

## **Maplewood SWMP 2014**

### **2017 (January 01, 2017 To December 31, 2017)**

This program consists of the following 9 Minimum Control Measure(s).

1. MCM 1: Public Education and Outreach
2. MCM 2: Public Participation/ Involvement
3. MCM 3: Illicit Discharge Detection and Elimination (IDDE)
4. MCM 4: Construction Site Stormwater Runoff Control
5. MCM 5: Post-Construction Stormwater Management
6. MCM 6: Pollution Prevention/ Good Housekeeping for Municipal Operations
7. Compliance Schedule for an Approved TMDL with an Applicable WLA
8. SOP's & ERP's
9. Completed MPCA Annual Report Form

# 1 MCM 1: Public Education and Outreach

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

## **Description:**

**New permittees** shall develop and implement, and **existing permittees** shall revise their current program, as necessary, and continue to implement, a public education program to distribute educational materials or equivalent outreach that informs the public of the impact **stormwater** discharges have on water bodies and that includes actions citizens, businesses, and other local organizations can take to **reduce** the discharge of pollutants to **stormwater**. The program shall also include:

a. Distribution of educational materials or equivalent outreach focused on:

(1) Specifically selected **stormwater**-related issue(s) of high priority to the **permittee** to be emphasized during this permit term (e.g., specific **TMDL** reduction targets, changing local business practices, promoting adoption of residential **BMPs**, lake improvements through lake associations, responsible management of pet waste, household chemicals; yard waste, deicing materials, etc.)

(2) **Illicit discharge** recognition and reporting **illicit discharges** to the **permittee**

b. An implementation plan that consists of the following:

(1) Target audience(s), including measurable goals for each audience

(2) Responsible **Person(s)** in charge of overall plan implementation

(3) Specific activities and schedules to reach measurable goals for each target audience

(4) A description of any coordination with and/or use of other **stormwater** education and outreach programs being conducted by other entities, if applicable

(5) Annual evaluation to measure the extent to which measurable goals for each target audience are attained

c. Documentation of the following information:

(1) A description of any specific **stormwater**-related issues identified by the **permittee** under Part III.D.1.a(1)

(2) All information required under Part III.D.1.b

(3) Any modifications made to the program as a result of the annual evaluation under Part III.D.1.b(5)

(4) Activities held, including dates, to reach measurable goals

(5) Quantities and descriptions of educational materials distributed, including dates distributed

## Best Management Practices

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### 1.1 Educational Information Distribution and Outreach Program

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

**Required:** Yes

#### Description

Develop and maintain a public education program to distribute educational materials or equivalent outreach to inform the public of the impact stormwater discharges have on water bodies. The program will advise the public of actions citizens, businesses and other local organizations can take to reduce the discharge of pollutants to stormwater.

Include educational materials that focus on specifically selected stormwater issues of high priority to the permittee, such as specific TMDL reduction targets, changing local business practices, promoting adoption of residential BMPs, lake improvements through lake associations, and responsible management of pet waste, household chemicals, yard waste, deicing materials, etc. Include efforts to educate the public to recognize illicit discharges in the MS4 and to report illicit discharges to the permittee.

Address the following elements in the program:

1. Identify target audiences with measurable stormwater education goals specific to each audience.
2. Identify the person or persons in charge of overall plan implementation.
3. Describe specific activities and schedules planned to meet measurable goals for each target audience.
4. Describe coordination with or use of other stormwater education and outreach programs being conducted by other entities as applicable.
5. Complete an annual evaluation to measure the extent to which measurable goals for each target audience are attained.
6. Describe each completed activity by date, including quantities and descriptions of educational materials distributed.

#### Goals

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##### 1.1.1 Develop and Maintain an Implementation Plan

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

#### Description

The City shall develop a written public education and outreach implementation plan. This plan shall:

1. Identify high priority stormwater related issues to be emphasized during the permit term.
2. Cover illicit discharge recognition and reporting of illicit discharges to the city.

For each identified stormwater related issue the written plan shall document the following:

1. Target audiences with measurable stormwater education goals specific to each audience.
2. Specific activities and schedules planned to meet measurable goals for each target audience.
3. Describe coordination with or use of other stormwater education and outreach programs being conducted by other entities as applicable.
4. Describe each completed activity by date, including quantities and descriptions of educational materials distributed.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
12/29/2017	2018 - Education Plan	Education plan for 2018 is attached.

**1.1.2 Conduct Annual Review**

**Responsible Staff / Position:** Virginia Gaynor  
 Natural Resources Coordinator  
 (651) 249-2416

**Description**

The public education and outreach implementation plan shall be reviewed annually. This review the work done throughout the year to measure the extent to which the measurable goals for each target audience were attained.

Modification will be made to the implementation plan as a result of the annual evaluation review.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
12/29/2017	2017 - Conduct annual review of Education Plan	In 2017 the City;s stormwater education focused on rain garden maintenance and illicit discharge. This included demonstrations, distribution of rain garden maintenance brochure, site visits with home rain gardeners, and articles in the City newsletter. A review of activities is attached.

## 1.2 Conduct Public Education and Outreach Activities

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

**Required:** Yes

### Description

Conduct the activities described in the stormwater Public Education and Outreach program for the identified target audiences.

### Goals

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#### 1.2.1 Stormwater Brochures

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

### Description

Prepare and maintain brochures for distribution or publication to address the specific stormwater related issues as identified in the plan. Review the materials annually and update as needed to support program goals and permit requirements.

Upload or link to copies of stormwater related brochures available and distributed each reporting period to document activity in support of this goal.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
12/29/2017	2017 - Distribute stormwater literature	The City distributes stormwater literature to residents, businesses, developers, contractors, churches, and schools. A list of brochures available at information kiosks at Public Works, Planning, and Nature Center is attached.

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#### 1.2.2 Stormwater Education Website

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

### Description

Develop and maintain relevant stormwater education information on the MS4's public website, including information on general stormwater management topics and information specific to stormwater management issues within the MS4.

Provide a list of information published on the website as described above through each reporting period and a link to the current website URL.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
12/29/2017	2017 - Stormwater education website	The city's stormwater webpage is at: <a href="http://www.maplewoodmn.gov/453/Stormwater-Management">www.maplewoodmn.gov/453/Stormwater-Management</a> . It includes sections on:

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- Stormwater management
- Environmental Utility Fee
- Pervious pavers
- Rain barrels
- Rain gardens
- Ordinance and Standards

The city's Illicit Discharge webpage is at: [www.maplewoodmn.gov/435/Illicit-Discharge](http://www.maplewoodmn.gov/435/Illicit-Discharge). It includes sections on:

- Illicit Discharge Overview
- Sources of Illicit Discharge
- Informational Video about Illicit Discharge

It is estimated these pages were viewed a total of 731 times in 2017.

### 1.2.3 Newsletter Articles

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

#### Description

Provide seasonally relevant stormwater education information in newsletter format for periodic publication to address the specific stormwater related issues as identified in the plan.

Upload a copy of each article published in the MS4's newsletter, including the date of publication and general distribution.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
12/30/2017	2017 - Newsletter articles	Maplewood's quarterly newsletter called Seasons focuses on environmental issues. It is mailed to over 17,000 households and located on the City's website. In 2017 the <i>Seasons</i> focused on the following environmental issues, which all include elements of stormwater management: Comprehensive Planning, Energy, Impaired Waters, Green Building Code. The <i>Seasons</i> newsletter that focused on impaired waters included an article on illicit discharge (Help Clean Our Waterways).  Seasons Newsletter: <a href="http://www.maplewoodmn.gov/DocumentCenter/Home/Index/111">http://www.maplewoodmn.gov/DocumentCenter/Home/Index/111</a>

### 1.2.4 Environmental & Natural Resources Commission

**Responsible Staff / Position:** Shann Finwall  
Environmental Planner  
(651) 249-2304

#### Description

Conduct televisive regular public meeting of the ENRC. For each reporting period document the total number of ENRC meetings, the number of meetings that were related to stormwater issues, and include attachments as necessary.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
12/30/2017	2017 - ENR	<p>The Environmental and Natural Resources (ENR) Commission meets once a month throughout the year. The meetings are open to the public and televised on cable and on the City's website. Follow the link below to the Environmental and Economic Development Department's (EEDD) 2017 Annual Report which includes the ENR Commission 2017 Annual Report. The report details the items reviewed throughout the year which included holding a public hearing for the NPDES Phase II and MS4 Permit, 2016 SWPPP Annual Report.</p> <p>EEDD/ENR Commission 2017 Annual Report: <a href="http://www.maplewoodmn.gov/DocumentCenter/View/19618">http://www.maplewoodmn.gov/DocumentCenter/View/19618</a></p>

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### 1.2.6 Residential Rainwater Garden Program

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

#### Description

The city has a residential rainwater garden program. The goal of this program is to help keep the existing rainwater garden operating and in good shape. Additionally, the City offers residents who live on streets that are to be fully reconstructed the opportunity to have a raingarden installed as part of the street reconstruction project.

