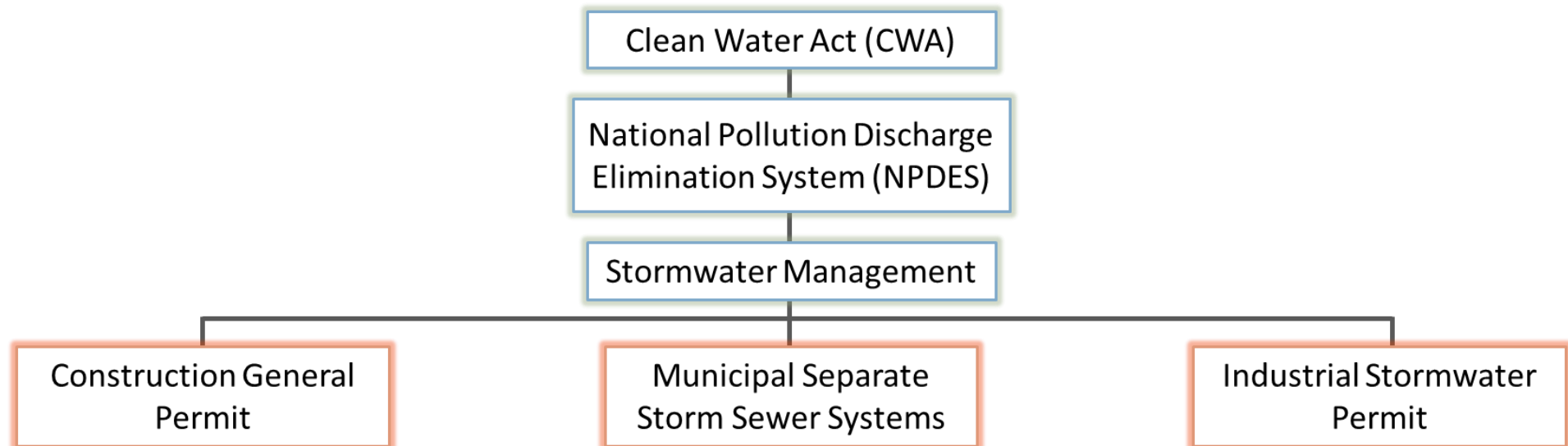


Wyoming as a MS4



NPDES - National Pollutant Discharge Elimination System

- 1972- EPA implemented the NPDES program under the Clean Water Act
 - Purpose: To improve water quality in the U.S. by issuing and enforcing permits





Overview

- The Stormwater Program for MS4s is designed to reduce the amount of sediment and pollution that enters surface and ground water from storm sewer systems to the maximum extent practicable.
- Stormwater discharges associated with MS4s are regulated through the use of NPDES permits. Through this permit, the owner or operator is required to develop a stormwater pollution prevention program (SWPPP) that incorporates best management practices (BMPs) applicable to their MS4.



Components to MS4 Permit

- Prioritize educational and outreach activities within your City
- Provide opportunity once a year for public participation and involvement
- Target high priority areas for illicit discharges and refine enforcement response procedures and ordinances if needed
- Follow SOPs, SWPPP, Engineering Standards, Plan Reviews for Construction Site Stormwater Control
- Follow SOPs for Post Construction Stormwater Management
- Follow written standard operating procedures for municipal good housekeeping activities
- Inspections and documentation (most important and crucial part)

Why does it matter?

According to the EPA,
stormwater runoff is the leading
source of water pollution





MS4 Permit Requires...

Reduction of pollutants discharged in stormwater to the maximum extent practicable.



What is Stormwater?

