



**MINNESOTA POLLUTION
CONTROL AGENCY**

2020 MS4 General Permit- TMDL Application Form

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Municipal Division

218-316-3929

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February 16, 2021



Presentation Roadmap

Quick Vocab: What is a TMDL? WLA?

Permit Requirements for TMDLs

TMDL Application Form

How to complete the Form

Resources for completing the Form

Q & A



Twin Cities Metropolitan Area Chloride Total Maximum Daily Load Study

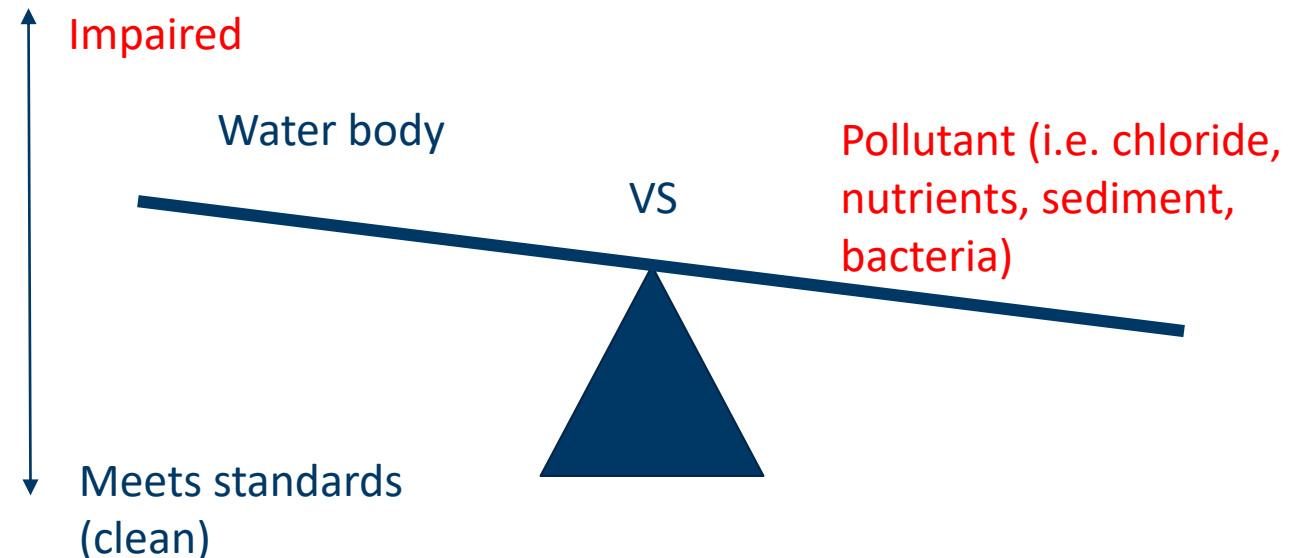


TMDL Report

What's a TMDL?

-Total Maximum Daily Load

- An equation
- A report



TMDL Equation

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	<i>Coleraine-Bovey WWTP (MN0053341)</i>	2.4	2.4	2.4	2.4	2.4
	<i>Keewatin WWTP (MN0022012)</i>	1.5	1.5	1.5	1.5	1.5
	<i>Marble WWTP (MN0020214)</i>	0.5	0.5	0.5	0.5	0.5
	<i>Nashwauk WWTP (MNG580184)</i>	14.8	14.8	14.8	14.8	14.8
	<i>Hibbing, MN MS4 (MS400270)</i>	93.7	34.1	16.3	9.0	3.5
	Total WLA	112.9	53.3	35.5	28.2	22.7
Load Allocations	<i>Watershed Runoff</i>	658.4	239.9	114.3	62.8	24.1
	Total LA	658.4	239.9	114.3	62.8	24.1
10% MOS		85.7	32.6	16.6	10.1	5.2
Total Loading Capacity		857.0	325.8	166.4	101.1	52

$$\text{TMDL} = \text{WLA} + \text{LA} + \text{MOS}$$

TMDL WLA List



2020 Municipal Stormwater Permit TMDL WLAs List

Municipal Separate Storm Sewer Systems (MS4) Program
Total Maximum Daily Load (TMDL), Wasteload Allocations (WLAs)

