



REGION 5
CHICAGO, IL 60604

May 6, 2025

Mr. Glenn Skuta
Watershed Division Director
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Dear Mr. Skuta:

The U.S. Environmental Protection Agency completed its review of the final Total Maximum Daily Load (TMDL) revisions for the Mississippi River-Grand Rapids Watershed TMDLs (originally approved in 2019), including supporting documentation. The revised TMDLs address changes to the bacteria allocations for three waterbodies, Willow River (07010103-751), Swan River (07010103-753), and Tamarack River (07010103-758). The revised TMDLs address the impaired Aquatic Recreation Use due to excessive bacteria.

The revised TMDLs meet the requirements of Section 303(d) of the Clean Water Act and the EPA's implementing regulations set forth at 40 C.F.R. Part 130. Therefore, the EPA approves Minnesota's three revised TMDLs for bacteria. All other aspects of the original TMDL approval remain the same. The EPA describes Minnesota's compliance with the statutory and regulatory requirements in the enclosed decision document.

The EPA acknowledges Minnesota's efforts in submitting these revised TMDLs and look forward to future TMDL submissions by the State of Minnesota. If you have any questions, please contact Mr. David Werbach, at 312-886-4242 or Werbach.david@epa.gov.

Sincerely,

5/6/2025

X 

Tera L. Fong
Division Director, Water Division
Signed by: TERA FONG

cc: Andrea Plevan, MPCA
Phil Votruba, MPCA

wq-iw8-58q

2025 Mississippi River – Grand Rapids Watershed Revised TMDL Decision Document

TMDL: Revisions to the Minnesota “Total Maximum Daily Loads for the Mississippi River-Grand Rapids Watershed”

Approval Date: May 6, 2025

Background

On October 1, 2019, the United States Environmental Protection Agency approved the Total Maximum Daily Loads (TMDLs) for phosphorus, and bacteria (specifically *E. coli*) for the waterbodies in the Mississippi River-Grand Rapids Watershed (MRGRW) in the State of Minnesota.¹ For purposes of this Decision Document, the TMDLs approved on October 1, 2019, will be referred to as the “Original TMDL.” The Original TMDL addresses certain waterbodies not meeting aquatic recreation uses due to exceedances of the phosphorus, and bacteria water quality standards.

For the purposes of this amendment to the Original TMDL Decision Document (October 2019), the EPA recognizes the revisions to the MRGRW TMDL, submitted to the EPA on April 7, 2025, as the 2025 Revision Summary. This revision addresses three waterbodies; Willow River (07010103-751), Swan River (07010103-753) and Tamarack River (07010103-758) for bacteria.

The Original TMDL was developed by the Minnesota Pollution Control Agency (MPCA) and established load allocations (LA) for nonpoint sources and wasteload allocations (WLA) to point sources. A margin of safety (MOS) was established for the bacteria and phosphorus TMDLs in the Original TMDL.²

The MRGRW TMDL is being revised by MPCA to correct errors made in the WLA calculations for several wastewater treatment plants (WWTPs) addressed in the bacteria TMDLs. Table 1 of this Decision Document contains the updated WLAs as well as the specific reason each is being revised. MPCA also submitted revised Tables 3-18 and 4-13 in the 2025 Revision Summary. These revised tables (below) contain the facility details (i.e., flow rate, facility type) for the WWTPs in the TMDL watershed, and facility information in these Tables were revised to ensure consistency throughout the TMDL document.

As a result of these WLA calculation revisions, the WLAs and LAs have been slightly revised for the three waterbodies to account for the revisions. The overall Loading Capacity and Margin of Safety, as well as all other portions of the TMDL, remained unchanged and are still in effect. The updated information is contained in the 2025 Revision Summary.

¹ Mississippi River-Grand Rapids Watershed TMDLs Decision Document dated October 1, 2019.

² MPCA, *Mississippi River-Grand Rapids Watershed Total Maximum Daily Load*, September 2019.

2025 Revisions to the MRGRW TMDL

The EPA is approving the changes documented in the 2025 TMDL Revision of the MRGRW TMDL based on the information submitted by the State of Minnesota on April 7, 2025. MPCA provided bacteria WLAs for five WWTPs as noted in Table 1 of this TMDL Revision Decision Document.

As a result of the new WLAs, the associated LAs for nonpoint sources were reduced for two of the segments (Revised Table 4-16 (Willow River -751) and Revised Table 4-18 (Tamarack River -758) of this decision document). As a result of the reductions in LA, additional reasonable assurance is needed to demonstrate that the additional non-point source reductions are likely to occur.