For each reporting period document the following activities:

1. The number of existing rainwater gardens
2. The number of new rainwater gardens installed
3. Identify the area and number of rainwater gardens for the rehabilitation program
4. Report the number of rainwater gardens that take part of the rehabilitation program

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
12/29/2017	2017 - Residential rain garden program	In 2017, Maplewood and its partners did retrofits on seven boulevard rain gardens, adding curb cuts and relandscaping. In addition, we provided replacement plants and educational support on garden maintenance to homeowners on the Sunrise-Arkwright project.

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### 1.2.7 Stormwater Education Exhibits

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

#### Description

The City maintains a number of stormwater education exhibits including displays and poster.

Document the number and type of stormwater education exhibits. For each reporting period review the existing exhibits and identify if there are any changes to the exhibits that should be made for the next reporting period.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
12/29/2017	2017 - Stormwater education exhibits	<p>The city maintains several exhibits on water quality and storm water. All are in good condition and do not need repair or upgrading.</p> <ul style="list-style-type: none"><li>• Water Whiz (Indoor display at Maplewood Nature Center)</li><li>• Living Streets Demonstration Project (Indoors at Public Works Building)</li><li>• Porous Pavement (Outdoor sign at Public Works Visitor Entrance)</li><li>• Rain Gardens (Outdoor signs at Wakefield Park and Birmingham Rain Garden)</li><li>• Water Works (Outdoor sign and demonstration at Maplewood Nature Center)</li></ul>

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### 1.2.8 Programs, Adverts, & Projects

**Responsible Staff / Position:** Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

#### Description

Conduct stormwater related programs, adverts, and projects as identified in the public education and outreach implementation plan. This also include collaborative projects with outside agencies or groups such as activities conducted by/with watershed districts.

For each activity conducted during each reporting period document the date, name or type of activity, topic presented, and approximate number of participants. Include a copy of presentations or other documents available.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
12/29/2017	2017 - Present programs	Maplewood Nature Center presented 32 water-related programs for the public and school groups, reaching 2033 participants. A list of 2017 programs is attached.

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**1.2.9 Collaborative Support**  
**Responsible Staff / Position:**

Virginia Gaynor  
Natural Resources Coordinator  
(651) 249-2416

**Description**

Collaborate with other entities to meet the SWPPP's stormwater education and outreach goals, including local and regional non-profit/ environmental/ community groups.

Report collaboration efforts each reporting period, including the name and description of each group, and collaborative efforts completed including a summary of educational materials or information provided, date conducted and estimated number of participants for each activity.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
12/29/2017	2017 - Collaborative support	Maplewood partnered with Ramsey-Washington Metro Watershed District (RWMWD) on education and outreach for schools, families and adults. Programs included: <ul style="list-style-type: none"><li>• 6/3/17– Waterfest, 267+ participants, RWMWD's community event to educate people about watershed issues and enjoy water activities</li><li>• 10/4/17, 10/5/17 – Watershed Watchers with Woodbury Elementary, assisted 564 students planting the school rain gardens</li></ul>

## 2 MCM 2: Public Participation/ Involvement

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

### **Description:**

a. **New permittees** shall develop and implement, and **existing permittees** shall revise their current program, as necessary, and continue to implement, a Public Participation/Involvement program to solicit public input on the **SWPPP**. The **permittee** shall:

(1) Provide a minimum of one (1) opportunity annually for the public to provide input on the adequacy of the **SWPPP**. Public meetings can be conducted to satisfy this requirement provided appropriate local public notice requirements are followed and opportunity to review and comment on the **SWPPP** is provided.

(2) Provide access to the **SWPPP** document, Annual Reports, and other documentation that supports or describes the **SWPPP** (e.g., Regulatory Mechanism(s), etc.) for public review, upon request. All public data requests are subject to the Minnesota Government Data Practices Act, Minn. Stat. 13.

(3) Consider public input, oral and written, submitted by the public to the **permittee**, regarding the **SWPPP**.

b. Document the following information:

(1) All relevant written input submitted by **persons** regarding the **SWPPP**.

(2) All responses from the **permittee** to written input received regarding the **SWPPP**, including any modifications made to the **SWPPP** as a result of the written input received

(3) Date(s) and location(s) of events held for purposes of compliance with this requirement

(4) Notices provided to the public of any events scheduled to meet this requirement, including any electronic correspondence (e.g., website, e-mail distribution lists, notices, etc.)

## Best Management Practices

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### 2.1 Public Meeting - SWPPP Input

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Conduct an annual public meeting for the public to provide input on the adequacy of the SWPPP. Follow local public notice requirements and provide an opportunity to review and comment on the SWPPP. Review all input received through the meeting for consideration of modification of the SWPPP.

#### Goals

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##### 2.1.1 Annual Public Meeting Notice

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

Provide notice to the public of any events scheduled to provide an opportunity for public to provide input on the adequacy of the SWPPP.

Provide a copy or records of each type of notice published or distributed for public meetings held as required for each reporting period.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016

Activity Date	Name	Description
05/24/2017	2016 Public Hearing Notice	The notice of the Public Hearing for the 2016 permit cycle will be published twice in the local paper in advance of the hearing. The Public Hearing is Scheduled for June 19, 2017. Attached is the conformation email.

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##### 2.1.2 Conduct Public Meeting

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

Conduct (at least) one public meeting annually as an opportunity for the public to provide input on the adequacy of the SWPPP.

Document all public meetings each reporting period, including the date and venue of the meeting, a copy of the agenda and description of any distributed materials and posted exhibits, the number of participants. Also include a copy or summary of verbal input and copies of written feedback submitted by the public.

**Planned:** 2015 2016

**Complete:** 2015 2016

Activity Date	Name	Description
06/19/2017	2016 Public Hearing	The public hearing for the 2016 MS4 Permit was held on 6/19/2017. A presentation was given to the

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ENRC commission. The commission opened the floor for any resident input on the City's MS4 program. No residents spoke at the meeting.

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## 2.2 Public Access to SWPPP Documents

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

### Description

Provide access to the SWPPP document, Annual Reports, and other documentation that supports or describes the SWPPP for public review, upon request. All public data requests are subject to the Minnesota Government Data Practices Act, Minn. Statute Section 13.

### Goals

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#### 2.2.1 Access to SWPPP Documents

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

### Description

Provide public access to the SWPPP and related documents including the SWPPP document, Annual Reports and related documents (regulatory mechanism, annual budgets, etc.) through the MS4 website. Printed copies will be provided as requested and will be available for pickup at the Public Works office.

Provide a copy or hyperlinks to the SWPPP and related documents described above for each reporting period.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016

Activity Date	Name	Description
None		

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### 2.3 Public Input Review and Consideration

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Consider public input, oral and written, submitted by the public to the permittee, regarding the SWPPP. Evaluate the input and consider any modifications to the SWPPP as a result of the written input received.

#### Goals

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##### 2.3.1 Consider Public Input

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

Collect and review all public input for consideration of potential modification of the SWPPP, including written input and records of verbal feedback submitted by the public regarding the SWPPP. Identify any modification of the SWPPP resulting from the public input.

Provide a summary of all public input regarding the SWPPP collected each reporting period, including description of any resulting SWPPP modifications.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
06/19/2017	2016 Consider Public Input	No public input was received at the public meeting held by the ENRC at the June 19, 2017 meeting.

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### 3 MCM 3: Illicit Discharge Detection and Elimination (IDDE)

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

#### **Description:**

**New permittees** shall develop, implement, and enforce, and **existing permittees** shall revise their current program as necessary, and continue to implement and enforce, a program to detect and eliminate **illicit discharges** into the **small MS4**. The IDDE program shall consist of the following:

- a. Map of the **small MS4** as required by Part III.C.1.
  - b. Regulatory Mechanism(s) that effectively prohibits **non-stormwater discharges** into the **small MS4**, except those **non-stormwater discharges** authorized under Part I.B.1.
  - c. Incorporation of **illicit discharge** detection into all inspection and maintenance activities' conducted under Part III.D.6.e and f. Where feasible, **illicit discharge** inspections shall be conducted during dry-weather conditions (e.g., periods of 72 or more hours of no precipitation).
  - d. Detecting and tracking the source of **illicit discharges** using visual inspections. The **permittee** may also include the use of mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures that may be effective investigative tools.
  - e. Training of all field staff, in accordance with the requirements of Part III.D.6.g(2), in **illicit discharge** recognition (including conditions which could cause **illicit discharges**), and reporting **illicit discharges** for further investigation.
  - f. Identification of priority areas likely to have **illicit discharges**, including at a minimum, evaluating land uses associated with business/industrial activities, areas where **illicit discharges** have been identified in the past, and areas with storage of large quantities of **significant materials** that could result in an **illicit discharge**. Based on this evaluation, the **permittee** shall conduct additional **illicit discharge** inspections in those areas identified as having a higher likelihood for **illicit discharges**.
  - g. For timely response to known, suspected, and reported **illicit discharges**:
    - (1) Procedures for investigating, locating, and eliminating the source of **illicit discharges**.
    - (2) Procedures for responding to spills, including emergency response procedures to prevent spills from entering the **small MS4**. The procedures shall also include the immediate notification of the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (Metro area), if the source of the **illicit discharge** is a spill or leak as defined in Minn. Stat. 115.061.
    - (3) When the source of the **illicit discharge** is found, ERPs required by Part III.B (if necessary) to eliminate the **illicit discharge** and require any needed corrective action(s).
  - h. Documentation of the following information:
    - (1) Date(s) and location(s) of IDDE inspections conducted in accordance with Part III.D.3.c and f
    - (2) Reports of alleged **illicit discharges** received, including date(s) of the report(s), and any follow-up action(s) taken by the **permittee**
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- (3) Date(s) of discovery of all **illicit discharges**
- (4) Identification of **outfalls**, or other areas, where **illicit discharges** have been discovered
- (5) Sources (including a description and the responsible party) of **illicit discharges** (if known)
- (6) Action(s) taken by the **permittee**, including date(s), to address discovered **illicit discharges**