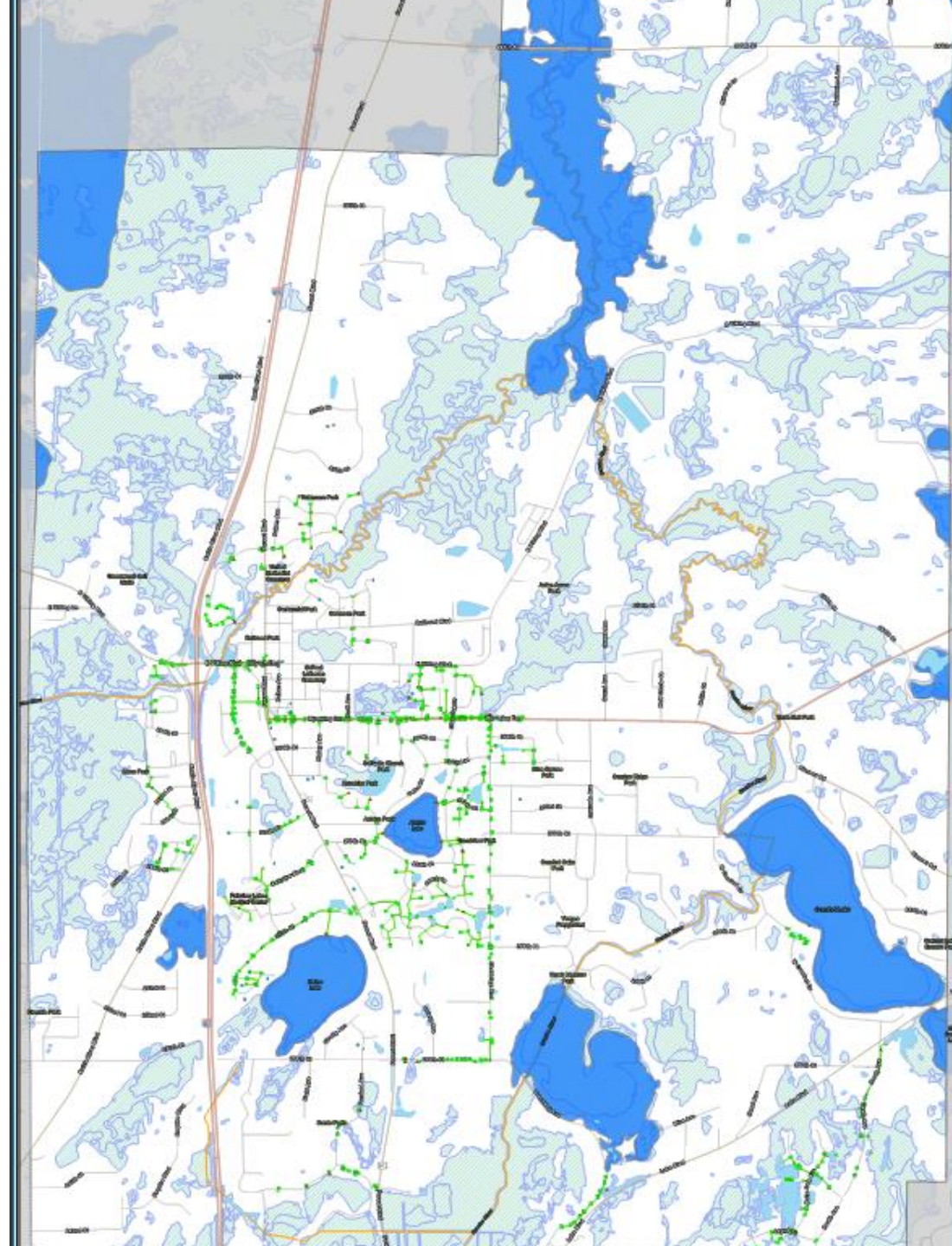
- Stormwater runoff is rain or snowmelt that flows over land and does not infiltrate into the ground
- As stormwater runoff flows across surfaces, it picks up trash, debris and pollutants (ex: sediment, soil, grease, etc.) along the way
- For construction sites, sediment movement from the site is the primary stormwater pollutant and is considered an illicit discharge



Anything in the streets and ditches—**litter, pesticides, fertilizer, grass clippings**—can end up in your local lakes and rivers

What is a MS4

- A MS4 is a conveyance or system of conveyances (roads, with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, storm drains);
- Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes.
- Designated or used for collecting or conveying stormwater; which is not a combined sewer; and which is not part of a publicly owned treatment works.





Why is Wyoming a MS4?