Permittee name	MS4 Permit	TMDL project name	Waterbody ID	Waterbody name	WLA type	Numeric W	Units	Flow Condition	Percent Reduction	Pollutant	Annual/Daily	MPCA Recommended Baseline year	TMDL Approval Date
Albert Lea city of	MS400263	Lower Mississippi River Basin-Fecal Coliform TMDL	07080202-501	Shell Rock River	Individual	2.700	trillions of organisms/m	Very High	Not Available	Fecal Coliform	Monthly	1988	4/5/2006
Albert Lea city of	MS400263	Lower Mississippi River Basin-Fecal Coliform TMDL	07080202-501	Shell Rock River	Individual	0.720	trillions of organisms/m	High	Not Available	Fecal Coliform	Monthly	1988	4/5/2006
Albert Lea city of	MS400263	Lower Mississippi River Basin-Fecal Coliform TMDL	07080202-501	Shell Rock River	Individual	0.250	trillions of organisms/m	Mid	Not Available	Fecal Coliform	Monthly	1988	4/5/2006
Albert Lea city of	MS400263	Lower Mississippi River Basin-Fecal Coliform TMDL	07080202-501	Shell Rock River	Individual	**	trillions of organisms/m	Low	Not Available	Fecal Coliform	Monthly	1988	4/5/2006
Albert Lea city of	MS400263	Lower Mississippi River Basin-Fecal Coliform TMDL	07080202-501	Shell Rock River	Individual	**	trillions of organisms/m	Very Low	Not Available	Fecal Coliform	Monthly	1988	4/5/2006
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	8.300	billions of organisms/day	Very High	Not Available	E. coli	Daily	2005	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	4.800	billions of organisms/day	High	Not Available	E. coli	Daily	2005	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	2.500	billions of organisms/day	Mid	Not Available	E. coli	Daily	2005	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	0.800	billions of organisms/day	Low	Not Available	E. coli	Daily	2005	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	0.200	billions of organisms/day	Very Low	Not Available	E. coli	Daily	2005	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	1.800	tons/day	Very High	Not Available	TSS	Daily	2004	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	0.600	tons/day	High	Not Available	TSS	Daily	2004	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	0.200	tons/day	Mid	Not Available	TSS	Daily	2004	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	0.100	tons/day	Low	Not Available	TSS	Daily	2004	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	0.100	tons/day	Very Low	Not Available	TSS	Daily	2004	Original TMDL approved 8/20/2013, modification approved 6/5/19

As part of the application-

Permittee checks master spreadsheet and lists all applicable WLAs

Is your MS4 currently meeting its WLA for any approved TMDLs?

- If yes, list WLAs and corresponding BMPs and strategy for long term continuation of meeting each WLA. (no further requirements for the rest of the permit cycle)
- If No, list interim milestones, implementation dates and strategies for BMPs beyond this permit cycle. (BMPs reported on in annual reports)



520 Lafayette Road North
St. Paul, MN 55155-4194

MS4 Permit TMDL Application

Municipal Separate Storm Sewer System (MS4) Program

Total Maximum Daily Load (TMDL)

wq-strm4-62 (Revised 9/25/20)

1

2 The worksheets in this workbook are customized for :

3 **Municipality X**

4 **Instructions**

5 You must complete this form for your applicable waste load allocations (WLAs) for oxygen demand, nitrate, total suspended solids (TSS), and total phosphorus (TP). Navigate the form using the worksheet tabs and complete all of the required fields as needed. MPCA staff have inserted the applicable TMDL projects on the **Applicable WLAs determination** tab. Applicants will need to determine whether or not they are meeting the WLAs associated with each TMDL and then provide the information required with that determination on subsequent workbook tabs.

