



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 16 2019

REPLY TO THE ATTENTION OF:
WW-16J

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

Dear Mr. Skuta:

The U.S. Environmental Protection Agency has conducted a complete review of the final Total Maximum Daily Loads (TMDL) for segments within the Lower Red River of the North Watershed (LRRNW), including support documentation and follow up information. The LRRNW is in northwestern Minnesota in parts of Kittson, Marshall and Roseau Counties. The LRRW TMDLs address impaired aquatic life use due to excessive sediment (turbidity/TSS).

EPA has determined that the LRRNW TMDLs meet the requirements of Section 303(d) of the Clean Water Act and EPA's implementing regulations set forth at 40 C.F.R. Part 130. Therefore, EPA approves Minnesota's two sediment (total suspended solids) TMDLs. The statutory and regulatory requirements, and EPA's review of Minnesota's compliance with each requirement, are described in the enclosed decision document.

We wish to acknowledge Minnesota's efforts in submitting these TMDLs and look forward to future TMDL submissions by the State of Minnesota. If you have any questions, please contact Mr. Peter Swenson, Chief of the Watersheds and Wetlands Branch, at 312-886-0236.

Sincerely,

A handwritten signature in cursive script that reads "Joan M. Tanaka".

Joan M. Tanaka
Acting Director, Water Division

wq-iw5-15g

TMDL: Lower Red River of the North Watershed TSS TMDL, Kittson, Marshall and Roseau Counties, Minnesota

Date: April 16, 2019

**DECISION DOCUMENT
FOR THE LOWER RED RIVER OF THE NORTH WATERSHED TMDLS, KITTSON,
MARSHALL & ROSEAU COUNTIES, MINNESOTA**

Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations at 40 C.F.R. Part 130 describe the statutory and regulatory requirements for approvable TMDLs. Additional information is generally necessary for EPA to determine if a submitted TMDL fulfills the legal requirements for approval under Section 303(d) and EPA regulations, and should be included in the submittal package. Use of the verb "must" below denotes information that is required to be submitted because it relates to elements of the TMDL required by the CWA and by regulation. Use of the term "should" below denotes information that is generally necessary for EPA to determine if a submitted TMDL is approvable. These TMDL review guidelines are not themselves regulations. They are an attempt to summarize and provide guidance regarding currently effective statutory and regulatory requirements relating to TMDLs. Any differences between these guidelines and EPA's TMDL regulations should be resolved in favor of the regulations themselves.

1. Identification of Water body, Pollutant of Concern, Pollutant Sources, and Priority Ranking

The TMDL submittal should identify the water body as it appears on the State's/Tribe's 303(d) list. The water body should be identified/georeferenced using the National Hydrography Dataset (NHD), and the TMDL should clearly identify the pollutant for which the TMDL is being established. In addition, the TMDL should identify the priority ranking of the water body and specify the link between the pollutant of concern and the water quality standard (see Section 2 below).

The TMDL submittal should include an identification of the point and nonpoint sources of the pollutant of concern, including location of the source(s) and the quantity of the loading, e.g., lbs/per day. The TMDL should provide the identification numbers of the NPDES permits within the water body. Where it is possible to separate natural background from nonpoint sources, the TMDL should include a description of the natural background. This information is necessary for EPA's review of the load and wasteload allocations, which are required by regulation.

The TMDL submittal should also contain a description of any important assumptions made in developing the TMDL, such as:

- (1) the spatial extent of the watershed in which the impaired water body is located;
- (2) the assumed distribution of land use in the watershed (e.g., urban, forested, agriculture);
- (3) population characteristics, wildlife resources, and other relevant information affecting the characterization of the pollutant of concern and its allocation to sources;
- (4) present and future growth trends, if taken into consideration in preparing the TMDL (e.g., the TMDL could include the design capacity of a wastewater treatment facility); and

(5) an explanation and analytical basis for expressing the TMDL through *surrogate measures*, if applicable. *Surrogate measures* are parameters such as percent fines and turbidity for sediment impairments; chlorophyll *a* and phosphorus loadings for excess algae; length of riparian buffer; or number of acres of best management practices.

Comment:

Location Description/Spatial Extent:

The Lower Red River of the North Watershed (LRRNW) (HUC-8 #09020311) encompasses the northern portion of the Red River watershed in northwestern Minnesota (see Figure 1-3 of the final TMDL document). The Red River originates at the confluence of the Bois de Sioux and Otter Tail rivers and flows northward into Canada. The Red River eventually empties into Lake Winnipeg in Manitoba, Canada. The portions of the LRRNW addressed in this TMDL effort drain approximately 886 square miles (567,040 acres) in portions of Kittson, Marshall and Roseau Counties.

The LRRNW total maximum daily loads (TMDLs) address two (2) impaired segments due to excessive sediment inputs (Table 1 of this Decision Document). The portions of the LRRNW addressed in this TMDL effort are within the boundaries of the Lake Agassiz Plain (LAP) ecoregion.

Table 1: Lower Red River of the North Watershed impaired waters addressed by this TMDL

Water body name	Assessment Unit ID	Affected Use	Pollutant or stressor	TMDL
Tamarac River (Florian Park Reservoir to Stephen Dam)	09020311-503	Aquatic Life	Fish and Macroinvertebrate Bioassessments - addressed via a TSS surrogate	TSS TMDL
Tamarac River (Stephen Dam to Red River)	09020311-505	Aquatic Life	Sediment/TSS	TSS TMDL

Land Use:

Land use in the LRRNW is predominantly agricultural (80%) (Table 2 of this Decision Document). According to MPCA, significant development is not expected in the LRRNW and the overall land use is expected to remain agricultural for the foreseeable future.

Table 2: Land Use for the Lower Red River of the North Watershed based on Multi-Resolution Land Characteristics Consortium (MRLC) 2011 data set

Land Use	Portion of the LRRNW in Minnesota (886 square miles)
Cropland	80.04%
Wetland	5.83%
Forest/Shrub Land	5.52%
Urban	5.14%
Pasture/Hay/Grassland	1.86%
Open Water	1.59%
Barren	0.01%
TOTALS	100.0%

Problem Identification:

Sediment (Total Suspended Solids) TMDLs: The Tamarac River segment (09020311-505) was included on the final 2018 Minnesota 303(d) list due to excessive sediment within the water column. The

Tamarac River segment (09020311-503) was include on the final 2018 Minnesota 303(d) list due to impaired fish and macroinvertebrate communities. The biotic impairments for segment 09020311-503 are addressed in this TMDL via a total suspended solids (TSS) surrogate TMDL. Water quality monitoring within the LRRNW indicated that these segments were not attaining their designated aquatic life uses due to high sediment and/or turbidity measurements and the negative impact of those conditions on aquatic life (i.e., fish and macroinvertebrate communities).