## Best Management Practices

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### 3.1 Regulatory Mechanism - IDDE

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Develop, maintain and enforce a regulatory mechanism that effectively prohibits non-stormwater discharges into the small MS4, except those non-stormwater discharges authorized under part I.B.1 of the NPDES permit.

#### Goals

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##### 3.1.1 IDDE Regulatory Mechanism

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

The City of Maplewood has developed and adopted a regulatory mechanism to effectively prohibit non-stormwater discharges into the small MS4 as required by the NPDES permit. The following link will direct you to Maplewood's City Code that contains adopted IDDE regulatory mechanisms:

[https://www.municode.com/library/mn/maplewood/codes/code\\_of\\_ordinances](https://www.municode.com/library/mn/maplewood/codes/code_of_ordinances)

Conduct an annual review of the IDDE regulatory mechanism and related policies and procedures. Identify any need for revisions to improve the regulatory mechanism effectiveness.

Summarize the results of the review and described any necessary changes, including specific revisions required.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 IDDE Code Review	Staff conducted a review of the 2016 IDDE section of the City Code. Based on a review City code and of the illicit discharge activities responded to in 2016 there are no proposed revisions recommended at this time.

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### 3.2 Storm Sewer System Map

**Responsible Staff / Position:** John Ducharme  
Senior Engineering Technician  
(651) 249-2411

**Required:** Yes

#### Description

Develop and maintain a storm sewer system map of the **small MS4** (as required by Part III.C.1) that depicts the following:

- a. The permittee's entire small MS4 as a goal, but at a minimum, all pipes 12 inches or greater in diameter, including stormwater flow direction in those pipes
- b. Outfalls, including a unique identification (ID) number assigned by the permittee, and an associated geographic coordinate
- c. Structural stormwater BMPs that are part of the permittee's small MS4
- d. All receiving waters

The City shall maintain the storm sewer system map and review it on annual basis for each reporting period.

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#### Goals

##### 3.2.1 Annual Update Storm - Sewer System Map

**Responsible Staff / Position:** John Ducharme  
Senior Engineering Technician  
(651) 249-2411

#### Description

Review and update the storm sewer system map annually to reflect changes in the storm sewer system, outfalls, structural stormwater BMPs and receiving waters.

Provide a narrative summary of storm sewer system map updates by listing the projects with a general description of changes.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 Storm System Annual Review	Public Work field crews consolidated and identified changes to the City's storm sewer system map and have coordinated with the Engineering Department to have these changes reflected on the system map.  Additionally, the Engineering Department is currently working to link as-built plans to the storm sewer system GIS map. This will provide better and more efficient access to information related to the existing storm sewer system.  The Public Works Department is in the process of implementing a city wide asset management program that will be tied into our MS4 program.

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### 3.3 Illicit Discharge Inspection and Reporting

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Required:** Yes

#### Description

Incorporate illicit discharge detection into all inspection and maintenance activities conducted under Part III.D.6.e and f. (Where feasible) Conduct illicit discharge inspections during dry-weather conditions.

Investigate and document all reported cases of illicit discharge reported to the City of Maplewood.

Documentation shall include the following information:

- (1) Date(s) and location(s) of IDDE inspections conducted in accordance with Part III.D.3.c and f
- (2) Reports of alleged **illicit discharges** received, including date(s) of the report(s), and any follow-up action(s) taken by the **permittee**
- (3) Date(s) of discovery of all **illicit discharges**
- (4) Identification of **outfalls**, or other areas, where **illicit discharges** have been discovered
- (5) Sources (including a description and the responsible party) of **illicit discharges** (if known)
- (6) Action(s) taken by the **permittee**, including date(s), to address discovered **illicit discharges**

#### Goals

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##### 3.3.1 Illicit Discharge Inspection and Reporting

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

#### Description

City staff are instructed to include identification of potential illicit discharges in all routine inspections of structural stormwater BMPs, ponds, outfalls, stockpiles, storage and material handling areas conducted during periods of dry weather.

The City shall investigate, report, document, and enforce all illicit discharges reported to the City by following the City of Maplewood MS4 SOPs and ERPs.

Documentation of all potential and confirmed illicit discharges identified as part of routine inspections and all cases reported to the City by following the City of Maplewood MS4 SOPs and ERPs shall include the following:

1. Name of the person responsible for violating the terms and conditions of the permittee's Regulatory Mechanism(s)
2. Date(s) and location(s) of the observed violation(s)
3. Description of the violation(s), including reference(s) to relevant Regulatory Mechanism(s)
4. Corrective action(s) (including completion schedule) issued by the permittee
5. Date(s) and type(s) of enforcement used to compel compliance (e.g., written notice, citation, stop work order, withholding of local authorizations, etc.)
6. Referrals to other regulatory organizations (if any)
7. Date(s) violation(s) resolved

Attach spread sheet showing the above data for Illicit Discharge event that takes place during each report period.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
08/22/2017	2017 Illicit Discharge Reports	Received 1 report of possible illicit discharge in 2017. In the area of 2400 Timber Ave. Traced the source to 2422 Timber, homeowner had cleaned up tools and exct from a concrete repair. Washed off with garden hose the flow traveled down the curb line towards a cb but had appeared to have dried in the curb line before entering the cb. Talked to homeowner about clean up if any future work takes place.
08/22/2017	2017 Illicit Discharge Reports	Received 1 report of possible illicit discharge in 2017. In the area of 2400 Timber Ave. Traced the source to 2422 Timber, homeowner had cleaned up tools and exct from a concrete repair. Washed off with garden hose the flow traveled down the curb line towards a cb but had appeared to have dried in the curb line before entering the cb. Talked to homeowner about clean up if any future work takes place.
08/22/2017	2017 Illicit Discharge Reports	Received 1 report of possible illicit discharge in 2017. In the area of 2400 Timber Ave. Traced the source to 2422 Timber, homeowner had cleaned up tools and exct from a concrete repair. Washed off with garden hose the flow traveled down the curb line towards a cb but had appeared to have dried in the curb line before entering the cb. Talked to homeowner about clean up if any future work takes place.
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08/22/2017

2017 Illicit Discharge Reports

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### 3.4 Field Staff Training - Illicit Discharge Recognition and Reporting

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Provide training for all field staff in illicit discharge recognition and reporting for further investigation. See Part III.D.6.g(2).

#### Goals

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#### 3.4.1 Municipal Employee Training - Illicit Discharge Identification

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

Provide illicit discharge identification and elimination training for municipal employees including instruction on what illicit discharge is, why it is important to watch for, proper notification procedures, and discharge response procedures.

Provide a summary of IDDE training provided each reporting period, including a summary of training program content, training dates and locations, list of participants and training program source.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 Illicit Discharge Training	Public Works staff are reminded to be on the lookout for illicit discharge prior to start of the pond inventory and yearly outfall/outlet inspections. Employees were give a general introduction to what is an illicit discharge and main point of contact if they witness or are contacted about a reported illicit discharge.

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### 3.5 Identify and Inspect Priority Areas for Potential Illicit Discharge

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Required:** Yes

#### Description

Identify priority areas likely to have illicit discharges through evaluation of past and present land uses associated with business/ industrial activity, areas where illicit discharges have been identified in the past and areas with past or present storage of large quantities of significant or hazardous materials.

Conduct additional illicit discharge inspections in those areas identified as described above.

#### Goals

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##### 3.5.1 Illicit Discharge Inspection Priority Areas

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

Develop and maintain a list of priority areas likely to have illicit discharges based on past illicit discharge information and local municipal employee knowledge. Review and update the list annually.

