOU SEE SOMETHING, SAY SOMETHING™

You are your City's eyes and ears.



MCM 4 – Construction Sites

Construction Site Storm Water Runoff Control - General

- **Revise, implement, and enforce** a program to reduce pollutants in any storm water runoff to the MS4 from:
 - construction sites with a land disturbance of greater than or equal to one acre
 - sites less than one acre that are part of a larger common plan of development
- Public and private projects, including projects proposed by the Permittee's own departments and agencies, shall comply with these requirements



MCM 4 – Construction Sites

Construction Site Storm Water Runoff Control - Tasks

- **Revise/enforce ordinances** that require the use of erosion and sediment control practices
- **Require** Storm Water Pollution Prevention Plan (SWPPP)
 - All disturbances greater than 1 acre
 - Disturbances less than 1 acre but part of a Common Plan of Development (i.e. individual building lots)
 - Disturbances in a sensitive area (e.g. floodplain, near wetland, steep slope, highly erosive soils)
- **Inspections**
 - City responsible for inspecting high-priority construction sites monthly
 - City responsible for enforcing SWPPP, ordinances, violations





MCM 4 – Construction Sites

More tasks...

- **Develop** SOPs for enforcement of ordinances
- **Document and track** all enforcement actions
- **Develop** checklist for SWPPP review
- **Conduct** pre-construction SWPPP meeting
- **Develop** procedures for receiving input by public
- **Identify** priority construction sites
- **Develop** SOPs for construction site inspection
- **Inspect** all phases of construction (pre-, during, and post-)
- **Perform** monthly inspections of high-priority construction sites
- **Perform** necessary follow-up actions





MCM 4 – Construction Sites

Have hotline for reporting issues posted at the construction site



<https://regionalstormwater.org/about-stormwater/stormwater-pollution/>



<https://www.maryland.gov/stormwater-management/pages/construction-site-stormwater-runoff-control>

SWPPP

A Storm Water Pollution Protection
Permit covers this construction site.
If any Non-Storm Water discharge
or severe vehicle tracking occurs
please call 801-804-4577.





MCM 4 – Construction Sites

Provide annual **training**

- Registered Storm Water Inspectors, building inspectors
- Anyone dealing with construction, building permits

Document reviews,
inspections, enforcement



MCM 5 – Long-Term SW Mgmt

Long-Term Storm Water Management in New Development and Redevelopment - General

- [Revise, implement, and enforce](#) a program to [address post-construction storm water runoff](#) to the MS4 from private and public new development and redevelopment construction sites.
- These [water quality considerations](#) do not replace or substitute for water quantity or flood management requirements for new development or redevelopment sites.
- The water quality controls may be [incorporated into the design](#) of structures intended for flow control; or water quality control may be achieved with separate control measures.
- The program must [apply to private and public](#) development sites.



MCM 5 – Long-Term SW Mgmt

Low Impact Development (LID)

- Structural and non-structural ways to minimize, slow, and/or clean storm water flows
- Examples: minimizing impervious areas, preserving natural features, infiltration basins, rain barrels, permeable pavements



MCM 5 – Long-Term SW Mgmt

Long-Term Storm Water Management for New Development and Redevelopment - Tasks

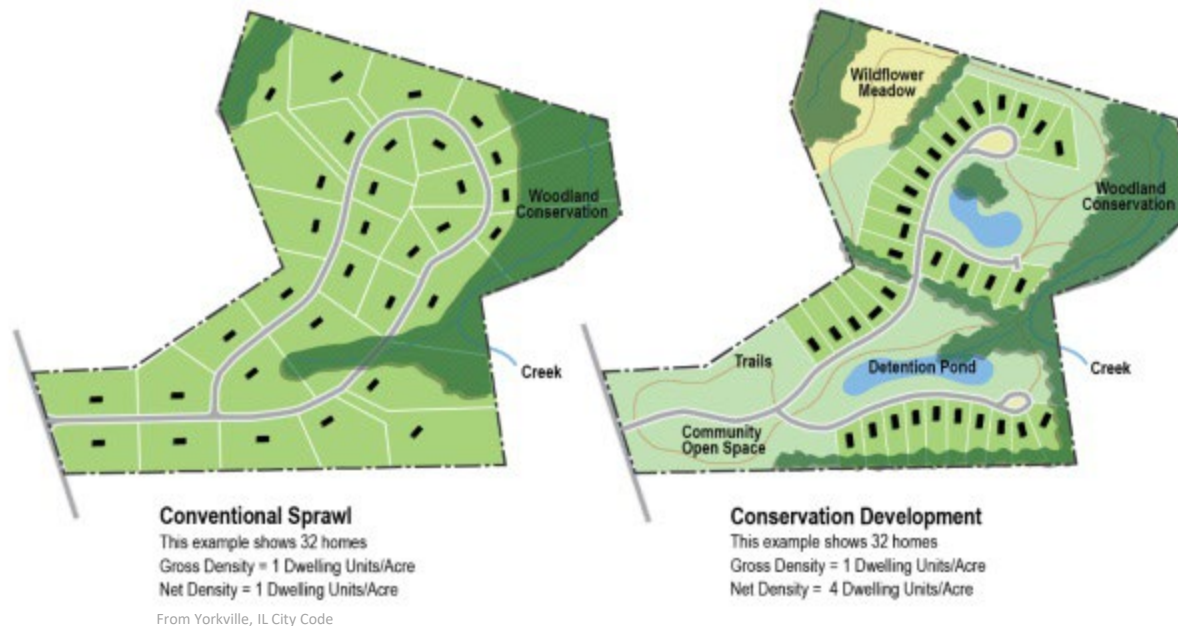
- Program must have requirements or standards to ensure that any storm water controls or management practices for new development and redevelopment will **prevent or minimize impacts to water quality**.
- Non-Structural BMPs (i.e. procedural)
 - Planning (ordinance, SWMP, City Standards)
 - Site-based design
- **Develop and define** a specific hydrologic method or methods for calculating runoff volumes and flow rates
- **Require retention** of 80th percentile storm event (~0.5") onsite
- **Require** a process which requires the evaluation of a Low Impact Development (LID) approach
- Permittees must allow for use of **a minimum of five (5) LID practices**
- **Check** feasibility



