City of Fairmont
Storm Water Pollution Prevention Plan
Annual Public Meeting

June 11, 2018

Why is Water Quality Important?

- Water has always been important to Minnesota and is a key part of our history, culture, economy and recreation. There are more than 13.1 million acres of lakes, rivers, streams and wetlands.
- Fairmont has approximately 1300 acres of lakes, streams, and wetlands within city limits. (12% of city limits)

Why is Water Quality Important?

- We need to maintain the beneficial uses of our lakes, rivers, creeks, and wetlands.
  - Domestic Water Supply
  - Recreation: Fishing, Swimming, Boating
  - Aquatic Life, Wildlife Habitat
  - Aesthetics: Property Values, Tourism

Current Permits with MPCA

- WWTP Surface Water Discharge NPDES
- Lime Ponds Surface Water Discharge NPDES
- Airport Industrial Stormwater
- WWTP Industrial Stormwater
- Construction Stormwater Permits
- MS4 Permit

What is a MS4?

Municipal Separate Storm Sewer System

MS4

- A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains:
  a. Owned or operated by a state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, that drain discharges into waters of the state.
  b. Designed or used for collecting or conveying stormwater
  c. That is not a combined sewer; and that is not part of a publicly owned treatment works

MS4

- 175 Outlets (to lakes, creeks, ditches, wetlands or stormwater structures)
- 2129 Catch basins (inlets)

MS4

- 56.8 Miles of Stormsewer

- 5 Wet Ponds

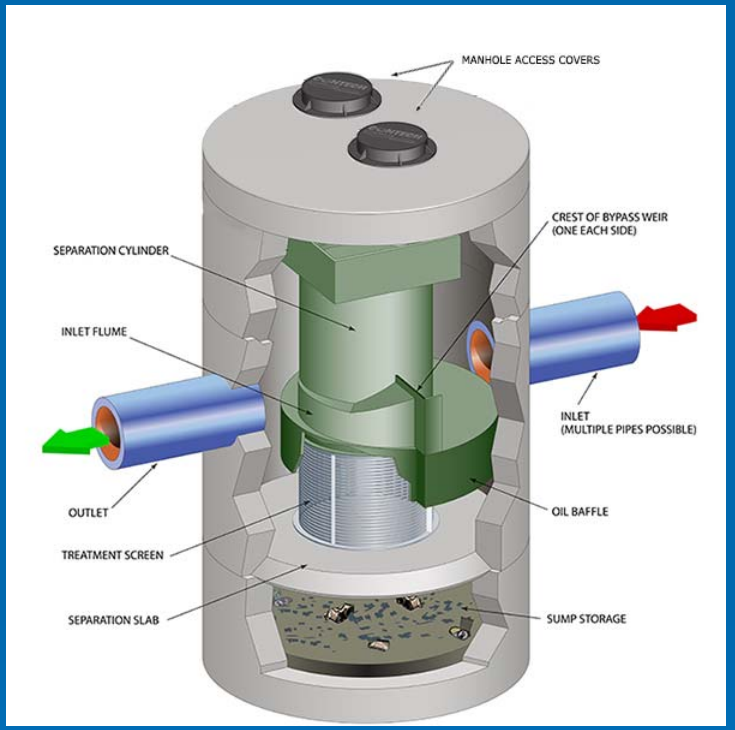
MS4

- 3 Dry Ponds

- 4 Filtration Basins

MS4

- 12 Structural Sediment Removal Devices



MS4 Permit

- Fairmont is an MS4 Community
  - Designated by Minnesota Pollution Control Agency (MPCA) under federal Clean Water Act (CWA)
- Received National Pollution Discharge Elimination System Permit (NPDES) in 2006 from the MPCA.
- Currently the City is permitted under MPCA's General Permit that was issued August 1, 2013 and expires July 31, 2018. The MPCA will likely issue a new permit in the beginning of 2019.
- The City will have to reapply for the permit coverage at that time.
- Only minor changes expected from the new permit.