Provide a copy of or link to a list of identified priority area list each reporting period.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 Illicit Discharge Priority Area	<p>In 2016 the city responded to 3 reports of illicit discharge. The three reports included a private homeowner dumping paint into the curb line, A 5 gallon buck of oil being left on the side of the road, and a leak of cooling water at the 3M campus. The discharge at the 3M campus was caused by a pipe rupturing and discharging cooling water. 3M self reported the discharge and there was no negative environmental effects.</p> <p>Typically, the city responds to 1 to 3 reports of illicit discharge each year. Maplewood is generally made up of residential and commercial property. At this time there is not a defined priority at this time. In 2016 city staff worked on educating residents about illicit discharge an how they can help prevent it.</p>

##### 3.5.2 Inspect Priority Areas for Illicit Discharge

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

#### Description

Inspect priority areas identified as likely to have illicit discharges.

For areas identified as priority areas provide a summary of inspections completed and the results for each reporting period. Include a list of any illicit discharges identified in the priority areas with the status

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of resolution of the discharge.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
04/18/2017	2016 - Priority Area Inspections	<p>City staff responded to 3 reports of illicit discharge in 2016. Maplewood is primarily made up of residential and commercial property. The city typically receives 1 to 3 reports of illicit discharge each year. At this time there is no clearly identified illicit discharge priority area.</p> <p>City staff is trained to look for signs of illicit discharge as part of their daily duties and especially when conducting yearly outlet inspections.</p>

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### 3.6 Illicit Discharge SOPs & ERPs

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Develop, implement and maintain standard operating procedures (SOPs) and enforcement response procedures (ERPs) for known, suspected and reported illicit discharges as described by the NPDES permit.

#### Goals

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#### 3.6.1 Review Illicit Discharge Procedures

**Responsible Staff / Position:** Jon Jarosch  
Civil Engineer II  
(651) 249-2405

#### Description

The City of Maplewood has developed standard operation procedures (SOPs) and enforcement response procedures (ERPs) for suspected and reported illicit discharges as described in the NPDES permit. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. This document shall be reviewed annual and updated with an identified changes.

Provide a summary of any identified changes to the City of Maplewood MS4 SOPs and ERPs document related to illicit discharges.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/15/2017	2016 Review of SOPS and ERPS	City staff has conducted a review of the city's SOPs and ERPs related to illicit discharge. There are no proposed changes recommended at this time.

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## 4 MCM 4: Construction Site Stormwater Runoff Control

**Responsible Staff / Position:** Jon Jarosch  
Civil Engineer II  
(651) 249-2405

### **Description:**

**New permittees** shall develop, implement, and enforce, and **existing permittees** shall revise their current program, as necessary, and continue to implement and enforce, a Construction Site **Stormwater** Runoff Control program that **reduces** pollutants in stormwater runoff to the **small MS4** from **construction activity** with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger **common plan of development or sale**, that occurs within the **permittee's** jurisdiction. The program shall incorporate the following components:

#### a. Regulatory Mechanism(s)

A Regulatory Mechanism(s) that establishes requirements for erosion and sediment controls and waste controls that is at least as stringent as the **Agency's general permit to Discharge Storm water Associated with Construction Activity NO. MN R100001** (as of the **effective date** of this permit). The **permittee's** Regulatory Mechanism(s) shall require that owners and operators of **construction activity** develop site plans that must be submitted to the **permittee** for review and approval, prior to the start of **construction activity**. Site plans must be kept up-to-date by the owners and operators of **construction activity** with regard to **stormwater** runoff controls. The Regulatory Mechanism(s) must require that site plans incorporate the following erosion and sediment controls and waste controls as described in the above referenced permit:

- (1) **BMPs** to minimize erosion
- (2) **BMPs** to minimize the discharge of sediment and other pollutants
- (3) **BMPs** for dewatering activities
- (4) Site inspections and records of rainfall events
- (5) **BMP** maintenance
- (6) Management of solid and hazardous wastes on each project site
- (7) Final stabilization upon the completion of **construction activity**, including the use of perennial vegetative cover on all exposed soils or other equivalent means
- (8) Criteria for the use of temporary sediment basins

#### b. Site plan review

The program shall include written procedures for site plan reviews conducted by the **permittee** prior to the start of **construction activity**, to ensure compliance with requirements of the Regulatory Mechanism(s). The site plan review procedure shall include notification to owners and operators proposing **construction activity** of the need to apply for and obtain coverage under the **Agency's general permit to Discharge Stormwater Associated with Construction Activity NO. MN R100001**.

#### c. Public input

The program shall include written procedures for receipt and consideration of reports of noncompliance or other **stormwater** related information on **construction activity** submitted by the public to the **permittee**.

#### d. Site inspections

The program shall include written procedures for conducting site inspections, to determine compliance with the **permittee's** Regulatory Mechanism(s). The written procedures shall:

(1) Include procedures for identifying priority sites for inspection. Prioritization can be based on such parameters as topography, soil characteristics, type of **receiving water(s)**, stage of construction, compliance history, weather conditions, or other local characteristics and issues.

(2) Identify frequency at which site inspections will be conducted

(3) Identify name(s) of individual(s) or position titles responsible for conducting site inspections

(4) Include a checklist or other written means to document site inspections when determining compliance.

e. Enforcement Response Procedures (ERPs) required by Part III.B of this permit

f. Documentation of the following information:

(1) For each site plan review - The project name, location, total acreage to be disturbed, owner and operator of the proposed **construction activity**, and any **stormwater** related comments and supporting documentation used by the " **permittee** to determine project approval or denial.

(2) For each site inspection - Inspection checklists or other written means used to document site inspections

## Best Management Practices

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### 4.1 Regulatory Mechanism - Erosion, Sediment and Waste Controls

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Develop, implement and enforce a regulatory mechanism that establishes requirements for erosion and sediment control and waste control from construction activity as described by NPDES permit.

#### Goals

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##### 4.1.1 ESC Regulatory Mechanism

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

The City of Maplewood has developed and adopted a regulatory mechanism to establish requirements for erosion and sediment controls and waste controls from construction activity as described by the NPDES permit. The following link will direct you to Maplewood's City Code that contains adopted construction activity regulatory mechanisms:

[https://www.municode.com/library/mn/maplewood/codes/code\\_of\\_ordinances](https://www.municode.com/library/mn/maplewood/codes/code_of_ordinances)

Conduct an annual review of the construction site stormwater runoff control mechanisms and related policies and procedures. Identify any need for revisions to improve the regulatory mechanism effectiveness.

Summarize the results of the review and described any necessary changes, including specific revisions required.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 Review of Regulatory Mechanism	City staff has conduct an annual review of the construction site stormwater runoff control mechanisms and related policies and procedures. There are no revisions recommended at this time.

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## 4.2 Site Plan Review - ESC

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

### Description

Develop, maintain and implement written site plan review procedures for construction site erosion and sediment control practices prior to the start of construction activity to ensure compliance with requirements of the Regulatory Mechanism(s). Include notification to owners and operators proposing construction activity of the need to apply for and obtain coverage under the Agency's general permit.

### Goals

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#### 4.2.1 Annual Review - Construction Site Stormwater Runoff Control Procedures

**Responsible Staff / Position:** Jon Jarosch  
Civil Engineer II  
(651) 249-2405

### Description

The City of Maplewood has developed procedures for review of construction site erosion and sediment control practices as described, including notification procedures as required. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. This document shall be reviewed annually and updated with any identified changes.

Provide a summary of any identified changes to the the City of Maplwood MS4 SOPs and ERPs related to review of construction site erosion and sediment control practices.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 SOPS and ERPS Review	City staff has conducted a review of the standard operation procedures (SOPs) and enforcement response procedures (ERPs) for the review of construction site erosion and sediment control practices. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. There are no revisions recommended at this time.

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#### 4.2.3 ESC Site Plan Reviews

**Responsible Staff / Position:** Jon Jarosch  
Civil Engineer II  
(651) 249-2405

### Description

Erosion control site plans shall be submitted for all grading and construction activities as detailed in the City of Maplewood MS4 SOPs and ERPs document. The review process shall follow steps as laid out in the City of Maplewood MS4 SOPs and ERPs document.

For each reporting period provide a summary of projects requiring an erosion control site plan review. The summary shall include the following information:

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- Project name and number
- Location
- Total acreage disturbed
- Owner and operator of the proposed construction activity

All storm water related comments and supporting documentation used by the permittee to determine project approval or denial shall be stored in the City's project files.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/17/2017	2016 ESC Site Plan Reviews	In 2016 the City of Maplewood issued 51 grading permits. 12 projects were over 1 acre in size. All grading permits require a site plan review and a field review of installed BMPs prior to the approving and issuing a grading permit. Attached is a list of all grading permits issued int 2016. All permit information is available in the City's permitting software.

### 4.3 Site Inspections - Construction

**Responsible Staff / Position:** John Ducharme  
Senior Engineering Technician  
(651) 249-2411

**Required:** Yes

#### Description

The City of Maplewood has developed written procedures for site inspections for construction site erosion and sediment control practices, including notification procedures as required. These procedures are included in the City of Maplewood MS4 Standard Operation Procedures (SOPs) and Enforcement Response Procedures (ERPs) document. This document shall be reviewed annually and updated with any identified changes.