TSS is a measurement of the sediment and organic material in the water column that inhibits light from penetrating the surface water column. Excessive sediment and organic material within the water column can negatively impact fish and macroinvertebrates within the ecosystem. Excess sediment and organic material may create turbid conditions within the water column and may increase the costs of treating surface waters used for drinking water or other industrial purposes (e.g., food processing).

Excessive amounts of fine sediment in stream environments can degrade aquatic communities, can reduce spawning and rearing areas for certain fish and macroinvertebrate species, can clog fish gills, can abrade fish tissue and can limit visibility and light penetration which may impair foraging and predation activities by certain species.

Excessive fine sediment also may degrade aquatic habitats, alter natural flow conditions in stream environments and add organic materials to the water column. The potential addition of fine organic materials may lead to nuisance algal blooms which can negatively impact aquatic life and recreation (swimming, boating, fishing, etc.). Algal decomposition depletes oxygen levels which stresses benthic macroinvertebrates and fish. Excess algae can shade the water column and limit the distribution of aquatic vegetation. Established aquatic vegetation stabilizes bottom sediments and provides important habitat areas for healthy macroinvertebrates and fish communities.

Degradations in aquatic habitats or water quality (e.g., low dissolved oxygen) can negatively impact aquatic life use. Increased turbidity, brought on by elevated levels of nutrients within the water column, can reduce dissolved oxygen in the water column, and cause large shifts in dissolved oxygen and pH throughout the day. Shifting chemical conditions within the water column may stress aquatic biota (i.e., fish and macroinvertebrate species). In some instances, degradations in aquatic habitats or water quality have reduced fish populations or altered fish communities from those communities supporting sport fish species to communities which support more tolerant rough fish species.

Excess siltation and flow alteration in streams can negatively impact aquatic life by altering habitats. Excess sediment can fill pools, embed substrates, and reduce connectivity between different stream habitats. The result is a decline in habitat types that, in healthy streams, support diverse macroinvertebrate communities. Excess sediment can reduce spawning and rearing habitats for certain fish species. Flow alterations in the LRRNW have resulted from drainage improvements on or near agricultural lands. Specifically, tile drains and land smoothing have increased surface and subsurface flow to streams. This results in higher peak flows during storm events and flashier flows which carry sediment loads to streams and erode streambanks.

Priority Ranking:

The water bodies addressed by the LRRNW TMDLs were given a priority ranking for TMDL development due to: the impairment impacts on public health and aquatic life, the public value of the

impaired water resource, the likelihood of completing the TMDL in an expedient manner, the inclusion of a strong base of existing data, the restorability of the water body, the technical capability and the willingness of local partners to assist with the TMDL, and the appropriate sequencing of TMDLs within a watershed or basin. Water quality degradation has led to efforts to improve the overall water quality within the LRRNW, and to the development of TMDLs for these water bodies. Additionally, MPCA explained that its TMDL development priorities were prioritized to align with its Statewide watershed monitoring approach and its 10-year Watershed Restoration and Protection Strategies (WRAPS) schedule.

Pollutants of Concern:

The pollutant of concern is sediment (TSS).

Source Identification (point and nonpoint sources):

Point Source Identification: The potential point sources to the LRRNW TSS TMDLs are:

NPDES permitted facilities: NPDES permitted facilities may contribute sediment loads to surface waters through treated wastewater discharges. Permitted facilities must discharge wastewater according to their NPDES permit. MPCA determined that there is one wastewater treatment facility (WWTF), the Stephen WWTF (MNG580162), which discharges into the Tamarac River (09020311-505) segment. MPCA assigned the Stephen WWTF a portion of the sediment wasteload allocation (WLA) (Table 3 of this Decision Document).

Stormwater runoff from permitted construction and industrial areas: Construction and industrial sites may contribute sediment via stormwater runoff during precipitation events. These areas within the LRRNW must comply with the requirements of the MPCA's NPDES Stormwater Program. The NPDES program requires construction and industrial sites to create a Stormwater Pollution Prevention Plan (SWPPP) that summarizes how stormwater will be minimized from the site.

Nonpoint Source Identification: The potential nonpoint sources to the LRRNW TSS TMDLs are:

Stream channelization and streambank erosion: Eroding streambanks and channelization efforts may add sediment to local surface waters. Eroding riparian areas may be linked to soil inputs within the water column and potentially to changes in flow patterns. Changes in flow patterns may also encourage down-cutting of the streambed and streambanks. Stream channelization efforts can increase the velocity of flow (via the removal of the sinuosity of a natural channel) and disturb the natural sedimentation processes of the streambed. Unrestricted livestock access to streams and streambank areas may lead to streambank degradation and sediment additions to stream environments.

Stormwater runoff from agricultural land use practices: Runoff from agricultural lands may contain significant amounts of sediment which may lead to impairments in the LRRNW. Sediment inputs to surface waters can be exacerbated by tile drainage lines, which channelize stormwater flow. Tile lined fields and channelized ditches enable particles to move more efficiently into surface waters.

Wetland Sources: Sediment may be added to surface waters by stormwater flows through wetland areas (5.83% of the total land area in the LRRNW). Storm events may mobilize particulates through the transport of suspended solids and other organic debris.

Forest Sources: Sediment may be added to surface waters via stormwater flows through forested areas (5.52% of the total land area in the LRRNW). Stormwater runoff from forested areas may include debris from decomposing vegetation and organic soil particles.

Atmospheric deposition: Sediment may be added via particulate deposition. Particles from the atmosphere may fall directly onto river, stream or lake surfaces within the LRRNW.

Future Growth:

Significant development is not expected in the LRRNW. The land use within the watershed is primarily agricultural with small cities and towns scattered throughout the LRRNW. MPCA expects that land use in the LRRNW will remain unchanged for the foreseeable future. The WLA and load allocations (LA) for the LRRNW TMDLs were calculated for all current and future sources. Any expansion of point or nonpoint sources will need to comply with the respective WLA and LA values calculated in the LRRNW TMDLs.

The EPA finds that the TMDL document submitted by MPCA satisfies the requirements of the first criterion.