6 **Notes for using this workbook**

7 **For the workbook to function- you must click Enable Content when opening, and save it as a macro-enabled spreadsheet (.xlsm type file)**

8 This spreadsheet contains macros. Save the file as a macro-enabled file to retain the macros.

9 If you need to clear a cell, please use the delete button and not the backspace button.

10 Some entries are optional. Look at the column header to identify cells that are optional.

11 This workbook contains protected cells that allow you to enter values but do not delete or change coding.

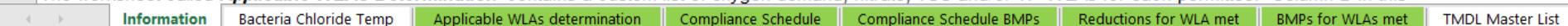
12 Worksheets with white tabs are for information only and do not require any input from the applicant.

13 Worksheets with green tabs may require information from the applicant.

14 **This workbook contains worksheets for TMDL Waste Load Allocations**

15 The worksheet called **Bacteria Chloride Temp** contains a custom list of applicable WLAs for bacteria, chloride or temperature. This provides information to answer questions 141, 146 and 151 on the MS4 Part 2 Permit Application.

The worksheet called **Applicable WLAs Determination** contains a custom list of oxygen demand, nitrate, TSS and/or TP WLAs for each permittee. Column B in this



Ready

2020 Permit –Application requirements

12.8 The applicant must submit a compliance schedule for each applicable Waste Load Allocation (WLA) not being met for **oxygen demand, nitrate, total suspended solids (TSS), and total phosphorus (TP)**. The applicant may develop a compliance schedule to include multiple WLAs. The applicant's compliance schedule must include the following information:

- a. proposed BMPs or progress toward implementation of BMPs to be achieved during the permit term;
- b. the year each BMP is expected to be implemented;
- c. a target year the applicable WLA(s) will be achieved; and
- d. if the applicant has an applicable WLA for TSS or TP, a cumulative estimate of TSS and TP load reductions (in pounds) to be achieved during the permit term and the Agency-approved method used to determine the estimate.

2020 Permit- Application requirements

- 12.9 For each applicable WLA where a reduction in pollutant loading is required for **bacteria, chloride, and temperature**, the applicant must provide a description of any existing BMPs the applicant has developed and implemented to satisfy the requirements of items 22.3 through 22.7, including:
 - a. the BMPs the applicant has implemented for each required component at the time of application;
 - b. the status of each required component; and
 - c. name(s) of individual(s) or position titles responsible for implementing and/or coordinating each required component.

2020 Permit-Application requirements

12.10 If the applicant is claiming to meet an applicable WLA where a reduction in pollutant loading is required for **oxygen demand, nitrate, TSS, or TP**, the applicant must provide documentation to demonstrate the applicable WLA is being met. At a minimum, the applicant must provide the following information:

- a. a list of all structural stormwater BMPs implemented to achieve the applicable WLA, including the BMP type (e.g., constructed basin, infiltrator, filter, swale or strip, etc.), location in geographic coordinates, owner, and year implemented; and
- b. documentation using an Agency-approved method, which demonstrates the estimated reductions of oxygen demand (or its surrogate pollutants), nitrate, TSS, or TP from BMPs meet the MS4 WLA reductions included in the TMDL report, if that information is available (e.g., percent reduction or pounds reduced); or
- c. documentation using an Agency-approved method, which demonstrates the applicant's existing load meets the WLA.

Oxygen demand, nitrate, total suspended solids and total phosphorus

TMDL Permit Application Form Completion

Yes! I have WLAs that are being met



Complete 'Reductions for WLA met' tab



Complete 'BMPs for WLAs' met tab

No! I have WLAs that are not being met



Complete 'Compliance Schedule' tab



Complete 'Compliance Schedule BMPs' tab

Where is the TMDL Application Form?

Guidance: [Guidance for completing the MS4 Permit TMDL Application Form - Minnesota Stormwater Manual \(state.mn.us\)](#)

Overview page: [2020 MS4 General Permit TMDL Application - Minnesota Stormwater Manual \(state.mn.us\)](#)

TMDL Application Forms: <ftp://files.pca.state.mn.us/pub/MIDS/APPS/>

Discharges to Impaired Waters with an EPA-Approved TMDL that Includes an Applicable Waste Load Allocation (WLA)

To determine if you have an applicable WLA(s), please reference the MPCA's MS4 Permit TMDL Application Form webpage at https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form.