The City shall follow the site inspection procedures as detailed in the City of Maplewood MS4 SOPs and ERPs document for all public reported issues relative to noncompliance with stormwater management during construction activities.

#### Goals

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##### 4.3.1 Annual Review - Construction Site Inspection Procedures

**Responsible Staff / Position:** John Ducharme  
Senior Engineering Technician  
(651) 249-2411

#### Description

Review construction site inspection procedures annually and update as necessary to maintain an effective program in compliance with permit requirements. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document.

Summarize any planned or completed revisions to the written construction site inspection procedures each reporting period and provide a copy of or link to the current procedures.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 SOPs and ERPs Review	City staff has conducted a review of the construction site inspection procedures. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. There are no recommended changes at this time.

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##### 4.3.2 Conduct Construction Site ESC Inspections

**Responsible Staff / Position:** John Ducharme  
Senior Engineering Technician  
(651) 249-2411

#### Description

Conduct construction site erosion and sediment control and waste control inspections in accordance with the written program procedures and documentation.

On an annual basis provide a summary report on the number of inspections completed each reporting period, including inspection checklists or other written means used to document site inspections.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/15/2017	Site Inspections 2016	Site inspection Xcel spreadsheet.



#### 4.4 Construction Activity SOPs & ERPs

**Responsible Staff / Position:** John Ducharme  
Senior Engineering Technician  
(651) 249-2411

**Required:** Yes

##### **Description**

Develop and implement standard operating procedures (SOPs) and enforcement response procedures (ERP) for construction site stormwater runoff control as described in the NPDES permit.

##### **Goals**

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#### 4.4.1 Annual Review - ERP for Construction Activity

**Responsible Staff / Position:** John Ducharme  
Senior Engineering Technician  
(651) 249-2411

##### **Description**

The City of Maplewood has developed standard operation procedures (SOPs) and enforcement response procedures (ERPs) for construction site stormwater runoff control as described in the NPDES permit. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. This document shall be reviewed annual and updated with an identified changes.

Provide a summary of any identified changes to the City of Maplewood MS4 SOPs and ERPs document related to construction site stormwater runoff control.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/15/2017	2016 - SOPs and ERPs Review	The City of Maplewood has conducted a review of the standard operation procedures (SOPs) and enforcement response procedures (ERPs) for construction site stormwater runoff control as described in the NPDES permit. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. There are no recommended changes at this time.

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## 5 MCM 5: Post-Construction Stormwater Management

### Responsible Staff / Position:

#### Description:

**New permittees** shall develop, implement, and enforce, and **existing permittees** shall revise their current program, as necessary, and continue to implement and enforce, a Post-Construction **Stormwater** Management program that prevents or **reduces water pollution** after **construction activity** is completed, related to **new development** and **redevelopment** projects with land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger **common plan of development or sale**, within the permittee's jurisdiction and that discharge to the **permittee's small MS4**. The program shall consist, at a minimum, of the following:

a. A Regulatory Mechanism(s) that incorporates:

(1) A requirement that owners and/or operators of **construction activity** submit site plans with post-construction **stormwater** management **BMPs** to the **permittee** for review and approval, prior to start of **construction activity**

(2) Conditions for Post-Construction **Stormwater** Management:

The **permittee** shall develop and implement a Post-Construction **Stormwater** Management program that requires the use of any combination of **BMPs**, with highest preference given to **Green Infrastructure** techniques and practices (e.g., infiltration, evapotranspiration, reuse/harvesting, conservation design, urban forestry, green roofs, etc.), necessary to meet the following conditions on the site of a **construction activity** to the **MEP**:

(a) For **new development** projects - no net increase from pre-project conditions (on an annual average basis) of:

1) **Stormwater** discharge Volume, unless precluded by the **stormwater** management limitations in Part 111.D.5.a(3)(a)

2) **Stormwater** discharges of Total Suspended Solids (TSS)

3) **Stormwater** discharges of Total Phosphorus (TP)

(b) For **redevelopment** projects - a net reduction from pre-project conditions (on an annual average basis) of:

1) **Stormwater** discharge Volume, unless precluded by the **stormwater** management limitations in Part 111.D.5.a(3)(a)

2) **Stormwater** discharges of TSS

3) **Stormwater** discharges of TP

(3) **Stormwater** management limitations and exceptions

(a) Limitations

1) The **permittee's** Regulatory Mechanism(s) shall prohibit the use of infiltration techniques to achieve the conditions for post-construction **stormwater** management in Part III.D.5.a(2) when the infiltration **structural stormwater BMP** will receive discharges from, or be constructed in areas:

a) Where industrial facilities are not authorized to infiltrate industrial **stormwater** under an **NPDES/SDS Industrial Stormwater** Permit issued by the **Agency**

b) Where vehicle fueling and maintenance occur

c) With less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally **saturated soils** or the top of bedrock

d) Where high levels of contaminants in soil or groundwater will be mobilized by the infiltrating **stormwater**

2) The **permittee's** Regulatory Mechanism(s) shall restrict the use of infiltration techniques to achieve the conditions for post-construction **stormwater** management, without higher engineering review, sufficient to provide a functioning treatment system and prevent adverse impacts to groundwater, when the infiltration device will be constructed in areas:

a) With predominately Hydrologic Soil Group D (clay) soils

b) Within 1,000 feet up-gradient, or 100 feet down-gradient of **active karst** features

c) Within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13

d) Where soil infiltration rates are more than 8.3 inches per hour

3) For linear projects where the lack of right-of-way precludes the installation of volume control practices that meet the conditions for post-construction **stormwater** management in Part.III.D.5.a(2), the **permittee's** Regulatory Mechanism(s) may allow exceptions as described in Part III.D.5.a(3)(b). The **permittee's** Regulatory Mechanism(s) shall ensure that a reasonable attempt be made to obtain right-of-way during the project planning process.

(b) Exceptions for stormwater discharge volume

The **permittee's** Regulatory Mechanism(s) may allow for lesser volume control on the site of the original **construction activity** than that in Part III.D.5.a(2) only under the following circumstances:

1) The owner and/or operator of a **construction activity** is precluded from infiltrating **stormwater** through a designed system due to any of the infiltration related limitations described above, and

2) The owner and/or operator of the **construction activity** implements, to the **MEP**, volume reduction techniques, other than infiltration, (e.g., evapotranspiration, reuse/harvesting, conservation design, green roofs, etc.) on the site of the original **construction activity** that **reduces stormwater** discharge volume, but may not meet the conditions for post-construction **stormwater** management in Part III.D.5.a(2).

(4) Mitigation provisions

There may be circumstances where the **permittee** or other owners and operators of a **construction activity** cannot cost effectively meet the conditions for post-construction **stormwater** management for TSS and/or TP in Part III.D.5.a(2) on the site of the original **construction activity**. For this purpose, the **permittee** shall identify, or may require owners or operators of a **construction activity** to identify, locations where mitigation projects can be completed. The **permittee's** Regulatory Mechanism(s) shall ensure that any **stormwater** discharges of TSS and/or TP not addressed on the site of the original **construction activity** are addressed through mitigation and, at a minimum, shall ensure the following requirements are met:

(a) Mitigation project areas are selected in the following order of preference:

1) Locations that yield benefits to the same **receiving water** that receives runoff from the original **construction activity**

2) Locations within the same Department of Natural Resource (**DNR**) **catchment area** as the original **construction activity**

3) Locations in the next adjacent **DNR catchment area** up-stream

4) Locations anywhere within the **permittee's** jurisdiction

(b) Mitigation projects must involve the creation of new **structural stormwater BMPs** or the retrofit of existing **structural stormwater BMPs**, or the use of a \ properly designed regional **structural stormwater BMP**.

(c) Routine maintenance of **structural stormwater BMPs** already required by this permit cannot be used to meet mitigation requirements of this Part.

(d) Mitigation projects shall be completed within 24 months after the start of the original **construction activity**.

(e) The **permittee** shall determine, and document, who is responsible for long-term maintenance on all mitigation projects of this Part.

(f) If the **permittee** receives payment from the owner and/or operator of a **construction activity** for mitigation purposes in lieu of the owner or operator of that **construction activity** meeting the conditions for post-construction **stormwater** management in Part III.D.5.a(2), the **permittee** shall apply any such payment received to a public **stormwater** project, and all projects must be in compliance with Part III.D.5.a(4)(a)-(e).

(5) Long-term maintenance of structural stormwater BMPs

The **permittee's** Regulatory Mechanism(s) shall provide for the establishment of legal mechanism(s) between the **permittee** and owners or operators responsible for the long-term maintenance of **structural stormwater BMPs** not owned or operated by the **permittee**, that have been implemented to meet the conditions for post-construction **stormwater** management in Part III.D.5.a(2). This only includes **structural stormwater BMPs** constructed after the **effective date** of this permit, that are directly connected to the **permittee's MS4**, and that are in the **permittee's** jurisdiction. The legal mechanism shall include provisions that, at a minimum:

(a) Allow the **permittee** to conduct inspections of **structural stormwater BMPs** not owned or operated by the **permittee**, perform necessary maintenance, and assess costs for those

**structural stormwater BMPs** when the **permittee** determines that the owner and/or operator of that **structural stormwater BMP** has not conducted maintenance.

