St. Paul, MN 55155-4194

# 2019 Modification to Mississippi River – Lake Pepin Tributaries Total Maximum Daily Load Report

#### Overview

| TMDL Project Name   | Mississippi River – Lake Pepin Tributaries TMDL  |
|---|--|
| Date of EPA TMDL Approval                                   | August 18, 2015  |
| Public Notice Dates   | May 6, 2019 through June 5, 2019   |
| MPCA Approval Date for Modification                         | June 5, 2019   |
| TMDL segment AUID and pollutant which require modification  | 07040001-534 – <i>E. coli</i> TMDL modification<br>07040001-530 – <i>E. coli</i> TMDL modification |
| TMDL Tables in final TMDL document which are being modified | Table 4.2: Gilbert Creek and Miller Creek TMDLs  |

#### What is being changed from the final Total Maximum Daily Load (TMDL) to the modified TMDL?

The Minnesota Pollution Control Agency (MPCA) is making adjustments to stormwater wasteload allocations (WLAs) to account for a new regulated-Municipal Separate Storm Sewer Systems (MS4s). There is one new regulated-MS4 within the TMDL project area, Lake City (Permit #MS400288) (Table 1; Table 2). When the TMDLs were approved on August 18, 2015, Lake City was unregulated and the areas associated with the city were assigned to the load allocation (LA). Now that the city is a regulated-MS4, the LA assigned to them is being transferred to the MS4 WLA. The adjustments will not change the approved overall total loading capacities of the TMDLs.

Table 1. Current and new regulated-MS4s within TMDL subwatersheds.

| AUID         | Reach Name    | Current MS4s included in TMDL | New MS4       | Impairment |
|--------------|---------------|-------------------------------|---------------|------------|
| 07040001-534 | Miller Creek  | None                          | Lake City MS4 | E. coli    |
| 07040001-530 | Gilbert Creek | None                          | Lake City MS4 | E. coli    |

Table 2. Regulated-MS4s and MS4 Permit Numbers

| Regulated MS4 | MS4 Permit # |  |  |
|---------------|--------------|--|--|
| Lake City     | MS400288     |  |  |

#### **Explanation of modifications:**

Lake City was not regulated under the MS4 permit when the TMDL was completed in 2015. Lake City is now a regulated-MS4 and the permitted area needs to be accounted for in the TMDL WLAs for the TMDL segments listed above. The MPCA is proposing the following modifications:

#### Miller Creek, AUID 07040001-534

The MPCA is shifting between 2.1 and 4.0 billions of organisms/day depending on flow zone of Escherichia Coli (*E. coli*) from the LA to the MS4 WLA for Lake City (Modified Table 4.2).

#### Gilbert Creek, AUID 07040001-530

We are shifting between 1.0 and 2.0 billions of organisms/day depending on flow zone of *E. coli* from the LA to the MS4 WLA for Lake City (Modified Table 4.2).

### **Maps**

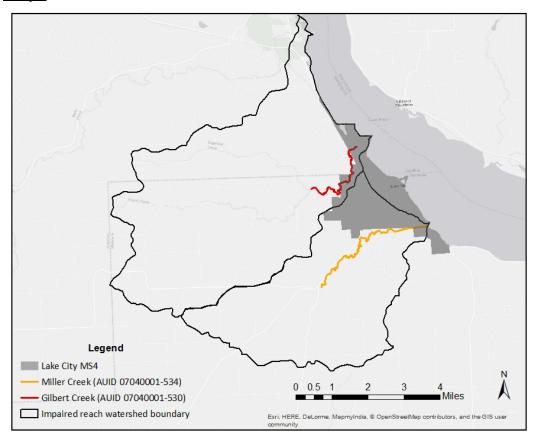


Figure 1. Impaired bacteria reaches Miller Creek (AUID 07040001-534), Gilbert Creek (AUID 07040001-530), and TMDL subwatersheds and Lake City MS4 regulated area.