- *141. **Permit item 22.3:** Do you have an applicable WLA where a reduction in pollutant loading is required for bacteria?
- Yes
 No (Skip to Q146)
142. **If yes in Q141, do you maintain a written or mapped inventory of potential areas and sources of bacteria (e.g., dense populations of waterfowl or other bird, dog parks)?** *(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)*
- Yes
 No (Skip to Q145)
143. **If yes in Q142, do you maintain a written plan to prioritize reduction activities to address the areas and sources identified in the inventory? The written plan must include BMPs you will implement over the permit term.** *(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)*
- Yes
 No (Skip to Q145)
144. **If yes in Q143, which of the following are included in your written plan?** (Check all that apply)
- 144.A. Water quality monitoring to determine areas of high bacteria loading.
144.B. Installation of pet waste pick-up bags in parks and open spaces.
144.C. Elimination of over-spray irrigation at permittee land owned areas.

Download the MS4 Part 2 Permit Application

<https://www.pca.state.mn.us/water/2020-ms4-general-permit> (or Google search “2020 MS4 general permit” – 1st result)

MINNESOTA POLLUTION CONTROL AGENCY

Air ▾ Water ▾ Waste ▾ Regulations ▾ Living Green ▾ Data ▾ About the MPCA ▾

Water / Permitting and regulations / Stormwater / Municipal stormwater (MS4)

2020 MS4 general permit

The issuance date of the new MS4 General Permit (MNR040000) is November 16, 2020.

- [2020 MS4 General Permit \(wq-strm4-94\)](#)
- For reference only: [Expired - 2013 MS4 general permit \(wq-strm4-59k\)](#)

Applying for the permit

Existing MS4 permittees will have 150 days (April 15, 2021) to complete and submit the permit application forms.

Application materials

- [MS4 Part II permit application \(wq-strm4-49a\)](#)
- TMDL application form:** Permittees that are subject to an EPA-approved total maximum daily load (TMDL) waste load allocation (WLA) must also complete another customized application form, which is available at https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form.