MS4s in Minnesota must satisfy the requirements of the MS4 general permit if they are:

- Located in an urbanized area and used by a population of 1,000 or more or
- Owned by a municipality with a population of 10,000 or more, or
- ***A population of at least 5,000 and the system discharges to specially classified bodies of water.***



Six Minimum Control Measures (MCMs) for MS4 Permit

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management
6. Pollution Prevention and Good Housekeeping for Municipal Operations

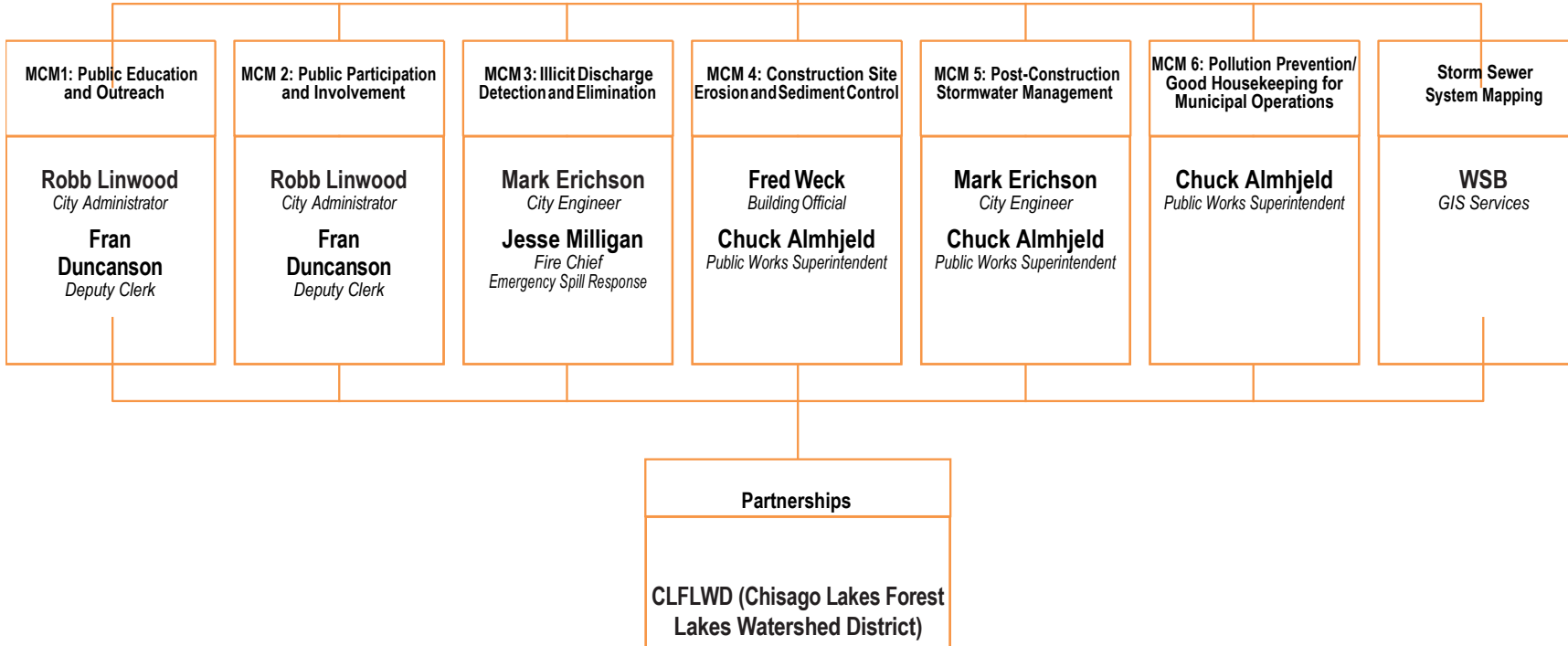


City Administrator

Robb Linwood

MS4 Coordinator

Kory Bonnell



MCM1: Public Education and Outreach

Robb Linwood
City Administrator

Fran Duncanson
Deputy Clerk

MCM 2: Public Participation and Involvement

Robb Linwood
City Administrator

Fran Duncanson
Deputy Clerk

MCM3: Illicit Discharge Detection and Elimination

Mark Erichson
City Engineer

Jesse Milligan
Fire Chief
Emergency Spill Response

MCM 4: Construction Site Erosion and Sediment Control

Fred Weck
Building Official

Chuck Almhjeld
Public Works Superintendent

MCM 5: Post-Construction Stormwater Management

Mark Erichson
City Engineer

Chuck Almhjeld
Public Works Superintendent

MCM 6: Pollution Prevention/ Good Housekeeping for Municipal Operations

Chuck Almhjeld
Public Works Superintendent

Storm Sewer System Mapping

WSB
GIS Services

Partnerships

CLFLWD (Chisago Lakes Forest Lakes Watershed District)