2018 Annual Public Meeting

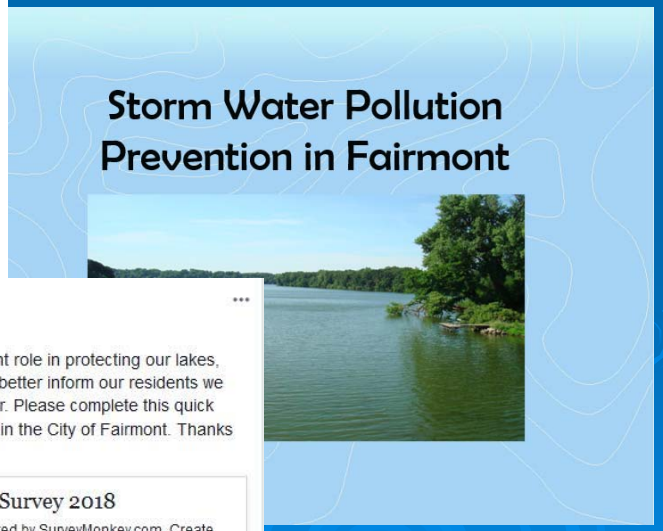
- The City of Fairmont was approved for the current permit March 17, 2014.
- The city has been working to update, revise, and make additions to its Storm Water Pollution Prevention Plan in order to meet new requirements.
- Changes to permits, ordinances, standard operating procedures (SOPs), and enforcement response procedures (ERPs) will be made to meet the new permit rules.

Acronyms of the NPDES Permit

- SWPPP - Storm Water Pollution Prevention Plan
  - Primary Component of Permit
- BMP - Best Management Practices
  - Specific SWPPP Action Items
- MCM - Minimum Control Measures
  - 6 MCM's are defined in the SWPPP with specific BMP's for each
- TMDL – Total Maximum Daily Load
  - Maximum nutrient and contaminant levels that will maintain a healthy ecosystem
- WLA – Waste Load Allocation
  - Specific amount of nutrient or contaminant that a source is allowed to discharge to meet the TMDL requirements

MCM #1
Public Education and Outreach

- Permittees shall develop and implement a public education program to distribute educational materials, interact with the public and educate them on why it is important to prevent storm water pollution.



MCM #1
Public Education and Outreach

- Survey Results (30 Responses)
  - How familiar are you with the Municipal Separate Storm Sewer System (MS4) Permit and Program?
    - 67% Never heard of MS4 program
    - 30% Somewhat familiar
    - 3% Well aware of MS4 program

MCM #1
Public Education and Outreach

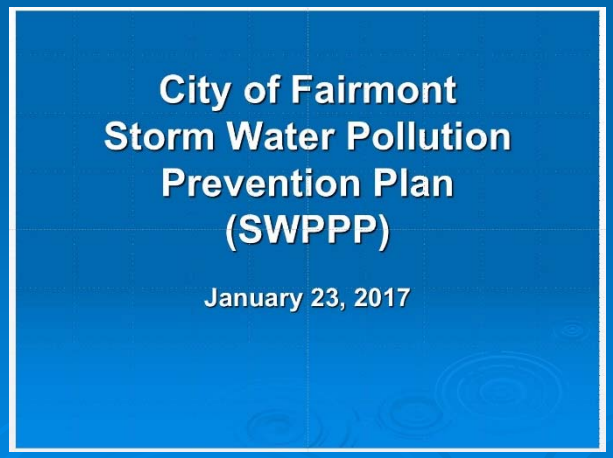
- Do you know what an illicit discharge it?
  - 43% Yes
  - 57% No
- In your experiences, which medium is the best way(s) to effectively reach the general public in Fairmont?
  - #1 Social Media
  - #2 Utility Bill Insert
  - #3 Newspaper
  - #4 City Newsletter

MCM #1
Public Education and Outreach

- Which MS4 Program Minimum Control Measures do you feel the City can improve upon, if any?
  - #1 Public Education & Outreach
  - #2 Municipal Operations and Good Housekeeping
  - #3 Public Participation and Involvement