Application requirements and process

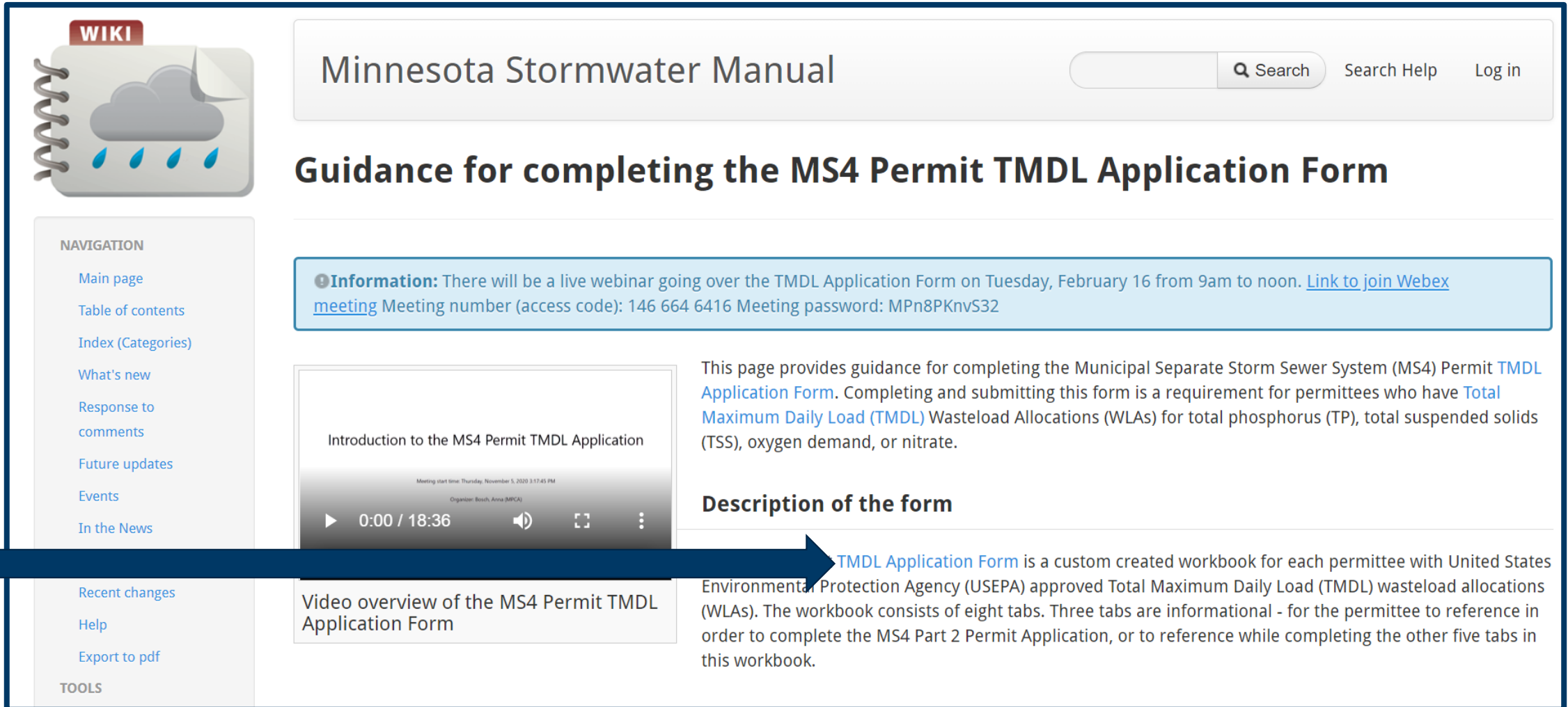
In this section:

- [Complying with the MS4 general permit](#)

MS4 General Permit

Stay in touch! Subscribe to the Municipal Stormwater email list to stay informed about the MS4 general permit, MS4 permit application public notices, and topics related to municipal stormwater.

Email:



The screenshot shows a web page titled "Minnesota Stormwater Manual" with a search bar and "Search Help" and "Log in" links. The main heading is "Guidance for completing the MS4 Permit TMDL Application Form". A blue information box states: "Information: There will be a live webinar going over the TMDL Application Form on Tuesday, February 16 from 9am to noon. [Link to join Webex meeting](#) Meeting number (access code): 146 664 6416 Meeting password: MPn8PKnvS32". Below this is a video player for "Introduction to the MS4 Permit TMDL Application" with a play button and a progress bar showing 0:00 / 18:36. To the right of the video is the text: "This page provides guidance for completing the Municipal Separate Storm Sewer System (MS4) Permit [TMDL Application Form](#). Completing and submitting this form is a requirement for permittees who have [Total Maximum Daily Load \(TMDL\)](#) Wasteload Allocations (WLAs) for total phosphorus (TP), total suspended solids (TSS), oxygen demand, or nitrate." Below the video is the heading "Description of the form" and the text: "The [TMDL Application Form](#) is a custom created workbook for each permittee with United States Environmental Protection Agency (USEPA) approved Total Maximum Daily Load (TMDL) wasteload allocations (WLAs). The workbook consists of eight tabs. Three tabs are informational - for the permittee to reference in order to complete the MS4 Part 2 Permit Application, or to reference while completing the other five tabs in this workbook." A blue arrow points from the video player to the "TMDL Application Form" text in the description.

WIKI

Minnesota Stormwater Manual

Search Search Help Log in

Guidance for completing the MS4 Permit TMDL Application Form

Information: There will be a live webinar going over the TMDL Application Form on Tuesday, February 16 from 9am to noon. [Link to join Webex meeting](#) Meeting number (access code): 146 664 6416 Meeting password: MPn8PKnvS32

Introduction to the MS4 Permit TMDL Application

Meeting start time: Thursday, November 5, 2020 3:17:45 PM
Organizer: Brock, Anna (MRCA)

0:00 / 18:36

This page provides guidance for completing the Municipal Separate Storm Sewer System (MS4) Permit [TMDL Application Form](#). Completing and submitting this form is a requirement for permittees who have [Total Maximum Daily Load \(TMDL\)](#) Wasteload Allocations (WLAs) for total phosphorus (TP), total suspended solids (TSS), oxygen demand, or nitrate.