MCM 5 – Long-Term SW Mgmt

Non-structural example – land planning

- Allow cluster subdivisions - leave undisturbed or natural land





MCM 5 – Long-Term SW Mgmt

Non-structural example - minimize impervious surfaces

- Minimize driveway widths (curb cuts at street) [by ordinance](#)
- Encourage gravel and/or permeable pavers (site-based design)



MCM 5 – Long-Term SW Mgmt

City selected 5 LID practices (structural)



Bioretention Cell
Bioswale
Vegetated Strip



Infiltration Basin
Infiltration Trench

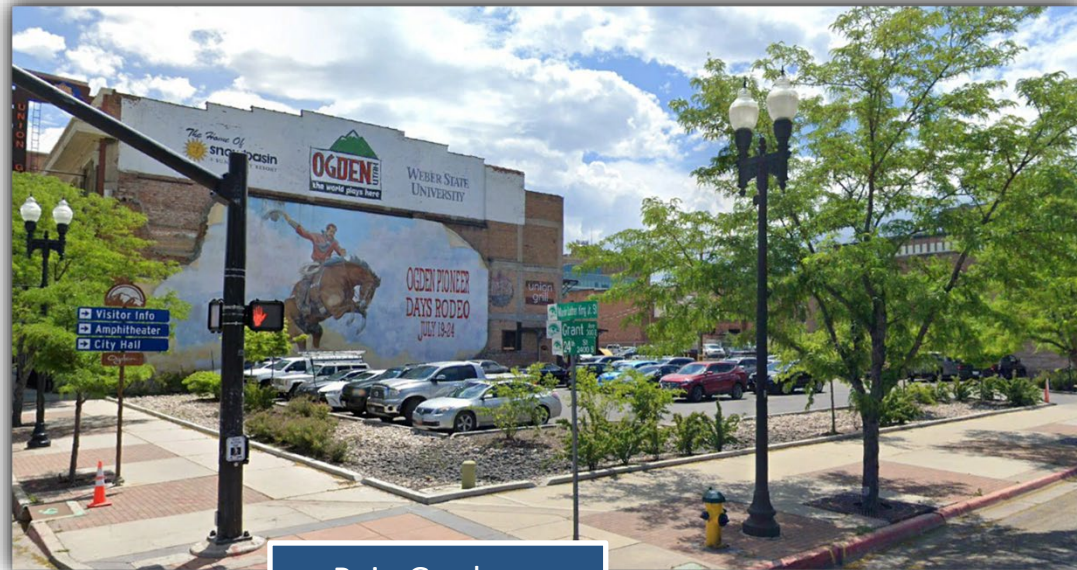




MCM 5 – Long-Term SW Mgmt

Selected Structural Practices

- Bioretention cells
- Bioswales
- Vegetated strips
- Infiltration Basins
 - can be incorporated into detention pond, when designed properly
- Infiltration Trench



Rain Gardens,
Vegetated Strips,
and Bioswales



MCM 5 – Long-Term SW Mgmt



Bioretention Cell
Grant Avenue at
23rd St. in Ogden

Curb cuts to
allow inflow

© 2020 Google
© 2019 Google

Google Earth

Report a problem



MCM 5 – Long-Term SW Mgmt



https://www.hydroscreen.com/products/detention_pond_screens/index.html

Avoid pollution with
pre-treatment



https://www.stormwaterpa.org/basin_retrofit/existing.html



MCM 5 – Long-Term SW Mgmt

Jordan River Clean Up



<https://www.sltrib.com/news/environment/2018/03/29/https://www.wachtonline.com/jordan-river-basin-retrofit/existing.html>
river-threatens-entire-species-of-waterfowl-but-a-new-project-aims-to-fix-that/