MCM 1: Public Education & Outreach

- Prioritize educational opportunities and activities within the City of Wyoming
 - Focus on areas without stormwater treatment
 - Areas adjacent to or that discharge to waterbodies
- IDDE
 - Educate City staff and public on illicit discharge
- Utilize partnerships to spread educational awareness
 - Work with CLFWD on educational opportunities





MCM 2: Public Participation & Involvement

- Annual Public meeting
 - One opportunity annually for the public to view and comment on the SWPPP (November or December 2020)
- Documentation of specific MCM 2 data
 - Attendance at the annual meeting
 - Comments received and responses to input of SWPPP

MCM 3: Illicit Discharge Detection & Elimination

- Ordinance
 - Utilize Wyoming City ordinance to provide notice of verbal or written warnings when illicit discharge has been identified
- Training
 - Annual training for all City staff on how to recognize illicit discharges
- Detection
 - What to look for during yearly outfall inspections and routine activities





MCM 4: Construction Site Stormwater Runoff Control

- Plan reviews and inspections
 - Plan reviews and inspections required for all sites 1 acre or greater. Minimum of weekly inspections and after 0.5" rain fall events on sites 1 acre or more
- Need to inspect smaller sites
 - City can determine inspection frequency but smaller sites need regular inspection as well
- Documentation
 - Record of all inspections and plan reviews

MCM 5: Post Construction Stormwater Management

- Direction for post construction stormwater runoff control
- Long Term Maintenance
 - City to conduct inspections, perform maintenance and assess costs to maintain structural stormwater BMPs constructed after the permit is in effect
 - Rain gardens
 - Infiltration basins
 - Stormponds





MCM 6: Pollution Prevention & Good Housekeeping

- SWAMP
 - Storm Water Access Management Program
- Inspections
 - Structural Stormwater BMPs (annually)
 - Outfalls (once per permit cycle)
 - Ponds (once per permit cycle)
- Training
 - Implemented annual stormwater management training program
- Documentation



Checklist

- ✓ Site Plan Review for Post Construction
 - When the proposed project results of 1 or more acres of new impervious surface or fully reconstructs 1 or more acres of impervious surface
- ✓ Construction Site Inspections
 - Initial project inspection in accordance with City ordinance
 - Project completion inspection
 - Inspection at any other time, at the issuing authority's discretion
 - City owned projects on a weekly basis and within 24 hrs of 0.5" rainfall



Checklist

- ✓ Structural Stormwater BMP Inspection
 - Should be completed after initial inspection is completed (SWAMP)
- ✓ Stormwater Catch Basins
 - 20% inspected each year, minimum of once per 5 year permit cycle
- ✓ Stormwater Pond Inspection
 - 20% inspected each year, minimum of once per 5 year permit cycle
- ✓ Outfall Inspections
 - Culvers or pipes of 12" or greater that outfall into public waterbodies at 20% inspection each year (all outfalls inspected once over 5 year permit cycle)



Checklist

- ✓ TSS and TP Assessments of Ponds
 - Should be completed after initial inspection is completed (SWAMP)
- ✓ Staff Training
 - Annual Training of MS4 Stormwater program, Illicit Discharge and Erosion and sediment control BMPs
- ✓ City Owned Facility Inspections and MS4 Check in
 - Quarterly MS4 Check ins and facility inspections of public works building, material storage yard, golf maintenance buildings and streets and parks



Checklist

- ✓ Public Education
 - Newsletter articles
 - Website
 - Social Media
- ✓ Public Involvement
 - Annual SWPPP meeting
- ✓ Annual Reporting
 - Due June 30th of each year



Now what?

Provide education for high priority areas

Continue to perform training with city staff

Continually perform inspections for illicit discharges, construction sites, and post-construction sites

Complete stormwater system inspections and maintenance

Continue to document MS4 activities. (Most crucial element to a possible future MS4 MPCA Audit)

Continue to use checklist provided in previous slides to ensure MS4 permit requirements are being met



THANK YOU