



Storm Drainage Ordinance Revisions

City Council Study Session
March 12, 2019





Why update?

- ✓ State MS4 permit requirements
- ✓ Update language, delete unnecessary language
- ✓ Organize content
- ✓ Strengthen code and requirements
- ✓ Better protect community from flooding and poor surface water quality





Why have a storm drainage ordinance?

- Protect storm water quality through regulations, education, design criteria, construction practices, maintenance
- And its required by federal law!





What is “storm drainage” or “stormwater”?

Stormwater = Rain water and snow melt down the outside drains (into storm sewer that goes to the creeks and rivers) > untreated

As opposed to...

Potable water from tap (delivered by Denver Water)

Wastewater down the interior drains (goes into sanitary sewer pipes to the wastewater treatment plant) > treated



Stormwater Runoff





What is the MS4 permit?

- MS4= Municipal Separate Storm Sewer System= a system of conveyances such as pipes, inlets, ditches, etc.
- Mandated by Federal Law (Clean Water Act), regulated by State of Colorado (CPDHE/WQCD)





What is the MS4 permit?

Permit requires certain programs aimed to protect/improve Water Quality:

1. Public participation
2. Public outreach/education
- **3. Illicit discharge detention and elimination**
- **4. During construction stormwater controls**
- **5. Post-construction water quality measures from developments**
6. Municipal operations/good housekeeping



Examples of illicit discharges

Common:

- Oil
- Grease
- Sediment
- Grass clippings





Examples of temporary construction control measures

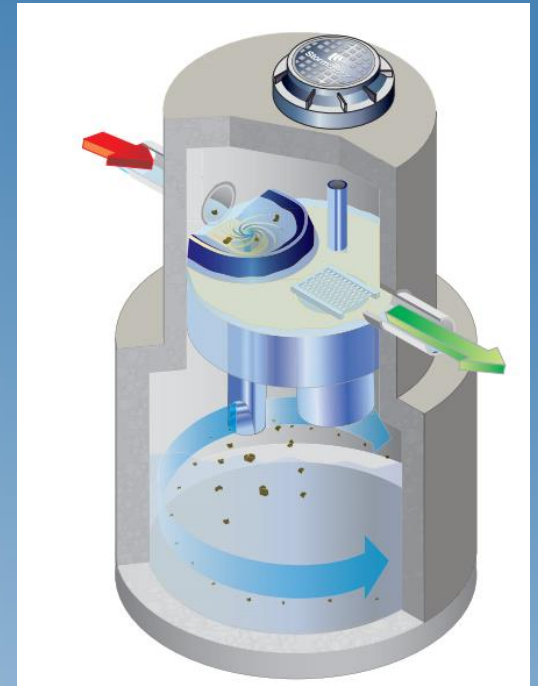
Common:

- Vehicle tracking control pads
- Silt fence
- Straw wattles
- Inlet protection
- Curb socks





Examples of permanent water quality control measures



Common:

- Ponds
- Underground vaults
- Raingardens
- Permeable pavements



Littleton

Colorado

More permanent water
quality control measures





MS 4 permit...

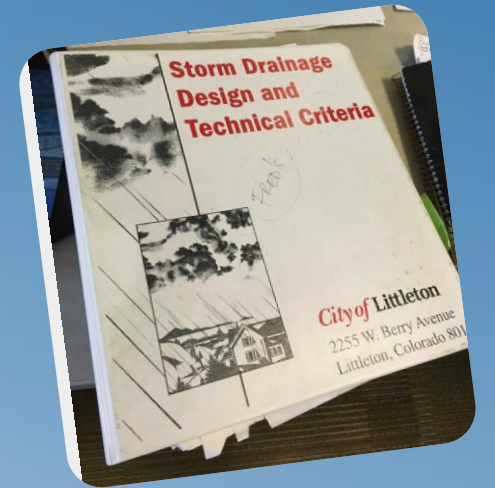
- Permit renewed July 2016, valid for 5 years
- New requirements and program elements
- Implementation period for various requirements
- **Regulatory mechanisms deadline July 1, 2019**



MS 4 permit...

“Regulatory mechanism” for Littleton consists of:

1. Storm drainage ordinance (Title 7, Chapter 7)
2. Storm Drainage Design and Criteria Manual (first edition 1986, last update was in 2012)

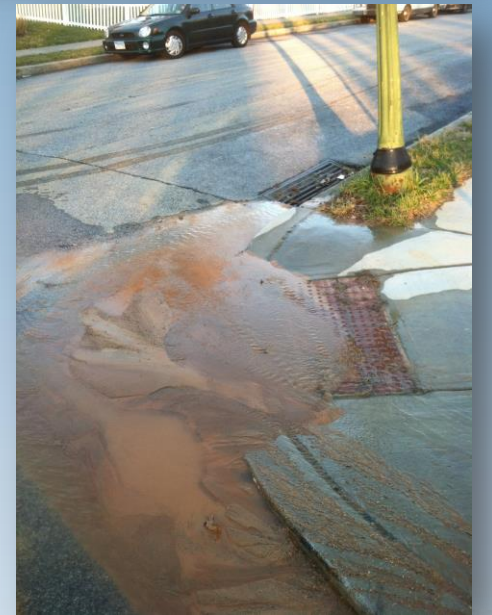
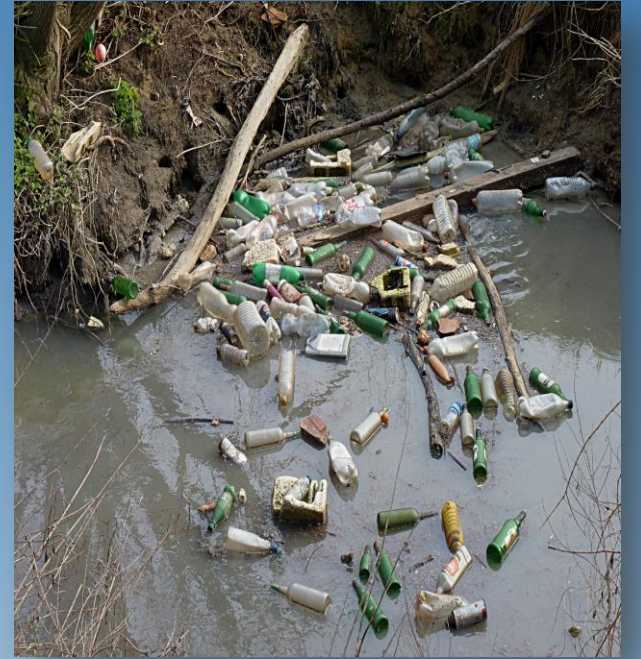