(b) Include conditions that are designed to preserve the **permittee's** right to ensure maintenance responsibility, for **structural stormwater BMPs** not owned or operated by the **permittee**, when those responsibilities are legally transferred to another party.

(c) Include conditions that are designed to protect/preserve **structural stormwater BMPs** and site features that are implemented to comply with Part III.D.5.a(2). If site configurations or **structural stormwater BMPs** change, causing decreased **structural stormwater BMP** effectiveness, new or improved **structural stormwater BMPs** must be implemented to ensure the conditions for post-construction **stormwater** management in Part III.D.5.a(2) continue to be met.

b. Site plan review

The program shall include written procedures for site plan reviews conducted by the **permittee** prior to the start of **construction activity**, to ensure compliance with requirements of the Regulatory Mechanism(s).

c. Documentation of the following information:

(1) Any supporting documentation used by the **permittee** to determine compliance with Part III.D.5.a, including the project name, location, owner and operator of the **construction activity**, any checklists used for conducting site plan reviews, and any calculations used to determine compliance

(2) All supporting documentation associated with mitigation projects authorized by the **permittee**

(3) Payments received and used in accordance with Part III.D.5.a(4)(f)

(4) All legal mechanisms drafted in accordance with Part III.D.5.a(5), including date(s) of the agreement(s) and name(s) of all responsible parties involved

## Best Management Practices

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### 5.1 Regulatory Mechanism - Post-Construction Stormwater Management

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Develop, implement and enforce a regulatory mechanism that establishes requirements for post-construction stormwater management as described by NPDES permit.

#### Goals

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##### 5.1.1 Post-Construction Regulatory Mechanism

**Responsible Staff / Position:** Jon Jarosch  
Civil Engineer II  
(651) 249-2405

#### Description

The City of Maplewood has developed and adopted a regulatory mechanism to establish requirements for post-construction stormwater management as described by the NPDES permit. The following link will direct you to Maplewood's City Code that contains adopted construction activity regulatory mechanisms:

[https://www.municode.com/library/mn/maplewood/codes/code\\_of\\_ordinances](https://www.municode.com/library/mn/maplewood/codes/code_of_ordinances)

Conduct an annual review of the post-construction stormwater management regulatory mechanism and related policies and procedures. Identify any need for revisions to improve the regulatory mechanism effectiveness.

Summarize the results of the review and described any necessary changes, including specific revisions required.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 SOPs and ERPs Review	The City of Maplewood conducted a review of the adopted a regulatory mechanism for post-construction stormwater management as described by the NPDES permit. There are no recommended changes at this time.

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## 5.2 Post-Construction BMPs

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

### Description

The City of Maplewood has several ordinances and standards that must be followed to meet post construction runoff rates and water quality infiltration volume requirements. There are a variety of both structural and non-structural BMPs that can be used to meet the City's requirements. The type of BMPs can vary from raingardens, underground infiltration systems, underground rate control facilities, structural water quality facilities, and ponding systems.

These BMPs require various levels of maintenance to maintain their effectiveness. Therefore, it is important that the City maintains a system for tracking the locations and types of BMPs installed within the city, require a maintenance agreements on all new private BMPs, and to maintain a system for tracking the private stormwater maintenance agreements.

### Goals

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#### 5.2.1 Maintain City Database and GIS Map for Private Maintenance Agreements

**Responsible Staff / Position:** Jon Jarosch  
Civil Engineer II  
(651) 249-2405

### Description

Throughout each reporting cycle, the City's database and GIS map for Private Maintenance Agreements Map be updated with each new maintenance agreement. A copy of the fully executed agreements shall be scanned and entered into the system along with updating the GIS map.

For each reporting year review completed projects to verify that all fully executed agreements have been added. Report the number of new private maintenance agreements for each reporting year.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/17/2017	2016 - New Private	In 2016 the City issued 51 grading permits. Of these 15 projects required the property owner to enter into a private stormwater maintenance agreement. These kept in the project files and are then added to the City's GIS Map.

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### 5.3 Post-Construction Stormwater Management SOPs and ERPs

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Develop, maintain, and implement standard operating procedures (SOPs) and enforcement response procedures (ERP) related to post-construction stormwater management as described in the NPDES permit.

#### Goals

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#### 5.3.1 Post-Construction Stormwater Management SOPs & ERPs

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

The City of Maplewood has developed standard operation procedures (SOPs) and enforcement response procedures (ERPs) for construction site stormwater runoff control as described in the NPDES permit. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. This document shall be reviewed annually and updated with an identified changes.

Provide a summary of any identified changes to the City of Maplewood MS4 SOPs and ERPs document related to post-construction stormwater management.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 - SOPs and ERPs Review	City staff has conducted a review of the standard operation procedures (SOPs) and enforcement response procedures (ERPs) for construction site stormwater runoff control as described in the NPDES permit. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. There are no recommended changes at this time.

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## 6 MCM 6: Pollution Prevention/ Good Housekeeping for Municipal Operations

### Responsible Staff / Position:

#### Description:

**New permittees** shall develop and implement, and **existing permittees** shall revise their current program, as necessary, and continue to implement, an operations and maintenance program that prevents or **reduces** the discharge of pollutants from **permittee** owned/operated facilities and operations to the **small MS4**. The operations and maintenance program shall include, at a minimum, the following:

#### a. Facilities Inventory

The **permittee** shall develop and maintain an inventory of **permittee** owned/operated facilities that contribute pollutants to **stormwater** discharges. Facilities to be inventoried may include, but is not limited to: composting, equipment storage and maintenance, hazardous waste disposal, hazardous waste handling and transfer; landfills, solid waste handling and transfer, parks, pesticide storage, public parking lots, public golf courses; public swimming pools, public works yards, recycling, salt storage, vehicle storage and maintenance (e.g., fueling and washing) yards, and materials storage yards.

#### b. Development and Implementation of BMPs for inventoried facilities and municipal operations

Considering the source of pollutants and sensitivity of **receiving waters** (e.g., Outstanding Resource Value Waters (ORVWs), **impaired waters**, trout streams, etc.), the **permittee** shall develop and implement **BMPs** that prevent or **reduce** pollutants in **stormwater** discharges from the **small MS4** and from:

- (1) All inventoried facilities that discharge to the **MS4**, and
- (2) The following municipal operations that may contribute pollutants to stormwater discharges, where applicable:
  - (a) Waste disposal and storage, including dumpsters
  - (b) Management of temporary and permanent stockpiles of materials such as street sweepings, snow, deicing materials (e.g., salt), sand and sediment removal piles
  - (c) Vehicle fueling, washing and maintenance
  - (d) Routine street and parking lot sweeping
  - (e) Emergency response, including spill prevention plans
  - (f) Cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste, and wastewater
  - (g) Use, storage, and disposal of **significant materials**
  - (h) Landscaping, park, and lawn maintenance
  - (i) Road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving
  - (j) Right-of-way maintenance, including mowing
  - (k) Application of herbicides, pesticides, and fertilizers
  - (l) Cold-weather operations, including plowing or other snow removal practices, sand use, and application of deicing compounds

#### c. Development and implementation of **BMPs** for **MS4** discharges that may affect Source Water Protection Areas (Minn. R. 4720.5100-4720.5590)

The **permittee** shall incorporate **BMPs** into the **SWPPP** to protect any of the following drinking water sources that the **MS4** discharge may affect, and the **permittee** shall include the map of these sources with the **SWPPP** if they have been mapped:

- (1) Wells and source waters for DWSMAs identified as vulnerable under Minn. R. 4720.5205, 4720.5210, and 4720.5330



(2) Source water protection areas for surface intakes identified in the source water assessments conducted by or for the Minnesota Department of Health (MDH) under the federal Safe Drinking Water Act, U.S.C. SubSection 300j - 13  
d. Pond Assessment Procedures and Schedule

The **permittee** shall develop procedures and a schedule for the purpose of determining the TSS and TP treatment effectiveness of all **permittee** owned/operated ponds constructed and used for the collection and treatment of **stormwater**. The schedule (which may exceed this permit term) shall be based on measureable goals and priorities established by the **permittee**.

e. Inspections

(1) Unless inspection frequency is adjusted as described below, the **permittee** shall conduct annual inspections of **structural stormwater BMPs** (excluding **stormwater** ponds which are under a separate schedule below) to determine structural integrity, proper function and maintenance needs.

