

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

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MPCA COMMISSIONERS OFFICE

REPLY TO THE ATTENTION OF:

WW-16J

Paul Eger, Commissioner Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155-4194

Dear Mr. Eger:

The U.S. Environmental Protection Agency has conducted a complete review of the final Total Maximum Daily Load (TMDL) for the Lower Wild Rice River, including supporting documentation and follow-up information. The Lower Wild Rice River, Assessment Unit (AU) 09020108-501, is located in northwestern Minnesota on the western edge bordering North Dakota in Norman County. This portion of the river is 30.58 miles long and is part of the Wild Rice River Watershed of the larger Red River Basin. The TMDL was calculated for turbidity using Suspended Sediment Concentration (SSC). The TMDL addresses the turbidity impairment of Class 2B waters for Aquatic Life and Recreation Use.

The TMDL meets the requirements of section 303(d) of the Clean Water Act and EPA's implementing regulations at 40 C.F.R. Part 130. Therefore, EPA hereby approves Minnesota's SSC TMDL, addressing turbidity in AU 09020108-501. 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 effort in submitting this TMDL and look forward to future TMDL submissions by the State of Minnesota. If you have any questions, please contact Dean Maraldo, Acting Chief of the Watersheds and Wetlands Branch at 312-353-2098.

Sincerely,

Lola Hest

Tinka G. Hyde Director, Water Division

Enclosure

cc: David Johnson, MPCA Lisa Scheirer, MPCA

wq-iw5-03g

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DECISION DOCUMENT FOR THE APPROVAL OF THE LOWER WILD RICE RIVER, MINNESOTA, TMDL

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 Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking

The TMDL submittal should identify the waterbody as it appears on the State's/Tribe's 303(d) list. The waterbody 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 waterbody 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 waterbody. 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 waterbody 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;

Lower Wild Rice River TMDL Decision Document (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 <u>a</u> and phosphorus loadings for excess algae; length of riparian buffer; or number of acres of best management practices.

Comment:

Location Description/Spatial Extent: The Geographic Location Section of the TMDL states that the Lower Wild Rice River is located in western Minnesota in Norman County (near the border of North Dakota), part of the South Branch to the Red River of the North. The segment of the stream, Assessment Unit (AU) ID 09020108-501, is 30.58 miles in length and is part of a larger watershed that includes the Wild Rice River, which drains over a million acres from Clearwater, Mahnomen, Becker, Norman, and Clay counties (Figure 1 in the TMDL). The watershed receives drainage from the Northern Lakes and Forests, North Central Hardwood Forest, and the Red River Valley ecoregions. This document addresses one TMDL in one segment for turbidity.

Land use: The Lower Wild Rice River is within the Glacial Lake Plain and historic glacial Lake Agassiz with flat, extremely level lake sediment deposits. The soils are mostly clays with low permeability. Table 3 in the TMDL shows the land use categories for the entire Wild Rice River watershed. Cultivated crops make up 52.71% of the land use, forest and shrub 23.45%, pasture/hay 6.7%, emergent herbaceous wetlands at 6.39%, and all other categories under 4% (open water, developed/open space, developed, barren, grassland/herbaceous, and woody wetlands). Crops also dominate the Lower Wild Rice River, mostly wheat, soy beans, and sugar beets, with corn acreage increasing. Drainage enhancement includes both ditching and tiling.

Problem Identification: The Listing Information Section of the TMDL submittal states that the segment is on the 2006 303(d) list for turbidity. The Designated Beneficial Use Section states that the waters are impaired for Class 2B, which is to support fish, other aquatic life, and bathing, boating and other recreational uses.

Pollutant of Concern: The pollutant of concern is turbidity.

Source Identification: The dominant sources of the turbidity impairment are nonpoint sources of sediment that originate from eroded soil and stream bank erosion. There are also many point sources in the Wild Rice River watershed. However, MPCA considers all of them to be minor contributors to the turbidity impairment. The permitted facilities that have TSS discharge limits are municipal wastewater treatment facilities (WWTF), construction activities, industrial facilities, and concentrated animal feeding operations (CAFO).

