

**CITY OF EAST LANSING
STORM WATER MANGEMENT PROGRAM**

**IMPLEMENTATION PLAN
FOR COMPLYING WITH THE
NPDES PERMIT REQUIREMENTS**

**11. TOTAL MAXIMUM DAILY LOAD
(TMDL)
IMPLEMENTATION PLAN**

JANUARY 2020

INTRODUCTION

Overview:

This section of the “Implementation Plan” is intended to serve as the primary guidance document for the Total Maximum Daily Load (TMDL) portion of the Storm Water Management Program. This section was not included in the City’s NPDES Permit until the issuance of the February 1, 2020 Permit

In particular, this section addresses Part I, Section A. 3. h “Total Maximum Daily Load (TMDL) Implementation Plan” which states “*The permittee shall implement the TMDL Implementation Plan to reduce the discharge of pollutants from the permittee’s MS4 to make progress in meeting Water Quality Standards. The permittee shall implement the TMDL as part of the SWMP.*”

2020 Updated Implementation Plan:

The program incorporated the materials provided in the 2017 application and in particular the “E.coli TMDL” plan that was submitted and dated January 2019 for approval as part of the 2020 NPDES Permit. The January 2019 E.coli TMDL plan constitutes the City’s official TMDL Plan.

The only TMDL requirement currently applicable to the City of East Lansing’s NPDES permit is for E.coli. In addition, the E.coli TMDL currently only applies to the Red Cedar River Watershed (RCRW) area within the City of East Lansing. However, it is likely that the TMDL requirement for E.coli will soon be extended to the Looking Glass River Watershed portions of the City of East Lansing.

E.coli TMDL Plan:

The City’s January 2019 “E.coli TMDL” implementation plan included the following:

1. Numeric Limits for the E.coli TMDL:

The State of Michigan has officially established the limits for its E.coli TMDL to be a concentration based standard as follows: “For this TMDL, the WQS of 130 E.coli per 100mL as a 30-day geometric mean and 300 E.coli per 100mL as a daily maximum to protect the TBC use are the target levels for the TMDL reaches for May 1 through October 31, and 1,000 E.coli per 100mL as a daily maximum year-round target level to protect the PBC use.”

2. Best Management Practices for Addressing Potential Sources of E.coli:

Part I, Section A. 3. h of the NPDES Permit “Total Maximum Daily Load (TMDL) Implementation Plan” further states “*The permittee shall implement the prioritized BMPs included in the TMDL Implementation Plan during the permit cycle to make progress in achieving the pollutant load reduction requirement in the TMDL.*”

The City evaluated the potential sources and causes of E.coli contributions from its borders and determined that wildlife, pet wastes, and illicit connections were the most likely sources of discharge. Furthermore, the highest potential for and likelihood of E.coli being discharged into the Red Cedar River Watershed and Looking Glass River Watershed are from pet wastes and wildlife.

The City evaluated and identified specific BMPs to address the identification, evaluation and elimination of the various sources of E.coli that could potentially discharge into the Red Cedar River Watershed and Looking Glass River Watershed.

3. TMDL Monitoring Plan:

Part I, Section A. 3. h of the NPDES Permit “Total Maximum Daily Load (TMDL) Implementation Plan” further states *“The permittee shall implement the monitoring plan included in the TMDL Implementation Plan for assessing the effectiveness of the BMPs implemented in making progress toward achieving the TMDL pollutant load reduction.”*

The City of East Lansing’s monitoring plan will take a two stage approach to meeting the City’s TMDL goals. First the City will continue to work with other communities and entities within the Red Cedar River Watershed to monitor the overall health of the entire watershed.

Second, the City of East Lansing will implement a plan to analyze and track the actual contribution of E.coli from the City to the Red Cedar River by means of end of pipe sampling. The City will also endeavor to undertake an informal plan to analyze and track the contribution of E.coli from the City to the Looking Glass River if and where practical.

Implementation & Tracking:

The following documents have been developed to help measure and ensure compliance with the TMDL requirements of the NPDES Permit:

- A checklist encompassing the various aspects and requirements of the TMDL has been developed for use on an annual basis.
- A spreadsheet for tracking the sampling and analysis of E.coli tests was developed to establish background data and for developing trends to show over time whether the BMPs enacted are successful in reducing the discharge of E.coli into the watersheds.