Inspections of **structural stormwater BMPs** shall be conducted annually unless the **permittee** determines if either of the following conditions apply: 1) Complaints received or patterns of maintenance indicate a greater frequency is necessary, or 2) Maintenance or sediment removal is not required after completion of the first two annual inspections; in which case the **permittee** may reduce the frequency of inspections to once every two (2) years. However, **existing permittees** are authorized under this permit to continue using inspection frequency adjustments, previously determined under the *general stormwater permit/or small MS4s No. MNR040000*, effective June 1, 2006, provided that documentation requirements in Part III.D.6.h(2) are satisfied.

(2) Prior to the expiration date of this permit, the **permittee** shall conduct at least one inspection of all ponds and **outfalls** (excluding underground **outfalls**) in order to determine structural integrity, proper function, and maintenance needs.

(3) The **permittee** shall conduct quarterly inspections of stockpiles, and storage and material handling areas as inventoried in Part III.D.6.a, to determine maintenance needs and proper function of **BMPs**.

f. Maintenance

Based on inspection findings, the **permittee** shall determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity, proper function, and treatment effectiveness of **structural stormwater BMPs**. Necessary maintenance shall be completed as soon as possible to prevent or reduce the discharge of pollutants to stormwater.

g. Employee Training

The **permittee** shall develop and implement a **stormwater** management training program commensurate with employee's job-duties as they relate to the **permittee's SWPPP**, including reporting and assessment activities. The **permittee** may use training materials from the United States Environmental Protection Agency (USEPA), state and regional agencies, or other organizations as appropriate to meet this requirement. The employee training program shall:

(1) Address the importance of protecting water quality

(2) Cover the requirements of the permit relevant to the job duties of the employee

(3) Include a schedule that establishes initial training for new and/or seasonal employees, and recurring training intervals for existing employees to address changes in procedures, practices, techniques, or requirements

h. Documentation of the following information:

(1) Date(s) and description of findings of all inspections conducted in accordance with Part III.D.6.e

- (2) Any adjustments to inspection frequency as authorized under Part III.D.6.e(1)
- (3) A description of maintenance conducted, including dates, as a result of inspection findings
- (4) Pond sediment excavation and removal activities, including:
  - (a) The unique ID number (consistent with that required in Part III.C.2.a) of each **stormwater** pond from which sediment is removed
  - (b) The volume (e.g., cubic yards) of sediment removed from each **stormwater** pond
  - (c) Results from any testing of sediment from each removal activity
  - (d) Location(s) of final disposal of sediment from each **stormwater** pond
- (5) Employee **stormwater** management training events, including a list of topics covered, names of employees in attendance, and date of each event

## Best Management Practices

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### 6.1 Facilities Inventory List

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

Develop and maintain an inventory of permittee owned/ operated facilities that contribute pollutants to stormwater discharges.

Facilities to be inventoried may include, but are not limited to: composting, equipment storage and maintenance, hazardous waste disposal, hazardous waste handling and transfer; landfills, solid waste handling and transfer, parks, pesticide storage, public parking lots, public golf courses; public swimming pools, public works yards, recycling, salt storage, vehicle storage and maintenance (e.g., fueling and washing) yards, and materials storage yards.

#### Goals

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##### 6.1.1 MS4 Facilities Inventory

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

The City of Maplewood has developed facilities inventory list as describe in the NPDES permit. The City has also developed a GIS map that shows the location and information of each facility.

Conduct an annual review of the facilities inventory list. Identify any need for revisions to list or the GIS map. Summarize the results of the review and described any necessary changes required.

Provide a copy of or link to the completed and updated inventory each reporting period.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 Facilities Inventory List	A review of the 2015 list has been conducted and no changes are recommended for 2016.

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## 6.2 Street Sweeping

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Required:** Yes

### Description

The City will continue the current street sweeping program for vehicle safety, pedestrian safety, and water quality and environmental reasons. Street sweeping will be done as weather permits once during spring and once during the fall of each year. The City also prioritizes sweeping to target key areas of the City as needed and in environmentally sensitive areas.

### Goals

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#### 6.2.1 Annual Street Sweeping

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

### Description

On an annual basis the streets in Maplewood will sweep at least once in the spring and once in the fall. Additional sweeping in targeted or environmental sensitive areas will be done as weather permits.

For each reporting cycle attach the sweeping records and include a summary of estimated miles of roads swept, volume of material collected, and weight of material collected.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
04/04/2017	2016 - Sweeping Report	See attached 2016 Street sweeping Report

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### 6.3 Employee Training

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Required:** Yes

#### Description

Develop and implement a stormwater management training program commensurate with employee's job-duties as they relate to the permittee's SWPPP, including reporting and assessment activities. The permittee may use training materials from the United States Environmental Protection Agency (USEPA), state and regional agencies, or other organizations as appropriate to meet this requirement. The employee training program shall:

1. Address the importance of protecting water quality
2. Cover the requirements of the permit relevant to the job duties of the employee
3. Include a schedule that establishes initial training for new and/or seasonal employees, and recurring training intervals for existing employees to address changes in procedures, practices, techniques, or requirements

#### Goals

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##### 6.3.1 Annual Employee Training

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

Conduct a staff training event on stormwater related topic at a **minimum of one time each year**. The training will be provided, in accordance with the City of Maplewood MS4 SOPs and ERPs document, to ensure the following:

- 1) Staff understands the importance of protecting water quality
- 2) Cover what requirements of the city's MS4 permit are relevant to the job duties of the employees
- 3) Provide continuing education opportunities through seminars, MnDot certification classes, educational material, and various other methods

For each reporting cycle attach a summary of the various training help/attended through out the year and include the following information:

- 1) Date(s)
- 2) List of topics covered
- 3) Number of employees in attendance

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/15/2017	2016 - Employee Training	The following are employee training activities that took place throughout 2016:

- Public Works staff are reminded to be on the lookout for illicit discharge prior to start of the pond

inventory and yearly outfall/outlet inspections.

- Employees were give a general introduction to what is an illicit discharge and main point of contact if they witness or are contacted about a reported illicit discharge.

- 2016 - CEAM annual conferences - 3 Civil Engineers, opportunity to attend several stormwater related topics

- 2016 - APWA national annual conferences - 3 Civil Engineers and all available public work crews had the opportunity to attend several stormwater related topics

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#### 6.4 Inspections - Stormwater BMPs

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Required:** Yes

##### Description

(1) Conduct annual inspections of structural stormwater BMPs (excluding stormwater ponds which are under a separate schedule below) to determine structural integrity, proper function and maintenance needs.

Inspections of structural stormwater BMPs shall be conducted annually unless the permittee determines if either of the following conditions apply:

1) Complaints received or patterns of maintenance indicate a greater frequency is necessary, or  
2) Maintenance or sediment removal is not required after completion of the first two annual inspections; in which case the permittee may reduce the frequency of inspections to once every two (2) years.  
However, existing permittees are authorized under this permit to continue using inspection frequency adjustments, previously determined under the general storm water permit/or small MS4s NO.MNR040000, effective June 1, 2006, provided that documentation requirements in Part III.D.6.h(2) are satisfied.

(2) Conduct at least one inspection of all ponds and outfalls (excluding underground outfalls) in order to determine structural integrity, proper function, and maintenance needs prior to the expiration date of this permit

(3) Conduct quarterly inspections of stockpiles, and storage and material handling areas as inventoried in Part III.D.6.a, to determine maintenance needs and proper function of BMPs.

##### Goals

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#### 6.4.1 Annual Inspections - Structural Stormwater BMPs

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

##### Description

Conduct annual inspections of structural stormwater BMPs (i.e. trap manholes, sumps, floatable skimmers, separators, and other small settling or filtering devices) to determine structural integrity, proper function and maintenance needs. Adjust the inspection frequency per existing permit terms and conditions.

For each reporting cycle attach a summary of inspections documenting the dates of and findings of all inspections. Include a description of required maintenance and any adjustments to the inspection frequency.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
None		

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#### 6.4.2 Inspections 20% Per Year - Ponds and Outfalls

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

##### Description

Inspect at least 20% of system ponds and outfalls each year to determine structural integrity, proper function and maintenance needs.

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For each reporting cycle attach a summary of inspections documenting the dates of and findings of all inspections. Include a description of required maintenance and any adjustments to the inspection frequency.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
04/18/2017	2016-Outfall Inspections	No outfall inspections in 2016, over 50% inspected in beginning of 2017

**6.4.3 Quarterly Inspections - Stockpiles & Material Handling Areas**

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Description**

Conduct quarterly inspections of stockpiles, inventoried storage areas and material handling areas to determine maintenance needs and proper function of BMPs.

For each reporting cycle attach a summary of inspections documenting the dates of and findings of all inspections. Include a description of required maintenance and any adjustments to the inspection frequency.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
04/04/2017	2016- Inspection Summary	Public works yard is inspected on a weekly basis. All road salt is stored inside a salt shed. Street sweeping and fill material are stored in concrete jersey bins upstream of sump structure located in the PW yard. Materials are generally on hand from March - June. at that time a conveyor is utilized to screen all materials and then haul off site for proper disposal or reuse.