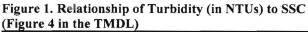
The point sources are:

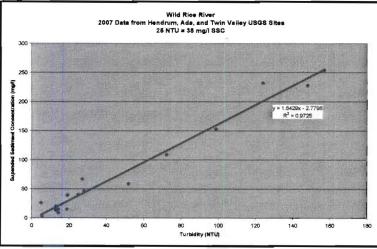
• WWTFs are in the cities of Bejou, Borup, Felton, Gary, Hendrum, Mahnomen, Ogema, Twin Valley, Ulen, and Waubun. The permits allow for two discharges in times of the year expected to have high flow;

Lower Wild Rice River TMDL Decision Document

- Construction activities account for less than one percent of the TMDL and is determined based on estimated disturbed land. They are considered in compliance with the TMDL if they obtain a Construction General Permit and meet the requirements or meet local requirements which may be more restrictive;
- Industrial permits are under a Minnesota General Permit for Construction Sand and Gravel, Aggregate and Hot Mix Asphalt. They are Ames Sand & Gravel B-B Felton Site, and Border States Paving/Marvin/Gordon Pits. Industrial storm water activities are considered in compliance if they have a stormwater general permit or General Sand and Gravel general permit (MNG49). These facilities contribute less that one percent of the TMDL;
- CAFO permits are under the Minnesota General Livestock Production Permit, and allow no discharge from the production area of the CAFO so have zero wasteload allocation. There are two permitted CAFO facilities, Burkel Turkey Farms, Inc. and Maple Leaf Enterprises, Inc.

Surrogate measures: Turbidity is a dimensionless unit, so MPCA used suspended sediment concentration (SSC) as a surrogate pollutant. SSC is the dry weight measurement of sediment from a volume of water/sediment mixture (Gray, Glysson, Turcios, and Schwarz, 2000¹). To use the SSC for a load allocation, the relationship between turbidity in Nephelometric Turbidity Units (NTU) and SSC had to be developed. A regression technique was used on turbidity unit values to predict SSC, and in general the relationship was found to be proportional, with greater NTU corresponding to greater suspended sediment concentration. The value of 25 NTU corresponds to a SSC of 38mg/l for this dataset (Page 13 of the TMDL).





There is another surrogate relationship and linkage established in the literature that is applicable to this TMDL. Because point sources have permit limits on Total Suspended Solids (TSS) rather

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¹ Gray, John, G.D. Glysson, L.M. Turcios, and G. Schwarz, August 2000, Comparability of Suspended-Sediment Concentration and Total Suspended Solids Data, USGS WRI Report 00-4191. Lower Wild Rice River TMDL

than SSC or turbidity, the WLA was correlated to TSS values. The relationship of TSS and SSC is examined in the above-referenced document by Gray and others. The TSS measurement was originally designed for analysis of wastewater samples, and the literature compared TSS to SSC (usually used to measure natural –water samples). Though bias was present because the methods were designed for different conditions, and it is acknowledged that measurement errors occur, the values of paired samples of TSS and SSC were comparable. The EPA concurs with the determination by MPCA that the 38 mg/l SSC concentration is equivalent to the 45 mg/l TSS concentration in the NPDES permits (Page 13 of the TMDL). Figure 2 below shows the relationship when the TSS and SSC paired samples are compared.

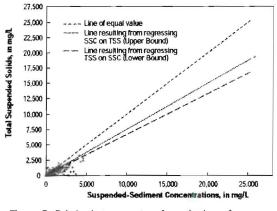


Figure 2. Relation between untransformed values of suspended-sediment concentration and total suspended solids for 3,235 data points.

Future Growth: There are ten cities in the watershed with WWTFs. According to data from the US Census in 2000 indicates four of the cities have declined in population since 1990, and the other six cities have increased in population from a range of 1.9% to 7.5%. There is a conservative 25% reserve capacity used for the WLAs in this TMDL.

EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning this first element.

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 waterbody, 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: The Designated Beneficial Use Section of the TMDL submittal states that the Lower Wild Rice River segment is designated Class 2B and 3B; Minnesota Rules Chapter 7050 states that the quality of Class 2B surface waters (the most protective use class): Aquatic life and recreation includes all waters of the state which do or may support fish, other aquatic life, bathing, boating, or other recreational purposes, and where quality control is or may be necessary to protect aquatic or terrestrial life or their habitats, or the public health, safety, or welfare.

Standards: The turbidity water quality standard is 25 NTUs and is addressed in Minnesota Rules Chapter 7050.0222 for 2B and 3B water. This TMDL is written for Class 2, the more protective class.

