

## MS4 Permit TMDL Application

### Municipal Separate Storm Sewer System (MS4) Program

Total Maximum Daily Load (TMDL)

wq-stmm4-62 (Revised 9/25/20)

The worksheets in this workbook are customized for :

**Shakopee city of**

#### Instructions

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.

#### Notes for using this workbook

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

This spreadsheet contains macros. Save the file as a macro-enabled file to retain the macros.  
If you need to clear a cell, please use the delete button and not the backspace button.  
Some entries are optional. Look at the column header to identify cells that are optional.  
This workbook contains protected cells that allow you to enter values but do not delete or change coding.  
Worksheets with white tabs are for information only and do not require any input from the applicant.  
Worksheets with green tabs may require information from the applicant.

#### This workbook contains worksheets for TMDL Waste Load Allocations

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 worksheet needs to be completed by the applicant in order to populate the following worksheets. If there are no TMDLs listed, you have no TMDLs to report on in this workbook, and you should enter 'No' for question 155 on the MS4 Part 2 Permit Application.

The worksheet called **Compliance Schedule** should be completed for all oxygen demand, nitrate, TSS and/or TP TMDL Waste Load Allocations (WLAs) you are not meeting.

The worksheet called **Compliance Schedule BMPs** should be completed for all oxygen demand, nitrate, TSS and/or TP TMDL Waste Load Allocations (WLAs) you are not meeting.

The worksheet called **Reductions for WLAs met** should be completed for all oxygen demand, nitrate, TSS and/or TP TMDL Waste Load Allocations (WLAs) you are claiming to meet.

The worksheet called **BMPs for WLAs met** should be completed for all oxygen demand, nitrate, TSS and/or TP TMDL Waste Load Allocations (WLAs) you are claiming to meet.

The worksheet called **TMDL Master List** contains summary information for all U.S. Environmental Protection Agency-approved TMDL waste load allocations. It is for informational/reference purposes only.

#### Questions?

If you have any questions, see the MS4 staff page to find the staff assigned to your MS4 at:

[https://stormwater.pca.state.mn.us/index.php?title=MS4\\_staff\\_contact\\_information\\_and\\_staff\\_assignments](https://stormwater.pca.state.mn.us/index.php?title=MS4_staff_contact_information_and_staff_assignments)

or see the staff contact information on the Minnesota Pollution Control Agency's (MPCA) MS4 webpage at:

<https://www.pca.state.mn.us/water/municipal-stormwater-ms4>

#### Useful links

**Guidance on completing this form (workbook)** - found on the MPCA's website at:

[https://stormwater.pca.state.mn.us/index.php?title=Guidance\\_for\\_completing\\_the\\_MS4\\_Permit\\_TMDL\\_Application\\_Form](https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form)

The above link includes guidance for completing the form, examples for completing the form, and a video illustrating how to complete the form.

**Link to permit** - found on MPCA's website at:

[https://stormwater.pca.state.mn.us/index.php?title=Stormwater\\_Program\\_for\\_Municipal\\_Separate\\_Storm\\_Sewer\\_Systems\\_\(MS4\)#MS4\\_stormwater\\_permit](https://stormwater.pca.state.mn.us/index.php?title=Stormwater_Program_for_Municipal_Separate_Storm_Sewer_Systems_(MS4)#MS4_stormwater_permit)

**Guidance for categorical wasteload allocations** - found on the MPCA's website at:

[https://stormwater.pca.state.mn.us/index.php?title=Guidance\\_for\\_categorical\\_TMDLs](https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_categorical_TMDLs)

**Bacteria, Chloride and Temperature Wasteload Allocation TMDL projects (permit item 12.9)**

Column A, rows 9 and beyond, will list any applicable WLAs for bacteria, chloride or temperature TMDL projects (USEPA approved, more than a zero % reduction). Use the information in this tab to answer questions 141, 146 and 151 in the MS4 Part 2 Permit Application. If there is not a project listed for any certain pollutant, you would check the 'No' box for the corresponding question(s) in the MS4 Part 2 Permit Application.