Description of the form

The [TMDL Application Form](#) is a custom created workbook for each permittee with United States Environmental Protection Agency (USEPA) approved Total Maximum Daily Load (TMDL) wasteload allocations (WLAs). The workbook consists of eight tabs. Three tabs are informational - for the permittee to reference in order to complete the MS4 Part 2 Permit Application, or to reference while completing the other five tabs in this workbook.

NAVIGATION

- Main page
- Table of contents
- Index (Categories)
- What's new
- Response to comments
- Future updates
- Events
- In the News








TOOLS

- Recent changes
- Help
- Export to pdf

Download Your MS4's Custom MS4 Permit TMDL Application (Macro-Enabled Excel Workbook)

Index of /pub/MIDS/APPS/

 [parent directory]

	Name	Size	Date Modified
	Albert_Lea_wq-strm4-62.xlsm	2.4 MB	10/12/20, 7:44:00 AM
	Albertville city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:23:00 AM
	Alexandria wq-strm4-62.xlsm	2.4 MB	10/7/20, 9:04:00 AM
	Andover city wq-strm4-62.xlsm	2.4 MB	10/19/20, 4:40:00 AM
	Anoka city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:26:00 AM
	Anoka county wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:29:00 AM
	Apple Valley city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:35:00 AM
	Arden Hills city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:37:00 AM
	Austin city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:20:00 AM
	Baxter wq-strm4-62.xlsm	2.4 MB	10/12/20, 1:05:00 AM
	Bayport city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:43:00 AM
	Bemidji city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:44:00 AM
	Benton county wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:46:00 AM
	Big Lake city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:47:00 AM
	Big Lake township wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:55:00 AM
	Birchwood village wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:57:00 AM
	Blaine city wq-strm4-62.xlsm	2.4 MB	10/19/20, 5:58:00 AM
	Bloomington city wq-strm4-62.xlsm	2.4 MB	10/19/20, 6:00:00 AM
	Blue Earth county wq-strm4-62.xlsm	2.4 MB	10/19/20, 6:12:00 AM
	Brainerd wq-strm4-62.xlsm	2.4 MB	10/12/20, 4:06:00 AM
	Brockway township wq-strm4-62.xlsm	2.4 MB	10/12/20, 4:11:00 AM