Target: The target is the **SSC of 38mg/l**, equivalent to **45mg/l TSS**. The linkages of turbidity to SSC, and SSC to TSS, were both discussed above in Section 1 of this document.

EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning this second element.

3. Loading Capacity - Linking Water Quality and Pollutant Sources

A TMDL must identify the loading capacity of a waterbody 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:

TMDL = Loading Capacity (LC) = WLA + LA + MOS.

Table 1 below is taken from the TMDL. The Loading Capacity values are shown in the first row. Five flow regimes were used to determine the load under high flow, moist, mid-range, dry, and low flow conditions.

 Table 1 (Table 5 in TMDL) – Wild Rice River near Hendrum. Suspended Sediment Loading Capacities and Allocations (AUID: 09020108-501)

| | Flow Zone | | | | |
|--|---|--------|--------|--------|----------|
| | High | Moist | Mid | Dry | Low |
| | Tons/day | | | | |
| TOTAL DAILY LOADING CAPACITY | 195.7 | 42.8 | 16.9 | 7.3 | 1.8 |
| Wasteload Allocation | | | | | |
| Permitted Wastewater Treatment Facilities* | 1.5 | 1.5 | 1.5 | 1.5 | ** |
| NPDES Construction and Industrial Stormwater | 0.7 | 0.15 | 0.06 | 0.03 | 0.006 |
| Load Allocation | 102.3 | 21.25 | 11.24 | 1.87 | ** |
| Margin of Safety | 91.2 | 19.9 | 4.1 | 3.9 | Implicit |
| | | | | | |
| | Percent of total daily loading capacity | | | | |
| TOTAL DAILY LOADING CAPACITY | 100% | 100% | 100% | 100% | 100% |
| Wasteload Allocation | | | | | |
| Permitted Wastewater Treatment Facilities* | 0.8% | 3.5% | 8.9% | 20.6% | ** |
| NPDES Construction and Industrial Stormwater | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 |
| Load Allocation | 52.26% | 49.66% | 65.56% | 25.66% | ** |
| Margin of Safety | 46.6% | 46.5% | 24.2% | 53.4% | Implicit |

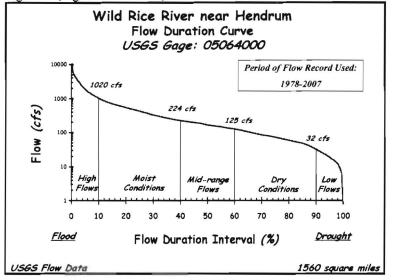
* Facilities are listed in Table 4 of the TMDL (Table 2 in this document), the results are in tons/day of TSS

** See the Methodology Section above for the allocations in the low flow zone.

Method for cause and effect: The General Methodology Section of the TMDL reviews the flow duration curve methodology that was used in this TMDL.

1. The flow monitoring data came from the Wild Rice River USGS gaging station (#05064000). The data reflect a range of natural occurrences from extremely high flows to extremely low flows. Monthly mean flow values were obtained from 1978 through 2007 and were multiplied by the target SSC concentration of 38 mg/l. These values were sorted by volume and a flow duration curve was developed. See Figure 2 on the following page taken directly from the TMDL. Lower Wild Rice River TMDL 6
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2. From flow and water quality data, SSC loads were calculated for five flow regimes under high flow, moist, mid-range, dry, and low flow conditions. The median flow value for each flow regime was used to calculate the loading for each zone. These values are shown in Table 1 on the previous page.





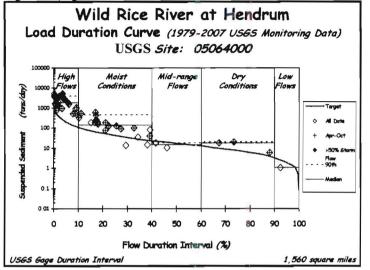
3. Wasteload Allocations were determined by using the flow multiplied by the permitted total suspended solids (TSS) values for the various facilities. The TMDL states NPDES/SDS permits include a mass loading limit for TSS, calculated using the unique design flow for each facility and an effluent concentration limit of 45 mg/l TSS. The 45 mg/l TSS effluent limit requirement comes from the Minnesota Rules, Chapter 7053.0215, which sets the standards of protection for water quality and purity in Minnesota. In very low flow conditions, this calculation would result in allocations greater than the streamflow, which is not possible. In these cases, an equation is used, which assigns a concentration based limit rather than a load based limit: streamflow x 45 mg/l TSS.