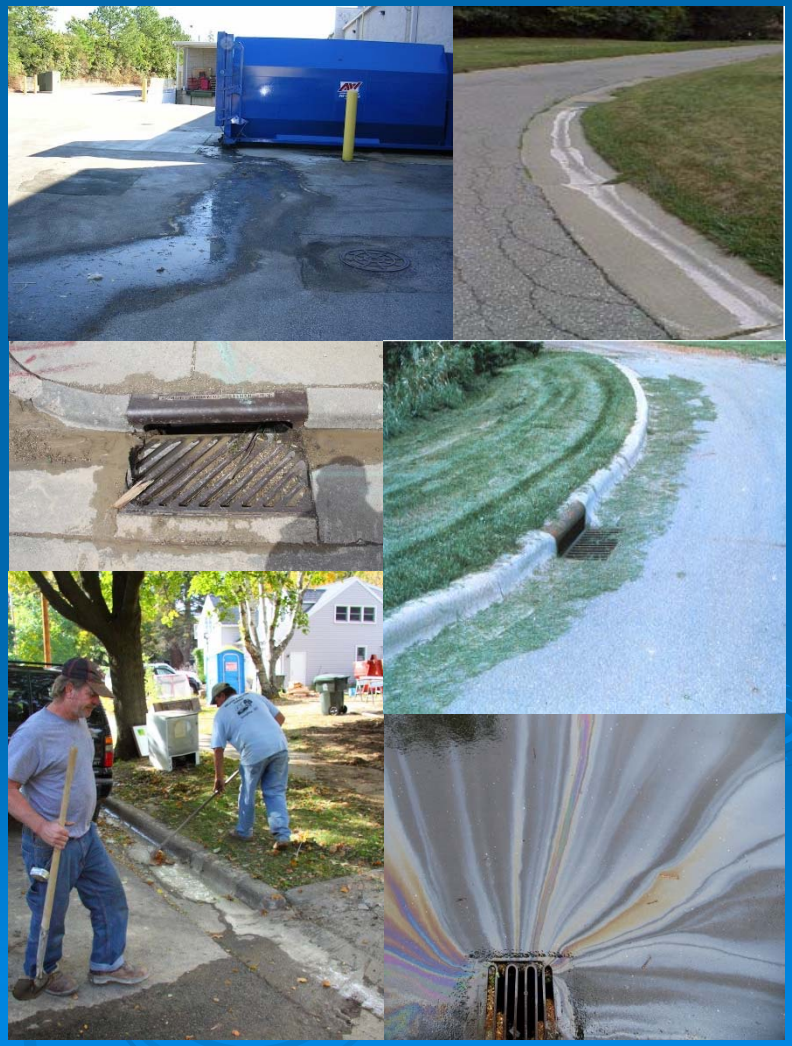
MCM #2
Public Education and Outreach

- Permittees shall develop and implement a plan to solicit public input on the SWPPP required by the permit.
- Provide access to the SWPPP document Document comments from the public
- Hold meeting allowing the public to voice their concerns and comments



MCM #3
Illicit Discharge Detection and Elimination

- Permittees shall develop, implement, and enforce a program to detect and eliminate illicit discharges into the city's storm sewer system.
- What is an illicit discharge?
  - Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer, i.e. WWTP) and discharges resulting from firefighting activities. (40 CFR § 122.26(b)(2))



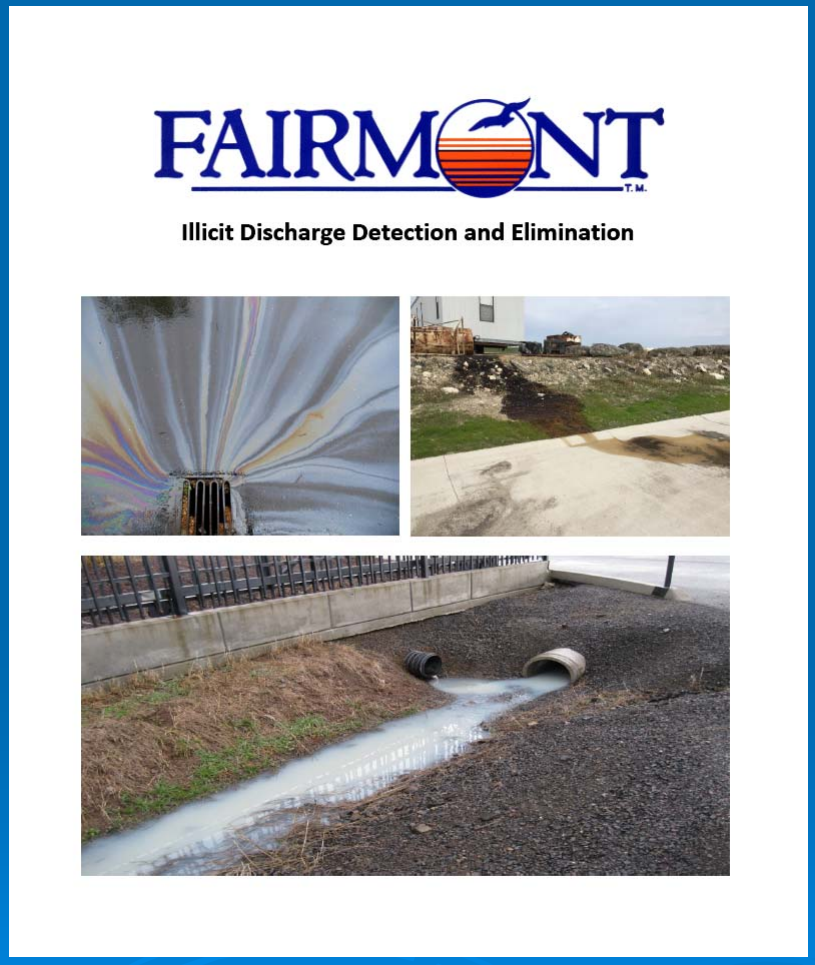
MCM #3
Illicit Discharge Detection and Elimination