2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target

The TMDL submittal must include a description of the applicable State/Tribal water quality standard, including the designated use(s) of the water body, the applicable numeric or narrative water quality criterion, and the antidegradation policy (40 C.F.R. §130.7(c)(1)). EPA needs this information to review the loading capacity determination, and load and wasteload allocations, which are required by regulation.

The TMDL submittal must identify a numeric water quality target(s) – a quantitative value used to measure whether or not the applicable water quality standard is attained. Generally, the pollutant of concern and the numeric water quality target are, respectively, the chemical causing the impairment and the numeric criteria for that chemical (e.g., chromium) contained in the water quality standard. The TMDL expresses the relationship between any necessary reduction of the pollutant of concern and the attainment of the numeric water quality target. Occasionally, the pollutant of concern is different from the pollutant that is the subject of the numeric water quality target (e.g., when the pollutant of concern is phosphorus and the numeric water quality target is expressed as Dissolved Oxygen (DO) criteria). In such cases, the TMDL submittal should explain the linkage between the pollutant of concern and the chosen numeric water quality target.

Comment:

Designated Uses:

Water quality standards (WQS) are the fundamental benchmarks by which the quality of surface waters are measured. Within the State of Minnesota, WQS are developed pursuant to the Minnesota Statutes

Chapter 115, Sections 03 and 44. Authority to adopt rules, regulations, and standards as are necessary and feasible to protect the environment and health of the citizens of the State is vested with the MPCA. Through adoption of WQS into Minnesota's administrative rules (principally Chapters 7050 and 7052), MPCA has identified designated uses to be protected in each of its drainage basins and the criteria necessary to protect these uses.

Minnesota Rule Chapter 7050 designates uses for waters of the state. The segments addressed by the LRRNW TMDLs are designated as Class 2 waters for aquatic recreation use (fishing, swimming, boating, etc.) and aquatic life use. The Class 2 designated use is described in Minnesota Rule 7050.0140 (3):

“Aquatic life and recreation includes all waters of the state that support or may support fish, other aquatic life, bathing, boating, or other recreational purposes and for which quality control is or may be necessary to protect aquatic or terrestrial life or their habitats or the public health, safety, or welfare.”

Standards:

Narrative Criteria: Minnesota Rule 7050.0150 (3) set forth narrative criteria for Class 2 waters of the State:

“For all Class 2 waters, the aquatic habitat, which includes the waters of the state and stream bed, shall not be degraded in any material manner, there shall be no material increase in undesirable slime growths or aquatic plants, including algae, nor shall there be any significant increase in harmful pesticide or other residues in the waters, sediments, and aquatic flora and fauna; the normal fishery and lower aquatic biota upon which it is dependent and the use thereof shall not be seriously impaired or endangered, the species composition shall not be altered materially, and the propagation or migration of the fish and other biota normally present shall not be prevented or hindered by the discharge of any sewage, industrial waste, or other wastes to the waters.”

Numeric criteria:

Sediment (TSS) TMDLs: On January 23, 2015, EPA approved MPCA's regionally-based TSS criteria for rivers and streams. The TSS criteria replaced Minnesota's statewide turbidity criterion (measured in Nephelometric Turbidity Units (NTU)). The TSS criteria provide water clarity targets for measuring suspended particles in rivers and streams.

TSS TMDL Targets: MPCA employed the regional TSS criterion for the South River Nutrient Region (SRNR), **65 mg/L**, for the LRRNW TMDLs.

The EPA finds that the TMDL document submitted by MPCA satisfies the requirements of the second criterion.

3. Loading Capacity - Linking Water Quality and Pollutant Sources

A TMDL must identify the loading capacity of a water body for the applicable pollutant. EPA regulations define loading capacity as the greatest amount of a pollutant that a water can receive without violating water quality standards (40 C.F.R. §130.2(f)).

The pollutant loadings may be expressed as either mass-per-time, toxicity or other appropriate measure (40 C.F.R. §130.2(i)). If the TMDL is expressed in terms other than a daily load, e.g., an annual load, the submittal should explain why it is appropriate to express the TMDL in the unit of measurement chosen. The TMDL submittal should describe the method used to establish the cause-and-effect relationship between the numeric target and the identified pollutant sources. In many instances, this method will be a water quality model.

The TMDL submittal should contain documentation supporting the TMDL analysis, including the basis for any assumptions; a discussion of strengths and weaknesses in the analytical process; and results from any water quality modeling. EPA needs this information to review the loading capacity determination, and load and wasteload allocations, which are required by regulation.

TMDLs must take into account *critical conditions* for stream flow, loading, and water quality parameters as part of the analysis of loading capacity (40 C.F.R. §130.7(c)(1)). TMDLs should define applicable *critical conditions* and describe their approach to estimating both point and nonpoint source loadings under such *critical conditions*. In particular, the TMDL should discuss the approach used to compute and allocate nonpoint source loadings, e.g., meteorological conditions and land use distribution.

Comment:

EPA regulations define “load” as “an amount of matter that is introduced into a receiving water” (40 CFR §130.2), while loading capacity is, “the greatest amount of loading that a water can receive without violating water quality standards.” (40 CFR §130.2). Therefore, a loading capacity set at the WQS will assure that the water does not violate WQS. MPCA calculated loading capacities, or TMDLs, for each of the two impaired segments (09020311-503 and 09020311-505) of the LRRNW. Loading capacities are typically expressed as mass per time (e.g., pounds per day).

Separate flow duration curves (FDCs) were created for each of the impaired segments in the LRRNW. The LRRNW FDCs were developed using simulated daily stream flow values generated from Hydrologic Simulation Program-FORTRAN (HSPF) model runs. HSPF hydrologic model runs focused on simulated daily stream flow values in the April 1 to September 30 time period of 1995 to 2009. The April 1 to September 30 time period of the water year was chosen to correspond to the time period in the water year where the TSS WQS are applicable. Simulated daily stream flow values were necessary to build the FDCs which provided the foundation for the load duration curve (LDC) approach which is described in subsequent paragraphs of Section 3 of this Decision Document.

FDCs graphs have flow duration interval (i.e., percentage of time flow exceeded) on the X-axis and discharge (i.e., flow per unit time) on the Y-axis. FDCs were transformed into LDC by multiplying individual simulated flow values by the WQS (65 mg/L, the SRNR TSS standard) and then multiplying that value by a conversion factor. The resulting points are plotted onto a LDC graph where flow duration interval (i.e., percentage of time flow exceeded) is presented via the X-axis and TSS load (i.e., pounds¹ (i.e., lbs) of TSS per unit time) is presented via the Y-axis. The curved line on a LDC graph represents the TMDL of the respective flow conditions observed at that location. See Figure 4 of Appendix A of the final TMDL document for the LDC for 09020311-503 and Figure 5 of Appendix A for the LDC for 09020311-505.