4. MOS was calculated using the difference between the loads corresponding to the median flow and minimum flow in each zone (Figure 3 following page).

5. LA was determined by the subtraction of the WLA and MOS from the loading capacity; the remaining load was allocated to the nonpoint sources.

Critical Conditions: The Critical Conditions Section states that the turbidity levels are worst following storm events during the spring and summer months (high flow conditions). MPCA believes that by controlling sediment loads from these events, the WQS will be met at all times.

Figure 3. (Figure 7 in TMDL) Load Duration Curve for USGS Site 05604000



EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning this third element.

4. Load Allocations (LAs)

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:

Load Allocation TSS: The LA is the remaining load after the WLA and MOS has been calculated and is shown in five flow regimes in Table 1 above.

EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning this fourth element.

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:

Individual WLAs are shown below in Table 2 for WWTFs and industrial facilities with discharge limits for TSS. The total is 1.5 tons/day and is shown in the WLA section of the TMDL table under all flow regimes. There are no MS4 locations. Construction and industrial stormwater permits have a small wasteload totaling less than 1% under all flow conditions, and CAFO permits have zero WLA.

For the low flow regime in Table 1 above, the theoretical wet weather flow is greater than the actual stream flow. To address this, MPCA used an equation, which assigns a concentration based limit rather than a load based limit: streamflow X 45 mg/L TSS.

| City | TSS WLA in Ibs/day | TSS WLA in tons/day |
|-------------|--------------------|---------------------|
| Bejou | 57.2 | 0.03 |
| Borup | 41.8 | 0.02 |
| Felton | 83.6 | 0.04 |
| Gary | 92.4 | 0.05 |
| Hendrum | 305.8 | 0.15 |
| Mahnomen | 1548.8 | 0.77 |
| Ogema | 77.0 | 0.04 |
| Twin Valley | 338.8 | 0.17 |
| Ulen | 321.2 | 0.16 |
| Waubon | 176.0 | 0.09 |
| Total | 3043 | 1.5 tons/day |

Table 2. (Table 4 in TMDL) – WWTFs and WLAs in the Wild Rice River Watershed

EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning this fifth element.

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 Lower Wild Rice River TMDL 9 Decision Document 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 MOS is shown in Table 1 above in Section 2 for each flow regime and is the difference between the median flow and minimum flow in each of the flow zones, as shown in Figure 3. For example, the MOS for the high flow zone is the 95th percentile flow value subtracted from the 100th percentile flow value (the entire flow zone is from 100th percentile to the 90th). The resulting value was converted to a load and used as the MOS. This methodology, taking the difference between the median flow and minimum flow per zone, was repeated in each of the remaining four flow zones.

EPA finds that the TMDL document submitted by MPCA contains an appropriate MOS satisfying all requirements concerning this sixth element.

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:

Seasonal variation was considered in this TMDL as described in the Critical Conditions and Seasonal Variation Section. There are five distinct flow regimes that were used for the development of the allocations, from near drought to near flood conditions. Reductions vary, based on these flow regimes that occur at all times of the year. The stream conditions in all seasons were used for the flow duration and load duration curve development.

EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning this seventh element.

8. Reasonable Assurances

When a TMDL is developed for waters impaired by point sources only, the issuance of a National Pollutant Discharge Elimination System (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, andthe WLA is based on an assumption that nonpoint source load reductions will occur, EPA's 1991TMDL Guidance states that the TMDL should provide reasonable assurances that nonpointLower Wild Rice River TMDL10Decision Document

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:

There are many plans and funds that the state may utilize for reasonable assurance that the TMDL will be implemented. The water management plans include:

- Red River Basin Water Quality Plan;
- County Comprehensive Local Water Plans; and,
- Wild Rice Watershed District Watershed Management Plan.

Funding programs include:

- Clean Water Legacy Act;
- EPA grants;
- Clean Water Partnership grants;
- Natural Resource Conservations Service programs; and,
- Conservation Reserve Enhancement Program.

Further, the five SWCDs located in the Wild Rice River watershed have identified soil erosion as a concern and plan to implement erosion control practices through a guidebook. Watershed Management Plans for the Wild Rice Watershed District have strategies to stabilize streams, implement agricultural conservation practices on land with high sediment yield, fix bank erosion, and install and maintain buffer strips.