TMDL Application

1	Applicable Oxygen Demand, Nitrate, TSS, TP TMDL projects (permit item 12.8 & 12.10)						
2	Column A, rows 9 and below, includes any applicable WLAs (USEPA approved, more than a zero % reduction) for oxygen demand, nitrate, TSS, or TP TMDL projects. They are listed by TMDL project name-waterbody-(waterbody id)-pollutant. Column F lists the corresponding applicable numeric WLAs for those projects. The applicant needs to make a determination if they are meeting each WLA or not and type 'Yes' or 'No' in Column B. Once you are done with your determination in Column B, click the red text in highlighted cell A7. This will autopopulate the rest of the workbook. If you make any changes in Column B, click on the button with the red text in cell A7 again. For each WLA that is marked as 'Yes' in Column B, please complete the tabs 'Reductions for WLAs met' and 'BMPs for WLAs met'. For each WLA marked 'No' in Column B, please complete 'Compliance Schedule' and 'Compliance Schedule BMPs' tabs.						
3	Permittee name	Municipality X					
4	Pollutant	(Multiple Items)					
5	Percent Reduction	(Multiple Items)	Permittee name	Municipality X			
6	Notes	(Multiple Items)	Pollutant	(Multiple Items)			
7	Click here after completing or changing any items in Column B, and then continue to other tabs in workbook.						
8	Applicable Oxygen Demand, Nitrate, TP and/or TSS WLA TMDLs-Waterbody-Pollutant	Meeting WLA? (Yes/No)	TMDL Project - waterbody - pollutant	WLA type	WLA	Units	Flow Condition
9	Coon Creek Watershed District WRAPS 2010-Coon Creek-(07010206-530)-TP		Coon Creek Watershed District WRAPS 2010-Coon Creek-(07010206-530)-TP	Individual	0.530	lbs/day	Mid
10	Coon Creek Watershed District WRAPS 2010-Coon Creek-(07010206-530)-TSS				0.860	lbs/day	High
11	Coon Creek Watershed District WRAPS 2010-County Ditch 17-(07010206-557)-TP				1.750	lbs/day	Very High
12	Coon Creek Watershed District WRAPS 2010-Sand Creek-(07010206-558)-TP		Coon Creek Watershed District WRAPS 2010-Coon Creek-(07010206-530)-TSS	Individual	0.080	tons/day	Mid
13	Coon Creek Watershed District WRAPS 2010-Sand Creek-(07010206-558)-TSS				0.130	tons/day	High
14	Coon Creek Watershed District WRAPS 2010-Unnamed ditch-(07010206-594)-TP				0.260	tons/day	Very High
15	Coon Creek Watershed District WRAPS 2010-Unnamed ditch-(07010206-594)-TSS		Coon Creek Watershed District WRAPS 2010-County Ditch 17-(07010206-557)-TP	Individual	0.130	lbs/day	Low
16	Golden Lake TMDL-Golden-(02-0045-00)-TP				0.170	lbs/day	Mid
17	Hardwood Creek Impaired Biota and Dissolved Oxygen TMDL-Hardwood Creek-(07010206-596)-Total Oxygen Demand				0.230	lbs/day	High
18	Hardwood Creek Impaired Biota and Dissolved Oxygen TMDL-Hardwood Creek-(07010206-596)-TSS				0.340	lbs/day	Very High

Video Overview of TMDL Application Form

- 18 minute video-
- https://stormwater.pca.state.mn.us/images/2/28/Introduction_to_the_MS4_Permit_TMDL_Application_Form.mp4

Total Maximum Daily Loads (TMDLs) - Minnesota Stormwater Manual

TMDL MS4 permit guidance

- [Summary of TMDL requirements in stormwater permits](#)
- [Guidance for completing the MS4 Permit TMDL Application Form](#)
- [Guidance for meeting chloride TMDL MS4 permit requirements](#)
- [Guidance for meeting bacteria TMDL MS4 permit requirements](#)
- [Guidance for meeting dissolved oxygen or oxygen demand TMDL MS4 permit requirements](#)
- [Guidance for meeting temperature TMDL MS4 permit requirements](#)
- [Guidance for categorical TMDLs](#)
- [List of Approved TMDLs with MS4 WLAs](#)
- [Forms, guidance, and resources for completing the TMDL annual report form](#)
- [Baseline year](#)
- [Interpreting wasteload allocations based on flow/load duration curves](#)

Resources - Minnesota Stormwater Manual

- [Total Maximum Daily Loads \(TMDLs\) - Minnesota Stormwater Manual \(state.mn.us\)](#)

TMDL toolkit for MS4 permit compliance [\[edit\]](#)