¹ The TSS TMDL calculations in Table 3 of this Decision Document are in Tons per day (1 ton = 2,000 lbs).

TSS and or turbidity water quality data which informed the LDC calculations in the LRRNW TMDLs were queried from water quality data in the LRRNW between 2000-2009 (Table 4.1 of the final TMDL document). TSS/turbidity concentrations were converted to individual sampling loads by multiplying the sample concentration by the instantaneous flow measurement observed/estimated at the time of sample collection and then by a conversion factor which allows the individual samples to be plotted on the same figure as the LDCs (e.g., Figures 4 and 5 of Appendix A of the final TMDL document).

The LDC plots were subdivided into five flow regimes; very high flow conditions (exceeded 0–10% of the time), high flow conditions (exceeded 10–40% of the time), mid flow conditions (exceeded 40–60% of the time), low flow conditions (exceeded 60–90% of the time), and very low flow conditions (exceeded 90–100% of the time). LDC plots can be organized to display individual sampling loads with the calculated LDC. Watershed managers can interpret LDC graphs with individual sampling points plotted alongside the LDC to understand the relationship between flow conditions and water quality exceedances within the watershed. Individual sampling loads which plot above the LDC represent violations of the WQS and the allowable load under those flow conditions at those locations. The difference between individual sampling loads plotting above the LDC and the LDC, measured at the same flow, is the amount of reduction necessary to meet WQS.

The strengths of using the LDC method are that critical conditions and seasonal variation are considered in the creation of the FDC by plotting hydrologic conditions over the flows measured during the April 1 to September 30 time period. Additionally, the LDC methodology is relatively easy to use and cost-effective. The weaknesses of the LDC method are that nonpoint source allocations cannot be assigned to specific sources, and specific source reductions are not quantified. Overall, MPCA believes and EPA concurs that the strengths outweigh the weaknesses for the LDC method.

Implementing the results shown by the LDC requires watershed managers to understand the sources contributing to the water quality impairment and which Best Management Practices (BMPs) may be the most effective for reducing sediment loads based on flow magnitudes. Different sources will contribute sediment loads under varying flow conditions. For example, if exceedances are significant during high flow events this would suggest storm events are the cause and implementation efforts should target BMPs that will reduce stormwater runoff and consequently sediment loading into surface waters. This allows for a more efficient implementation effort.

TSS TMDLs for the LRRNW were calculated and those results are found in Table 3 of this Decision Document. Load allocation values for each segment were calculated after the determination of the WLA, and the Margin of Safety (MOS) (10% of the loading capacity). The LA values were not split among individual nonpoint contributors. Instead, the LA values were combined into a single LA value (i.e. a categorical LA value) to cover all nonpoint source contributions.

Table 3 of this Decision Document reports five points (the midpoints of the designated flow regime) on the loading capacity curve. However, the components of the TMDL equation could be illustrated for any point on the loading capacity curve. The LDC method can be used to display collected sediment monitoring data and allows for the estimation of load reductions necessary for attainment of the SRNR TSS water quality standard. Using this method, daily loads were developed based upon the flow in the water body. Loading capacities were determined for each segment for multiple flow regimes. This

allows the TMDL to be represented by an allowable daily load across all flow conditions. Table 3 of this Decision Document identifies the loading capacity for each segment at each flow regime. Although there are numeric loads for each flow regime, the LDC is what is being approved for this TMDL.

Table 3: Total Suspended Solids (TSS) TMDLs for the Lower Red River of the North Watershed

Allocation	Source	Very High	High	Mid	Low	Very Low
		TSS (tons/day)				
TMDL for Tamarac River (09020311-503)						
<i>Wasteload Allocation</i>	WLA - Construction Stormwater (MNR100001) and Industrial Stormwater (MNR050000) (0.1%)	0.10	0.02	0.01	0.001	0.00
	<i>WLA Totals</i>	0.10	0.02	0.01	0.001	0.0001
<i>Load Allocation</i>	Watershed load	103.35	18.70	5.31	1.38	0.07
<i>Margin of Safety (10%)</i>		11.49	2.08	0.59	0.15	0.01
Loading Capacity (TMDL)		114.94	20.80	5.91	1.53	0.08
Estimated Load Reduction		13%	--	--	--	--
TMDL for Tamarac River (09020311-505)						
<i>Wasteload Allocation</i>	WLA - Stephen WWTF (MNG580162)	0.22	0.22	0.22	0.22	*
	WLA - Construction Stormwater (MNR100001) and Industrial Stormwater (MNR050000) (0.1%)	0.14	0.03	0.01	0.002	0.0002
	<i>WLA Totals</i>	0.36	0.25	0.23	0.222	0.0002
<i>Load Allocation</i>	Watershed load	140.92	27.82	7.23	1.63	0.17
<i>Margin of Safety (10%)</i>		15.70	3.12	0.83	0.21	0.02
Loading Capacity (TMDL)		156.98	31.19	8.29	2.062	0.1902
Estimated Load Reduction		95%	76%	78%	51%	13%

* = The outflow from the WWTF will be greater than the median flow under this flow regime. If the WWTF contributes flow (i.e., outflow from the WWTF) to the reach in this flow regime, the WLA for this flow regime will be the permitted outflow concentration multiplied by the flow rate.

Table 3 of this Decision Document presents MPCA’s loading reduction estimates across all five flow regimes of the LDC. The loading reduction estimates were calculated from field sampling data collected in each segment. MPCA explained that its load reduction estimates are likely more conservative since they are based on a limited water quality data set.

EPA supports the data analysis and modeling approach utilized by MPCA in its calculation of WLA, LA, and the MOS for the TSS TMDLs. Additionally, EPA concurs with the loading capacities calculated by the MPCA in the TSS TMDLs. EPA finds MPCA’s approach for calculating the loading capacity for the TSS TMDLs to be reasonable and consistent with EPA guidance.

The EPA finds that the TMDL document submitted by MPCA satisfies the requirements of the third criterion.

4. Load Allocations (LA)

EPA regulations require that a TMDL include LAs, which identify the portion of the loading capacity attributed to existing and future nonpoint sources and to natural background. Load allocations may range from reasonably accurate estimates to gross allotments (40 C.F.R. §130.2(g)). Where possible, load allocations should be described separately for natural background and nonpoint sources.