Permittee name	Shakopee city of
Percent Reduction	(Multiple Items)

**Applicable WLAs for Bacteria, Temperature, or Chloride**

**Chloride**

**Twin Cities Metro Area Chloride TMDL and Management Plan**

Sand Creek

**E. coli**

**Lower Minnesota River WRAPS 2014**

Eagle Creek

Sand Creek

**Applicable Oxygen Demand, Nitrate, TSS, TP TMDL projects (permit item 12.8 & 12.10)**

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.

Permittee name	Shakopee city of
Pollutant	(Multiple Items)
Percent Reduction	(Multiple Items)
Notes	(Multiple Items)

Permittee name	Shakopee city of
Pollutant	(Multiple Items)

	Workbook autopopulated. Continue to other tabs.
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Applicable Oxygen Demand, Nitrate, TP and/or TSS WLA TMDLs-Waterbody-Pollutant	Meeting WLA? (Yes/No)
Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TP	No
Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TSS	No
South Metro Mississippi TSS TMDL-Mississippi River-(07040001-531)-TSS	Yes

TMDL Project - waterbody - pollutant	WLA type	Numeric WLA	Units	Flow Condition	Percent Reduction	Notes
<b>Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TP</b>	<b>Individual</b>	0.042	<b>lbs/day</b>	Not Applicable	<b>67%</b>	Overall concentration-based percent reduction
<b>Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TSS</b>	<b>Individual</b>	**	<b>lbs/day</b>	Very Low	<b>89%</b>	Overall concentration-based percent reduction
		0.570	<b>lbs/day</b>	Low	<b>89%</b>	Overall concentration-based percent reduction
		12.000	<b>lbs/day</b>	High	<b>89%</b>	Overall concentration-based percent reduction
		3.800	<b>lbs/day</b>	Mid	<b>89%</b>	Overall concentration-based percent reduction
		52.000	<b>lbs/day</b>	Very High	<b>89%</b>	Overall concentration-based percent reduction
<b>South Metro Mississippi TSS TMDL-Mississippi River-(07040001-531)-TSS</b>	<b>Categorical</b>	154.000	<b>lbs/acre/year</b>	Not Applicable	<b>Not Available</b>	(blank)

**Compliance schedule for Wasteload Allocations not being met (permit item 12.8)**

Fill in the target year that each of the applicable WLA(s) will be achieved for each TMDL, waterbody and pollutant listed in column A. If you have an applicable WLA for total suspended solids (TSS) or total phosphorus (TP), a cumulative estimate of TSS and TP load reductions to be achieved during the permit term and the method used to determine the estimate should be entered in Columns D and E. For further instruction on completing this tab, refer to:

[https://stormwater.pca.state.mn.us/index.php?title=Guidance\\_for\\_completing\\_the\\_MS4\\_Permit\\_TMDL\\_Application\\_Form#12.8\\_Compliance\\_schedule\\_tab](https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form#12.8_Compliance_schedule_tab)

TMDL Project Name, Waterbody, and Pollutant	Pollutant	Target year WLA will be achieved	Estimated pollutant reduction this permit cycle (include units, such as lbs, percent reduction, lb/acre, etc.)	Method(s) for calculating reduction
Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TP	TP	2050	0-25% (BMPs implemented as Ag redevelops)	Other
Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TSS	TSS	2050	0-25% (BMPs implemented as Ag redevelops)	Other
0				

Compliance Schedule BMPs

**Compliance schedule Best Management Practices (BMPs) for Wasteload Allocations not being met (permit item 12.8)**

Fill in the following table with your proposed best management practices (BMPs) or progress toward implementation of BMPs to be achieved during the permit term, anticipated number of practices (if you are planning to install more than one of any type of BMP), and the year each BMP is expected to be implemented ("Implementation Year(s)" column). Put an "X" in the boxes for the TMDL that corresponds with each BMP. Where possible, please select the appropriate BMP from the dropdown (click on downward arrow to see options) in the "Best Management Practice/Activity" column. Otherwise, you are free to enter text in this worksheet. For more guidance on completing this tab, see:

[https://stormwater.pca.state.mn.us/index.php?title=Guidance\\_for\\_completing\\_the\\_MS4\\_Permit\\_TMDL\\_Application\\_Form#12.8\\_Compliance\\_schedule\\_BMPs\\_tab](https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form#12.8_Compliance_schedule_BMPs_tab)