- Overview of models used to meet MS4 TMDL permit requirements
- **P8**
 - Recommendations and guidance for utilizing P8 to meet TMDL permit requirements
 - Case study for using P8 to meet TMDL permit requirements
- **WINSLAMB**
 - Recommendations and guidance for utilizing WINSLAMB to meet TMDL permit requirements
 - Case study for using WINSLAMB to meet TMDL permit requirements
- **MIDS (Minimal Impact Design Standards calculator)**
 - Recommendations and guidance for utilizing the MIDS calculator to meet TMDL permit requirements
 - MIDS calculator
 - Case study for using the MIDS calculator to meet TMDL permit requirements
- **MPCA Simple Estimator**
 - Recommendations and guidance for utilizing the MPCA Simple Estimator to meet TMDL permit requirements
 - Guidance and examples for using the MPCA Estimator
 - Case study for using the MPCA Simple Estimator to meet TMDL permit requirements
 - MPCA review of submittals using the MPCA Simple Estimator
- **Monitoring**
 - Recommendations and guidance for utilizing monitoring to meet TMDL permit requirements
 - Recommendations and guidance for utilizing lake monitoring to meet TMDL permit requirements
 - Recommendations and guidance for utilizing stream monitoring to meet TMDL permit requirements
 - Recommendations and guidance for utilizing major stormwater outfall monitoring to meet TMDL permit requirements
 - Recommendations and guidance for utilizing stormwater best management practice monitoring to meet TMDL permit requirements
- Quick guides for using models to meet MS4 TMDL permit requirements
- Case studies for monitoring to meet TMDL permit requirements

Resources – Minnesota Pollution Control Agency

- [Stormwater Mapping Tool](#)

How to get there: Municipal Stormwater page; scroll to References

- Default view
- Scroll into one MS4
- Go to Layer list, click carrot next to MS4 layers
- Add TMDL Study Area

- [Total Maximum Daily Load \(TMDL\) projects | Minnesota Pollution Control Agency \(state.mn.us\)](#)

- Click on approved tab, type in project name

- [Impaired waters viewer \(IWAV\) | Minnesota Pollution Control Agency \(state.mn.us\)](#)

- Type in waterbody identification

2020 Permit –permit requirements

The goal of the General Permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

Bacteria, chloride and temperature are all performance based

- That means no determination whether the WLA is being met or not is necessary.
- Must meet permit requirements 22.3 & 22.4 for bacteria
- Must meet permit requirements 22.5 & 22.6 for chloride
- Must meet permit requirement 22.7 for temperature

Oxygen demand, nitrate, total suspended solids and total phosphorus

Not meeting applicable WLA -the permittee must provide a summary of the permittee's progress toward achieving those applicable WLAs with the annual report.



Questions?
Anna Bosch | Stormwater TMDL Liaison
Anna.bosch@state.mn.us
218-316-3929

South Metro Mississippi River TMDL

- Loading rate per acre?
- From the WLA section in the TMDL report: Section 6.1.2:
 - “MS4s in Minnesota within the St. Croix River basin or above Lock and Dam 1 (except for the Crow River watershed) require no reduction for this TMDL. Other MS4s can evaluate compliance status for the South Metro Mississippi River TSS TMDL via monitoring, modeling or other means approved by MPCA Stormwater Program staff, with a target average loading of 154 pounds per acre per year for their **MS4-regulated area**.”
- New Stormwater Manual page: [Default TSS and TP loads for different land use scenarios using the MPCA Simple Estimator - Minnesota Stormwater Manual \(state.mn.us\)](#)

South Metro Mississippi River TMDL

- [Default TSS and TP loads for different land use scenarios using the MPCA Simple Estimator - Minnesota Stormwater Manual \(state.mn.us\)](https://state.mn.us/stormwater-manual)
- If your landuse is similar to one of the three pre-set groups, you can use that to help determine your loading rate per acre.
 - If not, it is still a helpful example of how to allocate your landuse on a per acre basis to help determine your loading rate.
- If you are not meeting with your base land use, then you can add in **any currently installed and functioning BMPs** to see if that allows you to meet the loading rate.

- I have a categorical WLA with no percent reduction. How do I figure out what my piece of the pie is?
- First step-check the TMDL project page.
 - Look at the report to see how the WLA was calculated in the first place.
 - Is there a completed Implementation Plan? Some have agreed upon target wasteloads.
- You can use the filter ability on the Master Spreadsheet tab to see what other permittees are included in the categorical. (or refer to the TMDL report).
- Apply the same general methodology as was used in the TMDL to figure out your wasteload. (Land cover, jurisdictional area, etc)
- Shapefiles for the majority of TMDL projects will be uploaded to an FTP site shortly.