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:

The Monitoring Plan Section of the TMDL states that monitoring will be implemented by several entities along with the MPCA. There will be monitoring by the Red River Basin's River Watch, the USGS flow monitoring and sediment analysis, and MPCA's Milestone and condition monitoring. Details including monitoring sites will be included in the Lower Wild Rice River Implementation Strategy.

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 Implementation Strategy Section of the TMDL states that a strategy will be written within a year of approval of the TMDL by the Flood Damage Reduction Project Team. The team is comprised of representatives from many agencies, affected landowners, and interested citizen groups. Funding programs include:

- Clean Water Legacy Act;
- Section 319/other EPA programs;
- Clean Water Partnership/State Revolving Fund Phase II program;
- Board of Water and Soil Resources Challenge Grants;
- Natural Resource Conservations Service's Environmental Quality Incentive Program;
- Agricultural Best Management Practices (BMP) loan program;
- Conservation Reserve Enhancement Program; and,
- Conservation Reserve Program.

BMPs would include filter strips, riparian buffers, grassed waterways, cover crops and conservation tillage. Structural practices would include water and sediment control basins and grade control structures.

The partners in this effort could include a variety of agencies and citizens in the watershed, including land owners, Wild Rice Watershed District, MPCA, MDNR, Minnesota Board of Water and Soil Resources, Soil and Water Conservation Districts, Natural Resource Conservation Districts, County Water Planning, Minnesota Extension Service, USGS, and other citizens and organizations.

EPA finds that this criterion has been adequately addressed.

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:

Public outreach activities are detailed in the TMDL submittal in Table 3 below. The TMDL was public noticed from September 15 to October 15, 2008. There was also a renotice from April 20 to May 20, 2009, based on comments of the draft TMDL from EPA which required minor revision of the wasteloads from construction and industrial stormwater sites. Copies of the draft TMDL were made available upon request and on the Internet web site: http://www.pca.state.mn.us/water/tmdl/project-lowerwildrice-turbidity.html

| Phase | Meeting Location | Meeting Date | Stakeholder Groups | |
|------------|-----------------------|---|---|--|
| Phase I | Moorhead, Minnesota | August 11, 2005 | state and local governmental units and citizens | |
| Phase I | Moorhead, Minnesota | October 24, 2006 | state and local governmental units and citizens | |
| Phase II | Ada, Minnesota | August, 13, 2007 | Wild Rice Watershed District | |
| Phase II | Ada, Minnesota | January 16, 2008 | Wild Rice Watershed District – Flood Damage Reduction Project Team | |
| Phase II | Ada, Minnesota | April 23, 2008 | Wild Rice Watershed District – Flood Damage Reduction Project Team | |
| Public III | Public Comment Period | September 15, 2008 – October 15, 2008* | state and local governmental units and citizens | |

Table 3. (Table 6 in TMDL)

* Note that there was an additional public comment period added to the TMDL process from April 20, 2009 to May 20, 2009 for minor revision of the TMDL.

Lower Wild Rice River TMDL Decision Document EPA, other agencies, and associations provided comments to the MPCA during the public comment period. The comments were adequately addressed by MPCA and are included with the TMDL document submittal.

EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning 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 waterbody, and the pollutant(s) of concern.

Comment:

The EPA received the final Lower Wild Rice River Watershed TMDL on July 10, 2009, accompanied by a submittal letter dated July 6, 2009. In the submittal letter, MPCA stated the submission includes the final TMDLs for turbidity for the Lower Wild Rice River Watershed. Assessment Unit ID 09020108-501 on Minnesota's 2006 303(d) list. The Lower Wild Rice River Watershed is impaired for fish, other aquatic life, and bathing, boating and other recreational uses.

EPA finds that the TMDL document submitted by MPCA satisfies all requirements concerning this twelfth element.

13. Administrative Record

Conclusion

After a full and complete review, EPA finds that the TMDL for the Lower Wild Rice River Watershed satisfies all of the elements of an approvable TMDL. This approval addresses 1 segment for turbidity (suspended sediment/ SSC surrogate) in Assessment Unit ID 09020108-501.

EPA's approval of this TMDL does not extend to those waters that are within Indian Country, as defined in 18 U.S.C. Section 1151. EPA is taking no action to approve or disapprove TMDLs for those waters at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under the CWA Section 303(d) for those waters.