# <u>Tables</u>

Excerpt from original Table 4.2 E. coli TMDL summaries (pg. 27 of TMDL report).

|                                   | Flow Regime               |      |          |     |      |          |
|-----------------------------------|---------------------------|------|----------|-----|------|----------|
|                                   | Very High                 | Н    | igh      | Mod | Low  | Very Low |
| Gilbert Creek TMDL                |                           |      | <u> </u> |     |      |          |
| Summary                           | Billions of Organisms/day |      |          |     |      |          |
| Loading Capacity (TMDL)           | 53                        | 41   | 3        | 8   | 33   | 27       |
| Wasteload Allocation              |                           |      |          | -   |      |          |
| Load Allocation                   | 47.7                      | 36.9 | 34       | .2  | 29.7 | 24.3     |
| Margin of Safety                  | 5.3                       | 4.1  | 3.       | 8   | 3.3  | 2.7      |
| 90 <sup>th</sup> Percentile Value |                           |      |          |     |      |          |
| from WQ Data                      | NA                        | 281  | 24       | 1   | 281  | 79       |
| Miller Creek TMDL                 |                           |      |          |     |      |          |
| Summary                           | Billions of Organisms/day |      |          |     |      |          |
| Loading Capacity (TMDL)           | 37                        | 29   | 2        | 6   | 23   | 19       |
| Wasteload Allocation              |                           |      |          | -   |      |          |
| Load Allocation                   | 33.3                      | 26.1 | 23       | .4  | 20.7 | 17.1     |
| Margin of Safety                  | 3.7                       | 2.9  | 2.       | 6   | 2.3  | 1.9      |
| 90 <sup>th</sup> Percentile Value |                           |      |          |     |      |          |
| from WQ Data                      | NA                        | 342  | 49       | 94  | 305  | 147      |

Modified excerpt from original Table 4.2 E. coli TMDL summaries (modifications highlighted in yellow).

|                                   | Flow Regime               |      |      |    |      |          |
|-----------------------------------|---------------------------|------|------|----|------|----------|
|                                   | Very High                 | Н    | High |    | Low  | Very Low |
| Gilbert Creek TMDL                |                           |      |      |    |      |          |
| Summary                           | Billions of Organisms/day |      |      |    |      |          |
| Loading Capacity (TMDL)           | 53 41 38 33 27            |      |      |    |      |          |
| WLA – Lake City MS4               |                           |      |      |    |      |          |
| (MS400288) 3.72%                  | 2.0                       | 1.5  | 1.4  | 4  | 1.2  | 1.0      |
| Load Allocation                   | 45.7                      | 35.4 | 32.  | .8 | 28.5 | 23.3     |
| Margin of Safety                  | 5.3                       | 4.1  | 3.8  | 8  | 3.3  | 2.7      |
| 90 <sup>th</sup> Percentile Value |                           |      |      |    |      |          |
| from WQ Data                      | NA                        | 281  | 24   | 1  | 281  | 79       |
| Miller Creek TMDL                 |                           |      |      |    |      |          |
| Summary                           | Billions of Organisms/day |      |      |    |      |          |
| Loading Capacity (TMDL)           | 37                        | 29   | 26   | ó  | 23   | 19       |
| WLA – Lake City MS4               |                           |      |      |    |      |          |
| (MS400288) 10.9%                  | 4.0                       | 3.2  | 2.8  | 8  | 2.5  | 2.1      |
| Load Allocation                   | 29.3                      | 22.9 | 20.  | .6 | 18.2 | 15.0     |
| Margin of Safety                  | 3.7                       | 2.9  | 2.0  | 6  | 2.3  | 1.9      |
| 90 <sup>th</sup> Percentile Value |                           |      |      |    |      |          |
| from WQ Data                      | NA                        | 342  | 49   | 4  | 305  | 147      |

## **Implementation**

Given the modification described, are there any changes to Stormwater Pollution Prevention Plan (SWPPP) to account for the modified WLAs?

Lake City MS4 will be required to submit an updated SWPPP when the new MS4 permit becomes effective in late 2019. At that time, Lake City MS4 will be required to account for the *E. coli* impaired reaches above.

Will the SWPPPs be updated to include the new information included in the modification? If yes, when will the SWPPPs be updated?

The SWPPP will be updated to include the new information in the modification when the new MS4 permit becomes effective in late 2019.