MCM 5 – Long-Term SW Mgmt

Underground Infiltration Galleries



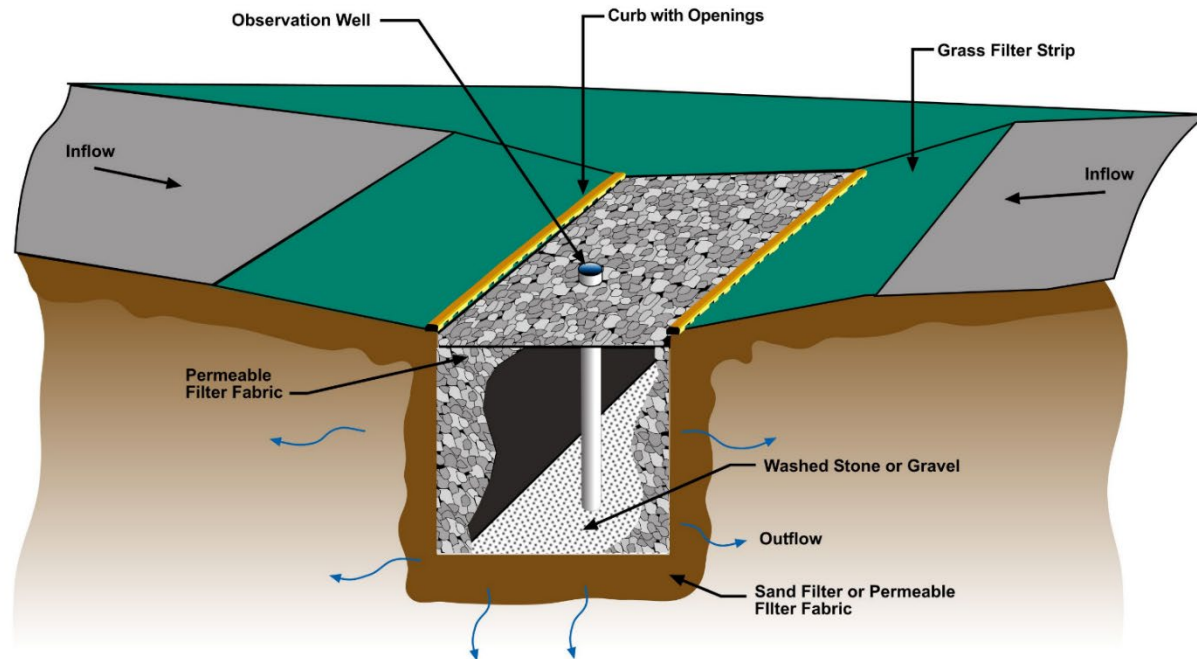
<https://www.fergusonwaterworks.com/product/r-tank-stormwater-modules/>



<https://www.adspipe.com/stormtech>



MCM 5 – Long-Term SW Mgmt



INFILTRATION TRENCH

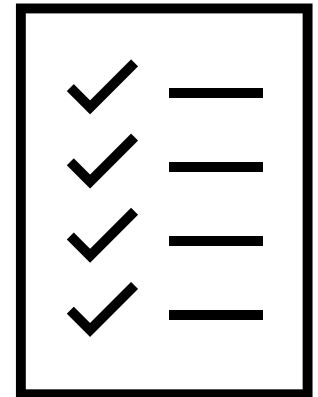
<https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-1--Infiltration-System-6-3-2019.pdf>



MCM 5 – Long-Term SW Mgmt

Other Tasks

- Develop and adopt ordinances
- Maintain documentation
- Adopt and implement SOPs for site inspection and enforcement
- Require long-term storm water management agreements
- Inspect during installation, at completion, and every 5 years
- Adopt and implement procedures for site plan review
- Review plans to ensure they include long-term storm water management measures
- Create and maintain an inventory of long-term BMPs (public and private)
- Provide **training** – suitability, installation, maintenance
- Maintain **documentation**





MCM 6 – Good Housekeeping

Pollution Prevention / Good Housekeeping – General

- Implement a program for Permittee-owned or operated facilities to prevent or reduce the runoff of pollutants to the MS4 and waters of the state.
- **Create** inventory of potential “high-priority facilities”
 - Public Works Yard
 - City Hall
 - City parks
 - City-owned detention/retention basins
 - Family Activity Center
 - South Weber Fire Station
 - UTA parking lot
- **Identify** high-priority facilities
- **Develop** SWPPP for each high-priority permittee-owned or operated facility



MCM 6 – Good Housekeeping

Pollution Prevention / Good Housekeeping - Tasks

- **Perform** monthly visual inspections
- **Perform** semi-annual comprehensive inspection of “high-priority” facilities
- **Perform** annual observation of storm water discharge from “high-priority” facilities
- **Develop/update** SOPs for city-owned facilities (parks, roads, buildings, etc.)
- **Obtain** private maintenance contracts (privately owned facilities)
- Follow permitting process for public construction projects (SWPPP, NOI, NOT)
- Provide **training**
- **Document, document, document**

SUMMARY

SWMP is a comprehensive plan that covers all facets of the City's storm water program

Requires involvement from City Council to Public Works to the public

Implementation requires time and manpower, both initial and on-going

SUMMARY

Questions?

Discussion

Next Steps