*Some regulatory items are more appropriate in the ordinance, and others in the design criteria manual



MS4 permit requirements for ordinance

- Prohibit illicit discharges
- Require temporary construction controls, maintenance
- Require permanent controls for new development and re-development, maintenance
- Enforcement procedures
- Procedures for property access





Changes to 7-7: General

- Adding or enhancing language as required by MS4 permit
- General re-organization for consistency with other code sections, clarity, and logical sequencing
- Deletion of unnecessary or outdated language
- Consistency with other metro area and surrounding jurisdictions

Changes to 7-7: Specific

	Proposed Change	Reason
1	Add sections for: -Definitions -Abbreviations -Purpose, Objective and Scope	Consistency with other titles and chapters, add clarity for terms used in sections, add and clarify statement of purpose of the chapter. Definitions are same as the state MS4 permit definitions.
2	Delete 7-7-6	Not applicable to this section, belongs in 10-6 (floodplain)
3	Delete 7-7-7	Not appropriate for ordinance, best to have technical design content in storm design criteria manual
4	Delete 7-7-8	Outdated language, applicable content moved to other sections for clarity and to consolidate all facility maintenance language to one section.
5	Modify 7-7-10	Reworded and added more robust language about requirement for maintenance and notification of any changes to facilities

Changes to 7-7 – specific *(continued)*

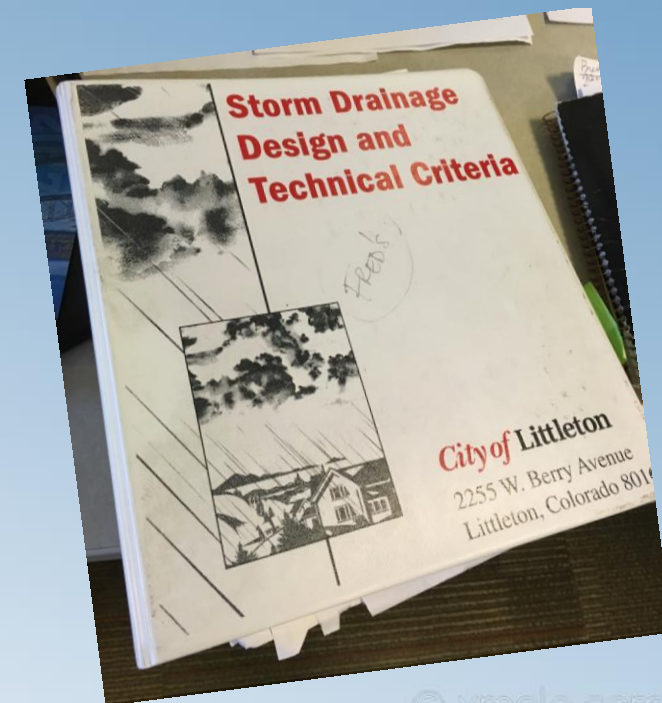
Proposed Change		Reason
6	Delete 7-7-11	Most of language is now obsolete because the city performs routine inspections of facilities and does not rely upon property owners to self-report inspections. However, city can still require a self-report and that language moved to the new section.
7	Modify 7-7-12	Revised language to be more robust and enforceable and meet MS4 permit requirements for site access to enforce this chapter. Clearly outline city's enforcement procedure and steps, as required by MS4 permit.
8	Change 7-7-13 to 7-7-8 and modify language	Reorganization of sections to match order of items in new 7-7-7 (Authority of Director), add MS4 permit to clarify prohibition of illicit discharges and required permit language for types of allowable discharges, process for potential discharge evaluations, and responsibility and notice. Added language for illicit connections and potential illicit discharge activities for consistency with surrounding jurisdictions and to be more robust.
9	Add 7-7-13	Provide a mechanism for appeals to decisions of Director.
10	Add 7-7-14	Provide severability language.



The other part of the regulatory mechanism: the design criteria manual

Planned 2019 revisions to chapters:

- 3 (Policy)
- 13 (temporary construction)
- 14 (detention)
- 15 (permanent water quality)





Design Criteria Manual revisions

- Detailed language from MS4 permit
- Consistency with UDFCD updates
- Clarifications
- **More robust and clear “triggers” that require detention and/or permanent water quality**
 - 10,000 SF of CUMULATIVE impervious area on a site > detention and water quality
 - 5,000 SF of disturbance > grading permit and stormwater management plans



Questions?