MPCA provided additional reasonable assurance in the 2025 Revision Summary. MPCA noted that the waterbodies are prioritized for implementation activities in the *Upper Mississippi Grand Rapids Watershed Comprehensive Watershed Management Plan: 2025–2035*, developed by a partnership of numerous local entities, including Soil and Water Conservation Districts (SWCDs) and the Minnesota Board of Water and Soil Resources (BWSR) (https://drive.google.com/file/d/1WX3xJndgaZmastZGFFv_Xp1CICQ18h32/view). In the document, the impaired rivers are noted as higher priority for implementation activities. In addition, MPCA noted that a Section 319 Nine-Element Plan was developed in 2021 that addresses bacteria in the Tamarack River (<https://www.pca.state.mn.us/sites/default/files/wq-cwp2-25.pdf>).

The EPA Assessment:

The EPA finds the State’s calculation of new WLAs and adjusted WLA/LA for the three rivers as noted below to be reasonable and appropriate. MPCA provided the basis for their calculations, as well as additional reasonable assurance to account for the shift of loads from LA to WLA.

Public Participation for the 2025 Revisions

MPCA put the revised Mississippi River - Grand Rapids TMDL on public notice from January 27, 2025, to February 26, 2025, and requested public comments on the proposed 2025 Revisions to the MRGRW TMDL. The draft document was posted at: <http://www.pca.state.mn.us/water/tmdl>. No comments were received by MPCA.

The EPA Assessment:

The EPA reviewed the public participation information submitted by the State, and also reviewed information made available by MPCA to the public for review and comment, and the MPCA’s announcement of the public comment period. The EPA finds that the State of Minnesota’s public participation processes for the 2025 Revisions to the MRGRW TMDL were appropriate and that MPCA provided the general public with reasonable opportunity to review and comment on the proposed revisions to the MRGRW TMDL.

Conclusion

The EPA has completed a full review of the information provided by MPCA on April 7, 2025, and other appropriate supporting information. The EPA finds that pursuant to Section 303(d) of the Clean Water Act (CWA), 33 U.S.C. Section 1313(d), and the EPA’s implementing regulations at 40 C.F.R. Part 130,

the 2025 Revisions to the MRGRW TMDL satisfy the elements of an approvable revised TMDL. This approval addresses changes to three bacteria TMDLs for the Willow River (07010103-751), Swan River (07010103-753) and Tamarack River (07010103-758) segments (Updated Tables 4-16, 4-17, and 4-18 of this revised Decision Document). No other elements or documentation relating to the original or subsequent approvals of this TMDL are being revised.

The EPA's approval of this TMDL extends to the waterbodies which are identified above with the exception of any portions of the waterbodies that are within Indian Country, as defined in 18 U.S.C. Section 1151, and as further discussed in our Decision Document. The EPA is taking no action to approve or disapprove TMDLs for those waters at this time. The EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under the CWA Section 303(d) for those waters.

Table 1. Revised *E. coli* WLAs for WWTPs

Permit name and number	Impaired waterbody (WID: 07010103-###)	Reason for WLA revision	WLA in 2019 TMDL (billion org/day)	Revised WLA (billion org/day)
Cromwell WWTP (MN0051101)	Tamarack R (758)	Miscalculated WLA	2.8 (Table 3-18, Table 4-13, 4-18)	3.0
Keewatin WWTP (MN0022012)	Swan R (753)	Permit in process of termination, facility no longer in operation, city connected to Nashwauk WWTP	0.9 (Table 3-18, Table 4-13) 1.5 (Table 4-17)	0
Marble WWTP (MN0020214)	Swan R (753)	Transcription error in TMDL table	1.5 (Table 3-18, Table 4-13) 0.5 (Table 4-17)	1.5
Nashwauk WWTP (MNG580184)	Swan R (753)	Permit expansion ^a , connected City of Keewatin. Converted from controlled to continuous discharge resulting in decrease of daily flow	14.8 (Table 3-18, Table 4-13 and 4-17)	3.3
Remer WWTP (MNG585210)	Willow R (751)	Miscalculated WLA. Permit number changed from MNG580210 to MNG585210	2.1 (Table 3-18, Table 4-13) 1.7 (Table 4-16)	6.1

- a. The permit authorizing the expansion was issued 6/3/2020, and final limits became effective in April 2024. Note that the December 2019 Nashwauk WWTP Statement of Basis incorrectly states that the WLA will be 5.261 b-org/day. The substantial reduction in the Nashwauk WWTP WLA is due to the conversion of the facility from controlled (i.e., pond system) to continuous discharge; the continuous discharge spreads the load over the entire year instead of being restricted to a limited discharge window. The daily flow used to calculate the WLA was reduced from 3.1 mgd to 0.695 mgd.