<b>Required</b>	<b>Optional</b>	<b>Optional</b>	<b>Required</b>	<b>TMDL-Waterbody-Pollutant</b>	
<b>Best Management Practice/Activity</b>	<b>BMP description (Select all that apply)</b>	<b>Anticipated number of practices (if applicable)</b>	<b>Expected Implementation Year(s)</b>	<b>Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TP</b>	<b>Lower Minnesota River WRAPS 2014-Sand Creek-(07020012-513)-TSS</b>
Constructed basin	Multiple pond system		entire permit cycle	X	X

**Documentation for Waste load Allocations being met (permit item 12.10)**

Fill in the following table for each applicable oxygen demand, nitrate, TSS and/or TP WLA you are claiming to meet using the MPCA-approved method. This should either demonstrate the cumulative estimated reductions from BMPs that serve to meet the MS4 WLA reductions included in the TMDL report OR demonstrates the MS4's existing load meets the WLA. For more guidance on completing this tab, see:

[https://stormwater.pca.state.mn.us/index.php?title=Guidance\\_for\\_completing\\_the\\_MS4\\_Permit\\_TMDL\\_Application\\_Form#12.10\\_Reductions\\_for\\_WLAs\\_met\\_tab](https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form#12.10_Reductions_for_WLAs_met_tab)

Required	Cumulative Estimated Reductions - Required		Required	Required if "other" selected in column D	Required	Required	Required if WLA is categorical	Required if WLA is categorical	Optional
TMDL project name, waterbody and pollutant	Cumulative estimated reduction-How are you claiming to meet the WLA?	Cumulative estimated reduction (Enter value corresponding to units specified in Column B)	Method(s) used to calculate	Name of other model	Do you have the calculations available on file?	Is this part of a categorical WLA? (See Column E on Applicable WLAs determination tab)	If part of a Categorical WLA, how did you determine your portion of the WLA?	What is your portion of the categorical WLA? (Include units)	Notes
South Metro Mississippi TSS TMDL-Mississippi River-(07040001-531) TSS	Loading rate (lb/ac/yr)	City Load rate is 77 lb/ac/yr	MPCA Simple Estimator		Yes	Yes	Not applicable	154 lb/acre/yr	

**BMPs (Best Management Practices) for Wasteload Allocations being met (permit item 12.10)**

Fill in the following table with a list of all stormwater BMPs implemented to achieve the applicable WLA. For structural BMPs, it is required to include the BMP type, year implemented, location in geographic coordinates (x coordinate and y coordinate), and owner. Then put an "X" in the boxes for the TMDL that corresponds with each BMP. Also make sure to complete the tab, "Reduction for WLAs met" worksheet. For more guidance on completing this tab, see:

[https://stormwater.pca.state.mn.us/index.php?title=Guidance\\_for\\_completing\\_the\\_MS4\\_Permit\\_TMDL\\_Application\\_Form#12.10\\_BMPs\\_for\\_WLAs\\_met\\_tab](https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form#12.10_BMPs_for_WLAs_met_tab)

For the "Best Management Practice/Activity" column, please use the dropdown (click on downward arrow to see options) whenever possible.

Required	Optional	Required field	Optional	Geographic coordinates required if not autofilled with "NA"		Required	Required if cell says "Enter owner"	Optional	Optional	Optional	Optional	TMDL Project-Waterbody-Pollutant		
Best Management Practice/Activity	BMP description (optional)	Implementation Year(s)	Are you lumping multiple BMPs?	X coordinate (e.g. - 93.38494434)	Y coordinate (e.g., 45.21049133)	Owner	Other owner	Estimated TSS reduction (lbs)	Estimated phosphorus reduction (lbs)	Estimated Oxygen Demand reduction (lbs)	Estimated Total Nitrate reduction (lbs)	South Metro Mississippi TSS TMDL-Mississippi River-(07040001-531)-TSS		
Constructed_basin	Multiple Pond System	1990-present	Yes	NA	NA	Permittee (you)	NA					X		
Constructed_basin	Wet pond/wet detention pond	1990-present	Yes	NA	NA	Permittee (you)	NA					X		
							Enter owner							
							Enter owner							