## 6.5 Maintenance Activities

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Required:** Yes

### Description

Determine if repair, replacement, or maintenance measures are necessary based on inspection findings to ensure the structural integrity, proper function, and treatment effectiveness of the following items:

- 1) Stormwater System
- 2) Ponds & Outfalls
- 3) Stockpiles & Material Handling Areas

Complete necessary maintenance as soon as possible to prevent or reduce the discharge of pollutants to stormwater.

### Goals

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#### 6.5.1 Maintenance - Stormwater System

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

### Description

Repair, replace or maintain structural the City's stormwater system based on inspection findings to ensure structural integrity, proper function and treatment effectiveness.

For each reporting period attach a summary of maintenance activities performed on the City's stormwater system including a description of maintenance conducted and dates.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
None		

#### 6.5.2 Maintenance - Ponds & Outfalls

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

### Description

Repair, replace or maintain ponds and outfalls based on inspection findings to ensure structural integrity, proper function and treatment effectiveness.

For each reporting period attach a summary of maintenance activities performed on the ponds and outfalls including a description of maintenance conducted and dates.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
None		

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**6.5.3 Maintenance - Stockpiles & Material Handling Areas**

**Responsible Staff / Position:** Bryan Nagel  
Street Superintendent  
(651) 249-2420

**Description**

Repair, replace or maintain stockpiles and material handling areas based on inspection findings to ensure structural integrity, proper function and treatment effectiveness.

For each reporting period attach a summary of maintenance activities performed on the stockpiles and material handling areas including a description of maintenance conducted and dates.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
None		

## 6.6 Pond Assessment Procedures and Schedule

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

### Description

Develop procedures and a schedule to determine the TSS and TP treatment effectiveness of all permittee owned/ operated ponds constructed and used for the collection and treatment of stormwater. The schedule shall be based on measurable goals and priorities established by the permittee.

### Goals

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#### 6.6.1 Pond Assessments

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

### Description

The City of Maplewood has developed procedures and a schedule to determine the TSS and TP treatment effectiveness of all permittee owned/ operated ponds constructed and used for the collection and treatment of stormwater. These procedures and schedule are outlined in the City of Maplewood MS4 SOPs and ERPs document.

Conduct pond assessments to determine TSS and TP treatment effectiveness in accordance with the City of Maplewood MS4 SOPs and ERPs document.

Provide a summary of pond assessments completed including a list of inspected ponds.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/15/2017	2016 - Pond Assessments	Due to a lack of available funds there were no pond assessments completed in 2016. The city will be looking to seek out partnership opportunities in 2017 for pond maintenance (e.g. pond dredging) projects along with including future funding in the City's CIP plan.

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## 6.7 Pollution Prevention / Good Housekeeping for Municipal Operations SOPs & ERPs

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

### Description

Develop, maintain, and implement standard operating procedures (SOPs) and enforcement response procedures (ERP) related to pollution prevention / good housekeeping for municipal operations as described in the NPDES permit.

### Goals

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#### 6.7.1 Pollution Prevention / Good Housekeeping for Municipal Operations SOPs & ERPs

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

### Description

The City of Maplewood has developed standard operation procedures (SOPs) and enforcement response procedures (ERPs) for pollution prevention / good housekeeping for municipal operations as described in the NPDES permit. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. This document shall be reviewed annually and updated with an identified changes.

Provide a summary of any identified changes to the City of Maplewood MS4 SOPs and ERPs document related to pollution prevention/ good housekeeping for municipal operations.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 - Review of SOPs and ERPs	City staff has conducted a review of the standard operation procedures (SOPs) and enforcement response procedures (ERPs) for pollution prevention / good housekeeping for municipal operations as described in the NPDES permit. These procedures are included in the City of Maplewood MS4 SOPs and ERPs document. There are no recommended changes at this time.

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## 7 Compliance Schedule for an Approved TMDL with an Applicable WLA

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

### **Description:**

Discharges to **Impaired Waters** with a USEPA-Approved **TMDL** that includes and **Applicable WLA**

For each **applicable WLA** approved prior to the **effective date** of this permit, the **BMPs** included in the compliance schedule at application constitute a discharge requirement for the **permittee**. The **permittee** shall demonstrate continuing progress toward meeting each discharge requirement, on a form provided by the **Commissioner**, by submitting the following:

1. An assessment of progress toward meeting each discharge requirement, including a list of all **BMPs** being applied to achieve each **applicable WLA**. For each **structural stormwater BMP**, the **permittee** shall provide a unique identification (ID) number and **geographic coordinate**. If the listed **structural stormwater BMP** is also inventoried as required by Part III.C.2, the same ID number shall be used.
2. A list of all **BMPs** the **permittee** submitted at the time of application in the **SWPPP** document compliance schedule(s) and the stage of implementation for each **BMP**, including any **BMPs** specifically identified for the **small MS4** in the **TMDL** report that the **permittee** plans to implement
3. An up-dated estimate of the cumulative reductions in loading achieved for each **pollutant of concern** associated with each **applicable WLA**
4. An up-dated narrative describing any adaptive management strategies used (including projected dates) for making progress toward achieving each **applicable WLA**

## Best Management Practices

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### 7.1 Annual Review of TMDL's with an Applicable WLA

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

#### Description

On an annual basis the City will conduct a review of all approved Total Maximum Daily Load (TMDLs) with an applicable Waste Load Allocation (WALs).

The review will provide an assessment of progress toward meeting each discharge requirement, including a list of all BMPs being applied to achieve each applicable WLA.

## Goals

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### 7.1.1 Annual Review of Current TMDL's

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

For each reporting cycle the City will conduct a review of all active approved Total Maximum Daily Load (TMDL) with an applicable Waste Load Allocations (WAL).

For each reporting cycle attach a list of all active approved TMDL's with applicable WAL's. Document the name of the water body with the approved TMDL's and type of WAL.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

Activity Date	Name	Description
05/15/2017	2016 - Current TMDL's	Based on the MPCA's TMDL online map the City of Maplewood currently has one active and approved TMDL. This TMDL is located at Kohlman Lake and is for Total Phosphorus. See attached images for screen shots of the MPCA's TMDL online map.  Each MS4 was assigned a WLA as part of this TMDL. Maplewood's WLS was set at an overall reduction of 10 pounds of Phosphorus during growing season.

### 7.1.2 Annual WAL Progress and BMP's

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

#### Description

Assess progress toward meeting the identified discharge requirement each reporting period.

For each reporting period attach the results of the assessments including a list of all BMPs applied to the applicable WLA.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/15/2017	2016 - Annual Progress	<p>Based on the attached Ramsey Washington Metro Watershed District' report dated June 23, 2015 the City of Maplewood has met the required WLA reduction. The following is a summary of the WAL information:</p> <ul style="list-style-type: none"><li>• Overall WAL Reduction Required by the TMDL: 10 pounds of Phosphorus during growing season</li><li>• WAL Reduction through 2014: 91 pounds of Phosphorus during growing season.</li><li>• Percent of Overall Reduction Achieved through 2014: 908.8%</li></ul>

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## **8 SOP's & ERP's**

**Responsible Staff / Position:**

Steve Love  
City Engineer  
(651) 249-2404

**Description:**

Store most current version of the City of Maplewood MS4 Standard Operation Procedures (SOPs) and Enforcement Response Procedures (ERPs). This document will be reviewed on an annual basis.



**Best Management Practices**

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**8.1 Current SOPs & ERPs Document**

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

**Description**

Provide the most current version of the City of Maplewood MS4 Standard Operations Procedures (SOPs) and Enforcement Response Procedures (ERPs).

**Goals**

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**8.1.1 Annually Updated SOPs & ERPs Document**

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Description**

Attached is the most current version of the City of Maplewood MS4 Standard Operations Procedures (SOPs) and Enforcement Response Procedures (ERPs). Each year the latest version will be attached in order to provide a secure and accessible location for this document.

**Planned:** 2015 2016 2017

**Complete:** 2015 2016 2017

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
05/15/2017	2016 SOP's and ERP's Document	No updates are proposed at this time. See attached copy of the SOP's and ERP's.

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## 9 Completed MPCA Annual Report Form

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Description:**

The MPCA requires each city to submit an annual report for the NPDES permit. This form is distributed by the MPCA and is required to be submitted by June 30th following each reporting cycle.

**Best Management Practices**

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**9.1 MPCA Annual Report Form**

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Required:** Yes

**Description**

Complete and submit the MPCA's annual report for each reporting cycle. This report is required to be submitted to the MPCA by June 30th of the following year.

**Goals**

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**9.1.1 Annual Report Form**

**Responsible Staff / Position:** Steve Love  
City Engineer  
(651) 249-2404

**Description**

Attach a copy of the MPCA's annual report form for each reporting cycle.

**Planned:** 2014 2015 2016

**Complete:** 2014 2015 2016

<b>Activity Date</b>	<b>Name</b>	<b>Description</b>
None		

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