Comment:

MPCA determined the LA calculations for each of the TMDLs based on the applicable WQS. MPCA recognized that LAs for each of the individual TMDLs addressed by the LRRNW TMDLs can be attributed to different nonpoint sources.

The calculated LA values for the TSS TMDLs are applicable across all flow conditions (Table 3 of this Decision Document). MPCA identified several nonpoint sources which contribute sediment loads to the surface waters in the LRRNW. Load allocations were recognized as originating from many diverse nonpoint sources including; stormwater contributions from agricultural lands, stream channelization and streambank erosion, wetland and forest sources, and atmospheric deposition. MPCA did not determine individual load allocation values for each of these potential nonpoint source considerations but aggregated the nonpoint sources into one LA value.

EPA finds MPCA's approach for calculating the LA to be reasonable.

The EPA finds that the TMDL document submitted by MPCA satisfies the requirements of the fourth criterion.

5. Wasteload Allocations (WLAs)

EPA regulations require that a TMDL include WLAs, which identify the portion of the loading capacity allocated to individual existing and future point source(s) (40 C.F.R. §130.2(h), 40 C.F.R. §130.2(i)). In some cases, WLAs may cover more than one discharger, e.g., if the source is contained within a general permit.

The individual WLAs may take the form of uniform percentage reductions or individual mass based limitations for dischargers where it can be shown that this solution meets WQSs and does not result in localized impairments. These individual WLAs may be adjusted during the NPDES permitting process. If the WLAs are adjusted, the individual effluent limits for each permit issued to a discharger on the impaired water must be consistent with the assumptions and requirements of the adjusted WLAs in the TMDL. If the WLAs are not adjusted, effluent limits contained in the permit must be consistent with the individual WLAs specified in the TMDL. If a draft permit provides for a higher load for a discharger than the corresponding individual WLA in the TMDL, the State/Tribe must demonstrate that the total WLA in the TMDL will be achieved through reductions in the remaining individual WLAs and that localized impairments will not result. All permittees should be notified of any deviations from the initial individual WLAs contained in the TMDL. EPA does not require the establishment of a new TMDL to reflect these revised allocations as long as the total WLA, as expressed in the TMDL, remains the same or decreases, and there is no reallocation between the total WLA and the total LA.

Comment:

MPCA identified one NPDES permitted facility, the Stephen WWTF (MNG580162), within the LRRNW and assigned that facility a portion of the WLA (Table 3 of this Decision Document). The WLA for the Stephen WWTF was calculated based on the permitted daily flow value and the average calendar month TSS effluent limit (45 mg/L) (see Table 4.2 and Section 4.1.3 of the final TMDL document).

MPCA used a categorical/combined WLA for construction and industrial stormwater. MPCA assumed that 0.1% of the land use in the LRRNW to be under a construction or industrial use and therefore this 0.1% of the land use could generate stormwater under certain large precipitation events. In the final TMDL document MPCA explained that if a construction site owner/operator obtains coverage under the NPDES/SDS General Stormwater Permit (MNR100001) and properly selects, installs and maintains all BMPs required under MNR100001 and applicable local construction stormwater ordinances, including those related to impaired waters discharges and any applicable additional requirements found in Appendix A of the Construction General Permit, the stormwater discharges would be expected to be consistent with the WLA in this TMDL. BMPs and other stormwater control measures which act to limit the discharge of the pollutant of concern (i.e., sediment) are defined in MNR100001.

The MPCA is responsible for overseeing industrial stormwater loads which impact water quality in the LRRNW. Industrial sites within these subwatersheds are expected to comply with the requirements of the State's NPDES/SDS Industrial Stormwater Multi-Sector General Permit (MNR050000) or NPDES/SDS General Permit for Construction Sand & Gravel, Rock Quarrying and Hot Mix Asphalt Production facilities (MNG490000). MPCA explained that if a facility owner/operator obtains coverage under the appropriate NPDES/SDS General Stormwater Permit and properly selects, installs and maintains all BMPs required under the permit, the stormwater discharges would be expected to be consistent with the WLA in this TMDL. BMPs and other stormwater control measures which act to limit the discharge of the pollutant of concern (i.e., sediment) are defined in MNR050000 and MNG490000.

The NPDES program requires construction and industrial sites to create SWPPPs which summarize how stormwater pollutant discharges will be minimized from construction and industrial sites. Under the MPCA's Stormwater General Permit (MNR100001) and applicable local construction stormwater ordinances, managers of sites under construction or industrial stormwater permits must review the adequacy of local SWPPPs to ensure that each plan complies with the applicable requirements in the State permits and local ordinances. As noted above, MPCA has explained that meeting the terms of the applicable permits will be consistent with the WLAs set in the LRRNW TMDLs. In the event that the SWPPP does not meet the WLA, the SWPPP will need to be modified within 18-months of the approval of the TMDL by the U.S. EPA. This applies to sites under permits for MNR100001, MNR050000 and MNG490000.

EPA finds the MPCA's approach for calculating the WLA for the LRRNW TSS TMDLs to be reasonable and consistent with EPA guidance.

The EPA finds that the TMDL document submitted by MPCA satisfies the requirements of the fifth criterion.

6. Margin of Safety (MOS)

The statute and regulations require that a TMDL include a margin of safety (MOS) to account for any lack of knowledge concerning the relationship between load and wasteload allocations and water quality (CWA §303(d)(1)(C), 40 C.F.R. §130.7(c)(1)). EPA's 1991 TMDL Guidance explains that the MOS may be implicit, i.e., incorporated into the TMDL through conservative assumptions in the analysis, or explicit, i.e., expressed in the TMDL as loadings set aside for the MOS. If the MOS is implicit, the conservative assumptions in the analysis that account for the MOS must be described. If the MOS is explicit, the loading set aside for the MOS must be identified.

Comment:

The determination of the Margin of Safety is described in Section 4.1.4 of the final TMDL document. The TSS TMDLs incorporated an explicit MOS of 10% which was applied to the total loading capacity calculation for each flow regime of the LDC. After the calculation of the MOS, the remaining load was allocated to point and nonpoint sources (Table 3 of this Decision Document). MPCA explained that the explicit MOS was set at 10% to account for the following:

- Any uncertainty in the observed daily flow record;
- Any uncertainty in simulated daily flow values from HSPF modeling efforts (i.e., simulated daily flows from HSPF should not be considered an exact representation of actual flows in the two TMDL segments);
- Calibration and validation processes of the HSPF modeling efforts, uncertainty in HSPF modeling outputs and any conservative assumption made during the HSPF modeling efforts; and
- Any uncertainty in the observed water quality data and the transformation of turbidity water quality data to TSS surrogate values.