- Requirements
  - Maintain a map of the storm sewer system (All mapped is GIS)
  - Implement regulatory mechanisms that effectively prohibit non-stormwater discharges in the MS4. (Recently passed stormwater ordinance).
  - Incorporate illicit discharge detection into all maintenance and inspection activities.
  - Detect and track source of all found illicit discharges.
  - Annually train all field staff to recognize and report illicit discharges. (2018 training was completed this spring and all new employees receive a one page educational sheet in their employee handbook)

MCM #3
Illicit Discharge Detection and Elimination

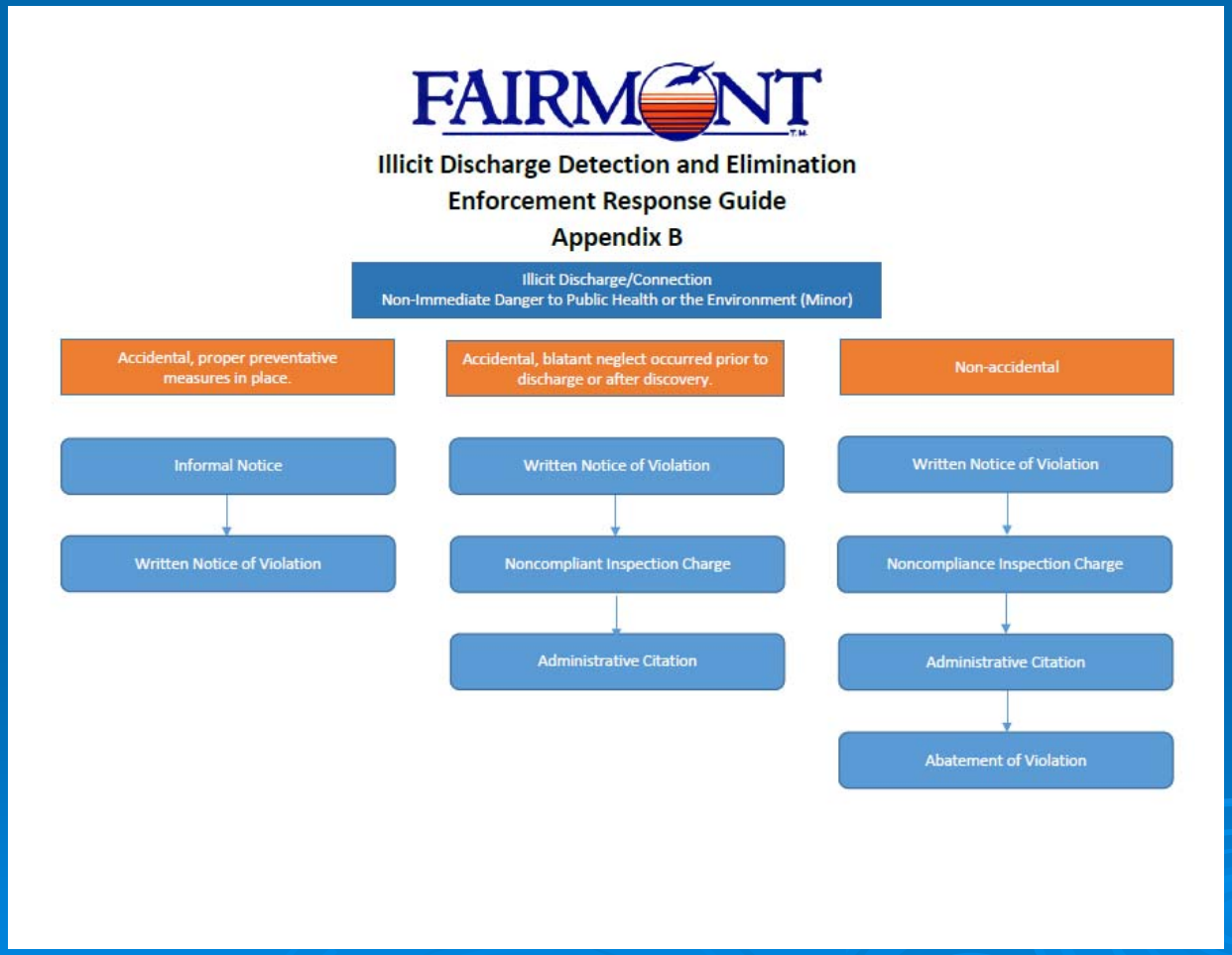
- Requirements
  - Identify areas where illicit discharges are most likely to occur and conduct additional illicit discharges inspections in these areas.
  - Set up procedures for investigating, locating, and eliminating source of illicit discharges.
  - Set up procedures for responding to spills, and emergency response to hazardous spills.
  - Enforcement Procedures for stopping the illicit discharges and not reporting illicit discharges.
  - Documentation of all illicit discharges, including action taken.