UPDATED Table 3-18 and 4-13. WWTF design flows and permitted bacteria loads

Stream Reach	Facility Name, Permit #	Facility Type	Design Flow Rate (mgd)	Permitted Bacteria Load	
				as Fecal Coliform ¹ : 200 org/ 100 ml [billion org/day]	as <i>E. coli</i> : 126 org. / 100 ml ¹ [billion org/day]
-753	Coleraine-Bovey-Taconite Joint WWTP ³ MN0053341	Continuous Discharge	0.499	3.8	2.4
	Marble WWTP MN0020214	Continuous Discharge	0.324	2.5	1.5
	Nashwauk WWTP MN0053392	Continuous Discharge	0.695	5.3	3.3
-751	Remer WWTP MNG585210	Stabilization Pond ²	0.1063	9.7	6.1
-758	Cromwell WWTP MN0051101	Stabilization Pond ²	0.052	4.8	3.0

¹ WWTF permits are regulated for fecal coliform, not *E. coli*. The MPCA surface water quality standard for *E. coli* (126 org. / 100 ml) was used in place of the fecal coliform permitted limit of 200 org. / 100 ml, which was also the MPCA surface water quality standard prior to the March 2008 revisions to Minn. R. ch. 7050

²The permit for stabilization ponds allows discharge only during the period March 1 - Jun 30 and September 1 - December 31.

³ The WLA for the Coleraine-Bovey-Taconite Joint WWTP did not change from the Original TMDL.

UPDATED Table 4-16. Willow River (07010103-751) *E. coli* TMDL and allocations

Willow River 07010103-751 Load Component		Flow Regime				
		Very High	High	Mid	Low	Very Low
		Billion organisms per day				
Existing Load ¹		245.0	101.5	23.7	8.4	NA
Wasteload Allocations	Remer WWTP MNG585210)	6.1	6.1	6.1	6.1	6.1
	Total WLA	6.1	6.1	6.1	6.1	6.1
Load Allocations	Watershed Runoff	240.0	67.7	29.2	15.6	8.3
	Total LA	240.0	67.7	29.2	15.6	8.3
10% MOS		27.3	8.2	3.9	2.4	1.6
Total Loading Capacity ¹		273.4	82.0	39.2	24.1	16.0
Estimated Load Reduction		NA	19.5	NA	NA	NA
		NA	19%	NA	NA	NA

¹The TMDL for Willow River reach -751 was calculated using data from the HSPF model area weighted to WQ station S006-257. Existing loads were estimated using observed E.coli data from WQ station S006-257 (Appendix C).

UPDATED Table 4-17. Swan River (07010103-753) *E. coli* TMDL and allocations

Swan River 07010103-753 Load Component		Flow Regime				
		Very High	High	Mid	Low	Very Low
		<i>E. coli</i> (billion organisms per day)				
Existing Load		NA	160.8	349.9	33.7	NA
Wasteload Allocations	Coleraine-Bovey WWTP (MN0053341)	2.4	2.4	2.4	2.4	2.4
	Marble WWTP (MN0020214)	1.5	1.5	1.5	1.5	1.5
	Nashwauk WWTP (MNG580184)	3.3	3.3	3.3	3.3	3.3
	Hibbing, MN MS4 (MS400270)	93.7	34.1	16.3	9.0	3.5
	Total WLA	100.9	41.3	23.5	16.2	10.7
Load Allocations	Watershed Runoff	670.4	251.9	126.3	74.8	36.1
	Total LA	670.4	251.9	126.3	74.8	36.1
10% MOS		85.7	32.6	16.6	10.1	5.2
Total Loading Capacity		857.0	325.8	166.4	101.1	52
Estimated Load Reduction		NA	NA	183.5	NA	NA
		NA	NA	52%	NA	NA

UPDATED Table 4-18. Tamarack River (07010103-758) *E. coli* TMDL and allocations

Tamarack River 07010103-758 Load Component		Flow Regime				
		Very High	High	Mid	Low	Very Low
		<i>E. coli</i> (billion organisms per day)				
Existing Load		189.1	122.3	NA	129.2	5.0
Wasteload Allocations	<i>Cromwell WWTP (MN0051101)</i>	3.0	3.0	3.0	3.0	3.0
	Total WLA	3.0	3.0	3.0	3.0	3.0
Load Allocations	<i>Watershed Runoff</i>	395.4	126.9	70.0	43.1	20.6
	Total LA	395.4	126.9	70.0	43.1	20.6
10% MOS		44.3	14.4	8.1	5.1	2.6
Total Loading Capacity		442.7	144.3	81.1	51.2	26.2
Estimated Load Reduction		NA	NA	NA	78	NA
		NA	NA	NA	60%	NA

Attachments

Attachment 1: The EPA's October 1, 2019, approval of the Mississippi River-Grand Rapids Watershed TMDL