The EPA finds that the TMDL document submitted by MPCA contains an appropriate MOS satisfying the requirements of the sixth criterion.

7. Seasonal Variation

The statute and regulations require that a TMDL be established with consideration of seasonal variations. The TMDL must describe the method chosen for including seasonal variations. (CWA §303(d)(1)(C), 40 C.F.R. §130.7(c)(1)).

Comment:

The TSS WQS applies from April 1 to September 30 which is also the time period when high concentrations of sediment are expected in the surface waters of the LRRNW. Sediment loading to surface waters in the LRRNW varies depending on surface water flow, land cover and climate/season. Typically, in the LRRNW, sediment is being moved from terrestrial source locations into surface waters during or shortly after wet weather events. Spring is typically associated with large flows from snowmelt, the summer is associated with the growing season as well as periodic storm events and receding streamflows, and the fall brings increasing precipitation and rapidly changing agricultural landscapes.

Critical conditions that impact loading, or the rate that sediment is delivered to the water body, were identified as those periods where large precipitation events coincide with periods of minimal vegetative cover on fields. Large precipitation events and minimally covered land surfaces can lead to large runoff volumes, especially to those areas which drain agricultural fields. The conditions generally occur in the spring and early summer seasons.

The EPA finds that the TMDL document submitted by MPCA satisfies the requirements of the seventh criterion.

8. Reasonable Assurance

When a TMDL is developed for waters impaired by point sources only, the issuance of a NPDES permit(s) provides the reasonable assurance that the wasteload allocations contained in the TMDL will be achieved. This is because 40 C.F.R. 122.44(d)(1)(vii)(B) requires that effluent limits in permits be consistent with, “the assumptions and requirements of any available wasteload allocation” in an approved TMDL.

When a TMDL is developed for waters impaired by both point and nonpoint sources, and the WLA is based on an assumption that nonpoint source load reductions will occur, EPA’s 1991 TMDL Guidance states that the TMDL should provide reasonable assurances that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable. This information is necessary for EPA to determine that the TMDL, including the load and wasteload allocations, has been established at a level necessary to implement water quality standards.

EPA’s August 1997 TMDL Guidance also directs Regions to work with States to achieve TMDL load allocations in waters impaired only by nonpoint sources. However, EPA cannot disapprove a TMDL for nonpoint source-only impaired waters, which do not have a demonstration of reasonable assurance that LAs will be achieved, because such a showing is not required by current regulations.

Comment:

The LRRNW TSS TMDLs provide reasonable assurance that actions identified in the implementation section of the final TMDL (i.e., Sections 6 and 8 of the final TMDL document) and the final WRAPS document, will be realized to attain the loading capacities and allocations calculated for the impaired reaches within the LRRNW. The recommendations made by MPCA will be successful at improving water quality if the appropriate local groups work to implement these recommendations. Those mitigation suggestions, which fall outside of regulatory authority, will require commitment from state agencies and local stakeholders to carry out the suggested actions.

MPCA has identified several local partners which have expressed interest in working to improve water quality within the LRRNW. Implementation practices will be implemented over the next several years. The following groups are expected to work closely with one another to ensure that pollutant reduction efforts via BMPs are being implemented within the LRRNW: the Joe River Watershed District (JRWD), the Middle Snake-Tamarac River Watershed District (MSTRWD), the Two Rivers Watershed District (TRWD), county Soil and Water Conservation Districts (SWCDs) of Kittson, Marshall and Roseau

Counties, the Minnesota Department of Natural Resources (MDNR), the Minnesota Department of Agriculture (MDA) and the Minnesota Board of Water and Soil Resources (BWSR).

The JRWD, MSTRWD and TRWD are all active partners in the LRRNW and have installed and maintained conservation practices aimed at improving water quality and controlling water quantity. MPCA anticipates that these groups will continue to be active in the future. The MSTRWD has various programs which target flooding and aim to improve water quality in surface waters. The MSTRWD has been awarded Clean Water Legacy Act (CWLA) monies through BWSR to improve water quality and overall water drainage in the watershed district, via water quantity control structures. The MSTRWD has identified high priority areas within its district to target for sediment reduction BMPs and water quantity control efforts (e.g., practices which promote greater retention of agricultural stormwater via water/sediment control basins, grassed waterways, etc).

The TRWD is another active group in the LRRNW. The TRWD has partnered with the Kittson SWCD to improve water quality in local streams and lakes within its district. A recent example of this partnership is efforts of the TRWD and the Kittson SWCD to identify drainage ditches which contribute disproportionate sediment loading to surface waters and to install sediment BMPs (e.g., buffer strips, grade stabilization structures, channel improvement efforts) to address these critical areas.

The ongoing efforts of the JRWD, MSTRWD and TRWD and local SWCDs in northwestern Minnesota, demonstrate the commitment of stakeholders to improving water quality and reducing pollutant load to surface waters in the LRRNW. While measurable progress may be slow to develop, actions from these groups and other stakeholders in the LRRNW should ultimately result in improvements to water quality for all the pollutants addressed in the LRRNW TMDLs.

MPCA has authored a Lower Red River of the North WRAPS document (finalized March 2019) which provides information on restoration and protection strategies for implementation efforts in the LRRNW. The WRAPS document summarizes the stressors causing impairments for the stream segments, including a chart of point sources, and a table outlining the relative magnitude of contributing nonpoint pollutant sources in the LRRNW. According to the WRAPS, because much of the nonpoint source strategies outlined rely on voluntary implementation by landowners, land users, and residents of the watershed, it is imperative to create social capital (i.e., trust, networks, and positive relationships) with those who will be needed to voluntarily implement BMPs. Thus, effective ongoing civic engagement is important for successful implementation moving forward.

MPCA views the WRAPS document as a starting point for which MPCA and local partners can develop tools that will help local governments, land owners, and special interest groups determine (1) the best strategies for making improvements and protecting resources that are already in good condition, and (2) focus those strategies in the best places to do work. EPA believes that the detail provided in the WRAPS document is a sound starting point for providing a focused, comprehensive implementation plan on the watershed scale. Subsequent work in the watershed by BWSR to further refine implementation on the local level via its One Watershed, One Plan (1W1P) document should also serve to enhance implementation discussions included in the WRAPS document.