MCM #3
Illicit Discharge Detection and Elimination



Contains all SOP's and ERP's

MCM #3
Illicit Discharge Detection and Elimination



MCM #4
Construction Site Stormwater Runoff Control

- Permittees shall develop, implement and enforce a construction site stormwater runoff control program which reduces pollutants in stormwater runoff into the MS4 from construction activity.
- The city shall create a mechanism to enforce the owner or contractor to create a SWPPP for construction sites, which includes items such as BMPs to prevent erosion, minimize discharge of sediment and other pollutants, control of dewatering activity, maintenance, management of hazardous chemicals, and inspection of construction sites after rainfall events.
- Land Disturbance Permit (Created with updated ordinance)

MCM #4
Construction Site Stormwater Runoff Control

- Develop a plan review procedure for construction site SWPPPs
- Develop a way for the public to report and comment on noncompliance or other stormwater related information to the permittee.
- Develop written procedures for conducting site inspections. (Prioritizing sites, frequency of inspections, documentation of inspections)
- Develop Enforcement Response Procedures for non-compliance

MCM #4
Construction Site Stormwater Runoff Control

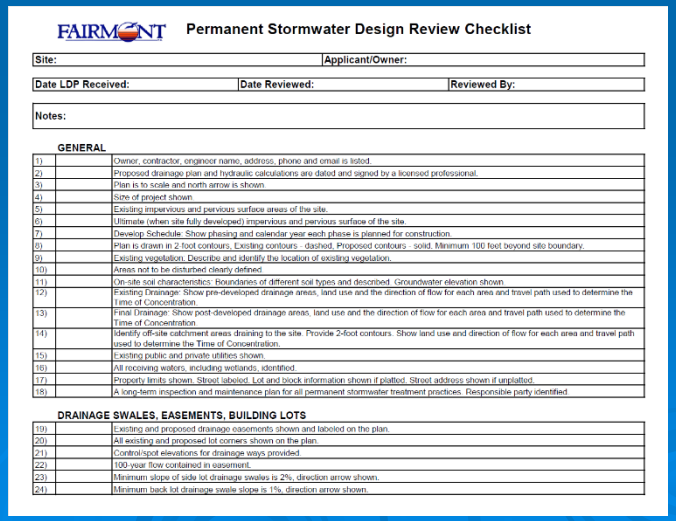
Contains all SOP's and ERP's for land disturbance sites.

MCM #4
Construction Site Stormwater Runoff Control

- Current Permitted Sites
  - 1 Acre or more - 7
  - ½ Acre or more - 3
  - 5,000 S.F. or more - 2
  - Less than 5,000 S.F. in Tier A Shoreland – 1
- Number of inspections so far in 2018 - 28

MCM #5
Post-Construction Stormwater Management

- Permittees shall develop, implement, and enforce a program that prevents or reduces water pollution after construction activity is completed.
- Require that owners and/or operators of construction activity, submit site plans with post-construction stormwater management BMPs to the city for review and approval, prior to the start of construction. (Submitted with land disturbance permit)



FAIRMONT **Permanent Stormwater Design Review Checklist**

Site:	Applicant/Owner:

Date LDP Received:	Date Reviewed:	Reviewed By:

Notes:

GENERAL

1)		Owner, contractor, engineer name, address, phone and email is listed.
2)		Proposed drainage plan and hydraulic calculations are dated and signed by a licensed professional.
3)		Plan is to scale and north arrow is shown.
4)		Size of project shown.
5)		Existing impervious and pervious surface areas of the site.
6)		Ultimate (when site fully developed) impervious and pervious surface of the site.
7)		Develop Schedule: Show phasing and calendar year each phase is planned for construction.
8)		Plan is drawn in 2-foot contours, Existing contours - dashed, Proposed contours - solid. Minimum 100 feet beyond site boundary.
9)		Existing vegetation. Describe and identify the location of existing vegetation.
10)		Areas not to be disturbed clearly defined.
11)		On-site soil characteristics: Boundaries of different soil types and described. Groundwater elevation shown.
12)		Existing Drainage: Show pre-developed drainage areas, land use and the direction of flow for each area and travel path used to determine the Time of Concentration.
13)		Final Drainage: Show post-developed drainage areas, land use and the direction of flow for each area and travel path used to determine the Time of Concentration.
14)		Identify off-site catchment areas draining to the site. Provide 2-foot contours. Show land use and direction of flow for each area and travel path used to determine the Time of Concentration.
15)		Existing public and private utilities shown.
16)		All receiving waters, including wetlands, identified.
17)		Property limits shown. Street labeled. Lot and block information shown if platted. Street address shown if unplatted.
18)		A long-term inspection and maintenance plan for all permanent stormwater treatment practices. Responsible party identified.

DRAINAGE SWALES, EASEMENTS, BUILDING LOTS

19)		Existing and proposed drainage easements shown and labeled on the plan.
20)		All existing and proposed lot corners shown on the plan.
21)		Control/spot elevations for drainage ways provided.
22)		100-year flow contained in easement.
23)		Minimum slope of side lot drainage swales is 2%, direction arrow shown.
24)		Minimum back lot drainage swale slope is 1%, direction arrow shown.

MCM #6
Pollution Prevention/Good Housekeeping for Municipal Operations

- The permittee shall develop and implement an operations and maintenance program that prevents or reduces the discharge of pollutants from permittee owned or operated facilities and operations within the MS4.
- Facilities Inventory: Develop an inventory of all facilities or sites that have a potential to contribute to stormwater pollution. (Complete)
- Develop and implement BMP's that divert, treat, infiltrate, reuse, contain, or otherwise reduce pollutants in stormwater discharges from the city and all inventoried facilities.

MCM #6
Pollution Prevention/Good Housekeeping for Municipal Operations

- Develop and implement SOP's for municipal operations that may contribute pollutants to stormwater.
- Pond Assessment Procedures and Schedule: Permittee needs to develop procedures and a schedule for the purpose of determining the TSS and TP treatment effectiveness of all permittee owned or operated ponds. (Will be surveying stormwater ponds for sedimentation.)
- Permittee must inspect all structural stormwater BMPs annually, outfalls at least once per permit cycle, and stockpile, storage and material handling areas at least quarterly for structural integrity, function, and maintenance needs.
- The permittee shall develop a schedule for training of all employees on the importance of water quality, requirements of the permit relevant to each employees job. (Complete 2018)

Construction Stormwater Permit Update

- Expires: August 1, 2018
- 2018 Draft Permit: Public Noticed May 23, 2018
- Comment period just ended and the new permit will be issued before August 1
- Very minor changes: Filtration system details, infiltration prohibitions and soil testing requirements, sediment control buffer requirements, stabilization methods, rewritten sections for added clarity.
- MS4 Permit states the City's Construction Stormwater progam, must be as stringent as the Construction Stormwater Permit

WRAPS

(Watershed Restoration and Protection Strategy)

- Four phase watershed based approach to restoring and protecting Minnesota's rivers lakes, and wetlands.
- Evaluate water conditions, establish priorities and goals for improvement

Blue Earth River Watershed

1) Monitor water bodies and collect data. (2017-2018)
   - Monitoring and Assessment Report
   - Stressor Identification Report
2) Assess the data (Monitoring Report Spring 2019)
   - Identify whether waters meet water quality standards and designated uses.
   - List waters as impaired that do not meet standards
   - Identify waters that are meeting standards to be protected.
   - Identify stressors affecting aquatic life in streams
3) Develop Strategies to restore and protect the watershed's water bodies.
   - TMDL's (2020)
   - Stressor ID Report (2020)
   - WRAPS Report (2021)
4) Conduct restoration and protection projects in the watershed.
   - Cities and Soil and Water Conservation Districts take lead in developing projects.
   - Conduct civic engagement and public participation.

2018 Annual Update

QUESTIONS?

Thank You!

FAIRMONT T.M.