Continued water quality monitoring within the basin is supported by MPCA. Additional water quality monitoring results could provide insight into the success or failure of BMP systems designed to reduce

TSS loading into the surface waters of the watershed. Local watershed managers would be able to reflect on the progress of the various pollutant removal strategies and would have the opportunity to change course if observed progress is unsatisfactory.

Reasonable assurance that the WLA set forth will be implemented is provided by regulatory actions. According to 40 CFR 122.44(d)(1)(vii)(B), NPDES permit effluent limits must be consistent with assumptions and requirements of all WLAs in an approved TMDL. MPCA's stormwater program and the NPDES permit program are the implementing programs for ensuring WLA are consistent with the TMDL. The NPDES program requires construction and industrial sites to create SWPPPs which summarize how stormwater will be minimized from construction and industrial sites. Under the MPCA's Stormwater General Permits, managers of sites under construction or industrial stormwater permits must review the adequacy of local SWPPPs to ensure that each plan meets WLA set in the LRRNW TMDLs. In the event that the SWPPP does not meet the WLA, the SWPPP will need to be modified. This applies to sites under the MPCA's General Stormwater Permit for Construction Activity (MNR100001) and its NPDES/SDS Industrial Stormwater Multi-Sector General Permit (MNR050000) or NPDES/SDS General Permit for Construction Sand & Gravel, Rock Quarrying and Hot Mix Asphalt Production facilities (MNG490000).

Various funding mechanisms will be utilized to execute the recommendations made in the implementation section of this TMDL. The Clean Water Legacy Act was passed in Minnesota in 2006 for the purposes of protecting, restoring, and preserving Minnesota water. The CWLA provides the protocols and practices to be followed to protect, enhance, and restore water quality in Minnesota. The CWLA outlines how MPCA, public agencies and private entities should coordinate in their efforts toward improving land use management practices and water management. The CWLA anticipates that all agencies (i.e., MPCA, public agencies, local authorities and private entities, etc.) will cooperate regarding planning and restoration efforts. Cooperative efforts would likely include informal and formal agreements to jointly use technical, educational, and financial resources.

The CWLA also provides details on public and stakeholder participation, and how the funding will be used. In part to attain these goals, the CWLA requires MPCA to develop WRAPS. The WRAPS are required to contain such elements as the identification of impaired waters, watershed modeling outputs, point and nonpoint sources, load reductions, etc. ([Chapter 114D.26](#); CWLA). The WRAPS also contain an implementation table of strategies and actions that are capable of achieving the needed load reductions, for both point and nonpoint sources ([Chapter 114D.26](#), Subd. 1(8); CWLA). Implementation plans developed for the TMDLs are included in the table, and are considered "priority areas" under the WRAPS process ([Watershed Restoration and Protection Strategy Report Template](#), MPCA). This table includes not only needed actions but a timeline for achieving water quality targets, the reductions needed from both point and nonpoint sources, the governmental units responsible, and interim milestones for achieving the actions. MPCA has developed guidance on what is required in the WRAPS ([Watershed Restoration and Protection Strategy Report Template](#), MPCA)

The Minnesota BWSR administers the Clean Water Fund as well, and has developed a detailed grants policy explaining what is required to be eligible to receive Clean Water Fund money (FY 2014 Clean Water Fund Competitive Grants Request for Proposal ([RFP](#)); [Minnesota Board of Soil and Water Resources](#), 2014).

The EPA finds that this criterion has been adequately addressed.

9. Monitoring Plan to Track TMDL Effectiveness

EPA's 1991 document, *Guidance for Water Quality-Based Decisions: The TMDL Process* (EPA 440/4-91-001), recommends a monitoring plan to track the effectiveness of a TMDL, particularly when a TMDL involves both point and nonpoint sources, and the WLA is based on an assumption that nonpoint source load reductions will occur. Such a TMDL should provide assurances that nonpoint source controls will achieve expected load reductions and, such TMDL should include a monitoring plan that describes the additional data to be collected to determine if the load reductions provided for in the TMDL are occurring and leading to attainment of water quality standards.

Comment:

MPCA describes the various ongoing monitoring activities in Section 7 of the final TMDL document. MPCA anticipates that members of the JRWD, MSTRWD, TRWD and Kittson SWCD will continue their stream monitoring efforts in the LRRNW. These entities have previously established locations within the watershed where they collect water chemistry and flow data (i.e., velocity and streamflow). Additionally, MPCA will continue its major outlet water quality monitoring at the outlet point of the Lower Red River of the North watershed and at a minimum, will return to the LRRNW in 2023-2025 to resume its Intensive Watershed Monitoring program.

Progress of TMDL implementation will be measured through regular monitoring efforts of water quality and total BMPs completed. Water quality monitoring is a critical component of the adaptive management strategy employed as part of the implementation efforts utilized in the LRRNW. Water quality information will aid watershed managers in understanding how BMP pollutant removal efforts are impacting water quality. Water quality monitoring combined with an annual review of BMP efficiency will provide information on the success or failure of BMP systems designed to reduce pollutant loading into water bodies of the LRRNW. Watershed managers will have the opportunity to reflect on the progress or lack of progress and will have the opportunity to change course if progress is unsatisfactory. Review of BMP efficiency is expected to be completed by the local and county partners.

The EPA finds that this criterion has been adequately addressed.

10. Implementation

EPA policy encourages Regions to work in partnership with States/Tribes to achieve nonpoint source load allocations established for 303(d)-listed waters impaired by nonpoint sources. Regions may assist States/Tribes in developing implementation plans that include reasonable assurances that nonpoint source LAs established in TMDLs for waters impaired solely or primarily by nonpoint sources will in fact be achieved. In addition, EPA policy recognizes that other relevant watershed management processes may be used in the TMDL process. EPA is not required to and does not approve TMDL implementation plans.

Comment:

The findings from the LRRNW TMDLs will be used to inform the selection of implementation activities as part of the Lower Red River of the North WRAPS process. The purpose of the WRAPS document is to support local working groups (e.g., JRWD, MSTRWD and TRWD) and jointly develop restoration and protection strategies to be used for subsequent implementation planning. The TMDL outlined implementation strategies in Section 8 of the final TMDL document. MPCA outlined the importance of prioritizing areas within the LRRNW, education and outreach efforts with local partners, and partnering with local stakeholders to improve water quality within the watershed. Reduction goals for the TSS TMDLs may be met via components of the following strategies:

Improved Agricultural Drainage Practices: A review of local agricultural drainage networks should be completed to examine how improving drainage ditches and drainage channels could be reorganized to reduce the influx of sediments to the surface waters in the LRRNW. The reorganization of the drainage network could include the installation of drainage ditches or sediment traps to encourage particle settling during high flow events. Additionally, cover cropping, and residue management is recommended to reduce erosion and thus siltation and runoff into streams.

Improving storage capacity within the LRRNW: These strategies involve reducing stormwater derived runoff from agricultural and urban landscapes and efforts toward attenuating peak flows and augmenting base flow in stream environments. These practices could include: stormwater retention structures (e.g., rain gardens), buffer/filter strips, wetland restoration, re-establishing vegetation in riparian areas (e.g., trees, shrubs, native grasses) and grassed waterways.

Identification of Stream, River, and Lakeshore Erosional Areas: An assessment of stream channel, river channel, and lakeshore erosional areas should be completed to evaluate areas where erosion control strategies could be implemented in the LRRNW. Implementation actions (e.g., planting deep-rooted vegetation near water bodies to stabilize streambanks, grass filter strips, streambank stabilization practices, gully stabilization practices, installation of fencing near riparian areas, etc.) could be prioritized to target areas which are actively eroding. This strategy could prevent additional sediment inputs into surface waters of the LRRNW and minimize or eliminate degradation of habitat.

Reducing Livestock Access to Stream Environments: Livestock managers should be encouraged to implement measures to protect riparian areas. Managers should install exclusion fencing near stream environments to prevent direct access to these areas by livestock. Additionally, installing alternative watering locations and stream crossings between pastures may aid in reducing sediments to surface waters.

Public Education Efforts: Public programs will be developed to provide guidance to the public on sediment reduction efforts and their impact on water quality. These educational efforts could also be used to inform the public on what they can do to protect the overall health of rivers and streams in the LRRNW.

The EPA finds that this criterion has been adequately addressed. The EPA reviews but does not approve implementation plans.

11. Public Participation

EPA policy is that there should be full and meaningful public participation in the TMDL development process. The TMDL regulations require that each State/Tribe must subject calculations to establish TMDLs to public review consistent with its own continuing planning process (40 C.F.R. §130.7(c)(1)(ii)). In guidance, EPA has explained that final TMDLs submitted to EPA for review and approval should describe the State's/Tribe's public participation process, including a summary of significant comments and the State's/Tribe's responses to those comments. When EPA establishes a TMDL, EPA regulations require EPA to publish a notice seeking public comment (40 C.F.R. §130.7(d)(2)).

Provision of inadequate public participation may be a basis for disapproving a TMDL. If EPA determines that a State/Tribe has not provided adequate public participation, EPA may defer its approval action until adequate public participation has been provided for, either by the State/Tribe or by EPA.

Comment:

Section 9 of the final TMDL document outlines MPCA's efforts to engage the public during the development of the LRRNW TSS TMDLs. MPCA worked with members of the JRWD, MSTRWD and TRWD to coordinate public involvement during the development of the LRRNW TMDLs. A TMDL stakeholder group was formed and kept up-to-date on the progress of the TMDL project and WRAPS development. This stakeholder group included members of the JRWD, MSTRWD and TRWD, local landowners, representatives from Kittson, Marshall and Roseau Counties, representatives from local townships, representatives from state agencies (e.g., MPCA, MDNR, and BWSR). Various open houses and public meetings in the LRRNW were held during the development of the LRRNW TSS TMDLs to communicate the goals of the TMDL and to engage with members of the public.

MPCA posted the draft TMDL online at (<https://www.pca.state.mn.us/water/total-maximum-daily-load-tmdl-projects>) for a public comment period. The 30-day public comment period was started on August 13, 2018 and ended on September 12, 2018. MPCA received one public comment during the public comment period from the Two Rivers Watershed District.

The TRWD shared comments on both the draft TMDL document and the draft WRAPS document. The comments on the draft TMDL document involved updating town names within the background discussion of Section 3.2. MPCA made all requested changes from the commenter in the final TMDL submittal. Other comments from TRWD were related to information in the draft WRAPS document. MPCA answered the questions from TRWD on information included in the draft WRAPS document and addressed all other comments in its response document to TRWD dated March 18, 2019.

EPA believes that MPCA adequately addressed the comments from the TRWD and updated the final TMDL appropriately. MPCA submitted all public comments received during the public notice period and individual responses to those comments in the final TMDL submittal packet received by the EPA on March 22, 2019.

The EPA finds that the TMDL document submitted by MPCA satisfies the requirements of this eleventh element.

12. Submittal Letter

A submittal letter should be included with the TMDL submittal, and should specify whether the TMDL is being submitted for a *technical review* or *final review and approval*. Each final TMDL submitted to EPA should be accompanied by a submittal letter that explicitly states that the submittal is a final TMDL submitted under Section 303(d) of the Clean Water Act for EPA review and approval. This clearly establishes the State's/Tribe's intent to submit, and EPA's duty to review, the TMDL under the statute. The submittal letter, whether for technical review or final review and approval, should contain such identifying information as the name and location of the water body, and the pollutant(s) of concern.

Comment:

The EPA received the final LRRNW TMDL document, submittal letter and accompanying documentation from MPCA on March 22, 2019. The transmittal letter explicitly stated that the final TMDLs referenced in Table 1 of this Decision Document were being submitted to EPA pursuant to Section 303(d) of the Clean Water Act for EPA review and approval.

The letter clearly stated that this was a final TMDL submittal under Section 303(d) of CWA. The letter also contained the name of the watershed as it appears on Minnesota's 303(d) list, and the causes/pollutants of concern. This TMDL was submitted per the requirements under Section 303(d) of the Clean Water Act and 40 CFR 130.

The EPA finds that the TMDL transmittal letter submitted for the Lower Red River of the North Watershed TMDLs by MPCA satisfies the requirements of this twelfth element.

13. Conclusion

After a full and complete review, the EPA finds that the 2 TSS TMDLs satisfy all elements for approvable TMDLs. This TMDL approval is for **two TMDLs**, addressing water bodies for aquatic life use impairments (Table 1 of this Decision Document).

The EPA's approval of these TMDLs extends to the water bodies which are identified above with the exception of any portions of the water bodies that are within Indian Country, as defined in 18 U.S.C. Section 1151. 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.